# BENSON II

BRIARWOOD BLUFF LOT 22





# 110 VILLAGE TRAIL SUITE 215 WOODSTOCK, GA. 30188

DRAWING INDEX				
A0.0	COVER SHEET			
A1.1	FRONT ELEVATION			
A2.1	SIDE & REAR ELEVATIONS			
A3.1	SLAB FOUNDATION			
A5.1	FIRST FLOOR PLAN & DETAILS			
A5.2	SECOND FLOOR PLAN & DETAILS			
A6.1	ROOF PLAN			
A7.2-A7.3	ELECTRICAL PLANS			
A8.1	TRIM LOCATION LAYOUTS			

AREA TABULATION		
FIRST FLOOR	726	
SECOND FLOOR	1087	
TOTAL	1813	
GARAGE	408	
FRONT PORCH (COVERED)	76	
REAR PATIO	120	

12.11 12.131313				
DATE	BY	REVISION	PAGE #	
12/9/2022	AW	Prototype walk revisions - see revision sheet	A5.1, A5.2, A5.2.1,A7.2, A7.3, A7.3.1	
9/21/2023	BB	Removed tub and shower sizes from all affected pages	A5.2, A5.2.1	
1/30/2025	IJ	PCR 6201 - added unfinished and finished basements, stair well width adjusted to accommodate basements	A3.1 - A5.2.1, A7.1-8.1	

PLAN REVISIONS

#### **GOVERNMENTAL CODES & STANDARDS**

HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS

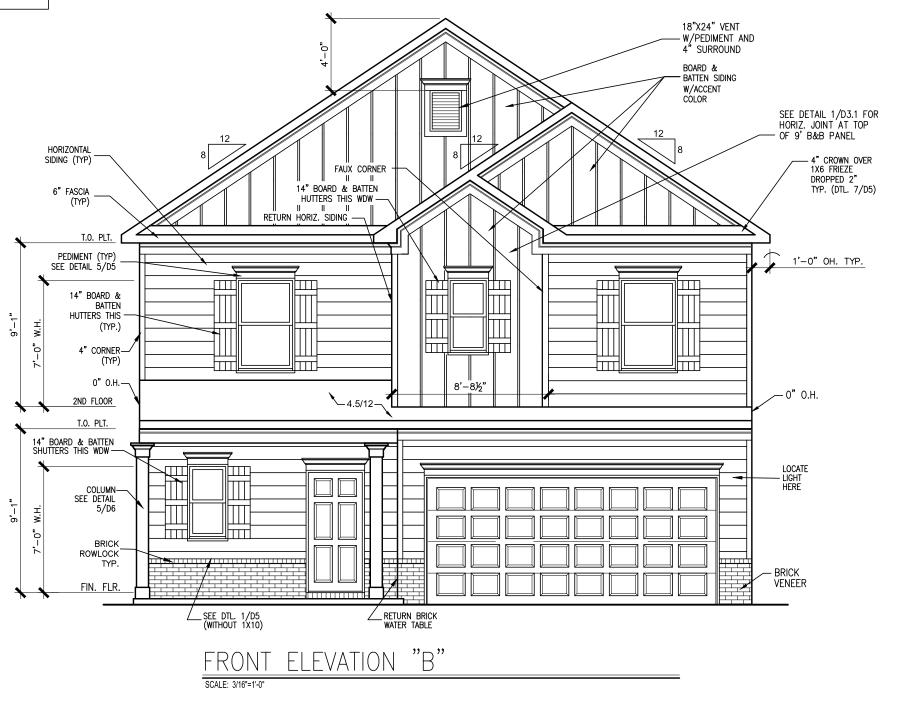
#### BUILDING CODE ANALYSIS / DESIGN CRITERIA

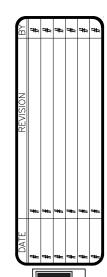
HOME TO BE BUILT TO MEET OR EXCEED ALL LOCAL CODES AND DESIGN CRITERIA

ALL NON-MASONRY RETURNS TO BE HORIZONTAL SIDING

SEE SHEET D3 OF SDH TYPICAL
DETAILS FOR SOFFIT DETAILS PER
SOFFIT MATERIAL

#### BRIARWOOD BLUFF LOT 22





SMITH DOUGLAS HOMES QUALITY I INTEGRITY I VALUE

ELEVATIONS FRONT ELEVATION BENSON II

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

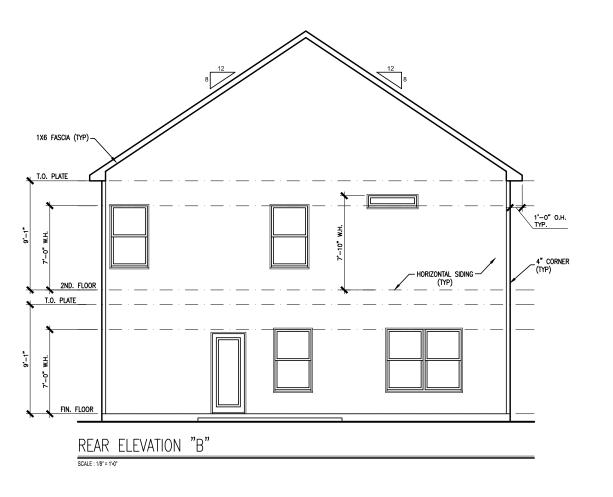
SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.



# SHINGLES PER SPEC (TYP) L<sub>8/12</sub>7 1X6 FASCIA (TYP — HORIZONTAL SIDING — (TYP) 2ND. FL00R \_\_\_T.0. PL<u>ate</u> LEFT ELEVATION "B" SHINGLES PER SPEC (TYP) L<sub>8/12</sub>7 - HORIZONTAL SIDING — (TYP) 2'-0"

RIGHT ELEVATION "B"

#### BRIARWOOD BLUFF LOT 22



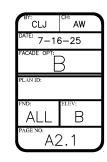


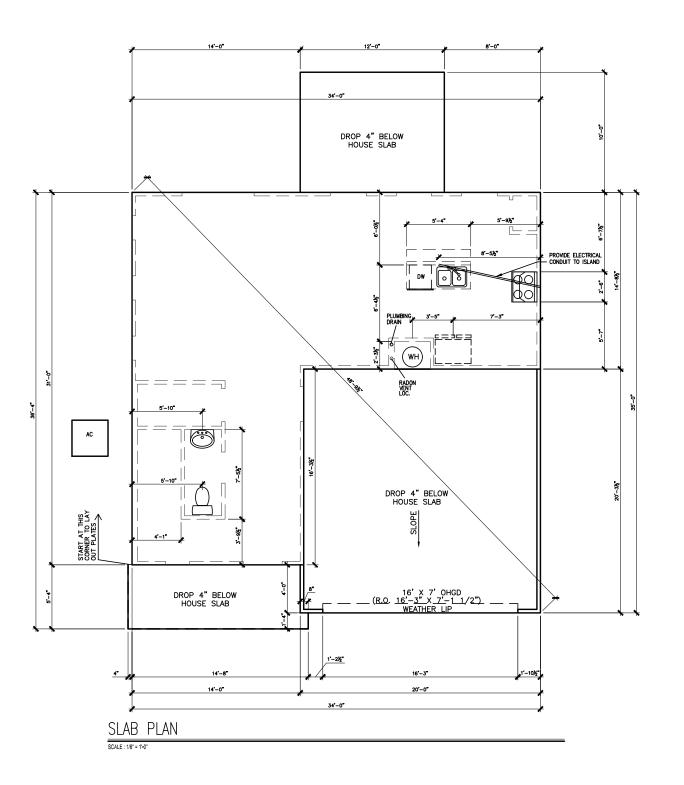
REAR SMITH DOUGLAS HOMES OUT INTEGRITY I VALUE

SIDES AND F BENSON

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

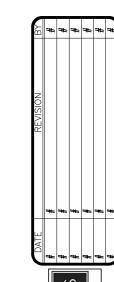
SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans are not related drawings are not to be reproduced without writte consent from SMITH DOUGLAS HOMES.





