

LANDEN

BRIARWOOD BLUFF
LOT 08A



SMITH DOUGLAS HOMES

QUALITY | INTEGRITY | VALUE

PLAN ID 010123

110 VILLAGE TRAIL SUITE 215
WOODSTOCK, GA. 30188

DRAWING INDEX	
A0.0	COVER SHEET
A1.1	FRONT ELEVATIONS
A2.1	SIDE & REAR ELEVATIONS
A3.1	SLAB FOUNDATIONS
A5.1	FIRST FLOOR PLAN
A6.1	ROOF PLANS
A7.2	ELECTRICAL PLAN

AREA TABULATION	
FIRST FLOOR	1535
TOTAL	1535
GARAGE	661
FRONT PORCH A & C MASSING(COVERED)	48
REAR PATIO	120

PLAN REVISIONS			
DATE	BY	REVISION	PAGE #
11/29/2022	BB	REVISED ROOF PITCH ON ALL ELEVATIONS AND ROOF PLANS	A1.1-A1.9, A2.1-A2.3, A6.1-A6.3

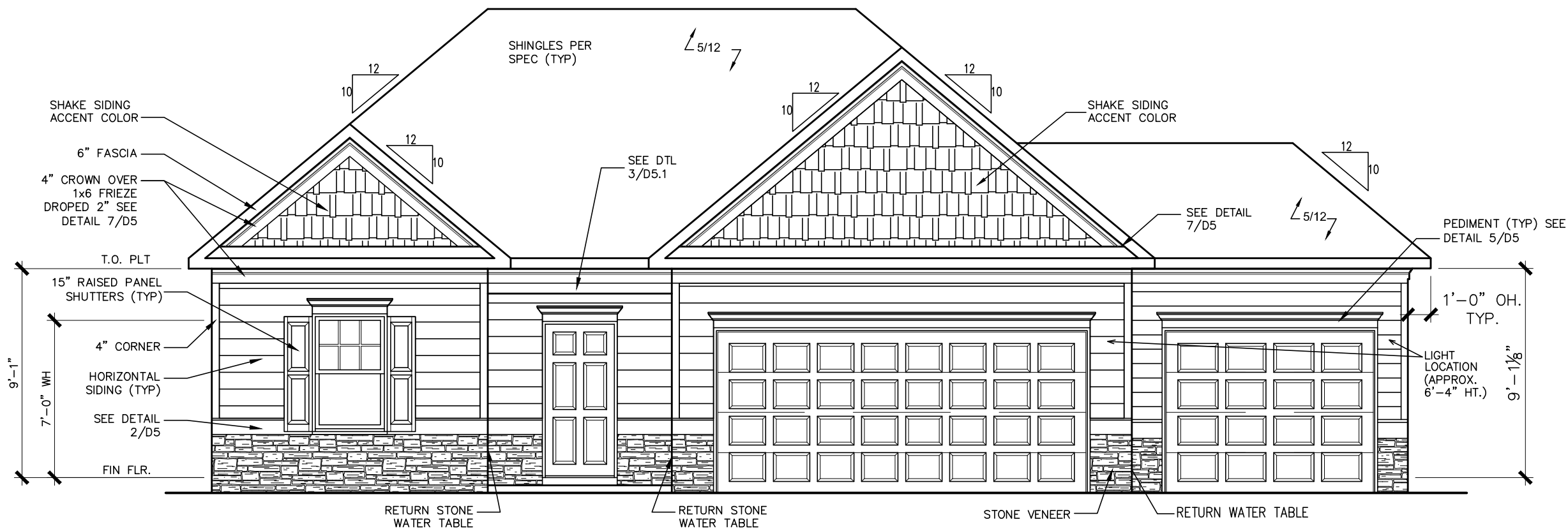
GOVERNMENTAL CODES & STANDARDS
HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS

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 08A



FRONT ELEVATION "C" FRONT ENTRY WITH 3RD CAR GARAGE

SCALE : 3/16" = 1'-0"

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ELEVATIONS

FRONT ELEVATION

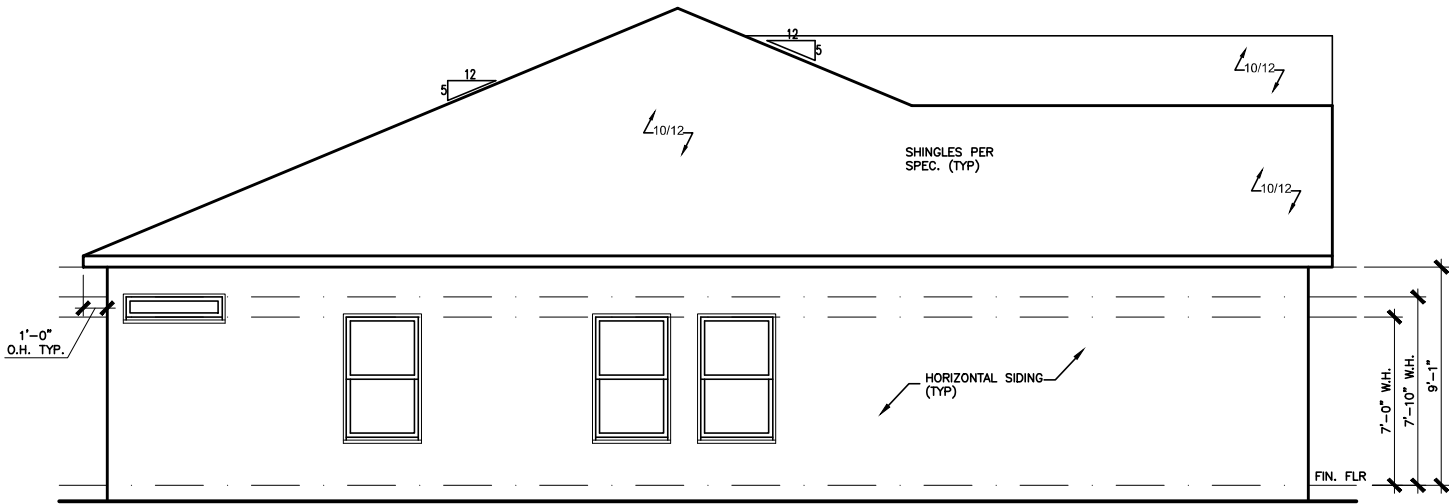
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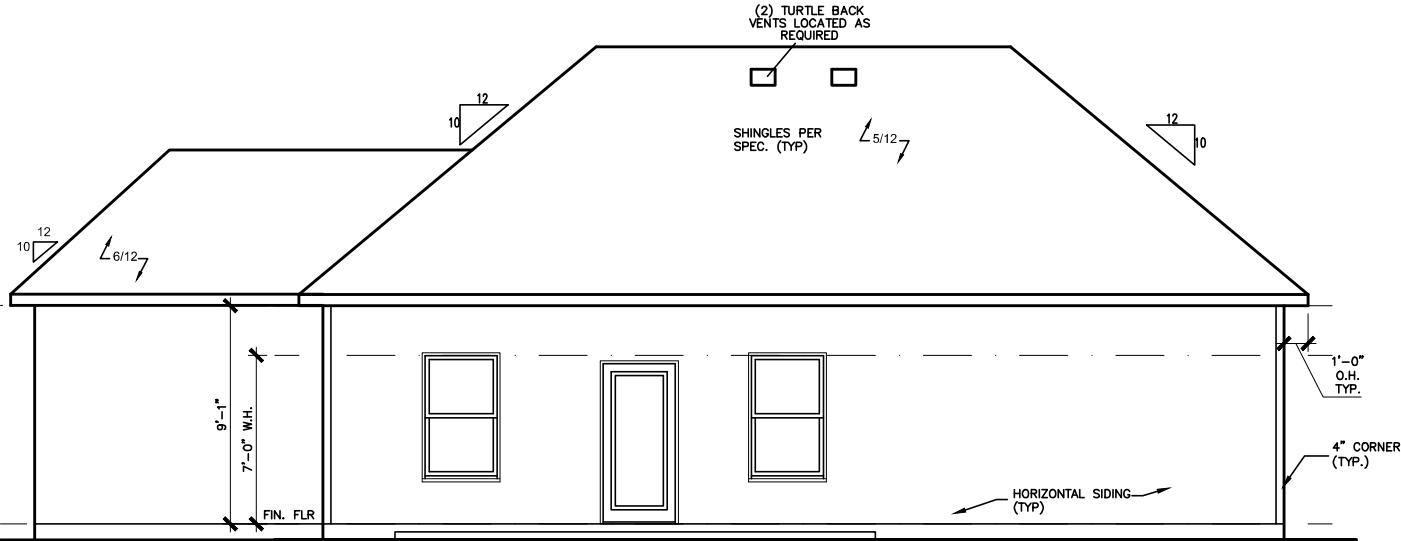
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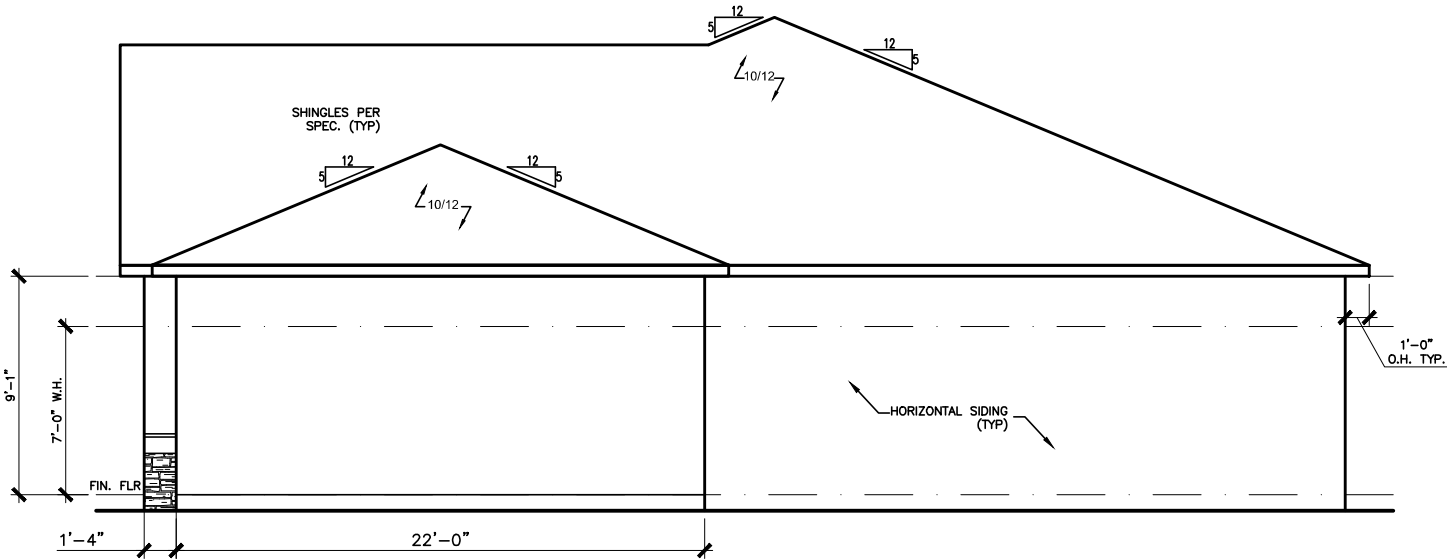
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LOT 08A



LEFT ELEVATION "C"



REAR ELEVATION "C"



RIGHT ELEVATION "C"

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ELEVATIONS
SIDES AND REAR
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[illegible]

FOUNDATION PLAN
SLAB PLAN
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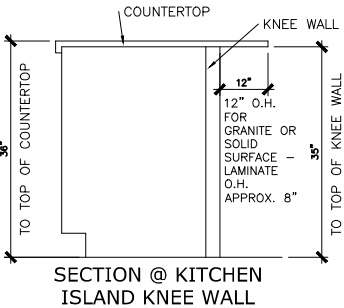
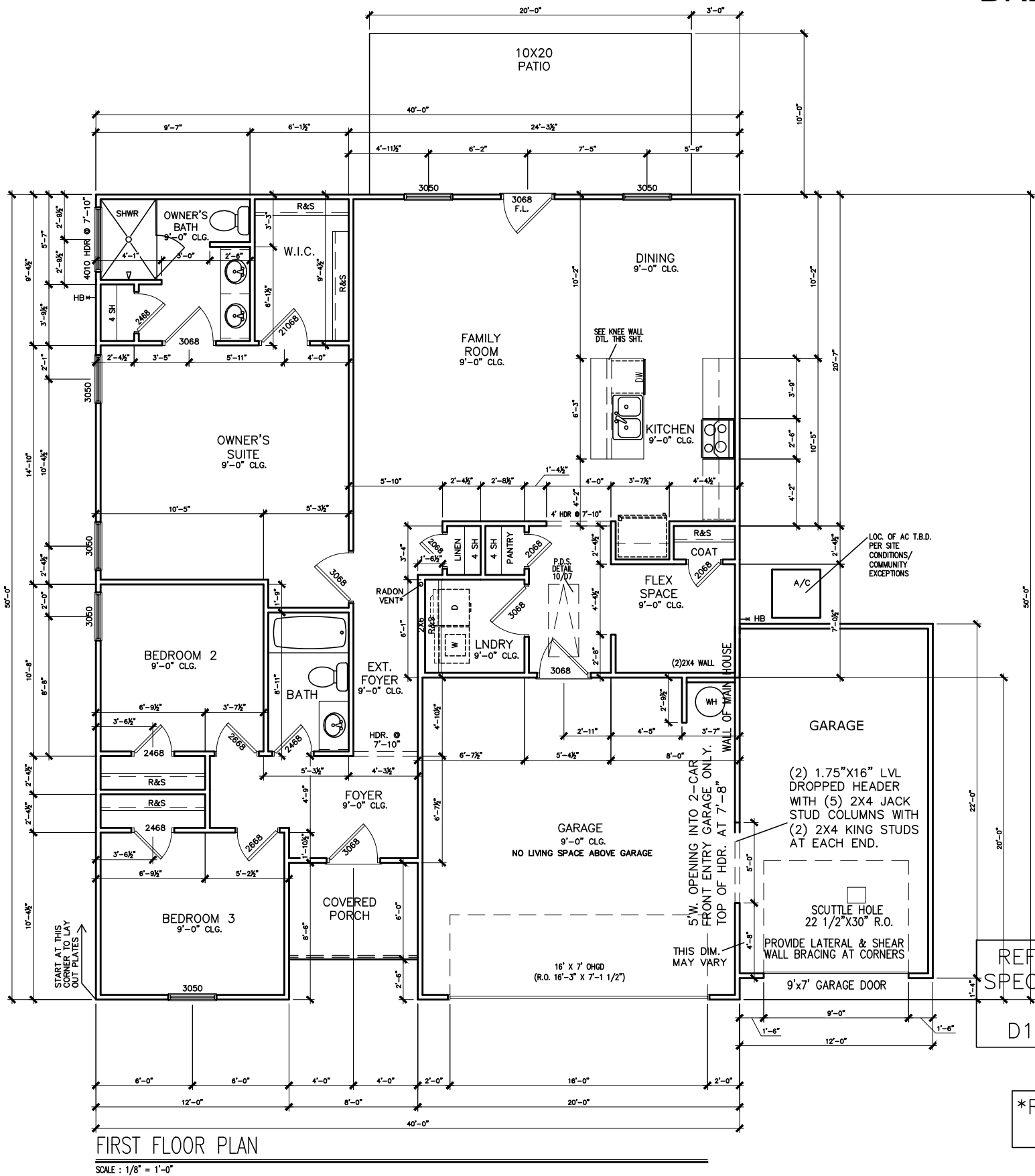
SLAB PLAN

