McGINNIS

SMITH DOUGLAS HOMES

QUALITY | INTEGRITY | VALUE

DUNCANS CROSSING
LOT 0062

PLAN ID 070121

110 VILLAGE TRAIL SUITE 215
WOODSTOCK, GA. 30188

DRAWING INDEX

AREA TABULATION	
FIRST FLOOR	1001
SECOND FLOOR	1371
TOTAL	2372
GARAGE	410
FRONT PORCH (COVERED) B&C MASSINGS	108
REAR PATIO	120

GOVERNMENTAL CODES & STANDARDS

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

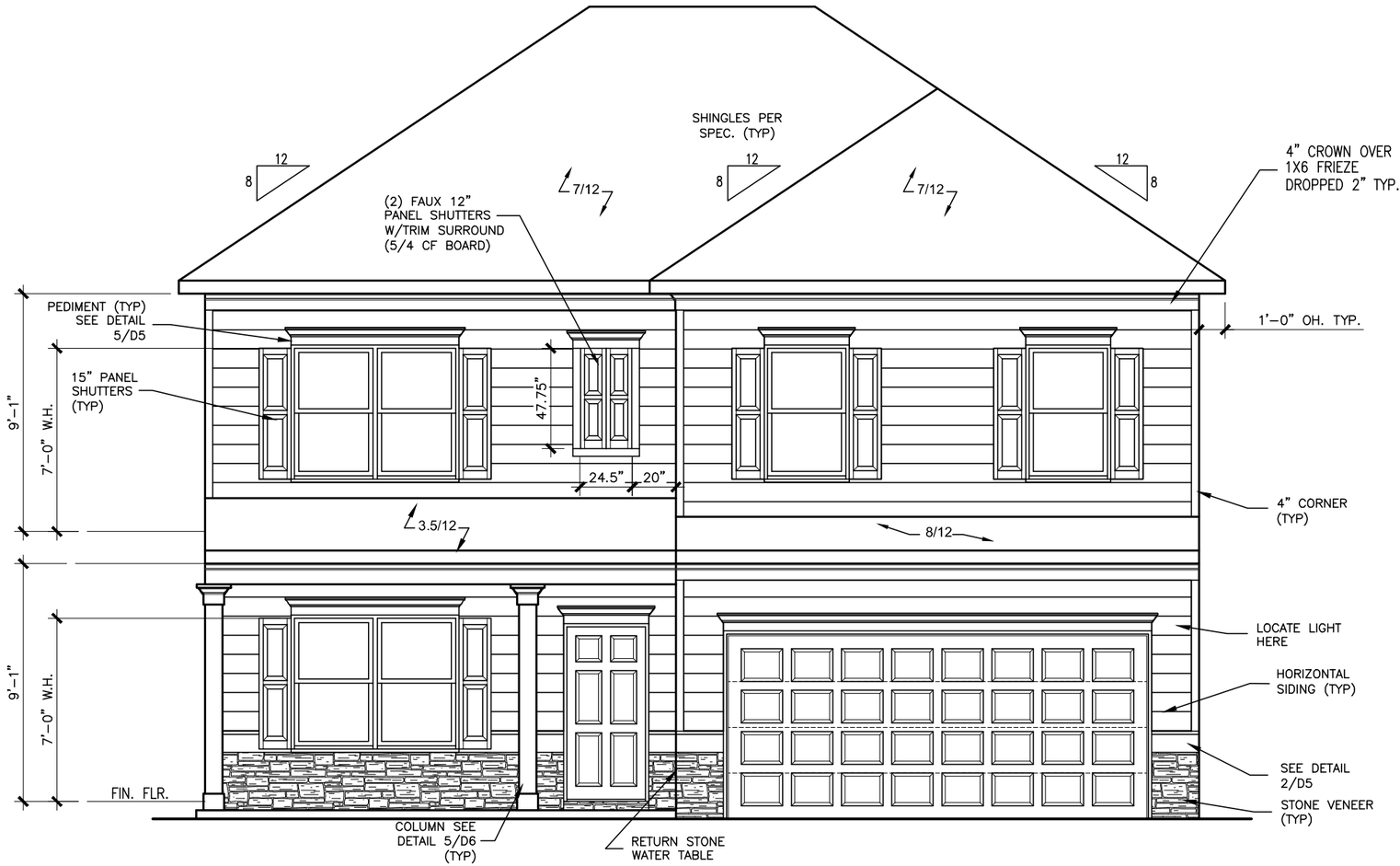
BUILDING CODE ANALYSIS / DESIGN CRITERIA

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

PLAN REVISIONS

DATE	BY	REVISION	PAGE #
2/23/2021	MM	PROTOTYPE WALK CHANGES - SEE REVISION SHT	ALL
4/7/2021	AW	Added elevations J & K	A1.10, A1.11
7/1/2021	AW	2ND Prototype walk changs - see revision sheet	A2.1-A2.3, A5.1-A5.3, A7.2-A7.3
9/2/2021	BB	ADDED FOURTH TURTLE BACK VENT TO C MASSING REAR ELEVATION	A2-3, A6.3
2/1/2022	AW	Added LED light in Laundry hall on same switch as Loft lights	A7.3

DUNCANS CROSSING
LOT 0062



FRONT ELEVATION "C"

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

ALL NON-MASONRY RETURNS TO BE HORIZONTAL SIDING

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

BY	DATE	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

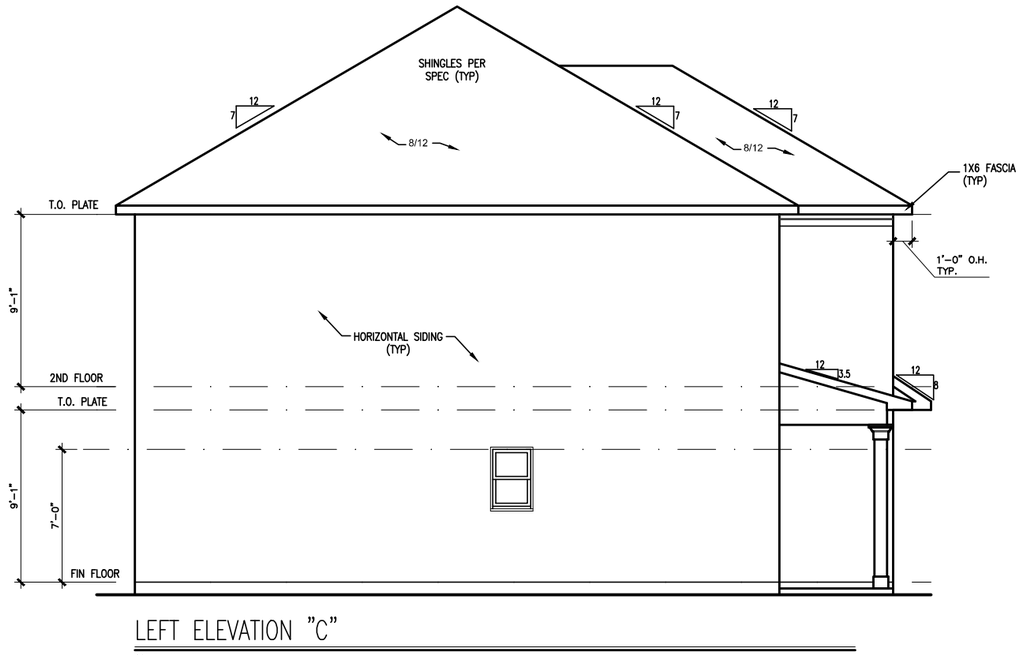
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

ELEVATIONS
FRONT ELEVATION
McGINNIS

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

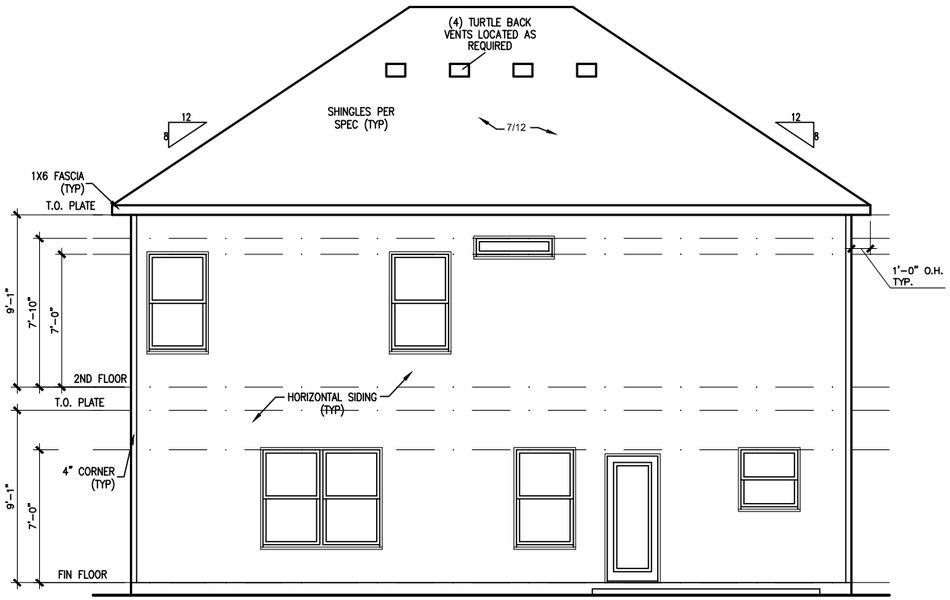
BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A1.1	

DUNCANS CROSSING
LOT 0062



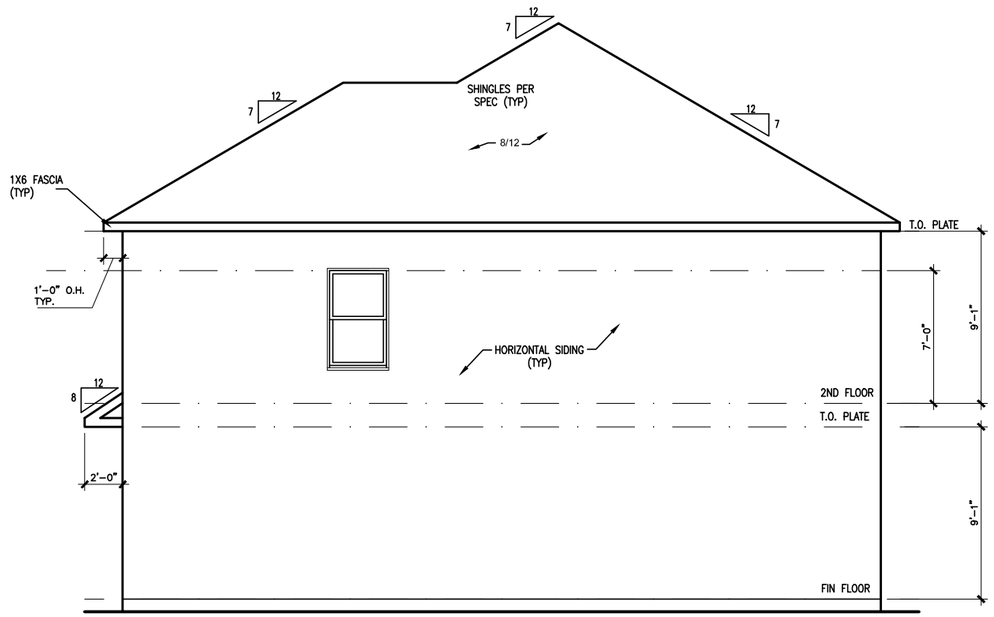
LEFT ELEVATION "C"

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



REAR ELEVATION "C"

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



RIGHT ELEVATION "C"

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

BY	DATE	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

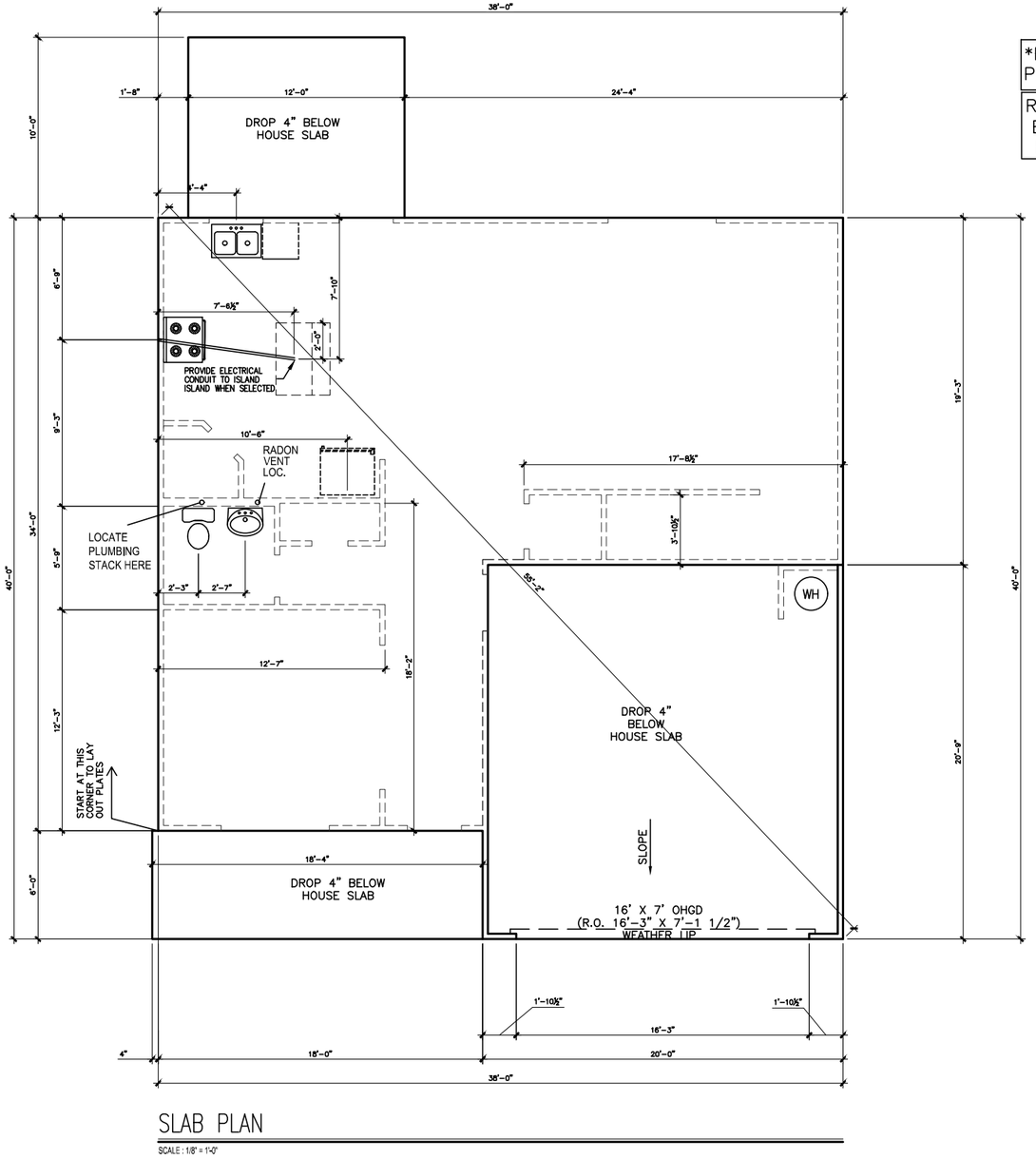
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

