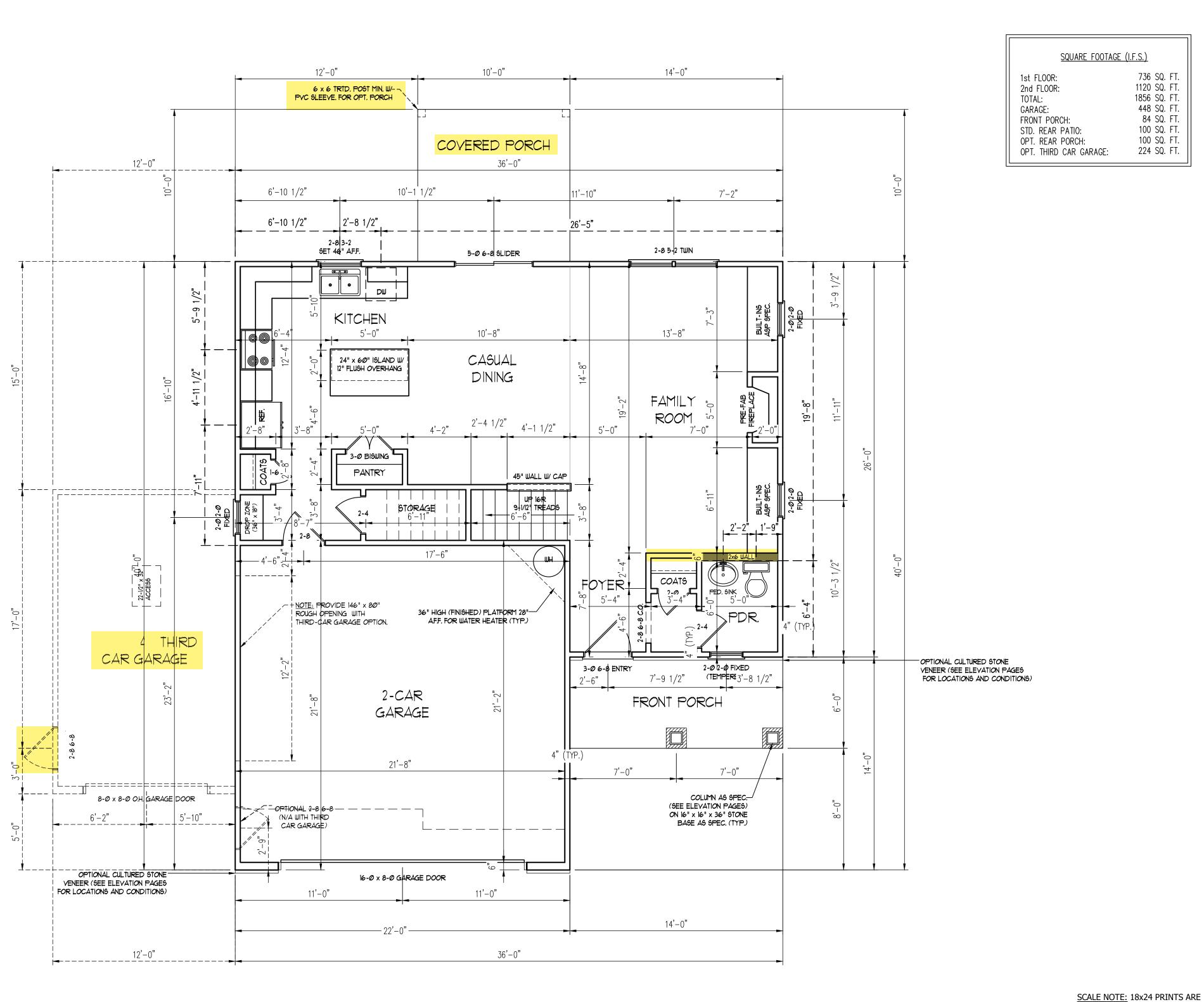
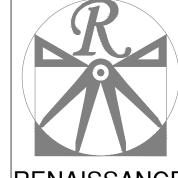


C:\Users\xbox\OneDrive\Projects\Westan-Weaver\Brinkley\Brinkley_10-24-22.dwg, 1/23/2023 8:35:59 PM



SQUARE FOOTAGE (I.F.S.)

736 SQ. FT. 1120 SQ. FT. 1856 SQ. FT. 448 SQ. FT. 84 SQ. FT. 100 SQ. FT. 100 SQ. FT. 224 SQ. FT. OPT. THIRD CAR GARAGE:



RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

ne art of transforming your vision into rea RENAISSANCE RESIDENTIAL DESIGN, INC.. ENAISSANCE HESIDEN I IAL DESIGN, IN RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE

PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY. RENAISSANCE RESIDENTIAL DESIGN, INC..
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DEBNISSANCE

WRITTEN CONSENT OF RENAISSANCE
RESIDENTIAL DESIGNS, INC.. NOR ARE
HEY TO BE ASSIGNED TO ANY THIRD
PARTY WITHOUT FIRST OBTAINING SAID
WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC
333 E.SIX FORKS RD. SUITE 180
RALEIGH, NC 27609
PHONE: (919) 780 0010



FAN HOMES LECTION WEAVER/ WEST, CAROLINA COLI BRINKLEY

DATE: OCTOBER 24, 2022

REV.:

SCALE: 1/4" = 1'-0" DRAWN BY: WG

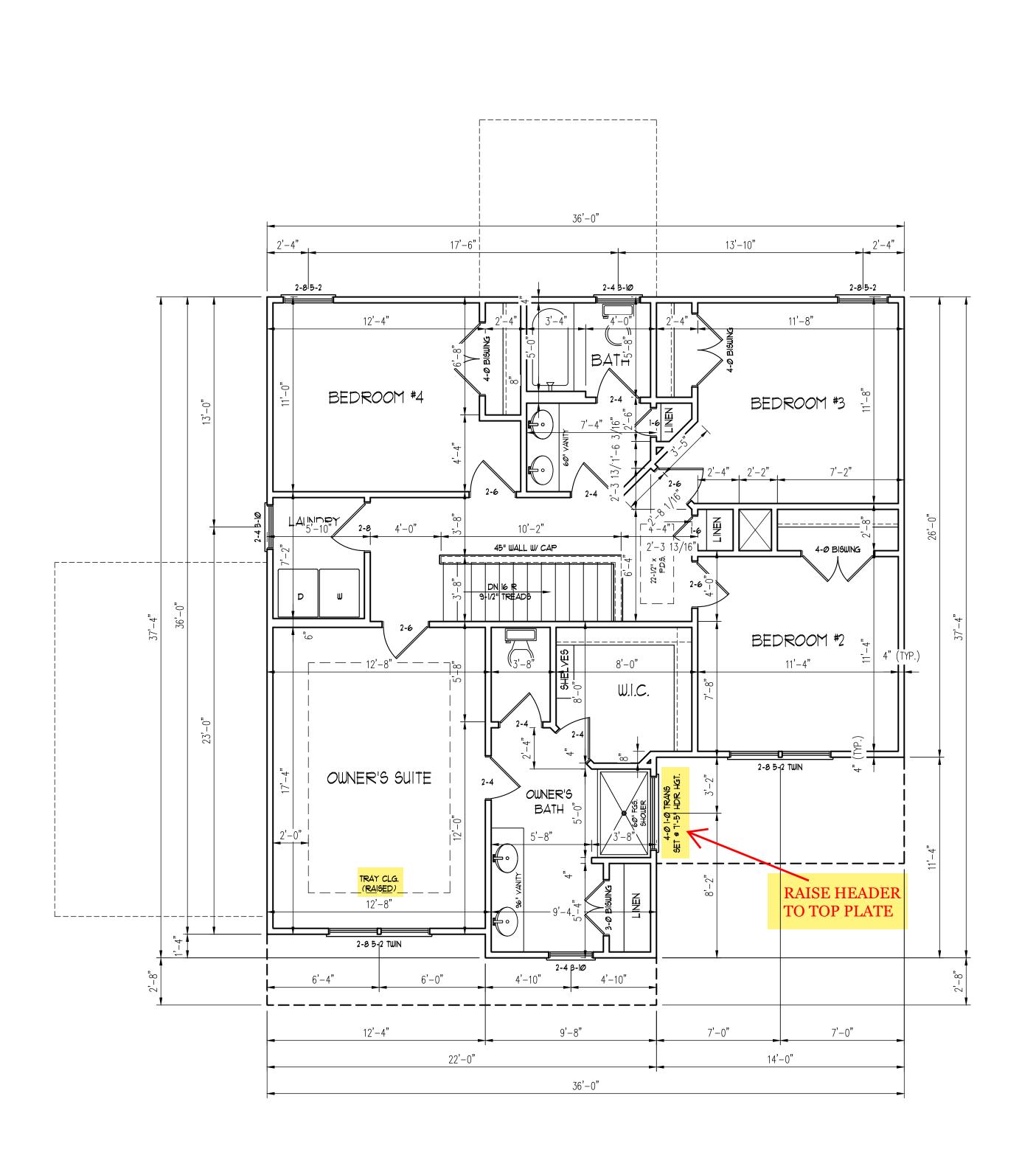
ENGINEERED BY: WFB

REVIEWED BY: MGS

FIRST FLOOR PLAN

A-4

TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE





RENAISSANCE

RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128

WWW.RRDCAROLINA.COM

The art of transforming your vision into reali

RENAISSANCE RESIDENTIAL DESIGN, INC..
RESERVES THE RIGHT TO MAKE
MODIFICATIONS TO FLOOR PLANS,
DIMENSIONS, MATERIALS, AND
SPECIFICATIONS WITHOUT NOTICE.
THESE DRAWNINGS ARE FOR THE
PURPOSE OF CONVEYING AN
ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC...
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF RENAISSANCE
RESIDENTIAL DESIGNS, INC... NOR ARE
THEY TO BE ASSIGNED TO ANY THIRD
PARTY WITHOUT FIRST OBTAINING SAID
WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC
333 E.SIX FORKS RD. SUITE 180
RALEICH, NC 27609
PHONE: (919) 789-9919
FAX: (919) 789-9911



