# ELMHURST-RALE

RALEIGH - LOT 00.0102 BLAKE POND SF (MODEL# 2223)

**ELEVATION 5 - GL** 

INDEX



RED
RED
RED

### 18 Frost Meadow Way

1	LOT 00.0102	BLAKE POND SF
		ELMHURST REV. RALE 3 ELEVATION 5
2	ADDRESS	18 FROST MEADOW WAY LILLINGTON, NC 27546
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	-	
	<del> </del>	



 MASTER PLAN INFORMATION
 UPDATED DATE

 REVISION DATE
 09-23-2019

 3-RALE 08-23-2019
 07-01-2024

DRAWN BY: ITS

DATE:
05/20/2025

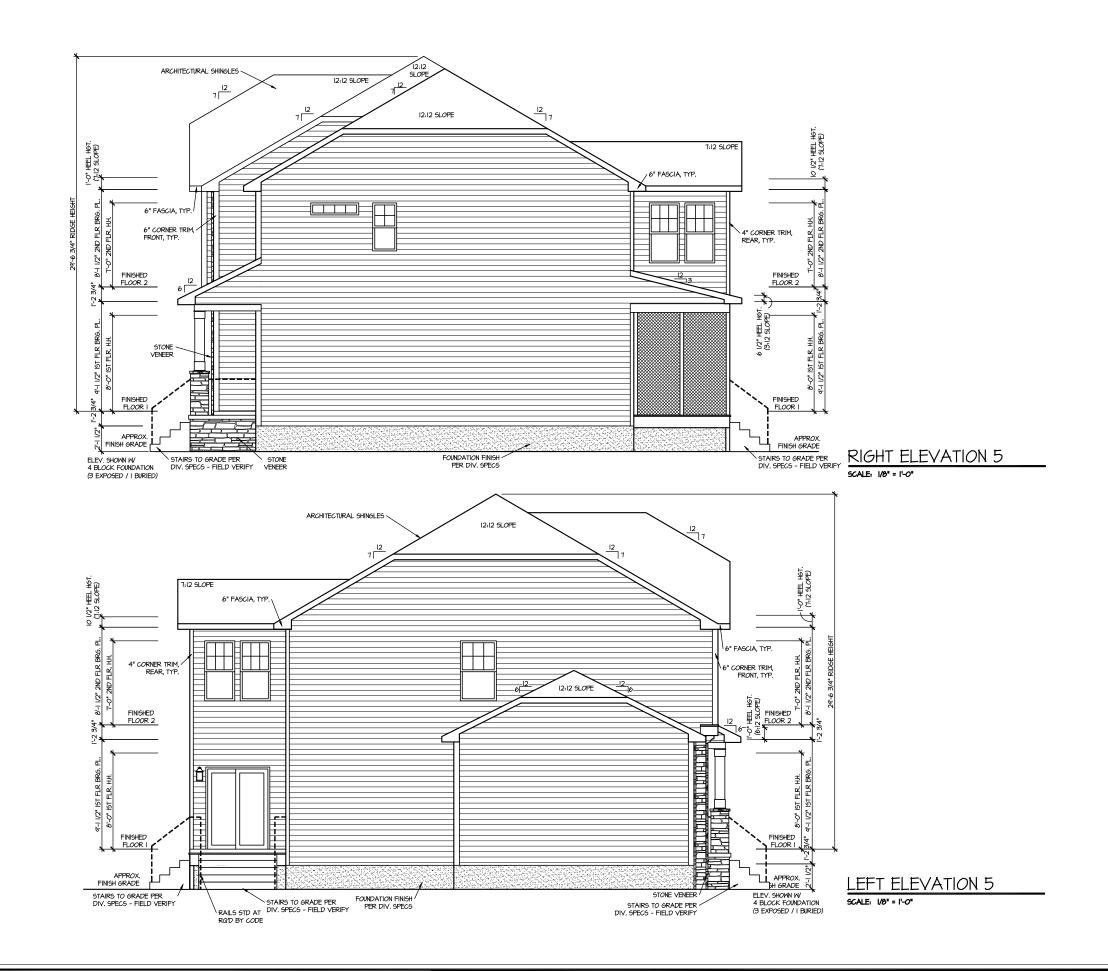
PLAN NO.
2223



THE REAR ELEVATIONS

HOUSE NAME:
ELMHURST
DRAWING TITLE
FRONT & REA

SHEET No.



DRAWN BY:
ITS
DATE:
05/20/2025

PLAN NO. 2223



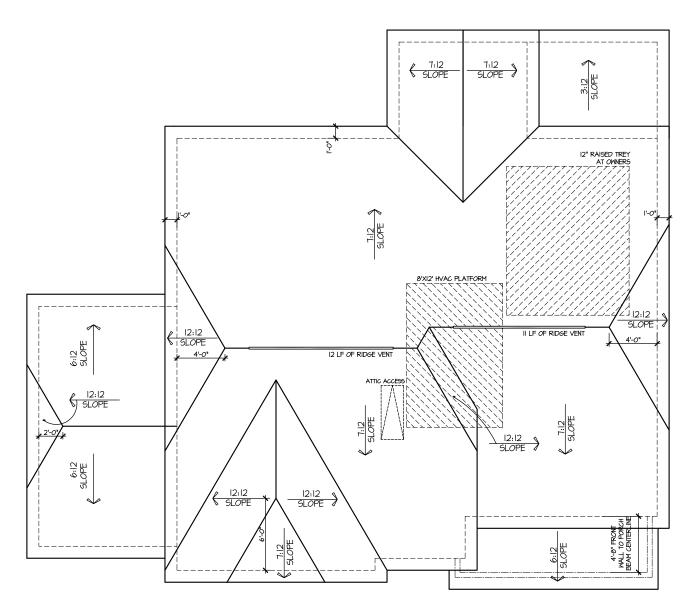
A LEFT ELEVATIONS

HOUSE NAME:
ELMHURST
DRAWING TITLE
RIGHT & LEFT

SHEET No.

A|.

ROOF VENTILATION CALCULATIONS: OPT. THIRD FLOOR
ROOF AREA = 1856 50. FT.
OVERALL REQUIRED VENTILATION.
1 TO 150 = 9.04 50. FT.
1 TO 300 = 452 50. FT.
50-80% IN TOP THIRD = 2.26 - 3.61 FT. (1 TO 300)
NET FREE AREA OF VENTED 50FFIT = 5.1 50. IN / LINEAR FT.
NET FREE AREA OF VENTED 50FFIT = 5.1 50. IN / LINEAR FT.
LOWER VENTING. (BOTTOM 2/3 RDS.)
63 LINEAR FEET OF SOFFIT X 5.1 50. IN = 2.5 50. FT.
UPPER VENTING. (TOP 1/3 RD.)
23 LINEAR FEET OF RIDGE X IS 50. IN = 2.4 50. FT.
2.4 50. FT. BETIVEEN 50% - 80%
(1 TO 300 ALLONED)
TOTAL ROOF VENTILATION: 5.1 50. FT. > 4.45 50. FT. (RQTD)



ROOF PLAN ELEV. 5

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

| MASTER PLAN INFORMATION | PATE | PLAN INFORMATION | PATE | SEVISION | DATE | OP-23-2019 | O7-01-2024 | PATE | OP-23-2019 | O7-01-2024 | PATE | OP-23-2019 | O7-01-2024 | PATE | OP-23-2019 | O7-01-2024 | OP-23-2019 | OP-23-201

DRAWN BY: ITS DATE: 05/20/2025 PLAN NO. 2223



HOUSE NAME:
ELMHURST
DRAWING TITLE
ROOF PLAN

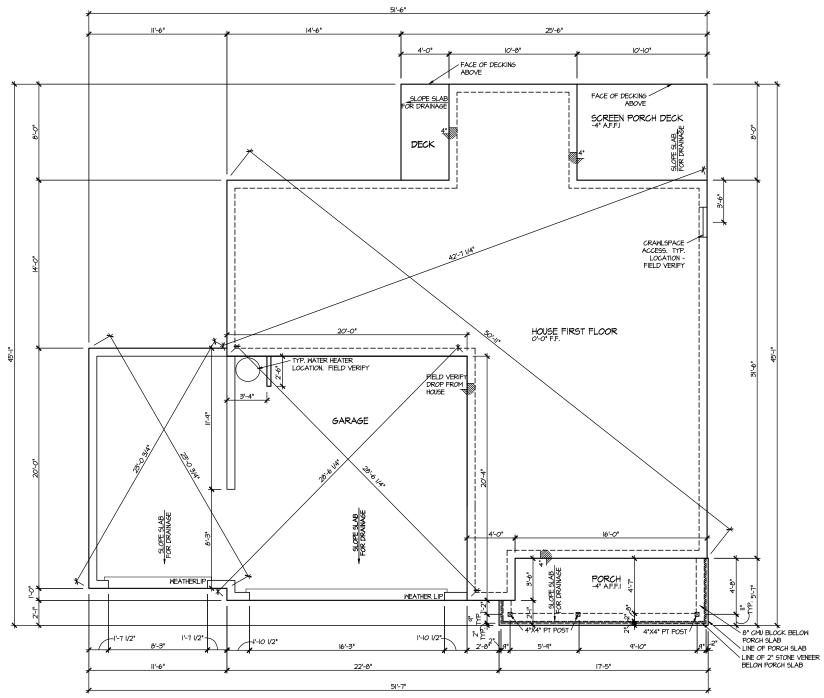
SHEET No.

AI.3

VENT CALCULATIONS
CRAWL AREA = 431 50. FT.
OVERALL REQUIRED VENTILATION:
1 TO 150 = 6.3 50. FT.