ELEVATIONS
SIDES AND REAR
McGINNIS

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

BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A2.1	

DUNCANS CROSSING
LOT 0062



SLAB PLAN

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

*RADON VENT PROVIDED PER LOCAL CODE

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

BY	REVISION	DATE
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

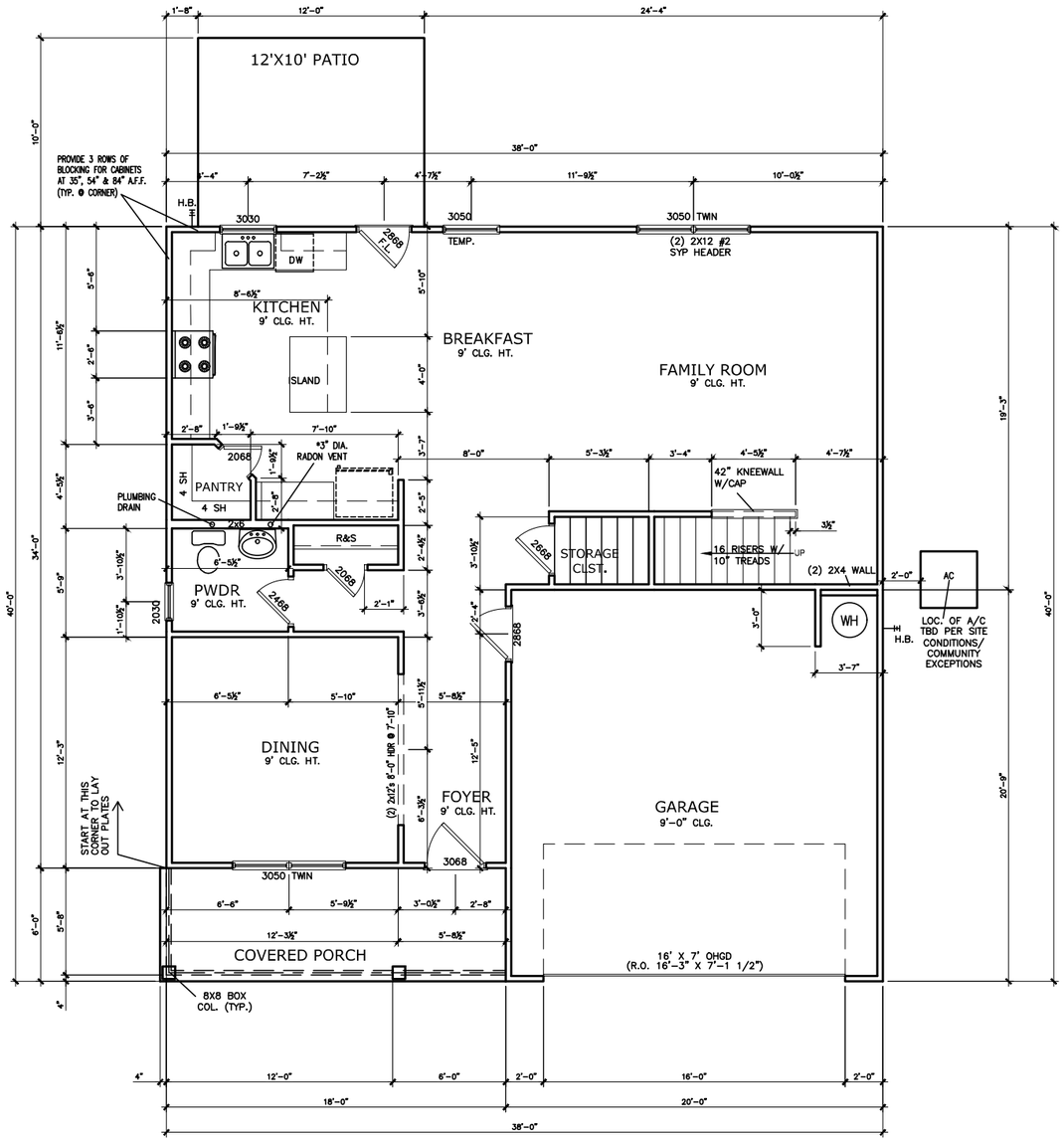
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

FOUNDATION PLAN
SLAB PLAN
McGINNIS

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

BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A3.1	

DUNCANS CROSSING
LOT 0062



FIRST FLOOR PLAN

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

*RADON VENT PROVIDED PER LOCAL CODE

BY	REVISION	DATE
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

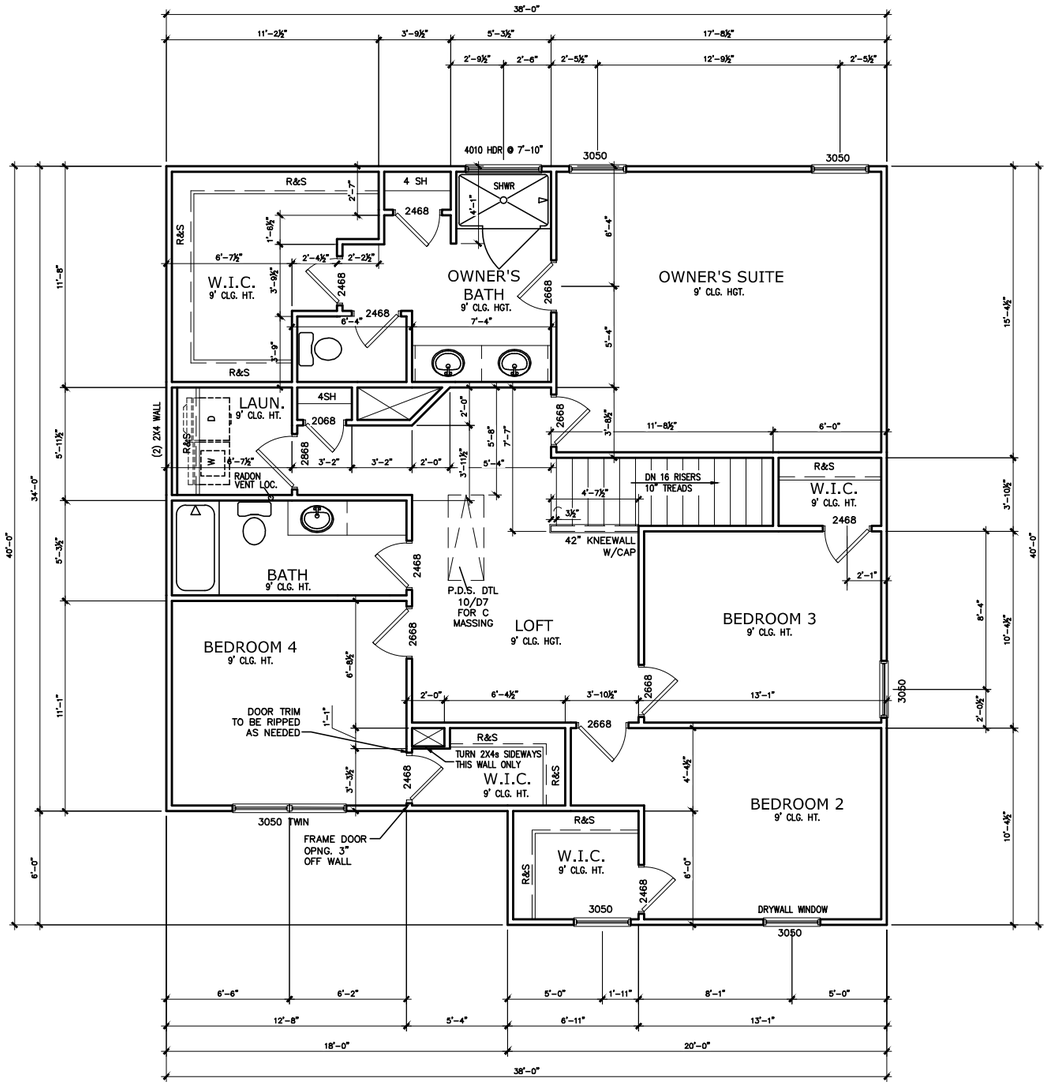
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

FLOOR PLAN
FIRST FLOOR
McGINNIS

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

BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A5.1	

DUNCANS CROSSING
LOT 0062



SECOND FLOOR PLAN

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

*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	DATE	BY
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

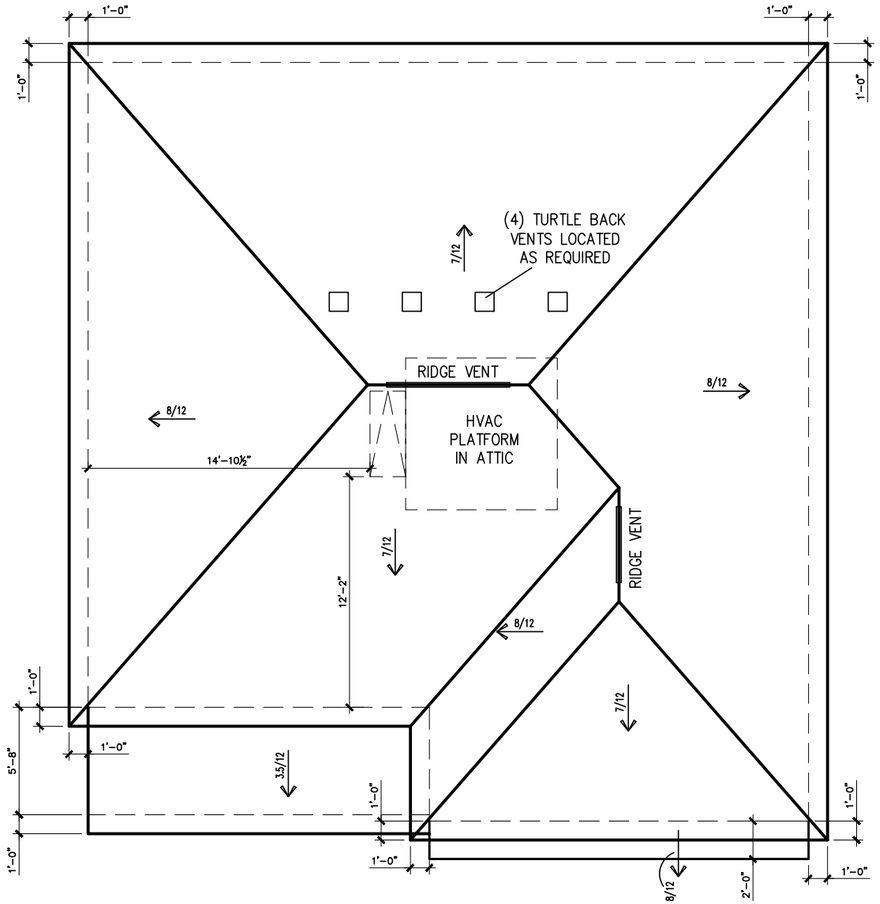
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

FLOOR PLANS
SECOND FLOOR
McGINNIS

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

BY: KCC	CH: AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A5.2	

DUNCANS CROSSING
LOT 0062



ROOF PLAN "C"

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

BY	DATE	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

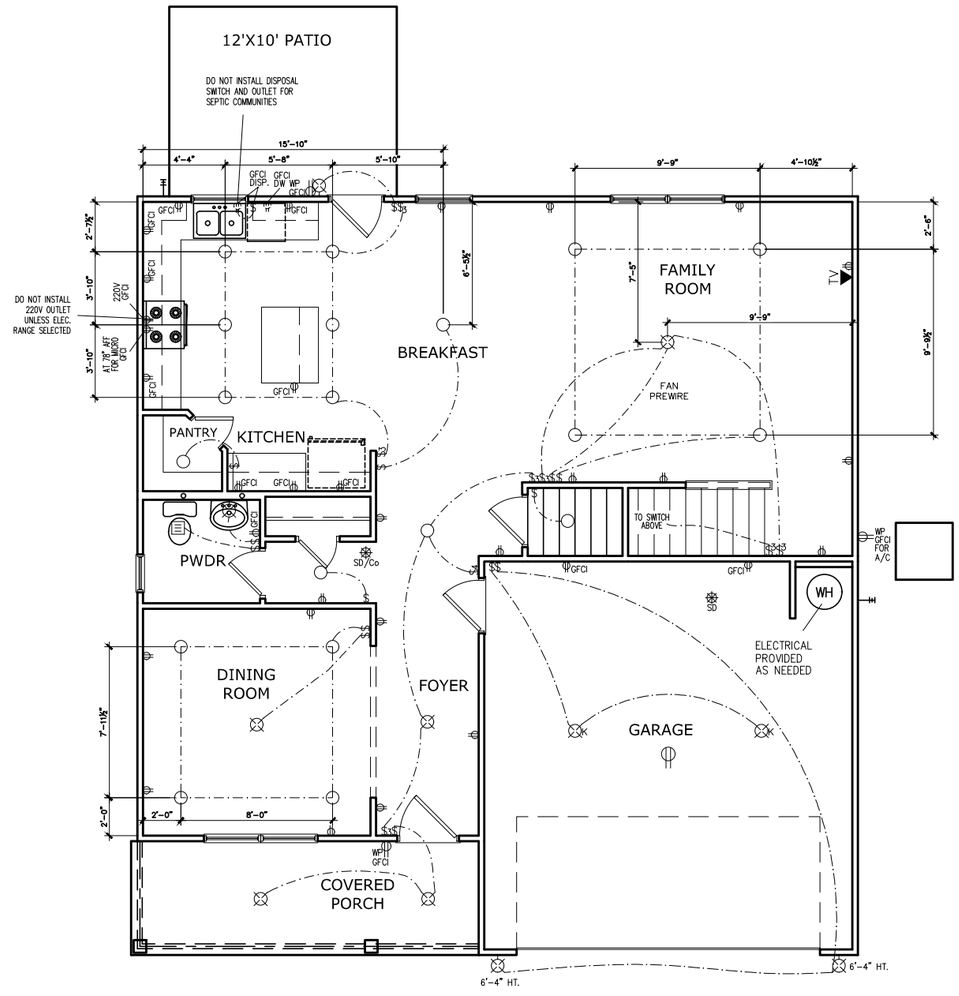
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

ROOF PLAN
ROOF PLAN
McGINNIS

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

BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A6.1	

DUNCANS CROSSING
LOT 0062



FIRST FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND

S	SWITCH	TV	TV
S3	3 WAY SWITCH		120V RECEPTACLE
S4	4 WAY SWITCH		120V SWITCHED RECEPTACLE
	CEILING FIXTURE		220V RECEPTACLE
K	KEYLESS	GFCI	GFCI OUTLET
	WALL MOUNT FIXTURE	AFCI	ARCH FAULT CIRCUIT INTERRUPTER
	CEILING FIXTURE	GL	GAS LINE
	FLEX CONDUIT	WL	WATER LINE
CH	CHIMES		HOSE BIBB
PH	TELEPHONE		FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE		1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET		CEILING FAN
	GARAGE DOOR OPENER		
	EXHAUST FAN		ELECTRICAL WIRING
	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
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR
CEILING FAN	96" ABOVE FINISHED FLOOR
FLOOD LIGHT	10' MAX. ABOVE FIN. FLOOR