WEAVER/ WESTAN HOMES CAROLINA COLLECTION BRINKLEY

DATE: OCTOBER 24, 2022

REV.:

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

DRAWN BY: WG

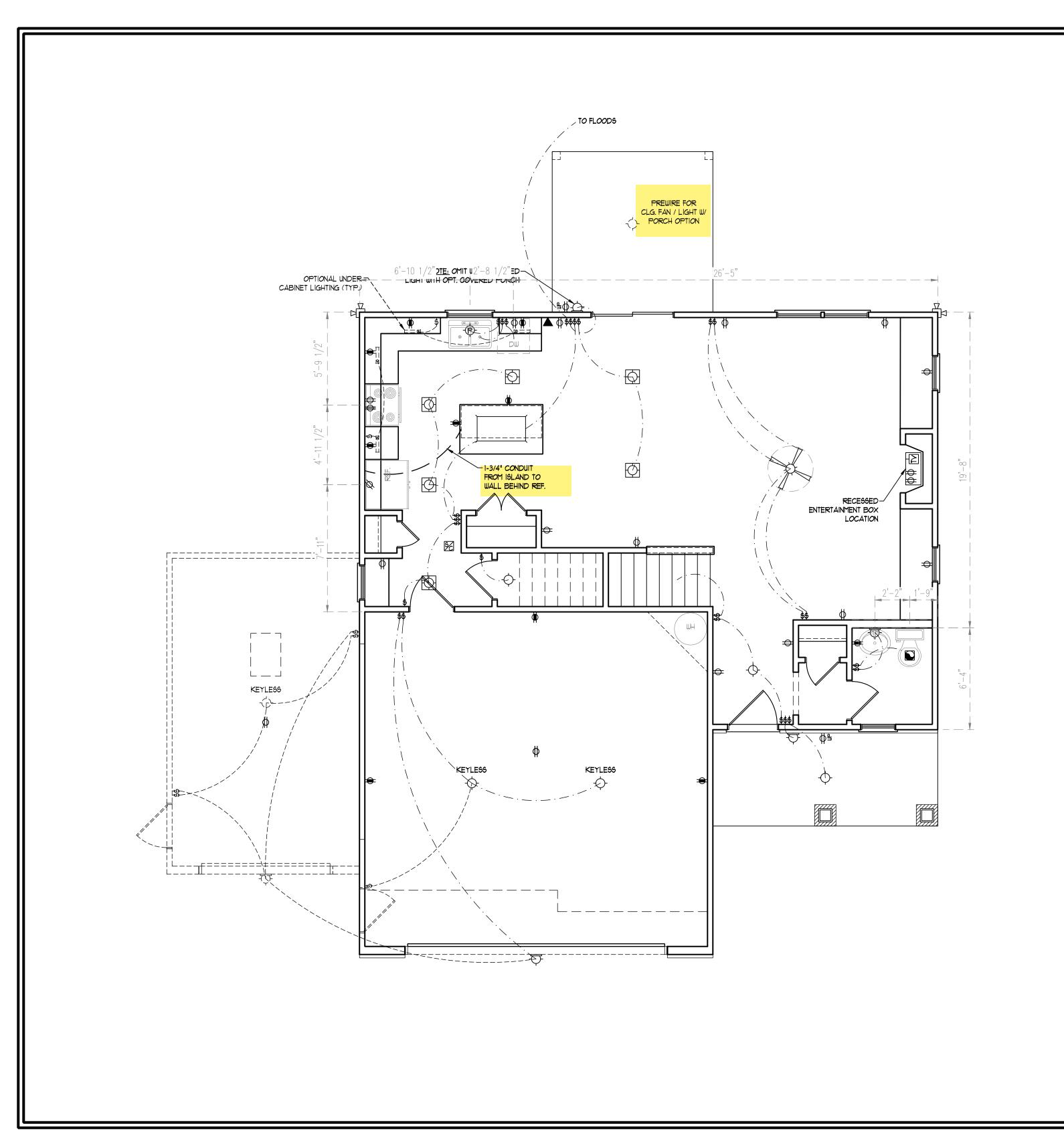
ENGINEERED BY: WFB

REVIEWED BY: MGS

SECOND FLOOR PLAN

A-5

SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE



ELECTRICAL LAYOUT NOTES:

1.) BLOCK AND WIRE FOR ALL CELING FANS PER PLAN.

2.) VANITY LIGHTS TO BE SET 90" AFF. (TYP.)

3.) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN.

4.) PLACE SWITCHES 8" (MIN.) FROM ROUGH OPENINGS.

ELECTRICAL LEGEND

→ IIØ ∨ OUTLET

→ 110 V GFI OUTLET

= 110 Y SWITCHED OUTLET

 $_{\mathrm{BB}}
eq _{\mathrm{IIO}} \vee \mathrm{BASEBOARD}$ OUTLET

4-PLEX

COUNTER OR FLOOR MOUNTED

COUNTER OR FLOOR MOUNTED 11/07 GFI

₩EATHERPROOF

⇒ 220 ∨ OUTLET

Ø 110 V DEDICATED CIRCUIT

220 Y DEDICATED CIRCUIT

PH SPECIAL PURPOSE (240 V, ETC.)

- WALL MOUNT LIGHT

-P- PENDANT LIGHT

RECESSED CAN LIGHT

MINI CAN LIGHT

EYEBALL LIGHT

FLUORESCENT LIGHT

undercabinet light

FLOOD LIGHT

SWITCH

DIMMER SWITCH

▲ TELEPHONE

△ DATA

TELEPHONE AND DATA

TV- TV CONNECTION

TV/ DATA

CD- CONDUIT FOR COMPONENT WIRING

SP SPEAKER

110 V SMOKE/ CM DETECTOR

6D 110 V SMOKE DETECTOR

EXHAUST FAN





SCALE NOTE: 18x24 PRINTS ARE

TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE



FIRST FLOOR ELECTRICAL PLAN

E-1



RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128

WWW.RRDCAROLINA.COM he art of transforming your vision into rea RENAISSANCE RESIDENTIAL DESIGN, INC..

ENAISSANCE HESIDEN I IAL DESIGN, IN:
RESERVES THE RIGHT TO MAKE
MODIFICATIONS TO FLOOR PLANS,
DIMENSIONS, MATERIALS, AND
SPECIFICATIONS WITHOUT NOTICE.
THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC...
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DEPAUSSANCE WRITTEN CONSENT OF RENAISSANCE
RESIDENTIAL DESIGNS, INC., NOR ARE
THEY TO BE ASSIGNED TO ANY THIRD
PARTY WITHOUT FIRST OBTAINING SAID
WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC 333 E.SIX FORKS RD. SUITE 180 RALEIGH, NC 27609