NET FREE AREA OF VENT = 62 SQ. IN PER VENT WITTEN AUTOMATIC VENT B-EBLACK (MB) OR EQUAL

<u>VENTING REQUIREMENT:</u>
6.3 SQ. FT / 62 SQ. IN = 14.63 VENTS = 15 VENTS



ELEVATION 5 CRAWL SPACE PLAN

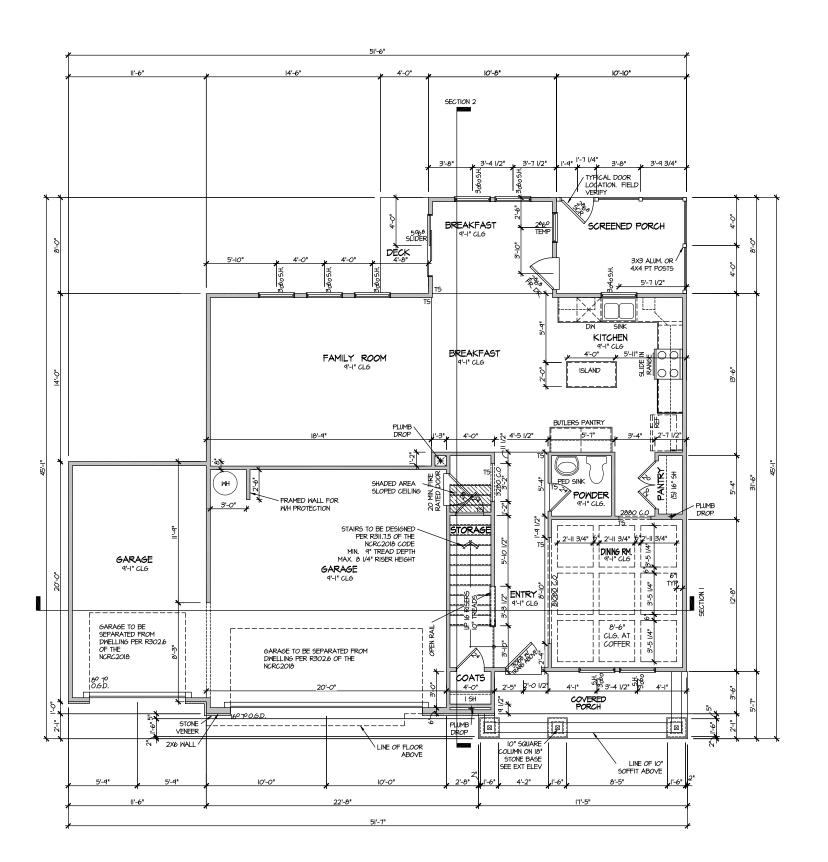
SCALE: 1/8" = 1'-0"

SHEET No. A2.1

HOUSE NAME:
ELMHURST
DRAWING TITLE
CRAML SPACE

DRAWN BY:

DATE: 05/20/2025 PLAN NO. 2223



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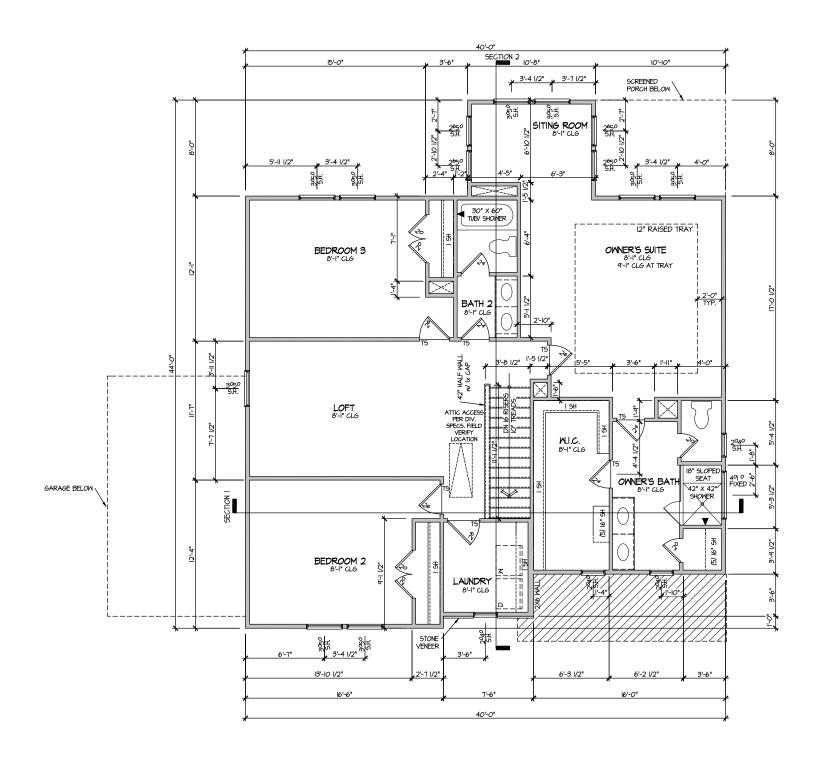
DATE: 05/20/2025 PLAN NO. 2223



ᅙ HOUSE NAME:
ELMHURST
DRAWING TITLE
FIRST FLOOR

SHEET No. A3.

ELEVATION 5 FIRST FLOOR PLAN SCALE: 1/8" = 1'-0"



UPDATED DATE 07-01-2024 DRAWN BY:

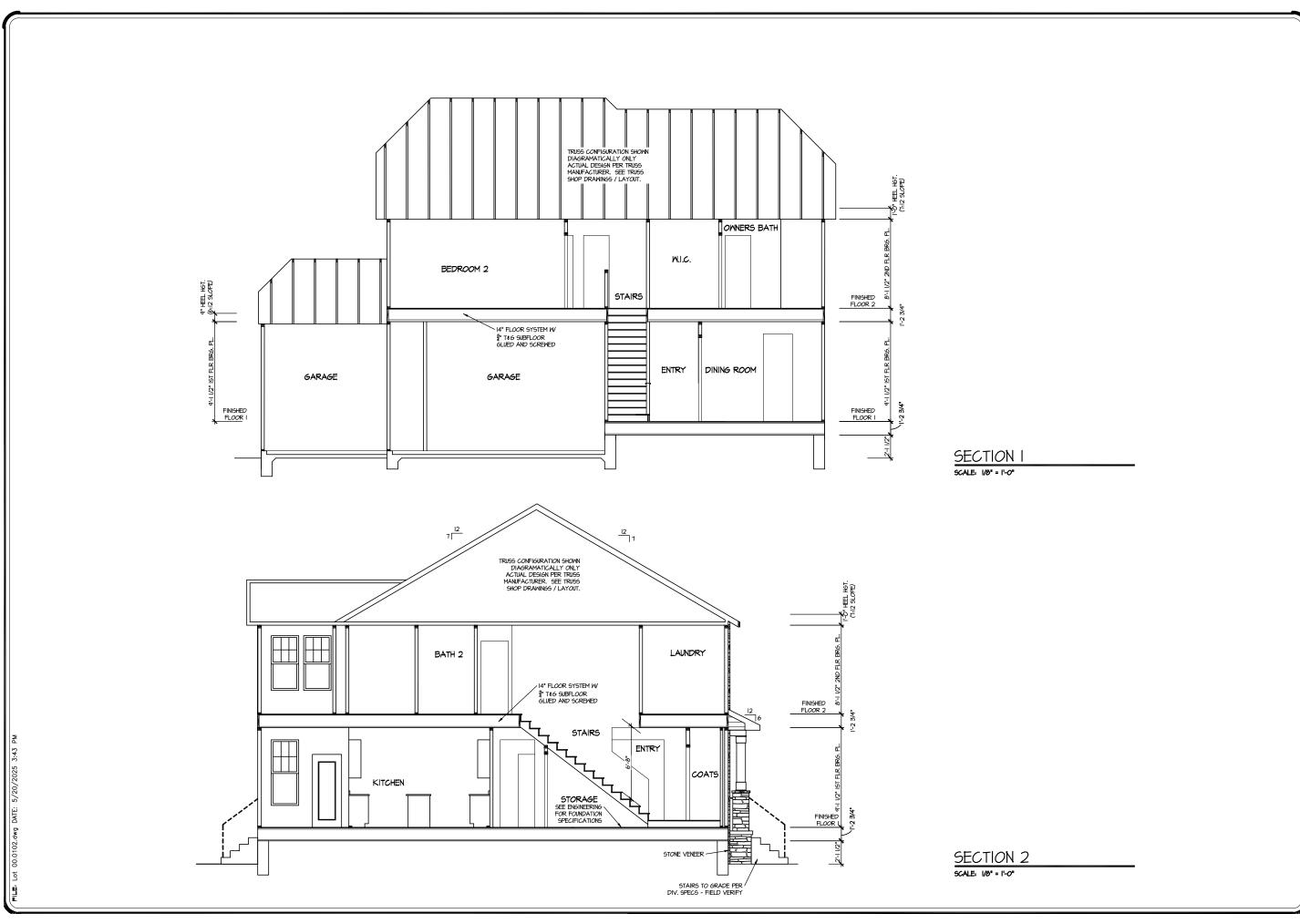
DATE: 05/20/2025 PLAN NO. 2223



1 0 0 0 HOUSE NAME:
ELMHURST
DRAWING TITLE
SECOND FLOO

SHEET No. A3.2

ELEVATION 5 SECOND FLOOR PLAN SCALE: 100' = 1'-0'



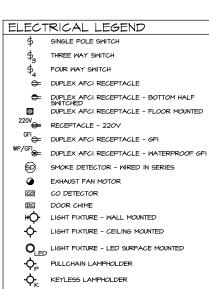
| MASTER PLAN INFORMATION | UPDATED DATE | 3-RALE | 08-23-2019 | 07-01-2024 | |

DRAWN BY: ITS DATE: 05/20/2025 PLAN NO. 2223

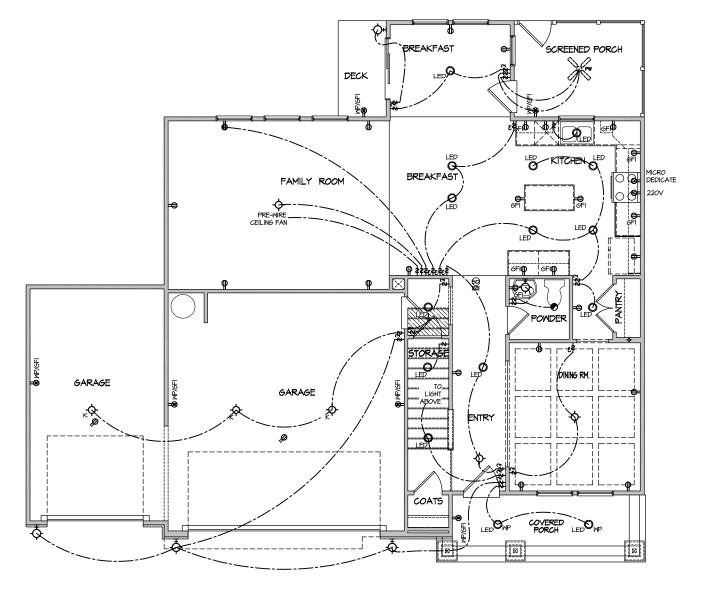


HOUSE NAME:
ELMHURST
DRAWING TITLE
BUILDING SECTION

SHEET No.



MOTE: 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.



| MASTER PLAN INFORMATION | REVISION | DATE | DATE | STALE | 08-23-2019 | 07-01-2024 | |

DRAWN BY: ITS

DATE: 05/20/2025

PLAN NO. 2223



FLOOR ELECTRICAL

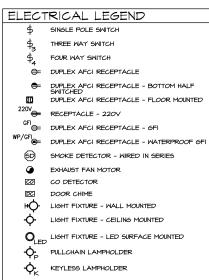
HOUSE NAME:
ELMHURST
DRAWING TITLE
FIRST FLOOR

SHEET No.