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

BY	REVISION	DATE
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

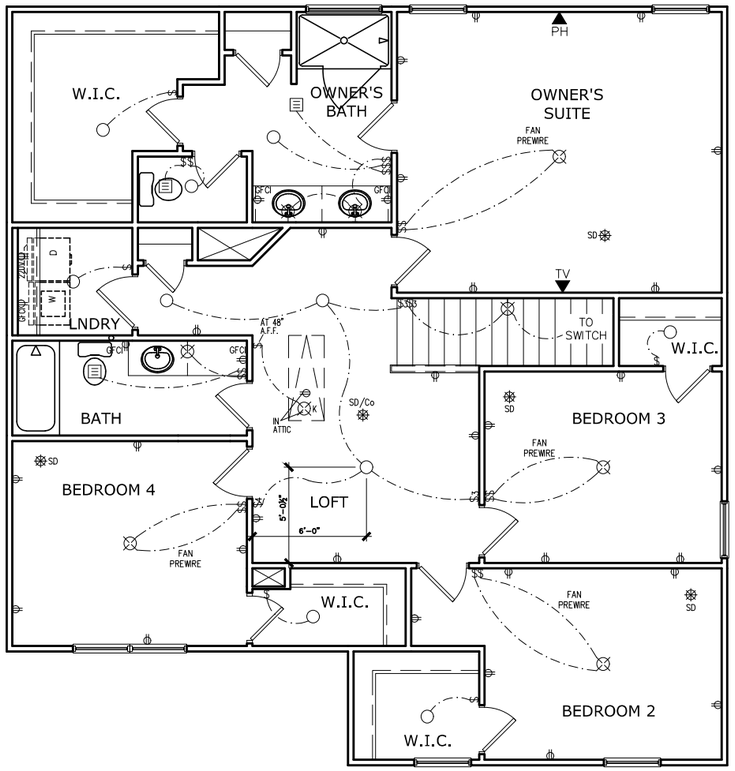
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

ELECTRICAL PLAN
FIRST FLOOR
McGINNIS

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

BY: KCC	CH: AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A7.2	

DUNCANS CROSSING
LOT 0062



SECOND FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND

S	SWITCH	TV	TV
S3	3 WAY SWITCH		120V RECEPTACLE
S4	4 WAY SWITCH		120V SWITCHED RECEPTACLE
	CEILING FIXTURE		220V RECEPTACLE
K	KEYLESS	GFCI	GFCI OUTLET
	WALL MOUNT FIXTURE	AFCI	ARCH FAULT CIRCUIT INTERRUPTER
	CEILING FIXTURE	GL	GAS LINE
	FLEX CONDUIT	WL	WATER LINE
CH	CHIMES		HOSE BIBB
PH	TELEPHONE		FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE		1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET		CEILING FAN
	GARAGE DOOR OPENER		
	EXHAUST FAN		ELECTRICAL WIRING
	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
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR
CEILING FAN	96" ABOVE FINISHED FLOOR
FLOOD LIGHT	10' MAX. ABOVE FIN. FLOOR

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

BY	DATE	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

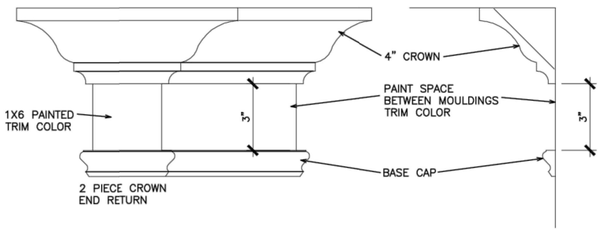
SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

ELECTRICAL PLAN
SECOND FLOOR
McGINNIS

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

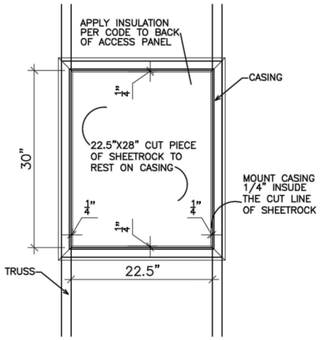
BY:	CH:
KCC	AW
DATE: 6/28/2024	
FACADE OPT: C	
PLAN ID:	
FND: ALL	ELEV: C
PAGE NO: A7.3	

REFER TO LOT SPECIFIC PLAN TO DETERMINE WHICH DETAILS APPLY



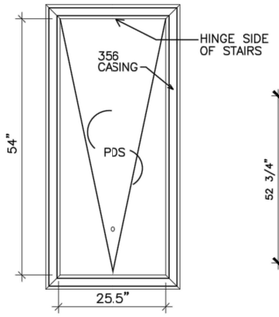
TYPICAL TWO PIECE CROWN

N.T.S



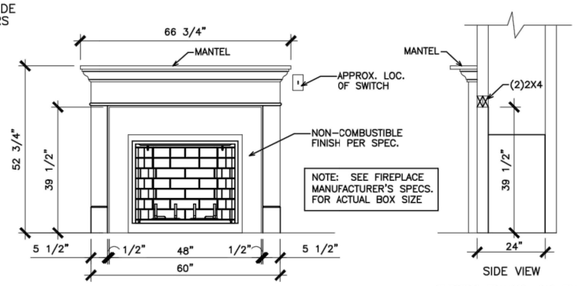
SCUTTLE HOLE DETAIL

N.T.S



PDS TRIM DETAIL

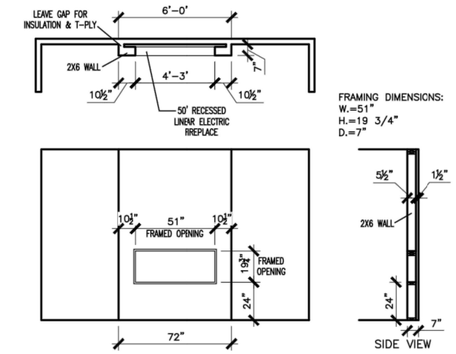
N.T.S



GAS/ELECTRIC FIREPLACE DETAIL WITH WESCOTT WOOD MANTEL

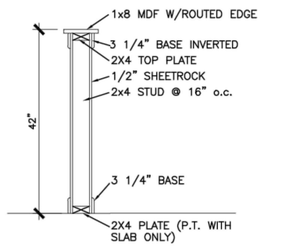
N.T.S

ELECTRIC FRAMING DIMENSIONS:	GAS FRAMING DIMENSIONS:
W.=37"	W.=37"
D.=24"	D.=24"
H.=31 1/4"	H.=34 3/4"



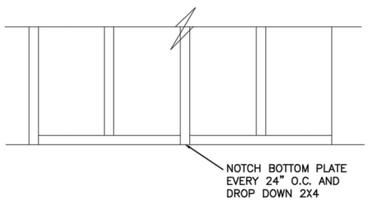
LINEAR ELECTRIC FIREPLACE DETAIL

N.T.S



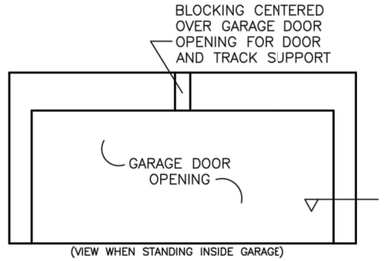
TYP. KNEEWALL SECTION

N.T.S



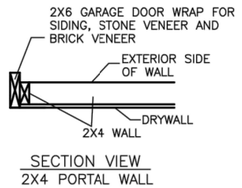
TYP. 2ND FLOOR KNEE WALL STABILITY

N.T.S

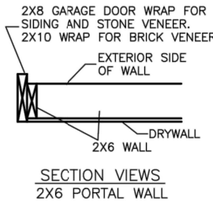


TYP. GARAGE WRAP & BLOCKING

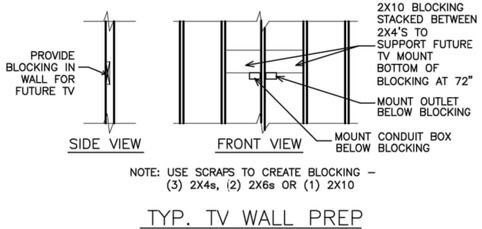
N.T.S



SECTION VIEW
2X4 PORTAL WALL



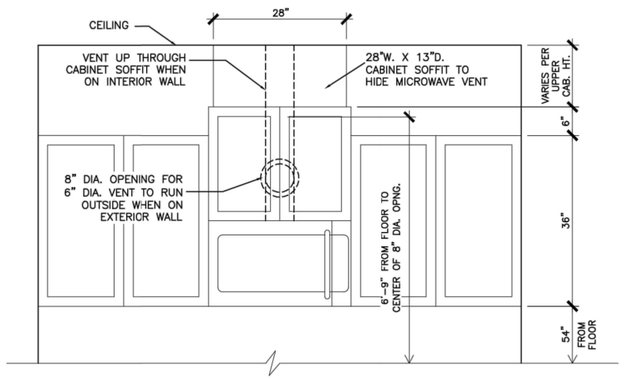
SECTION VIEWS
2X6 PORTAL WALL



NOTE: USE SCRAPS TO CREATE BLOCKING – (3) 2X4s, (2) 2X6s OR (1) 2X10

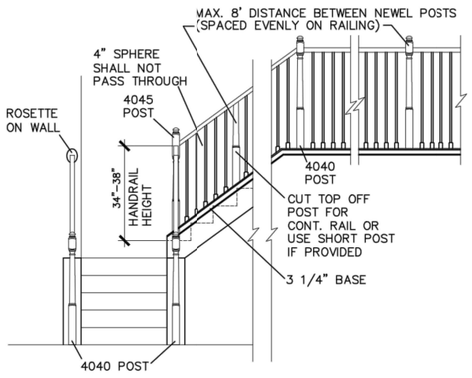
TYP. TV WALL PREP

N.T.S



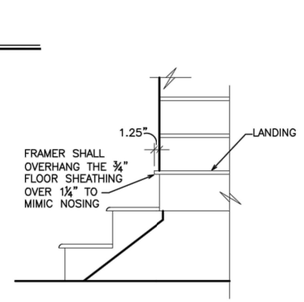
CABINET SOFFIT DETAIL ABOVE VENTED MICROWAVE W/CABINET ABOVE RANGE BUMPED UP & OUT

N.T.S



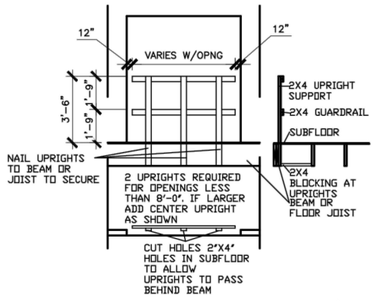
HANDRAIL/POST DETAIL @ STAIRS

N.T.S



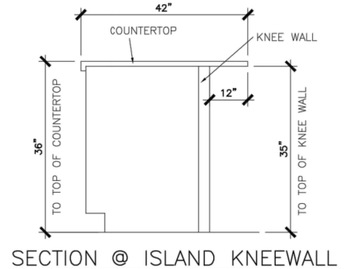
BOX STEP OVERHANG

N.T.S



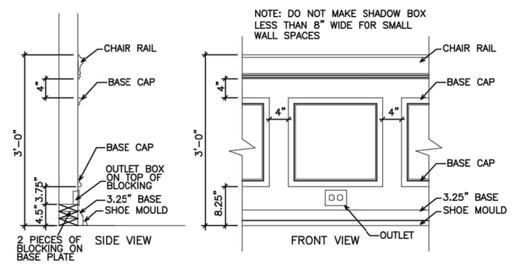
GUARD RAIL DTL. AS REQ'D

N.T.S.



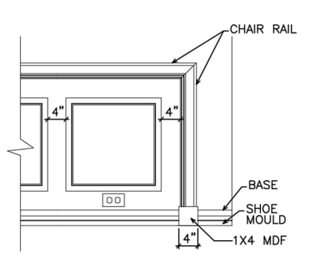
SECTION @ ISLAND KNEEWALL

N.T.S



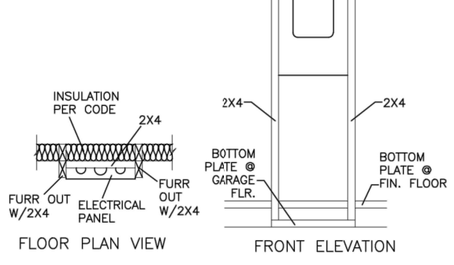
TYPICAL CHAIR RAIL & SHADOW BOX DETAIL

N.T.S



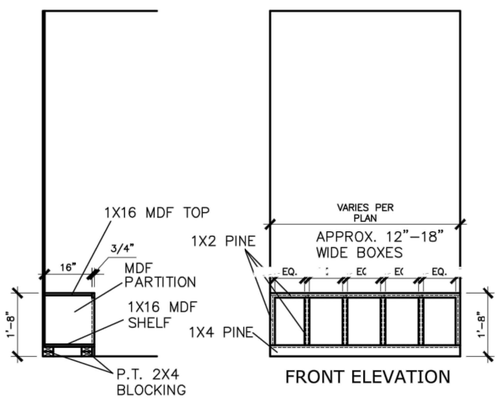
CHAIR RAIL END TRIM DETAIL

N.T.S



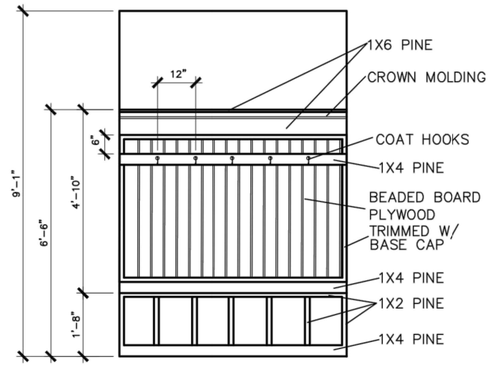
ELECTRICAL PANEL DETAIL

N.T.S



MUD ROOM BENCH SEAT DETAIL

N.T.S



MUD ROOM BENCH SEAT DETAIL WITH BEADED BOARD, HOOKS, & CROWN

N.T.S

(IF TRIM CHOSEN WITHOUT BENCH CONTINUE TO FLOOR)

BY	REVISION	DATE

SMITH DOUGLAS HOMES
QUALITY | INTEGRITY | VALUE

INTERIOR TRIM DETAILS

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

BY:	CH:
DATE: 6/13/23	
FACADE OPT:	
PLAN ID:	
END:	ELEV:
PAGE NO: D1.1	

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 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	(4) TOENAILS + (1) SIMPSON H2.5T
GAB. END TRUSS TO DBL. TOP PL.	TOENAILS @ 8" o.c.	TOENAILS @ 6" o.c.
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.	

* 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 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 DEFECTION 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"
6'-0"	3 FT. MAX	L3"x3"x1/4"
	12 FT. MAX	L4"x3"x1/4"
	20 FT. MAX	L5"x3½"x5/16"
8'-0"	3 FT. MAX	L4"x4"x1/4" *
	12 FT. MAX	L5"x3½"x5/16"
	16 FT. MAX	L6"x3½"x3/8"
9'-6"	12 FT. MAX	L6"x3½"x5/16"

ALL LINTELS:
- SHALL SUPPORT 2 5/8" - 3 1/2" VENEER w/ 40 psf MAXIMUM WEIGHT.
 < 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 1/4" 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 L4x3x1/4".

M&K STND. - MAY 2016

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 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 = 4,000 psi: .... FOUNDATION WALLS
  - 3,000 psi: .... FOOTINGS & INTERIOR SLABS ON GRADE
  - 3,500 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 (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 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.

M&K STND. - MAY 2012

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.W.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 NCSBC: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 1609) & ASCE 7, AS PERMITTED BY R301.1.3 OF 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 R802.11.1.1. 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 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 (7/16" 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 STND. - 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 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 RT7A 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.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 BCSI 1 "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 STND. - 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 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 (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=2.0x10^6 psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
  - 'LVL' - Fb=2400 psi; Fcll=2500 psi; E=1.8x10^6 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 WS35 SCREWS (OR 3½" 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 MEMBERS.
- FOR 4 PLY BEAMS OF EQUAL 1 3/4" 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 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 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.