TAN HOMES
LECTION WEAVER/ V CAROLINA BRINKLEY

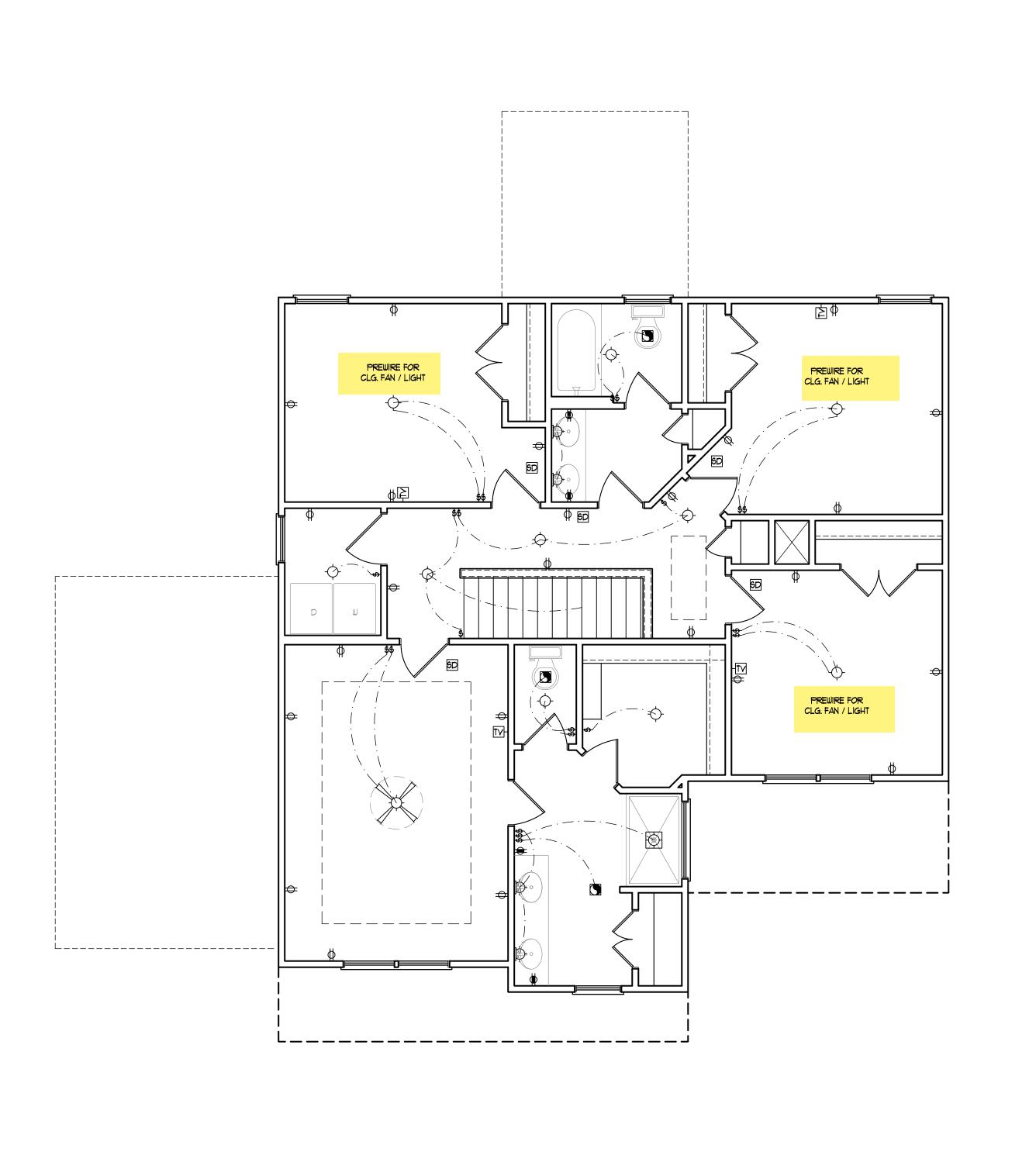
DATE: OCTOBER 24, 2022

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

DRAWN BY: WG

REVIEWED BY: MGS

 $C:\Users\x One Drive\Projects\Westan-Weaver\Brinkley\Brinkley_10-24-22.dwg,\ 1/23/2023\ 8:36:01\ PM$



ELECTRICAL LAYOUT NOTES:

1.) BLOCK AND WIRE FOR ALL CELING FANS PER PLAN.

2.) VANITY LIGHTS TO BE SET 90" A.F.F. (TYP.)

3.) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN.

4.) PLACE SWITCHES 8" (MIN.) FROM ROUGH OPENINGS.

ELECTRICAL LEGEND

 →
 IIØ ∨ OUTLET

€ 110 V GFI OUTLET

= 110 Y SWITCHED OUTLET

 $_{\mathrm{BB}}
eq _{\mathrm{IIO}} \vee \mathrm{BASEBOARD}$ OUTLET

4-PLEX

COUNTER OR FLOOR MOUNTED

COUNTER OR FLOOR MOUNTED 110V GF1

₩EATHERPROOF

⇒ 22Ø ∨ OUTLET

Ø 110 V DEDICATED CIRCUIT

220 V DEDICATED CIRCUIT

PH SPECIAL PURPOSE (240 V, ETC.)

- WALL MOUNT LIGHT

-P- PENDANT LIGHT

RECESSED CAN LIGHT

MINI CAN LIGHT

EYEBALL LIGHT

FLUORESCENT LIGHT

undercabinet light

FLOOD LIGHT

SWITCH

\$D DIMMER SWITCH

▲ TELEPHONE

△ DATA

TELEPHONE AND DATA

TV- TV CONNECTION

TV/ DATA

CD- CONDUIT FOR COMPONENT WIRING

SP SPEAKER

110 V SMOKE/ CO DETECTOR

5D 110 V SMOKE DETECTOR

EXHAUST FAN

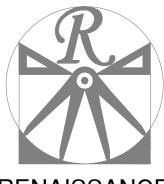


ALARM PANEL





SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE



RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

he art of transforming your vision into real RENAISSANCE RESIDENTIAL DESIGN, INC...
RESERVES THE RIGHT TO MAKE
MODIFICATIONS TO FLOOR PLANS,
DIMENSIONS, MATERIALS, AND
SPECIFICATIONS WITHOUT NOTICE.
THESE DRAWINGS ARE FOR THE
DEPOSE OF CONVEYING AND

PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY. RENAISSANCE RESIDENTIAL DESIGN, INC...
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DEPAUSSANCE WITHOUT FIRST DISTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGNS, INC., NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC 333 E.SIX FORKS RD. SUITE 180 RALEIGH, NC 27609



TAN HOMES LECTION

DATE: OCTOBER 24, 2022

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

DRAWN BY: WG

ENGINEERED BY: WFB REVIEWED BY: MGS

SECOND FLOOR ELCTRICAL PLAN

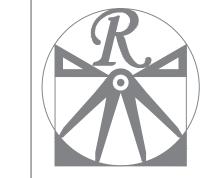
E-2

 $C:\Users\x One Drive\Projects\Westan-Weaver\Brinkley\Brinkley_10-24-22.dwg,\ 1/23/2023\ 8:36:02\ PM$

NOTES FOR LESS THAN

30' MEAN ROOF HEIGHT:

NOTES FOR LESS THAN



RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

ne art of transforming your vision into real

RENAISSANCE RESIDENTIAL DESIGN, INC.. ENAISSANCE RESIDENTIAL DESIGN, INF RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE

PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY. RENAISSANCE RESIDENTIAL DESIGN, INC. HENAISSANCE HESIDEN I JAL DESIGN, INC..
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DENAISSANCE

WRITTEN CONSENT OF RENAISSANCE
RESIDENTIAL DESIGNS, INC., NOR ARE
THEY TO BE ASSIGNED TO ANY THIRD
PARTY WITHOUT FIRST OBTAINING SAID
WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC 333 E. SIX FORKS RD. SUITE 180 RALEICH, NC 27609

WEST A COL

DATE: OCTOBER 24, 2022 REV.:

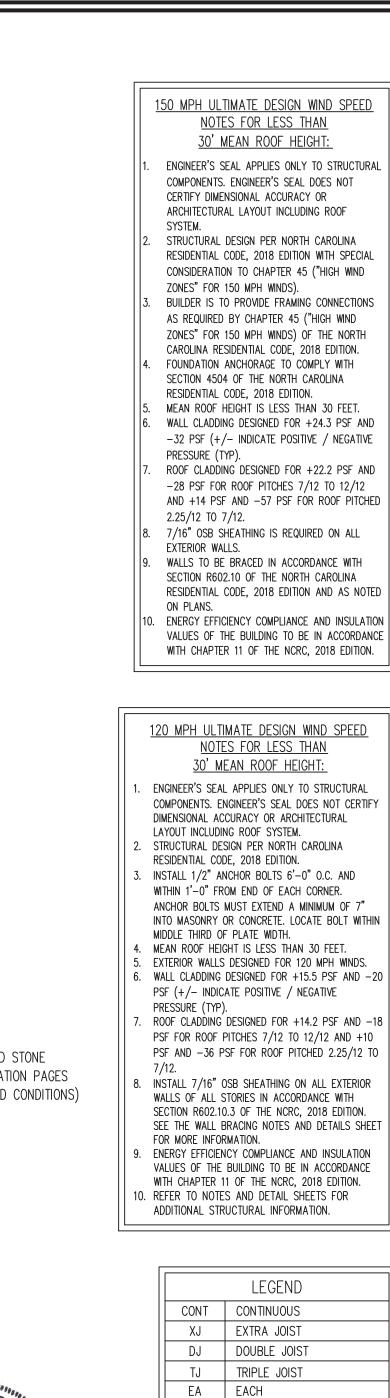
SCALE: 1/4" = 1'-0" DRAWN BY: WG

ENGINEERED BY: WFB

REVIEWED BY: MGS MONO SLAB

FOUNDATION PLAN

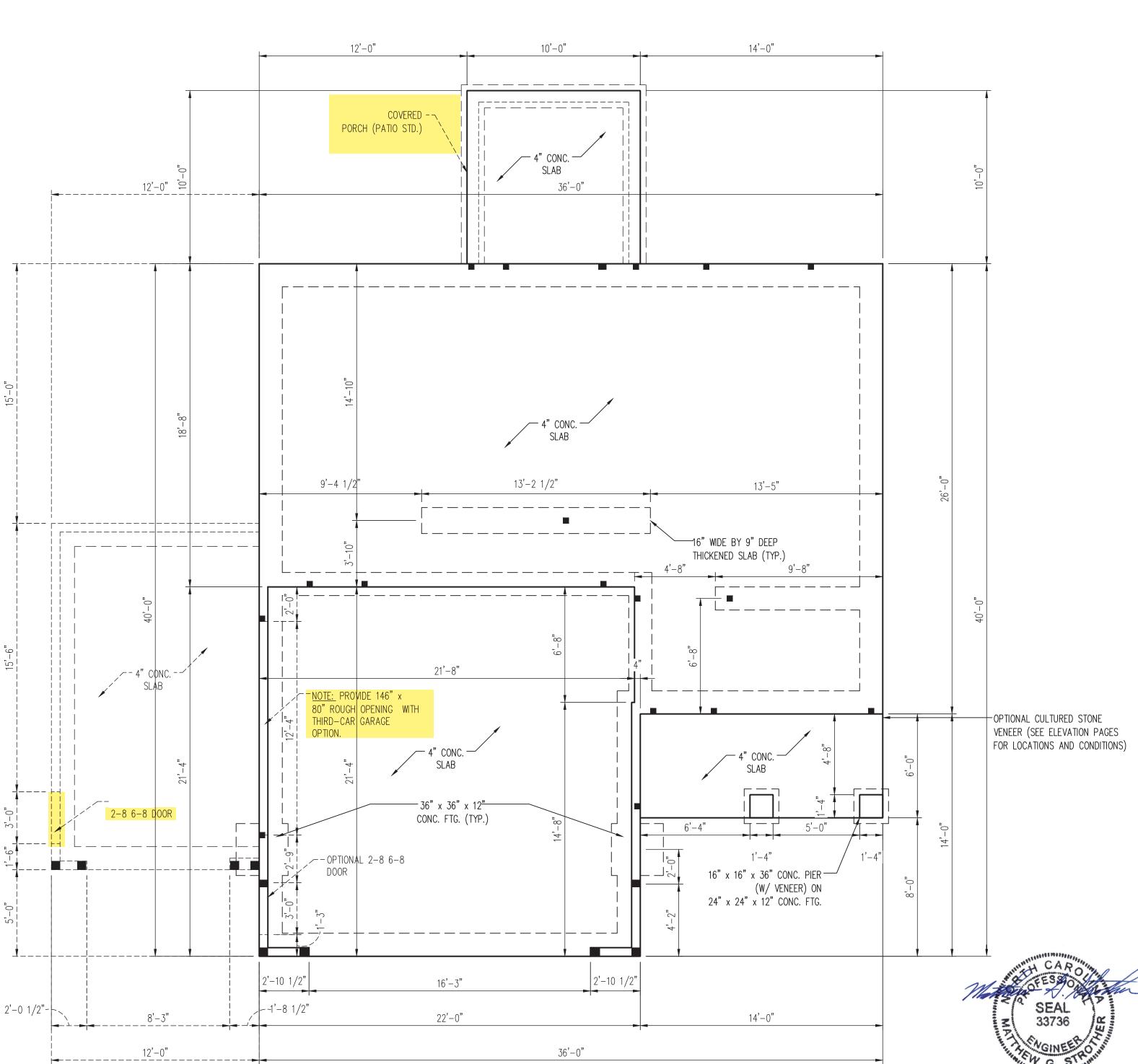
S-1a



1/24/2023

	LEGEND		
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		
TYP	TYPICAL		
UNO	UNLESS NOTED OTHERWISE		

SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE



RENAISSANCE

RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

RENAISSANCE RESIDENTIAL DESIGN, INC INAISSANCE HESIDEN I IAL DESIGN, IN RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN

ARCHITECTURAL CONCEPT ONLY

e art of transforming your vision into re

RENAISSANCE RESIDENTIAL DESIGN, INC HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRES WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGNS, INC.. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC 333 E.SIX FORKS RD. SUITE 180 RALEICH, NC 27609

ER

X WEST A COL WEAVER/ V CAROLINA BRINKLEY

DATE: OCTOBER 24, 2022

REV.: SCALE: 1/4" = 1'-0" DRAWN BY: WG

ENGINEERED BY: WFB REVIEWED BY: MGS

SECOND FLOOR FRAMING PLAN

S-2

BRACED WALL DESIGN NOTES:

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

STRUCTURAL NOTES:

- 1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- INSTALL 2 x 4 @ 16" O.C. BLOCKING BETWEEN ADJACENT TRUSSES UNDER WALLS PARALLEL TO FLOOR TRUSSES WHERE WALL LENGTH EXCEEDS 1/3 OF TRUSS SPAN (SEE DETAIL THIS SHEET). TRUSS DESIGNER TO DESIGN ADJACENT TRUSSES FOR ADDITIONAL LOADING FROM WALLS.
- 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. ALL SQUARES TO BE (2) STUDS (UNO.)
- 6. 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.
- 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.
- ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS w/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS AT TOP
- 9. FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB w/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS w/ 1/4" THROUGH BOLTS W/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.

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			

SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE

UNLESS NOTED OTHERWISE

LEGEND

CONTINUOUS

EXTRA TRUSS

ON CENTER

TYPICAL

SPRUCE PINE FIR

NUMBER OF STUDS

DOUBLE STUD POCKET

TRIPLE STUD POCKET

SOUTHERN YELLOW PINE

PRESSURE TREATED

EACH

CONT

ΧT

EΑ

DSP

TSP

OC

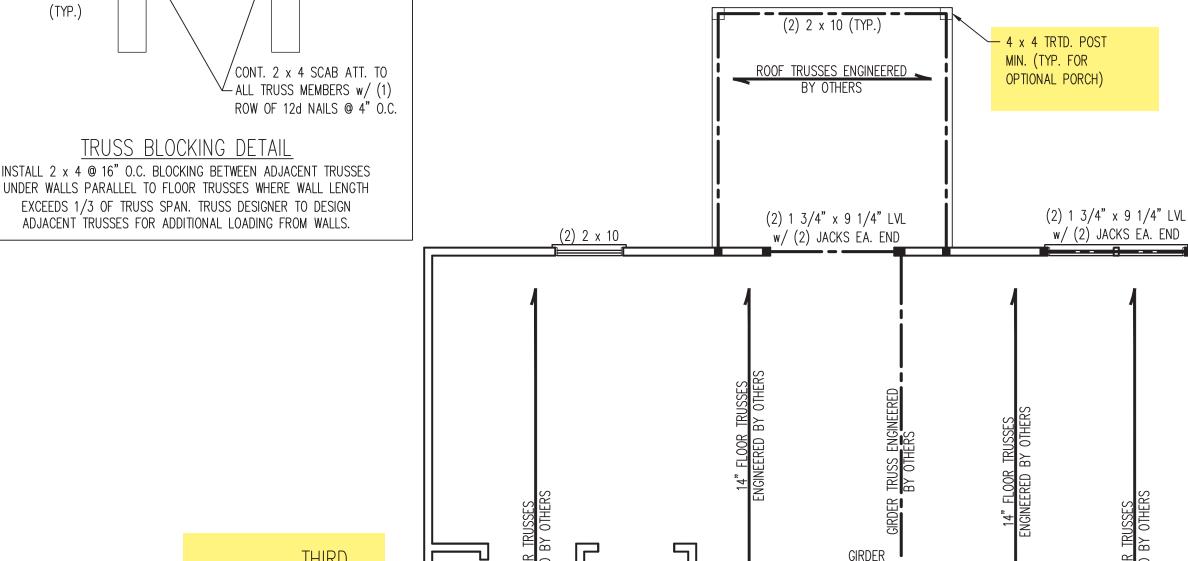
SPF

SYP

TRTD

TYP

UN0



GIRDER TRUSS ENG. CAR GARAGE BY OTHERS (2) 1 3/4" x 14" LVL FLUSH (2) 2 x 10

COVERED PORCH

+(5) 2 x 6 BUMPED INTO GARAGE w/ SIMPSON CS16 (3) 2 x 12 CONT. CORNER TO

COIL STRAPS @ 16" O.C. _CORNER w/ (2) 2 x 6 EA. BRG. PT. (4) 1 3/4" x 24" LVL. SET TOP FLUSH w/ TOP OF TRUSSES. SECURE PLIES w/(3) ROWS OF 6 3/4" SIMPSON SDW SCREWS (OR EQUAL) @ 16" O.C.

GARAGE PORTAL FRAME. SEE METHOD PF WALL

BRACING DETAIL

PARALLEL WALL

ABOVE

2 x 4 @ 16" O.C.

BLOCKING ATT. w/(2)12d TOE NAILS EA. END

FLOOR TRUSSES

AS SPECIFIED -

(TYP.)

(3) 1 3/4" x 11 7/8" LVL CONT. CORNER TO CORNER w/(2) 2 x 6 JACKS EA. BRG. PT.

> GARAGE PORTAL FRAME, SEE METHOD PF WALL BRACING DETAIL

ROOF TRUSSES ENGINEERED BY OTHERS

INCORPORATE SECOND FLOOR SEAL 33736

4 x 4 TRTD. POST—

MIN. (TYP.)

(2) 2 x 10 (TYP.)

 $\sqrt{(5)}$ 2 x 6 BUMPED

INTO GARAGE w/ SIMPSON CS16 COIL

STRAPS @ 16" O.C.

BUMP OUT INTO ROOF

TRUSSES ENG. BY OTHERS.

1/24/2023

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

RENAISSANCE

he art of transforming your vision into real

RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

RENAISSANCE RESIDENTIAL DESIGN, INC.. ENAISANCE HESIGN IT LESIGN, IN RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN

ARCHITECTURAL CONCEPT ONLY. RENAISSANCE RESIDENTIAL DESIGN, INC. HENAISSANCE HESIDEN IAL DESIGN, INC..
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DEPAISSANCE WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGNS, INC.. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

> IOMPSON EERING, INC ORKS RD. SUITE 180 IGH. NC 27600 J.S. TH ENGINE 333 E.SIX FOR RALEIG PHONE:

H 田

DATE: OCTOBER 24, 2022

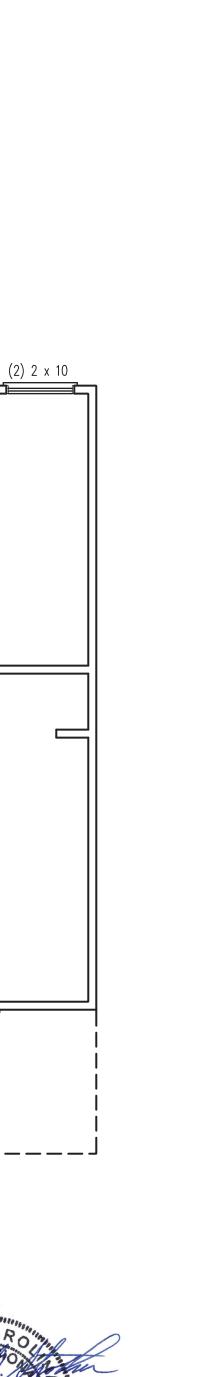
SCALE: 1/4" = 1'-0" DRAWN BY: WG

ENGINEERED BY: WFB

REVIEWED BY: MGS

ATTIC FLOOR FRAMING PLAN

S-3



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.
- 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.
- 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

