SUMMARY

CAVINESS & CATES, INC

PROJECT INFO NAME OF PROJECT: PROJECT ADDRESS: PROPOSED USE: CONTACT:

LOT 79 DUCKS LANDING / CC 2058F 402 BLACK DUCK LANE RESIDENTIAL

CODE COMPLIANCE: MUNICIPALITY: GAS COMMUNITY:

2018 NC STATE RESIDENTIAL BUILDING CODE HARNETT COUNTY

TODD TUCKER, AIBD, CPBD 910-366-2636 DESIGNER:

SPACE DATA: FIRST FLOOR: SECOND FLOOR:

<u>1155 SF</u> 2058 SF TOTAL HEATED: FRONT PORCH: 106 SF GARAGE: TOTAL UNDER ROOF: 2599 SF

OVERALL BUILDING HEIGHT 31'-2" WITH CRAWL FOUNDATION

DESIGN LOADS

ROOF LOADS: 20 PSF LIVE, 20 PSF DEAD ATTIC LOADS: 20 PSF LIVE, WHERE INDICATED (SEE TRUSS DWGS) 40 PSF LIVE, IO PSF DEAD FIRST FLOOR:

UPPER FLOORS: 30 PSF LIVE, 15 PSF DEAD FOR ASCE 7-10, RISK CATEGORY II, EXPOSURE "B", 120 mph WIND LOAD:

ALL GARAGE PORTAL WALLS TO BE FRAMED WITH 2x6 STUDS

ATTIC VENT CALCULATIONS R806 FRONT PORCH ATTIC AREA: 106 SF R806.2 EXCEPTIONS | \$ 2

SECOND FLOOR ATTIC AREA: <u>1338</u> S.F. RIDGE VENTS*: 79 L.F. / 10 S.F. (67%)

REAR PORCH ATTIC AREA: 120 SF R806.2 EXCEPTIONS | \$ 2

SOFFIT VENT*: 88 L.F. / 5 S.F. (33%) RATIO: <u>15</u> = 1338

* CALCS BASED ON VENT FREE AREA OF 18 S.I., FOR RIDGE & 9 S.I. FOR SOFFIT (PLF)

FOUNDATION NOTES

- CRAWL SPACE GRADE MINIMUM 12" BELOW GIRDER / 18" BELOW JOISTS
- 2. PROVIDE VAPOR BARRIER FOR CRAWL SPACE 3. FIELD-LOCATE CRAWL SPACE ACCESS, SIZED PER CODE

FOUNDATION VENT CALCULATIONS R408

4. USE 16"x8" VENT WITH MINIMUM 60" NET FREE AREA (AirVent, INC OR EQUAL)

CRAWL SPACE AREA: <u>903</u> SF

I SQUARE FOOT OF VENT PER 1500 SF OF FOUNDATION AREA* INSTALL VENT WITH MINIMUM OF 60 SQUARE INCHES NET FREE AREA

903 / 1500 = 0.6 TOTAL SQUARE FEET OR MINIMUM 2 VENTS PLUS VENTS @ CORNERS

* CALCS BASED ON USING A VAPOR RETARDER & INSTALLING A VENT WITHIN 36" OF EA CORNER

ENERGY COMPLIANCE (CHAPTER ELEVEN)

CHAPTER II ENERGY EFFICIENCY COMPLIANCE (CHECK ONE) PRESCRIPTIVE CODE

PERFORMANCE

CEILING INSULATION: RI5 FOR ZONE 3 / RI9 FOR ZONE 4 WALL INSULATION: RI9 FOR CRAWL SPACE / RIO FOR SLAB FLOOR INSULATION:

LIST OF SYMBOLS SLOPE UP PITCH

DETAIL MARK X TITLE SCALE TITLE MARK

EARTH INSULATION

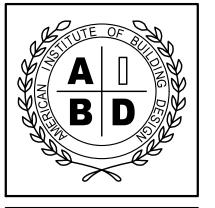
STANDARD WALL

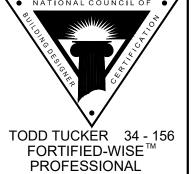
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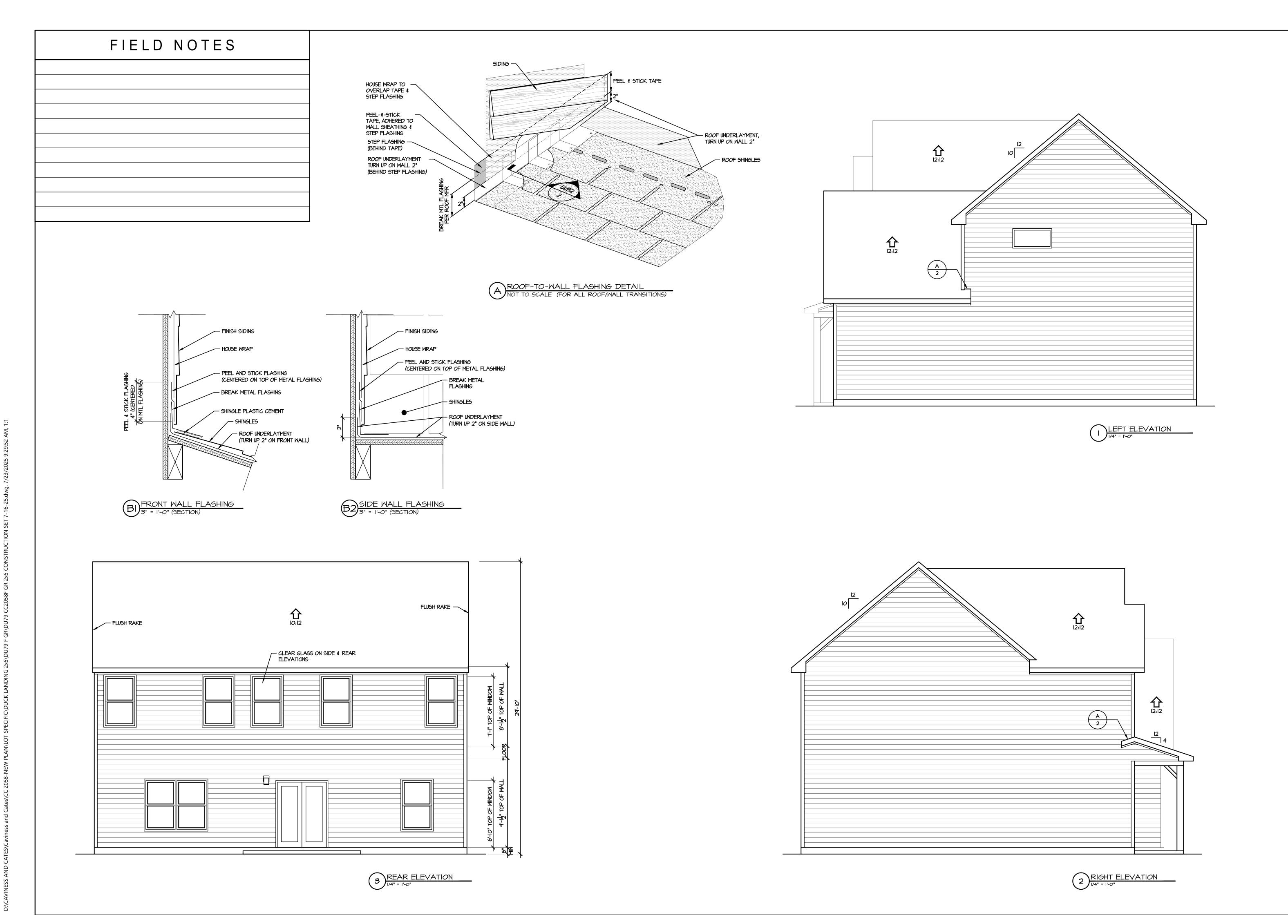
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CC2058

SEPTEMBER 2024 REVISIONS:

SHEET NO:

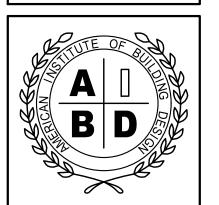
CONSTRUCTION SET 7-16-2025

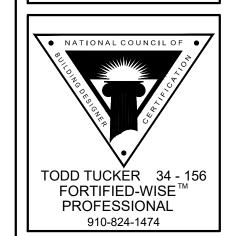


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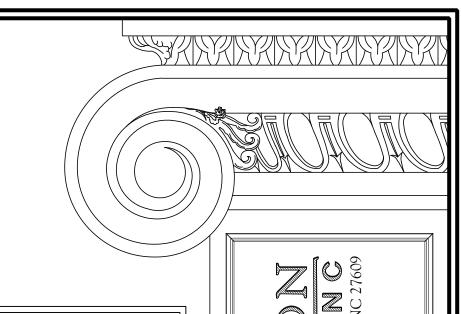




CC2058

SEPTEMBER 2024

SHEET NO:



120 MPH ULTIMATE DESIGN WIND SPEED

NOTES FOR LESS THAN
30' MEAN ROOF HEIGHT:

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL
- LAYOUT INCLUDING ROOF SYSTEM.

 STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 3. INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER.
 ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
 4. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- EXTERIOR WALLS DESIGNED FOR 120 MPH WNDS.
 WALL CLADDING DESIGNED FOR +15.5 PSF AND -20
 PSF (+/- INDICATE POSITIVE / NEGATIVE
- PRESSURE (TYP).

 7. ROOF CLADDING DESIGNED FOR +14.2 PSF AND -18
 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +10
 PSF AND -36 PSF FOR ROOF PITCHED 2.25/12 TO
- 8. INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR
 WALLS OF ALL STORIES IN ACCORDANCE WITH
 SECTION R602.10.3 OF THE NCRC, 2018 EDITION.
 SEE THE WALL BRACING NOTES AND DETAILS SHEET
 FOR MORE INFORMATION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.
 REFER TO NOTES AND DETAIL SHEETS FOR

ADDITIONAL STRUCTURAL INFORMATION.

150 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- 2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS).
- BUILDER IS TO PROVIDE FRAMING CONNECTIONS
 AS REQUIRED BY CHAPTER 45 ("HIGH WIND
 ZONES" FOR 150 MPH WINDS) OF THE NORTH
 CAROLINA RESIDENTIAL CODE, 2018 EDITION.

 4. FOUNDATION ANCHORAGE TO COMPLY WITH
- SECTION 4504 OF THE NORTH CAROLINA
 RESIDENTIAL CODE, 2018 EDITION.

 5. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
 6. WALL CLADDING DESIGNED FOR +24.3 PSF AND
 -32 PSF (+/- INDICATE POSITIVE / NEGATIVE
- PRESSURE (TYP).

 7. ROOF CLADDING DESIGNED FOR +22.2 PSF AND -28 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +14 PSF AND -57 PSF FOR ROOF PITCHED
- 2.25/12 TO 7/12.
 7/16" OSB SHEATHING IS REQUIRED ON ALL
- 7/16" OSB SHEATHING IS REQUIRED ON ALL EXTERIOR WALLS.

 WALLS TO BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE NORTH CAROLINA
- RESIDENTIAL CODE, 2018 EDITION AND AS NOTED ON PLANS.

 ENERGY EFFICIENCY COMPLIANCE AND INSULATION
- . ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

STRUCTURAL NOTES: . ALL FRAMING LUMBER TO BE #2 SPF (UNO) ALL TREATED LUMBER TO BE #7

- (UNO). ALL TREATED LUMBER TO BE #2 SYP (UNO.) 2. INSTALL AN EXTRA OR DOUBLE JOIST
- UNDER WALLS PARALLEL TO FLOOR JOISTS
 WHERE NOTED ON THE PLANS.

 3. SQUARES DENOTE POINT LOADS WHICH
 REQUIRE SOLID BLOCKING TO GIRDER OR
- 4. SHADED PIERS TO BE FILLED SOLID.

 5. INSTALL LADDER WIRE @ 16" O.C. TO
- SECURE MULTIPLE WYTHE FOUNDATION
 WALLS TOGETHER.

 B. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



9/30/2024

NOTE: BCI 4500s-1.8 JOISTS
MAY BE INSTALLED IN LIEU OF
TJI 110 JOISTS AT THE DEPTH
AND SPACING INDICATED ON
THE PLAN

CONT	CONTINUOUS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
FDN	FOUNDATION
FTG	FOOTING
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED

UNO UNLESS NOTED OTHERWISE

TYP TYPICAL

LEGEND

DATE: SEPTEMBER 30, 2024 SCALE: 1/4" = 1'-0"

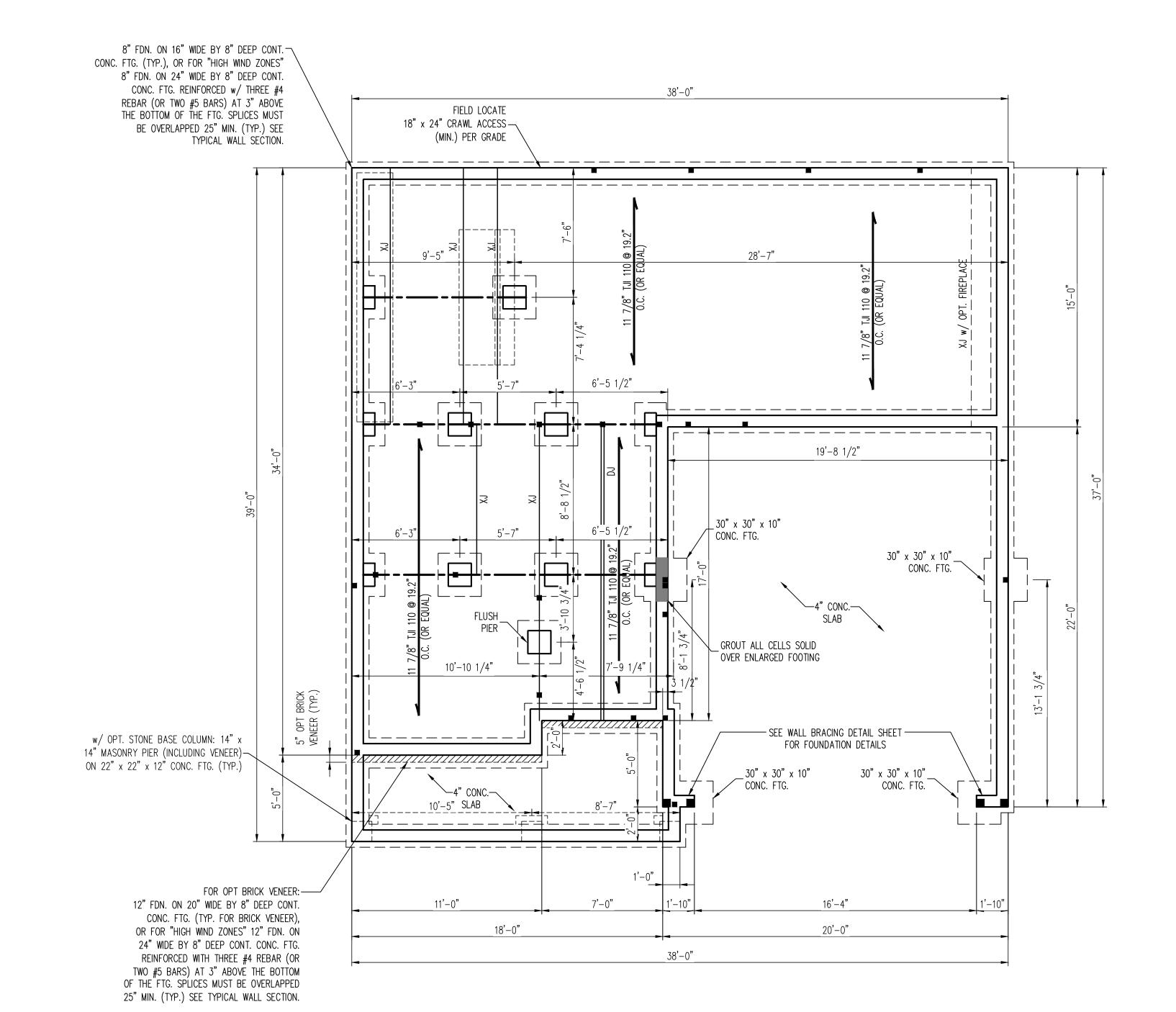
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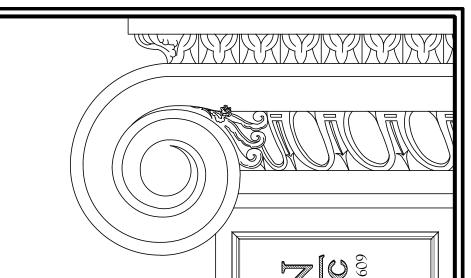
% S

DRAWN BY: TT

ENGINEERED BY: JAG

S-1a crawl foundation plan





LINTEL SCHEDULE FOR BRICK/NATURAL STONE SUPPORT		
LENGTH (FT.)	<u>SIZE OF LINTEL</u>	
UP TO 4 FT.	L 3 1/2 x 3 1/2 x 1/4	
4–8	L 5 x 3 1/2 x 5/16 LLV	
8 AND GREATER	L 6 x 4 x 5/16 LLV	
PRIOR CURRENT MOTEO		

BRICK SUPPORT NOTES:

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DWGS. FOR SIZE AND LOCATION OF OPENINGS.
- 2. (LLV) = LONG LEG VERTICAL
 3. LENGTH = CLEAR OPENING
- EMBED ALL ANGLE IRONS MIN. 4" EACH SIDE INTO VENEER TO PROVIDE BEARING.
- FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, ATTACH STEEL ANGLE TO HEADER W/
- 1/2" LAG SCREWS @ 12" O.C. STAGGERED.