M&K STND. - MAR 2016

DUNCANS
LOT 62

seal: 8/18/23

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047622 SHAUN KREIDEL

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Brookside Parkway, Suite 165 ▸ Alpharetta, GA 30022
p 770-777-0074 ▸ mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

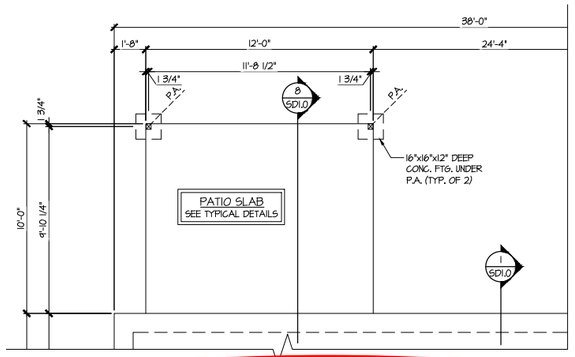
SMITH DOUGLAS HOMES

GENERAL STRUCTURAL NOTES

MCGINNIS MODEL

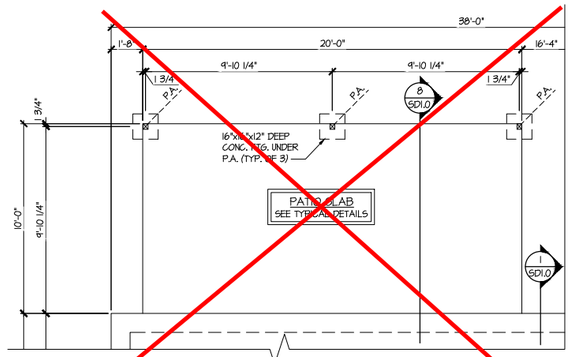
120 MPH WIND ZONE
NORTH CAROLINA

sheet: S0.0



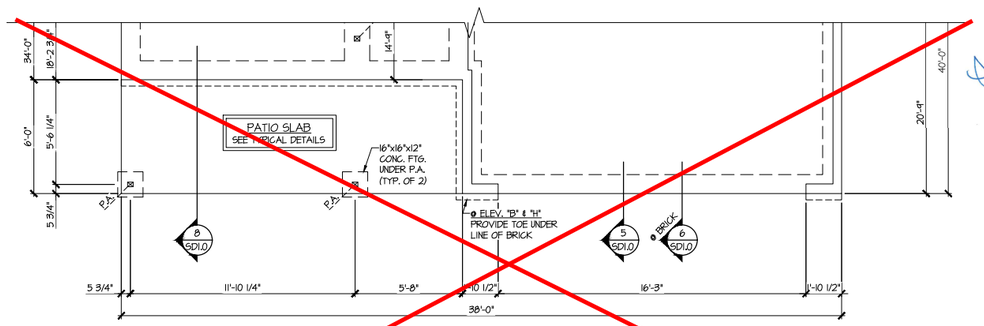
4 PARTIAL MONO-SLAB FOUNDATION PLAN

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



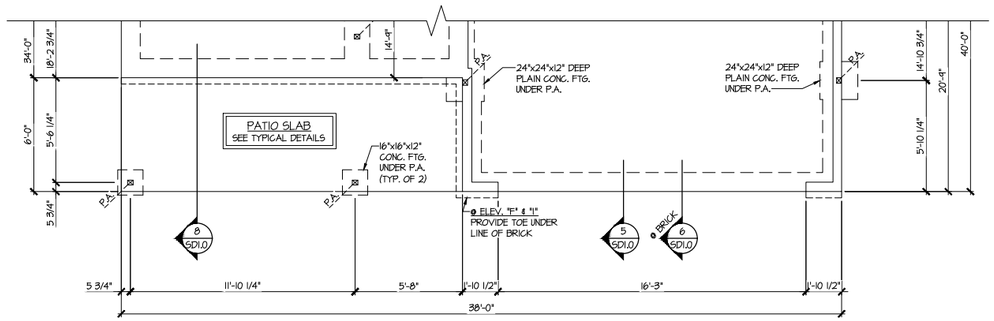
5 PARTIAL MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34 OPT. LARGE COVERED PORCH
1/8"=1'-0" ON 11x17



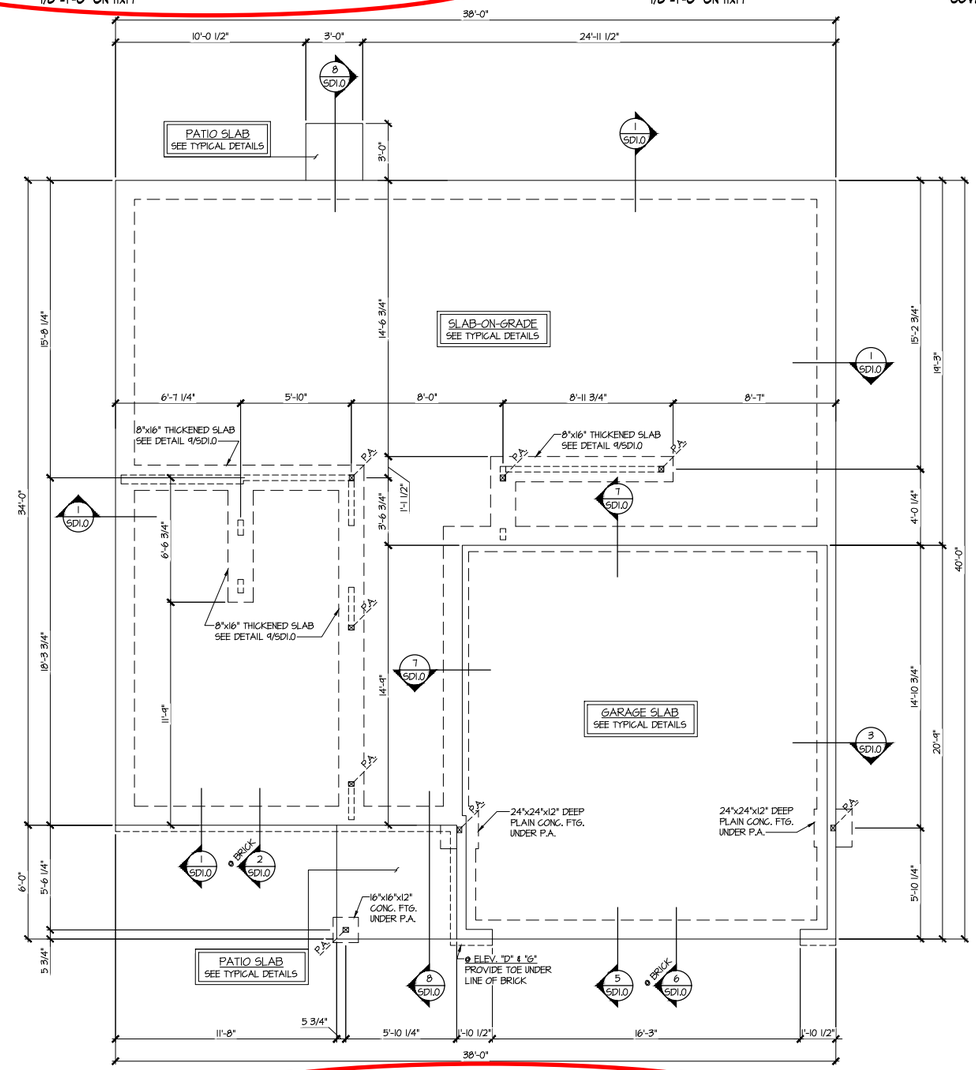
2 PARTIAL MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34 ELEV. B, E, H, & K
1/8"=1'-0" ON 11x17



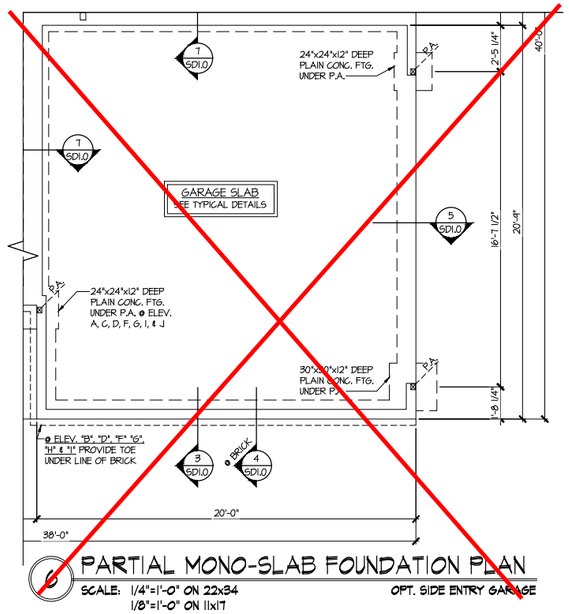
3 PARTIAL MONO-SLAB FOUNDATION PLAN

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



1 MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34 ELEV. ~~A, D, G, & J~~
1/8"=1'-0" ON 11x17



6 PARTIAL MONO-SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22x34 OPT. SIDE ENTRY GARAGE
1/8"=1'-0" ON 11x17

DUNCANS LOT 62

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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.W.A.)
- BEAM/HEADER
- JL METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal: 8/18/23

NORTH CAROLINA PROFESSIONAL SEAL 047622 ENGINEER JASON KREGER

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3525 Ramblewood Parkway, Suite 105 • Alpharetta, GA 30022
p 770.777.4874 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

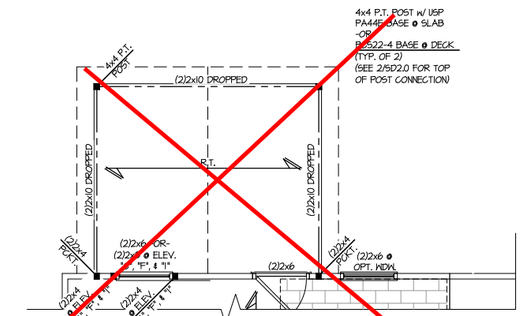
SMITH DOUGLAS HOMES

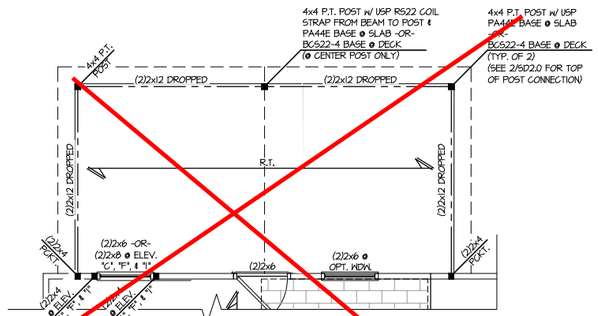
MONO-SLAB FOUNDATION

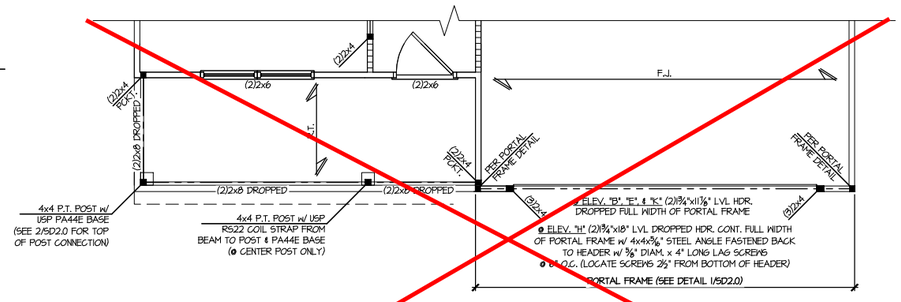
MCGINNIS MODEL

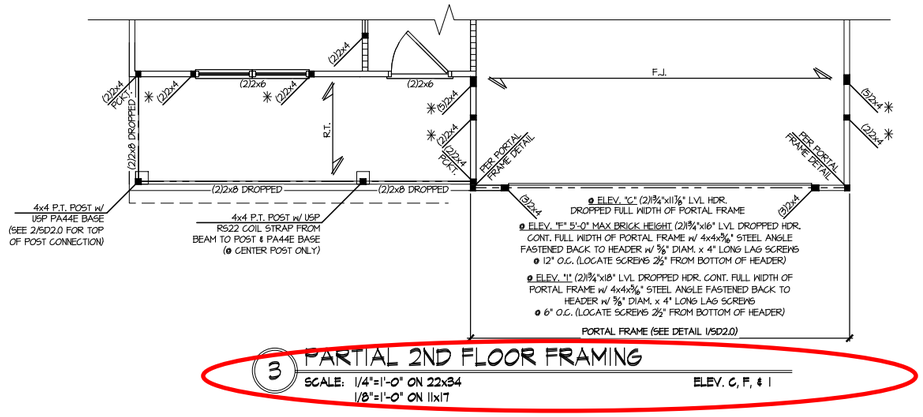
120 MPH WIND ZONE
NORTH CAROLINA

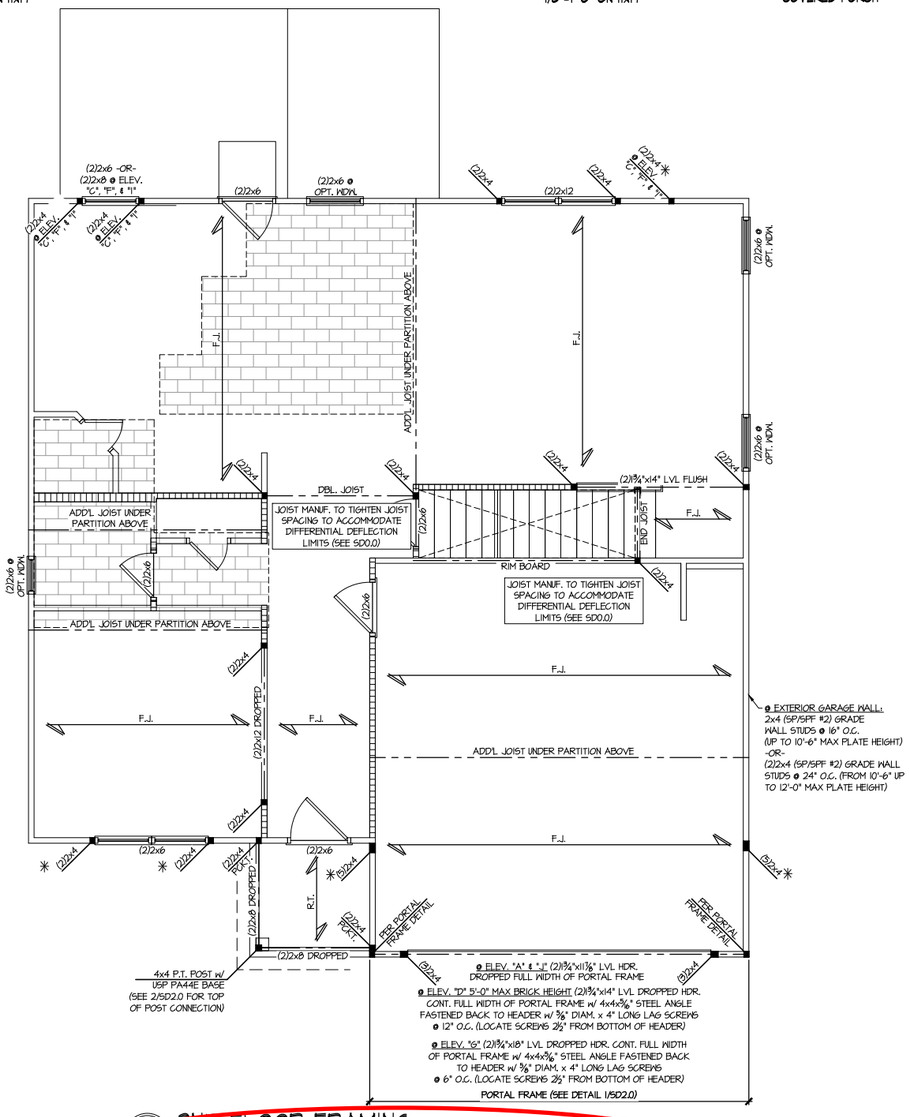
sheet: S1.0











4

PARTIAL 2ND FLOOR FRAMING

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

OPT. COVERED PORCH

5

PARTIAL 2ND FLOOR FRAMING

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

OPT. LARGE COVERED PORCH

@ ELEV. "B", "E", & "K" (2)1¾"x11⅞" LVL HDR. DROPPED FULL WIDTH OF PORTAL FRAME

@ ELEV. "H" (2)1¾"x18" LVL DROPPED HDR. CONT. FULL WIDTH OF PORTAL FRAME w/ 4x4x5⁄16" STEEL ANGLE FASTENED BACK TO HEADER w/ ⅝" DIAM. x 4" LONG LAG SCREWS @ 6" O.C. (LOCATE SCREWS 2½" FROM BOTTOM OF HEADER)