STRUCTURAL NOTES:

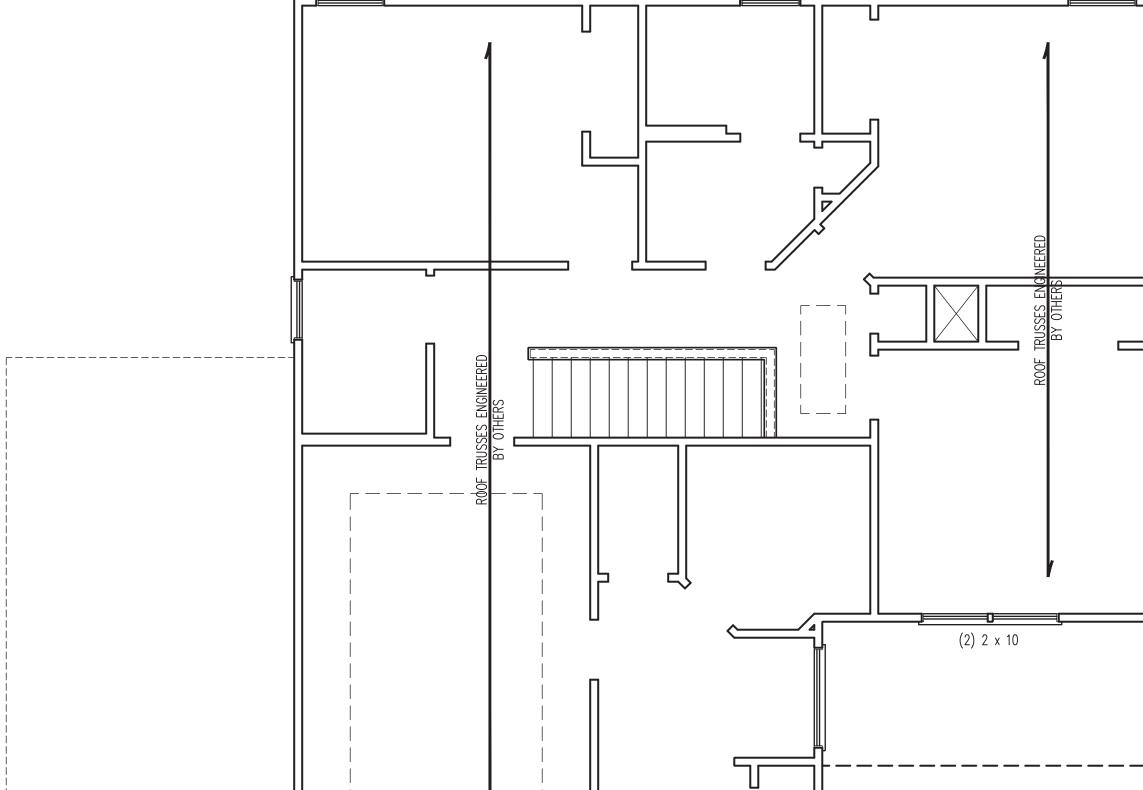
- 1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
- 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/(1)JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
- 4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL 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 SILL PLATES THEIR FULL DEPTH.
- 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		
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		

SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE

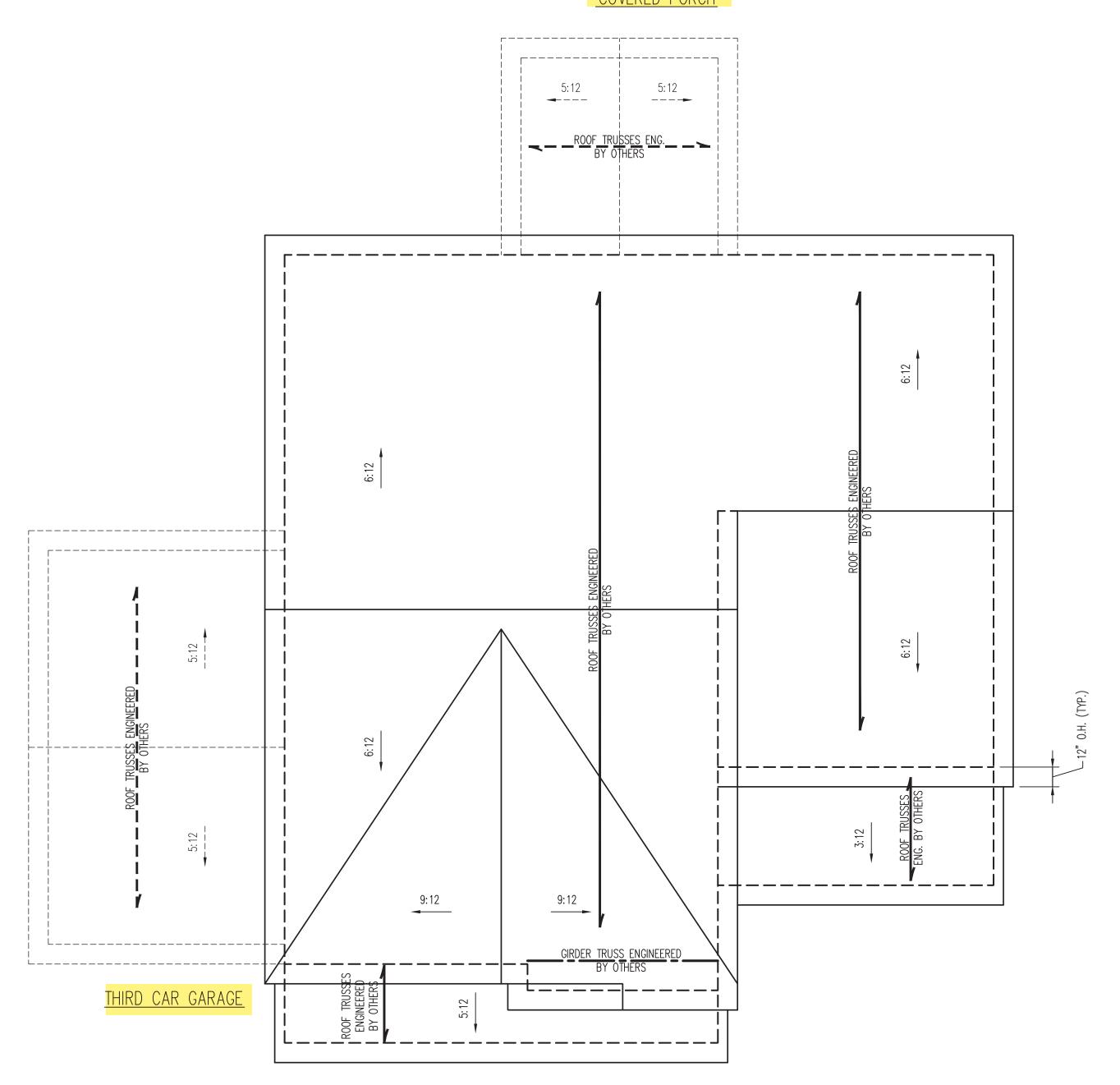


(2) 2 x 10 w/ (2) JACKS EA. END

(2) 2 x 10

(2) 2 x 10

COVERED PORCH



STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE #2 SPF (UNO).
- CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF SUPPORT.
- FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS.
- HIP SPLICES ARE TO BE SPACED A MIN. OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS @ 16" O.C. (TYP.)
- 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.
- FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. 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.
- 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		
DR	DOUBLE RAFTER		
TR	TRIPLE RAFTER		
RS	RAFTER SUPPORT		
CONT	CONTINUOUS		
EA	EACH		
OC	ON CENTER		
SPF	SPRUCE PINE FIR		
SYP	SOUTHERN YELLOW PINE		
TYP	TYPICAL		
UNO	UNLESS NOTED OTHERWISE		



RESIDENTIAL DESIGN, INC. WILMINGTON, NC (919) 649-4128 WWW.RRDCAROLINA.COM

he art of transforming your vision into real RENAISSANCE RESIDENTIAL DESIGN, INC...
RESERVES THE RIGHT TO MAKE
MODIFICATIONS TO FLOOR PLANS,
DIMENSIONS, MATERIALS, AND
SPECIFICATIONS WITHOUT NOTICE.
THESE DRAWINGS ARE FOR THE
PURPOSE OF CONVEYING AN

PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC...
HEREBY EXPRESSLY RESERVES ITS
COMMON LAW COPYRIGHT AND OTHER
PROPERTY RIGHTS IN THESE PLANS.
THESE PLANS AND DRAWINGS ARE NOT
TO BE REPRODUCED, CHANGED, OR
COPIED IN ANY FORM OR MANNER
WITHOUT FIRST OBTAINING THE EXPRESS
WRITTEN CONSENT OF DEPAUSSANCE WITHOUT FIRST DISTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGNS, INC., NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC 333 E.SIX FORKS RD. SUITE 180 RALEICH, NC 27609 PHONE. (919) 789-9919



DATE: OCTOBER 24, 2022

REV.:

SCALE: 1/4" = 1'-0" DRAWN BY: WG

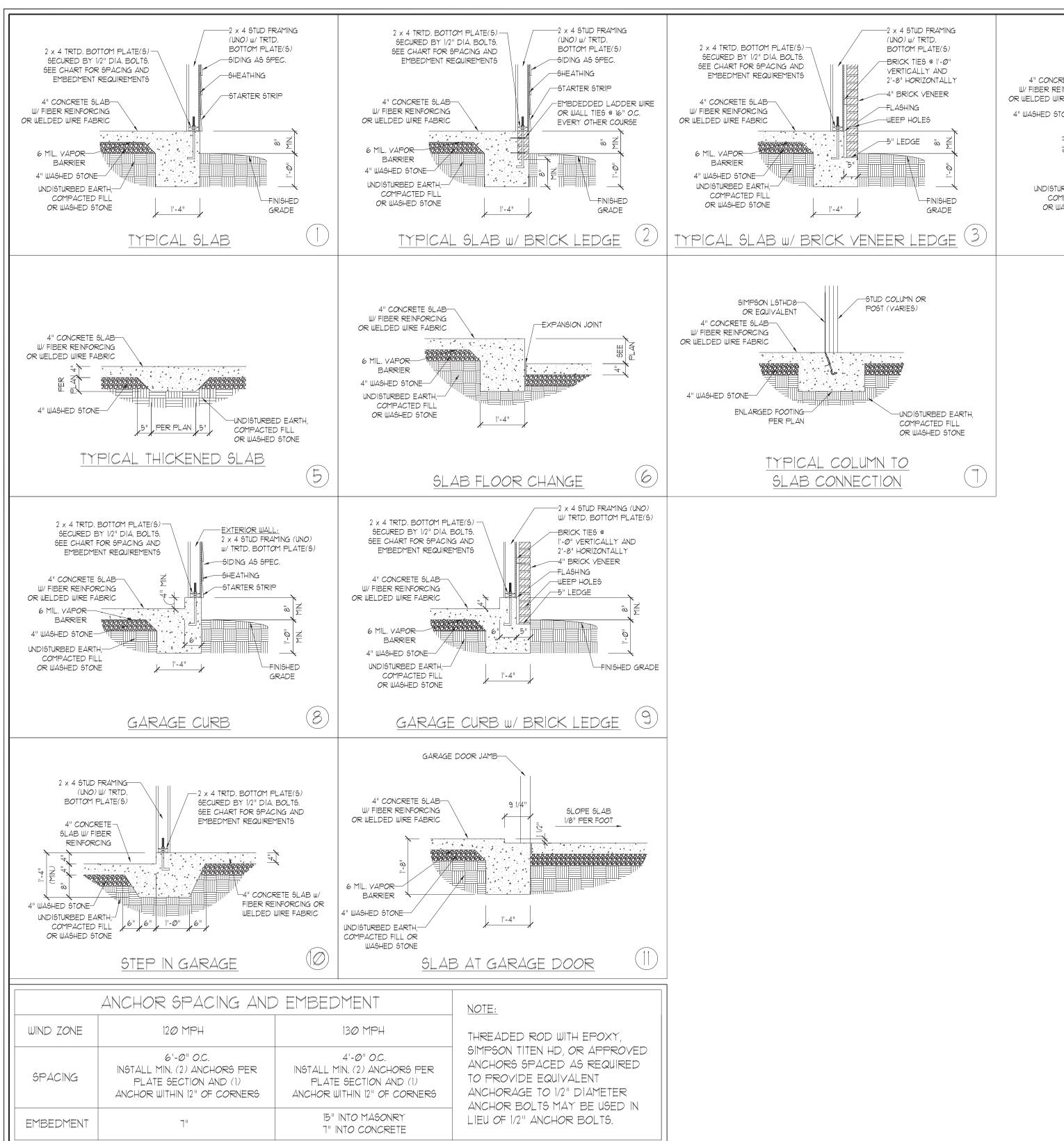
ENGINEERED BY: WFB

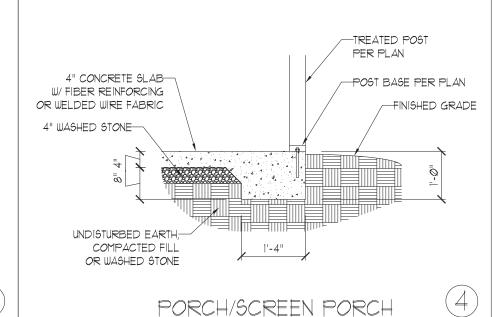
REVIEWED BY: MGS

ROOF PLAN

SCALE NOTE: 18x24 PRINTS ARE TO SCALE AS NOTED. 11x17 PRINTS ARE NOT TO SCALE

1/24/2023







MONOLITHIC SLAB FOUNDATION DETAILS



This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

DATE: AUGUST 30, 2022 SCALE: NTS

DRAWN BY: JST

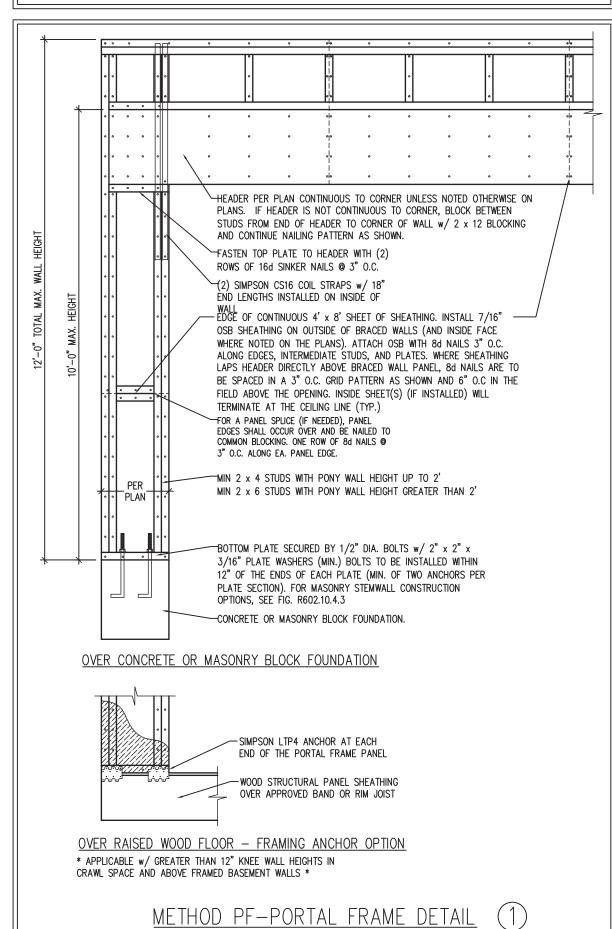
ENGINEERED BY: JST

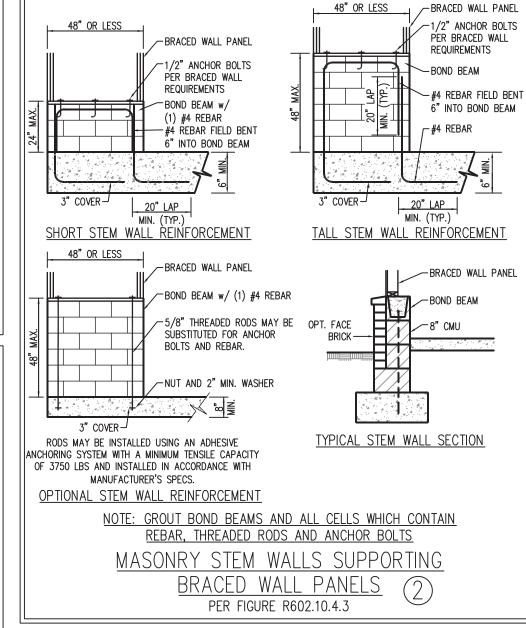
FOUNDATION DETAILS

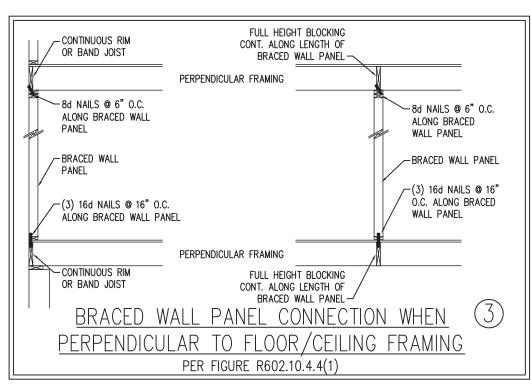
GENERAL WALL BRACING NOTES:

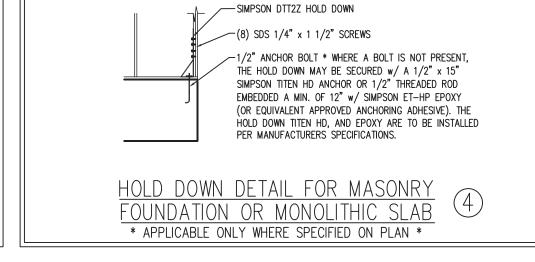
- I. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
- . SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED. . BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES 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.
- I. 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. 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 . 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.). B. 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
- R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY . REQUIRÈÓ 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 CONTRIBUTES 1.5 TIMES ITS ACTUAL LENGTH.