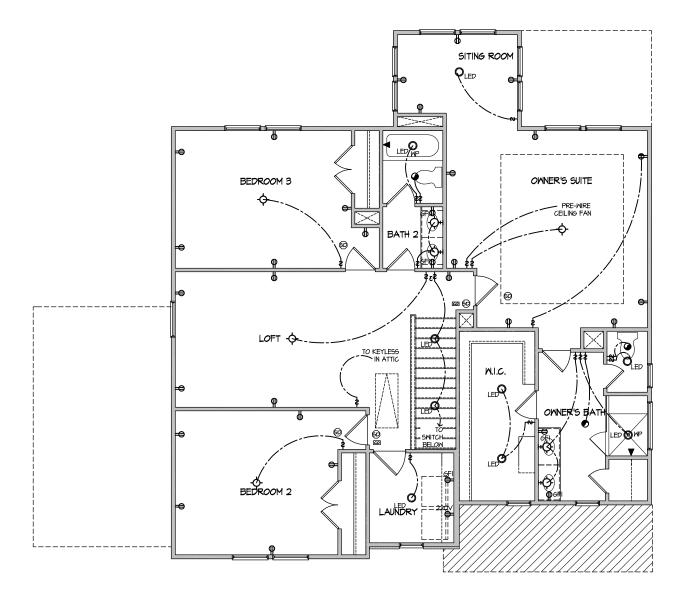
ELECTRICAL PLAN FIRST FLOOR - ELEV. 5

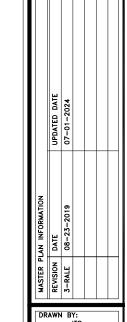
SCALE: 1/8" = 1'-0"

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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.





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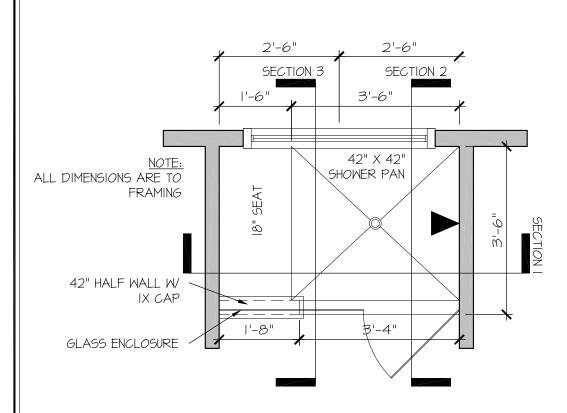


ᇳ HOUSE NAME:
ELMHURST
DRAWING TITLE
SECOND FLOO

SHEET No.

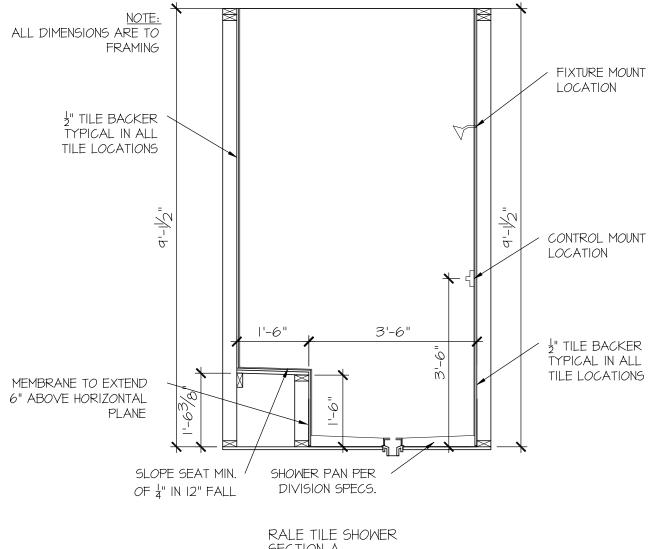
ELECTRICAL PLAN SECOND FLOOR - ELEV. 5

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



RALE TILE SHOWER 42" X 42" W 18" SEAT

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



SECTION A

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

CONSULTANT LOGO

DRAWN BY: L. BEAVERS DATE: 9/1/22 PLAN NO.

11 X 17 SCALE

24 X 36 SCALE



DETAIL SHOWER RALE

SHEET No.



SEAL

DRAWN BY:
L. BEAVERS
DATE: 9/1/22

PLAN NO.

24 X 36 SCALE

~ "

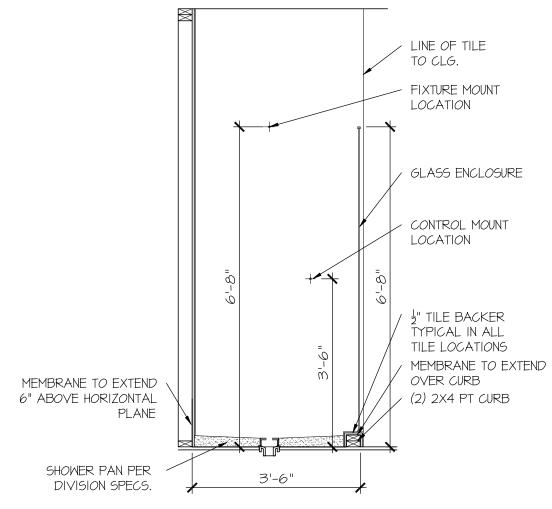


E ILE SHOWER DETAIL

OUSE NAME:

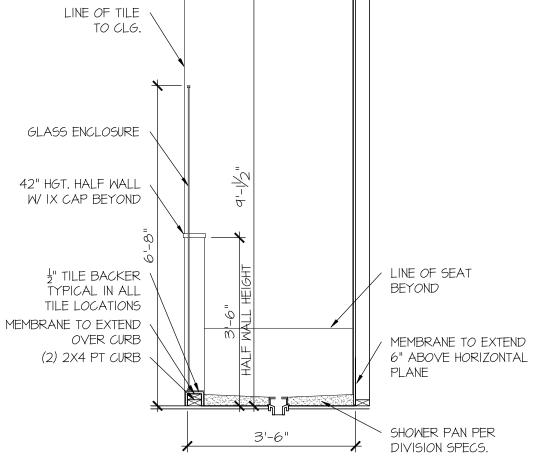
SHEET No.

P||.2



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





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

### **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 10' TALL WALL ANCHOR REQUIREMENTS) • ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE
- OR CMU SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2. BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT w/ PRESERVATIVE-TREATED
- WOOD. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. BASEMENT INTERIOR BEARING WALLS & EXTERIOR WALK-OUT
- BASEMENT WALLS SHALL BE 2x6 @ 16" O.C. SPF OR SYP, "STUD" CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN, COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
  - 4,000 psi: ...... FOUNDATION WALLS 2500 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 10' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED. • 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)2xIO 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
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY
- 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:1.5 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 (F'm=1500 psi). MORTAR SHALI
- BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 & 530 I. ● CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL
- JOINT REINFORCEMENT (OR EQUAL) 9 GA. MINIMUM @ 16" O.C. PROVIDE 2x8 x 16" LONG P.T. PLATE ON TOP OF ALL CRAWL
- SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID. PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.
- BUILDER TO VERIFY THAT MODEL HAS BEEN ADEQUATELY TREATED BY A LICENSED AND BONDED PEST CONTROL COMPANY FOR SUBTERRANEAN TERMITES, METHOD AND TYPE OF TREATMENT TO BE DETERMINED BY PEST CONTROL COMPANY.

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

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

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 • 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 <b>@</b> 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		

25"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 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 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 FLEMEN IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING BUT NOT LIMITED TO FOUNDATIONS SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING FLEMENTS 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/LICISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUS BEAMS DO NOT EXCEED THE FOLLOWING:

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

### ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)i¾"xi4" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xi2 + (i) ¼"xil¼" STEEL FLITCH PLATES - F	WI2xI4 - F
002	(2)13/4"×14" - F	3½"x14" - F	(2)194"x14" - F	(2)2xl2 + (I) ¼"xII¼" STEEL FLITCH PLATES - F	WI2xI4 - F
003	(3)194"x16" - H	T"x16" - H	N/A	(3)2xl2 + (2) ½"xll¼" STEEL FLITCH PLATES - H	N/A
004	(3)194"×20" - H	N/A	N/A	N/A	N/A
005	(2)i¾"xi4" - F	3½"x14" - F	(2)134"×14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATES - F	WI2xI4 - F
006	(2)19/4"x14" - F	3½"x 4" - F	(2)194"×14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATES - F	WI2xI4 - F
001	(2)1¾"x24" - FT <i>O</i> R (3)1¾"x22" - FT	N/A	N/A	N/A	WI4x34 - F
800	(2)134"×14" - F	3½"xl4" - F	(2)134"×14" - F	(2)2xl2 + (1)从"xli以" STEEL FLITCH PLATES - F	WI2xI4 - F
009	(2)134"×14" - F	3½"xl4" - F	N/A	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F
010	(2)13/4"×14" - F	3½"xl4" - F	(3)13/4"×14" - F	(2)2xl2 + (I) %"xll"," STEEL FLITCH PLATES - F	WI2xI4 - F

- BEAM NOTATION:
   "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM - "FB" INDICATES FLUSH BOTTOM BEAM
- "D" INDICATES DROPPED BEAM
- REFER TO DETAIL DISD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS REFER TO DETAIL E/SD20 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.

### 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 = 1 PSF T.C., 10 PSF B.C. LIVE = 16 PSF

LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS & SOLID SAWN) 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, @ 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 STRIKTIRAL 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 . I6" 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).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING "LSL" - Fb=2325 psi; Fv=310 psi; E=1.55x10^6 psi
- LVL' Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 psi
   PSL' FB=2900 PSi; Fv=290 PSi; E=2.0xl0^6 PSi
- M+K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES RESULTING FROM OR RELATED TO ANY BUILDING COMPONENT IF THE OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO MH FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR
- FOR 2 & 3 PLY BEAMS OF FOUAL 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 3½" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 3 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8
- FOR 4 PLY BEAMS OF FOUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/2"x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER, APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREW 2" FROM FDGE, 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 1/2" DIA BOLTS @ 48" O.C. STAGGERED
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW447 BASE UNO

### 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 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 x 0 131 NAII S @ 6"0 c @ PANEL EDGES & @ 12"0 c FIELD
- 2 3 × 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
- 2 🖥 × 0.113" NAILS 3" O.C. PANEL EDGES & 6" O.C. IN FIELD. #6 x 2" MIN. SCREWS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.

### ROOF FRAMING

- BAY WINDOWS & SHED ROOFS (UP TO 6' SPAN) CAN BE 2x4 OR 2x6 RAFTERS & CEILING JOISTS @ 16/24" O.C.
- FASTEN EACH ROOF TRUSS TO TOP PLATE W SIMPSON H2.5T CLIP (OR APPROVED FOUAL) & ALL BEARING POINTS PROVIDE (2) H25T 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.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"x0.131" NAILS @ 16" O.C. MAX. (I-JOISTS) - TRUSS VERTICALS w/ (3) 3"x0.131" NAILS @ 19.2" O.C. MAX.
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- w/ 2 1 x 0.131 NAILS @ 6"04. @ PANEL EDGES & @ 12" 04. FIELD.
- w/ 2 3 × 0.120 NAII S @ 4 a.c. @ PANEL EDGES & @ 8" O.C. FIELD. - W/ 2 🕺 × 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD.

