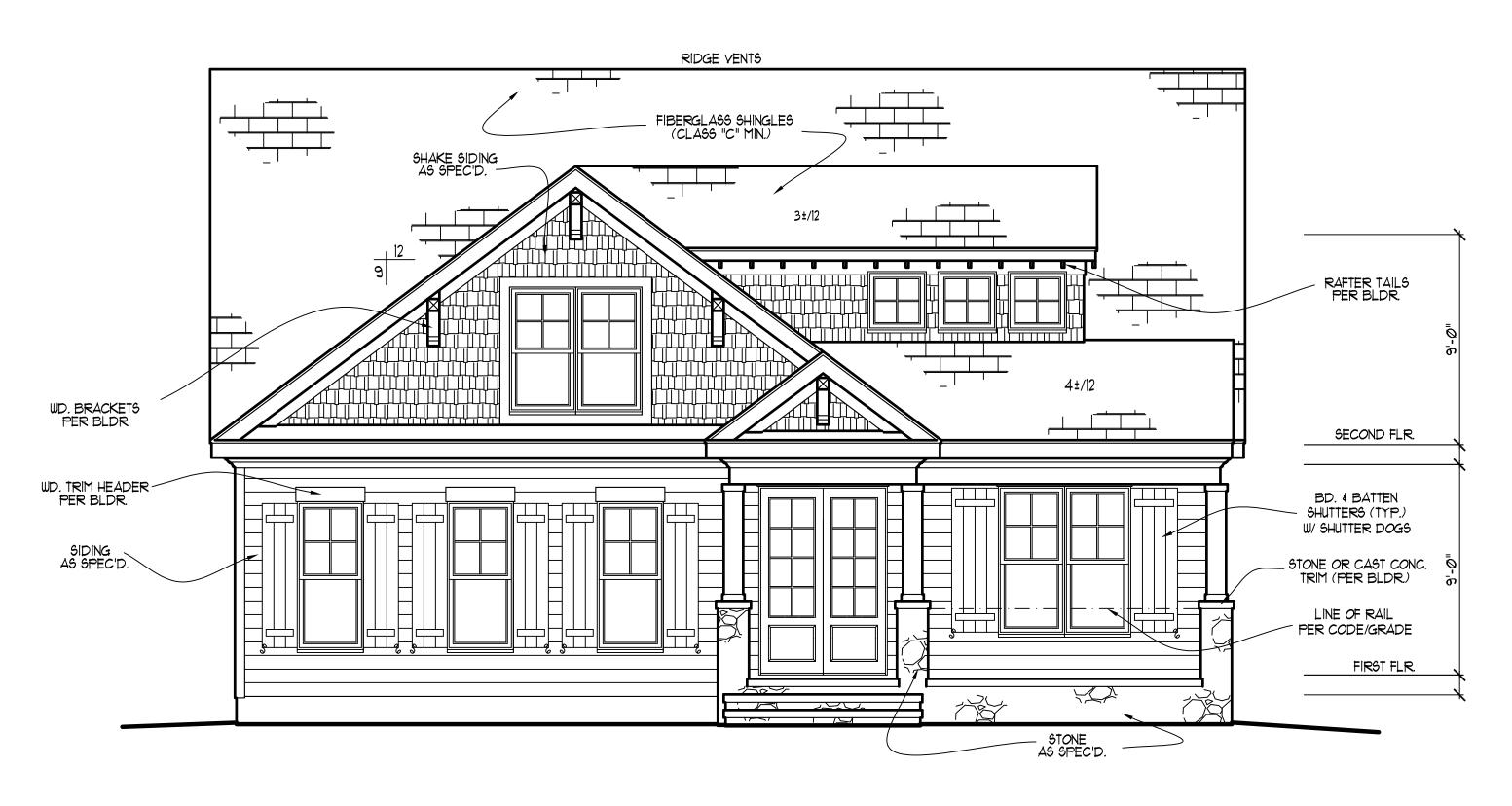


## REAR ELEVATION



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### ATTIC VENTILATION

```
2605 = 8.68 sq. ft. REQD.
300
          BASE, / VENTS =
          BASE, / VENTS =
* (76') - RIDGE VENT @ 9 sq.in./ft. = 4.75 SQ. FT.
                 TOTAL' = 4.75 SQ. FT.
```

\*\* PROVIDE CONTINUOUS SOFFIT VENT SUUROUND TO EQUAL OR EXCEED 4.34 SQ. FT. \*\*\* (OPT.) PROVIDE THEMOSTATICALLY CONTROLLED POWER VENT TO EQUAL OR EXCEED 4.34 SQ. FT.

### CODE INFORMATION

```
* ZONE: (CHECK ONE)
   ZONE 7
    ZONE 8
    ZONE
* GLAZING U-FACTOR
* R-VALUES
    CEILING
   FLOOR
    BSMNT, WALL
    SLAB PERIMETER
    CRAWL SPACE WALL
MEAN ROOF HEIGHT 19'-10"
WALL AND ROOF CLADDING DESIGN VALUE:
(MEAN ROOF HGT. 30 ft. OR LESS)
   CRAWL SPACE WALL
                             +18.0, -24.1
   ROOF PITCH 0/12 TO 2.25/12 +10.0, -45.4
ROOF PITCH 2.25/12 TO 7/12 +10.4, -34.8
    ROOF PITCH 7/12 TO 12/12 +16.5,-21.0
```

EXPOSURE ADJUSTMENT

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MURPHY GARNOW DESIGN GROUP

FAX; (919) 481-

DRAWN BY: TWG

FILE NAME: **HH-2-2735** REVISIONS

3-2-20 TWG PLAN

6-20-22 TWG PLAN

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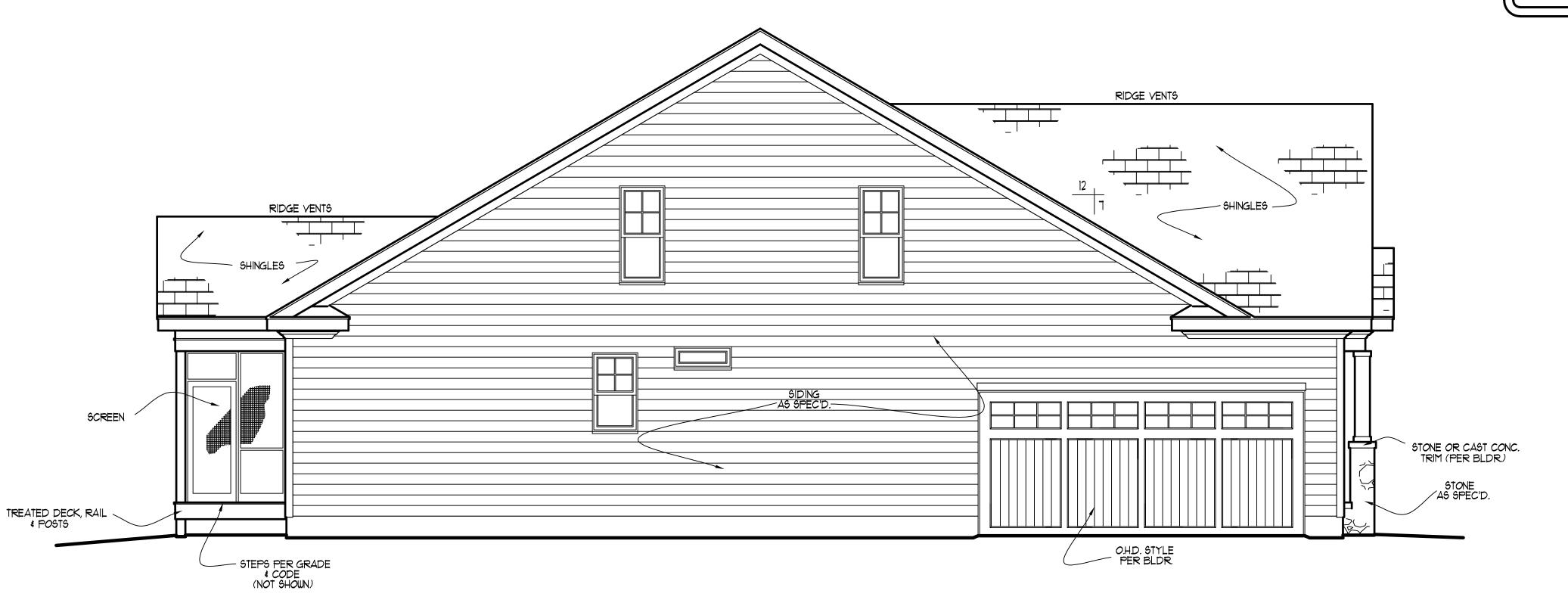
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HOUSE NUMBER:

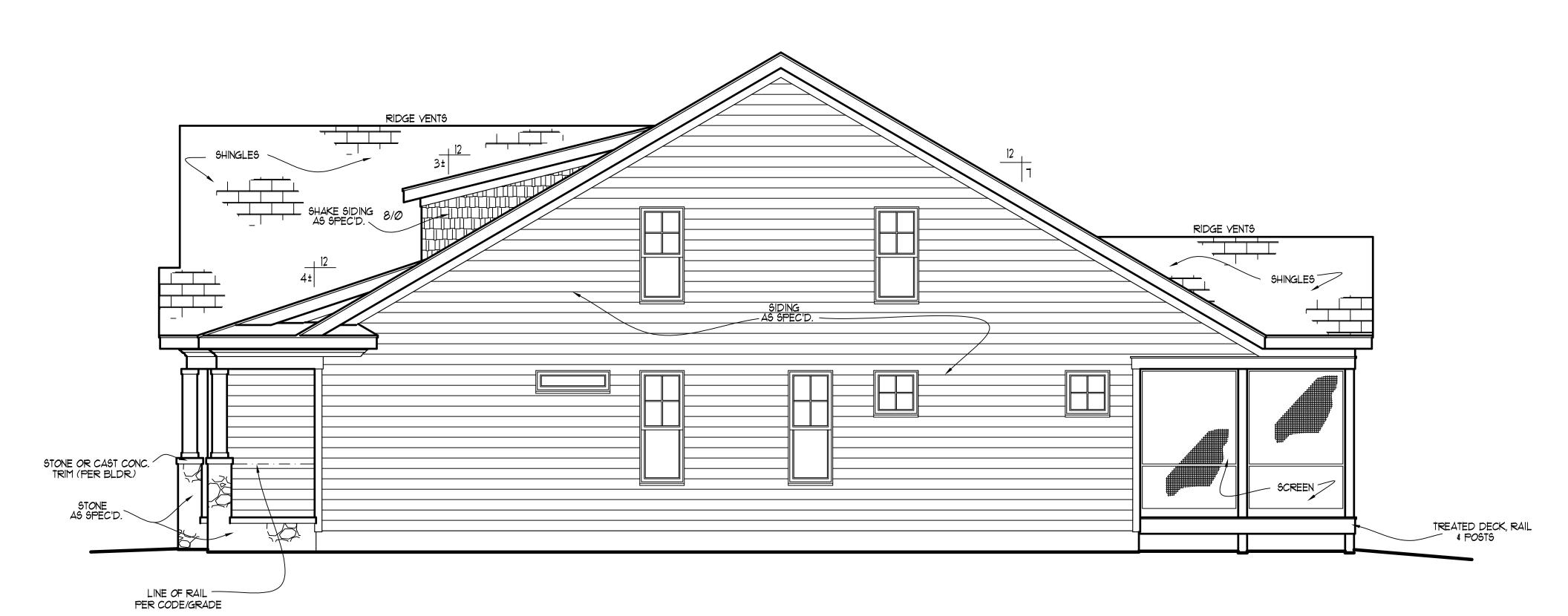
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THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE '2015' AND THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.

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## LEFT ELEVATION SCALE: -----1/4" = 1'-0"



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

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE '2015' AND THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.

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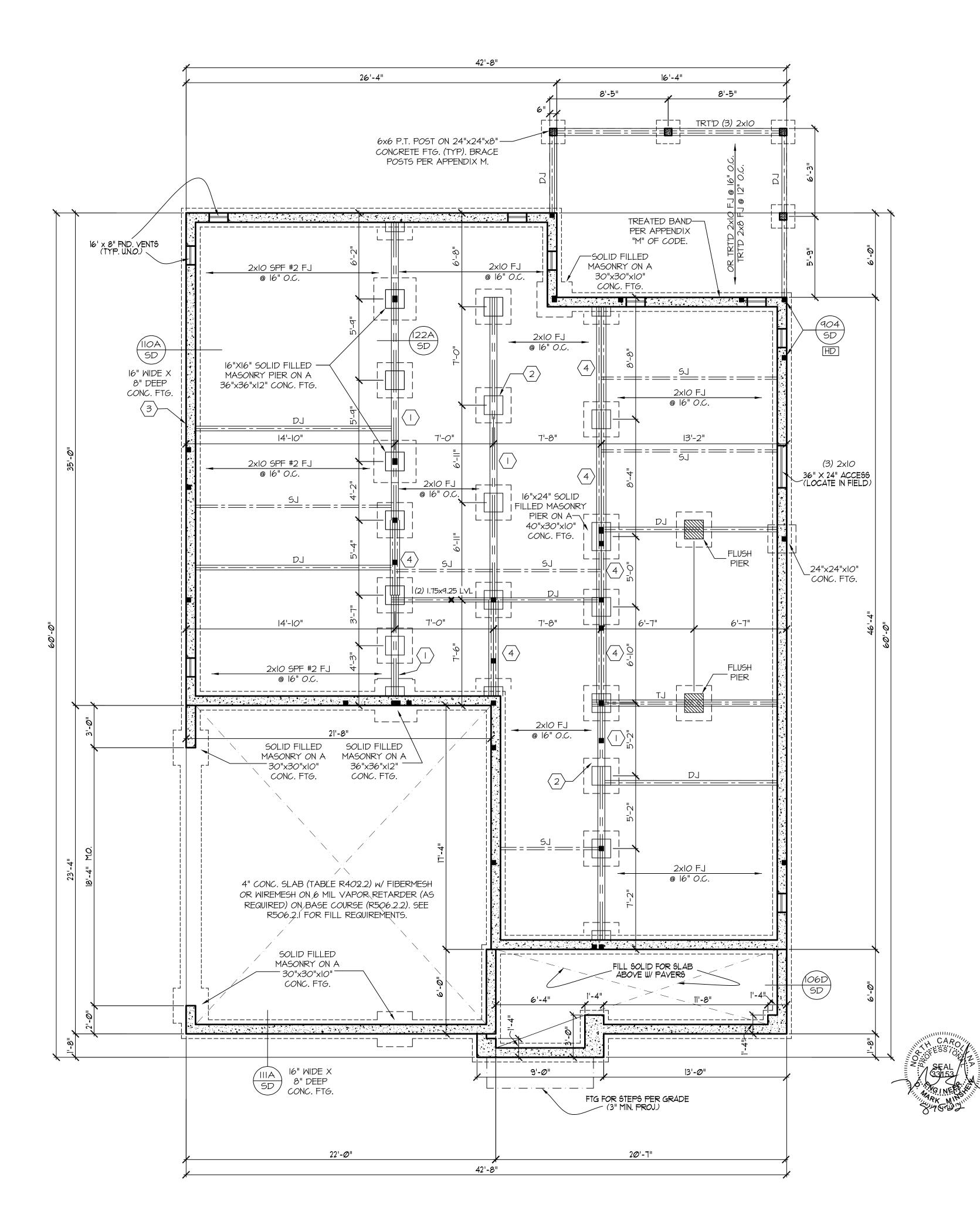
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#### FND. VENTILATION