\*RADON VENT PROVIDED PER LOCAL CODE

REFER TO DETAIL 3/D1 FOR BRICK LEDGE DETAIL WHEN BRICK VENEER IS CHOSEN



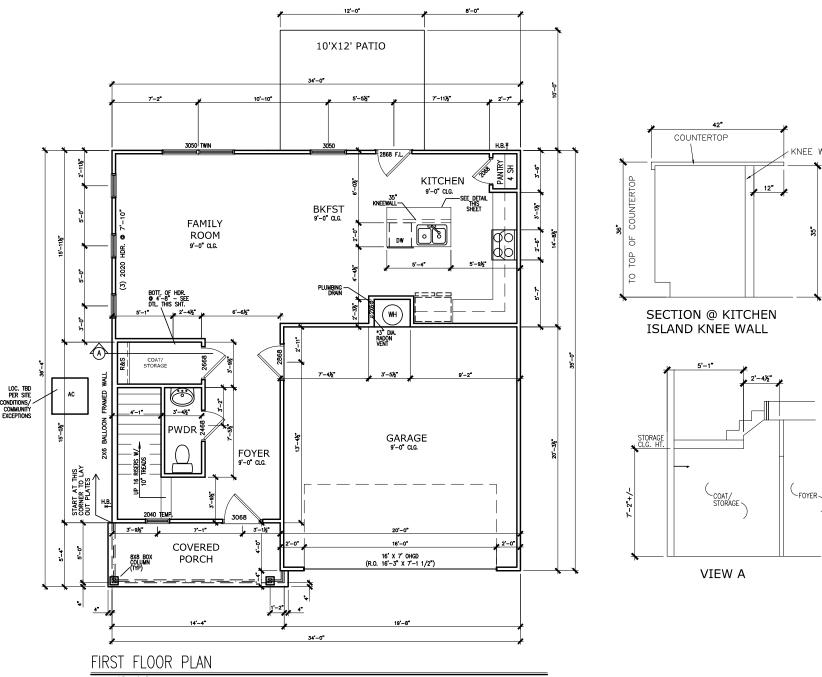
SMITH DOUGLAS HOMES

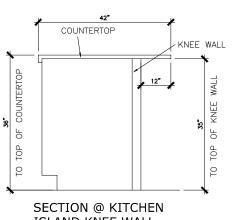
FOUNDATION PLAN SLAB PLAN BENSON II

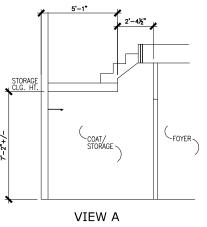
SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

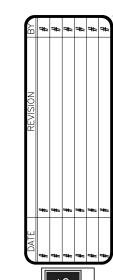








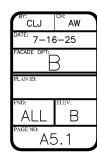
\*RADON VENT PROVIDED PER LOCAL CODE

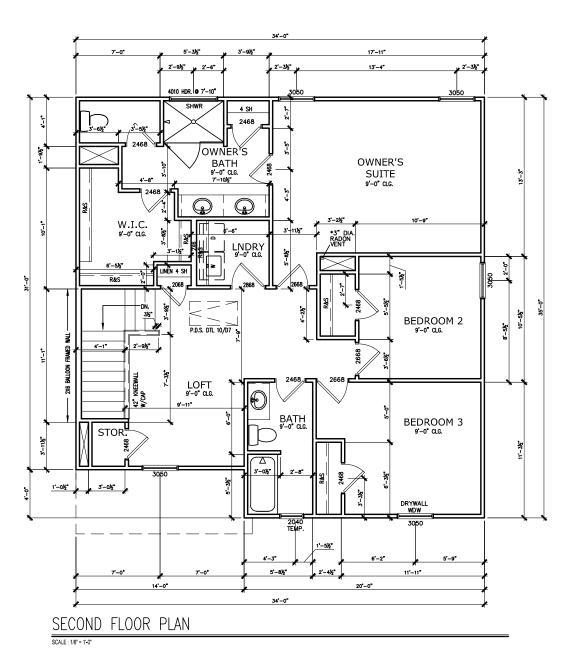




FLOOR PLAN BENSON FIRST SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

FLOOR





\*RADON VENT PROVIDED PER LOCAL CODE

REFER TO MANUFACTURER'S SPECS. FOR DRAIN LOCATIONS ON DETAIL SHEETS D12, D12.1, D12.2 & D12.3 REVISION

REVISION

REPLACEMENT OF THE SECOND OF THE SECON

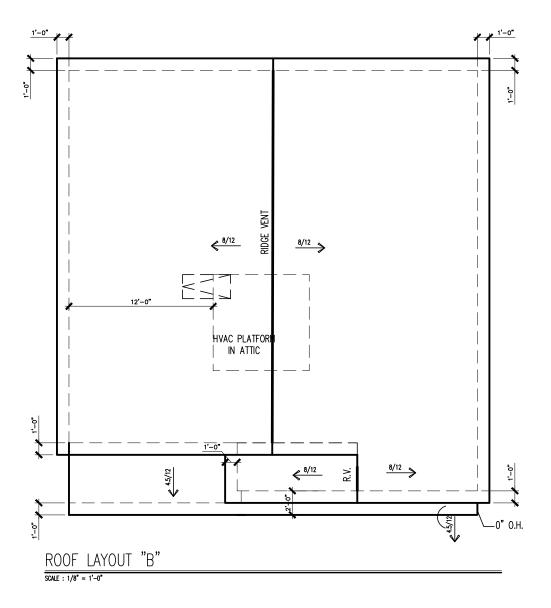
SMITH DOUGLAS HOMES

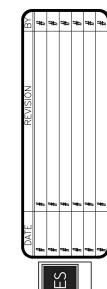
SECOND FLOOR BENSON II

SMITH DOUGLAS HOMES
110 VILLAGE TRAIL
SUITE 115
WOODSTOCK, GA 30188
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without writter consent from SMITH DOUGLAS HOMES.









ROOF PLAN
ROOF PLAN
BENSON II

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without writter consent from SMITH DOUGLAS LAWES



## 10'X12' PATIO CENTER ON WINDOW BKFST **FAMILY** ROOM KITCHEN ELECTRICAL PROVIDED AS NEEDED GARAGE FOYER COVERED PORCH

FIRST FLOOR ELECTRICAL PLAN

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

#### BRIARWOOD BLUFF LOT 22

ELECTRICAL LEGEND					
\$	SWITCH		TV		
\$3	3 WAY SWITCH	φ	120V RECEPTACLE		
\$4	4 WAY SWITCH	•	120V SWITCHED RECEPTACLE		
Ø	CEILING FIXTURE	Φ	220V RECEPTACLE		
-ф <sub>к</sub>	KEYLESS	P <sub>GFCI</sub>	GFCI OUTLET		
+83	WALL MOUNT FIXTURE	PAFCI	ARCH FAULT CIRCUIT INTERRUPTER		
0	CEILING FIXTURE	† <sub>GL</sub>	GAS LINE		
•	FLEX CONDUIT	† <sub>wL</sub>	WATER LINE		
СН	CH CHIMES ↓  PH TELEPHONE  SD/Cq SMOKE DETECTOR & CARBON MONOXIDE		HOSE BIBB		
PH			FLOOD LIGHT		
SD/Co			1x4 LUMINOUS FIXTURE		
SO	SECURITY OUTLET		CEILING FAN		
	GARAGE DOOR OPENER				
	EXHAUST FAN		ELECTRICAL WIRING		
	FAN/LIGHT	-	CEILING FIXTURE		
ELEC1	ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES				
APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)					
BREA	KFAST/DINING ROOM	63" ABO	VE FINISHED FLOOR		
KITCH	IEN PENDANT LIGHTS	33" ABO	VE COUNTER TOP		
TWO	STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR			
CEILIN	NG FAN	96" ABOVE FINISHED FLOOR			
FLOOI	D LIGHT	10' MAX. ABOVE FIN. FLOOR			

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER



SMITH DOUGLAS HOMES

ELECTRICAL PLAN
FIRST FLOOR
BENSON II

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.



# OWNER'S SUITE BATH LINDRY W.I.C. BEDROOM 2 BEDROOM 3 BEDROOM 3

SECOND FLOOR ELECTRICAL PLAN

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

#### BRIARWOOD BLUFF LOT 22

LLE	ectrical l	_EGE	ND	
\$	SWITCH		TV	
\$3	3 WAY SWITCH	φ	120V RECEPTACLE	
\$4	4 WAY SWITCH	•	120V SWITCHED RECEPTACLE	
Ø	CEILING FIXTURE	Φ	220V RECEPTACLE	
-ф <sub>к</sub>	KEYLESS	P <sub>GFCI</sub>	GFCI OUTLET	
ΗØ	WALL MOUNT FIXTURE	PAFCI	ARCH FAULT CIRCUIT	
0	CEILING FIXTURE	† <sub>GL</sub>	GAS LINE	
•	FLEX CONDUIT	T <sub>WL</sub>	WATER LINE	
СН	CHIMES	¥	HOSE BIBB	
PH	TELEPHONE	B	FLOOD LIGHT	
SD/Cd ₩	SMOKE DETECTOR & CARBON MONOXIDE		1x4 LUMINOUS FIXTURE	
SO	SECURITY OUTLET		05111110 5441	
	GARAGE DOOR OPENER		CEILING FAN	
	EXHAUST FAN		ELECTRICAL WIRING	
0	FAN/LIGHT		CEILING FIXTURE	
ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES				
APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)				
BREAKFAST/DINING ROOM 63" ABOVE FINISHED FLOOR				
KITCH	HEN PENDANT LIGHTS	33" ABOVE COUNTER TOP		
TWO	STORY FOYER FIXTURE	96" ABO	VE FINISHED FLOOR	
CEILI	NG FAN	96" ABOVE FINISHED FLOOR		
FLOO	D LIGHT	10' MAX	. ABOVE FIN. FLOOR	