PORTAL FRAME (SEE DETAIL 1/SD2.0)

2

PARTIAL 2ND FLOOR FRAMING

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

ELEV. B, E, H, & K

@ ELEV. "C" (2)1¾"x11⅞" LVL HDR. DROPPED FULL WIDTH OF PORTAL FRAME

@ ELEV. "F" 5'-0" MAX BRICK HEIGHT (2)1¾"x16" LVL DROPPED HDR. CONT. FULL WIDTH OF PORTAL FRAME w/ 4x4x5⁄16" STEEL ANGLE FASTENED BACK TO HEADER w/ ⅝" DIAM. x 4" LONG LAG SCREWS @ 12" O.C. (LOCATE SCREWS 2½" FROM BOTTOM OF HEADER)

@ ELEV. "I" (2)1¾"x18" LVL DROPPED HDR. CONT. FULL WIDTH OF PORTAL FRAME w/ 4x4x5⁄16" STEEL ANGLE FASTENED BACK TO HEADER w/ ⅝" DIAM. x 4" LONG LAG SCREWS @ 6" O.C. (LOCATE SCREWS 2½" FROM BOTTOM OF HEADER)

PORTAL FRAME (SEE DETAIL 1/SD2.0)

3

PARTIAL 2ND FLOOR FRAMING

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

ELEV. C, F, & I

JOIST MANUF. TO TIGHTEN JOIST SPACING TO ACCOMMODATE DIFFERENTIAL DEFLECTION LIMITS (SEE SD0.0)

JOIST MANUF. TO TIGHTEN JOIST SPACING TO ACCOMMODATE DIFFERENTIAL DEFLECTION LIMITS (SEE SD0.0)

4x4 P.T. POST w/ USP PA44E BASE (SEE 2/SD2.0 FOR TOP OF POST CONNECTION)

@ EXTERIOR GARAGE WALL:
2x4 (SP/SPF #2) GRADE
WALL STUDS @ 16" O.C.
(UP TO 10'-6" MAX PLATE HEIGHT)
-OR-
(2)2x4 (SP/SPF #2) GRADE WALL
STUDS @ 24" O.C. (FROM 10'-6" UP
TO 12'-0" MAX PLATE HEIGHT)

@ ELEV. "A" & "J" (2)1¾"x11⅞" LVL HDR. DROPPED FULL WIDTH OF PORTAL FRAME

@ ELEV. "D" 5'-0" MAX BRICK HEIGHT (2)1¾"x14" LVL DROPPED HDR. CONT. FULL WIDTH OF PORTAL FRAME w/ 4x4x5⁄16" STEEL ANGLE FASTENED BACK TO HEADER w/ ⅝" DIAM. x 4" LONG LAG SCREWS @ 12" O.C. (LOCATE SCREWS 2½" FROM BOTTOM OF HEADER)

@ ELEV. "G" (2)1¾"x18" LVL DROPPED HDR. CONT. FULL WIDTH OF PORTAL FRAME w/ 4x4x5⁄16" STEEL ANGLE FASTENED BACK TO HEADER w/ ⅝" DIAM. x 4" LONG LAG SCREWS @ 6" O.C. (LOCATE SCREWS 2½" FROM BOTTOM OF HEADER)

PORTAL FRAME (SEE DETAIL 1/SD2.0)

1

2ND FLOOR FRAMING

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

ELEV. A, ~~D, G, & J~~

JOIST MANUF. TO TIGHTEN JOIST SPACING TO ACCOMMODATE DIFFERENTIAL DEFLECTION LIMITS (SEE SD0.0)

@ EXTERIOR GARAGE WALL:
2x4 (SP/SPF #2) GRADE
WALL STUDS @ 16" O.C.
(UP TO 10'-6" MAX PLATE HEIGHT)
-OR-
(2)2x4 (SP/SPF #2) GRADE WALL
STUDS @ 24" O.C. (FROM 10'-6" UP
TO 12'-0" MAX PLATE HEIGHT)

6

PARTIAL 2ND FLOOR FRAMING

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

OPT. SIDE ENTRY GARAGE

DUNCANS
LOT 62

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. 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.W.A.)
- ━ ·━ BEAM/HEADER
- ┘└ METAL HANGER
- ✳ INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal:
8/18/23
SEAL 047622
SHAUN KREIDEL

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Brookside Parkway, Suite 165 ▸ Alpharetta, GA 30022
p 770-777-0074 ▸ mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

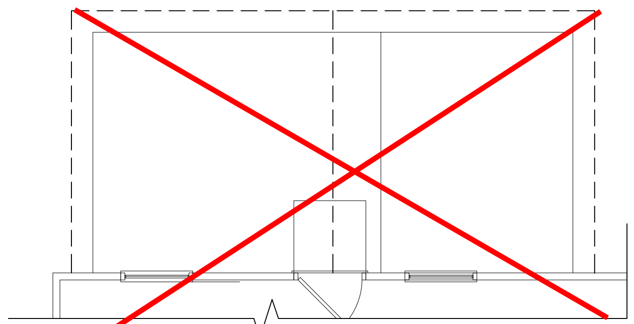
SMITH DOUGLAS
HOMES

2ND FLOOR FRAMING PLAN

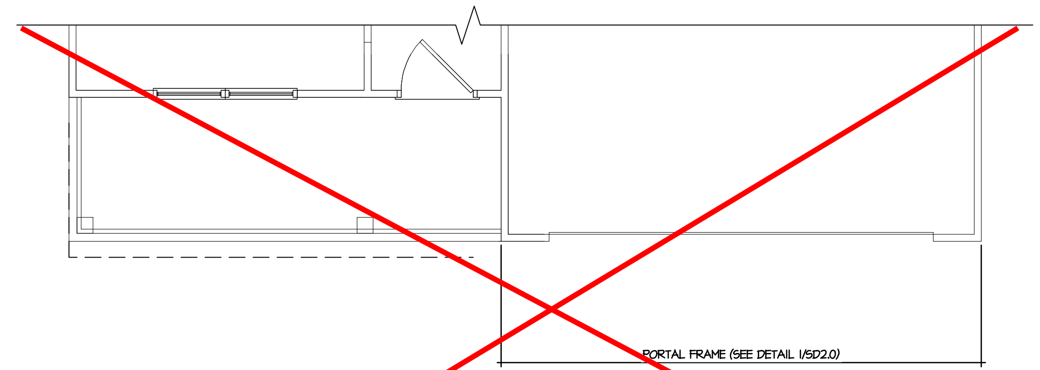
MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet:
S3.0

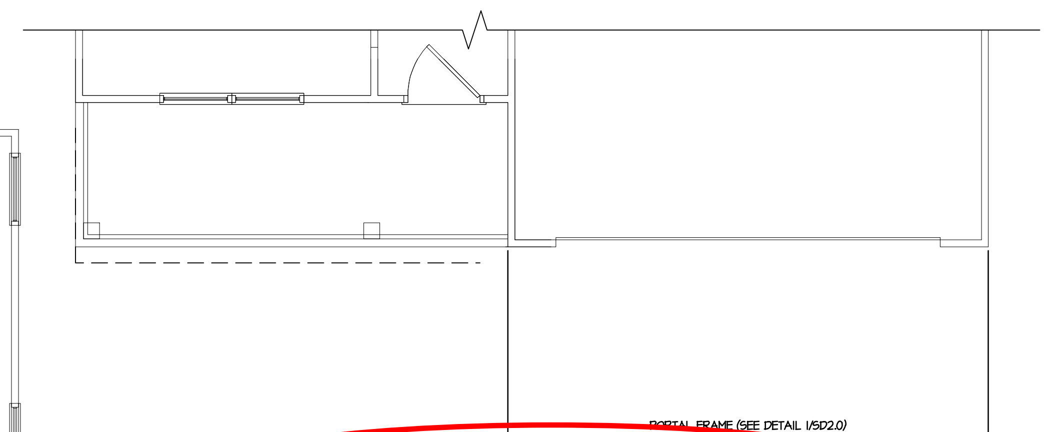


5 PARTIAL 1ST FLOOR WALL BRACING
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
OPT. LARGE COVERED PORCH

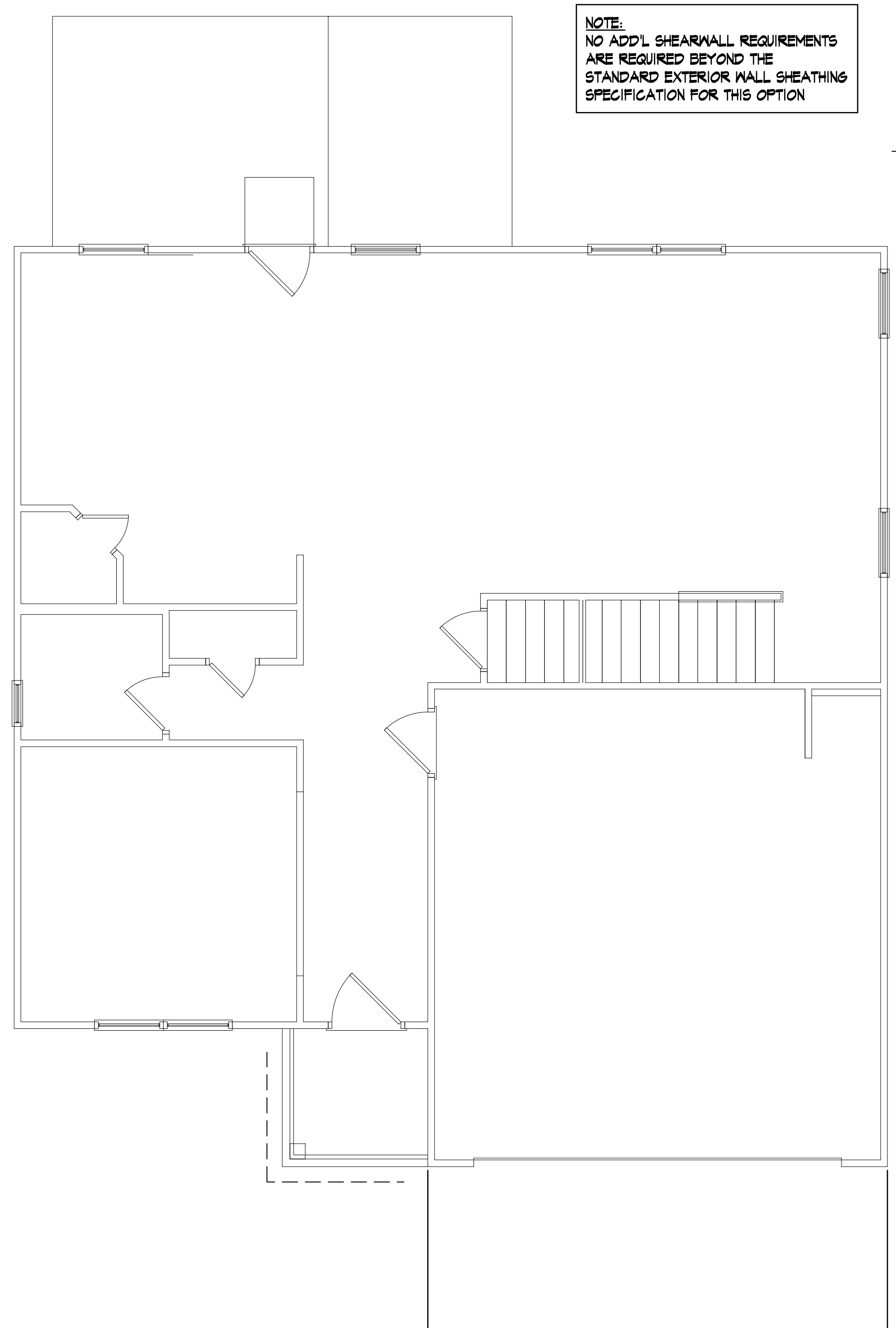


2 PARTIAL 1ST FLOOR WALL BRACING
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
ELEV. B, E, H, & K

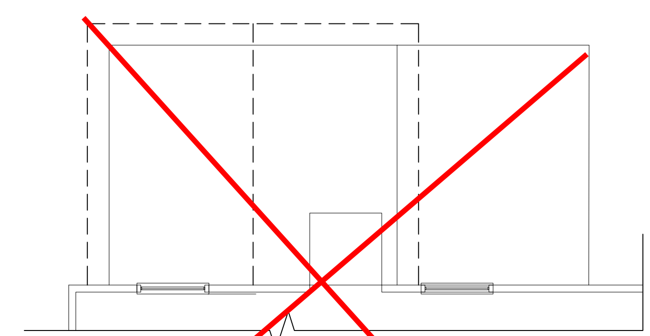
NOTE:
NO ADD'L SHEARWALL REQUIREMENTS ARE REQUIRED BEYOND THE STANDARD EXTERIOR WALL SHEATHING SPECIFICATION FOR THIS OPTION



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

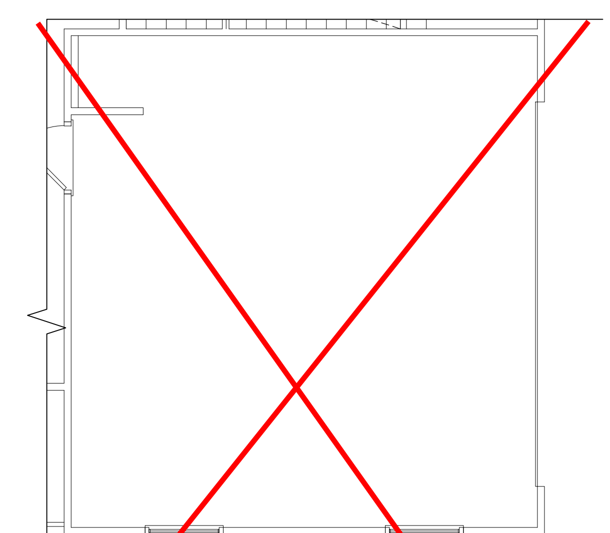


1 1ST FLOOR WALL BRACING
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
ELEV. A, D, G, & J



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

4 PARTIAL 1ST FLOOR WALL BRACING
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17
OPT. COVERED PORCH



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

6 PARTIAL 1ST FLOOR WALL BRACING
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 NCSBC: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 1609) & ASCE 7, AS PERMITTED BY R301.1.3 OF 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 R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5& R802.11.