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

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

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FLOOR PLAN

FIRST FLOOR

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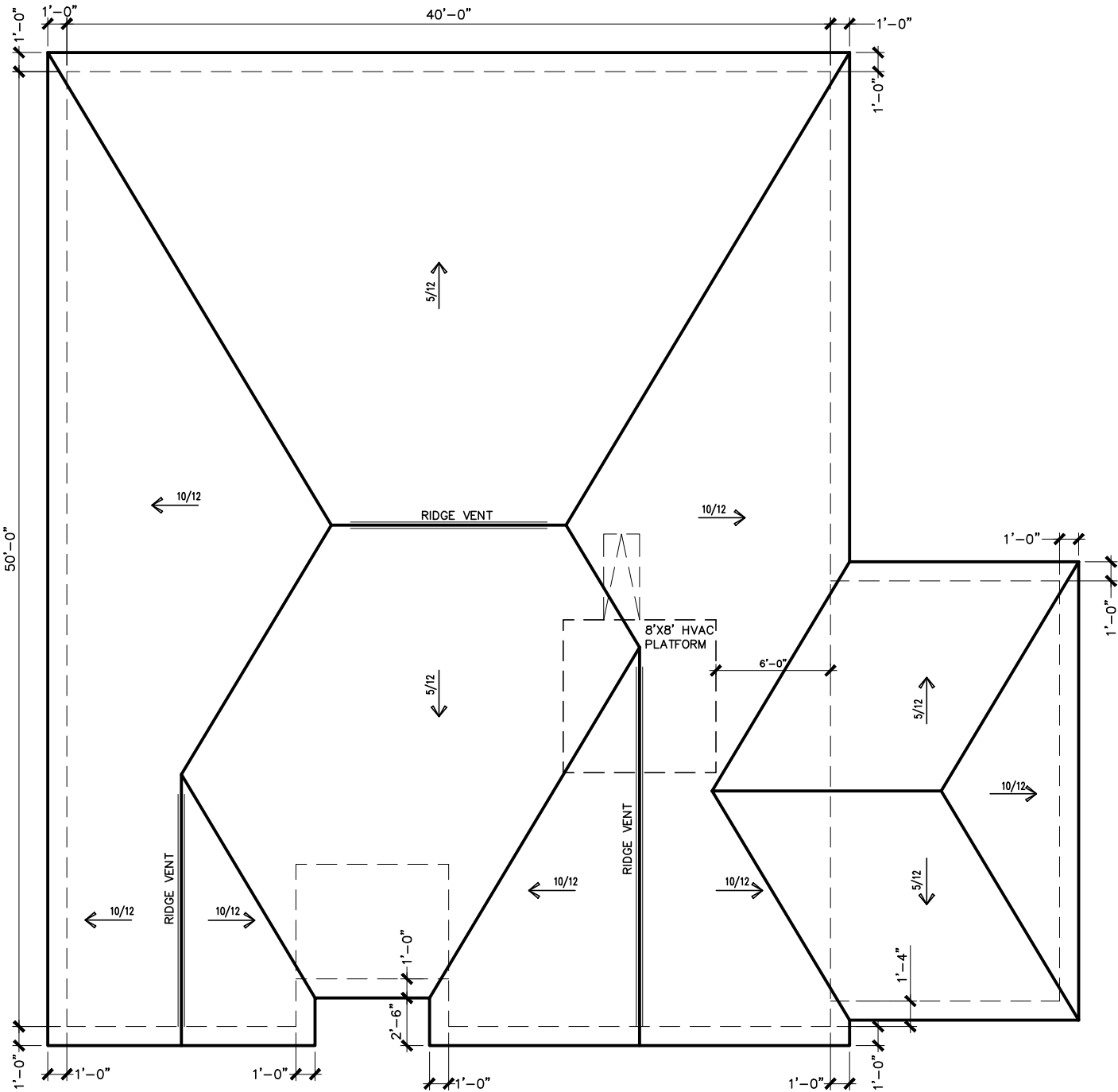
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ROOF PLAN "C"

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

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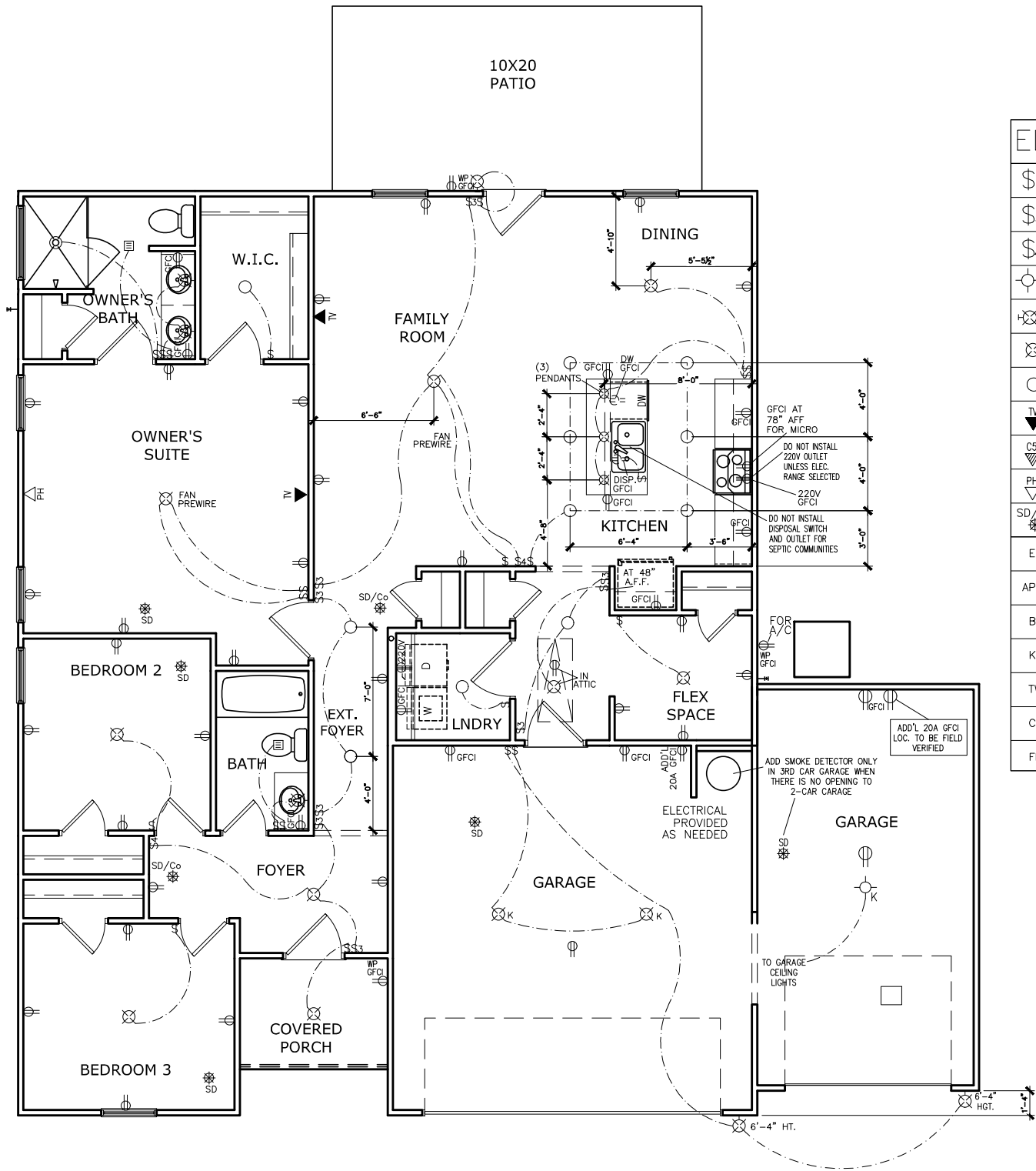
ROOF PLAN
ROOF PLAN
LANDEN

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ELECTRICAL LEGEND			
\$	SWITCH	⦿	120V RECEPTACLE
\$3	3 WAY SWITCH	⦿	220V RECEPTACLE
\$4	4 WAY SWITCH	⦿GFCI	GFCI OUTLET
⦿K	KEYLESS	⦿WP GFCI	WEATHER PROOF GFCI OUTLET
⦿	WALL MOUNT FIXTURE	⦿USB	USB OUTLET
⦿	CEILING FIXTURE	†GL	GAS LINE
⦿	CEILING FIXTURE	⦿	FLOOD LIGHT
TV	TV	⦿	CEILING FAN
C5	CAT 5	⦿	EXHAUST FAN
PH	TELEPHONE	⦿	ELECTRICAL WIRING
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE		
ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES			
APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)			
BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR		
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP		
TWO STORY FOYER FIXTURE	11'-6" FROM 1ST FLR TO BOTTOM OF LIGHT FIXTURE		
CEILING FAN	96" ABOVE FINISHED FLOOR		
FLOOD LIGHTS	10' MAX. ABOVE FIN. FLOOR		

FIRST FLOOR ELECTRICAL PLAN

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

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ELECTRICAL PLAN

FIRST FLOOR

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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 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 @ 12" O.C.	NAILS @ 8" O.C.
DOUBLE TOP PLATE LAP SPLIC	(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 + (1) SIMPSON H25T TOENAILS @ 8" O.C.	(4) TOENAILS + (1) SIMPSON H25T TOENAILS @ 6" O.C.
GAB. END TRUSS TO DBL. TOP PL.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" O.C.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" O.C.
R.T. w/ HEEL HT. 9 1/4" TO 12"	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" O.C.	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" O.C.
R.T. w/ HEEL HT. 12" TO 16"	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. UP TO 24"	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. & 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.	
* 2 1/2"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 TRUSSES 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 MK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

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

A. ROOF TRUSSES:
1/4" DEAD LOAD

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

ABSOLUTE DEAD LOAD DEFLECTION OF ATTIC TRUSSES WHEN ADJACENT TO FLOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT DIFFERENTIAL DEFLECTION)

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x1/4"
	3 FT. MAX	L3"x3"x1/4"
6'-0"	12 FT. MAX	L4"x3"x1/4"
	20 FT. MAX	L5"x3 1/2"x3/8"
8'-0"	3 FT. MAX	L4"x4"x1/4" *
	12 FT. MAX	L5"x3 1/2"x3/8"
9'-6"	16 FT. MAX	L6"x3 1/2"x3/8"
	12 FT. MAX	L6"x3 1/2"x3/8"

ALL LINTELS:
- SHALL SUPPORT 2 1/2" - 3 1/2" VENEER w/ 40 psf MAXIMUM HEIGHT.
- < 8" SHALL HAVE 4" MIN. BEARING
- > 8" SHALL HAVE 8" MIN. BEARING
- > 16" SHALL NOT BE FASTENED BACK TO HEADER.
- > 16" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @48" O.C. w/ 1/2" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
- MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
- ALL LINTELS SHALL BE LONG-LEG VERTICAL.
- WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3/4" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
- SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS.
* FOR QUEEN VENEER USE L4x3x1/2".

MK STD. - MAY 2016

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NCSCB-RESIDENTIAL CODE
- FOOTING DESIGN - 2,000 PSF NET ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x4/6 SILL PLATES TO CONC FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C., 1" MIN. EMBEDMENT
 - FA4 ANCHOR STRAPS @ 6'-0" O.C.
- FASTEN 2x10 SILL PLATES TO PRECAST BSMT WALLS WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" 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
 - f_y = 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 (GM, GP, SM, SP)
 - 45 PCF TYPE (GM, GC, SM, SM-SC, ML)
 - IMPORTANT - IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS UTILIZED FOR BACKFILL, CONTACT MULHERN & KULP FOR FURTHER EVALUATION OF FOUNDATION DESIGN.
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 1% 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 GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
 - JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
 - JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
 - CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS
- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR COVER WHERE CAST AGAINST EARTH, 1 1/2" MIN. CLEAR COVER AGAINST FORMS. LAP ALL REBAR 48 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 VERIFY.

MK STD. - MAY 2016

LEGEND

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX)
- 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.N.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSCB-RC
& 120MPH WIND IN 2018 IRC
(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 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCSCB-RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSCB-RC & 2018 IRC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 1/5/32" PLYWOOD:
 - FASTEN SHEATHING w/ 2 3/8"x0.113 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 FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/8" 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 3/8" x 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
- INDICATES HOLDOWN

MK STD. - MAR 2016

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 MK 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 LOADS').
- 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, UNCOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATIONS IN THE TCNA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).
- AT I-JOIST FLOORS, PROVIDE 1" 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 'STUD-I-FLOOR' 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS w/ GLUE AND
 - 2 1/4" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
 - 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
 - 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.

ROOF FRAMING

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
 - w/ 2 1/4" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES & @ 12" O.C. FIELD.
 - w/ 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
 - w/ 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. FIELD.
- 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 RT1A CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) RT1A CLIPS AT 2-PLY GIRDER TRUSSES, (3) RT1A CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.
- 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 MTCA & TP1'S BC51 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 1" SPAN).

MK STD. - MAR 2016

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 THE PROJECT.

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

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NCSCB-RESIDENTIAL CODE
- 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.G.
 - LOAD DURATION FACTOR = 1.25
 - FLOOR
 - LIVE = 40 PSF (30 PSF @ SLEEPING AREAS)
 - DEAD = 10 PSF (I-JOISTS)
 - ADD'L 10 PSF @ CERAMIC TILE IN BATHS & LAUND.
 - SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE (IRC TABLE R602.3.11) 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 WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX, U.N.O.)
 - HEADERS IN NON-LOAD BEARING WALLS SHALL BE:
 - (1)2x4/6 FLAT @ OPENINGS UP TO 4'; (2)2x4/6 FLAT UP TO 8'.
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
 - "LVL" - Fb=2600 psi; Fv=285 psi; E=2.0x10⁶ psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - "LVL" - Fb=2400 psi; FcII=2500 psi; E=1.8x10⁶ psi
- FOR 2 & 3 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS USP W535 SCREWS (OR 3 1/2" 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 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF USP W56 SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 1" 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 BC522-4 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.

