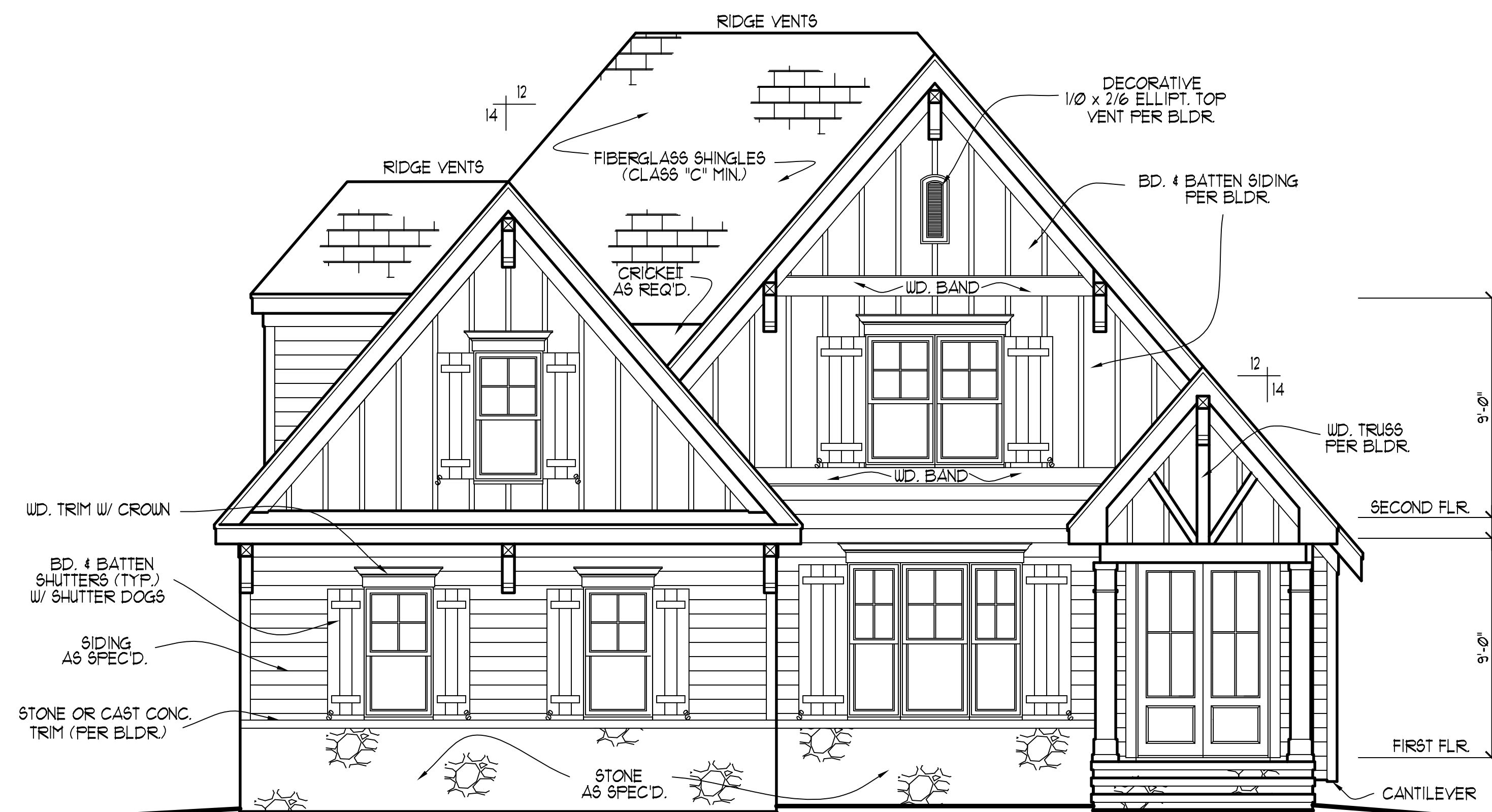


**REAR ELEVATION**  
SCALE: -----1/4" = 1'-0"



**FRONT ELEVATION**  
SCALE: -----1/4" = 1'-0"

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**ATTIC VENTILATION**  
2393 = 7.81 sq. ft. REQ'D.  
3000  
\* ( ) - BASE / VENTS =  
\* ( ) - BASE / VENTS =  
\* (78') - RIDGE VENT @ 9 sq.in./ft. = 4.875 SQ. FT.  
TOTAL = 4.875 SQ. FT.  
  