1759 = 11.72 SQ. FT. REQUIRED\*

1759 = 1.17 SQ. FT. REQUIRED\*

WITH APPROVED VAPOR RETARDER MATERIAL AND OPENINGS PLACED FOR CROSS VENTILATION

\* ONE VENTILATION OPENING SHALL BE WITHIN 3 FEET

OF EACH CORNER OF THE BUILDING

FOUNDATION STRUCTURAL NOTES NC (2018 NCRC): Wind: 115-120 mph - CRAWL

 $\langle I. \rangle$  (3)2xIO SYP#2 OR SPF#2 GIRDER, TYPICAL UNO.

CONCRETE BLOCK PIER SIZE SHALL BE: <u>HOLLOW</u> UP TO 32" UP TO 5'-0" UP TO 48" UP TO 9'-0" UP TO 64" UP TO 12'-0" 16x16

UP TO 96" • WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

WALL FOOTING AS FOLLOWS DEPTH: 8" - UP TO 2 STORY

<u> WIDTH:</u> 16" - UP TO 2 STORY 20" - 3 STORY 16" - 1 STORY

24" - 3 STORY FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO CODE TABLE R404.I.I (I THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE

CONDITIONS AND CONTACT SOILS ENGINEER IF

MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

10" - 3 STORY

20" - 2 STORY

(4) 2xIO SPF #2 OR SYP #2 GIRDER

(5) (2) 1.75x9.25 LVL OR LSL GIRDER

(6) (3) 1.75×9.25 LVL OR LSL GIRDER

■ " DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

8. ABBREVIATIONS: "SJ" = SINGLE JOIST

• "DJ" = DOUBLE JOIST

"TJ" = TRIPLE JOIST

9. ADJUST SUBFLOOR THICKNESS OR JOIST SPACING

AS REQ'D FOR FLOOR FINISH MATERIALS.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS AND STRUCTURAL NOTES.

STRUCTURAL DESIGN BY: SOUTHERN ENGINEERS, P.A. 3716 BENSON DRIVE RALEIGH, NC 27609 LICENSE: C-4772, PHONE: 919-878-1617 PROJECT #: 22-1682

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FOUNDATION PLAN SCALE: ----- 1/4"=1"-0"

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RINCE LOT  $\triangleleft$ 

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1

DATE: 6-3-19 FILE NAME: HH-2-2735

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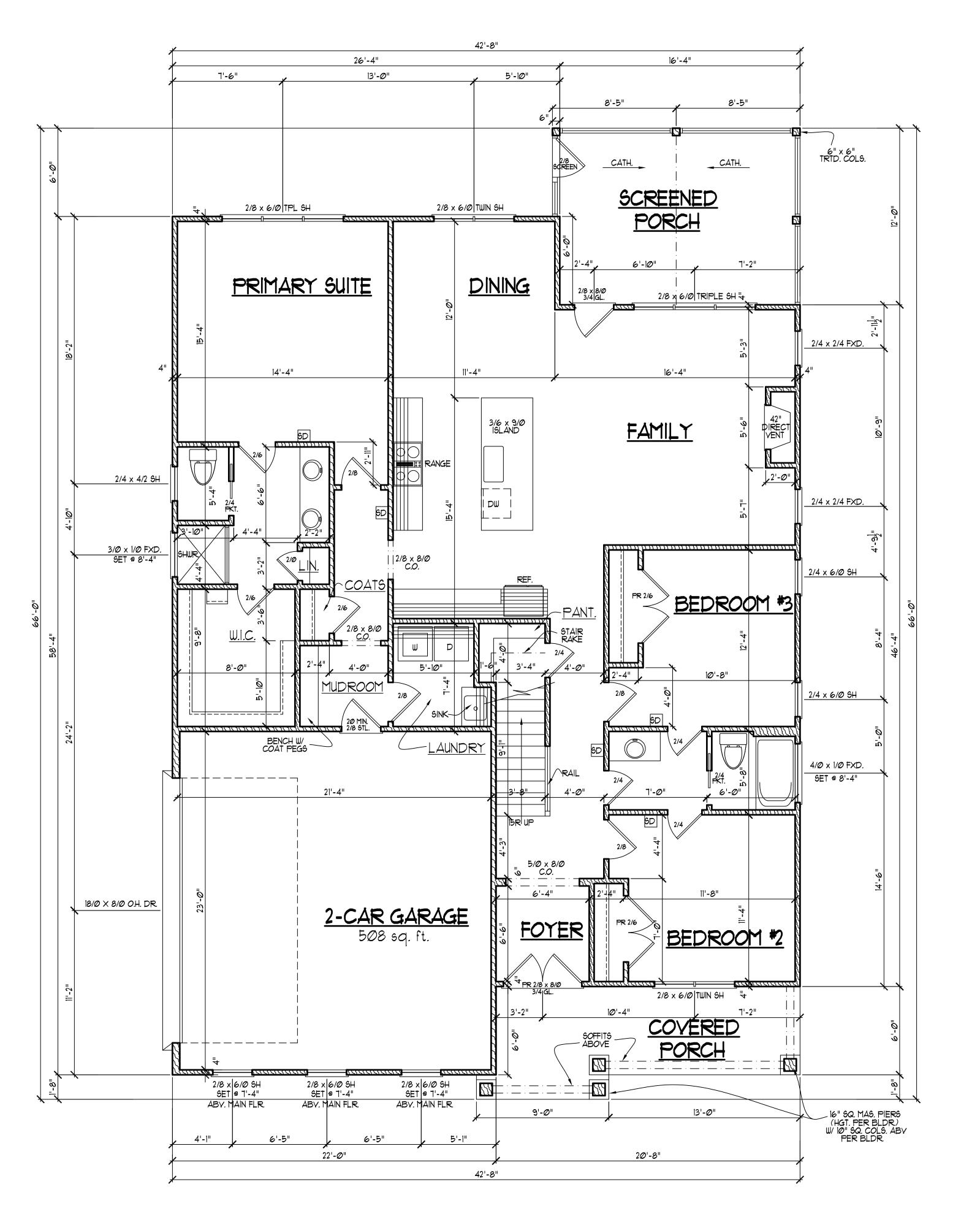
3-2-20 TWG PLAN

6-20-22 TWG PLAN

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HOUSE NAME:

HOUSE NUMBER:



#### FIRST FLOOR NOTES:

- 1) 9'-0" CLG. HGT. (TYP.) UN.O. 2) SET WINDOWS @ 8'-O" A.F.F. (TYP.) U.N.O. (YERIFY)
- 3) STAIRS: UP 15 RISERS @ 8" (+ -) (TYP.) (VERIFY W/ FLR. SYSTEM.)
- 4) PROVIDE 5/8" TYPE 'X' GYPSUM @ GARAGE CEILING ADJACENT TO HTD. SPACES
- PROVIDE 1/2" GYPSUM @ GARAGE WALLSADJACENT TO HTD. SPACES
- 5) ALL WALLS FIGURED AT 4" WIDTHS FOR FOR STUDS, 9" WIDTHS FOR STUD/BRICK (TYP.) U.N.O.
- 6) VERIFY ROUGH OPNG'S, SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF.
- 1) SD = SMOKE DETECTOR 8) INT. DOORS TO BE 8'-0" H. (VERIFY W/ BLDR.)