M&K STND. - 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, 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 (7/16" 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 STND. - MAR 2016

DUNCANS
LOT 62

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. 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.W.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047622 SHAUN KREIDEL
8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Brookside Parkway, Suite 165 ▸ Alpharetta, GA 30022
p 770-777-0074 ▸ mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number:	256-21009
project mgr:	SMK
drawn by:	MJF
issue date:	10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

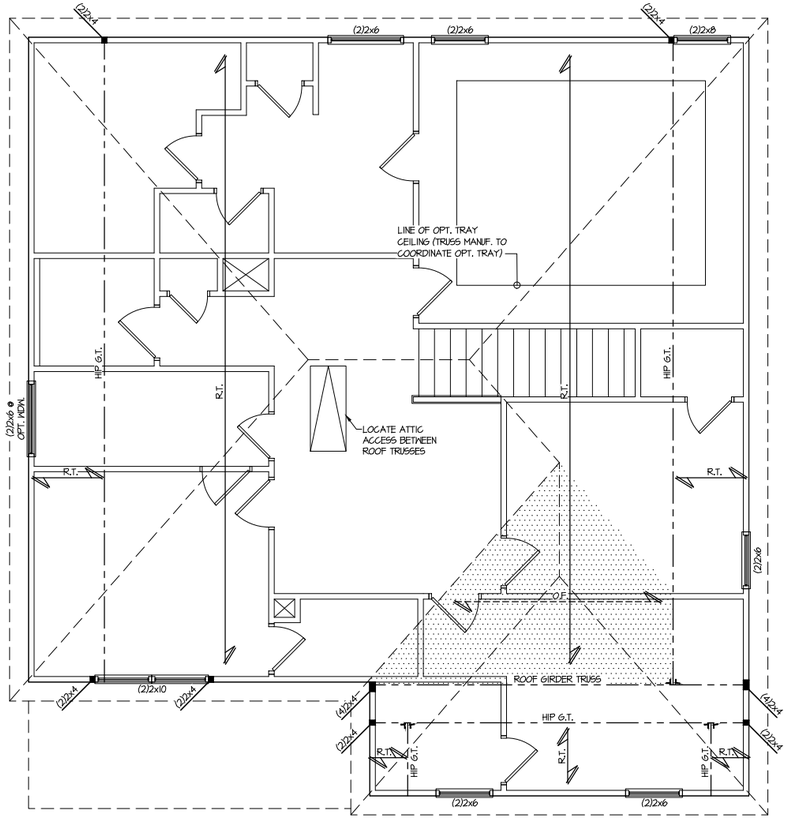
SMITH DOUGLAS HOMES

1ST FLOOR WALL BRACING PLAN

MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet:
S3.0L



ROOF FRAMING PLAN

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

ELEV. C, F, & I

DUNCANS
LOT 62

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

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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.W.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal: 8/18/23

NORTH CAROLINA PROFESSIONAL SEAL 047622 ENGINEER SHAUN KREIDEL

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3555 Roswell Rd, Suite 205 • Alpharetta, GA 30022
p 770-777-6074 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

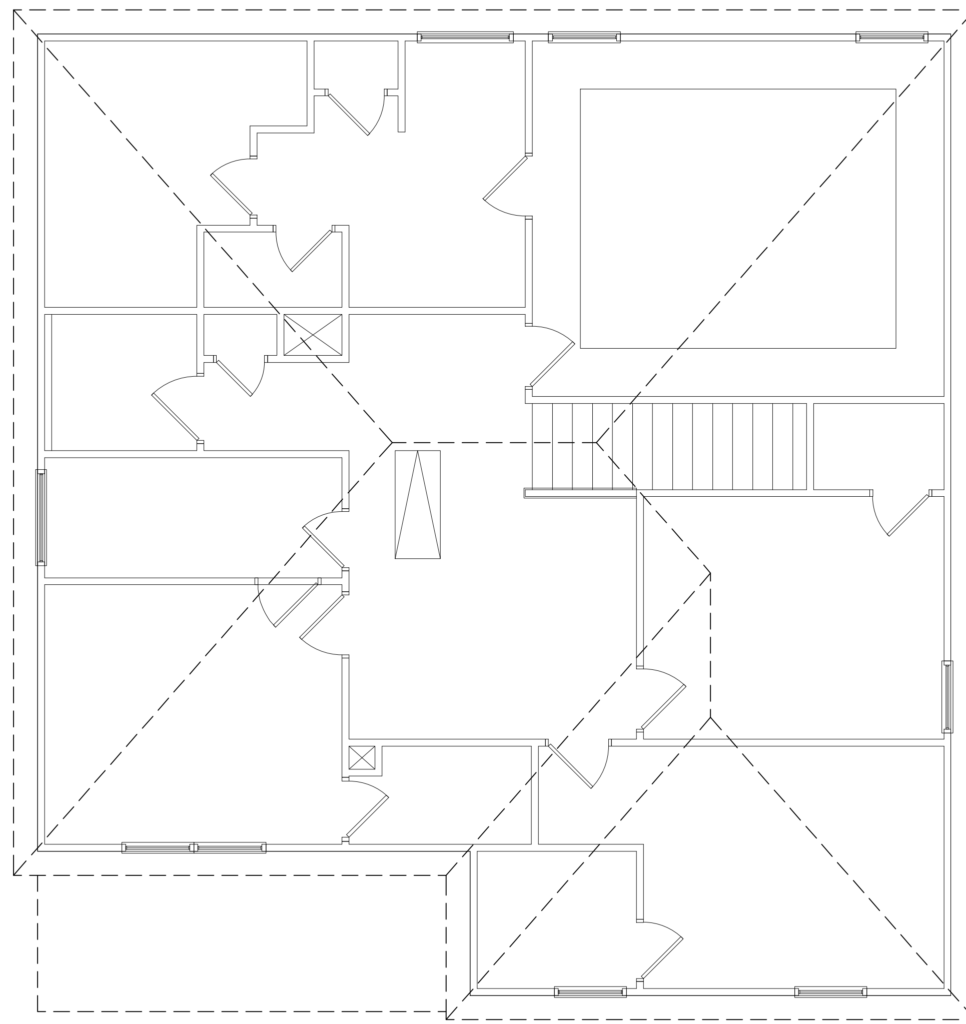
SMITH DOUGLAS HOMES

ROOF FRAMING PLAN

MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet: S4.2



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

1 2ND FLOOR WALL BRACING PLAN

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

ELEV. C, F, & I

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

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

120MPH WIND IN 2018 NCSBC: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 1609) & ASCE 7, AS PERMITTED BY R301.1.3 OF 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 R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5& R802.11.

M&K STND. - 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, 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 (7/16" 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 STND. - MAR 2016

DUNCANS
LOT 62

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

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

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.W.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 047622 SHAUN KREIDEL
8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Brookside Parkway, Suite 165 • Alpharetta, GA 30022
p 770-777-0074 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

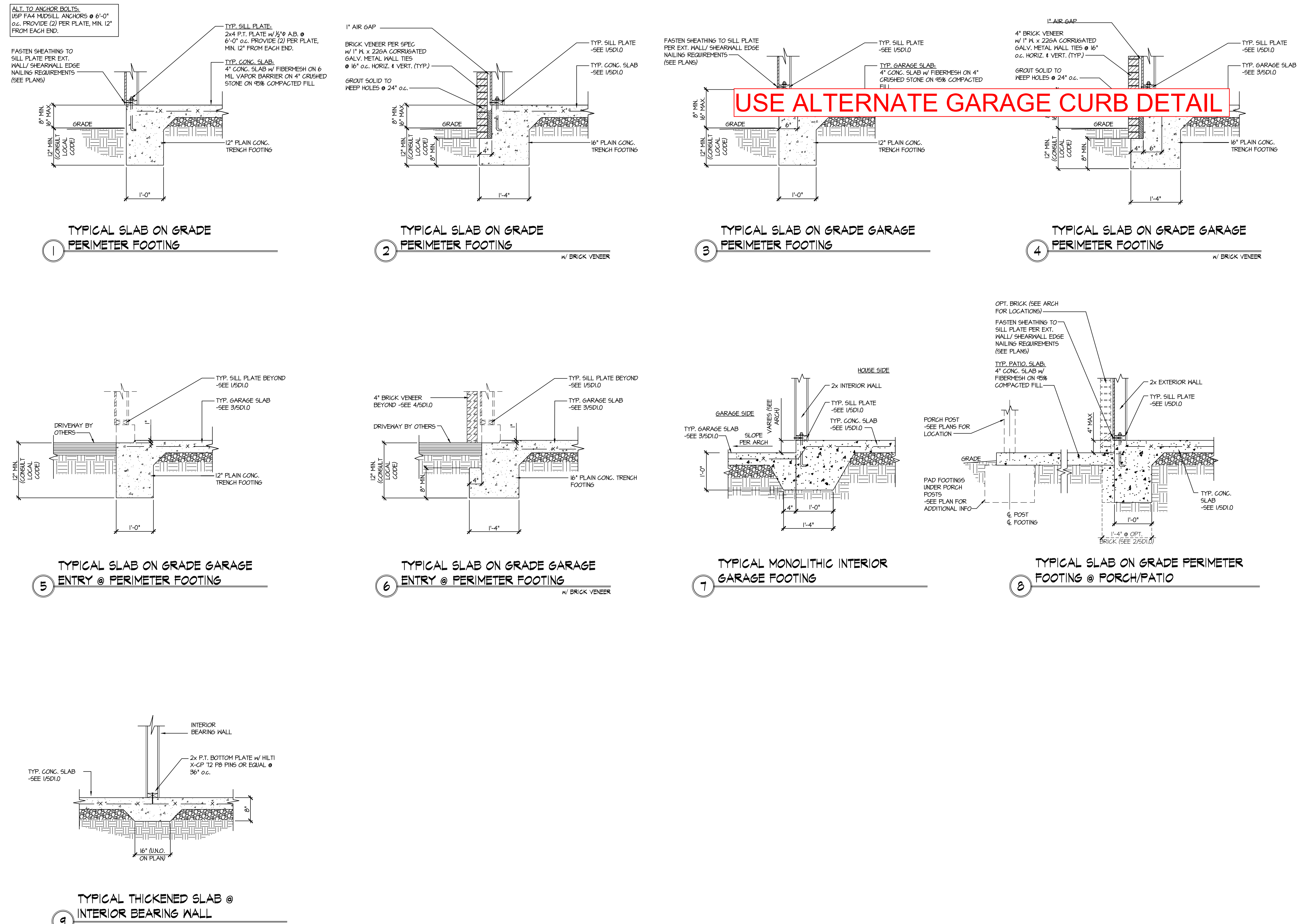
date:		initial:
11/22/21	MIRRORED PLANS ADDED	JPP
08/18/23	STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

SMITH DOUGLAS HOMES

2ND FLOOR WALL BRACING PLAN

MCGINNIS MODEL
120 MPH WIND ZONE
NORTH CAROLINA

sheet: S4.2L


USE ALTERNATE GARAGE CURB DETAIL
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING w/ BRICK VENEER
3 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING w/ BRICK VENEER
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
9 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL

DUNCANS
LOT 62

seal: 8/18/23

© copyright : MULHERN & KULP Structural Engineering, Inc.

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Brookside Parkway, Suite 165 • Alpharetta, GA 30022
p 770-777-0074 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:		initial:
11/22/21	MIRRORED PLANS ADDED	JPP
08/18/23	STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

SMITH DOUGLAS HOMES

FOUNDATION DETAILS

MCGINNIS MODEL
120 MPH WIND ZONE
NORTH CAROLINA

sheet: SD1.0

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

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

August 18, 2023

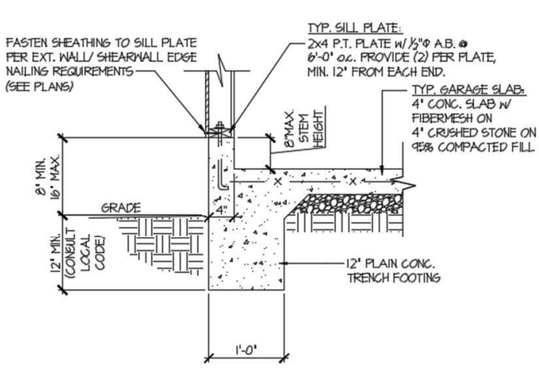
Jody Hunt
Director of Product Development
SMITH DOUGLAS HOMES
110 Village Trail, Suite 215
Woodstock, GA 30188

ALTERNATE GARAGE CURB DETAIL
Smith Douglas Homes

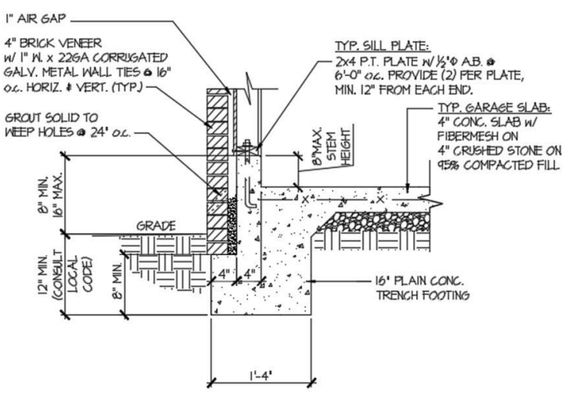
Reference
Current Structural Plans prepared by Mulhern & Kulp

Jody:

Pursuant to your request, we have prepared this letter to address the "*Alternate Garage Curb Details*", prepared by Mulhern & Kulp for Smith Douglas Homes shown below. The foundation details shown below call for a 4" wide curb with a maximum of 8" stem wall height; these are an acceptable alternative to the 6" wide curb at the garage per M&K foundation details 3 & 4 on sheet SD-1.0 at 2x4 garage wall locations.



TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
A



TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING w/ BRICK VENEER
B

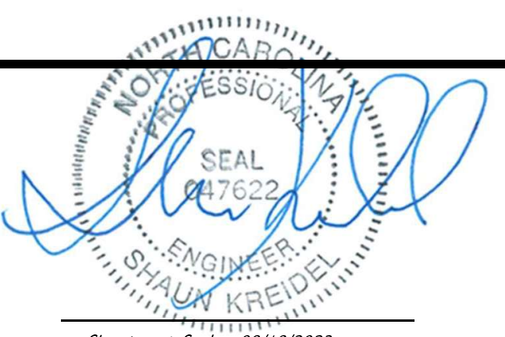
Please feel free to call if you have any questions.

Respectfully,

MULHERN & KULP STRUCTURAL ENGINEERING, INC.