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER



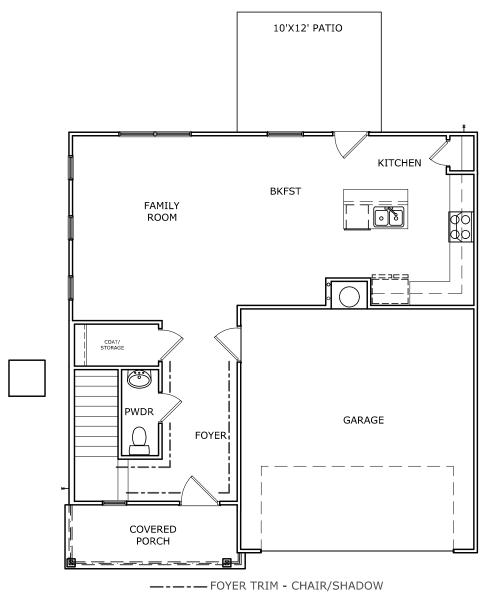
SMITH DOUGLAS HOMES

ELECTRICAL PLAN SECOND FLOOR BENSON II

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

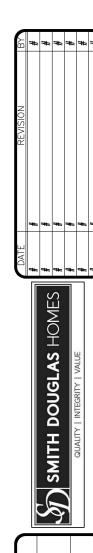




— TOTER TRITE CHAIN SHADON

#### TRIM LAYOUT FIRST FLOOR PLAN

SCALE : 1/8" = 1'-0

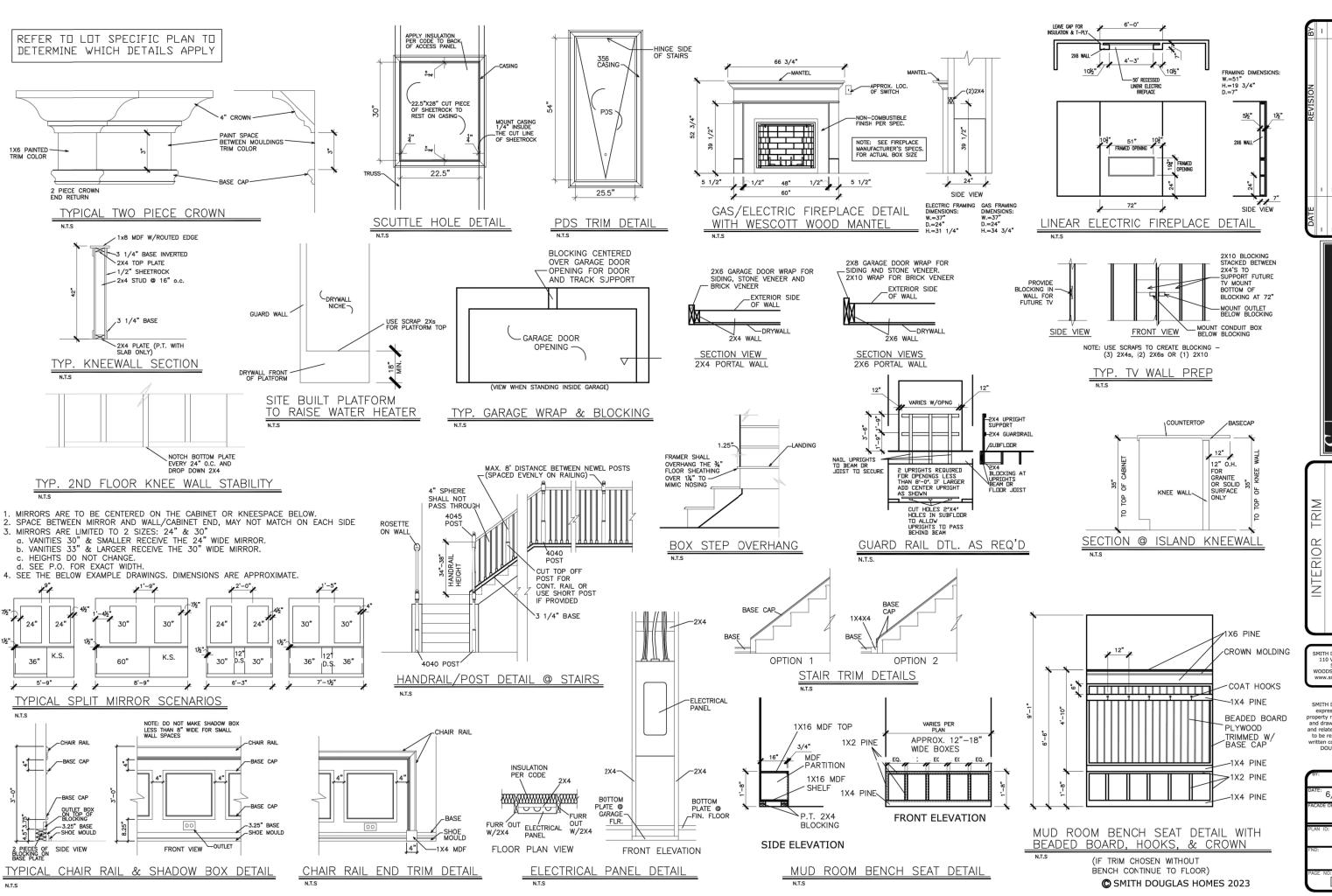




SMITH DOUGLAS HOME:
expressly reserves it's
property rights in thes
plans and drawings.
These plans and relate
drawings are not to b
reproduced without writt
consent from SMITH

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 115 WOODSTOCK, GA 30188 www.smithdouglas.com

	_
BY: CLJ	CH: AW
DATE: 7-16	6–25
FACADE OPT:	3
PLAN ID:	
fnd: ALL	B B
PAGE NO:	3.1



SMITH DOUGLAS HOMES OUALITY | VALUE

INTERIOR TRIM
DETAILS

SMITH DOUGLAS HOMES 110 VILLAGE TRAIL SUITE 215 WOODSTOCK, GA 30188 www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

DATE: 6/13/23
FACADE OPT:

PLAN ID:

FND: ELEV:

PAGE NO: D 1.1

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

DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAIL5	3"x0.120" NAILS	
JOIST TO SOLE PLATE	(3) TOENAILS	(3) TOENAILS*	
SOLE PL. TO JOIST/RIM OR BLK'G	NAILS @ 4" o.c.	NAILS @ 4" o.c.	
STUD TO PLATE	(4) TOENAILS/ (3)END NAILS	(4) TOENAILS/ (4)END NAILS*	
RIM TO TOP PLATE	TOENAILS @ 6" o.c.	TOENAILS @ 4" o.c.*	
BLK'G. BTWN. JOISTS TO TOP PL.	(3) TOENAILS EA. END	(3) TOENAILS EA. END*	
DOUBLE STUD	NAILS @ 16" o.c.	NAILS @ 16" o.c.	
DOUBLE TOP PLATE	NAILS ❷ 12" o.c.	NAILS @ 8" o.c.	
DOUBLE TOP PLATE LAP SPLICE	(12) NAILS IN LAPPED AREA (24" MIN.)	(15) NAILS IN LAPPED AREA (24" MIN.)	
TOP PLATE LAP @ CORNERS & INTERSECTING WALLS	(3) NAILS	(3) NAILS	
RAFTER/TRUSS TO TOP PLATE	(4) TOENAILS + (I) SIMPSON H2.5T	(4) TOENAILS + (I) SIMPSON H2.5T	
GAB. END TRUSS TO DBL. TOP PL.	TOENAILS @ 8" o.c.	TOENAILS @ 6" o.c.	
R.T. w/ HEEL HT. 91/4" TO 12"	2xIO BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 6" O.C.	2xIO BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W TOENAILS @ 4" O.C.	
R.T. w/ HEEL HT. 12" TO 16"	2xI2 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" O.C.	2xI2 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" O.C.	
R.T. w/ HEEL HT. UP TO 24"	LAP WALL SHTG. W/ DBL. TOP PL. \$ INSTALL ON TRUSS VERT FASTEN W/ NAILS @ 6" O.C.	LAP WALL SHTG. W/ DBL. TOP PL. \$ INSTALL ON TRUSS VERT FASTEN W/ NAILS @ 6" O.C.*	
R.T. w/ HEEL HT. 24" TO 48"	LAP WALL SHTG, W DBL. TOP PL. & INSTALL ON TRUSS VERT FASTEN W NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL	LAP WALL SHTG, W DBL. TOP PL. 4 INSTALL ON TRUSS VERT FASTEN W NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL*	
WALL TO FOUNDATION	WALL SHTG. LAP W/ SILL PL. & FASTENED PER SHEAR WALL FASTENING SPEC.		
* 2K"YO IIR IG AN ACCEPTABLE ALTERNATIVE TO A RIVOLOU' GAME GRACING OR NIMBER OF NAILG			

#### \* 2½"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. ONLY ACCEPTABLE WHERE \* ARE SHOWN)

#### ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE 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 MEK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALL ATION

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: I/4" DEAD LOAD
- B. ATTIC TRUSSES, & I-JOISTS:
- 1/8" DEAD LOAD

ABSOLUTE DEAD LOAD DEFECTION OF ATTIC TRUSSES WHEN AD JACENT TO ELOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT DIFFERENTIAL

#### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT, MAX	L3"x3"x/4"
	3 FT. MAX	L3"x3"x¼"
6'-0"	I2 FT. MAX	L4"x3"x¼"
	20 FT. MAX	L5"x3½"x5%"
8'-0"	3 FT. MAX	L4"x4"x¼" *
0-0	I2 FT. MAX	L5"x3½"x5%"
	I6 FT, MAX	L6"x3½"x3%"
9'-6"	I2 FT, MAX	L6"x3½"x5%"

- . LINTELS: HALL SUPPORT 2 % 3 ½ VENEER W 40 paf MAXIMUM 6' SHALL HAVE 4" MIN. BEARING IS' SHALL HAVE 8' MIN. BEARING 6' SHALL NOT BE FASTENED BACK TO HEADER.
- « GE HALL NOT BE FASTIBLED BACK TO HEADER.
  » GE HALL BE FASTIBLED BACK TO HEADER.
  » GE HALL BE FASTIBLED BACK TO HOOD HEADER IN HALL 646°02. W /S¹ DIA x 3 JS² LONG LAS SCREENED HALL SOME THE CONTROLL OF THE COPENING.
  » GENERAL PAPELS TO ANY HORIZING OF BROCK OPER THE OPENING.
  » HEN SIPPORTING VENERA (3° MOET THE EXTENCE TO GO FT THE HORIZIONTAL LES MAY BE QUIT IN THE FIELD TO BE 35° MIDE OVER THE EXAMINE LISTIN HOUT, THIS IS TO ALLOH FOR HOSTIFAL JOINT FINISHING.
  » EET STRUCKINGS, LONG TO HOSTIFAL JOINT FINISHING.
  » FOR STRUCKINGS, LONG FOR ANY LINITE. CONDITION NOT ENCOMPASSED BY THE ARGO LESS TO MACHETIES.
  » FOR OLED! VOIETR HE LAGSW.
  MK STID. MAY 2006.