\*\* PROVIDE CONTINUOUS SOFFIT VENT SURROUND TO EQUAL OR EXCEED 3.98 SQ. FT.  
\*\*\* (OPT.) PROVIDE THERMOSTATICALLY CONTROLLED FLOWER VENT TO EQUAL OR EXCEED 3.98 SQ. FT.

**CODE INFORMATION**  
\* ZONE: (CHECK ONE)  
ZONE 1  
ZONE 2  
ZONE  
\* GLAZING U-FACTOR  
\* R-VALUES  
CEILING R-38  
WALL R-13  
FLOOR R-19  
BSMT. WALL  
SLAB PERIMETER  
CRAWL SPACE WALL  
\* MEAN ROOF HEIGHT 21'-11"  
\* WALL AND ROOF CLADDING DESIGN VALUE: (MEAN ROOF HGT. 30 FT. OR LESS)  
CRAWL SPACE WALL  
WALLS +8.0, -24.1  
ROOF PITCH 0/12 TO 225/12 +10.0, -45.4  
ROOF PITCH 225/12 TO 1/12 +10.4, -34.8  
ROOF PITCH 1/12 TO 12/12 +16.5, -21.0  
EXPOSURE ADJUSTMENT x

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www.murphygarnowdesign.com

HALCYON HOMES  
PRINCE PLACE  
LOT #66

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DATE: 2-11-10  
FILE NAME: 156-2-2554  
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12-19-10 TUG PLAN  
1-1-21 TUG PLAN

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HOUSE NAME:  
**GLEN ELLEN**