 6. FOR ALL BRICK SUPPORT @ ROOF LINES, FASTEN
 (2) 2 x 10 BLOCKING BETWEEN STUDS w/ (4)
 12d NAILS PER PLY. FASTEN A 6" x 4" x 5/16"
 STEEL ANGLE TO (2) 2 x 10 BLOCKING w/ (2)
 1/2" LAG SCREWS @ 12" O.C. STAGGERED. SEE
 SECTION R703.8.2.1 OF THE 2018 NCRC FOR
- '. PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

ADDITIONAL BRICK SUPPORT INFORMATION.

BRACED WALL DESIGN NOTES:

- 1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
- 2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
- 3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.

 4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.)
- GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS
 ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER
 NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.

 5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH
 WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE
- WITH CHAPTER 45 OF THE NCRC 2018 EDITION.

 6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

STRUCTURAL NOTES:

- . ALL FRAMING LUMBER TO BE #2 SPF (UNO).
- 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
- REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS (UNO.)
- 5. FOR HIGH WIND ZONES, ALL EXTERIOR
 WALLS TO BE SHEATHED WITH 7/16" OSB
 SHEATHING WITH JOINTS BLOCKED AND
 SECURED WITH 8d NAILS AT 3" O.C. ALONG
 EDGES AND 6" O.C. IN THE FIELD.
- 6. FOR HIGH WIND ZONES, SECURE ALL
 EXTERIOR WALL SHEATHING PANELS TO
 DOUBLE TOP PLATES, BANDS, JOISTS, AND
 GIRDERS WITH (2) ROWS OF 8d NAILS
 STAGGERED AT 3" O.C. PANELS SHALL
 EXTEND 12" BEYOND CONSTRUCTION JOINTS
 AND SHALL OVERLAP GIRDERS AND DOUBLE
 SILL PLATES THEIR FULL DEPTH.
- SPECIFIED SIMPSON STRONG—TIE PRODUCTS MAY BE SUBSTITUTED WITH THOSE MANUFACTURED BY USP STRUCTURAL CONNECTORS PROVIDED THAT THE LOAD CAPACITY AND FUNCTION IS EQUIVALENT. REFER TO NOTES AND DETAIL SHEETS FOR
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT KING STUDS
AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5



LEGEND	
CONT	CONTINUOUS
XT	EXTRA TRUSS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
()	NUMBER OF STUDS
DSP	DOUBLE STUD POCKET
TSP	TRIPLE STUD POCKET
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

NOTE: BCI 4500s-1.8 JOISTS MAY
BE INSTALLED IN LIEU OF TJI 110
JOISTS AT THE DEPTH AND
SPACING INDICATED ON THE PLAN

DATE: SEPTEMBER 30, 2024

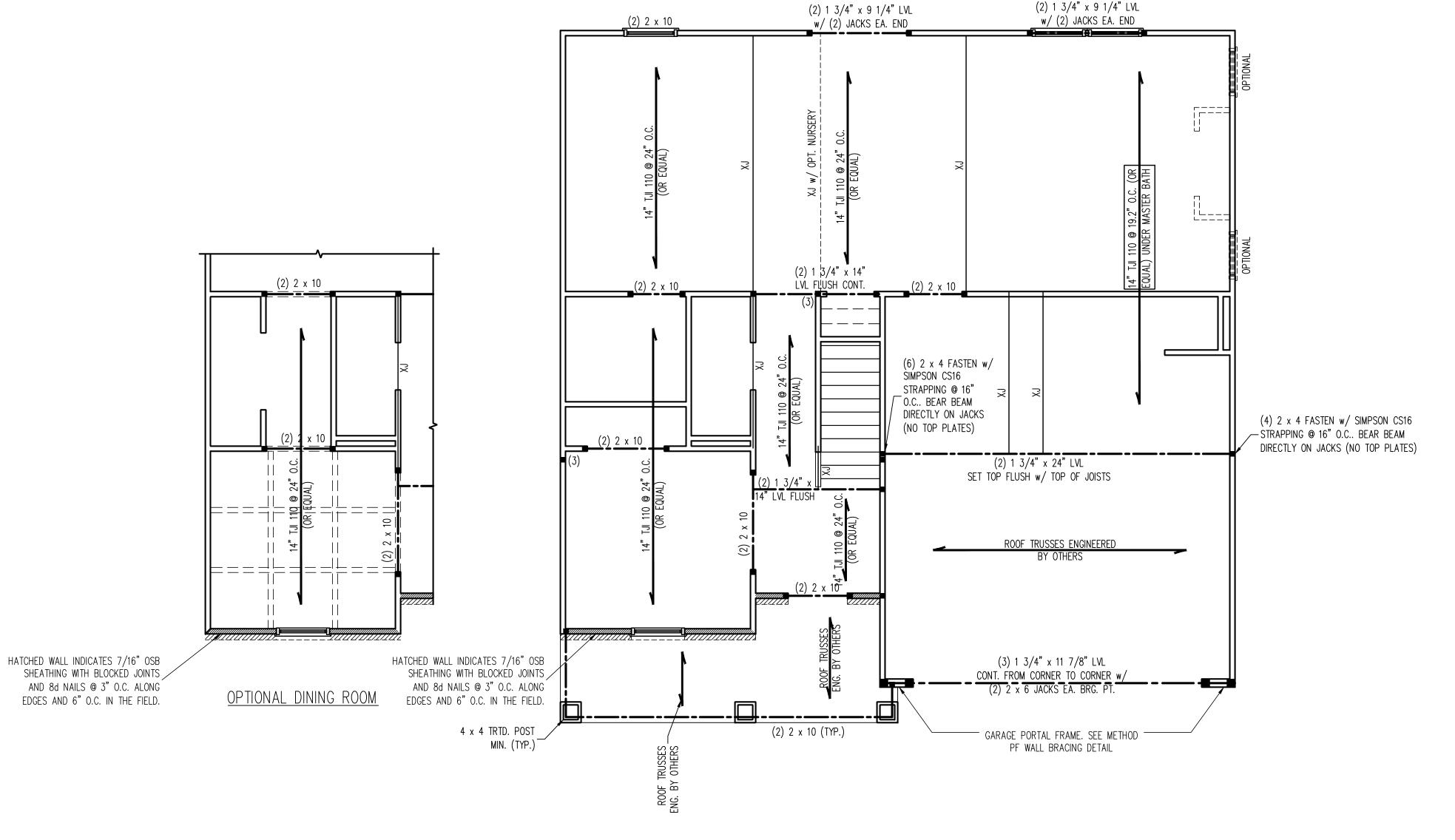
SCALE: 1/4" = 1'-0"