#### GENERAL STRUCTURAL NOTES

#### **FOUNDATION**

- DESIGN IS BASED ON 2018 NCSBC-RESIDENTIAL CODE & 2018 IRC WITH SOUTH CAROLINA AMENDMENTS
- FOOTING DESIGN 2,000 PSF NET ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2×4/6 SILL PLATES TO CONC 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 FA4 ANCHOR STRAPS @ 6'-0" O.C
- FASTEN 2xIO SILL PLATES TO PRECAST BSMT WALLS WITH A MINIMUM OF 2 ANCHORS PER PLATE, I2" MAX. FROM PLATE ENDS UTILIZING: • I/2" DIA. BOLTS @ 2'-0" O.C
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W PERIMETER FOUNDATION 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.
- FOUNDATION WALLS & FOOTINGS SHALL BE PLAIN CONCRETE, U.N.O.
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.: f'c = 4,000 psi: ...... FOUNDATION WALLS 3,000 psi: ...... FOOTINGS & INTERIOR SLABS ON GRADE
- 3,500 psi: ...... GARAGE & EXTERIOR SLABS ON GRADE = 60,000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
  - . 8' OR 9' HEIGHT (AS NOTED ON PLANS) TALLER WALLS MUST BE ENGINEERED.
- BASEMENT WALL DESIGN IS BASED ON 30 OR 45 PCF BACKFILL SOIL TYPE CLASSIFICATIONS:
  - 30 PCF TYPE (GW, GP, SW, SP) 45 PCF TYPE (GM, GC, SM, SM-SC, ML)
  - IMPORTANT IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS UTILIZED FOR BACKELL CONTACT MULHERN & KULP FOR FURTHER EVALUATION OF FOUNDATION DESIGN.
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL Ist FLOOR DECK.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN IN REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAE 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
- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR COVER WHERE CAST AGAINST EARTH, I 1/2" MIN. CLEAR COVER AGAINST FORMS. LAP ALL REBAR 40 BAR DIAMETERS MIN. (24" FOR #4 BARS) & BEND BARS AND LAP AT CORNERS. PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT.
- DIMENSIONS BY OTHERS BUILDER TO VERIEY.

#### LEGEND

#### R.T. NDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)

INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)

INDICATES I4" DEEP FLOOR I-JOISTS @ 24" O.C MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER NOTE: I4" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM

- INDICATES LOCATIONS OF POTENTIAL TILE FLOOR JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS
- INTERIOR BEARING WALL
- □□□□□ BEARING WALL ABOVE (B.W.A.)

- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

#### \_ATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: )MPH WIND IN 2018 NCSBC:R(

#### **& 120MPH WIND IN 2018 IRC** (120 MPH WIND SPEED IN ASCE 7 WIND MAP PER IRC R301211)

EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B. HE DESIGN WAS COMPLETED PER 2015 \$ 2018 IBC ECTION 1609) & ASCE 7. AS PERMITTED BY R301.1.3

OF THE 2018 NOSBO:RC & 2018 IRC. 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 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC & 2018 IRC SECTION R802.II.I.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.54 R802.II.

#### EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 3"XO.II3 NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP, U.N.O.)
- ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

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

AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 2 3" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE FIELD NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) 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.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

INDICATES EXTENT OF INT. OSB SHEARWALL, AND/OR 3" O.C. EDGE NAILING

INDICATES HOLDOWN

#### 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)2×4
UP TO 8'-0"	(2)2×6	(3)2x6

#### NOTES

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

#### FLOOR FRAMING

- I-JOISTS SHALL BE DESIGNED BY MANUF, TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT M&K FOR EXCLUDED FLOOR DESIGNS)
- PER THE GUIDELINES OF THE TILE COUNCIL OF NORTH AMERICA (TCNA HANDBOOK), IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO VERIFY THAT THE FINISHES TO BE INSTALLED MATCH THE DESIGN CRITERIA NOTED ABOVE (UNDER "DESIGN
- FLOOR SYSTEMS & SHEATHING HAVE BEEN DESIGNED TO SUPPORT ADDITIONAL DEAD LOAD FROM CERAMIC TILE (EXCLUDING MARBLE OR STONE). HOWEVER, IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO PROVIDE PROPER UNDERLAYMENT, UNGOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATION IN THE TONA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).
- AT I-JOIST FLOORS, PROVIDE I" MIN, OSB RIM BOARD
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O. I-JOIST SHOP DWGS. SHALL BE SUBMITTED TO ARCH. & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- 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 f" x 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 🖁 × 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.

#### ROOF FRAMING

- ROOF SHEATHING SHALL BE 1/16" 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 🖁 × 0.120" NAILS @ 4"o.c. @ PANEL EDGES & @ 8" O.C. FIELD. - W/2 🖁 × 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD.
- WITHIN 48" OF ALL ROOF EDGES, RIDGES, & HIPS FASTEN ROOF SHEATHING FIELDS PER EDGE NAILING SPEC
- FASTEN EACH ROOF TRUSS TO TOP PLATE W USP RTTA CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) RT7A CLIPS AT 2-PLY GIRDER TRUSSES, (3) RT7A CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.C
- ROOF TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI I "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT SHORT SPAN ROOF TRUSSES w/2x4 LEDGER FASTENED TO FRAMING w/(2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 7' SPAN)

#### 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, 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

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

#### GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NCSBC-RESIDENTIAL CODE \$ 2018 IRC WITH SOUTH CAROLINA AMENDMENTS
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

 DESIGN LOADS: ROOF

LIVE = 20 PSF DEAD = 7 PSF T.C., 10 PSF B.C. LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS)

ADD'L IO PSF @ CERAMIC TILE IN BATHS & LAUND.

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 (IRC TABLE R602.3(1)) 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.
- EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SPF/SP "STUD" GRADE LUMBER, OR BETTER, U.N.O...

  • WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED W. GYP WALL BOARD (ONE SIDE MIN.) OR PROVIDE MID HT. BLOCKING.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SP) LUMBER, OR BETTER. SUPPORT ALL HEADERS/ BEAMS W (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 NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED

(1)2x4/6 FLAT @ OPENINGS UP TO 4', (2)2x4/6 FLAT UP TO 8'.

- WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" O.C. (MAX., U.N.O.)

   HEADERS IN NON-LOAD BEARING WALLS SHALL BE:
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING: • 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10^6 psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING: "LVL" - Fb=2400 psi; FcII=2500 psi; E=I.8xI0^6 psi
- FOR 2 & 3 PLY BEAMS OF EQUAL 134" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"X0.120" NAILS @ 8" O/C OR 2 ROWS USP WS35 SCREWS (OR 31/5" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 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 ½" OR 5 ¼" BEAMS ARE ACCEPTABLE USE 2 ROWS OF NAILS FOR 2x6 & 2x8
- FOR 4 PLY BEAMS OF FOUAL 13/4" MAX WIDTH FASTEN PLIES TOGETHER WITH 3 ROWS OF USP WS6 SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF I4" 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.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS
- CONTINUOUS TO FND./BEARING. BLOCKING TO MATCH POST ABOVE. ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE USP BCS22-4 CAP & PA44E BASE, U.N.O.
- · CORROSION NOTES
  - BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.
- ALL FASTENERS AND CONNECTORS EXPOSED TO SALT WATER (WITHIN 300' OF SALT WATER SHORELINE, INCLUDING VENTED SPACES) SHALL BE STAINLESS STEEL.

BRIARWOOD

OT 22

MULHERN+KUL
RESIDENTIAL STRUCTURAL ENGINEERI (Svay, Stitle 165 v maffemikaja smr

C-3825

#

initial:



lulhern+Kulp project numbe 256-22019

SMK RAF ssue date: 01.13.2023

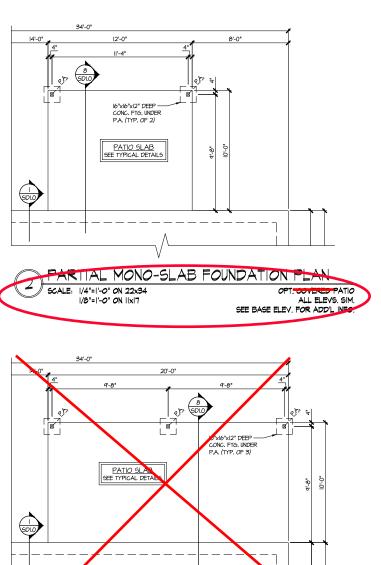
REVISIONS

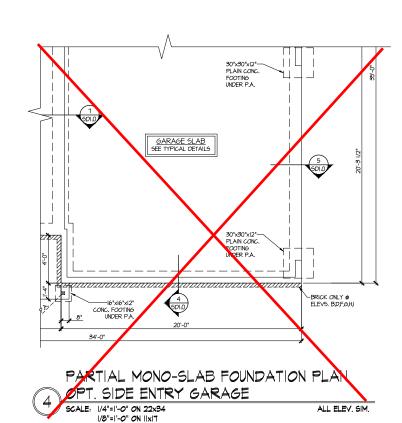
SMITH DOUGL HOMES

STRUCTURAL NOTES MOD 

H WIND ZONE CAROLINA BENSON 120 MPH NORTH (

GENERAL





#### BRIARWOOD OT 22

REFER TO SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

#### LEGEND

R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)

OF INDICATES TRUSS OVERFRAMING OF 24" O.C. (TYP. U.N.O.)