### VENEER LINTEL SCHEDULE

1-1						
SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE				
3'-O"	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"x%;"				
	3 FT. MAX	L4"x4"x¼" *				
8'-O"	I2 FT. MAX	L5"x3½"x%;"				
	I6 FT. MAX	L6"x3½"x%"				
q'-6"	I2 FT. MAX	L6"x3½"x%"				
16'-0"	2 FT. MAX	L7"x4"x½" **				
U-0	3 FT. MAX	L8"x4"x½" **				

- LINICLES' 2 % 3 ½" VENEER W 40 PSP MAXIMUM WEIGHT. 6" SHALL HAVE 4" MIN. BEARING 6" SHALL HAVE 6" MIN. BEARING 6" SHALL NOT BE FASTINED BACK TO HEADER. 6" SHALL BY FASTINED BACK TO WOOD HEADER IN WALL **9**40°02.

- W ½" DIA x 3 ½" LONG LAG SCRENG IN 2" LONG VERTICALLY SLOTTED HOLES. MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
- OPENING.
  ALL LINTELS SHALL BE LONG LEG VERTICAL.
  HIEN SUPPORTING VENEER < 8° MIDE THE EXTERIOR TOE OF THE
  HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 ½" MIDE OVER
  THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT
- SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS FOR ANY LINTE FASTENED BACK TO BEAM, FASTENERS SHALL MAINTAIN A 2/2" (MINIMUM) CLEAR DISTANCE FROM BOTTOM OF BEAM.
- (MINIMUM) CLEAR DISTANCE TOO TOO TO THE FOR GUEEN VENEER USE L4X3/4".

  FOR 3½" VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF

### HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION					
► HD-I	SIMPSON HTT4 HOLD-DOWN * (%" DIA. ANCHOR)					
► HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.) -OR- MSTC66B3 ALTERNATE					
<b>▶</b> HD-3	SIMPSON STHDI4/STHDI4RJ					

UTILIZE THE SSTB24 ANCHOR BOLT @ ALL MONOSLAB & INTERIOR RAISED 5LAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS, MINIMUM 24" MIN.

EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB THREADED ROD INTO CONCRETE FOUNDATION, PROVIDE IO" (FOR 5/8" DIA.) OR 5" (FOR 1/8" DIA.) MIN. EMBEDMENT INTO CONCRETE.

INSTALL PER MANUE INSTRUCTIONS MINIMUM 16" FOOTING THICKNESS REQ'D. DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF CONCRETE.

### 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)

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10. AS PERMITTED BY R301.1.3 OF THE 2018 NCSBC:RC. OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IE THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN IS ADEQUATE TO RESIST

THE CODE REQUIRED LATERAL FORCES.

EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

DESIGN WIND UPLIET LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED) ENGINEERING PRACTICE) AS ALLOWED PER 2018 NGSBC: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 • 7/16" OSB OR 15/32" PLYWOOD:

- FASTEN SHEATHING W 2 3/8"x0.II3" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP, U.N.O. • HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL
- PANEL EDGES IS <u>NOT</u> REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 1/2" 16 GA STAPLES (%" CROWN) @ 3" O.C. AT EDGES \$ @ 6" O.C IN FIELD.

### BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 % "  $\times$  0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR | 1 % " 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 FDGFS & FDGF FASTENING

### 3" O.C. EDGE NAILING

• AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W 8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

### **NOTES**

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

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

FO

COMMUNIT JRST 5 POND - ELMHUF AKE 102 -EIGH

LOT BL/

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sue date: 05-22-2

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MULHERN+KUL

SERIPENTIAL STRUCTURAL ENGINEERI

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P. 215-08-08001 - multimatocom

P. 215-08-08001 - multimatocom

M&K project number: 1 26-2306 1

project mgr: JTR
drawn by: JAD
issue date: 05-22-25

REVISIONS:

ate: initial:

MES WES

FOUNDATION PLANS
BLAKE POND COMMUNIT
LOT 102 - ELMHURST 5
RALEIGH, NC

**S1.0** 

REFER TO SO.O FOR
TYPICAL STRUCTURAL NOTES
\$ SCHEDULES

LEGEND

• = = INDICATES SHEAR WALL & EXTENT

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

• IIIIII INTERIOR BEARING WALL

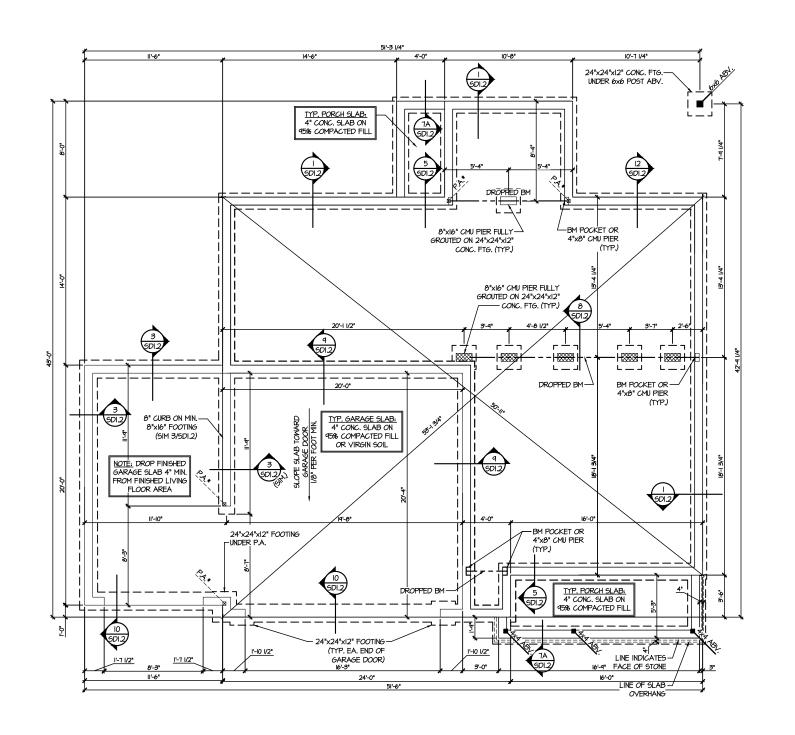
● □===□ BEARING WALL ABOVE

• EXTENT OF OVERFRAMING

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

• ---- BEAM / HEADER

JL METAL HANGER



JTR drawn by: JAD issue date: 05-22-2

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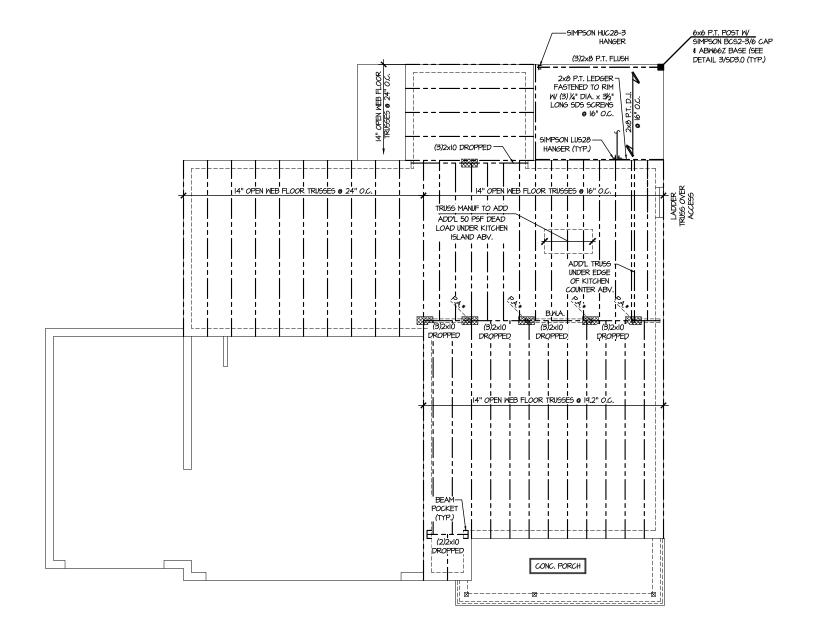
PLANS BLAKE POND COMMUNITY LOT 102 - ELMHURST 5 RALEIGH, NC

LEGEND

BEAM / HEADER

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

TYPICAL STRUCTURAL NOTES \$ SCHEDULES



	ENGINEERED BEAM MATERIAL SCHEDULE								
BEAM NUMBER	LVL OPTION PSL OPTION		LSL OPTION	FLITCH OPTION	STEEL OPTION				
001	(2)15/4"x14" - F	3½"x14" - F	(2)194"×14" - F	(2)2xi2 + (i) ¼"xil¼" STEEL FLITCH PLATES - F	WI2xI4 - F				
002	(2)13/4"×14" - F	3½"x14" - F	(2)194"×14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATES - F	WI2xI4 - F				
003	(3)194"×16" - H	7"×16" - H	N/A	(3)2xl2 + (2) ½"xll以" STEEL FLITCH PLATES - H	N/A				
004	(3)13/4"×20" - H	N/A	N/A	N/A	N/A				
005	(2)13/4"x14" - F	3½"x 4" - F	(2)i¾"xi4" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATES - F	WI2xI4 - F				
006	(2)13/4"×14" - F	3½"x14" - F	(2)13/4"×14" - F	(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATES - F	WI2xI4 - F				
007	(2)13/4"x24" - FT <i>O</i> R (3)13/4"x22" - FT	N/A	N/A	N/A	WI4x34 - F				
000	(2)13/4"x14" - F	3½"xl4" - F	(2)134"x14" - F	(2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F				
P00	(2)134"x14" - F	3½"xi4" - F	N/A	(2)2xl2 + (l) %"xll4" STEEL FLITCH PLATES - F	WI2xI4 - F				
OIO	(2)13/4"×14" - F	3½"xl4" - F	(3)134"×14" - F	(2)2xl2 + (l) %"xl以" STEEL FLITCH PLATES - F	WI2xI4 - F				

BEAM NOTATION:

- "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM
- "FD" INDICATES FLUSH BOTTOM BEAM
- "D" INDICATES DROPPED BEAM

- "p" INDICATES DROPPED BEAM
- "H" INDICATES DROPPED OPENING HEADER
REFER TO DETAIL D/SD2.0 FOR TYPICAL FILITCH 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"X01.20" NAILS @ 8" O.C.
FOR FLUSH BOTTOM BEAMS PROVIDE 2X STACKED PLATES ATOP BEAM AS REQ'D. FASTEN
PLATES IN SUCCESSION W (2) 3"X01.20" NAILS @ 8" O.C.