DRAWN BY: TT

ENGINEERED BY: JAG

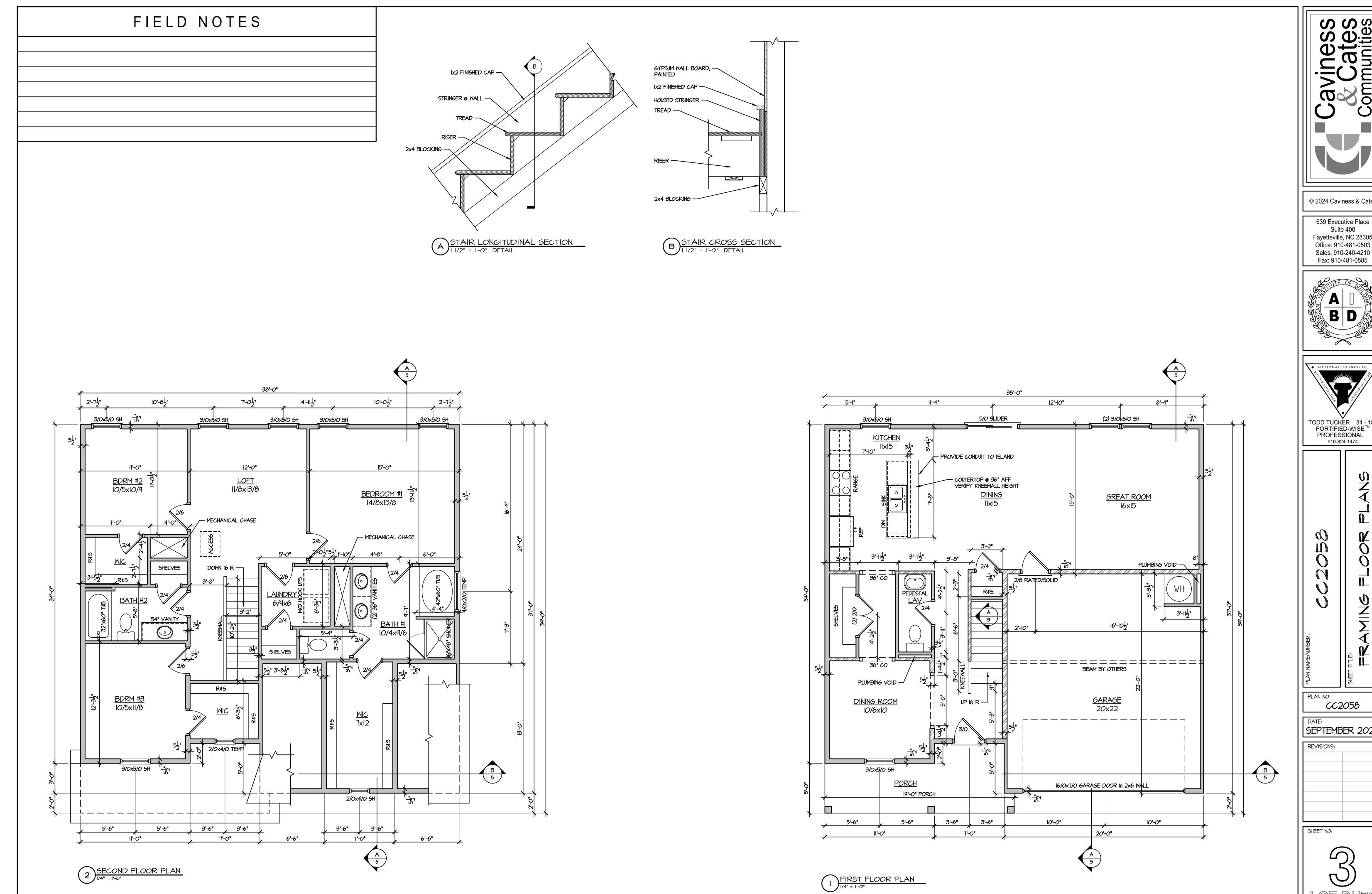
2058 S &

S-Z SECOND FLOOR FRAMING PLAN



(2) 2 x 10

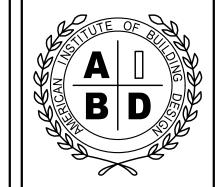
<u>OPTIONAL TRANSOM</u>

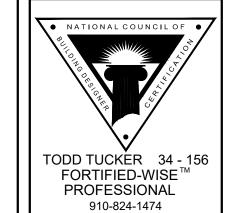


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SEPTEMBER 2024

ELECTRICAL NOTES:

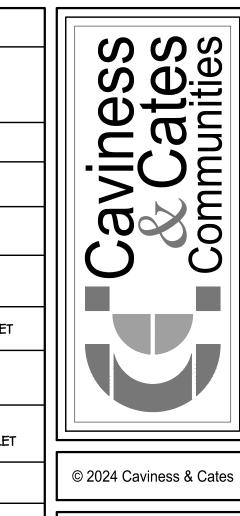
I. INSTALL LOW-WATTAGE LED LIGHTING IN SMALL CLOSETS PER 2017 NEC ARTICLE 410.2

SMOKE DETECTOR NOTES:

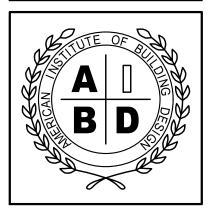
I. INSTALL SMOKE DETECTORS ON EVERY LEVEL, IN ALL SLEEPING AND GUEST ROOMS, AND OUTSIDE OF EACH SLEEPING ROOM, NO GREATER THAN 21' FROM ANY DOOR TO A SLEEPING ROOM [2022 NFPA 72, 29.8.1.1]

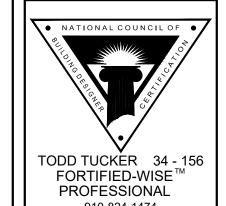
- 3. MAINTAIN 120" MIN FROM KITCHEN COOKING APPLIANCES [2022 NFPA 72, 29.11.3.4(5)]
- 4. MAINTAIN 36" MIN FROM A BATHROOM DOOR CONTAINING A TUB OR SHOWER [2022 NFPA 72, 29.11.3.4(6)]
 5. MAINTAIN 36" MIN FROM A SUPPLY REGISTER OF A FORCED
- HEATING/COOLING SYSTEM AND OUTSIDE OF THE DIRECT AIRFLOW [2022 NFPA 72, 29.11.3.4(7)]
- 6. MAINTAIN 36" MIN FROM TIP OF CEILING FAN BLADE [2019 NFPA 72, 29.11.3.4(8)] 7. WHERE STAIRS LEAD TO AN ABOVE-OCCUPIABLE LEVEL, A SMOKE DETECTOR SHALL BE LOCATED SO THAT RISING SMOKE IN THE
- 8. PLACE SMOKE DETECTORS AT HIGHEST POINT OF TRAY CEILING [2019 NFPA 72, 29.11.3.4(11)]

		El	LECTRICAL LEGEND		
ECTRICAL NOTES: INSTALL LOW-WATTAGE LED LIGHTING IN SMALL CLOSETS PER 2017 NEC ARTICLE 410.2 & ARTICLE 410.16	CEILING FAN		USB PORT	₩	SINGLE POLE SMITCH
OKE DETECTOR NOTES:		$\overline{\mathbb{V}}$	COMMUNICATIONS	₩	DIMMER SWITCH
INSTALL SMOKE DETECTORS ON EVERY LEVEL, IN ALL SLEEPING AND GUEST ROOMS, AND OUTSIDE OF EACH SLEEPING ROOM, NO GREATER THAN 21' FROM ANY DOOR TO A SLEEPING ROOM [2022	CEILING FAN W/ LIGHT	*	UL APPROVED SMOKE / CO DETECTOR	₩,	3 WAY SWITCH
NFPA 72, 29.8.I.I] WHERE AN INTERIOR FLOOR LEVEL EXCEEDS 1000 SQUARE FEET, SMOKE ALARMS SHALL BE INSTALLED WHERE ALL POINTS FALL		(5)	SURROUND SOUND CEILING SPEAKER	₩4	4 WAY SWITCH
WITHIN 30' OF TRAVEL DISTANCE OR ONE SMOKE ALARM PER 500 SQUARE FEET. FOR VAULTED CEILINGS OVER MULTIPLE LEVELS, SMOKE ALARMS IN THE UPPER LEVEL NEAR THE	FLUORESCENT LIGHT	S (DC)	DOOR CONTACT	→ AC IC	DUPLEX OUTLET ABOVE COUNTER UNDER COUNTER
CATHEDRAL SHALL BE CONSIDERED AS PART OF THE LOWER FLOOR PROTECTION [2022 NFPA 72, 29.8.1.3, 29.8.1.3.1 and 29.8.1.3.2]	HO WALL MOUNT LIGHT			- -	EXTERIOR DUPLEX OUTLET
MAINTAIN 120" MIN FROM KITCHEN COOKING APPLIANCES [2022 NFPA 72, 29.11.3.4(5)]	SURFACE LIGHT	O M	DIRECTIONAL MOTION SENSOR	→	I/2 HOT DUPLEX OUTLET
MAINTAIN 36" MIN FROM A BATHROOM DOOR CONTAINING A TUB OR SHOWER [2022 NFPA 72, 29.11.3.4(6)]	PENDANT LIGHT	A CELL			ON SMITCH
MAINTAIN 36" MIN FROM A SUPPLY REGISTER OF A FORCED HEATING/COOLING SYSTEM AND OUTSIDE OF THE DIRECT AIRFLOW [2022 NFPA 72, 29.II.3.4(7)]	LED LIGHT	7 K/P	SECURITY KEYPAD	→ _{GFC}	GROUND FAULT CIRCUIT INTERRUPT DUPLEX OUTLET
MAINTAIN 36" MIN FROM TIP OF CEILING FAN BLADE [2019 NFPA 72, 29.11.3.4(8)] WHERE STAIRS LEAD TO AN ABOVE-OCCUPIABLE LEVEL, A SMOKE	UNDER-WALL-CABINET LIGHT	5/P	20" ON-Q ENCLOSURE HOUSING PHONE, CABLE, ALARM & REQUIRES IIOV OUTLET	-	QUAD OUTLET
DETECTOR SHALL BE LOCATED SO THAT RISING SMOKE IN THE STAIRWAY CANNOT BE BLOCKED BY AN INTERVENING DOOR [2019	F FLOOD LIGHTS RECESS LIGHT	- 	SURROUND SOUND TERMINATION	0	FLOOR OUTLET
NFPA 72, 29.11.3.4(9)] PLACE SMOKE DETECTORS AT HIGHEST POINT OF TRAY CEILING [2019 NFPA 72, 29.11.3.4(11)]	LIGHT / EXHAUST FAN COMBO EXHAUST FAN		POINT-PHONE, CABLE, SS & FUTURE PIPE WILL TERMINATE IN ONE PHONE/CABLE JACK & SPOUT PLATE	=	220 ∨ OUTLET