SQUARE FOOTAGE (new const		
* B6MNT.	HTD.	UNHTD.
* FIRST FLR.  * SECOND FLR.  * ATTIC (3rd. FLR.)	1759 947	5 <i>0</i> 8 911
<u>TOTAL</u>	_ 2735	1413
MISC.  * COVERED PORCH  * SCREENED PORCH  *  *		139 199

#### WNDW. FALL PROTECTION NOTES:

SEE CODE SECTIONS R612 THRU R612.4 FOR WINDOW FALL PROTECTION DEVICE REQUIREMENTS IF WINDOW SILL IS LESS THAN 24" ABY. FLR. WITH A 6'-0" OR GREATER DISTANCE TO A SURFACE OUTSIDE AND BELOW THE WINDOW.

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GARNOW DESIGN GROUP

MURPHY

120 PRINCE LOT

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FILE NAME: **HH-2-2735** REVISIONS 3-2-20 TWG PLAN 6-20-22 TWG PLAN

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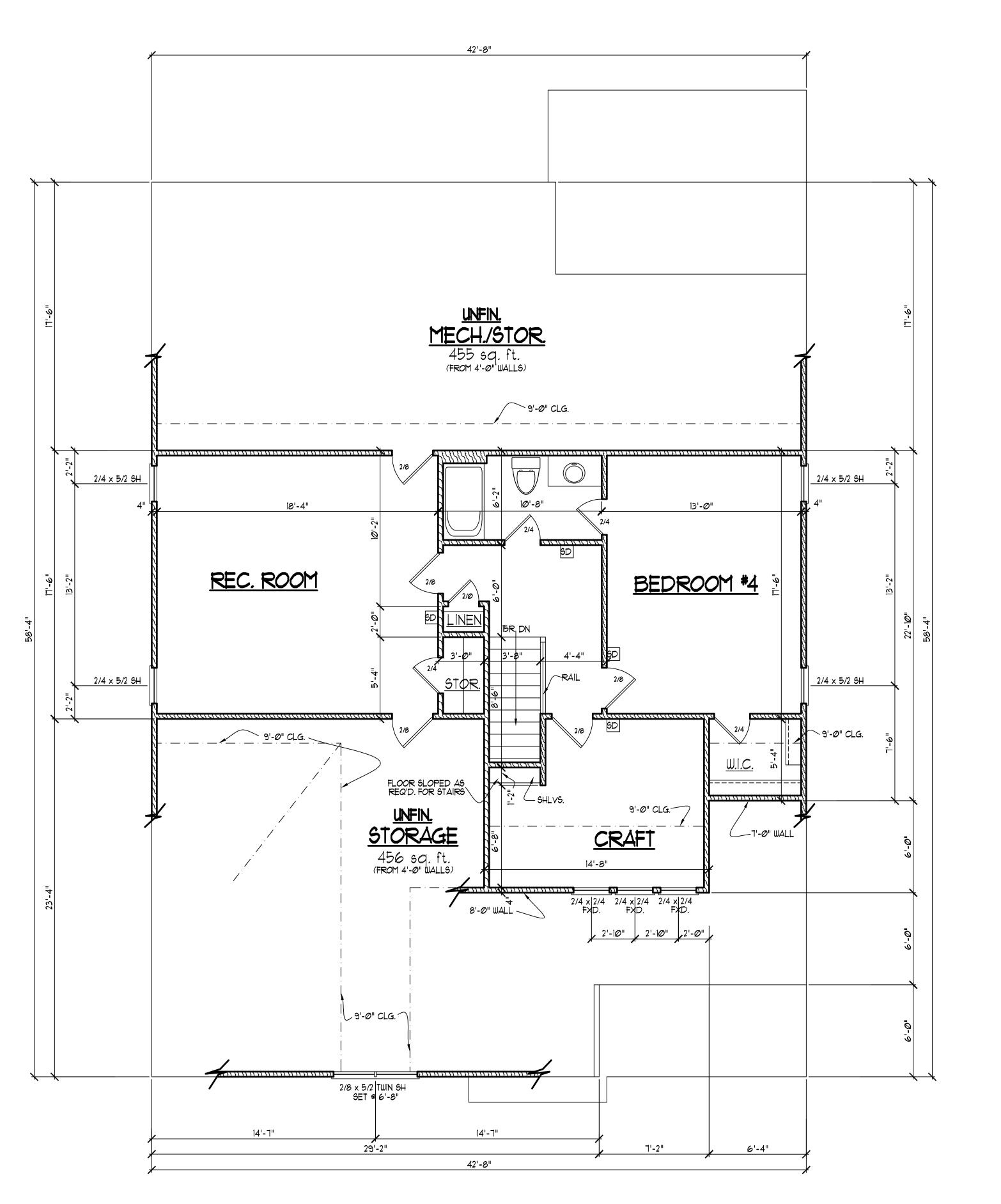
HOUSE NAME:

HOUSE NUMBER:

PAGE NUMBER:

FIRST FLOOR PLAN SCALE: -----1/4" = 1'-0"

THESE PLANS MEET THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE '2015' AND THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.



#### SECOND FLOOR NOTES:

1) 9'-0" CLG. HGT. (TYP.) U.N.O.

2) SET WINDOWS @ 1'-4" A.F.F. (TYP.) U.N.O. (YERIFY)

3) STAIRS: UP I5 RISERS @ 8" (+ -) (TYP.) (VERIFY W/ FLR. SYSTEM.)

4) ALL WALLS FIGURED AT 4" WIDTHS FOR FOR STUDS, 9" WIDTHS FOR STUD/BRICK

(TYP.) U.N.O.

5) VERIFY ROUGH OPNG'S,SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF. 6) SD = SMOKE DETECTOR

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121 PRINCE LOT 

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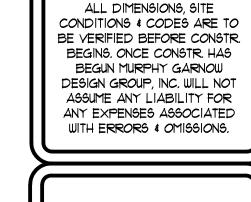
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SECOND FLOOR PLAN 

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DESIGN.