SD2, 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

• = INDICATES SHEAR WALL & EXTENT

EXTENT OF OVERFRAMING

JL METAL HANGER

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR

IST FLOOR FRAMING PLAN

OOR

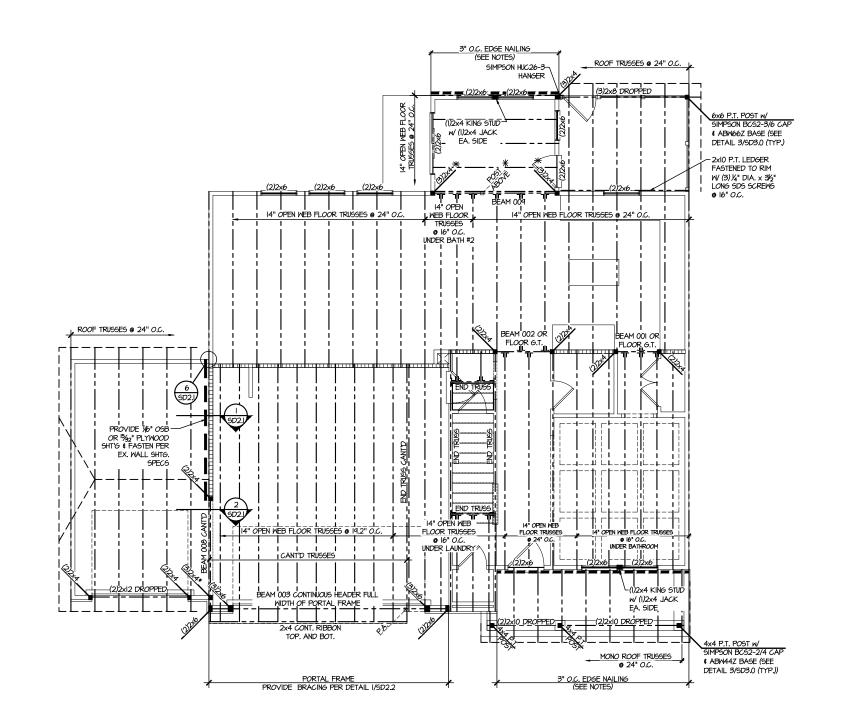
 BEAM / HEADER • = = INDICATES SHEAR WALL & EXTENT

EXTENT OF OVERFRAMING

\* INDICATES POST ABOVE. PROVIDE SOLID

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

TYPICAL STRUCTURAL NOTES & SCHEDULES



2ND FLOOR FRAMING PLAN

ENGINEERED BEAM MATERIAL SCHEDULE LVL OPTION LSL OPTION FLITCH OPTION STEEL OPTION (2)2x12 + (1) ¼"x11¼" STEE FLITCH PLATES - F 001 (2)13/4"×14" - F 3½"xl4" - F (2)13/4"×14" - F WI2xI4 - F (2)2x12 + (1) ¼"xII¼" STEEI FLITCH PLATES - F 002 (2)|3/4"x|4" - F 3½"xl4" - F (2)13/4"x14" - F WI2xI4 - F (3)2xl2 + (2) ½"xli¼" STEE FLITCH PLATES - H 003 (3)13/4"x16" - H 7"xl6" - H N/A NΑ (3)13/4"x20" - H N/A N/A (2)2xl2 + (I) 从"xl以" STEEI FLITCH PLATES - F 005 (2)1¾"x14" - F 3½"xl4" - F (2)13/4"×14" - F WI2xI4 - F (2)2xl2 + (1) ¼"xll¼" STEEL FLITCH PLATES - F 006 (2)13/4"x14" - F (2)13/4"x14" - F WI2xI4 - F '2)|%|'x24" - FT *O*R (3)|%|'x22" - FT NΑ WI4x34 - F 001 (2)2xl2 + (1)¼"xl¼" STEEL FLITCH PLATES - F 008 (2)13/4"x14" - F 3%"xI4" - F (2)13/4"x14" - F WI2xI4 - F (2)2xl2 + (I) %"xl以" STEEL FLITCH PLATES -WI2xI4 - F (2)2xl2 + (l) **¾"**xl**¼"** STEEL FLITCH PLATES - F 010 (2)13/4"x14" - F (3)134"x14" - F WI2xI4 - F

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/502.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
REFER TO DETAIL E/5D2.0 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.

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

### LEGEND

• IIIIIII INTERIOR BEARING WALL

● □===□ BEARING WALL ABOVE

JL METAL HANGER

BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO SO.O FOR

**S3.0** 

OOR

MULHERN+KUL

RESIDENTIAL STRUCTURAL ENGINEERI



M&K project number: 126-23061

JTR drawn by: JAD issue date: 05-22-25

REVISIONS:

initial:

ROOF

LEGEND

• == INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING

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

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES

& SCHEDULES

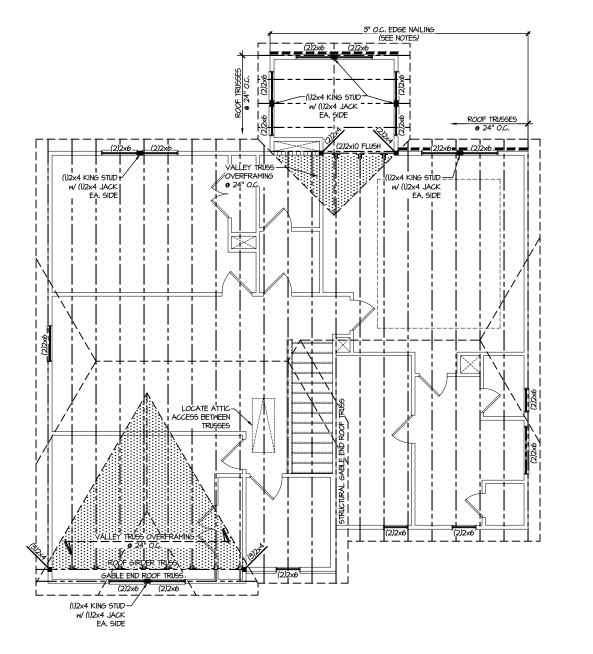
INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

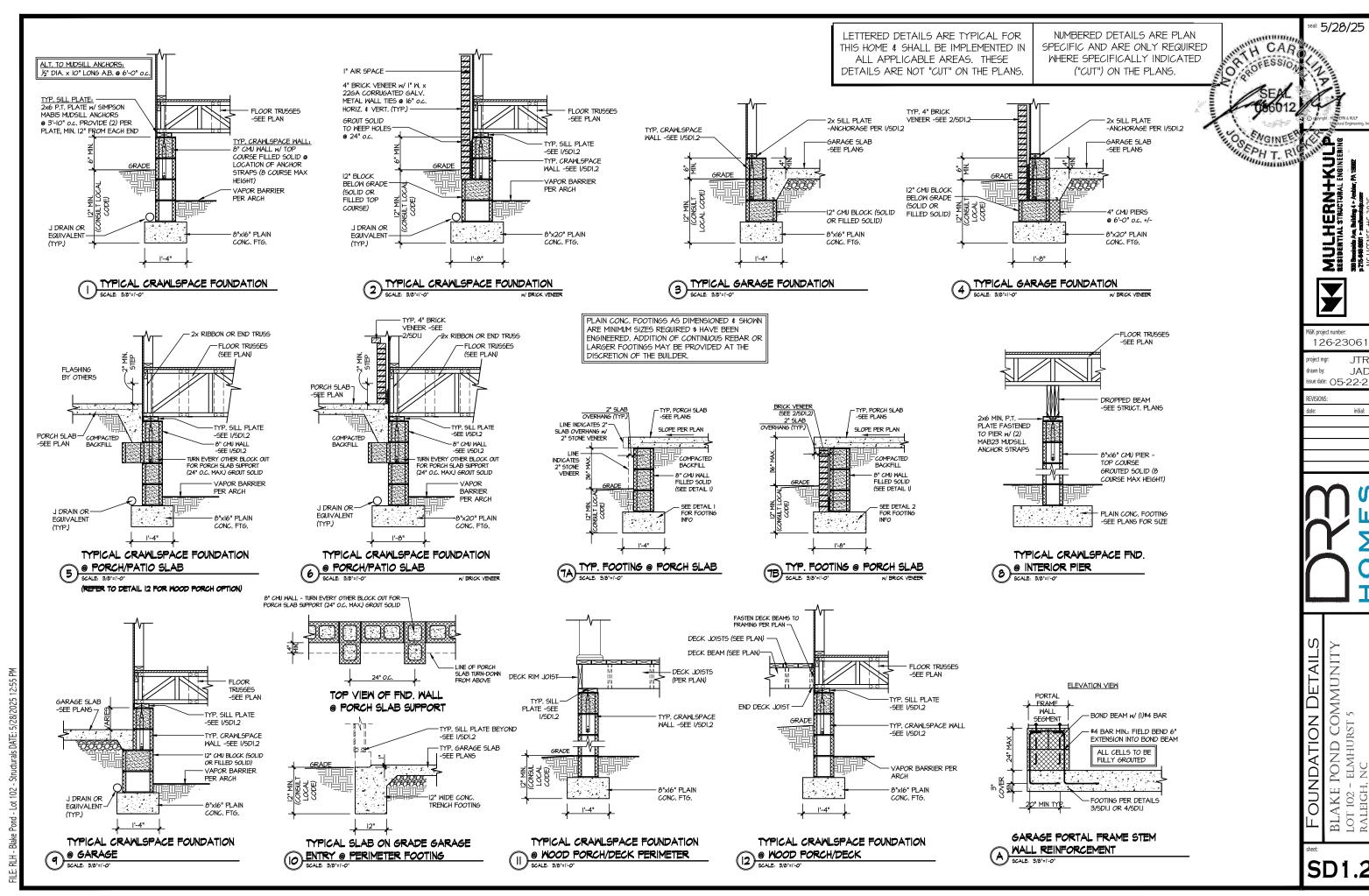
• INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE

• ---- BEAM / HEADER

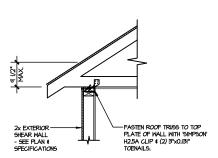
JL METAL HANGER

BLAKE POND COMMUNITY Lot 102 - elmhurst 5 Raleigh, nc



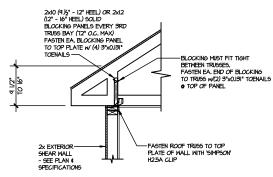


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### TYPICAL SHEAR

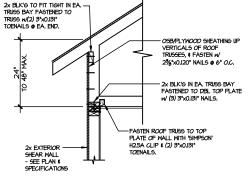
TRANSFER DETAIL @ ROOF HEEL HEIGHT LESS THAN 4½" NO BLOCKING REQ'D



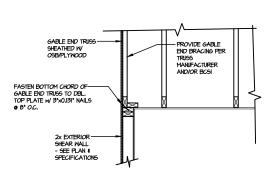
### TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

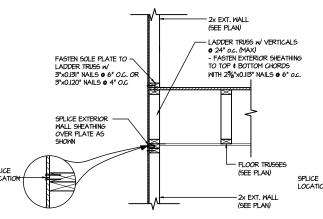
SCALE: 3/8"=1"-0" HEEL HEIGHT BETWEEN 9, HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQ'D



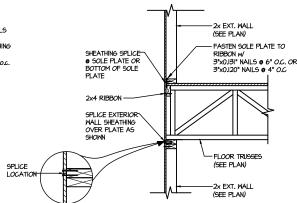
### TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS



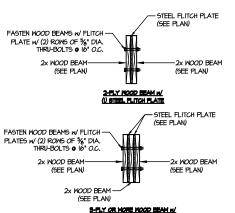
TYPICAL GABLE END DETAIL SOLLE SUB-SI-O"



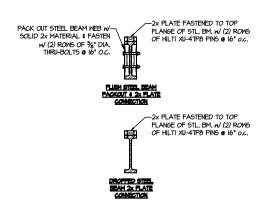
TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE SIGNAL FROM



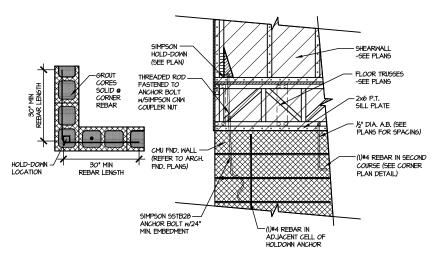
TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE 9/9"-1"-0" FEWEDICHAR FROME



TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE SUM-1-0"



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



TYPICAL CORNER FOUNDATION HOLD-DOMN INSTALLATION
SCALE: NTS.