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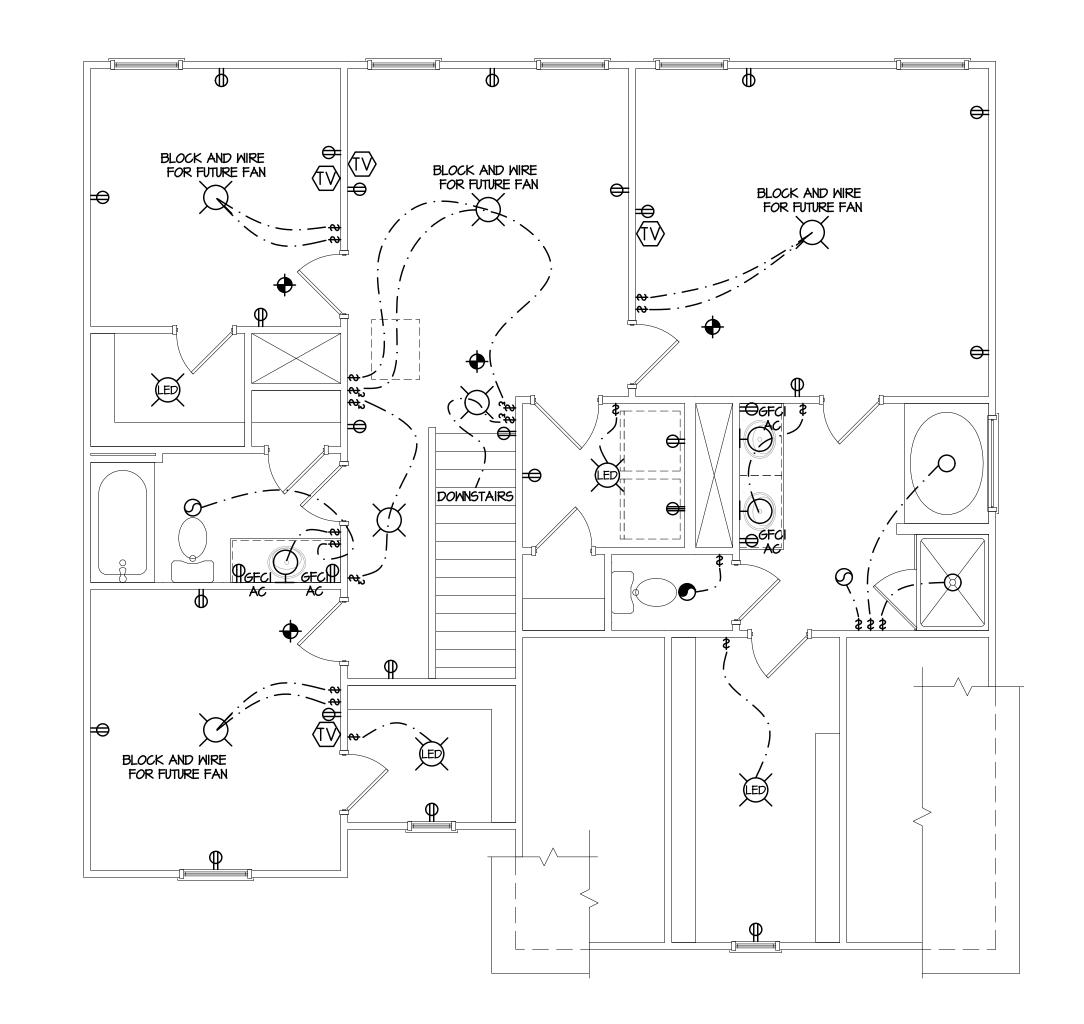
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SEPTEMBER 2024

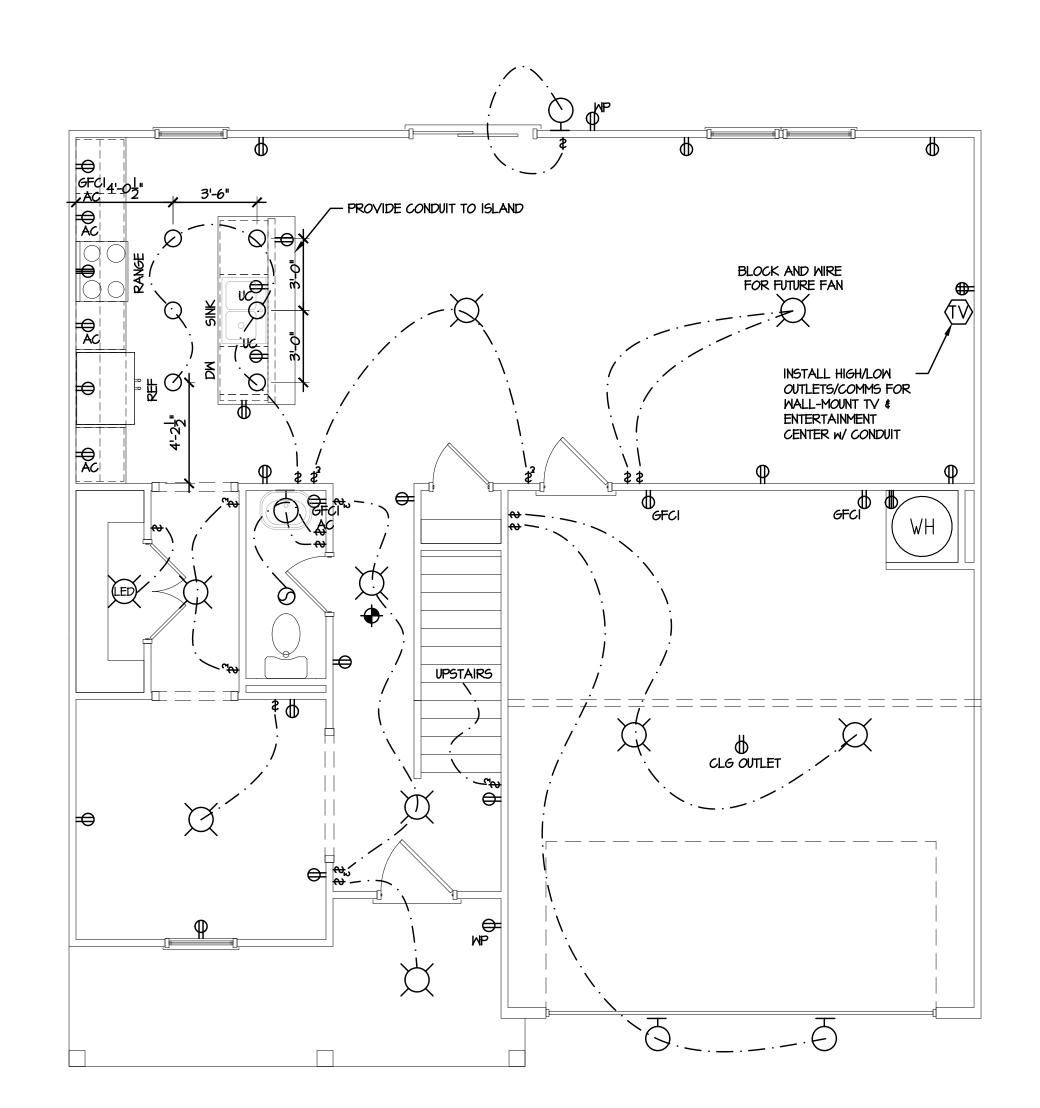
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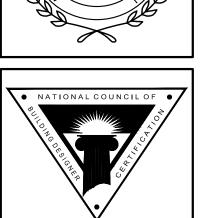
SECOND FLOOR PLAN

1/4" = 1'-0"



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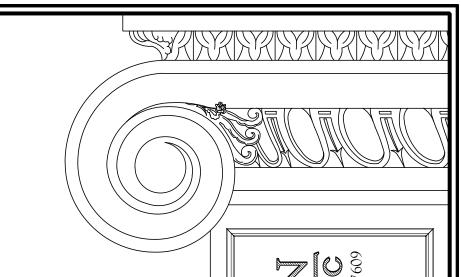
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TODD TUCKER 34 - 156 FORTIFIED-WISE™ PROFESSIONAL

PLAN NO: CC2058

SEPTEMBER 2024

REVISIONS:



BRACED WALL DESIGN NOTES:

- 1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE. 2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL
- BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION. 3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL
- PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD. 4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.)
- GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD. 5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE
- WITH CHAPTER 45 OF THE NCRC 2018 EDITION. 6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