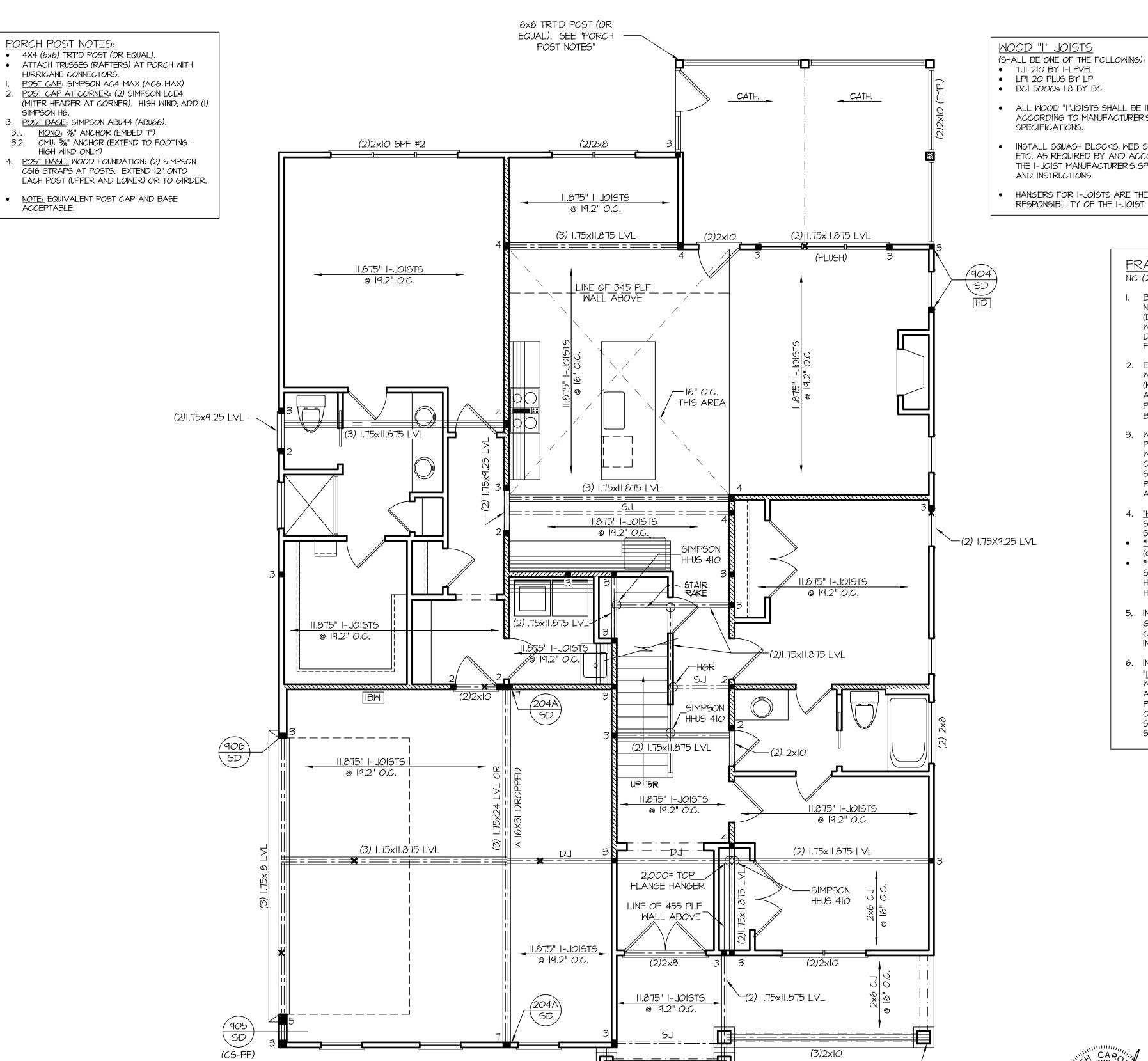
GARNOW

MURPHY

FAX; (919),

 $\mathcal{C}_{\mathcal{I}}$ 

RINCE LOT



HEADER/BEAM & COLUMN NOTES

 ALL WOOD "I"JOISTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S

INSTALL SQUASH BLOCKS, WEB STIFFENERS, ETC. AS REQUIRED BY AND ACCORDING TO THE I-JOIST MANUFACTURER'S SPECIFICATIONS

HANGERS FOR I-JOISTS ARE THE RESPONSIBILITY OF THE I-JOIST SUPPLIER. ALL EXTERIOR AND LOAD BEARING HEADERS

SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (I) SUPPORT STUD, UNLESS NOTED THE NUMBER SHOWN AT BEAM AND HEADER

SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020:

UP TO 3' SPAN: (I) KING STUD OVER 3' UP TO 6' SPAN: (2) KING STUDS OVER 6' UP TO 9' SPAN: (3) KING STUDS

OVER 9' UP TO 12' SPAN: (4) KING STUDS OVER 12' UP TO 15' SPAN: (5) KING STUDS

FRAMING NOTES

NC (2018 NCRC): Wind: 115-120 mph

BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL

2. EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (MSP) (EXPOSURE B: 1/16". EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.

WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF AND ATTACH BRACED WALLS PER CODE. MSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.

4. "HD" = HOLDOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS.

SEE DETAILS FOR HD ASSEMBLY. • \*\*GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET

• \*\*UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON CS22 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 7" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (7) 8d NAILS.

5. INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH I/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

6. INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 1/6" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1" OC ALONG THE EDGES AND AT INTERMEDIATE

> FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS AND STRUCTURAL NOTES.

STRUCTURAL DESIGN BY: SOUTHERN ENGINEERS, P.A. 3716 BENSON DRIVE RALEIGH, NC 27609 LICENSE: C-4772, PHONE: 919-878-1617 PROJECT #: 22-1682

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# 

(3)2x10

6x6 TRT'D POST (OR

EQUAL). SEE "PORCH -

POST NOTES"

(2)2xI0

THESE PLANS MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.

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3-2-20 TWG PLAN

6-20-22 TWG PLAN

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#### HEADER/BEAM & COLUMN NOTES

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (I) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020:
- •• UP TO 3' SPAN: (I) KING STUD
- OVER 3' UP TO 6' SPAN: (2) KING STUDS OVER 6' UP TO 9' SPAN: (3) KING STUDS
- OVER 9' UP TO 12' SPAN: (4) KING STUDS
- OVER 12' UP TO 15' SPAN: (5) KING STUDS

#### FRAMING NOTES

NC (2018 NCRC): Wind: 115-120 mph

- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- 2. EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (MSP) (EXPOSURE B: 1/16". EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
- WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF AND ATTACH BRACED WALLS PER CODE. MSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
- 4. "HD" = HOLDOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS.
- SEE DETAILS FOR HD ASSEMBLY. • \*\*GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET
- \*\*UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON CS22 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 7" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (7) 8d NAILS.
- 5. INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH I/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
- 6. INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 1/6" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH I/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" OC ALONG THE EDGES AND AT INTERMEDIATE

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS AND STRUCTURAL NOTES.

STRUCTURAL DESIGN BY: SOUTHERN ENGINEERS, P.A. 3716 BENSON DRIVE RALEIGH, NC 27609 LICENSE: C-4772, PHONE: 919-878-1617 PROJECT #: 22-1682

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# SECOND FLOOR CEILING STRUCTURAL PLAN SCALE: ------ 1/4" • 1'-0"

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GARNOW

FAX; (919)

 $\mathcal{C}_{\mathcal{I}}$ MINCE LOT

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FILE NAME: HH-2-2735 REVISIONS