NC License # C-3825

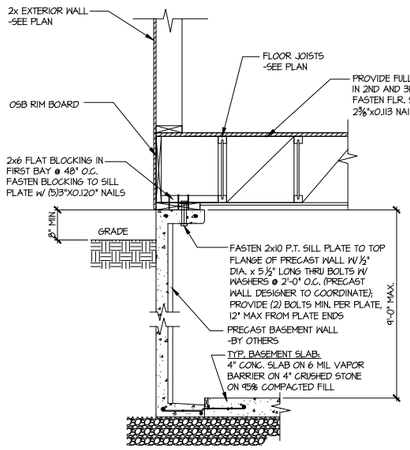
Shaun M. Kreidel, P.E. *Project Manager + Atlanta Office Director*



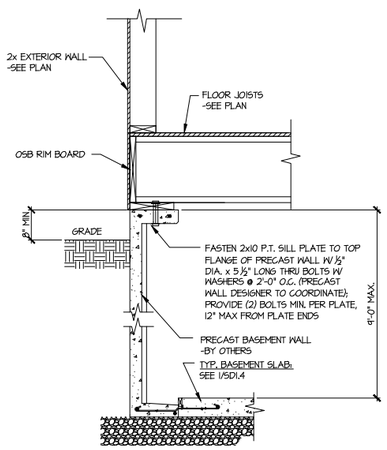
Signature + Seal *08/18/2023*

P:\Client Files\256 - Smith Douglas Homes\2023\23000 - 2023 Client Admin\2023-08-17 - 4in Garage Curb Letter\Alternate Garage Curb Detail - Letter - NC.docx

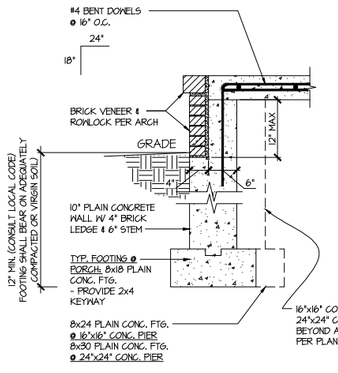
DUNCANS
LOT 62



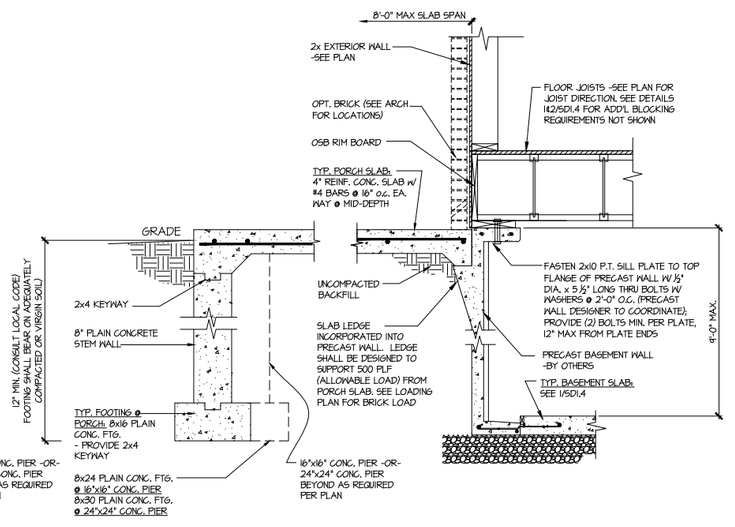
1 SECTION
SCALE: 3/4"=1'-0"



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

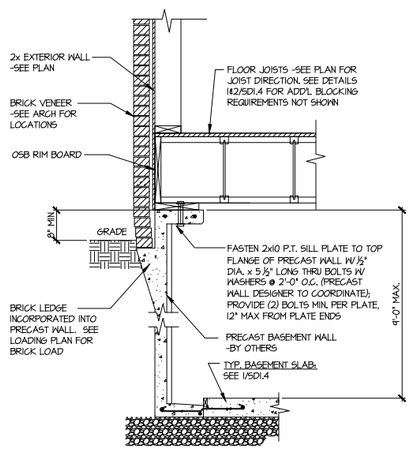


BRICK @ PORCH PERIMETER

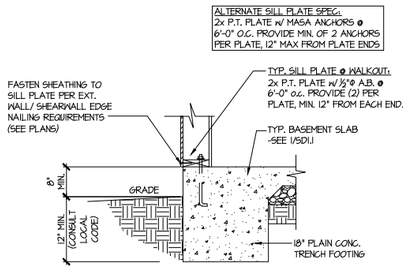


NO BRICK @ PORCH PERIMETER

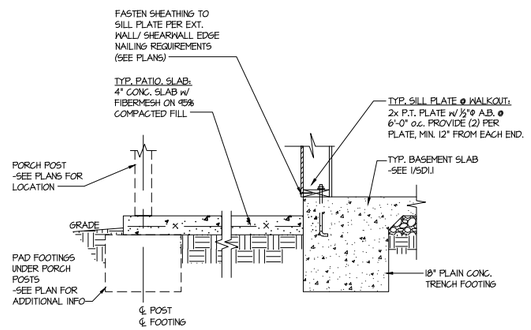
3 SECTION
SCALE: 3/4"=1'-0"



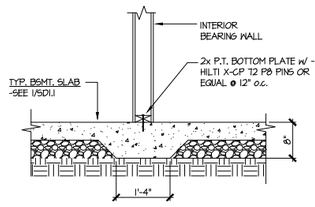
2 SECTION
SCALE: 3/4"=1'-0"



TYPICAL BASEMENT FOUNDATION @ WALKOUT
4



TYPICAL BASEMENT FOUNDATION @ WALKOUT
5



TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL
6

DUNCANS LOT 62

seal:
NORTH CAROLINA PROFESSIONAL SEAL 17622 ENGINEER JOSHUA KREBEL
8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3255 Peachtree Parkway, Suite 305 • Alpharetta, GA 30022
p 770.777.4874 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number:
256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

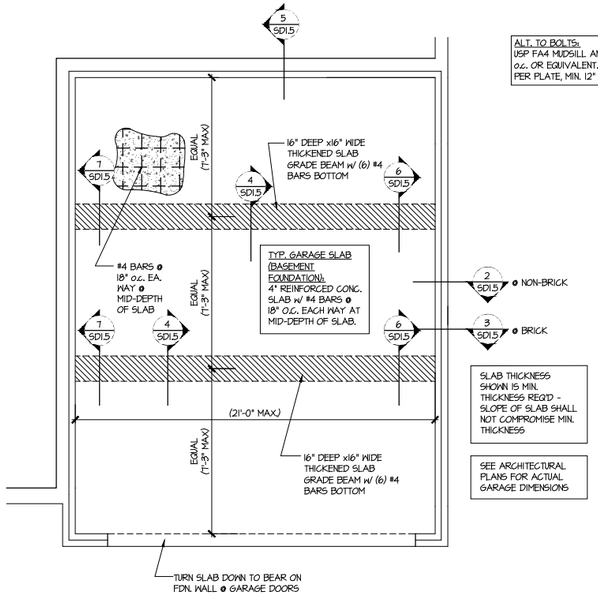
SMITH DOUGLAS HOMES

FOUNDATION DETAILS

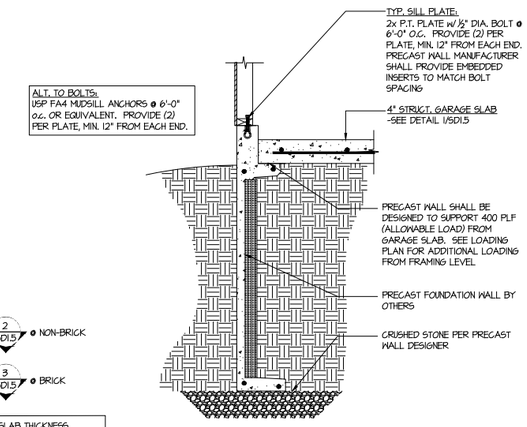
MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

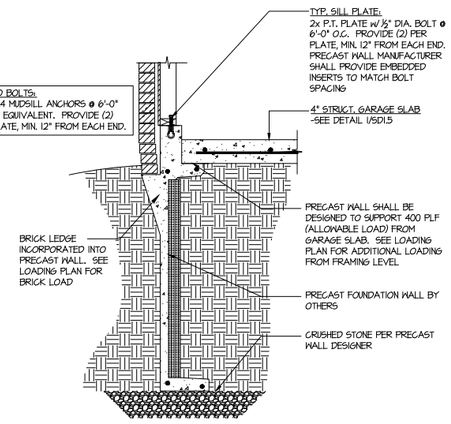
sheet:
SD1.4



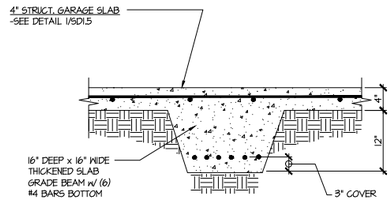
1 GENERIC FOUNDATION PLAN KEY @ GARAGE
SCALE: 1/4"=1'-0"



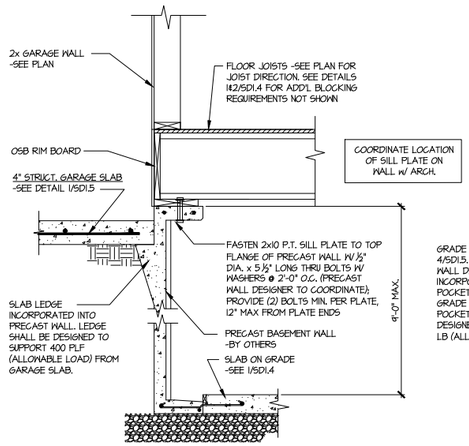
2 TYPICAL PERIMETER FOOTING @ GARAGE - BASEMENT FOUNDATION



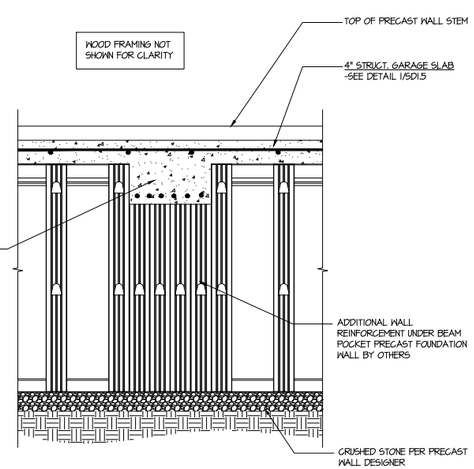
3 TYPICAL PERIMETER FOOTING @ GARAGE - BASEMENT FOUNDATION (BRICK)



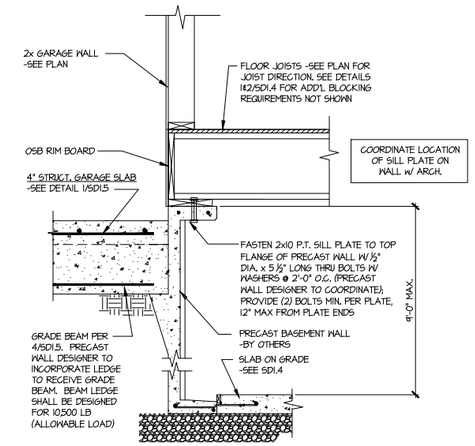
4 TYPICAL CONCRETE GRADE BEAM @ GARAGE FDN.
SCALE: 3/4"=1'-0"



5 CONCRETE BSMT. FDN. WALL @ GARAGE



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



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

DUNCANS LOT 62

seal: 8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3525 Piedmont Parkway, Suite 305 • Alpharetta, GA 30022
p 770-777-0074 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

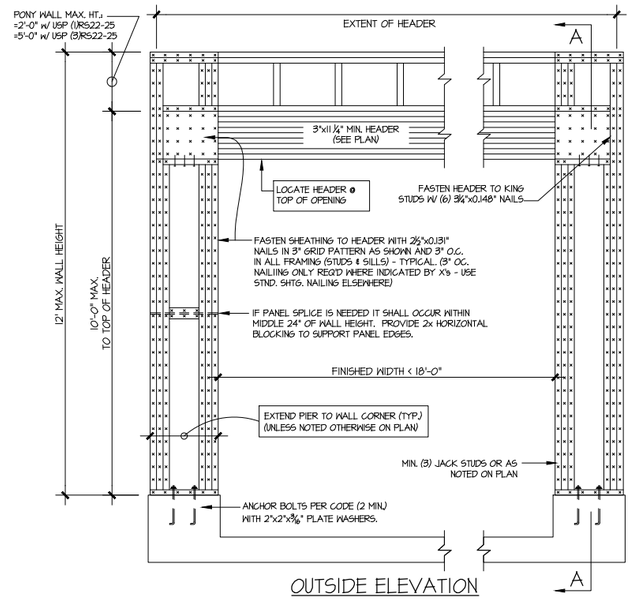
SMITH DOUGLAS HOMES

FOUNDATION DETAILS

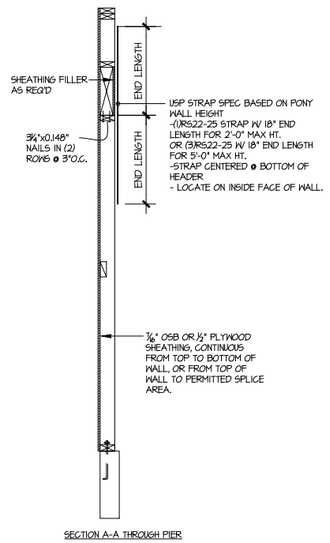
MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

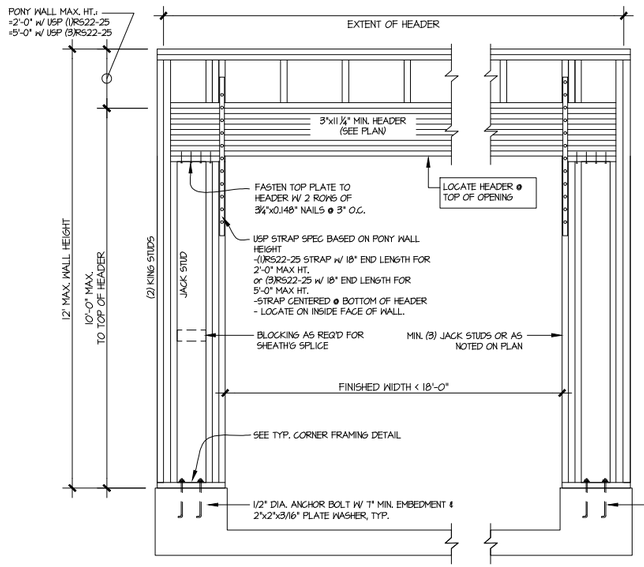
sheet: SD1.5



OUTSIDE ELEVATION



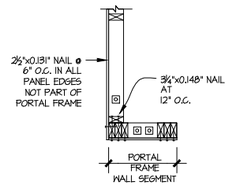
SECTION A-A THROUGH PIER



INSIDE ELEVATION

NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH ½" PLYWOOD OR ⅞" OSB

WALL FRAMING SPECIFICATION:
@2x4 WALL: USE SPF #2 GRADE STUDS (OR BETTER)
@2x6 WALL: USE SPF 'STUD' GRADE STUDS (OR BETTER)

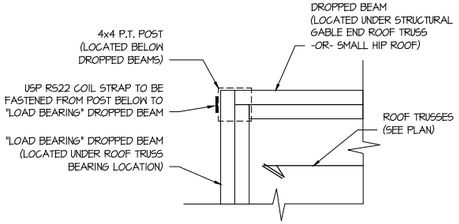


PLAN VIEW OF CORNER DETAIL

GARAGE PORTAL FRAME BRACING ELEVATION

SCALE: N.T.S.