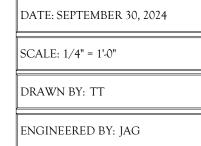
STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE #2 SPF 2. ALL LOAD BEARING HEADERS TO BE (2) 2
- x 6 (UNO). WINDOW AND DOOR HEADERS TO BE SUPPORTED w/(1) JACK STUD AND (1)
- KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR
- FOUNDATION. SQUARES TO BE (2) STUDS FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" OSB
- SHEATHING WITH JOINTS BLOCKED AND SECURED WITH 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD. 6. FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL
- EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH. SPECIFIED SIMPSON STRONG—TIE PRODUCTS MAY BE SUBSTITUTED WITH THOSE MANUFACTURED BY USP STRUCTURAL
- CONNECTORS PROVIDED THAT THE LOAD CAPACITY AND FUNCTION IS EQUIVALENT. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

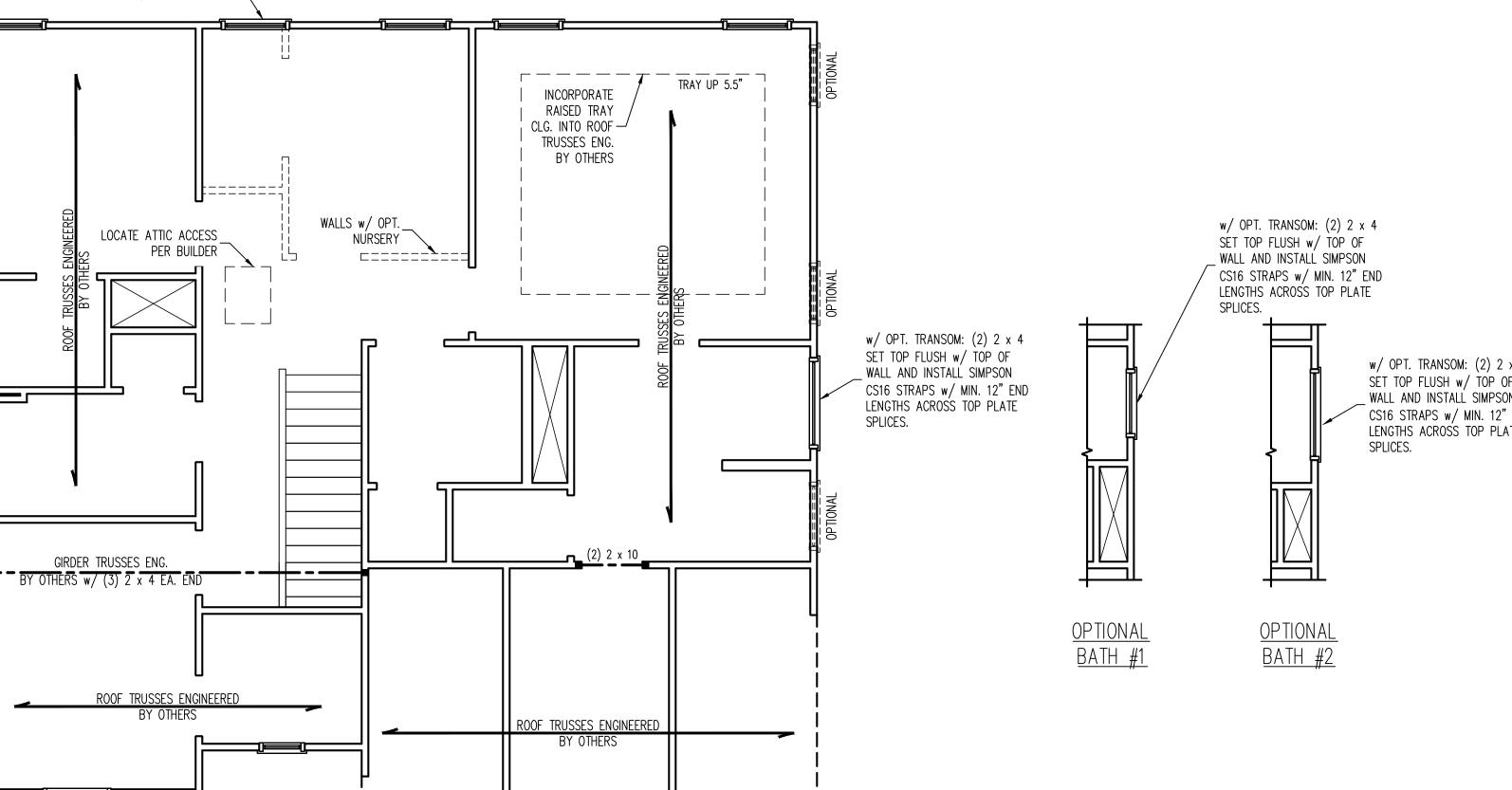
HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5

	LEGEND
CONT	CONTINUOUS
XT	EXTRA TRUSS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
()	NUMBER OF STUDS
DSP	DOUBLE STUD POCKET
TSP	TRIPLE STUD POCKET
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE



2058 S & C

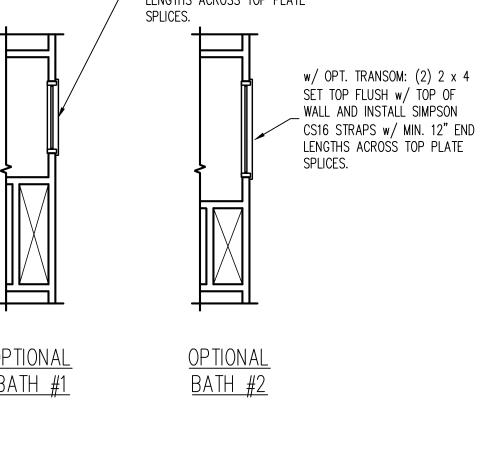
S-3 ATTIC FLOOR FRAMING PLAN

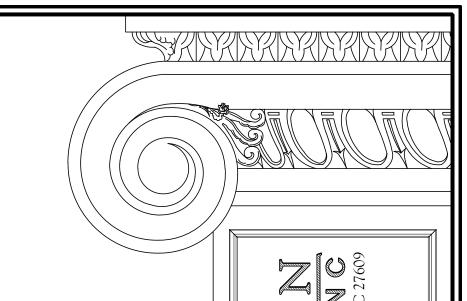


REMOVE WINDOW

w/ OPT. NURSERY T

L_______





STRUCTURAL NOTES:

- 1. ALL FRAMING LUMBER TO BE #2 SPF (UNO).
 2. CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF
- SUPPORT.

 3. FRAME DORMER WALLS ON TOP OF DOUBLE OR
- TRIPLE RAFTERS.

 4. HIP SPLICES ARE TO BE SPACED A MIN. OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF
- 5. STICK FRAME OVER-FRAMED ROOF SECTIONS W/
 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND
 FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
 6. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES
 WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C.

12d NAILS @ 16" O.C. (TYP.)

- MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.

 REFER TO SECTION R802.11 OF THE 2018 NCRC
- FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.

 8. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ROOF PITCHES, PLATE HEIGHTS, DIMENSIONS, OVERHANG WIDTHS, AND ATTIC VENT CALCS.

_		
		LEGEND
	XR	EXTRA RAFTER
	XT	EXTRA TRUSS
	DR	DOUBLE RAFTER
	TR	TRIPLE RAFTER
	RS	RAFTER SUPPORT
	TS	TRUSS SUPPORT
	CONT	CONTINUOUS
	EA	EACH
	OC	ON CENTER
	SPF	SPRUCE PINE FIR
	SYP	SOUTHERN YELLOW PINE
	TYP	TYPICAL
	UNO	UNLESS NOTED OTHERWISE
L		