INDICATES 14" DEEP FLOOR I-JOISTS © 24" O.C.
MAX. JOIST SERIES AND SPACING SHALL BE THE
RESPONSIBILITY OF THE MANUFACTURER NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM

INDICATES LOCATIONS OF POTENTIAL TILE FLOOR - JOIST MANUFACTURER SHALL DESIGN FLOOR - SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE

• INTERIOR BEARING WALL

• □===□ BEARING WALL ABOVE (B.W.A.)

• — BEAM/HEADER

• JL METAL HANGER

• \* INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

issue date: 01.13.2023 SMITH DOUGLAS HOMES

MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINERRINS

Aulhern+Kulp project number

REVISIONS:

256-22019

SMK

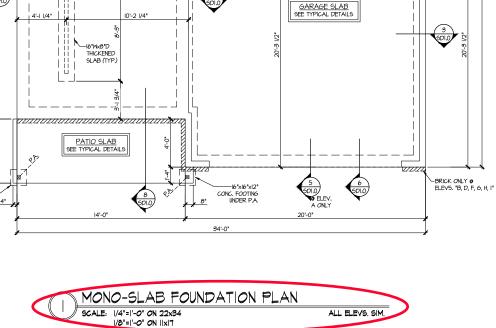
RAP

initial:

1905 Breutside Betwey, Salte 1905 - Algher 1979-77-4974 - medhenkapeans NC License # C-3825

MODEL FOUNDATION BENSON MONO-SLAB

120 MPH WIND ZONE NORTH CAROLINA

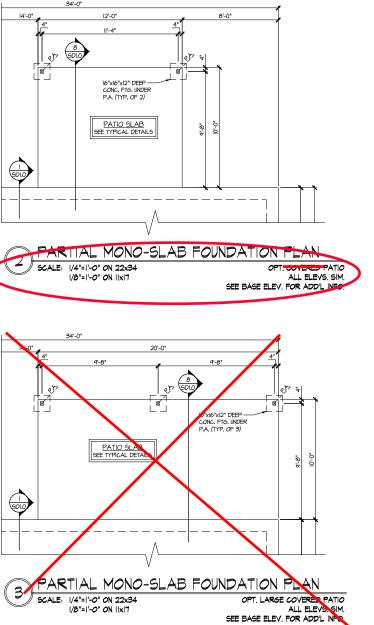


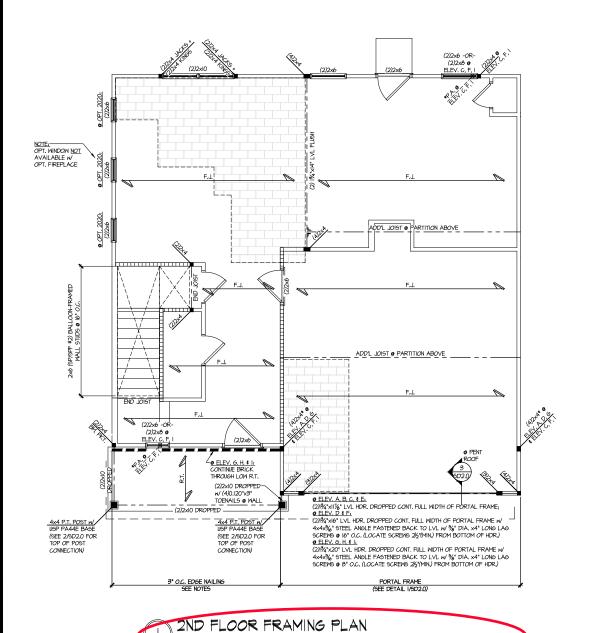
SLAB-ON-GRADE SEE TYPICAL DETAILS

THICKENED SLAB (TYP.)

19'-8 1/2"

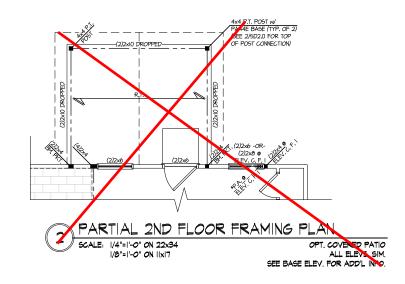
7 GDI.0

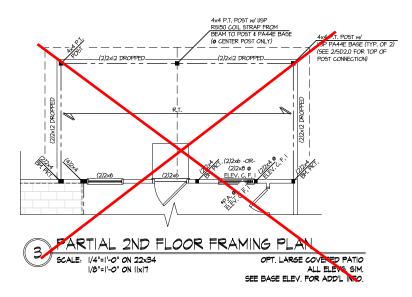


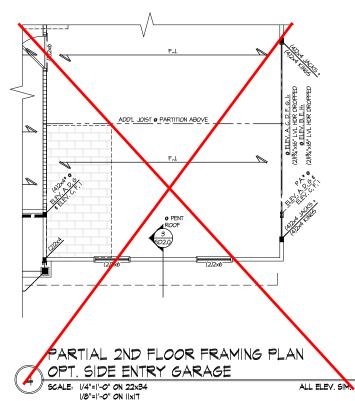


ALL ELEVS, SIM.

SCALE: |/4"=|'-0" ON 22x34 |/8"=|'-0" ON ||x|7







### BRIARWOOD

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

#### LEGEND

RT. NINDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)

O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)

INDICATES 14" DEEP FLOOR I-JOISTS © 24" O.C.
MAX. JOIST SERIES AND SPACING SHALL BE THE
RESPONSIBILITY OF THE MANUFACTURER NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM

INDICATES LOCATIONS OF POTENTIAL TILE FLOOR - JOIST MANUFACTURER SHALL DESIGN FLOOR - SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE

INTERIOR BEARING WALL

• □□□□□ BEARING WALL ABOVE (B.W.A.)

BEAM/HEADER

• JL METAL HANGER

• \* INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

7/14/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINERANS 1905 Brediside Perkvey, Suite 195 - Alph 1976-77-4874 - methom/aprom NC License # C-3825

Aulhern+Kulp project number 256-22019

SMK RAF issue date: 01.13.2023

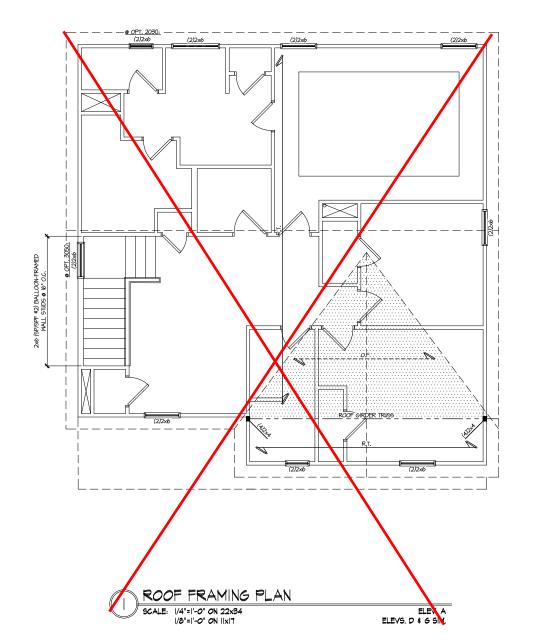
REVISIONS: initial:

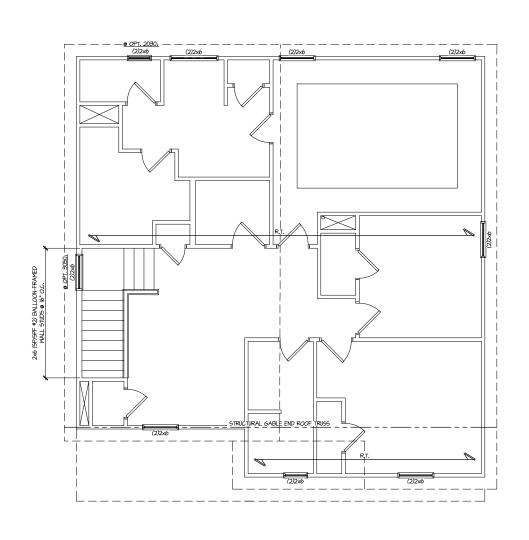
SMITH DOUGLAS HOMES

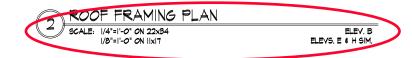
PLAN MODEL FRAMING FLOOR BENSON 2ND

**S2.0** 

120 MPH WIND ZONE NORTH CAROLINA









MULHERN + KULP

RESIDENTIAL STRUCTURAL ENGINERING

SESTEMBLISHERING

PTOTT WITH TO THE MANAGEMENT

NC License # C-3825



Mulhern+Kulp project number

256-22019

SMK RAP issue date: 01.13.2023

initial:

SMITH DOUGLAS HOMES

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

BRIARWOOD

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

OT 22

INDICATES LOCATIONS OF POTENTIAL TILE FLOOR.