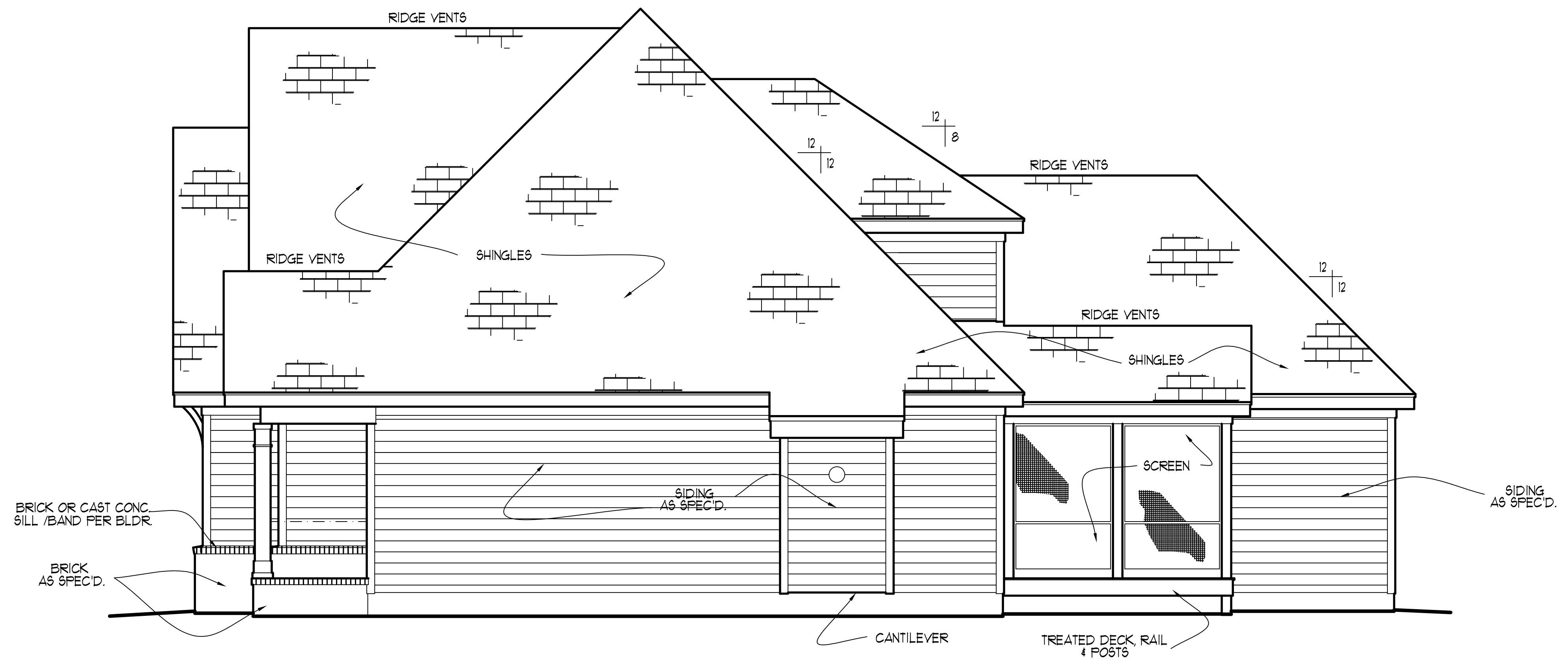
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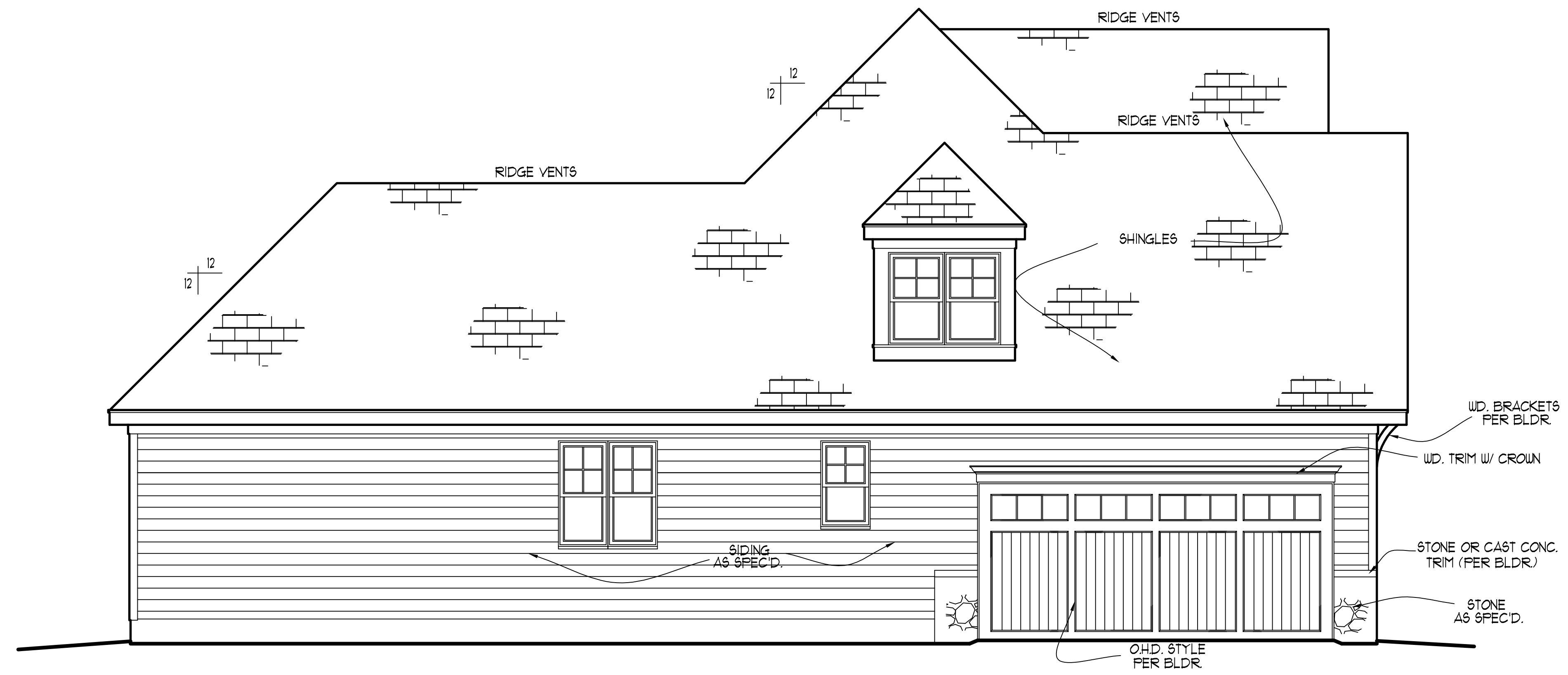
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**LEFT ELEVATION**  
 SCALE: .....1/4" = 1'-0"