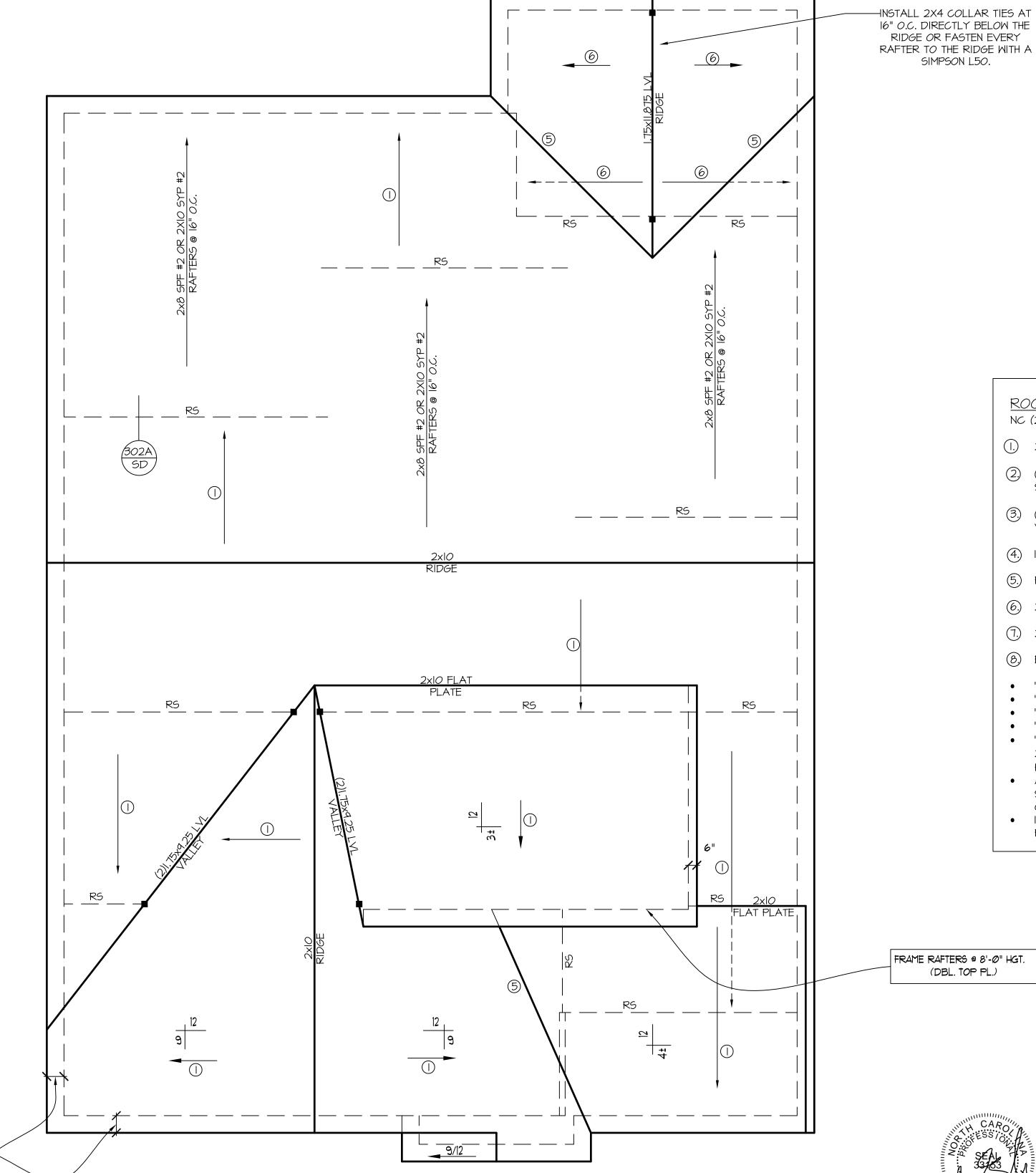
3-2-20 TWG PLAN

6-20-22 TWG PLAN

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HOUSE NAME:

HOUSE NUMBER:



1'-0" OVERHANGS (TYP.) U.N.O.

ROOF FRAMING NOTES:

1) ALLROOF PITCHES TO BE 1/12 (TYP.) U.N.O.

2) PROVIDE 2x4 COLLAR BEAMS EVERYOTHER RAFTER (TYP.)

3) PROVIDE "HURRICANE CLIPS" AT ALL VALLEYS AND OPPPOSING DBL. RAFTERS

4) PROVIDE DBL. HEADERS ABD TRIMMERS AT ALL ROOF OPENINGS (EX: DORMERS, SKYLIGHTS, CHIMNEYS,ETC.)

5) 2x8 RAFTERS @ CATH. OR YAULTED CLGS. TO BE FURRED DOWN 2" OR USE 2x10 RAFTERS (VERIFY BRNG.HGT.) FOR PROPER INSULATION PER CODE

6) VERIFY ALL RAFTER BRNG. HGTS. BEFORE CONSTR. HAS BEGUN

FRAME 9/12 RAFTERS ON A 3.5" KNEEWALL TO ALIGN SOFFITS W/ 7/12 RAFTERS. (VERIFY W/ BUILDER.)

ROOF FRAMING NOTES: NC (2018 NCRC): Wind: 115-120 mph

(1.) 2x8 @ 16" O.C. WITH 2x10 RIDGE, UNO.

(2) (2) 2x10 OR 1.75x11.875 LVL HIP. (2) 2x10 HIPS MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER

(3) (2) 2x10 OR 1.75x9.25 LVL VALLEY. DO NOT SPLICE VALLEYS

(4.) 1.75x11.875 LVL OR (2)1.75x9.25 LVL VALLEY

(5.) FALSE FRAME VALLEY ON 2xIO FLAT PLATE

(6) 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.

(7.) 2x10 RAFTERS @ 16" O.C. W/ 2x12 RIDGE, UNO.

(8) EXTEND RIDGE 12" BEYOND INTERSECTION

"SR" = SINGLE RAFTER • "DR" = DOUBLE RAFTER

• "TR" = TRIPLE RAFTER

"RS" = ROOF SUPPORT • "■" = (3) STUD OR 4x4 POST FOR ROOF SUPPORT (USE 2X6 STUDS OR 6X6 POST FOR SUPPORT OVER 10'-0" IN

HEIGHT) • ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS: SIMPSON "H-2.5A" OR EQUIVALENT. TIES TO BE INSTALLED

ON THE OUTSIDE FACE OF FRAMING. • INSTALL RAFTER TIES AND COLLAR TIES PER SECTION

R802.3.1 OF THE 2018 NC RESIDENTIAL CODE.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

FRAME RAFTERS @ 8'-0" HGT. (DBL. TOP PL.)

SIMPSON L50.

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS AND STRUCTURAL NOTES.

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 Any deviations or discrepancies on plans are to be brought to the immediate attention of Southern Engineers. Failure to do so will void Southern

Engineer's liability. Seal is valid for a project permitted within one year from date of seal.

 Use of these plans constitutes approval of terms and conditions as defined in the customer agreement.

ROOF FRAMING PLAN SCALE: -----1/4" = 1'-0"

> THESE PLANS MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE '2018' EDITION.

ALL DIMENSIONS, SITE CONDITIONS & CODES ARE TO BE VERIFIED BEFORE CONSTR. BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