JOIST MANUFACTURER SHALL DESIGN FLOOR

SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.

● □□□□□ BEARING WALL ABOVE (B.W.A.)

• — BEAM/HEADER

\*\* INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

LEGEND

RT. INDICATES ROOF TRUSSES © 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)

OF INDICATES TRUSS OVERFRAMING © 24" O.C. (TYP. U.N.O.)

F.J. INDICATES 14" DEEP FLOOR 1-JOISTS @ 24" O.C.
MAX. JOIST SERIES AND SPACING SHALL BE THE
RESPONSIBILITY OF THE MANUFACTURER
NOTE: 14" FLOOR TRUSESS @ 24" O.C. MAX. IS AN
ACCEPTABLE ALTERNATE FLOOR SYSTEM

INTERIOR BEARING WALL

• JL METAL HANGER

ROOF FRAMING PLAN

**S3.0** 

BENSON II MODEL

120 MPH WIND ZONE NORTH CAROLINA

#### \_ATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

LATERAL FORCES RESULTING FROM:

#### <u>OMPH WIND IN 2018 NCSBC:R</u>

(120 MPH WIND SPEED IN ASCE 7 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 \$ 2018 IBC (SECTION 1609) & ASCE 7, AS PERMITTED BY R301.1.3 F THE 2018 NCSBC:RC & 2018 IRC. 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 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC:RC & 2018 IRC SECTION R802.II.I.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.54 R802.II.

THIS MODEL HAS BEEN DESIGNED TO RESIST

#### FASTEN SHEATHING W/ 2 3"XO.113 NAILS @ 6" O.C. A EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP, U.N. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS, AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR # 120MPH WIND IN 2018 IRC 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE

ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED
 AND ARE CONSIDERED SHEAR WALLS.

7/16" OSB OR 15/32" PLYWOOD:

 ALT, STAPLE CONNECTION SPEC: 1 ¾" 16 GA STAPLES (1/6" CROWN) • 3" O.C. AT EDGES \$ • 6" O.C IN FIELD.

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

• AT DESIGNATED AREAS - FASTEN PANEL EDGES OF MOOD STRUCTURAL WALL SHEATHING TO FRAMING W 2 3 × 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD NO STAPLE ALTERNATIVE AVAILABLE
AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) 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
  SHEATHED W OSB OR PLYWOOD W 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

INDICATES EXTENT OF INT. OSB
SHEARWALL, AND/OR 3" O.C. EDGE NAILING

NDICATES HOLDOWN

### BRIARWOOD

THIS LEVEL HAS BEEN DESIGNED FOR 9'-I" PLATE HEIGHT

REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

#### LEGEND

R.T. NDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)

OF INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)

INDICATES 14" DEEP FLOOR 1-JOISTS @ 24" O.C.
MAX. JOIST SERIES AND SPACING SHALL BE THE
RESPONSIBILITY OF THE MANUFACTURER NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM

INDICATES LOCATIONS OF POTENTIAL TILE FLOOR JOIST MANUFACTURER SHALL DESIGN FLOOR

SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE

INTERIOR BEARING WALL

● □□□□□ BEARING WALL ABOVE (B.W.A.)

BEAM/HEADER

• JL METAL HANGER

INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

7/14/23 EXT. WALL SHEATHING SPECIFICATION

Structural Engin MULHERN + KULP
RESIDENTIAL STRUCTURAL ENSINERING
SESSMICIAL STRUCTURAL ENSINERING
PRESIDENTIAL STRUCTURAL ENSINERING
PRESIDENT STRUCTURAL ENSINERING
PRESIDENTIAL ENSINERING
PRESIDENTIAL



Aulhern+Kulp project number

256-22019 SMK

RAF ssue date: 01.13.2023

REVISIONS:

initial:

SMITH DOUGLAS HOMES

PLAN

MODE BENSON

120 MPH WIND ZONE NORTH CAROLINA

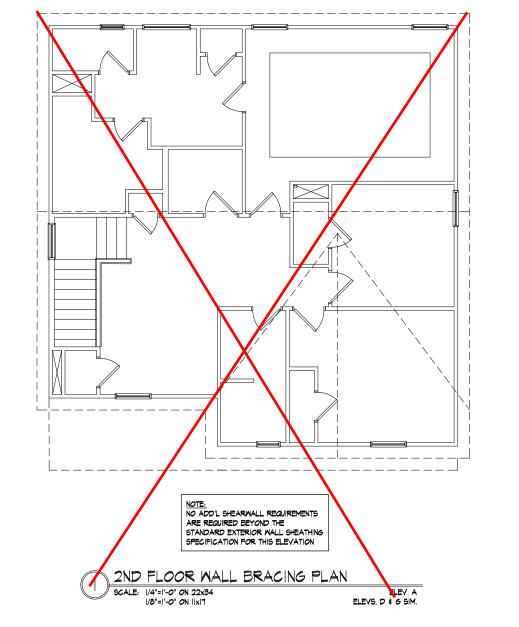
2ND

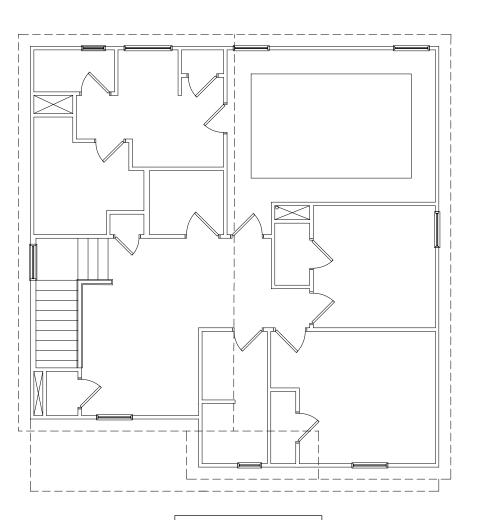
BRACING

WALL

FLOOR

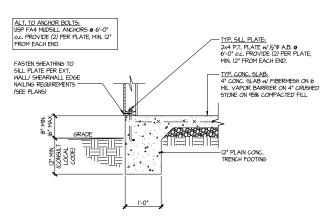
**S3.0**L

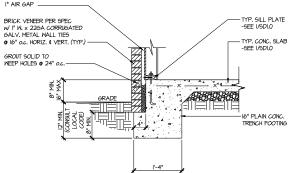




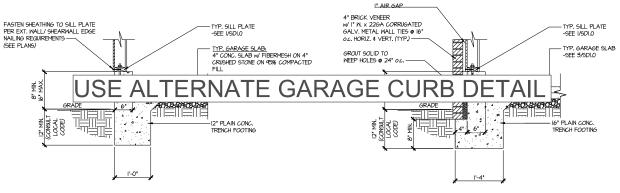
NOTE: NO ADD'L SHEARWALL REQUIREMENTS ARE REQUIRED BEYOND THE STANDARD EXTERIOR WALL SHEATHING SPECIFICATION FOR THIS ELEVATION







w/ BRICK VENEER



OPT. BRICK (SEE ARCH FOR LOCATIONS)

FASTEN SHEATHING TO-



TYPICAL SLAB ON GRADE 2 PERIMETER FOOTING

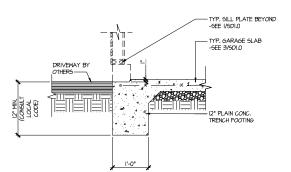


TYPICAL SLAB ON GRADE GARAGE 4 PERIMETER FOOTING

TYPICAL SLAB ON GRADE PERIMETER

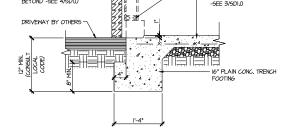
FOOTING @ PORCH/PATIO

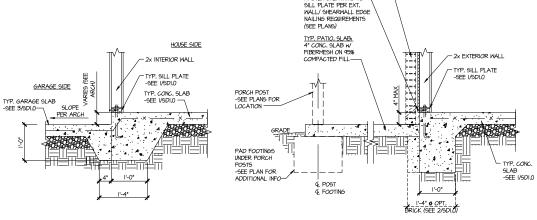
n/ BRICK VENEER



TYPICAL SLAB ON GRADE

PERIMETER FOOTING



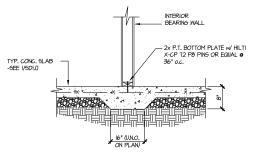


TYPICAL SLAB ON GRADE GARAGE (5) ENTRY @ PERIMETER FOOTING









TYPICAL THICKENED SLAB @ 9 INTERIOR BEARING WALL

BRIARWOOD OT 22

BENSON

MULHERN+KULP
RESIDENTIAL STREETURAL ENGINEERINS

# C-3825

Mulhern+Kulp project number:

256-22019

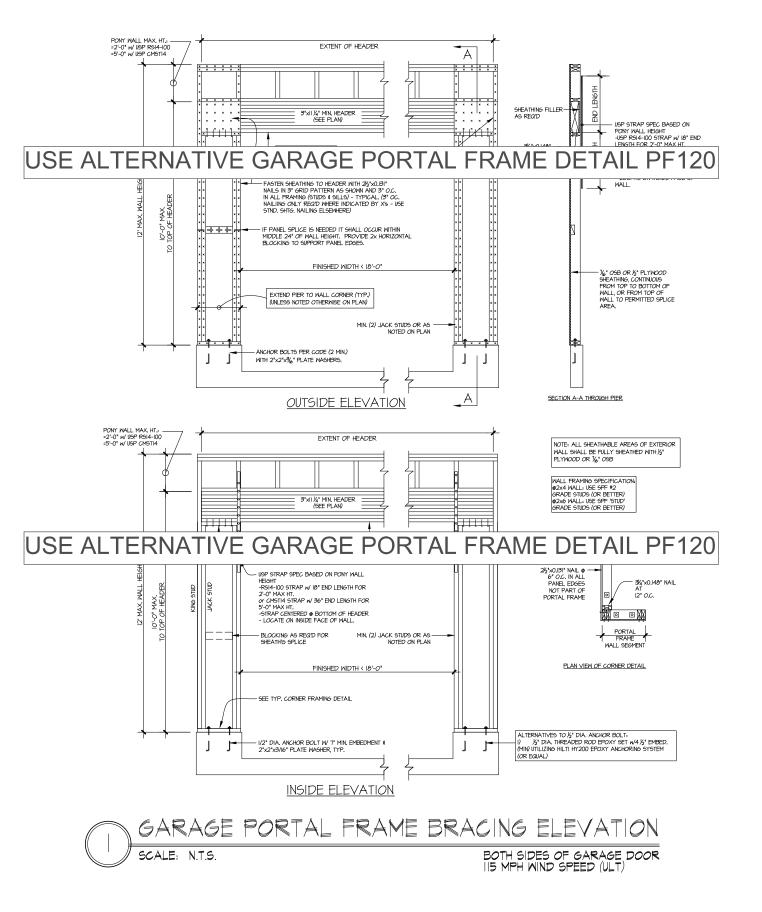
SMK RAF issue date: 01.13.2023 REVISIONS: initial:

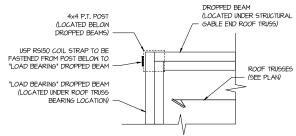
SMITH DOUGLAS HOMES

MODEL FOUNDATION DETAILS 

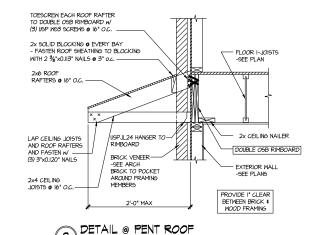
120 MPH WIND ZONE NORTH CAROLINA

**SD1.0** 





COVERED PORCH CONNECTION DETAIL SCALE: | 1/2"=1'-0"



SCALE: 3/4"=1'-0"

MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINERRING 1905 Bracksids Perkvey, Suite 1905 • Alpha 1978-77-4974 • methenskapsens NC License # C-3825

Aulhern+Kulp project number 256-22019

SMK project mgr RAF issue date: 01.13.2023

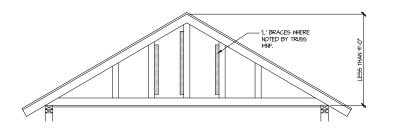
REVISIONS: initial:

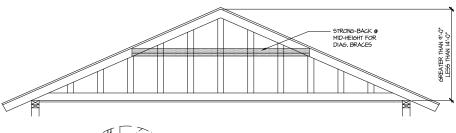
SMITH DOUGLAS HOMES

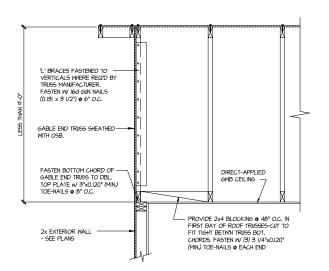
MODEL 120 MPH WIND ZONE NORTH CAROLINA FRAMING DETAILS BENSON

**SD2.0** 

BRIARWOOD \_OT 22

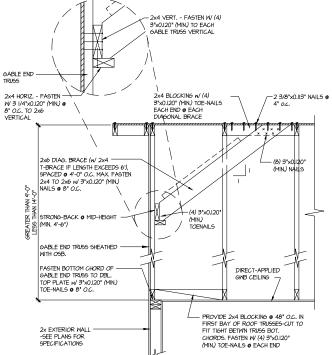






TYPICAL GABLE END BRACING DETAIL A TYPICAL SCALE: NONE

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9"-0". "L" BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0'. 'L' BRACES NOT REQUIRED.

TYPICAL GABLE END BRACING DETAIL

SCALE: NOME REOT & GABLE END TRUSS

REOT & GABLE END TRUSS

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.

> BRIARWOOD LOT 22

pyright : MULHERN & KULP Structural Engineering, Inc. MULHERN + KULP

RESIDENTIAL STRUCTURAL ENSINEERING

STS ENGINE FROM STR. TO STRUCTURAL ENSINEERING

\$770-777-571 - TO STRUCTURAL ENSINEERING

\$770-771-771 - TO STRUCTURAL ENSINEERING

\$770-771 - TO STRUCTURAL ENSINEERING

NO CLICERING

NO CLICE Mulhern+Kulp project number 256-22019 issue date: 01.13.2023 REVISIONS:

SMK RAP

initial:

7/14/23

SMITH DOUGLAS HOMES

BENSON II MODEL

FRAMING DETAILS

120 MPH WIND ZONE NORTH CAROLINA

SD2.



3625 Brookside Parkway, Suite 165, Alpharetta, GA 30022 ► p 770-777-0074 ► *mulhernkulp.com* 

July 28, 2023

Jody Hunt

Director of Product Development

# **SMITH DOUGLAS HOMES**

110 Village Trail, Suite 215 Woodstock, GA 30188

# **ALTERNATE GARAGE PORTAL FRAME DETAIL**

**Smith Douglas Homes** 

# Reference

"Alternate Garage Portal Frame Detail" on sheet PF-120 & PF-130, prepared by Mulhern & Kulp dated 07/28/2023 - attached

Jody:

Kulp for Smith Douglas Homes. Pursuant to your request, we have prepared this letter to address the "Alternate Garage Portal Frame Detail", prepared by Mulhern &

Mulhern& Kulp. It is the responsibility of "SDH" to provide the correct "Alternate Garage Portal Frame Detail", to the building Carolina with a wind speed less than or equal to 120mph ultimate wind speed per ASCE 7-16. department that matches the jurisdiction's wind speed requirements. or equal to 130mph ultimate wind speed per ASCE 7-16. These details only apply to structural plans that have been designed by Detail" on sheet "PF-130" is an acceptable alternative portal frame design for anywhere in North Carolina with a wind speed less than The "*Alternate Garage Portal Frame Detail*" on sheet "PF-120" is an acceptable alternative portal frame design for anywhere in North The "Alternate Garage Portal Frame

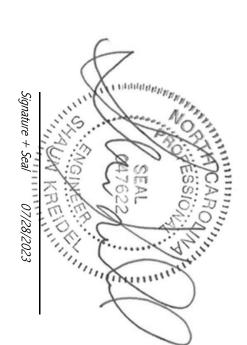
Please feel free to call if you have any questions.

Respectfully,

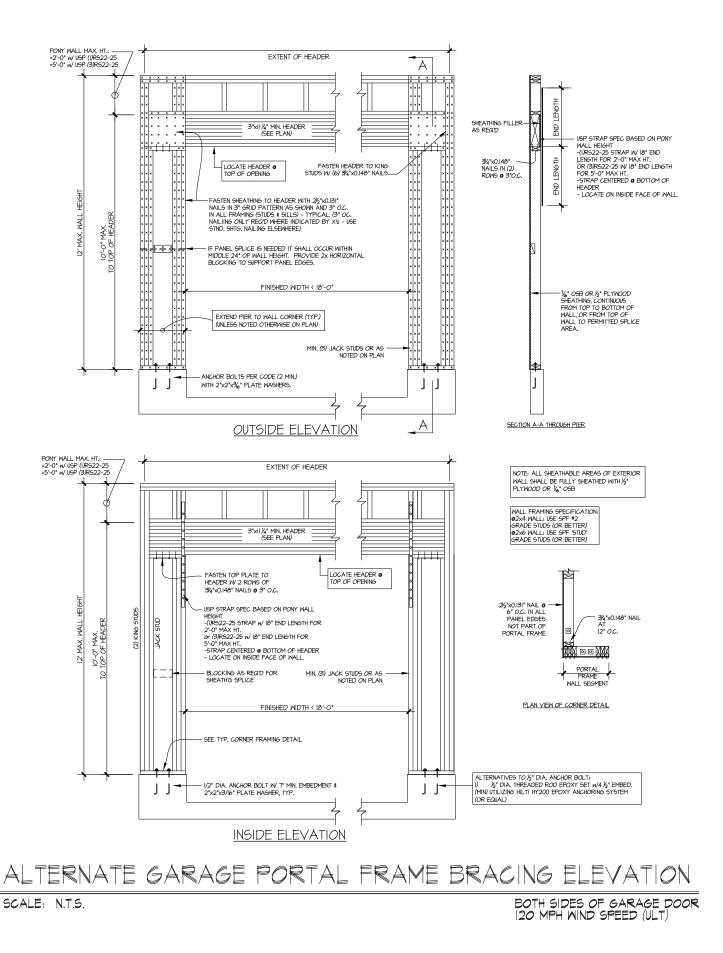
**MULHERN & KULP STRUCTURAL ENGINEERING, INC.** 