**RIGHT ELEVATION**  
 SCALE: .....1/8" = 1'-0"

HALCYON HOMES  
 PRINCE PLACE  
 LOT #66

DRAWN BY: TUG  
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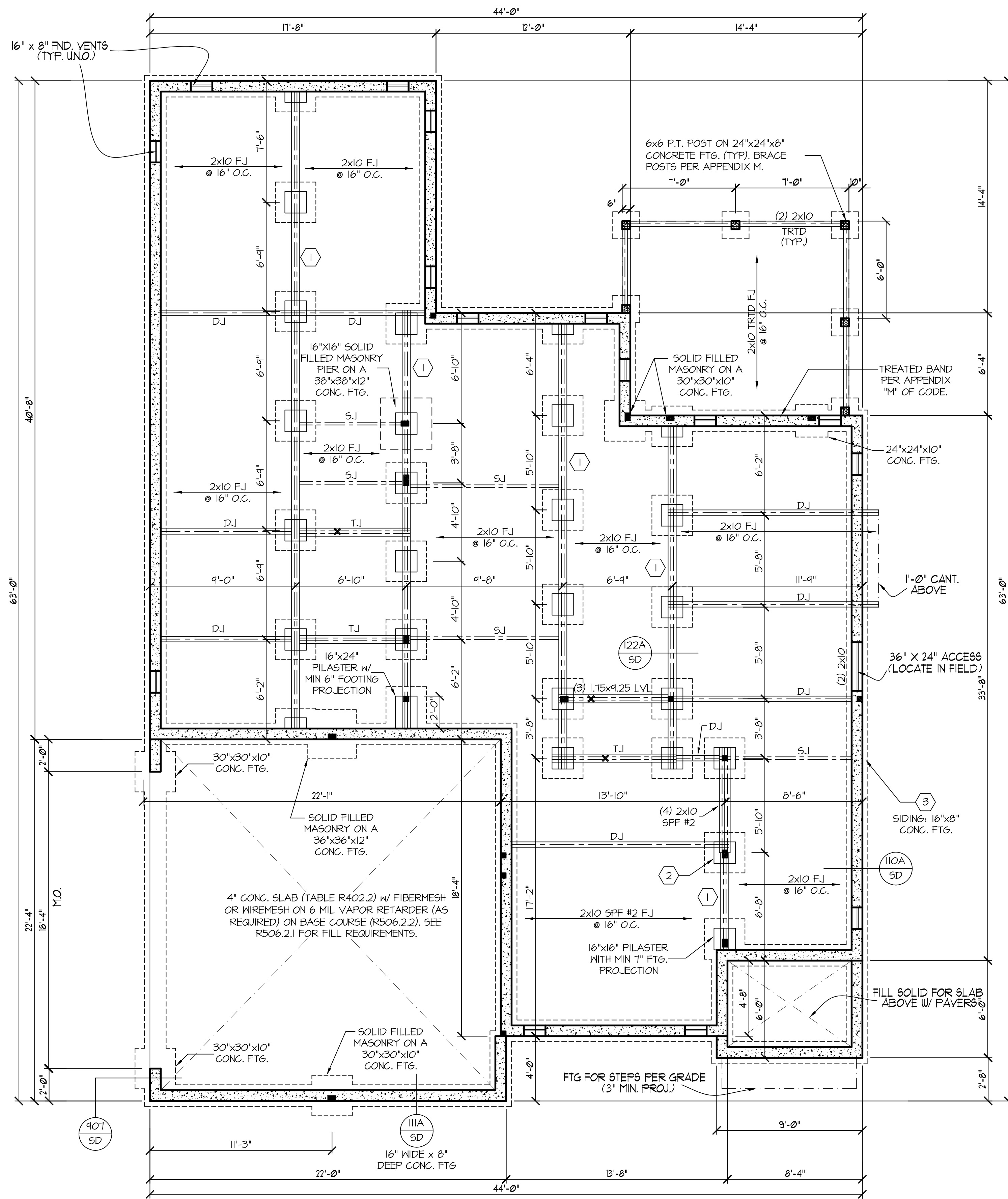
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**GLEN ELLEN**