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REVISIONS

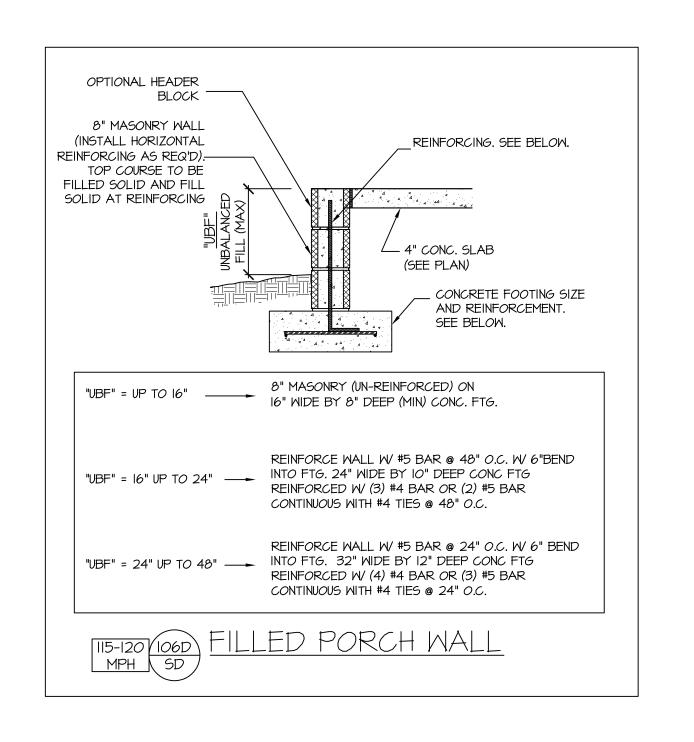
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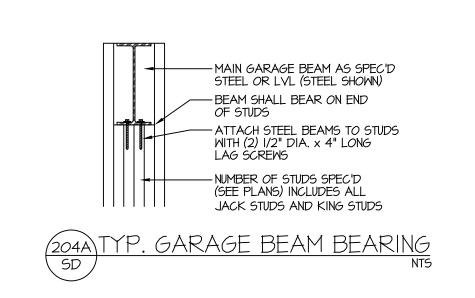
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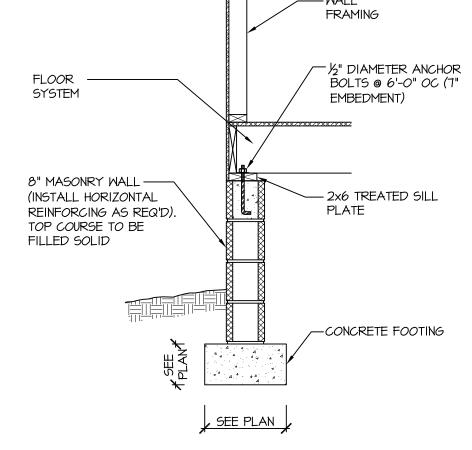
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HOUSE NAME:

HOUSE NUMBER:







115-120 (110A) CRAWL SPACE FOOTING

(8) IOd NAILS (MIN)

AT SPLICE

OR EQUAL

SIMPSON H2.5A

CONNECTORS

— WALL STUDS

2X6 BRACE AT MID

-WALL HEIGHT (EITHER

SIMPSON SSP

— HD LOCATION ———

SIMPSON CSI6 STRAP (EXTEND

TO SILL PLATE AND EXTEND

- SIMPSON SSP IN EACH

SIDE OF STRAP

(I) STUD (MIN)

SIDE OF WALL)

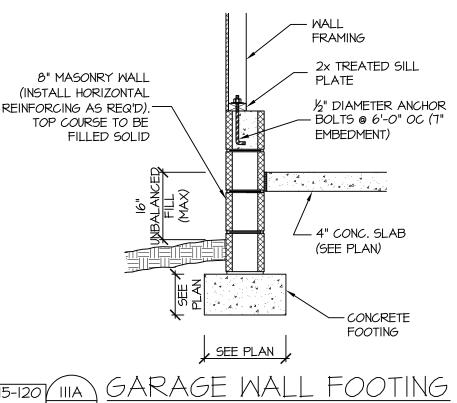
I'-O" OVERLAP

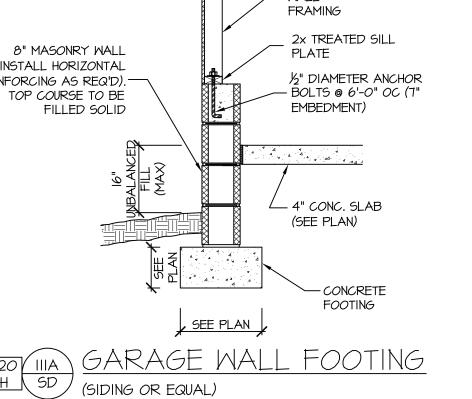
AT SPLICE (IF

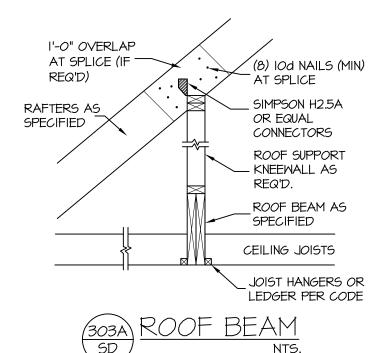
REQ'D)