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



COVERED PORCH CONNECTION DETAIL

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

DUNCANS LOT 62

seal: 8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3525 Piedmont Parkway, Suite 305 • Alpharetta, GA 30022
p 770-777-4874 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number: 256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

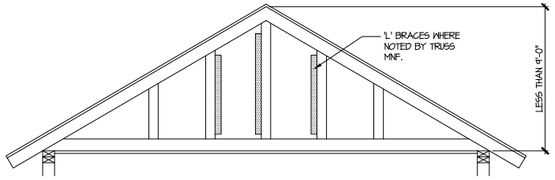
SMITH DOUGLAS HOMES

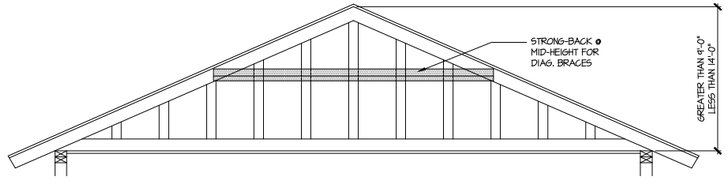
FRAMING DETAILS

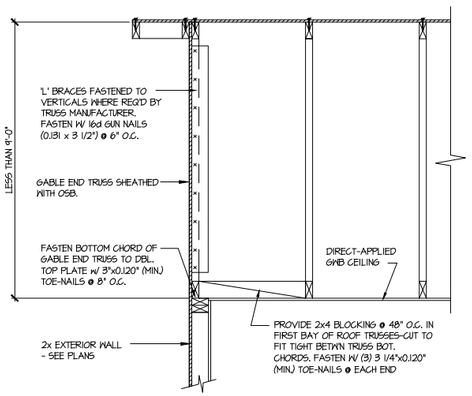
MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet: SD2.0

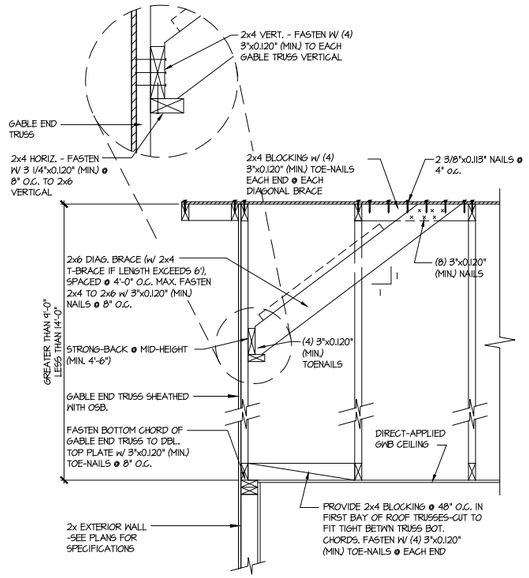






A TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT UP TO 9'-0"

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



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

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 'L' 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.

DUNCANS
LOT 62

seal: 8/18/23

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3255 Ramblin Parkway, Suite 105 • Alpharetta, GA 30022
p 770-777-4874 • mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number:
256-21009

project mgr: SMK
drawn by: MJF
issue date: 10-26-2021

REVISIONS:

date:	initial:
11/22/21 MIRRORED PLANS ADDED	JPP
08/18/23 STRAP, PORTAL FRAME, GARAGE EXT. WALLS	MMD

SMITH DOUGLAS HOMES

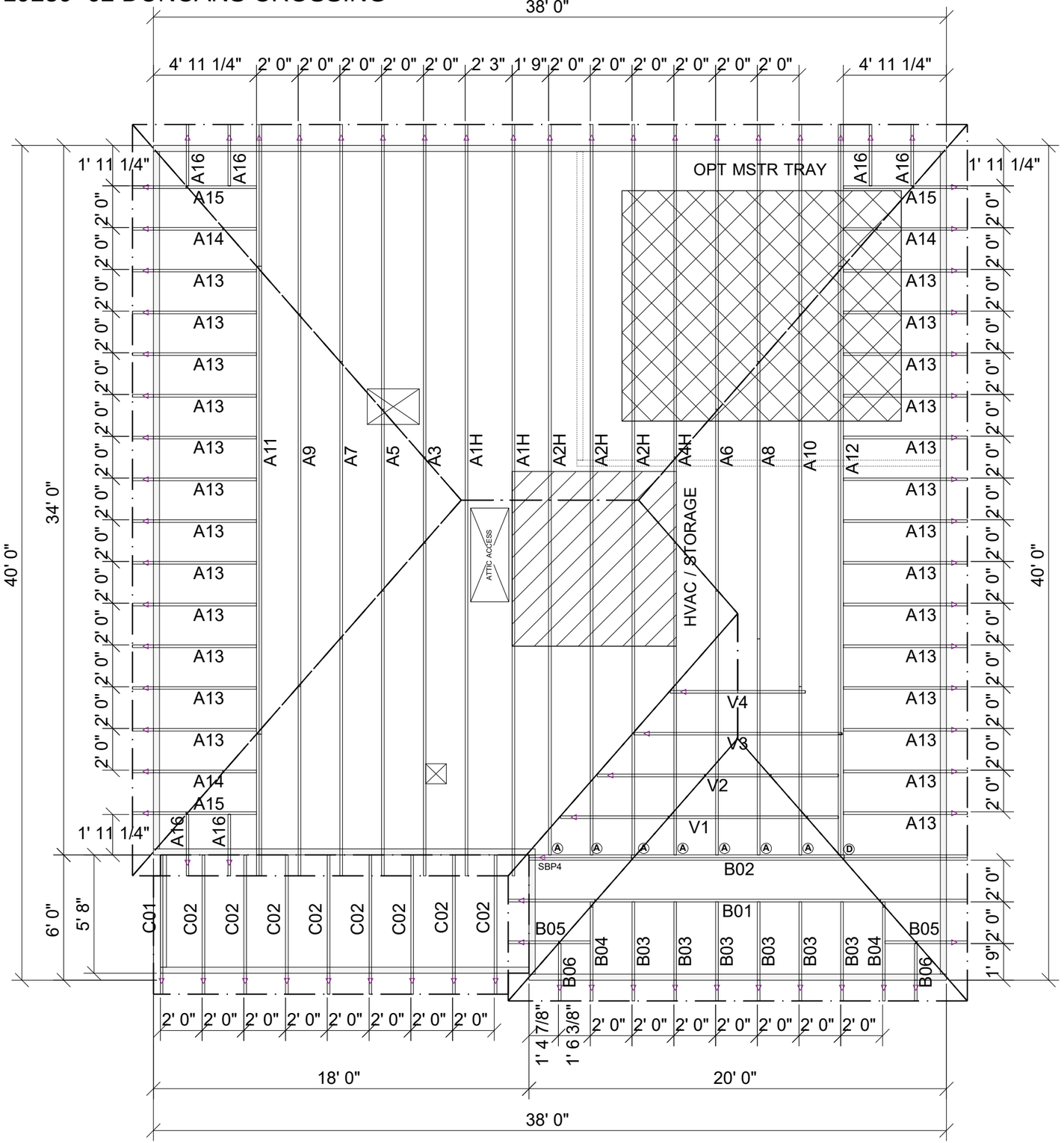
FRAMING DETAILS

MCGINNIS MODEL

120 MPH WIND ZONE
NORTH CAROLINA

sheet:
SD2.1

72419259 62 DUNCANS CROSSING



NOTES

- 2'-3" MAX SPACING FOR ATTIC ACCESS IS SHOWN. MAINTAIN 24"oc SPACING FOR 22-1/2" ACCESS.
-

Roof Hanger List			
MARK	TYPE	DESCRIPTION	QTY
Ⓐ	HUS26	FACE MOUNT HANGER	7
Ⓓ	THD26-2	FACE MOUNT HANGER	1
2x4	SBP4	SUPPLEMENTAL BEARING ENHANCER	2

MCGINNIS CFI

△ Indicates Left End of Truss

1. TEMPORARY BRACING TO BE INSTALLED w/T.P.I. STANDARD BCSI-B1.
2. SEE ENGINEERED DRAWING FOR PERMANENT BRACING MINIMUM REQUIREMENTS.
3. FRAMER TO VERIFY ALL DIMENSIONS, DROP, & RISE LOCATIONS PRIOR TO TRUSS PLACEMENT.
4. BLDR/FRAMER RESPONSIBLE FOR ADJUSTMENT OF TRUSS SPACING TO MISS PLUMBING DROPS, UNLESS NOTED OTHERWISE.
5. THIS LAYOUT IS NOT AN ENGINEERED DRAWING. THIS DRAWING WAS CREATED TO ESTABLISH TRUSS PLACEMENT ONLY. IT IS THE RESPONSIBILITY OF THE BUILDER TO PROVIDE ADEQUATE SUPPORT FOR ALL THE ELEMENTS SHOWN IN THIS DRAWING.

UFP MID-ATLANTIC,LLC
A UFP INDUSTRIES COMPANY

BURLINGTON, NC	PHONE (800) 476-9356
CHESAPEAKE, VA	PHONE (800) 476-3190
CLINTION, NC	PHONE (910) 590-3220
CONWAY, SC	PHONE (800) 397-9572
JEFFERSON,GA	PHONE (800) 648-4038
LOCUST, NC	PHONE (704) 888-0920
LIBERTY, NC	PHONE (800) 648-4038
OOLTEWAH, TN	PHONE (844) 497-0056
PEARISBURG, VA	PHONE (800) 397-9571

ROOF AREA: 1974.38 ft² RIDGE LINE: 14.5 ft VALLEY LINES: 18.24 ft HIP LINES:122.73 –

Customer
SMITH DOUGLAS

Job Name
MCGINNIS

–

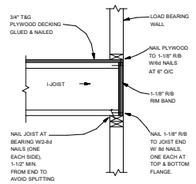
Date:3/3/22
Scale:NTS
Revision Date1:
Revision Date2:

Quality Products for Quality Builders

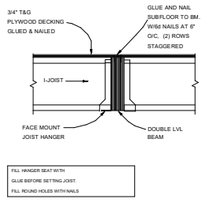
Drawn By: AS/JNN
Checked By: ***

Drawing Number
MASTER

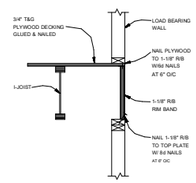
A1 1 1/8" RIMBOARD BAND



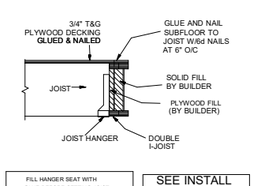
E1 DOUBLE LVL



A7 1 1/8" RIMBOARD BAND

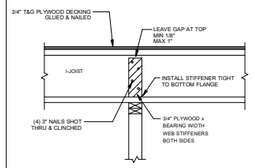


H2 JOIST TO ASSEMBLED DOUBLE JOIST

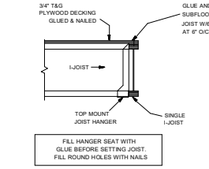


SEE INSTALL GUIDE- DETAIL H2

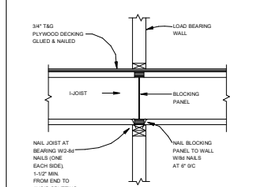
B1 WEB STIFFENER



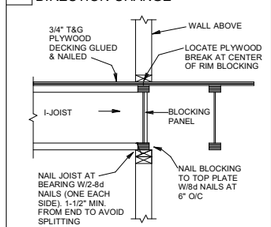
S1 SINGLE JOIST TO JOIST



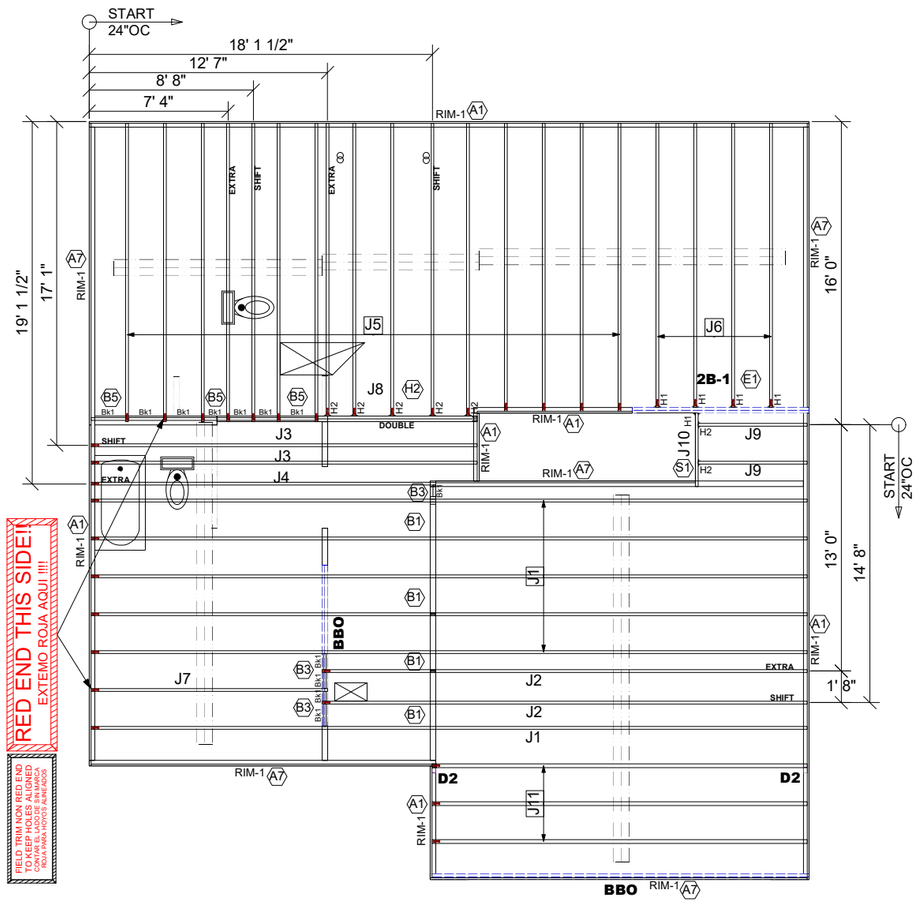
B3 BLOCKING AT LOAD BEARING WALL



B5 DIRECTION CHANGE



2ND FLOOR PLACEMENT PLAN



Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
J1	38' 0"	14" TJI® 110	1	6	MFD
J2	26' 0"	14" TJI® 110	1	2	MFD
J3	21' 0"	14" TJI® 110	1	2	MFD
J4	19' 0"	14" TJI® 110	1	1	MFD
J5	16' 0"	14" TJI® 110	1	16	MFD
J6	15' 0"	14" TJI® 110	1	4	MFD
J7	13' 0"	14" TJI® 110	1	1	MFD
J8	9' 0"	14" TJI® 110	2	2	FF
J9	6' 0"	14" TJI® 110	1	2	MFD
J10	4' 0"	14" TJI® 110	1	1	MFD
J11	20' 0"	14" TJI® 360	1	3	MFD
2B-1	10' 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	12	MFD
Bk1	2' 0"	14" TJI® 110	1	12	MFD

Connector Summary			
PlotID	Qty	Manuf	Product
H1	5	MiTek	IHFL1714
H2	7	MiTek	TFL1714

GENERAL NOTES:

1.) TOP CHORD OF JOISTS ARE PAINTED RED AT NUMBERED END. PLACE PAINTED END AS 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 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.
8.) IMPORTANT NOTE! NO STRUCTURAL ANALYSIS OF CONVENTIONAL HEADERS HAS BEEN CONDUCTED IF NOT NOTED. THEY ARE CONSIDERED TO BE ADEQUATE TO SUPPORT THE APPLIED LOADS.

FRAMER NOTE

DENOTES DUCT HOLE RUNS

ALL DIMENSIONS TO CENTERLINE UNLESS OTHERWISE NOTED

- **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

1B-, 2B- *INDICATES BEAM ABOVE TOP PLATE (FLUSH WITH FLOOR SYSTEM)

H-, 1H-, GDH- INDICATES BEAM BELOW TOP PLATE (DROPPED BELOW FLOOR SYSTEM)

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

EXTRA A JOIST ADDED TO THE LAYOUT IN ADDITION TO THE ON CENTER JOISTS

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

SCALE: 1/8"=1'

UFP SITE BUILT
A UFP INDUSTRIES COMPANY
Burlington, NC Locust, NC
Chesapeake, VA Liberty, NC
Clinton, NC Ooltewah, TN
Conway, SC Pearisburg, VA
Jefferson, GA Stanfield, NC
Customer Service (800) 476-9356

Smith Douglas Homes -

McGinnis 2nd Floor - -

REVISIONS	DSN	DESCRIPTION	DATE

DESIGNER PB2
LAYOUT DATE 6/14/2024
ARCH DATE 7/23/2021
STRUC DATE 8/18/2023

JOB #: 24061171F2