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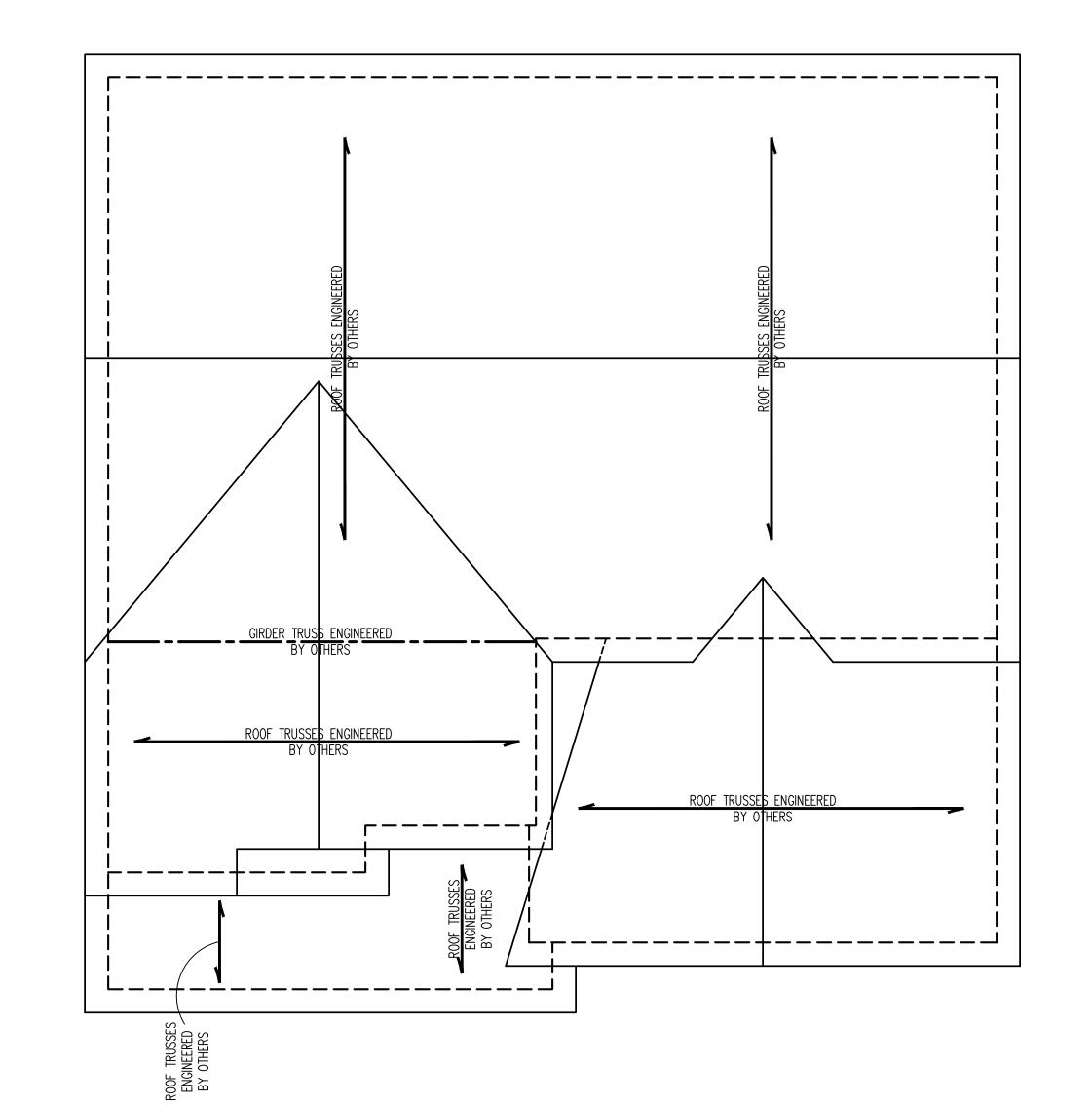
DATE: SEPTEMBER 30, 2024

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

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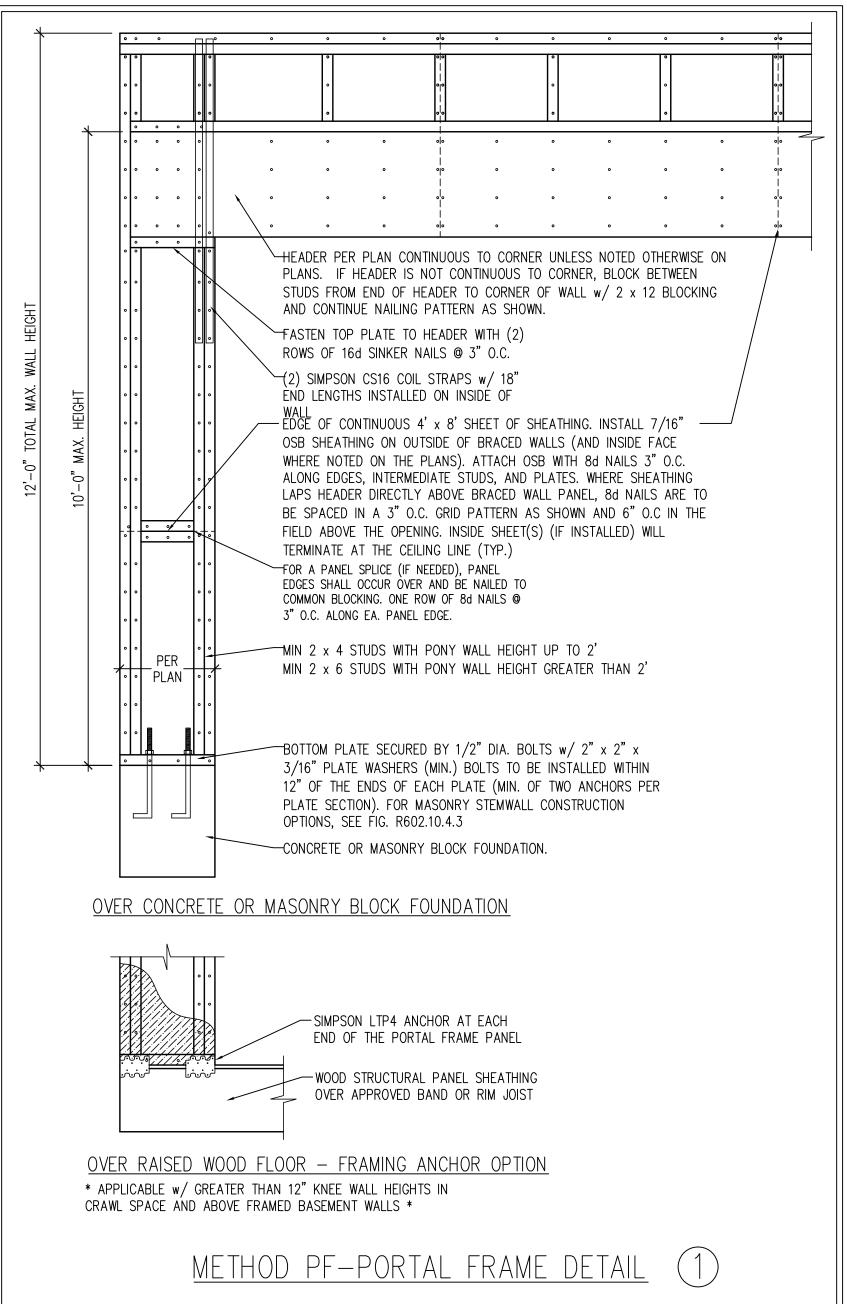
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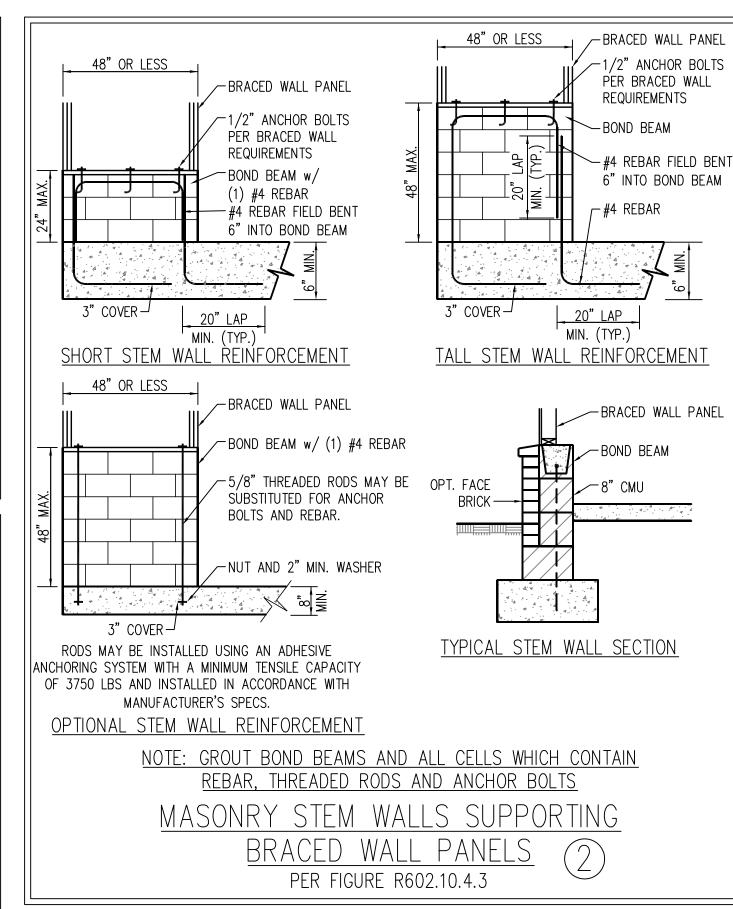
S-4 ROOF FRAMING PLAN