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

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

a: 5/28/25 TH CAR P ROFESSION OR SEPH T. R

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

M&K project number: 126-2306

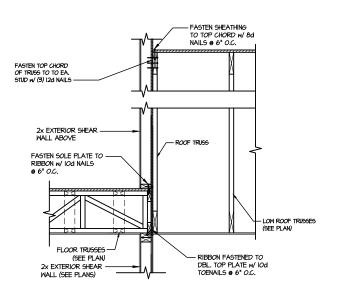
**JTR** drawn by: JAD ssue date: 05-22-2

REVISIONS

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DETAIL

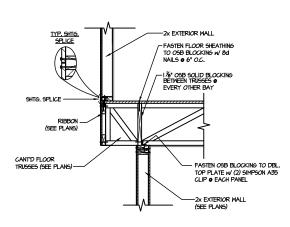
BLAKE POND COMMUNIT Lot 102 - elmhurst 5 raleigh, nc Ŋ



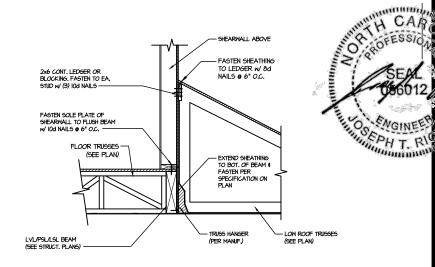
TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE SAT-1-0"

— FASTEN SHEATHING TO TOP CHORD w/ 8d NAILS @ 6" O.C. - SHEARWALL ABOVE FASTEN SOLE PLATE OF SHEARWALL TO FLUSH BEAM W/ IOd NAILS @ 6" O.C. - EXTEND SHEATHING TO BOT. OF BEAM & FASTEN PER SPECIFICATION ON PLAN FLOOR TRUSSES -LVL/PSL/LSL BEAM (SEE STRUCT, PLANS) LOW ROOF TRUSSES

SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE



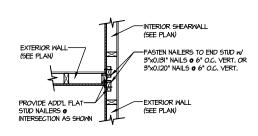
SHEAR TRANSFER DETAIL BETWEEN FLOORS @ CANT'D EXT. WALL



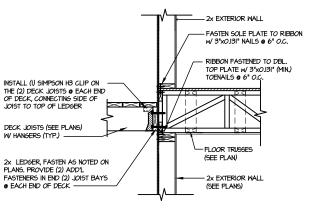
SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE

- Fasten Roof Sheathing to Ledger W 2 3/8"x0.113" Nails @ 3" O.C. (2)2x8 CONT. - 2x8 LEDGER FASTENED TO DBL RIBBON W (2) I/4" DIA. x 4 I/2" LONG WOOD SCREMS (SIMPSON SDS OR EQ.) . 16" O.C. - Fasten truss vertical to ledger w/ (1) simpson RR connector, utilize (8) nails/screms per manuf, rec. CONTIN. ROOF SHEATHING -FASTEN TO TRUSSES W 2 3/8"x0.113" NAILS @ 6" O.C. MONO TRUSSES • 24" O.C. FLOOR TRUSSES (SEE PLAN) - CONT. 2x FASCIA -FASTEN TO RAFTERS W (I) SIMPSON LS30 CLIP Ø EA. TRUSS - CONNECTION OR HANGER PER TRUSS MANUF. 2x6 LEDGER FASTENED TO— EA, WALL STUD (@ 16" MAX) W (1) 1/4" DIA, x 4 1/2" LONG 5D5 SCRENS + (2) 3 1/4"X0.120" NAILS

5 DETAIL @ SHED ROOF



SHEAR TRANSFER DETAIL @ INTERSECTING INT. SHEARWALL



DECK CONNECTION DETAIL



a: 5/28/25

MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING

M&K project number: 126-2306

issue date: 05-22-2

drawn by:

REVISIONS:

**JTR** 

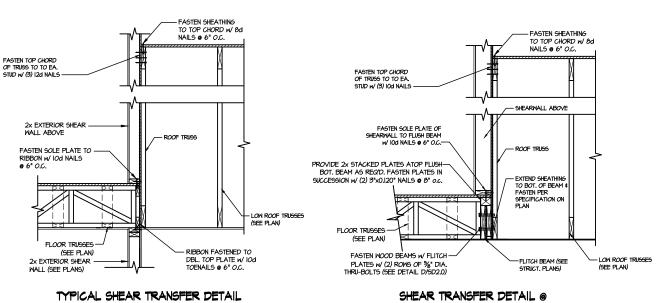
**JAD** 

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BLAKE POND COMMUNIT Lot 102 - elmhurst 5 raleigh, nc

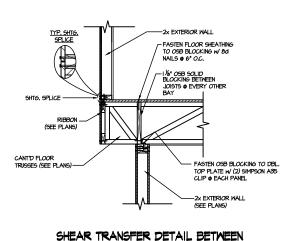
**SD2.1A** 

G DETAILS RAMIN

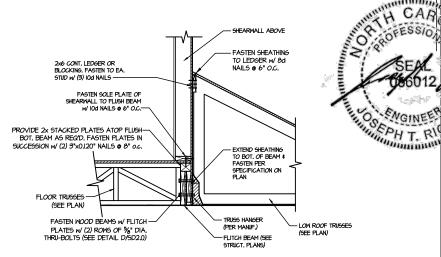


CONTIN. ROOF SHEATHING -FASTEN TO TRUSSES W 2 3/8"x0.113" NAILS ● 6" O.C.

- CONT. 2x FASCIA -FASTEN TO RAFTERS W (1) SIMPSON LS30 CLIP @ EA. TRUSS



3 FLOORS @ CANT'D EXT. WALL



SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE 8/4\*=1\*-0\*

TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

SCALE 944-1-07

MONO TRUSSES 9 24" O.C.

5 DETAIL @ SHED ROOF

(2)2x8 CONT.

FLOOR TRUSSES -

2x6 LEDGER FASTENED TO— EA. WALL STIID (@ 16" MAX) W (1) I/4" DIA, x 4 I/2" LONG 9DS SCREWS + (2) 3 I/4"X0.120" NAILS FASTEN ROOF SHEATHING TO LEDGER W 2 3/8"x0.113" NAILS @ 3" O.C.

- 2xô LEDGER FASTENED TO DBL RIBBON W (2) I/4" DIA, x 4 I/2" LONG WOOD SCREWS (SIMPSON SDS OR EQ.) © 16" O.C.

- FASTEN TRUSS VERTICAL TO LEDGER w/ (1) SIMPSON RR CONNECTOR, UTILIZE (8) NAILS/SCREMS PER MANUF, REC. SHEAR TRANSFER DETAIL @

EXTERIOR SHEARMALL ABOVE

SCALE. BAY-1-0"

EXTERIOR WALL
(SEE PLAN)

PROVIDE ADDL FLAT
STUD WAILERS ©
INTERSECTION AS SHOWN

SHEAR TRANSFER DETAIL @

(b) INTERSECTING INT. SHEARWALL

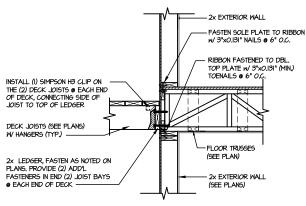
SCALE 5/47-17-07 SHITE, ON SAME PACE

-INTERIOR SHEARWALL

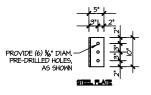
-FASTEN NAILERS TO END STUD W/ 3"x0.131" NAILS • 6" O.C. VERT. OR 3"x0.120" NAILS • 6" O.C. VERT.

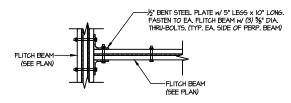
(SEE PLAN)

-EXTERIOR WALL (SEE PLAN)



DECK CONNECTION DETAIL





TYPICAL FLITCH BEAM TO FLITCH BEAM

CONNECTION DETAIL

SCALE 844-1-0\*

31 H - Blake Pond - Lot 102 - Structurals DATE: 5/28/2025 12:55 PM

FRAMING DETAILS
BLAKE POND COMMUNIT
LOT 102 - ELMHURST 5
RALEIGH, NC

a: 5/28/25

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

M&K project number: 126-2306

issue date: 05-22-2

drawn by:

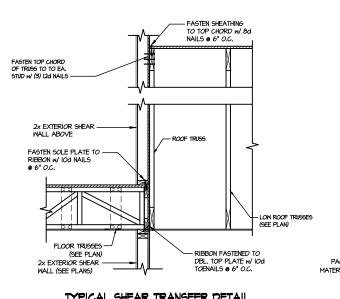
REVISIONS:

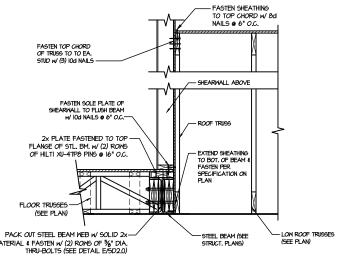
**JTR** 

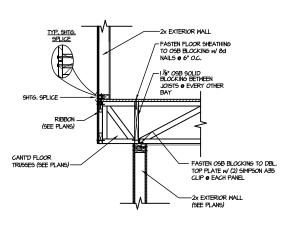
**JAD** 

initial:

SD2.1B







SHEAR TRANSFER DETAIL BETWEEN

3 FLOORS @ CANT'D EXT. WALL



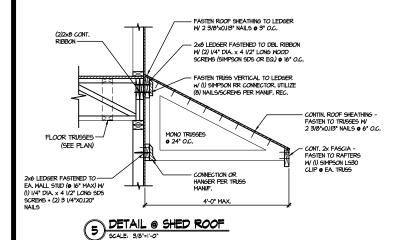
FASTEN SOLE PLATE OF SHEARWALL TO FLUSH BEAM W/ IOd NAILS • 6" O.C.—

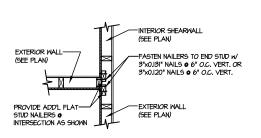
2x PLATE FASTENED TO TOP -FLANGE OF STL. BM. w/ (2) ROWS OF HILTI XU-47P8 PINS @ 16" O.C.