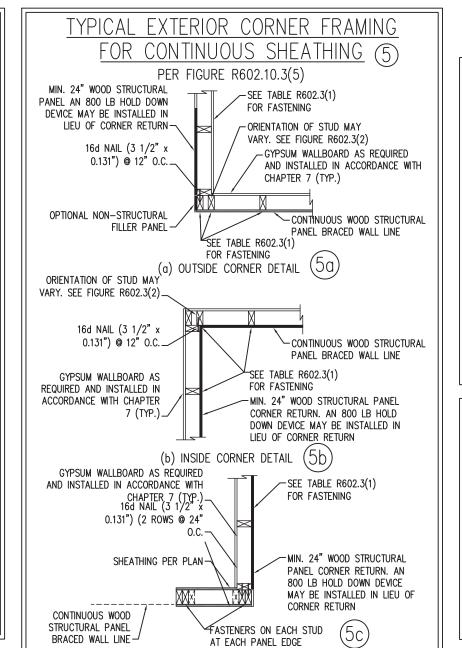
PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R702.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE











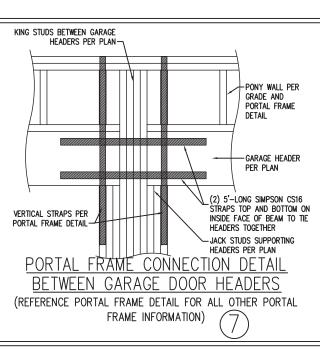
(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL

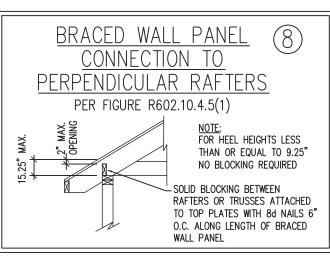
STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)

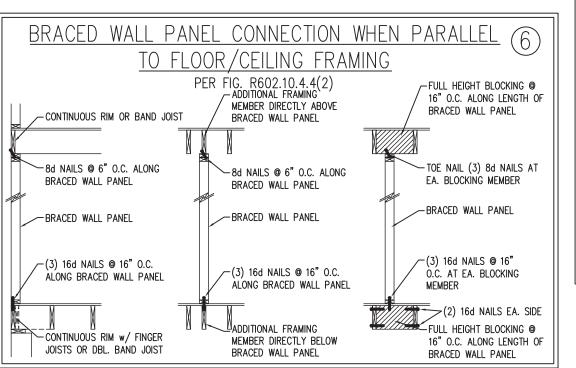
This sealed page is to be used in conjunction with a full plan set engineered by J.S.

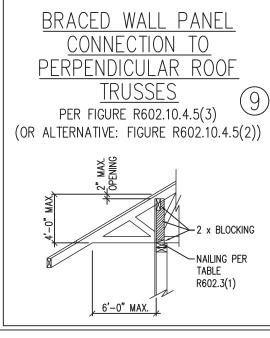
Thompson Engineering, Inc. only. Use of this individual sealed page within

rchitectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23









DATE: AUGUST 30, 2022 SCALE: 1/4" = 1'-0" DRAWN BY: IST ENGINEERED BY: JST

> BRACED WALL NOTES AND DETAILS AND PF DETAIL

1/24/2023

DETAILS AND BRACING NOTES

GENERAL NOTES

- 1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES. SEQUENCES OR PROCEDURES. OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAILS/GUARDRAILS	200	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R301.2	2(4) WIND ZONE AND EXPOSURE)	
GROUND SNOW LOAD: Pg	20 (PSF)		

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
- 4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.
- 5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

- 1. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- 2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" - 1" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- 6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- 7. THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- 8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC. 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).



This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

FRAMING NOTES

- 1. ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 975 PSI, Fv =175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E =1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

W AND WT SHAPES:

ASTM A992 ASTM A36 CHANNELS AND ANGLES: PLATES AND BARS: ASTM A36

HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B

STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S

4. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):

A. WOOD FRAMING (2) 1/2" DIA. x 4" LONG LAG SCREWS B. CONCRETE (2) 1/2" DIA. x 4" WEDGE ANCHORS

C. MASONRY (FULLY GROUTED) (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS D. STEEL PIPE COLUMN (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ 16" O.C.

- 5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- 6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 7. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- 9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE FNGINFER OF RECORD PRIOR TO INSTALLATION.
- 10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- 11. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- 12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (U.N.O). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCRC, 2018 EDITION.
- 13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- 14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- 15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTS12 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CS16 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

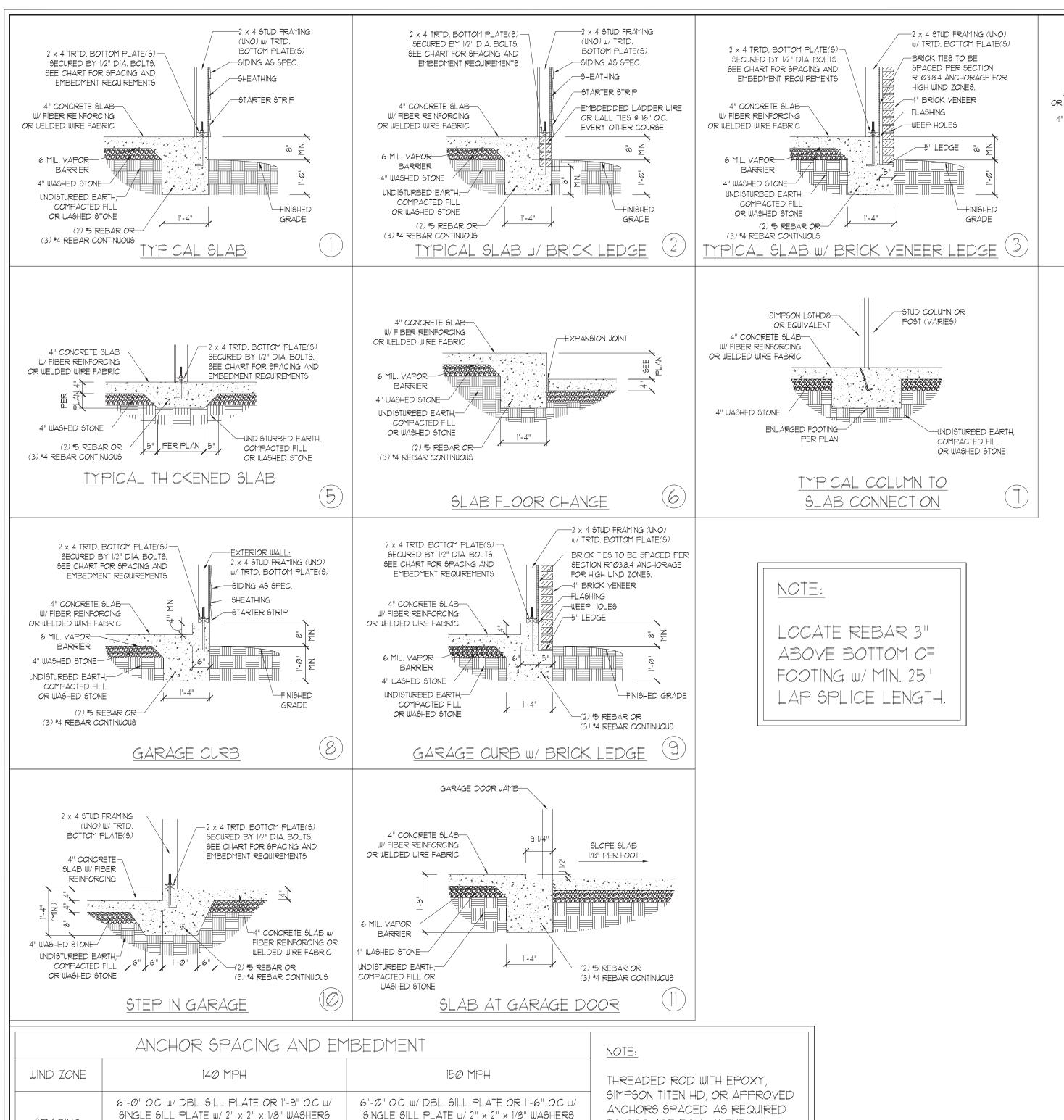
NOTES STRUCTURAL STANDARD

DATE: AUGUST 30, 2022

DRAWN BY: JST

ENGINEERED BY: IST

STRUCTURAL NOTES



INSTALL MIN. (2) ANCHORS PER PLATE SECTION

AND (1) ANCHOR WITHIN 12" OF CORNERS

TO PROVIDE EQUIVALENT

LIEU OF 1/2" ANCHOR BOLTS.

ANCHORAGE TO 1/2" DIAMETER

ANCHOR BOLTS MAY BE USED IN

SPACING

EMBEDMENT

INSTALL MIN. (2) ANCHORS PER PLATE SECTION

AND (1) ANCHOR WITHIN 12" OF CORNERS

4" CONCRETE SLAB
W/ FIBER REINFORCING
OR WELDED WIRE FABRIC

4" WASHED STONE

UNDISTURBED EARTH
COMPACTED FILL
OR WASHED STONE

PORCH/SCREEN PORCH

TREATED POST
PER PLAN

POST BASE PER PLAN

FINISHED GRADE

(2) #5 REBAR OR
(3) #4 REBAR CONTINUOUS

MPH - 150 MPH ULTIMATE DESIGN WIND SPEED MONOLITHIC SLAB FOUNDATION DETAILS

DATE: AUGUST 30, 2022 SCALE: NTS

40

DRAWN BY: JST

ENGINEERED BY: JST

ENGINEERED BY: JS1

FOUNDATION DETAILS

This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

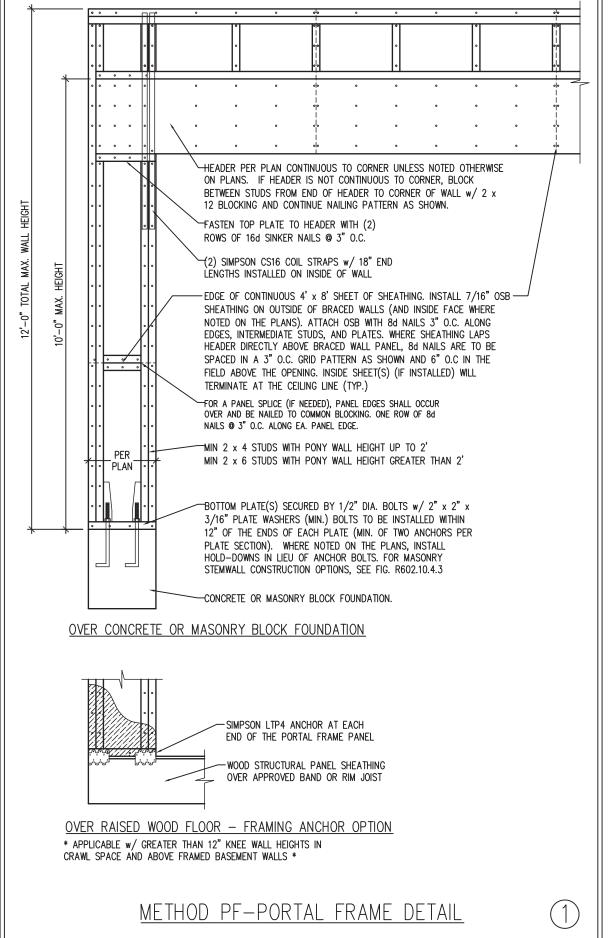
CARO ...