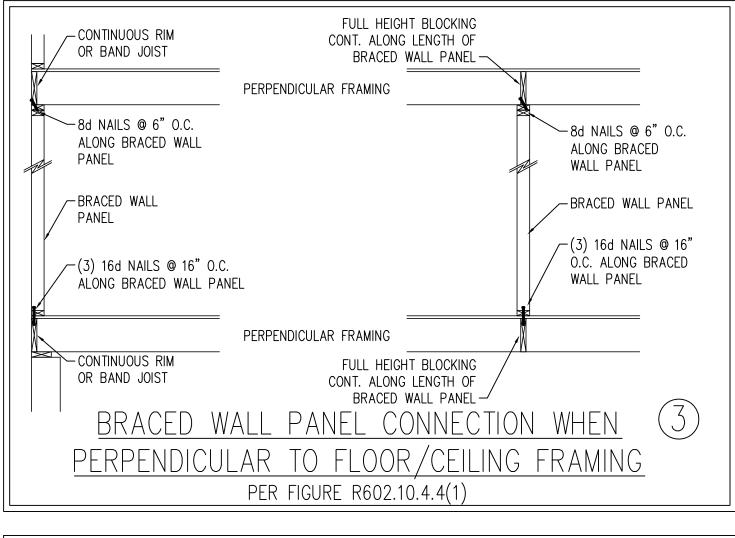


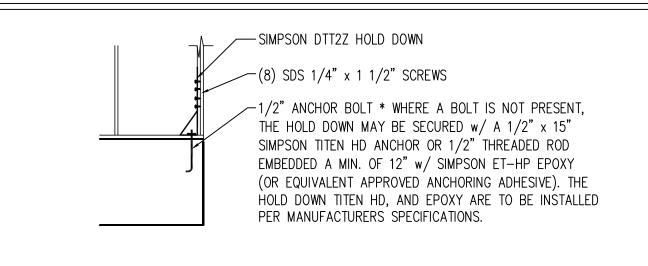
GENERAL WALL BRACING NOTES:

- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
- SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3). WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.
- SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS 5. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
- 6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED. WHEN NOT USING METHOD "GB", GYPSUM TO BE FASTENED PER TABLE R702.3.5. METHOD GB TO BE FASTENED PER TABLE R602.10.1
- 7. CS-WSP REFERS TO THE "CONTINUOUS SHEATHING WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (U.N.O.).
- GB REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. 1/2" (MIN.) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 7" O.C. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (U.N.O.). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R702.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY.
- REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602. 10.3. METHOD CS-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES .5 ITS ACTUAL LENGTH, AND METHOD PF



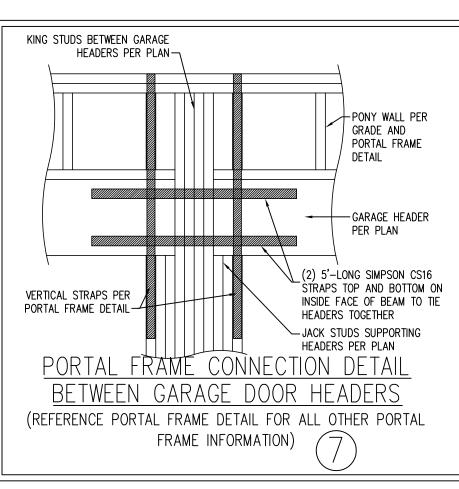


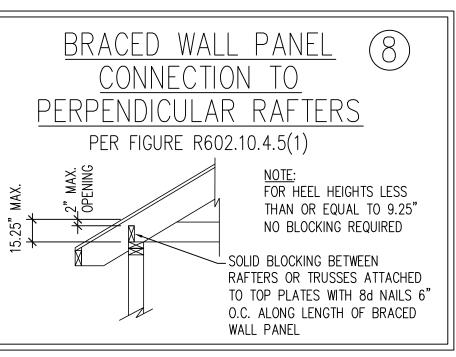


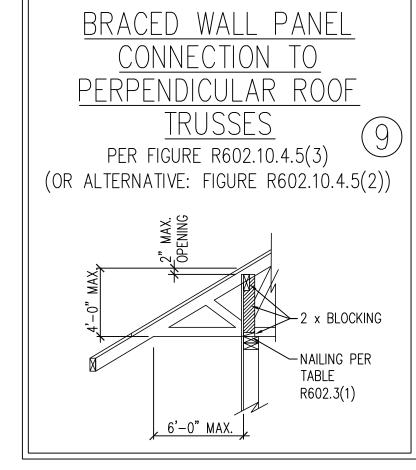


HOLD DOWN DETAIL FOR MASONRY FOUNDATION OR MONOLITHIC SLAB * APPLICABLE ONLY WHERE SPECIFIED ON PLAN *

TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING (5) PER FIGURE R602.10.3(5) MIN. 24" WOOD STRUCTURAL \sim SEE TABLE R602.3(1) PANEL AN 800 LB HOLD DOWN FOR FASTENING DEVICE MAY BE INSTALLED IN LIEU OF CORNER RETURN--ORIENTATION OF STUD MAY VARY. SEE FIGURE R602.3(2) 16d NAIL (3 1/2" x -GYPSUM WALLBOARD AS REQUIRED 0.131") @ 12" O.C._ AND INSTALLED IN ACCORDANCE WITH CHAPTER 7 (TYP.) OPTIONAL NON-STRUCTURAL ∕-CONTINUOUS WOOD STRUCTURAL FILLER PANEL -PANEL BRACED WALL LINE SEE TABLE R602.3(1) FOR FASTENING (a) OUTSIDE CORNER DETAIL (50) ORIENTATION OF STUD MAY VARY. SEE FIGURE R602.3(2) 16d NAIL (3 1/2" x 0.131") @ 12" O.C._ -CONTINUOUS WOOD STRUCTURAL PANEL BRACED WALL LINE SEE TABLE R602.3(1) GYPSUM WALLBOARD AS FOR FASTENING REQUIRED AND INSTALLED IN ACCORDANCE WITH CHAPTER -MIN. 24" WOOD STRUCTURAL PANEL 7 (TYP.)_ CORNER RETURN. AN 800 LB HOLD DOWN DEVICE MAY BE INSTALLED IN LIEU OF CORNER RETURN (b) INSIDE CORNER DETAIL (5b) GYPSUM WALLBOARD AS REQUIRED — SEE TABLE R602.3(1) AND INSTALLED IN ACCORDANCE WITH FOR FASTENING CHAPTER 7 (TYP.) 16d NAIL (3 1/2" x 0.131") (2 ROWS @ 24" ∕MIN. 24"WOOD STRUCTURAL SHEATHING PER PLAN PANEL CORNER RETURN. AN 800 LB HOLD DOWN DEVICE MAY BE INSTALLED IN LIEU OF CORNER RETURN CONTINUOUS WOOD STRUCTURAL PANEL FASTENERS ON EACH STUD BRACED WALL LINE -AT EACH PANEL EDGE (c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)







BRACED WALL PANEL CONNECTION WHEN PARALLEL (6) TO FLOOR/CEILING FRAMING PER FIG. R602.10.4.4(2)

ADDITIONAL FRAMING FULL HEIGHT BLOCKING @ 16" O.C. ALONG LENGTH OF MEMBER DIRECTLY ABOVE BRACED WALL PANEL BRACED WALL PANEL TOE NAIL (3) 8d NAILS AT -8d NAILS @ 6" O.C. ALONG EA. BLOCKING MEMBER BRACED WALL PANEL -BRACED WALL PANEL BRACED WALL PANEL \sim (3) 16d NAILS @ 16" √(3) 16d NAILS @ 16" O.C. O.C. AT EA. BLOCKING ALONG BRACED WALL PANEL (2) 16d NAILS EA. SIDE FULL HEIGHT BLOCKING @ ADDITIONAL FRAMING 16" O.C. ALONG LENGTH OF MEMBER DIRECTLY BELOW

BRACED WALL PANEL

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BRACED WALL PANEL

-CONTINUOUS RIM OR BAND JOIST

8d NAILS @ 6" O.C. ALONG

BRACED WALL PANEL

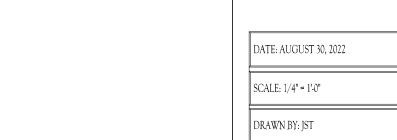
✓ BRACED WALL PANEL

-(3) 16d NAILS @ 16" O.C.

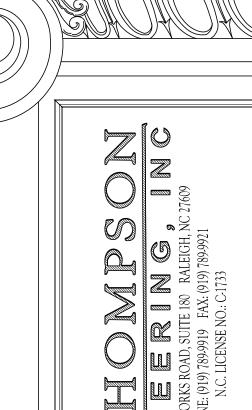
ALONG BRACED WALL PANEL

CONTINUOUS RIM w/ FINGER

JOISTS OR DBL. BAND JOIST



9/30/2024



ANI BRACING

ENGINEERED BY: JST

BRACED WALL NOTES AND DETAILS AND PF DETAIL