MK STD. - MAR 2016

BRIARWOOD
LOT 8A

GENERAL STRUCTURAL NOTES

LANDEN MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet:

S0.0

SMITH DOUGLAS
HOMES

project mgr: SMK
drawn by: MJF
issue date: 02-03-22

REVISIONS:
date: initial:

Mulhern+Kulp project number:
256-21019

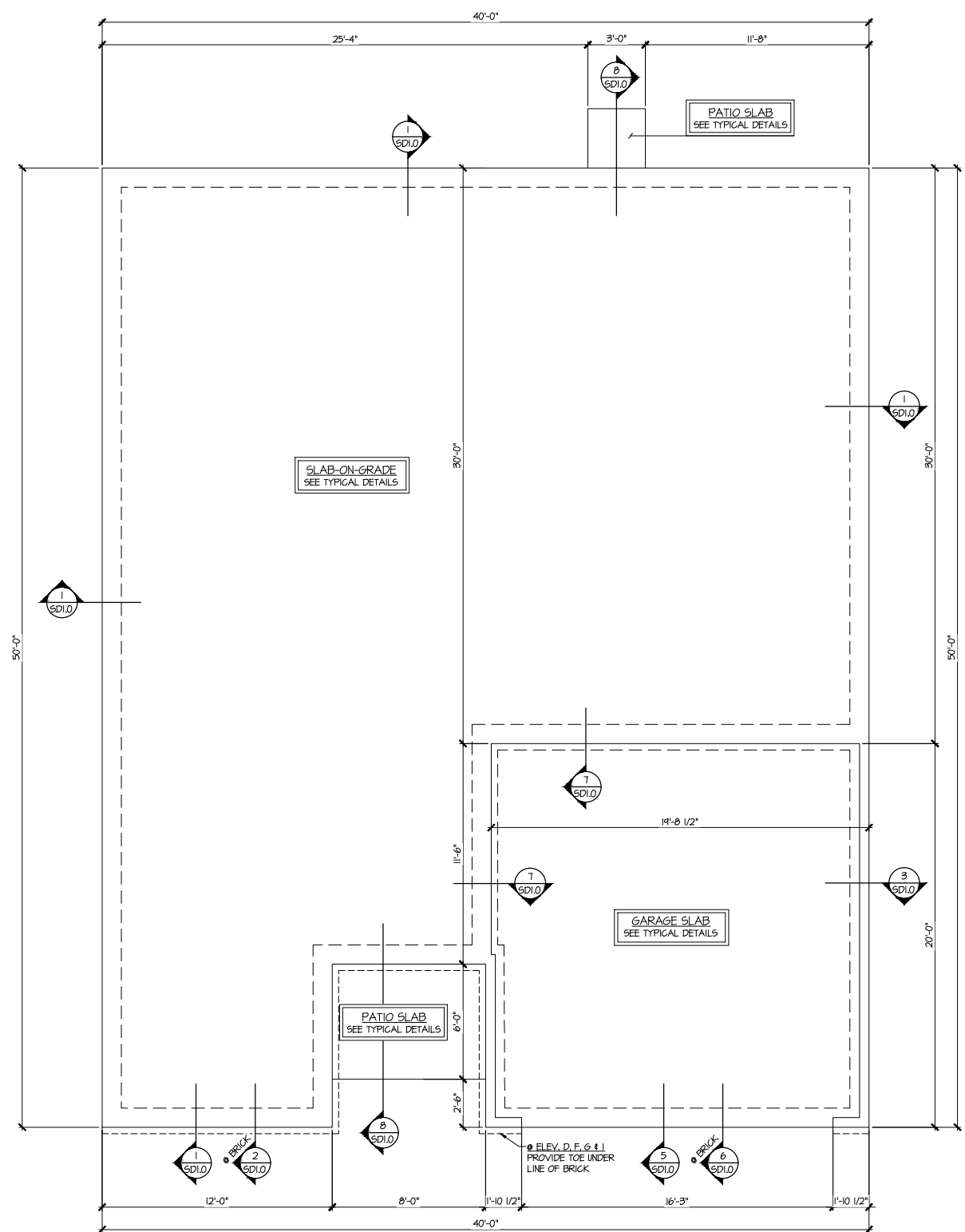


MULHERN+KULP
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3625 Shawlands Parkway, Suite 105 - Alpharetta, GA 30022
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Shawn Kreidel
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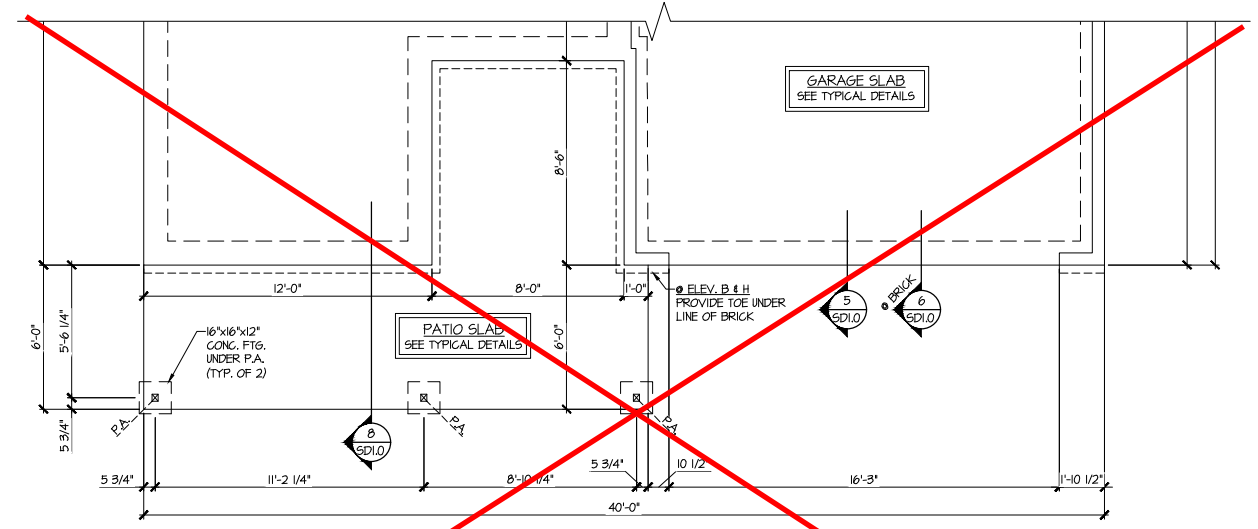


1

MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17

ELEV. A, C, D, F, G & I

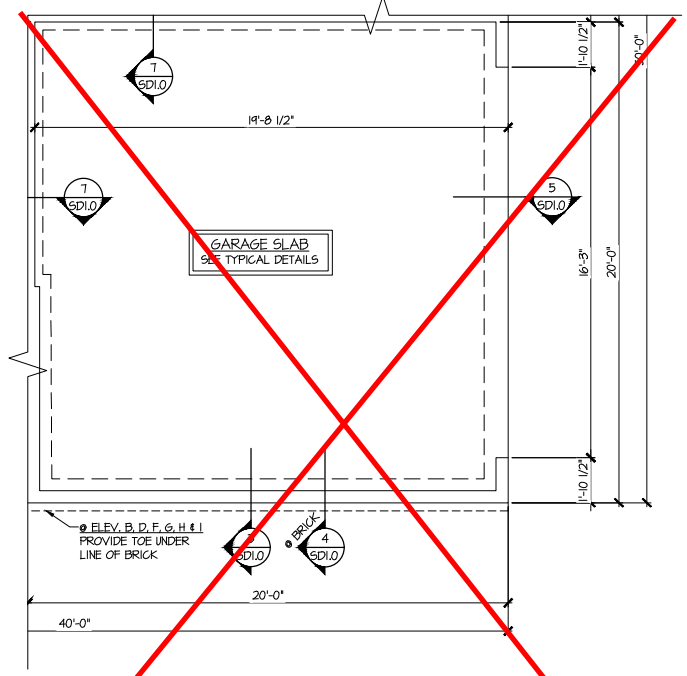


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PARTIAL MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17

ELEV. B, E & H
(SEE ELEV. A FOR ADD'L INFO)



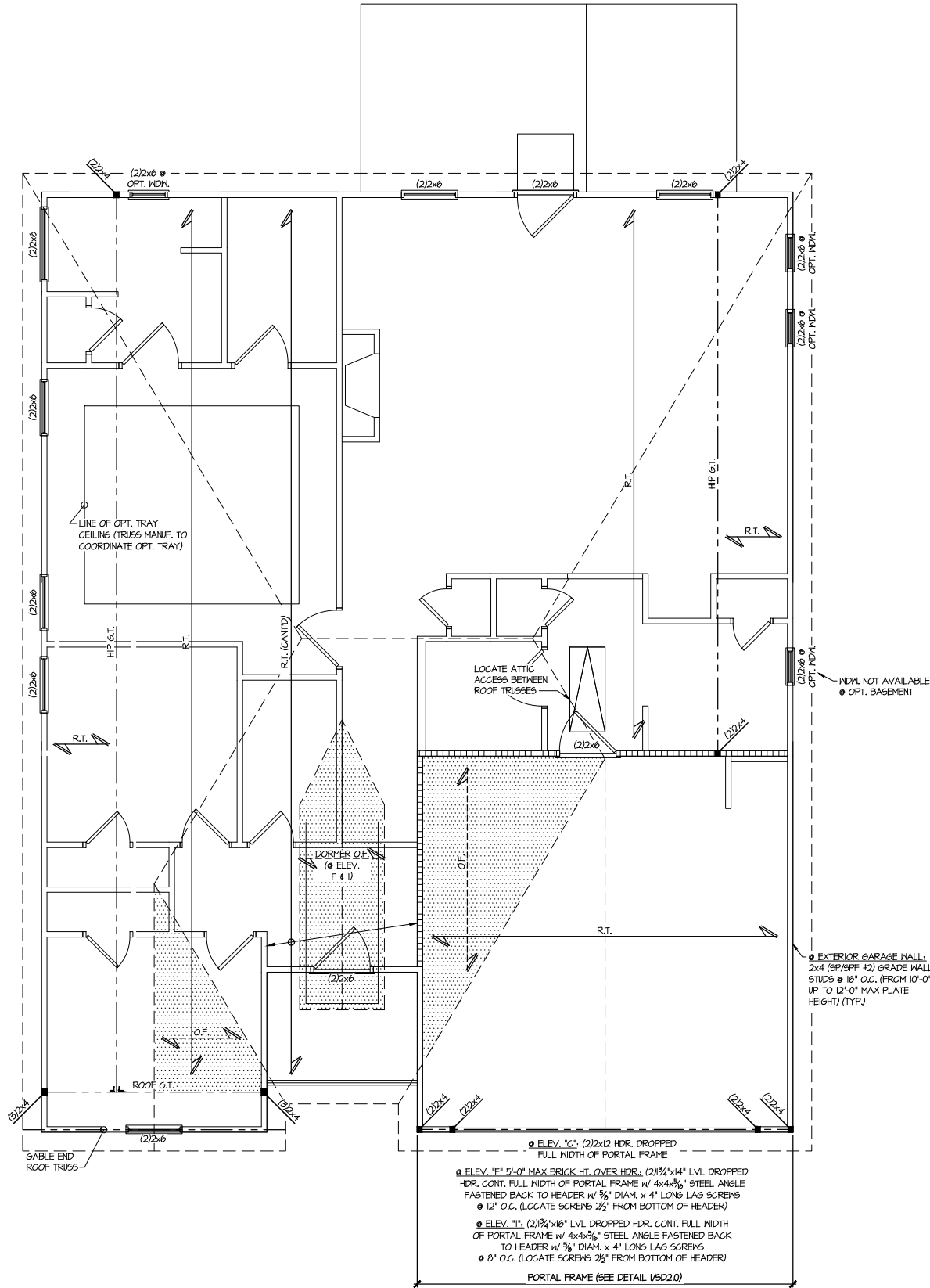
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PARTIAL MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17

OPT. SIDE ENTRY GARAGE

LEGEND	
	INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
	INDICATES FLOOR JOISTS @ 24" O.C. (TYP. UNO.)
	INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
	INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
	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.)
	BEAM/HEADER
	METAL HANGER
	INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

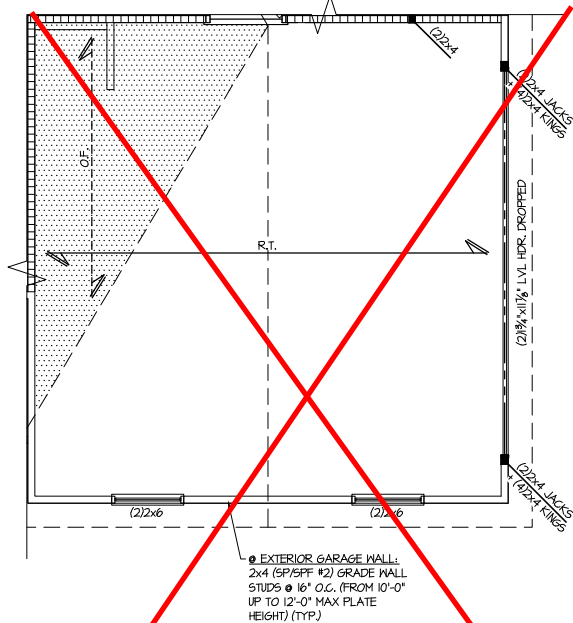


1

ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17

ELEV. C, F, & I



2

PARTIAL ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17

OPT. SIDE ENTRY GARAGE

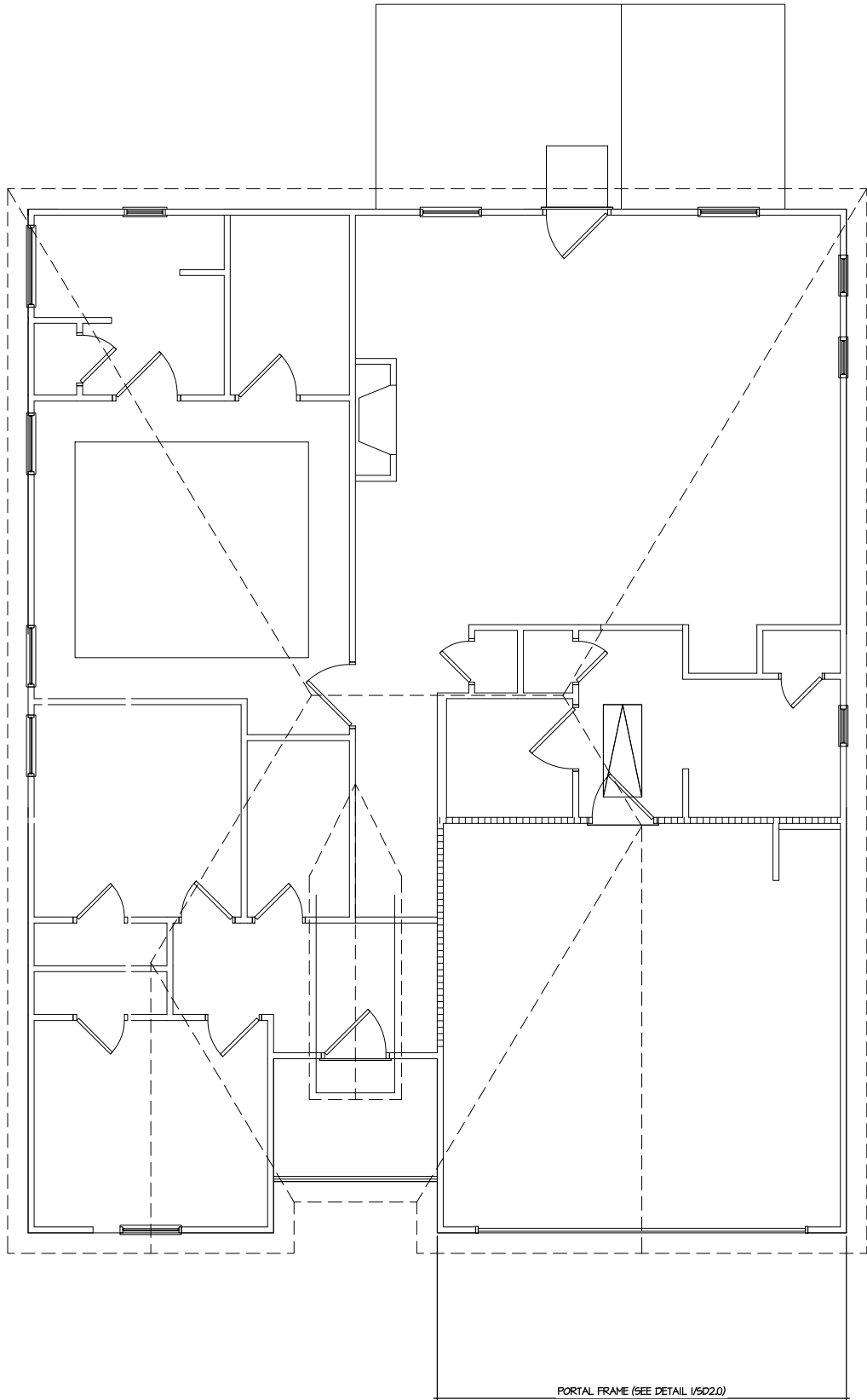
BRIARWOOD
LOT 8A

REFER TO S0.0 FOR TYPICAL
STRUCTURAL NOTES & SCHEDULES

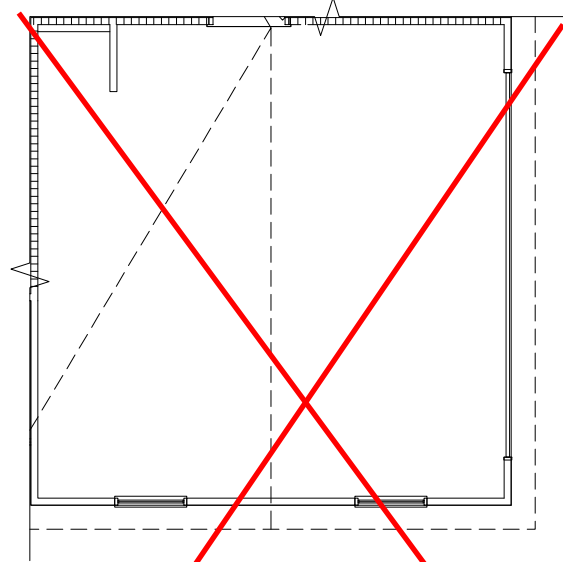
THIS LEVEL HAS BEEN DESIGNED
FOR 9'-1" PLATE HEIGHT

LEGEND

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- OF INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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.)
- BEAM/HEADER
- JL METAL HANGER
- * INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.