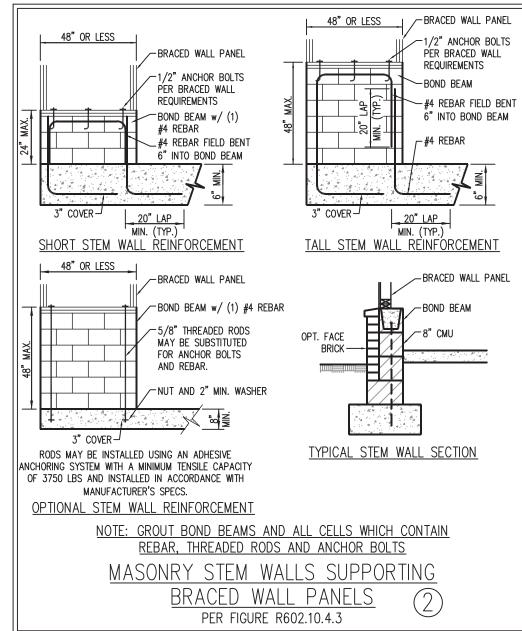
SEAL

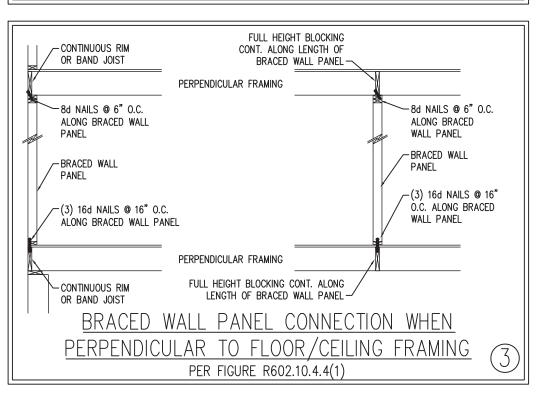
1/24/2023

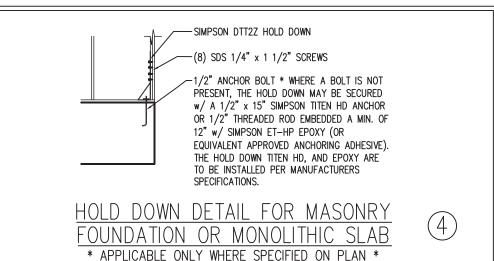
GENERAL WALL BRACING NOTES:

- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 AND CHAPTER 45 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.
- SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, AND ANY SPECIAL NOTES OR REQUIREMENTS.
- 4. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH 7/16" OSB WITH BLOCKING AT ALL SHEATHING JOINTS AND 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD UNLESS NOTED OTHERWISE.
- SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BAND 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 SILL PLATES THEIR FULL DEPTH.
- 6. ALL EXTERIOR WALLS TO BE SHEATHED ON INSIDE FACE WITH 1/2" GYPSUM BOARD PER TABLE R702.3.5 (UNO)









TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING PER FIGURE R602.10.3(5) MIN. 24" WOOD STRUCTURAL -SEE TABLE R602.3(1) PANEL AN 800 LB HOLD DOWN FOR FASTENING DEVICE MAY BE INSTALLED IN -ORIENTATION OF STUD MAY LIEU OF CORNER RETURN VARY. SEE FIGURE R602.3(2) 16d NAIL (3 1/2" x -GYPSUM WALLBOARD AS REQUIRED 0.131") @ 12" 0.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 (5a) ORIENTATION OF STUD MAY VARY. SEE FIGURE R602.3(2). 16d NAIL (3 1/2" x 0.131") @ 12" 0.C._ CONTINUOUS WOOD STRUCTURAL PANEL BRACED WALL LINE SEE TABLE R602.3(1) FOR FASTENING GYPSUM WALLBOARD AS 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 AND INSTALLED IN ACCORDANCE WITH SEE TABLE R602.3(1) FOR FASTENING CHAPTER 7 (TYP.)
16d NAIL (3 1/2") 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 FASTENERS ON EACH STUD AT EACH PANEL EDGE STRUCTURAL PANEL BRACED WALL LINE -

(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL

STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)

VERTICAL STRAPS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS PER PLAN

VERTICAL STRAPS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS TOP AND BOTTOM ON INSIDE FACE OF BEAM TO TIE HEADERS TOP AND T

BRACED WALL PANEL

CONNECTION TO

PERPENDICULAR RAFTERS

PER FIGURE R602.10.4.5(1)

NOTE:
FOR HEEL HEIGHTS LESS
THAN OR EQUAL TO 9.25"
NO BLOCKING REQUIRED

SOLID BLOCKING BETWEEN
RAFTERS OR TRUSSES ATTACHED
TO TOP PLATES WITH 8d NAILS 6"
O.C. ALONG LENGTH OF BRACED
WALL PANEL

BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING PER FIG. R602.10.4.4(2) FULL HEIGHT BLOCKING @ 16" O.C. ALONG LENGTH OF - ADDITIONAL FRAMING MEMBER DIRECTLY CONTINUOUS RIM OR BAND JOIST ABOVE BRACED WALL PANEL BRACED WALL PANEL 8d NAILS @ 6" O.C. ALONG TOE NAIL (3) 8d NAILS AT -8d NAILS @ 6" O.C. ALONG BRACED WALL PANEL EA. BLOCKING MEMBER BRACED WALL PANEL BRACED WALL PANEL -BRACED WALL PANEL BRACED WALL PANEL -(3) 16d NAILS @ 16" √(3) 16d NAILS @ 16" O.C. O.C. AT EA. BLOCKING ALONG BRACED WALL PANEL ALONG BRACED WALL PANEL (2) 16d NAILS EA. SIDE -MADDITIONAL FRAMING MEMBER DIRECTLY BELOW FULL HEIGHT BLOCKING @ -CONTINUOUS RIM w/ FINGER BRACED WALL PANEL 16" O.C. ALONG LENGTH OF JOISTS OR DBL. BAND JOIST BRACED WALL PANEL

BRACED WALL PANEL
CONNECTION TO
PERPENDICULAR ROOF
TRUSSES
PER FIGURE R602.10.4.5(3)
(OR ALTERNATIVE: FIGURE R602.10.4.5(2))

2 x BLOCKING
NAILING PER
TABLE
R602.3(1)
9

This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23



DESIGN WIND SPEED

S AND DETAILS

S AND DETAILS

PHONE

MPH ULTIMATE I BRACING NOTES

DATE: AUGUST 30, 2022 SCALE: NTS

140

DRAWN BY: JST
ENGINEERED BY: JST

D-2
BRACED WALL
NOTES AND DETAILS
AND PF DETAIL

GENERAL NOTES

- 1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES. SEQUENCES OR PROCEDURES. OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 R301.7)

LOAD (PSF) DEAD LO	DAD (PSF) DEFL	LECTION (IN)
10	L/2 [,]	40 (L/360 w/ BRITTLE FINISHES)
10	L/36	60
(BASED ON TABLE R301.2(4) WIND ZONE AND EXPOSURE)		
PSF)		
	10 10 10 10 10 10 10 10	10 L/2- 10 L/3-

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
- 4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.
- 5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

- 1. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- 2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" - 1" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- 6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- 7. THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- 8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC. 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).



This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

FRAMING NOTES

- 1. ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 975 PSI, Fv =175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E =1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

W AND WT SHAPES:

ASTM A992 ASTM A36 CHANNELS AND ANGLES: PLATES AND BARS: ASTM A36

HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B

STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S

4. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):

A. WOOD FRAMING (2) 1/2" DIA. x 4" LONG LAG SCREWS B. CONCRETE (2) 1/2" DIA. x 4" WEDGE ANCHORS

C. MASONRY (FULLY GROUTED) (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS D. STEEL PIPE COLUMN (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ 16" O.C.

- 5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- 6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 7. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- 9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE FNGINFER OF RECORD PRIOR TO INSTALLATION.
- 10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- 11. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- 12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (U.N.O). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCRC, 2018 EDITION.
- 13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- 14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- 15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTS12 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CS16 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

NOTES STRUCTURAL STANDARD

DATE: AUGUST 30, 2022

DRAWN BY: JST

ENGINEERED BY: IST

STRUCTURAL NOTES