NC License # C-3825

Shaun M. Kreidel, P.E. Project Manager + Atlanta Office Director



P:|Client Files|256 - Smith Douglas Homes|2023|23000 - 2023 Client Admin|2023-07-28 - Alternate Portal Frame Letter|Alternate Garage Portal Frame Detail -Letter - RLH.docx

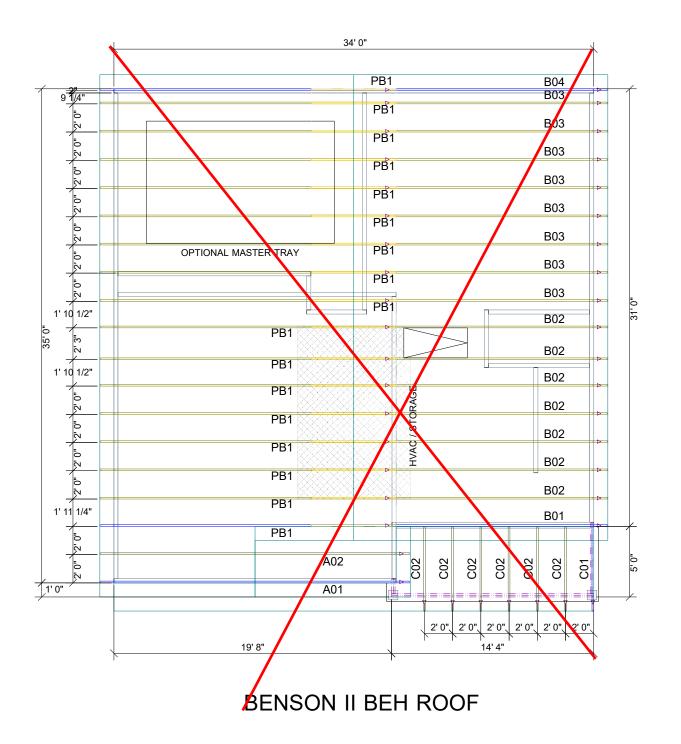


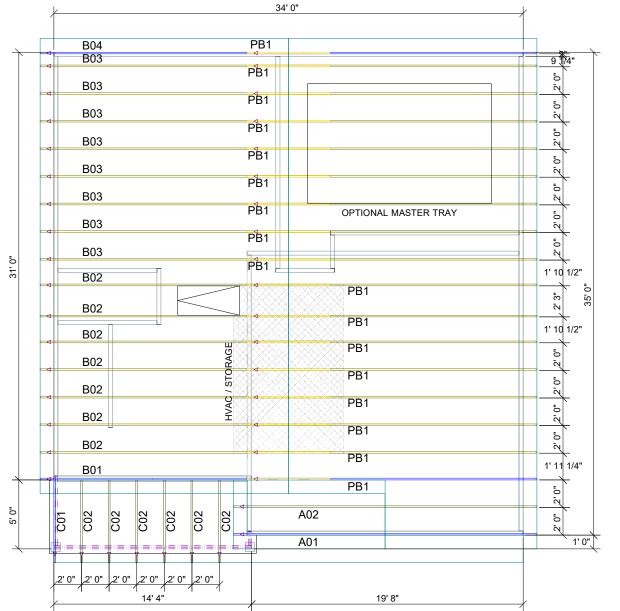
opyright : MULHERN & KULP Structural Engineering, Inc. MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERINS /lulhern+Kulp project number: 256-23000 SMK RAP issue date: 07.28.2023 REVISIONS: initial: SMITH DOUGLAS HOMES FRAME PORTAL FRAME

ALTERNATE PORTAI PORTAL FRAME

BRIARWOOD LOT 22 PF-120

#### 72519892 22 BRIARWOOD





BENSON II BEH ROOF

**PLACEMENT PLAN** 

 $\triangle$  indicates left end of truss Scale: N.T.S

UFP SITE BUILT

DOUGLAS -SMITH

II BEH

-BENSON

DESIGNER HATHCOCK LAYOUT DATE -04.07.2023 ARCH DATE

JOB #: -MASTER

		Products			
PlotID	Length	Product	Plies	Net Qty	Fab Type
J1	34' 0"	14" TJI® 110	1	3	MFD
J2	28' 0"	14" TJI® 110	1	2	MFD
J3	20' 0"	14" TJI® 110	1	1	MFD
J4	20' 0"	14" TJI® 110	1	2	MFD
J5	18' 0"	14" TJI® 110	1	8	MFD
J6	16' 0"	14" TJI® 110	1	9	MFD
J7	5' 0"	14" TJI® 110	1	1	MFD
J8	30' 0"	14" TJI® 210	1	4	MFD
2B-1	15' 0"	1 3/4" x 14" 2.0E Microllam® LVL	2	2	MFD
RIM-1	16' 0"	1 1/8" x 14" TJ® Rim Board	1	9	MFD
Bk1	2' 0"	14" TJI® 110	1	1	MFD

Connector Summary			
PlotID	Qty	Manuf	Product
H1	17	MiTek	IHFL1714
H2	2	MiTek	TFL1714

#### **GENERAL NOTES:**

1.) TOP CHORD OF JOISTS ARE PAINTED RED AT NUMBERED END. PLACE PAINTED END AS NOTED ON PLAN.

NOTED ON PLAN.
2) FOLLOW SPECIAL SPACING AND LOCATION
DIMENSIONS FOR EXTRAS OR SHIFTED JOISTS
AS SHOWN ON PLAN.
3) ALL INTERIOR WALL PLATES MUST BE LEVEL
WITH OUTSIDE WALL TOP PLATES.
4) DO NOT STACK CONSTRUCTION LOADS ON

4.) DO NOT STACK CONSTRUCTION LOADS ON UN-BRACED JOISTS.
5.) PROVIDE SOLID SUPPORT BELOW ALL BEAM AND HEADER BEARING POINTS IN WALL AND JOIST SPACES CONTINUOUS DOWN TO THE FOUNDATION.
6.) LOCATE CRIPPLE STUDS IN JOIST SPACE

DIRECTLY BELOW HEADER JACKS AT ALL FIRST FLOOR EXTERIOR DOOR LOCATIONS.
7.) INSTALL NAILS IN ALL HOLES PROVIDED IN

JOIST HANGERS EXCEPT AT BOTTOM CHORD SEAT. PLACE A DAB OF GLUE IN THE HANGER SEAT BEFORE SETTING JOISTS.

SEAT BEFORE SETTING STRUCTURAL
ANALYSIS OF CONVENTIONAL HEADERS HAS
BEEN CONDUCTED IF NOT NOTED. THEY ARE
CONSIDERED TO BE ADEQUATE TO SUPPORT

#### FRAMER NOTE

☐DENOTES DUCT HOLE RUNS

ALL DIMENSIONS TO CENTERLINE UNLESS

Avoid Plumbing Drops

#### FRAMER NOTE

1. GLUE AND NAIL PLYWOOD SUBFLOOR TO BEAMS AND GIRDERS AT 6" O/C WHERE NO WALL IS ABOVE. 2. FILL HANGER SEAT WITH GLUE BEFORE SETTING JOIST IN

HANGER. FILL ROUND HOLES WITH NAILS.

#### CRITICAL !!

**INSTALL 2X4 SQUASH BLOCKS** IN FLOOR TRUSS SPACE **BELOW ALL EXTERIOR DOOR** HEADER JACKS. CUT 1/16" TALLER THAN TRUSS.

#### PLAN LEGEND

\*INDICATES BEAM ABOVE TOP PLATE (FLUSH WITH FLOOR SYSTEM) H-, 1H-, GDH-

\*BEAMS MAY PROTRUDE ABOVE OR BELOW DECKING OR TOP PLATE RESPECTIVELY, REFER TO DETAIL IF BEAM IS A DIFFERENT DEPTH THAN FLOOR SYSTEM

SINGLE PLY BEAM (ADD LINE FOR EACH ADDITIONAL PLY)

SHIFT JOIST TO MISS PLUMBING, ALIGN W/WALL OR SUPPORT FURNITURE FXTRA

DOUBLE TWO JOISTS SIDE BY SIDE (ONLY ASSEMBLED IF NOTED)

#### FIELD TRIM NON RED END TO KEEP HOLES ALIGNED

CONTAR EL LADO DE SIN MARCA ROJA PARA HOYOS ALINEADOS

#### **FIELD LOCATE**

**PLUMBING DROPS/CAN** LIGHTS, ETC... PRIOR **TO JOIST SECUREMENT TO** 

AVOID INTERFERENCE.

#### LAYOUT FOR 19.2" O/C

1= 19-3/16"	9= 172-13/16"
2= 38-3/8"	10= 192"
3=57-5/8"	11= 211-3/16"
4= 76-13/16"	12= 230-3/8"
5= 96"	13= 249-13/16"
6= 115-3/16"	14= 268-13/16"
7= 134-3/8"	15= 288"
8= 153-5/8"	

FIELD VERIFY DIMENSIONS TO

**JOISTS LOCATED UNDER WALLS!!** 2ND FLOOR LAYOUT

2ND FLOOR PLACEMENT PLAN

BUILT 

UFP

Benson II B 2nd Floor Sanford, NC 27332

Lot 22 Briarwood Bluff

**Smith Douglas Homes** 

DESIGNER PB2 LAYOUT DATE 7/7/2025 **ARCH DATE** 9/1/2022 STRUC DATE 7/14/2023

JOB #: 25070308IJ2

SCALE: 1/8"=1'