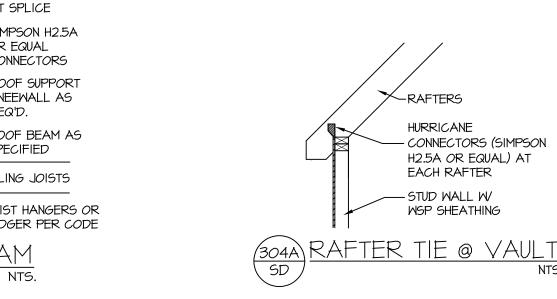
RAFTERS AS

SPECIFIED







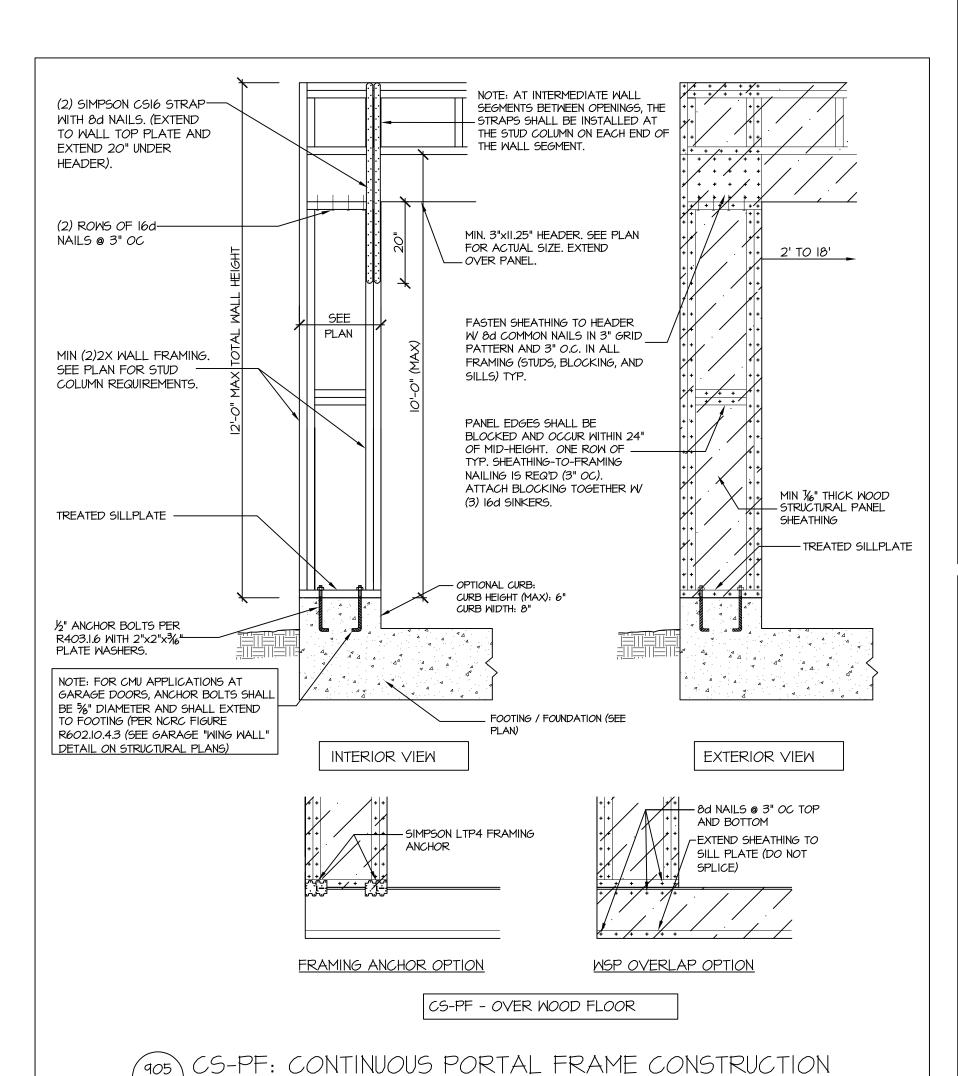


SUB FLOOR -

FLOOR JOIST -

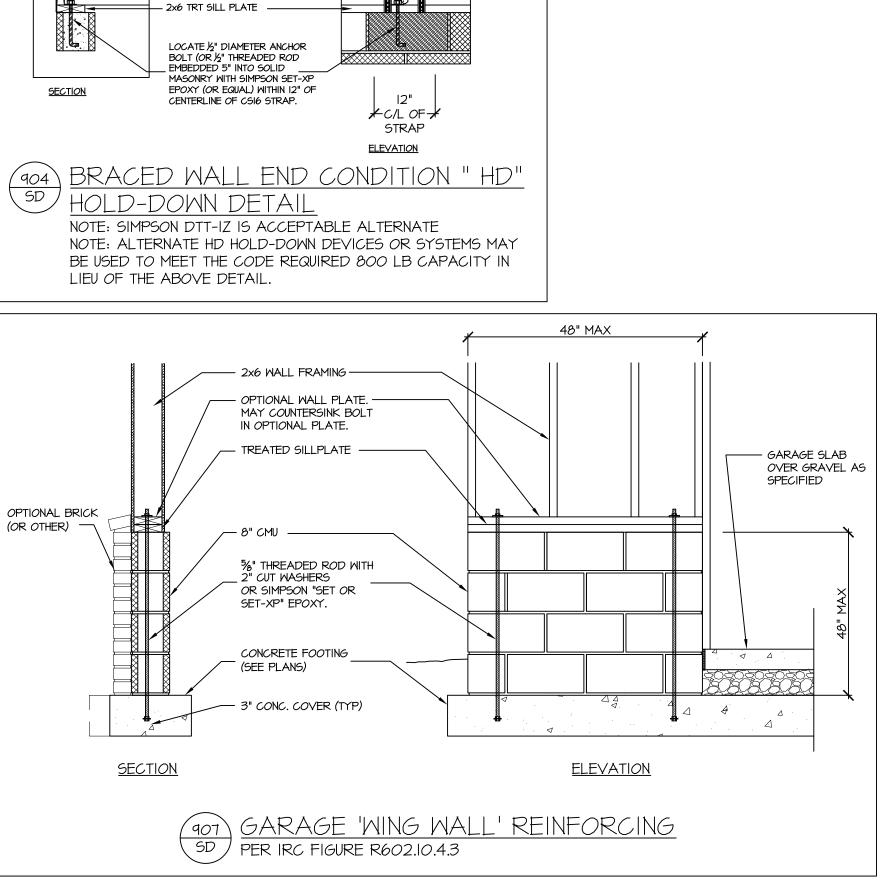
TREATED SILL -

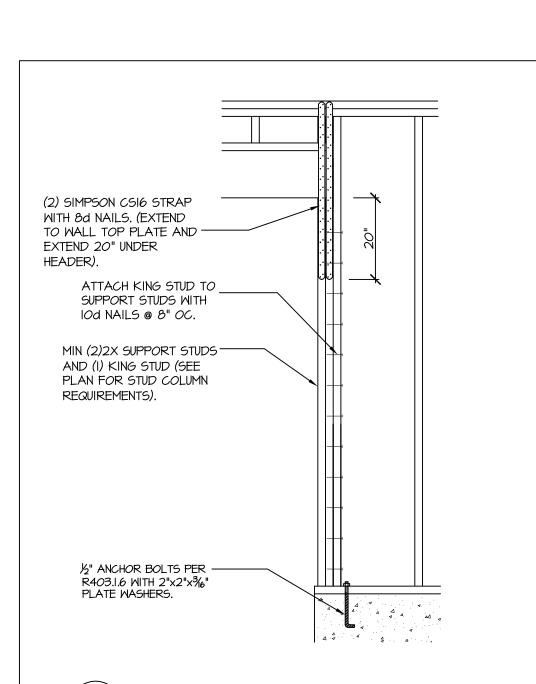
CMU -



DETAIL AND APPLICATION BASED ON NORC FIGURE

R602.IO.I - PORTAL FRAME CONSTRUCTION





(FOR USE WITH SINGLE CS-PF CONDITION) DETAIL AND APPLICATION BASED ON NORC FIGURE R602.IO.I - PORTAL FRAME CONSTRUCTION

STRUCTURAL NOTES

OVERLAP JOISTS. INSTALL

LOAD BEARING WALLS.

-DROPPED GIRDER

-BLOCKING BETWEEN JOISTS AT

SEE FND. PLAN FOR FOOTING SIZE

NC (2018 NCRC): Wind: 115-120 mph

ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.

2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NO RESIDENTIAL CODE, 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 FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

3. DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)

 ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, IO PSF, L/360) SLEEPING ROOMS: (30 PSF, IO PSF, L/360)

ATTIC WITH PERMANENT STAIR: (40 PSF, IO PSF, L/360)

 ATTIC WITHOUT PERMANENT STAIR: (20 PSF, IO PSF, L/360) ATTIC WITHOUT STORAGE: (10 PSF, 10 PSF, L/240)

 STAIRS: (40 PSF, I0 PSF, L/360) EXTERIOR BALCONIES: (60 PSF, IO PSF, L/360)

DECKS: (40 PSF, IO PSF, L/360)

 GUARDRAILS AND HANDRAILS: (200 LBS) PASSSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)

 FIRE ESCAPES: (40 PSF, IO PSF, L/360) SNOW: (20 PSF)

4. WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.

5. SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.

6. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF +-30 TIMES THE DEPTH (D). CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF I/D. (I.E. 4" CONCRETE SLABS SHALL HAVE 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A +-10'-0" x +-10'-0" GRID).

7. ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

8. ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2. PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fc(perp) = 425 PSI - MIN).

9. L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1.9x10 PSI. 9.1. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2.0x10 PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55xI0 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.

IO. ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.

II. ALL STRUCTURAL STEEL SHALL BE ASTM A-36, STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.

12. REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60. LAP ALL REBAR SPLICES 30 BAR DIAMETERS.

13. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

14. BRICK LINTELS (WHEN REQUIRED) SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-O". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION R703.8.3 LINTELS.

BEGINS. ONCE CONSTR. HAS BEGUN MURPHY GARNOW DESIGN GROUP, INC. WILL NOT ASSUME ANY LIABILITY FOR ANY EXPENSES ASSOCIATED WITH ERRORS & OMISSIONS.

ALL DIMENSIONS, SITE

CONDITIONS & CODES ARE TO

BE VERIFIED BEFORE CONSTR.

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STRUCTURAL DESIGN BY: SOUTHERN ENGINEERS, P.A. 3716 BENSON DRIVE RALEIGH, NC 27609 LICENSE: C-4772, PHONE: 919-878-1617 PROJECT #: 22-1682 • Engineers seal applies only to structural components

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