1 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
ELEV. C, F, & I



2 PARTIAL 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
OPT. SIDE ENTRY GARAGE

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSBG:RC
(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 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBG:RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBG:RC & 2018 IRC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

MIC STD. - MAR 2016

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
FASTEN SHEATHING w/ 2 3/8"x0.113 NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP. UNO.)
- 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 FASTENING.
- 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 3/8" x 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, UNO.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS:
FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED w/ OSB OR PLYWOOD w/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

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

▶ INDICATES HOLDOWN

MIC STD. - MAR 2016

LEGEND

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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.)
- BEAM/HEADER
- J.L. METAL HANGER
- * INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

BRIARWOOD LOT 8A

REFER TO S.O. FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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

5/31/23

seal
PROFESSIONAL
ENGINEER
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3625 Shallowford Parkway, Suite 105 • Alpharetta, GA 30022
970-777-8074 • info@mulhernkulp.com

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Mulhern+Kulp project number:
256-21019

project mgr: **SMK**
drawn by: **MJF**
issue date: **02-03-22**

REVISIONS:

date:	initial:

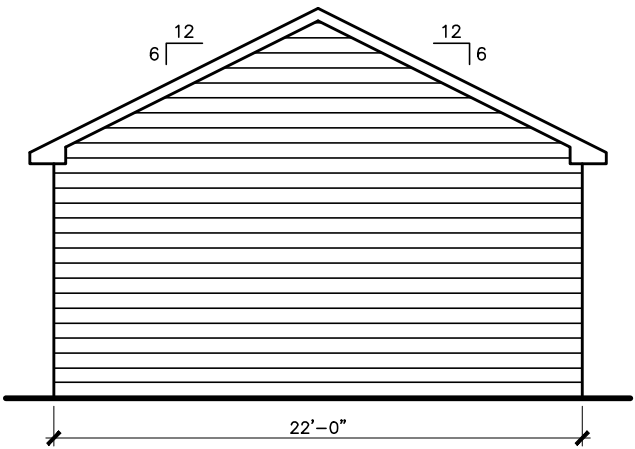
SMITH DOUGLAS HOMES

1ST FLOOR WALL BRACING PLAN

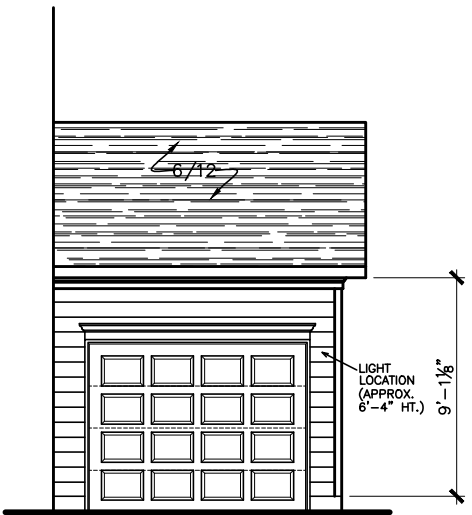
LANDEN MODEL

120 MPH WIND ZONE
NORTH CAROLINA

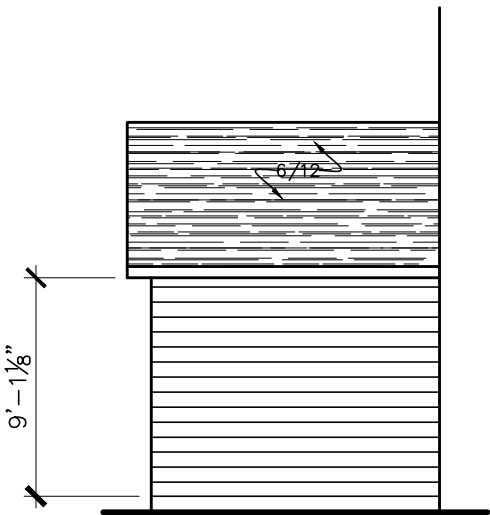
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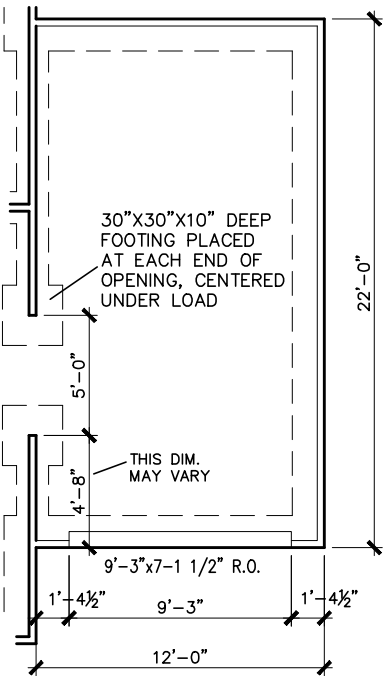
SIDE ELEVATION



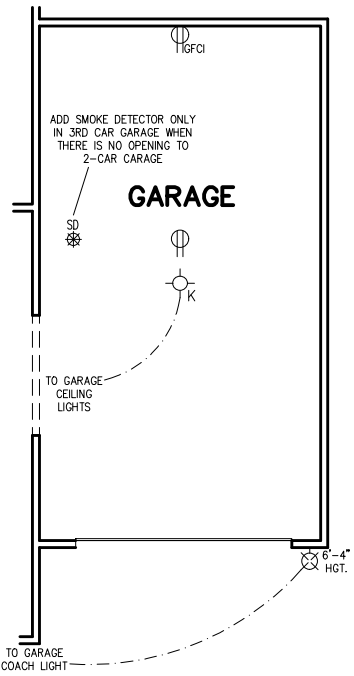
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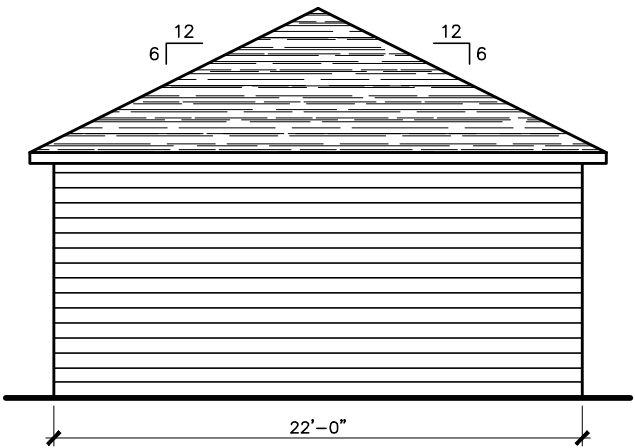
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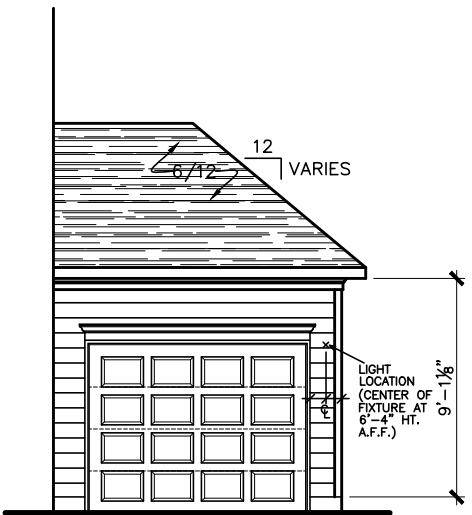
SLAB PLAN



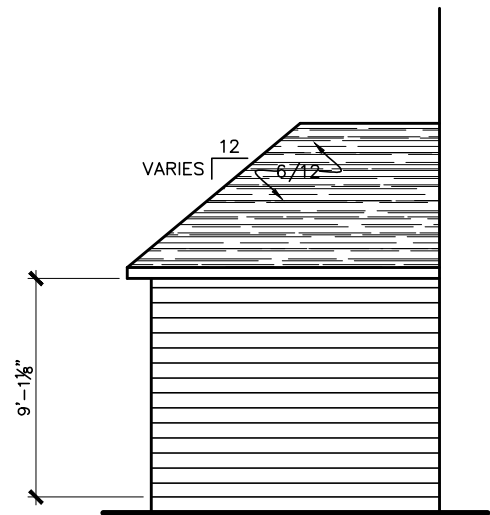
ELECTRICAL PLAN



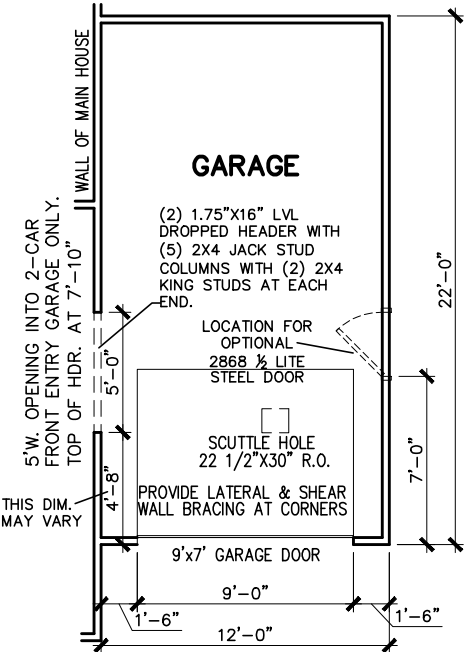
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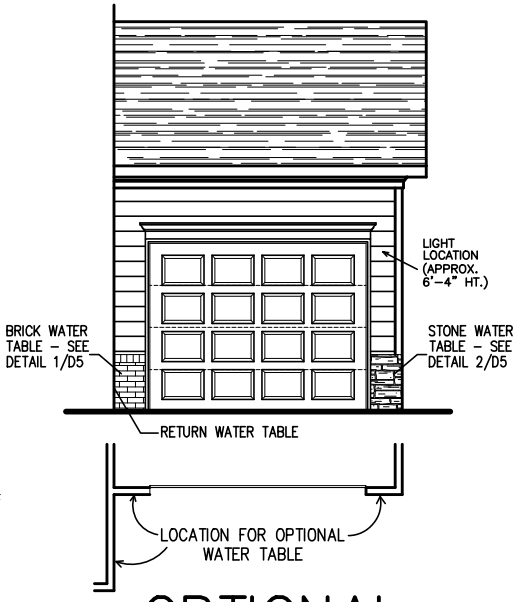
FRONT ELEVATION



REAR ELEVATION



FLOOR PLAN



OPTIONAL WATER TABLE

BRIARWOOD
LOT 8A

DATE	REVISION	BY
9/12/16	Noted location for light at right of O.H.C.D.	AW
5/3/18	Added opening between garages	AW

**SMITH DOUGLAS HOMES**
QUALITY | INTEGRITY | VALUE

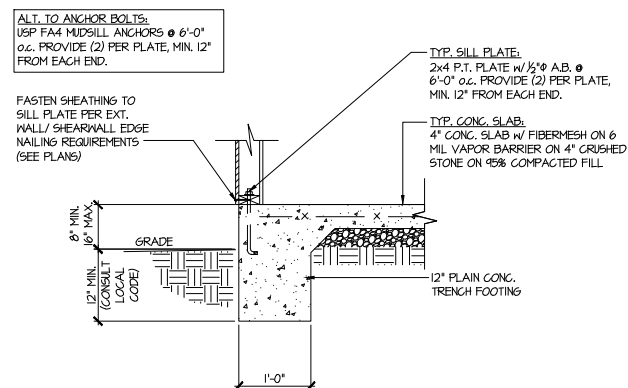
PLANS

ADD ON GARAGE

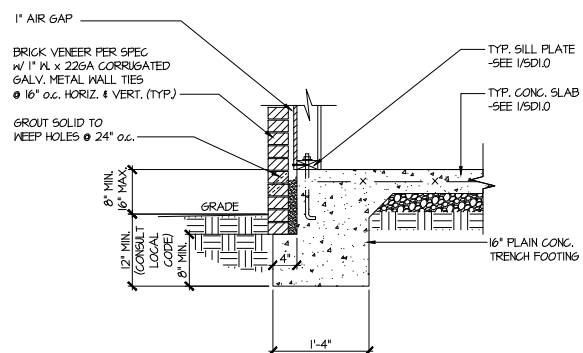
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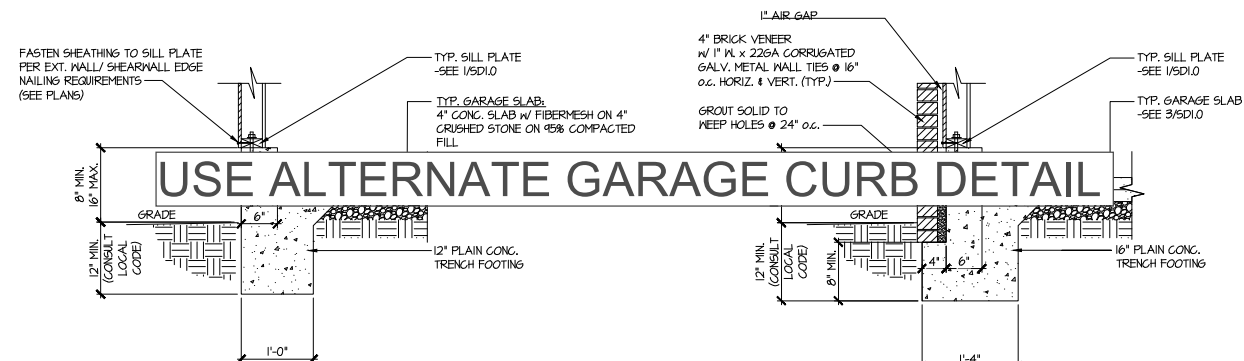
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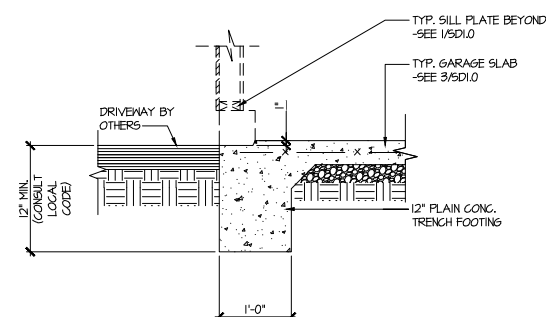
TYPICAL SLAB ON GRADE
PERIMETER FOOTING



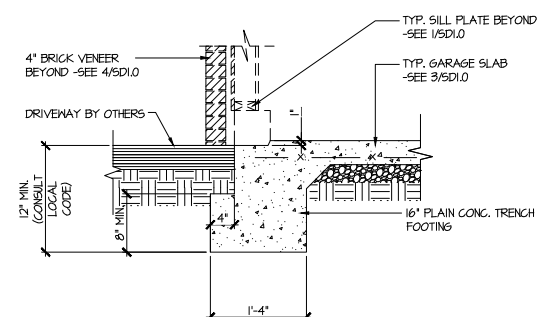
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING



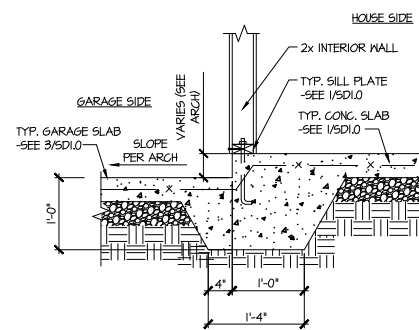
3 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING



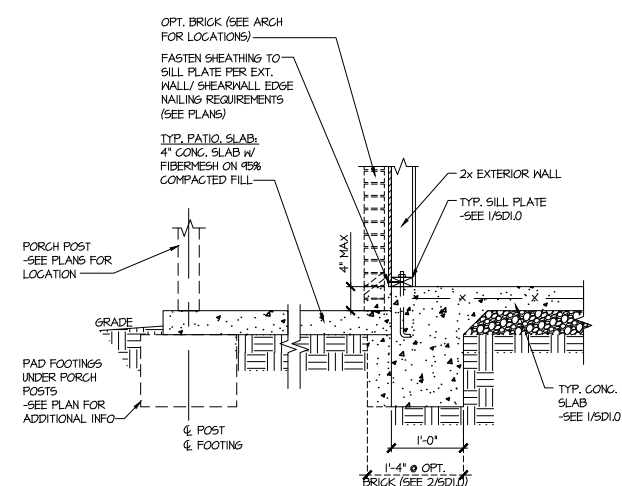
5 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING



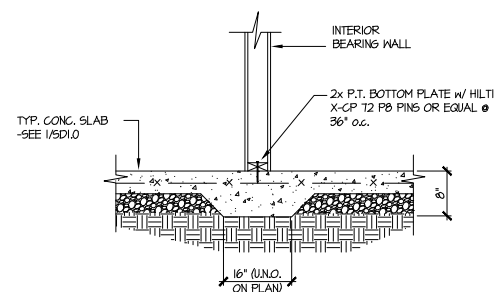
6 TYPICAL SLAB ON GRADE GARAGE
ENTRY @ PERIMETER FOOTING w/ BRICK VENEER



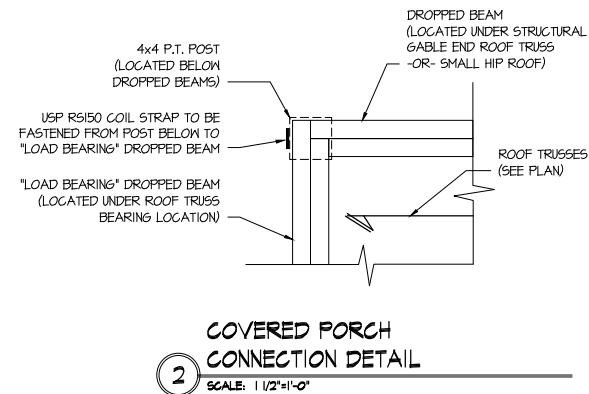
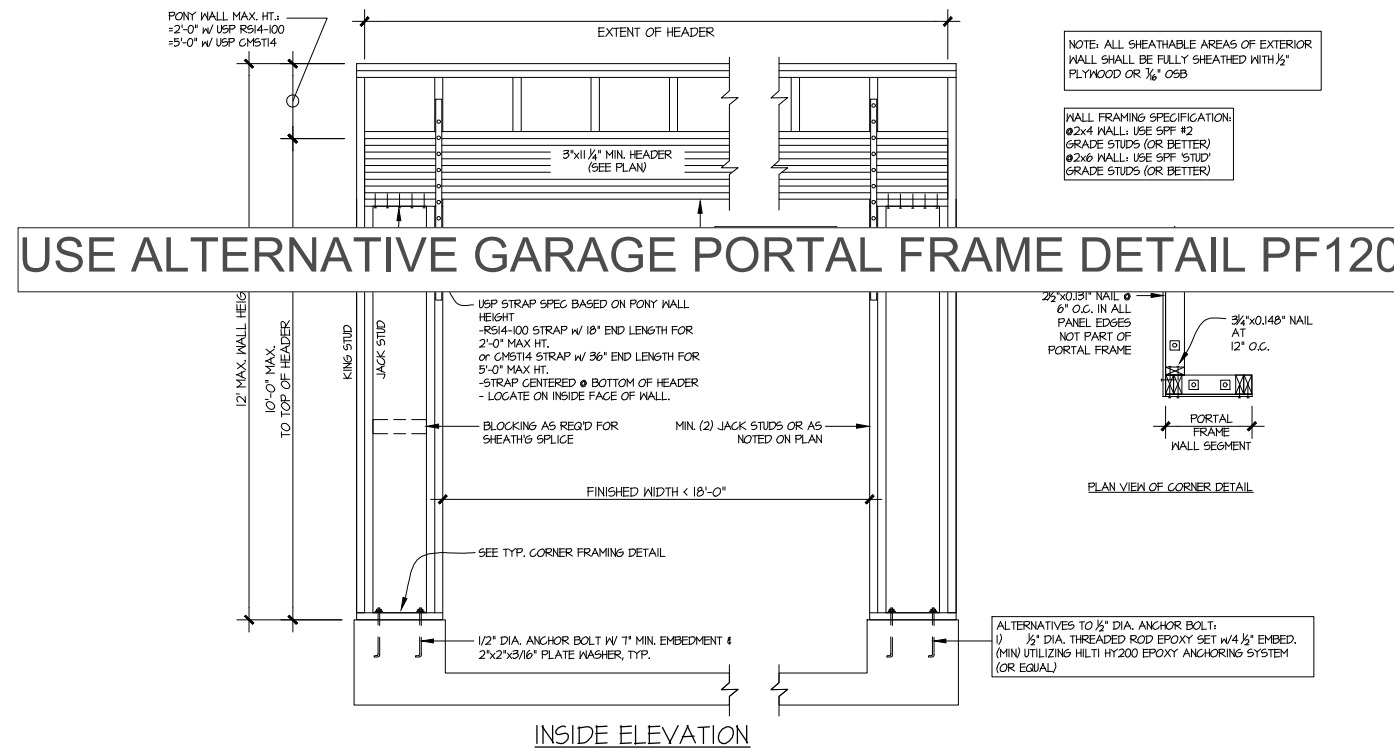
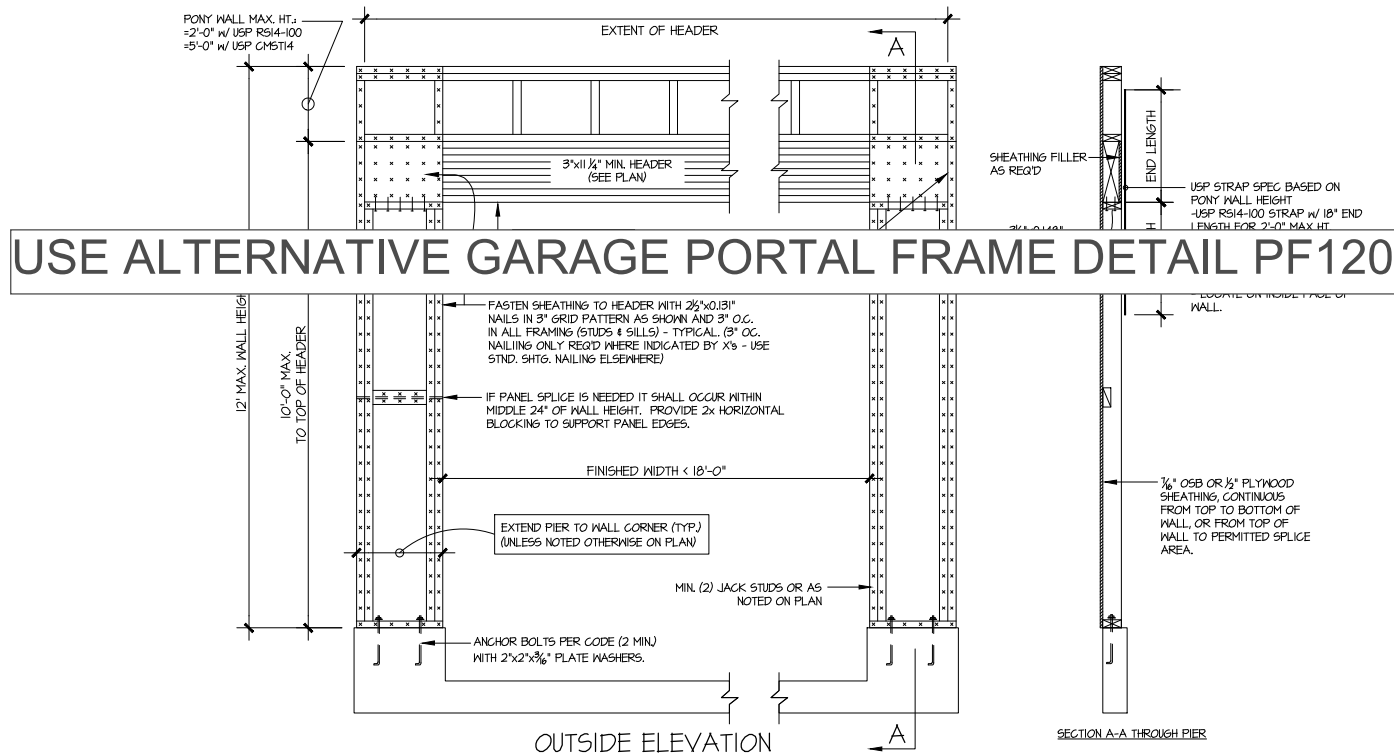
7 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING



8 TYPICAL SLAB ON GRADE PERIMETER
FOOTING @ PORCH/PATIO



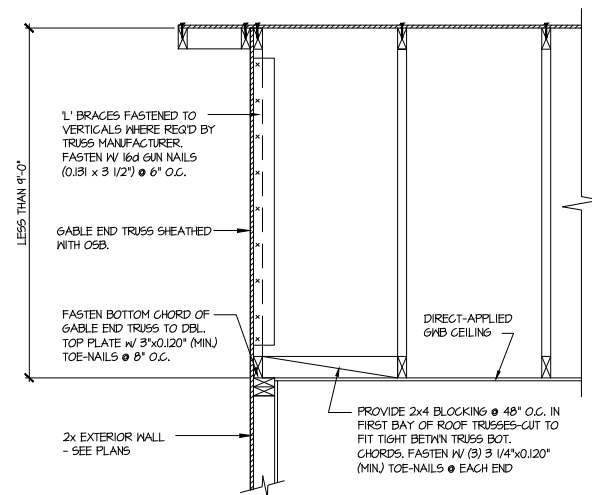
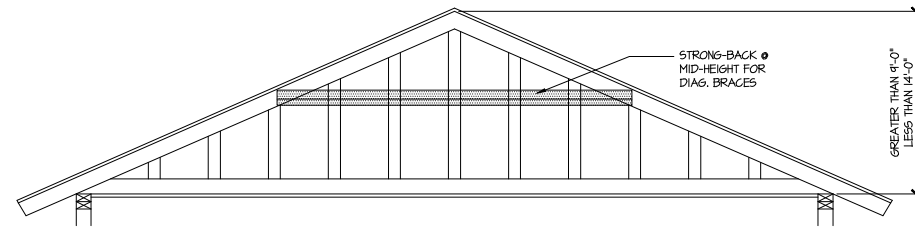
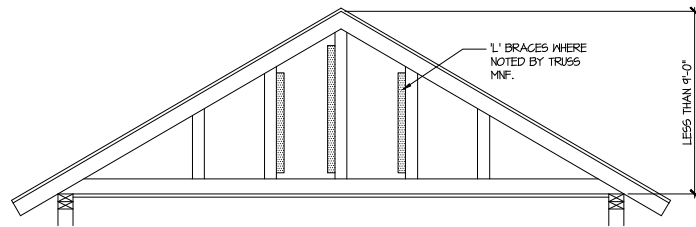
TYPICAL THICKENED SLAB @
INTERIOR BEARING WALL



GARAGE PORTAL FRAME BRACING ELEVATION

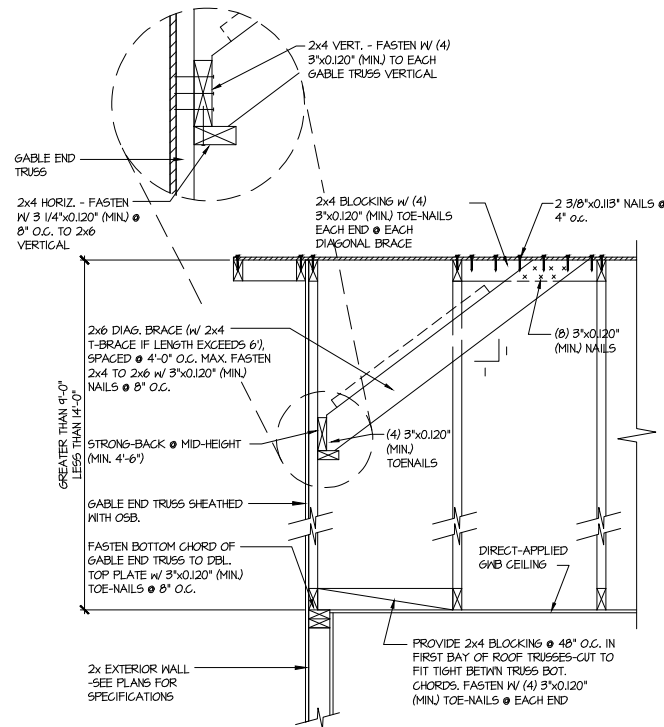
SCALE: N.T.S.

BOTH SIDES OF GARAGE DOOR
115 MPH WIND SPEED (ULT)



A TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D • GABLE END TRUSS
HEIGHT UP TO 9'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9'-0". 1" BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



B TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D • GABLE END TRUSS
HEIGHT BETWEEN 9'-0" TO 14'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 1" BRACES NOT REQUIRED.

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 8A**

5/31/23
SEAL
PROFESSIONAL
ENGINEER
SHAUN KREIDEL
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Structural Engineering, Inc.