FLOOR TRUSSES -

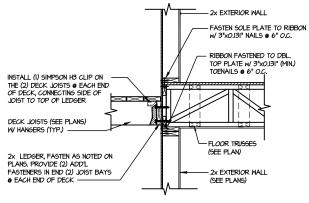












DECK CONNECTION DETAIL

SCALE 8/4\*\*I\*O\*

BLAKE POND COMMUNIT Lot 102 - elmhurst 5 raleigh, nc DETAILS Ŋ RAMIN

a: 5/28/25

MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING

M&K project number: 126-2306

issue date: 05-22-2

drawn by:

REVISIONS:

**JTR** 

**JAD** 

initial:

TH CAR

PROFESSION

OSEPH T. RIV

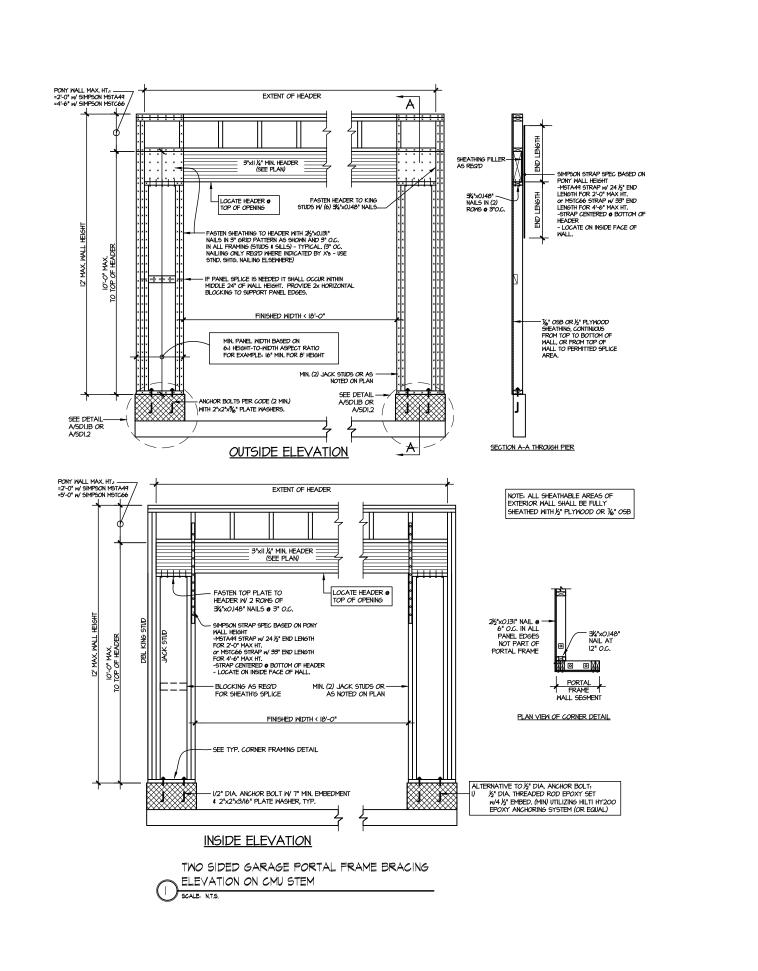
OR

FASTEN SHEATHING

TO LEDGER w/ 8d NAILS @ 6" O.C.

EXTEND SHEATHING TO BOT, OF BEAM &
FASTEN PER
SPECIFICATION ON
PLAN

SD2.1C



MULHERNIAL STRUCTURAL ENGINEERING

RESIDENTIAL STRUCTURAL AND STRU

M&K project number: 126-23061

project mgr: JTR drawn by: JAD issue date: 05-22-25

REVISIONS:

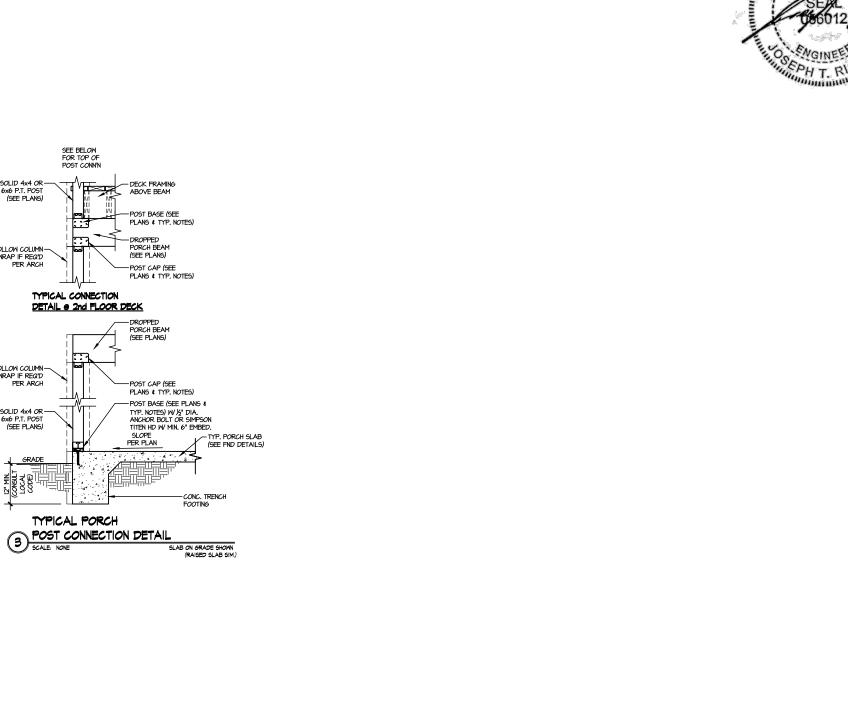
date: initial:

HOMES FOMES

FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 102 - ELMHURST 5
RALEIGH, NC

heet:

SD2.2



SOLID 4x4 OR — 6x6 P.T. POST (SEE PLANS)

HOLLOW COLUMN-WRAP IF REQ'D PER ARCH

HOLLOW COLUMN— WRAP IF REQ'D PER ARCH

SOLID 4x4 OR — 6x6 P.T. POST (SEE PLANS)

seal: 5/28/25

MULHERN+KUL
RESIDENTIAL STRUCTURAL ENGINEERI

M&K project number: 126-23061

issue date: 05-22-2

drawn by:

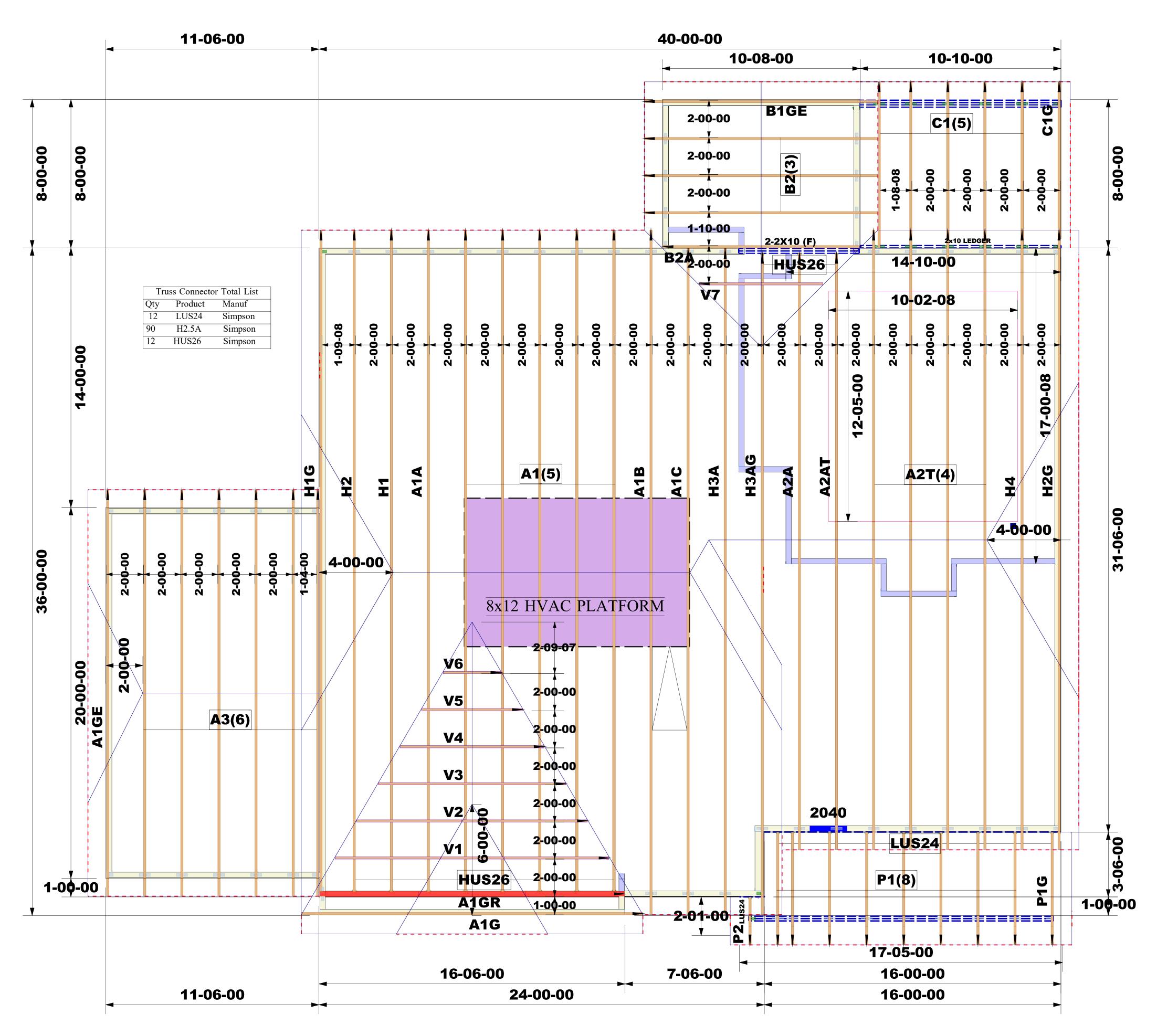
JTR

JAD

initial:

BLAKE POND COMMUNITY Lot 102 - elmhurst 5 raleigh, nc FRAMING DETAILS

SCALE: NTS



\*EXTERIOR DIMENSIONS ARE TO SHEATHING

\*INSTALL SIMPSON H2.5A HURRICANE

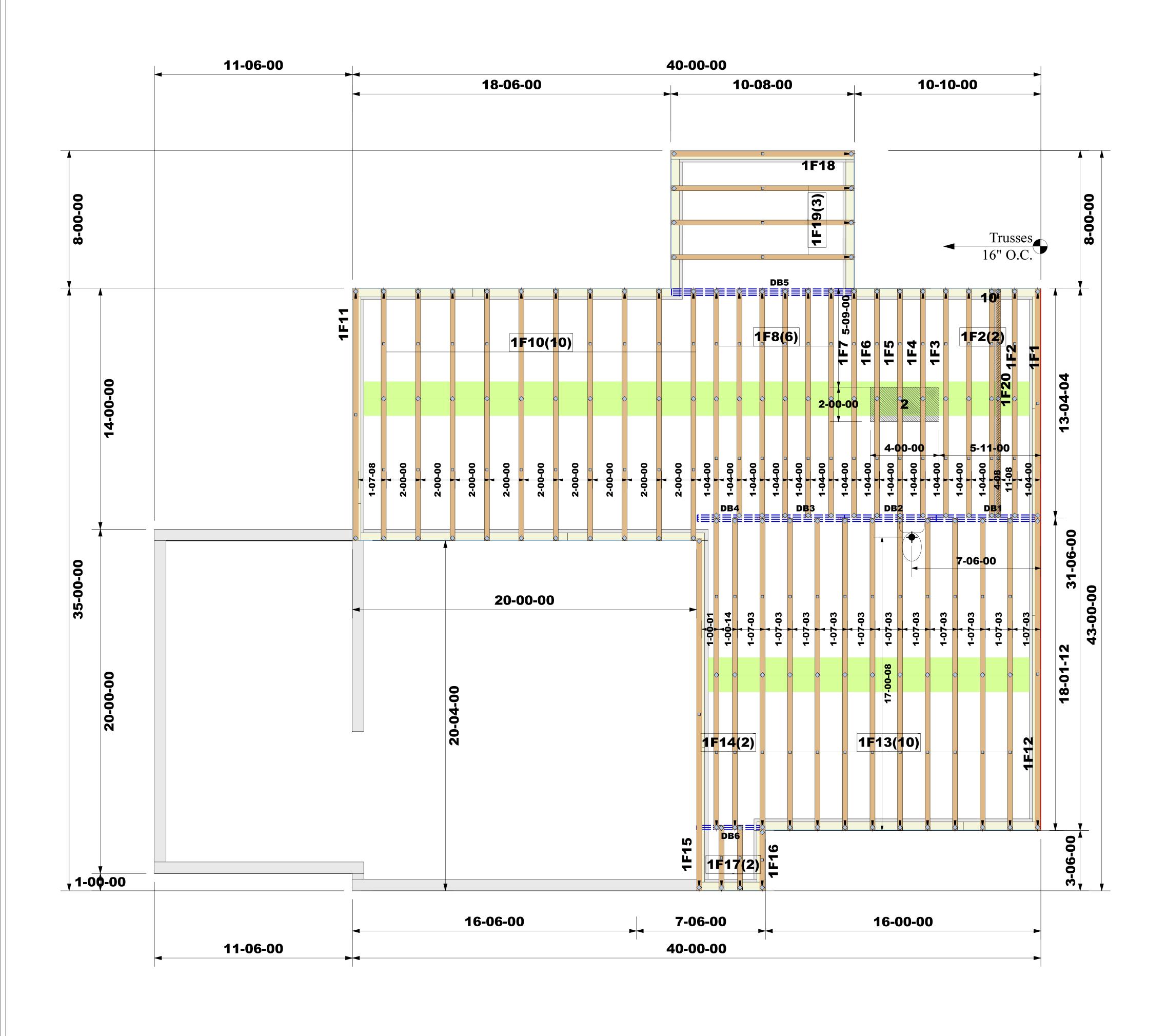
ANCHORS AT EACH BEARING POINT

ROOF FRAMING PLAN

BLAKE POND SF LOT 102
(NC)(RAL)
2223-1 - ELMHURST
EL. 5
OPT.SCREENED PORCH
OPT.EXTENED BREAKFAST
OPT.SITTING ROOM
OPT.3 CAR GARAGE
OPT.TRAY CEILING OWNER'S BEDROOM
GARAGE LEFT

Job #:	WARNING:	NOTE:	Cuctomor: DDP Poloigh		
2505-7437	CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE	IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO	Customer: DRB Raleigh		
	TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC	SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.	Job Name: Blake Pond Lot 00.0102 Roof	Third-Party Quality Assurance Licensee TPI Plant W974	
Designer: Sandy Das	APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMAITON.  TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY	THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS	<u>Lot #:</u> 00.0102	Structural, LLC 201 Poplar Avenue Thurmont, MD 21788	
Sales Rep:  Robbie Zarobinski	SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.	Model Name: Elmhurst Rev 3	Phone: 301-271-7591	

SCALE: NTS

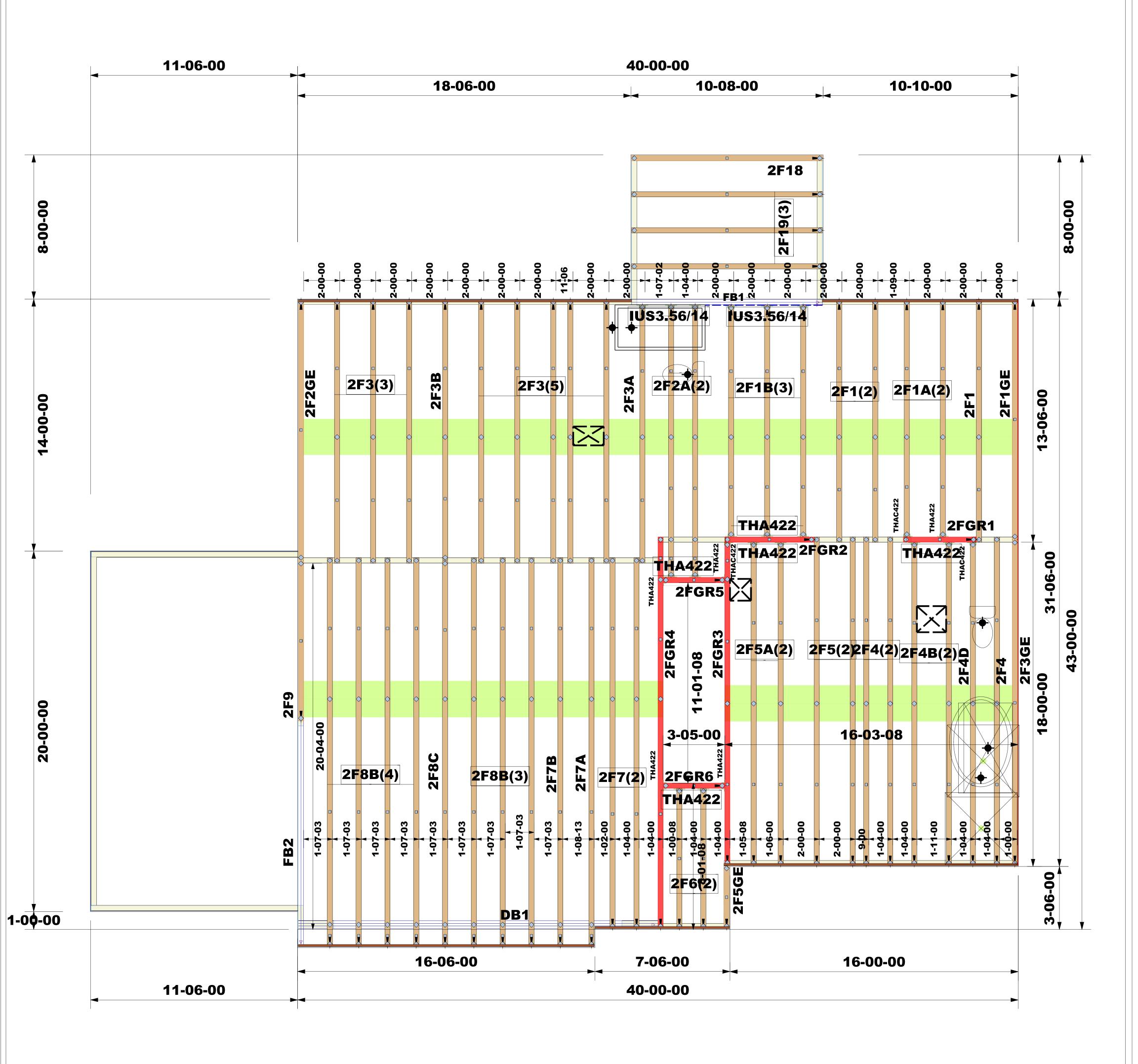


### 1ST FLOOR FRAMING

BLAKE POND SF LOT 102
(NC)(RAL)
2223-1 - ELMHURST
EL. 5
OPT.SCREENED PORCH
OPT.EXTENDED BREAKFAST
OPT.SITTING ROOM
OPT.3 CAR GARAGE
GARAGE LEFT/CRAWL

\*EXTERIOR DIMENSIONS ARE
TO SHEATHING.
\*INSTALLATION OF STRONGBACKS
RECOMMENDED ( NOT REQUIRED).
\*INSTALL 2X4 NAILERS ON ALL TOP
RIBBON NOTCH CONDITIONS.

Job #: <b>2505-7436</b>	CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER. PLATE MANUFACTURER. OR THE	NOTE:  IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO	Customer:	DRB Raleigh	
	THE IRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC	SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.	Job Name:	Blake Pond Lot 00.0102 OWF	Third-Party Quality Assurance Licensee TPI Plant W974
Designer: Sandy Das	APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMAITON.  TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS. THEY	THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS	Lot #: 00.0	102	Structural, LLC 201 Poplar Avenue Thurmont, MD 21788
Sales Rep:  Robbie Zarobinski	SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	INCLUDING THE INSTALLATION, AND BRACING OF	Model Nan	ne: Elmhurst Rev.3	Phone: 301-271-7591



\*EXTERIOR DIMENSIONS ARE TO SHEATHING. \*INSTALLATION OF STRONGBACKS RECOMMENDED ( NOT REQUIRED). \*INSTALL 2X4 NAILERS ON ALL TOP RIBBON NOTCH CONDITIONS.

## 2ND FLOOR FRAMING

Truss Connector Total List

Qty Product Manuf

6 IUS3.56/14 Simpson

16 THA422 Simpson

3 THAC422 Simpson

 Products

 Net Qty
 Plies
 Product
 Length
 PlotID

 2
 2
 1 3/4" x 14" (2.0E 3100) LVL
 12-00-00
 FB1

 3
 3
 1 3/4" x 16" (2.0E 3100) LVL
 20-00-00
 DB1

 2
 2
 1 3/4" x 14" (2.0E 3100) LVL
 13-00-00
 FB2

BLAKE POND SF LOT 102
(NC)(RAL)
2223-1 - ELMHURST
EL. 5
OPT.SCREENED PORCH
OPT.EXTENDED BREAKFAST
OPT.SITTING ROOM
OPT.3 CAR GARAGE
GARAGE LEFT/CRAWL

Job #: <b>2505-7436</b>	WARNING:  CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE	NOTE:  IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO	Customer: DRB Raleigh		
	THE IRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC	SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.	Job Name: Blake Pond Lot 00.0102 OWF	Third-Party Quality Assurance Licensee TPI Plant W974	
Designer: Sandy Das	APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMAITON.  TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS. THEY	THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTIION DESIGN. DRAWINGS. DOCUMENTS	<u>Lot #:</u> 00.0102	Structural, LLC 201 Poplar Avenue Thurmont, MD 21788	
Sales Rep:  Robbie Zarobinski	SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.	Model Name: Elmhurst Rev.3	Phone: 301-271-7591	