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3825 Shallowford Parkway, Suite 105 • Alpharetta, GA 30022
3776-777-8874 • mulhern+kulp@gmail.com
NC License # C-3825

Mulhern+Kulp project number:
256-21019
project mgr: **SMK**
drawn by: **MJF**
issue date: **02-03-22**

REVISIONS:
date: initial:

**SMITH DOUGLAS
HOMES**

FRAMING DETAILS
LANDEN MODEL
120 MPH WIND ZONE
NORTH CAROLINA

sheet:
SD2.1



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

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:

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

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

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

Signature + Seal 07/28/2023



Mulhern+Kulp project number:
256-23000

project mgr: SMK
drawn by: RAP
issue date: 07.28.2023

REVISIONS:
date: initial:

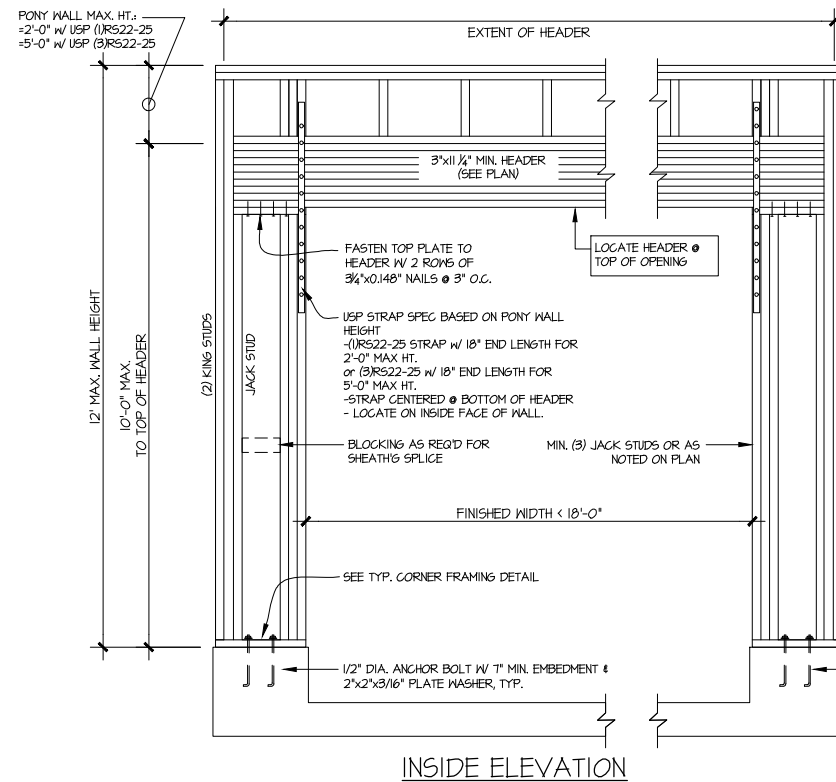
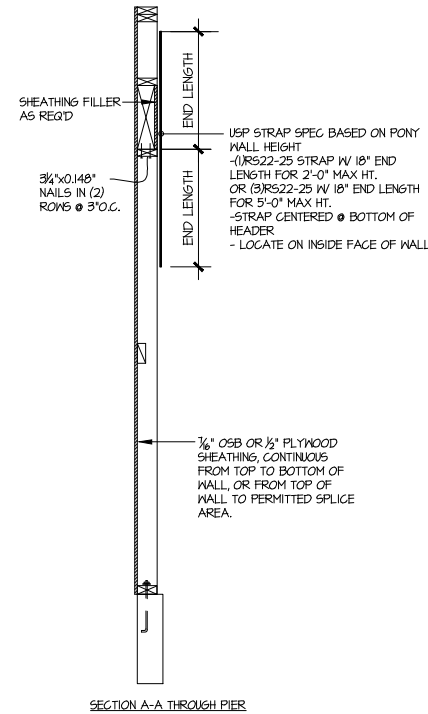
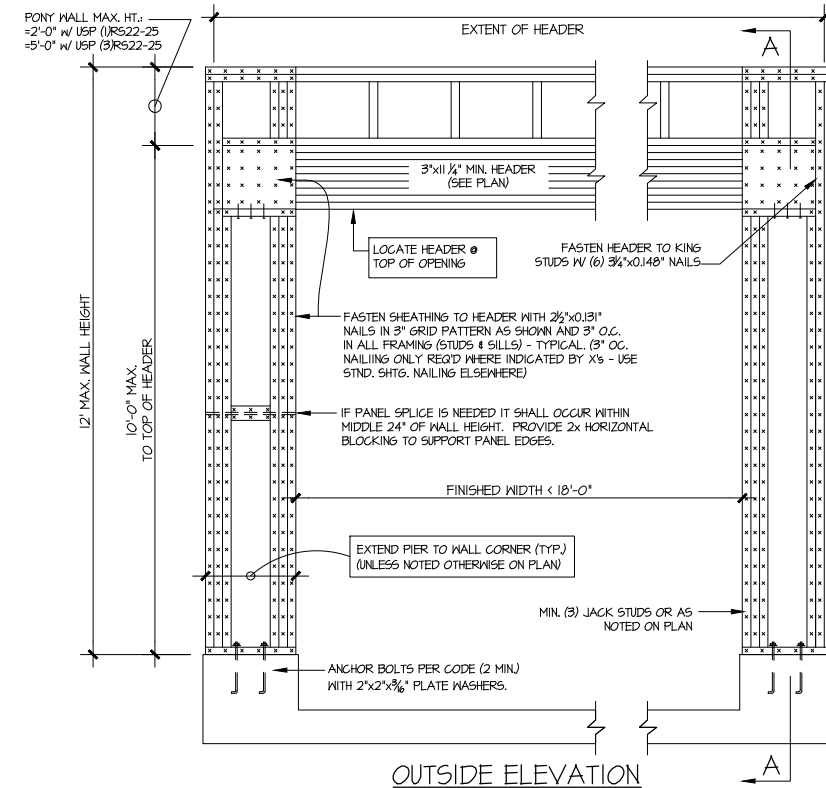
SMITH DOUGLAS
HOMES

ALTERNATE PORTAL FRAME

PORTAL FRAME

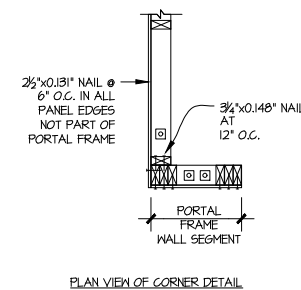
sheet:

PF-120



NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 3/8" OSB

WALL FRAMING SPECIFICATION:
Ø2x4 WALL: USE SFF #2 GRADE STUDS (OR BETTER)
Ø2x6 WALL: USE SFF #1UD GRADE STUDS (OR BETTER)



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



ALTERNATE GARAGE PORTAL FRAME BRACING ELEVATION

SCALE: N.T.S.

BOTH SIDES OF GARAGE DOOR
120 MPH WIND SPEED (ULT)

BRIARWOOD
LOT 8A

CONNECTION SPECIFICATIONS (TYP. U.N.O.)		
DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE SOLE PL. TO JOIST/RIM OR BLK'G STUD TO PLATE	(3) TOENAILS NAILS @ 4" o.c. (4) TOENAILS/ (3)END NAILS	(3) TOENAILS* NAILS @ 4" o.c. (4) TOENAILS/ (4)END NAILS*
RIM TO TOP PLATE BLK'G. BTWN. JOISTS TO TOP PL.	TOENAILS @ 6" o.c. (3) TOENAILS EA. END	TOENAILS @ 4" o.c.* (3) TOENAILS EA. END*
DOUBLE STUD DOUBLE TOP PLATE	NAILS @ 16" o.c. NAILS @ 12" o.c.	NAILS @ 16" 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 + (1) SIMPSON H2.5T TOENAILS @ 8" o.c.	(4) TOENAILS + (1) SIMPSON H2.5T TOENAILS @ 6" o.c.
GAB. END TRUSS TO DBL. TOP PL. R.T. w/ HEEL HT. 9 1/4" TO 12"	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" o.c.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" o.c.
R.T. w/ HEEL HT. 12" TO 16"	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" o.c.	2x12 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. # 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.	
* 2 1/2"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 M&K FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

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

A. ROOF TRUSSES:
1/4" DEAD LOAD

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

ABSOLUTE DEAD LOAD DEFLECTION OF ATTIC TRUSSES WHEN ADJACENT TO FLOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT DIFFERENTIAL DEFLECTION)

VENEER LINTEL SCHEDULE		
SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x1/4"
	3 FT. MAX	L3"x3"x1/4"
6'-0"	12 FT. MAX	L4"x3"x1/4"
	20 FT. MAX	L5"x3 1/2"x3/8"
8'-0"	3 FT. MAX	L4"x4"x1/4" *
	12 FT. MAX	L5"x3 1/2"x3/8"
9'-6"	16 FT. MAX	L6"x3 1/2"x3/8"
	12 FT. MAX	L6"x3 1/2"x3/8"
ALL LINTELS: - SHALL SUPPORT 2 3/4" - 3 1/2" VENEER w/ 40 psf MAXIMUM HEIGHT. - < 16" SHALL HAVE 4" MIN. BEARING - > 16" SHALL HAVE 8" MIN. BEARING - < 16" SHALL NOT BE FASTENED BACK TO HEADER. - > 16" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @ 48" o.c. w/ 1/2" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES. - MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING. - ALL LINTELS SHALL BE LONG LEG VERTICAL. - WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3/4" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING. - SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS. * FOR QUEEN VENEER USE L4"x3/4".		

M&K STD. - MAY 2016

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NCSCB-RESIDENTIAL CODE
- FOOTING DESIGN - 2,000 PSF NET ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x4/6 SILL PLATES TO CONC FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C./7" MIN. EMBEDMENT
 - FA4 ANCHOR STRAPS @ 6'-0" O.C.
- FASTEN 2x10 SILL PLATES TO PRECAST BSMT WALLS WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" 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 = 4000 psi FOOTINGS & INTERIOR SLABS ON GRADE
 - 3000 psi GARAGE & EXTERIOR SLABS ON GRADE
 - fy = 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 (GM, GC, SM, SM-SC, ML)
 - 45 PCF TYPE (GM, GC, SM, SM-SC, ML)
 - IMPORTANT - IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS UTILIZED FOR BACKFILL, CONTACT MULHERN & KULP FOR FURTHER EVALUATION OF FOUNDATION DESIGN.
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st 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 GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
 - JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
 - JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
 - CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS
- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR COVER WHERE CAST AGAINST EARTH, 1 1/2" MIN. CLEAR COVER AGAINST FORMS. LAP ALL REBAR 48 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 VERIFY.

LEGEND

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)
- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM/HEADER
- J1 METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
130MPH WIND IN 2018 NCSCB-RC
& 130MPH WIND IN 2018 IRC
(130 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 OF THE 2018 NCSCB-RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREIN, 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 NCSCB-RC & 2018 IRC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 1/16" OSB OR 15/32" PLYWOOD:
FASTEN SHEATHING w/ 2 3/8"x0.113 NAILS @ 6" o.c. AT EDGES & @ 12" o.c. IN THE PANEL FIELD. (TYP. 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 FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (7/6" 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 3/8" x 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

INDICATES HOLDOWN

M&K STD. - MAR 2016

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING PARTITION WALL
UP TO 3'-0"	(1)2x4 FLAT	(1)2x6 FLAT
UP TO 6'-0"	(2)2x4	(3)2x4
UP TO 8'-0"	(2)2x6	(3)2x6

NOTES:

- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE 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 LOADS').
- 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, UNCOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATIONS IN THE TCNA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).
- AT I-JOIST FLOORS, PROVIDE 1" 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 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS w/ GLUE AND - 2 1/2" x 0.131" NAILS @ 6" o.c. @ PANEL EDGES & @ 12" o.c. FIELD.
- 2 3/8" x 0.120" NAILS @ 4" o.c. @ PANEL EDGES & @ 8" o.c. FIELD.
- 2 3/8" x 0.113" NAILS @ 3" o.c. @ PANEL EDGES & @ 6" o.c. IN FIELD.

ROOF FRAMING

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS - w/ 2 1/2" x 0.131" NAILS @ 6" o.c. @ PANEL EDGES & @ 12" o.c. FIELD.
- w/ 2 3/8" x 0.120" NAILS @ 4" o.c. @ PANEL EDGES & @ 8" o.c. FIELD.
- w/ 2 3/8" x 0.113" NAILS @ 3" o.c. @ PANEL EDGES & @ 6" o.c. FIELD.
- 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 RTIA CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) RTIA CLIPS AT 2-PLY GIRDER TRUSSES, (3) RTIA CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.
- 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 BC51 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).

M&K STD. - MAR 2016

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 THE PROJECT.

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

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NCSCB-RESIDENTIAL CODE
- 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 (I-JOISTS)
 - ADD'L 10 PSF @ CERAMIC TILE IN BATHS & LAUND.
 - SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE (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 WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" o.c. (MAX., U.N.O.)
 - HEADERS IN NON-LOAD BEARING WALLS SHALL BE:
(1)2x4/6 FLAT @ OPENINGS UP TO 4'; (2)2x4/6 FLAT UP TO 8'.
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
 - 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10⁶ psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - 'LVL' - Fb=2400 psi; FcII=2500 psi; E=1.8x10⁶ psi
- FOR 2 & 3 PLY BEAMS OF EQUAL 1 1/2" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" o.c. OR 2 ROWS USP #635 SCREWS (OR 3 1/2" 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 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL 1 1/2" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF USP #66 SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" o.c. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE.
- 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 BC522-4 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.

M&K STD. - MAR 2016

BRIARWOOD
LOT 8A

GENERAL STRUCTURAL NOTES

3RD CAR ADD-ON GARAGE

130 MPH WIND ZONE
NORTH CAROLINA

sheet:

S0.0

10/8/24

MULHERN & KULP
STRUCTURAL ENGINEERING, INC.



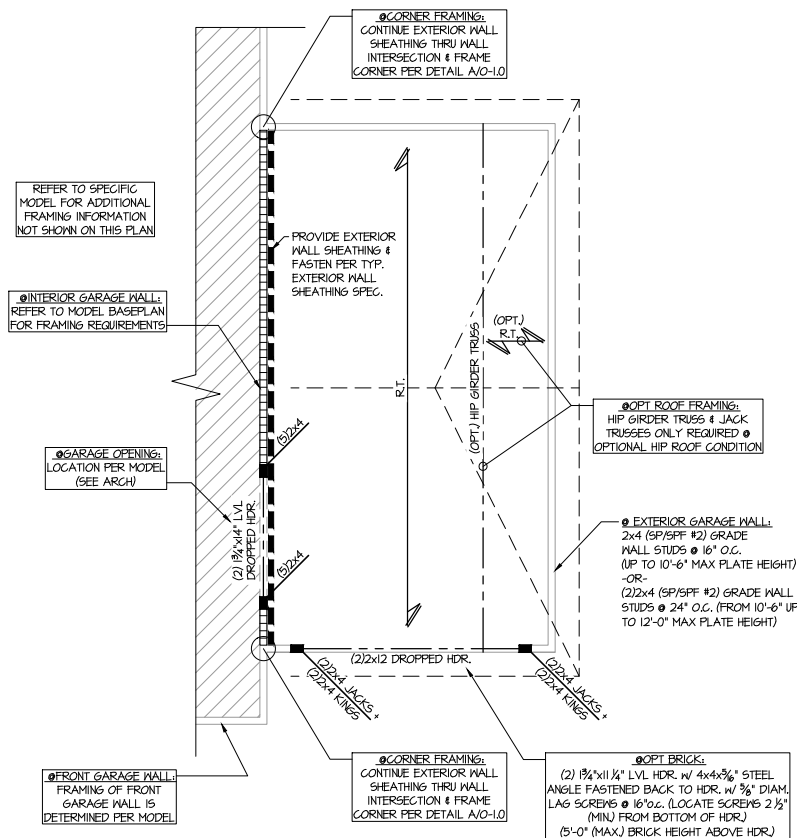
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Mulhern+Kulp project number:
256-24029

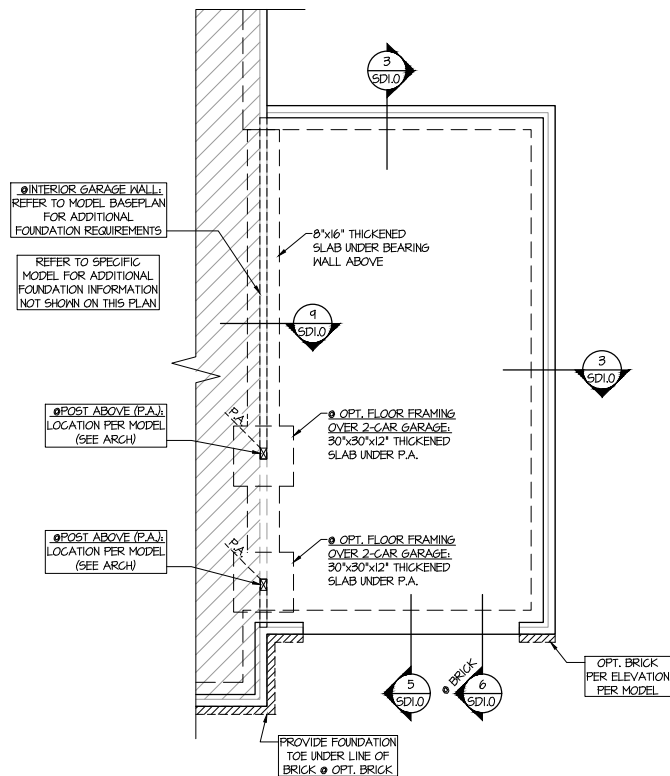
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drawn by: RAP
issue date: 10.08.2024

REVISIONS:
date: initial:

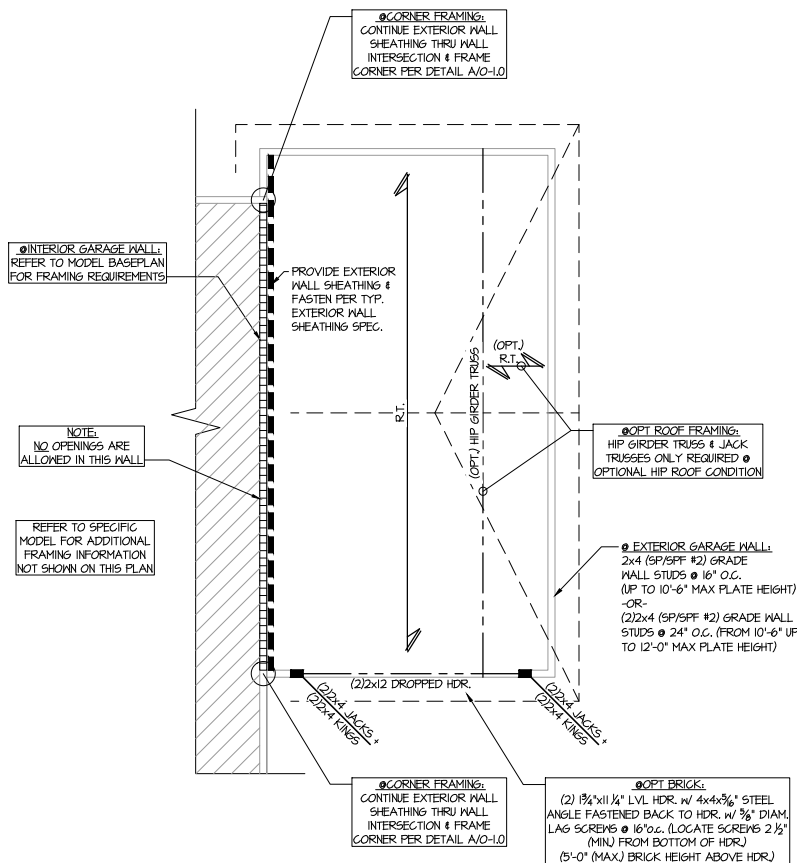
SMITH DOUGLAS
HOMES



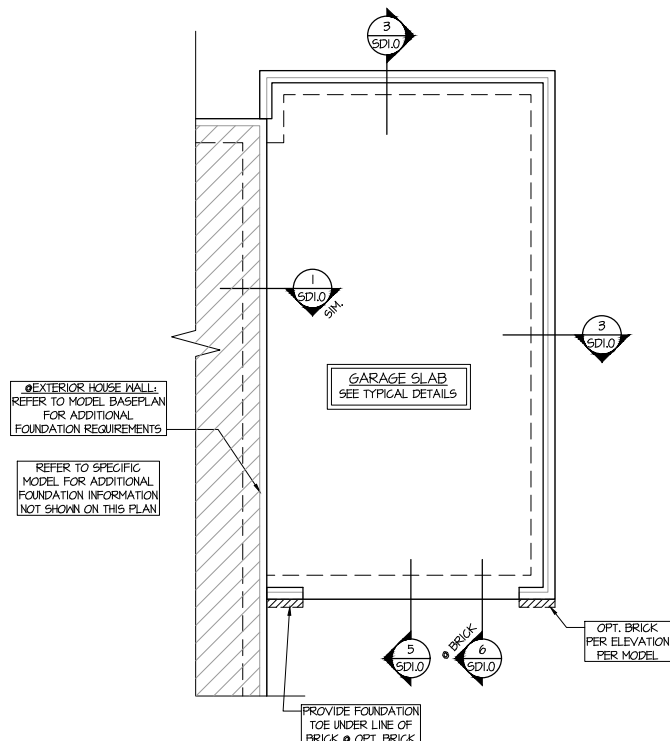
PARTIAL ROOF FRAMING PLAN
OPT. 3RD CAR GARAGE + FRONT LOAD GARAGE
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ALL ELEV. SIM.



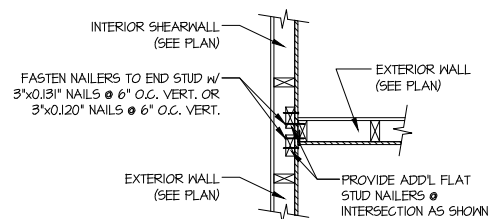
PARTIAL SLAB FOUNDATION PLAN
OPT. 3RD CAR GARAGE + FRONT LOAD GARAGE
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ALL ELEV. SIM.



PARTIAL ROOF FRAMING PLAN
OPT. 3RD CAR GARAGE + SIDE ENTRY GARAGE
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ALL ELEV. SIM.



PARTIAL SLAB FOUNDATION PLAN
OPT. 3RD CAR GARAGE + SIDE ENTRY GARAGE
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ALL ELEV. SIM.



SHEAR TRANSFER DETAIL @
INTERSECTING INT. SHEARWALL
 SCALE: 3/4"=1'-0"

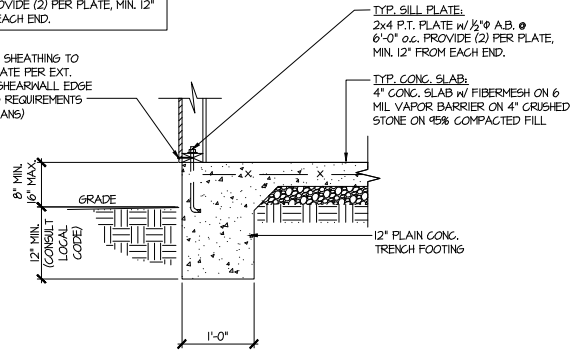
BRIARWOOD
LOT 8A

LIST OF APPROVED MODELS (DESIGNED BY M&K)	
AVERY MODEL	COLEMAN MODEL
AVONDALE MODEL	CRAWFORD MODEL
BENSON II MODEL	HARRINGTON MODEL
BRADLEY MODEL	JAMES MODEL
CALDWELL MODEL	MCGINNIS MODEL

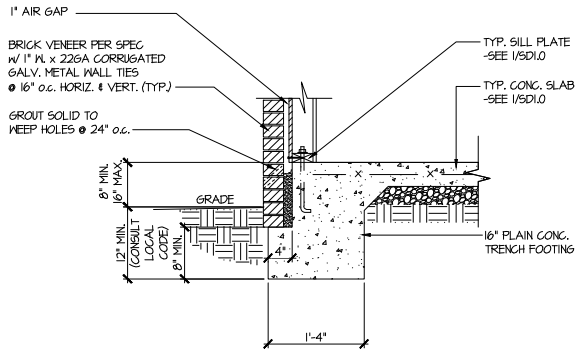
LEGEND	
• R.T. →	INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)
• O.F. →	INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)
• [Hatched Box]	INTERIOR BEARING WALL
• [Dashed Box]	BEARING WALL ABOVE (B.W.A.)
• [Solid Line]	BEAM/HEADER
• [Dashed Line]	METAL HANGER
• *	INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

ALT. TO ANCHOR BOLTS:
USE FA4 MUDSILL ANCHORS @ 6'-0"
O.C. PROVIDE (2) PER PLATE, MIN. 12"
FROM EACH END.

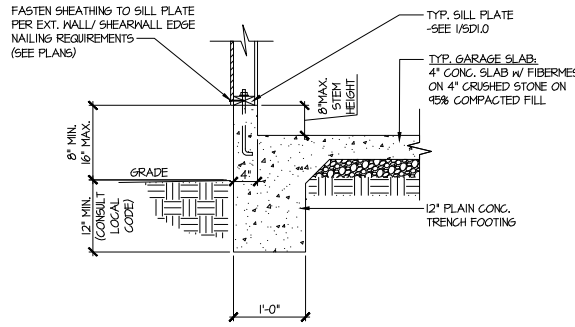
FASTEN SHEATHING TO
SILL PLATE PER EXT.
WALL/ SHEARWALL EDGE
NAILING REQUIREMENTS
(SEE PLANS)



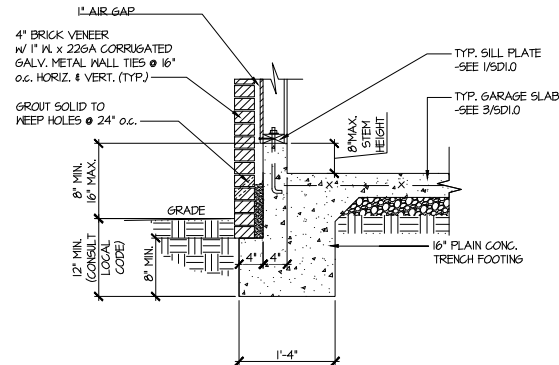
1 TYPICAL SLAB ON GRADE
PERIMETER FOOTING



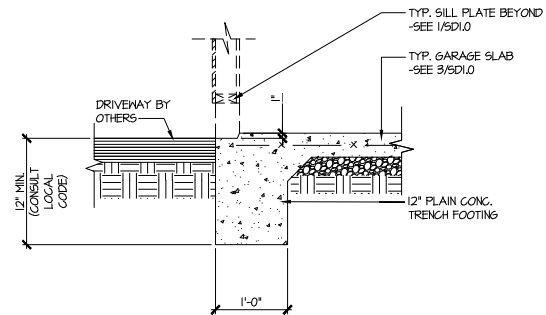
2 TYPICAL SLAB ON GRADE
PERIMETER FOOTING



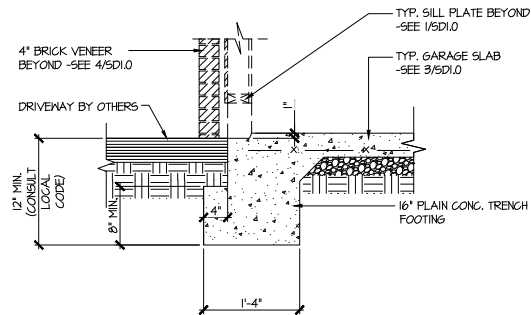
3 TYPICAL SLAB ON GRADE GARAGE
PERIMETER FOOTING



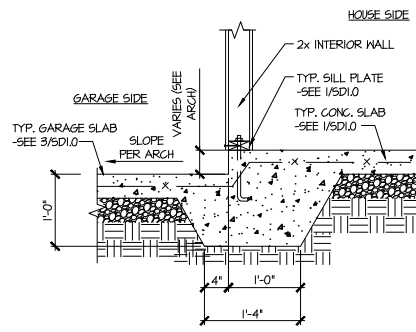
4 TYPICAL SLAB ON GRADE GARAGE
PERIMETER FOOTING



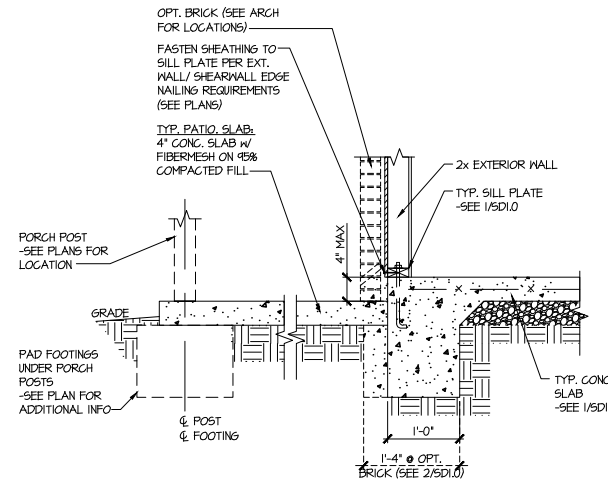
5 TYPICAL SLAB ON GRADE GARAGE
ENTRY @ PERIMETER FOOTING



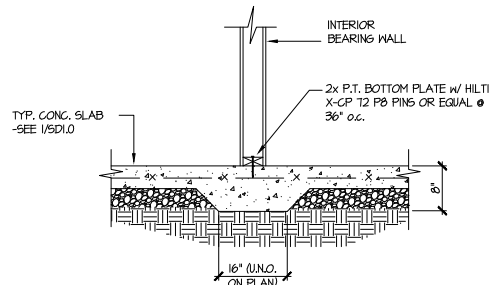
6 TYPICAL SLAB ON GRADE GARAGE
ENTRY @ PERIMETER FOOTING



7 TYPICAL MONOLITHIC INTERIOR
GARAGE FOOTING



8 TYPICAL SLAB ON GRADE PERIMETER
FOOTING @ PORCH/PATIO



9 TYPICAL THICKENED SLAB @
INTERIOR BEARING WALL

BRIARWOOD
LOT 8A

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RESIDENTIAL STRUCTURAL ENGINEERING
3825 Shawhokee Parkway, Suite 305 • Alpharetta, GA 30022
970-777-8974 • mulhern+kulp.com
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Mulhern+Kulp project number:
256-24029

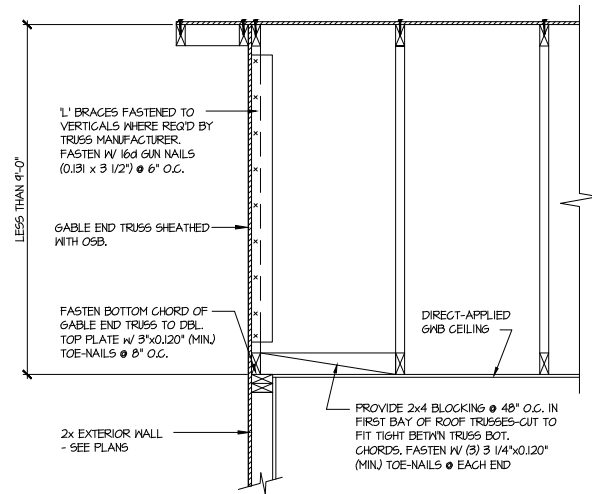
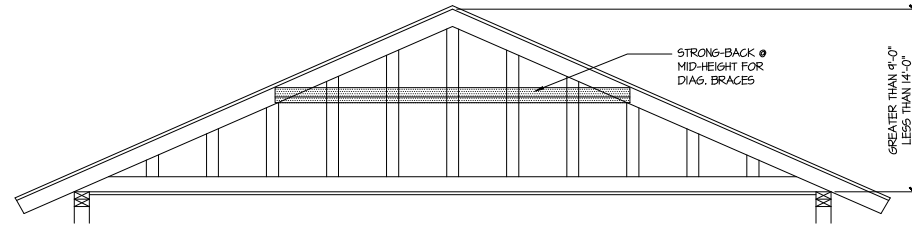
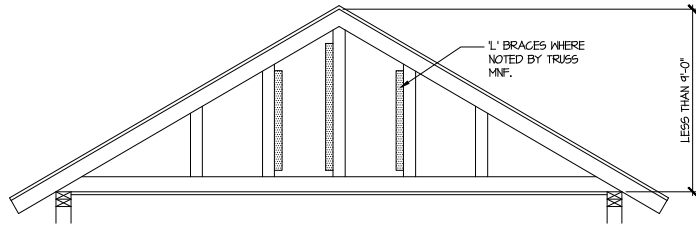
project mgr: SMK
drawn by: RAP
issue date: 10.08.2024

REVISIONS:
date: initial:

SMITH DOUGLAS
HOMES

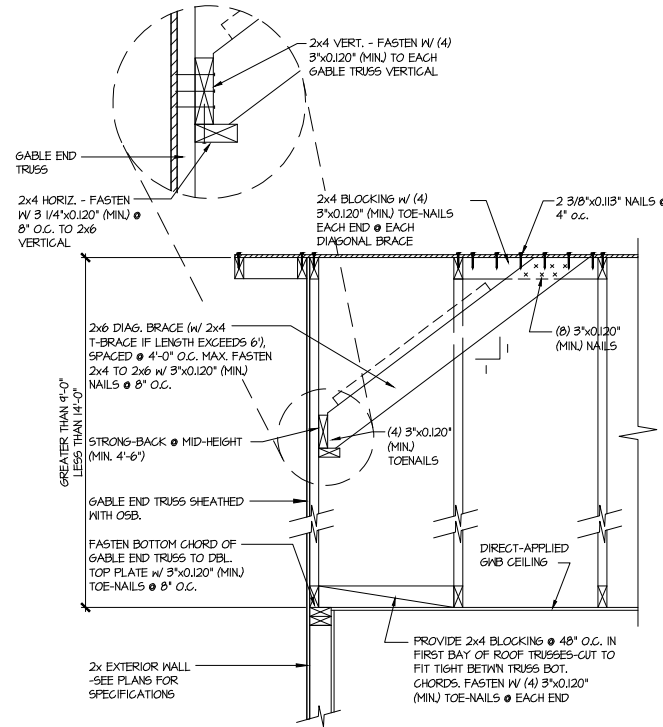
FOUNDATION DETAILS
3RD CAR ADD-ON GARAGE
130 MPH WIND ZONE
NORTH CAROLINA

sheet:
SD1.0



A TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT UP TO 9'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9'-0". 1' BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



B TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT BETWEEN 9'-0" TO 14'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 1' BRACES NOT REQUIRED.

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

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

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3825 Shawlands Parkway, Suite 105 • Alpharetta, GA 30022
9776-777-8874 • mulhern+kulp@gmail.com
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Mulhern+Kulp project number:
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project mgr: SMK
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issue date: 10.08.2024

REVISIONS:
date: initial:

SMITH DOUGLAS
HOMES

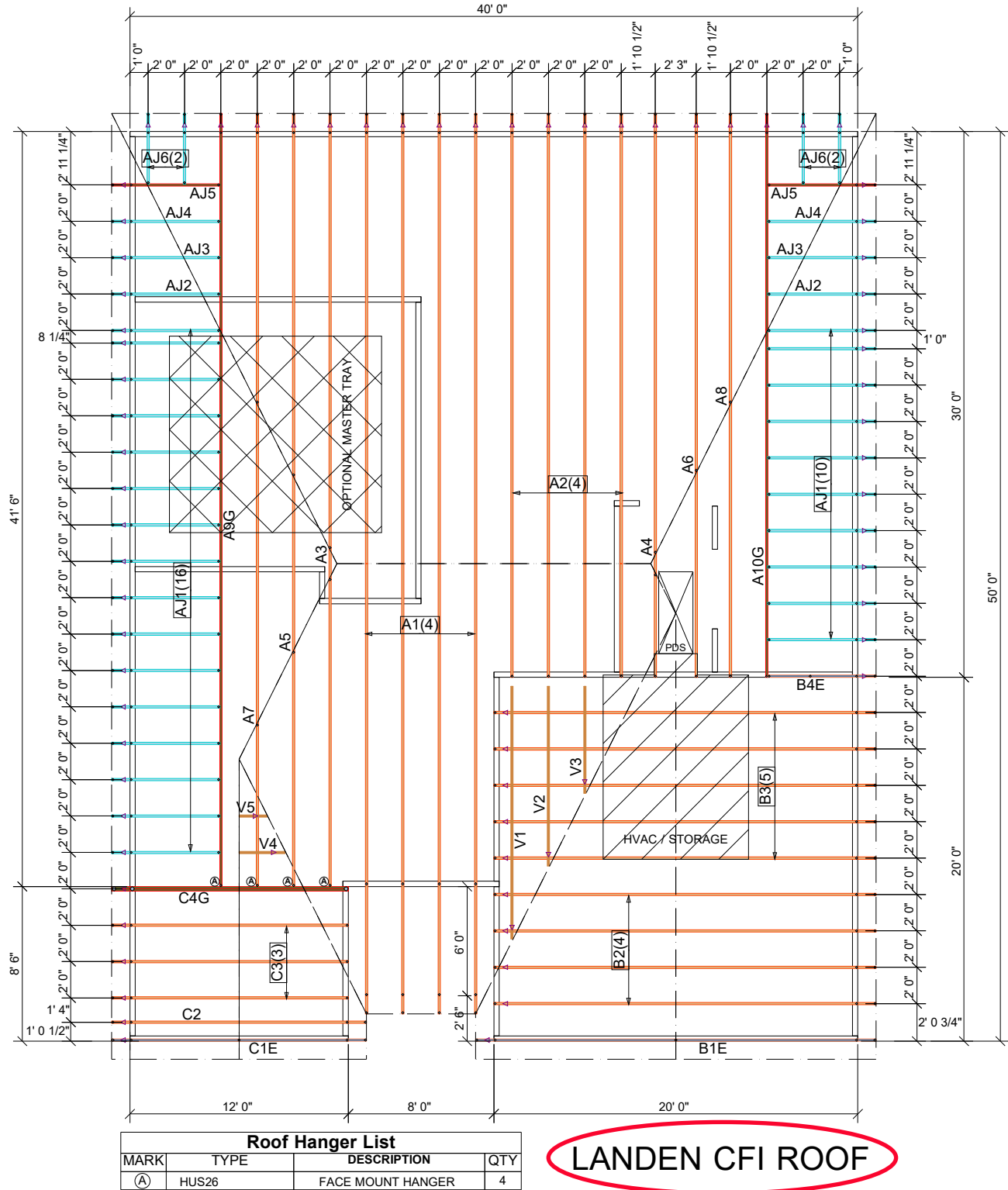
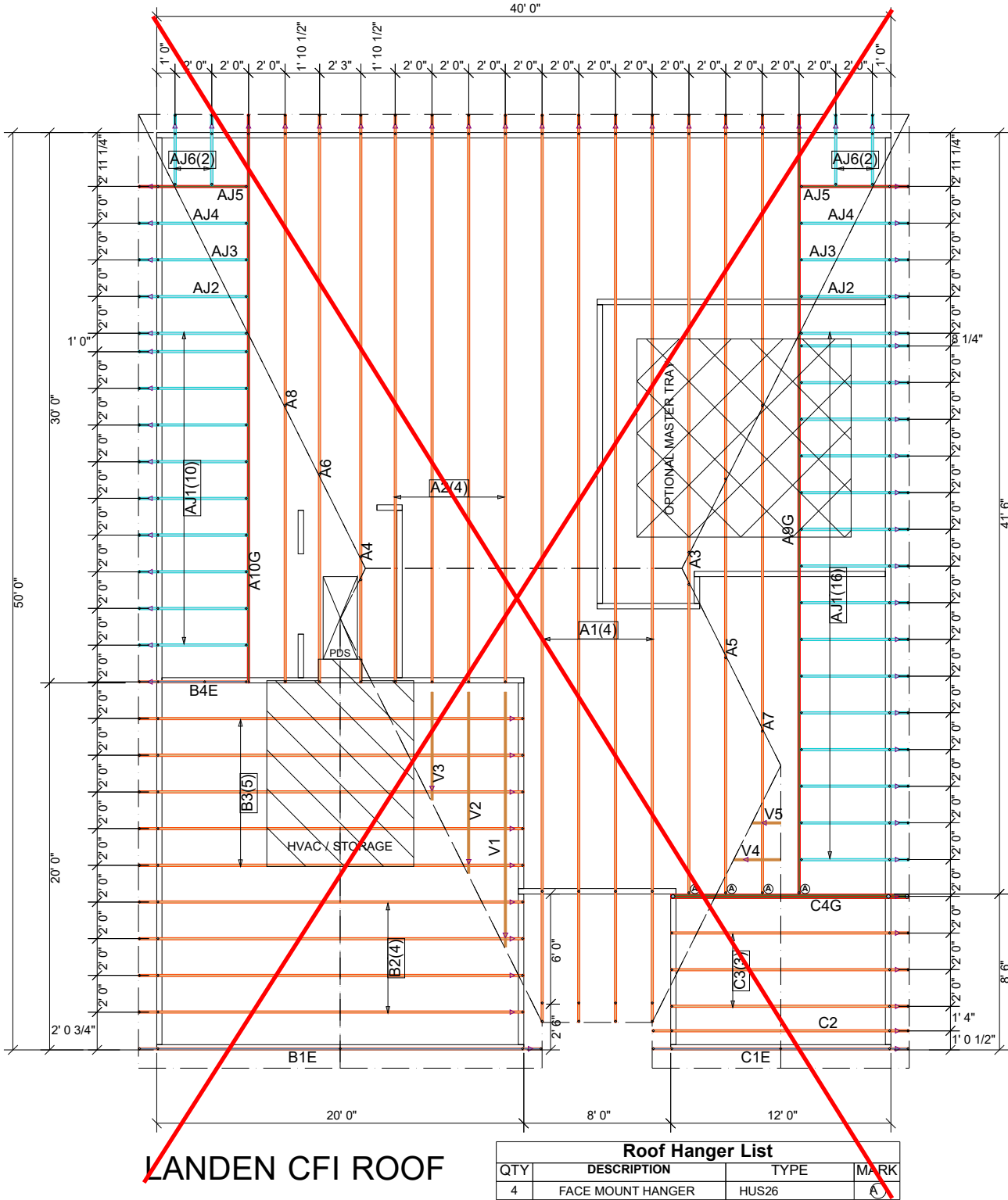
FRAMING DETAILS
3RD CAR ADD-ON GARAGE
130 MPH WIND ZONE
NORTH CAROLINA

BRIARWOOD
LOT 8A

sheet:
SD2.1

THIS IS A TRUSS PLACEMENT DIAGRAM (TPD) ONLY, NOT AN ENGINEERED DOCUMENT. Trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss design drawings (TDDs) for each truss design identified on the TPD. The Contractor is responsible for the temporary bracing of the roof and floor system, and the building designer is responsible for the permanent bracing of the roof and floor system and the overall structure. The design of the support structure including but not limited to headers, beams, walls, and columns is also the responsibility of the building designer. For general guidance regarding installation and bracing, consult "Building Component Safety Information (BCSI)" available from the SBC Association (www.sbcassociations.com). It is the responsibility of the General Contractor to verify that the provided component layout matches the final intended construction plans, loading conditions, and use. If they do not, it is the responsibility of the General Contractor to notify UFP and provide plans containing the latest specifications and designs. UFP will not be responsible for plan changes by others after final approval of shop drawings, or for errors or modifications made on-site during construction. DO NOT CUT, NOTCH, DRILL, OR OTHERWISE "REPAIR" MANUFACTURED TRUSSES IN ANY WAY WITHOUT PRIOR WRITTEN AUTHORIZATION BY A LICENSED PROFESSIONAL DESIGNATED BY UFP. The Framing is responsible to verify all dimensions, including adjusting member spacing within tolerances to allow for the drop and rise of plumbing/HVAC, unless noted otherwise. Truss-to-wall connections, if shown, are for uplift only and do not consider lateral loads. All connectors on this project are to be installed per the connector manufacturer's specifications. All connectors shown that are not truss-to-truss are suggestions only and are to be verified by the Building Designer or Engineer of Record for this particular project. UFP accepts no responsibility for the specific application or suitability of any connector that is not truss-to-truss as they apply to this specific structure.

ROOF TRUSS PLACEMENT PLAN



△ INDICATES LEFT END OF TRUSS SCALE: N.T.S.

REVISIONS		DATE	DESCRIPTION	DSN
		05/02/2023	MAIN PITCH CHANGE	JK

DESIGNER JK
LAYOUT DATE 05/02/2023
ARCH DATE 04/07/2023
STRUC DATE N/A
JOB #: MASTER

SMITH DOUGLAS

LANDEN CFI ROOF



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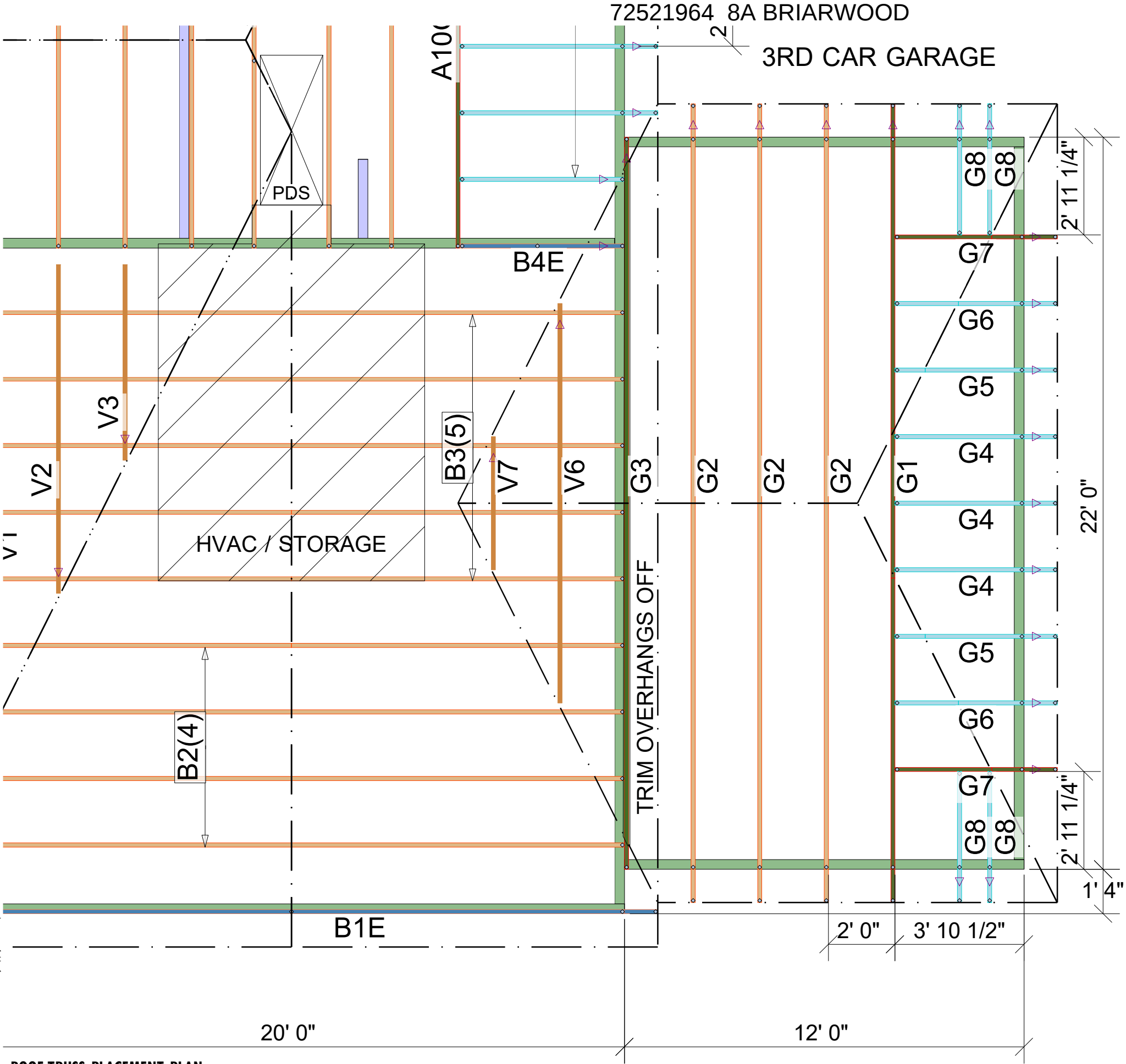
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ROOF TRUSS PLACEMENT PLAN



△ INDICATES LEFT END OF TRUSS SCALE: N.T.S.

REVISIONS		DSN
DATE	DESCRIPTION	JK
05/02/2023	MAIN PITCH CHANGE	-
-	-	-
-	-	-
-	-	-
-	-	-

DESIGNER JK
LAYOUT DATE 05/02/2023
ARCH DATE 04/07/2023
STRUC DATE N/A

JOB #: MASTER

LANDEN CFI ROOF

SMITH DOUGLAS

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UPCONSTRUCTION

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