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**FRAMING NOTE:** THIS PLAN IS DESIGNED FOR SFF #2 LUMBER. PLEASE NOTE THAT SYP #2 LUMBER IS STRUCTURALLY INFERIOR TO SFF #2 IN MOST SITUATIONS AND ANY SUBSTITUTION TO SYP #2 IS AT THE DISCRETION OF THE BUILDER. HOWEVER, PLEASE NOTE THE FOLLOWING MAX RECOMMENDED SPANS FOR SYP #2 JOISTS FOR 40 PSF LIVE LOAD AND 10 PSF DEAD LOAD.  
 - 2X10 SYP #2 @ 16" O.C. - 13'-6" (MAX)  
 - 2X10 SYP #2 @ 12" O.C. - 15'-3" (MAX)

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**END VENTILATION**  
 1692 = 1128 SQ. FT. REQUIRED:  
 150  
 OR  
 1692 = 112 SQ. FT. REQUIRED:  
 1500  
 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 NCRS) Wind: 115-120 mph - CRAWL

- (3) 2x10 SYP#2 OR SFF#2 GIRDER, TYPICAL UNO.
- CONCRETE BLOCK PIER SIZE SHALL BE:  
 SIZE HOLLOW SOLID  
 8x16 UP TO 32" UP TO 5'-0"  
 12x16 UP TO 48" UP TO 4'-0"  
 16x16 UP TO 64" UP TO 12'-0"  
 24x24 UP TO 46"  
 \* WITH 30" x 30" x 10' CONCRETE FOOTING, UNO.
- WALL FOOTING AS FOLLOWS  
 DEPTH: 8" - UP TO 2 STORY  
 10" - 3 STORY  
 WIDTH:  
 SIDING: 16" - UP TO 2 STORY  
 20" - 3 STORY  
 BRICK: 16" - 1 STORY  
 20" - 2 STORY  
 24" - 3 STORY
- FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO CODE TABLE R404.1.1 (1 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.
- (4) 2x10 SFF #2 OR SYP #2 GIRDER
- (2) 1.75x4.25 LVL OR LSL GIRDER
- (3) 1.75x4.25 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.
- ABBREVIATIONS:  
 "S." = SINGLE JOIST  
 "DJ" = DOUBLE JOIST  
 "TJ" = TRIPLE JOIST
- ADJUST SUBFLOOR THICKNESS OR JOIST SPACING AS REQ'D FOR FLOOR FINISH MATERIALS.

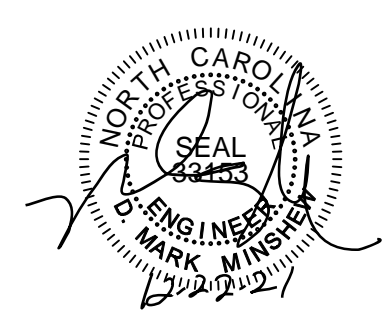
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HALCYON HOMES  
 PRINCE PLACE  
 LOT #66

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: 919-870-1617  
 PROJECT #: 21-2911(GL)

- Engineers seal applies only to structural components on this document. Seal does not include construction means, methods, techniques, sequences, procedures or safety precautions.
- 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.



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

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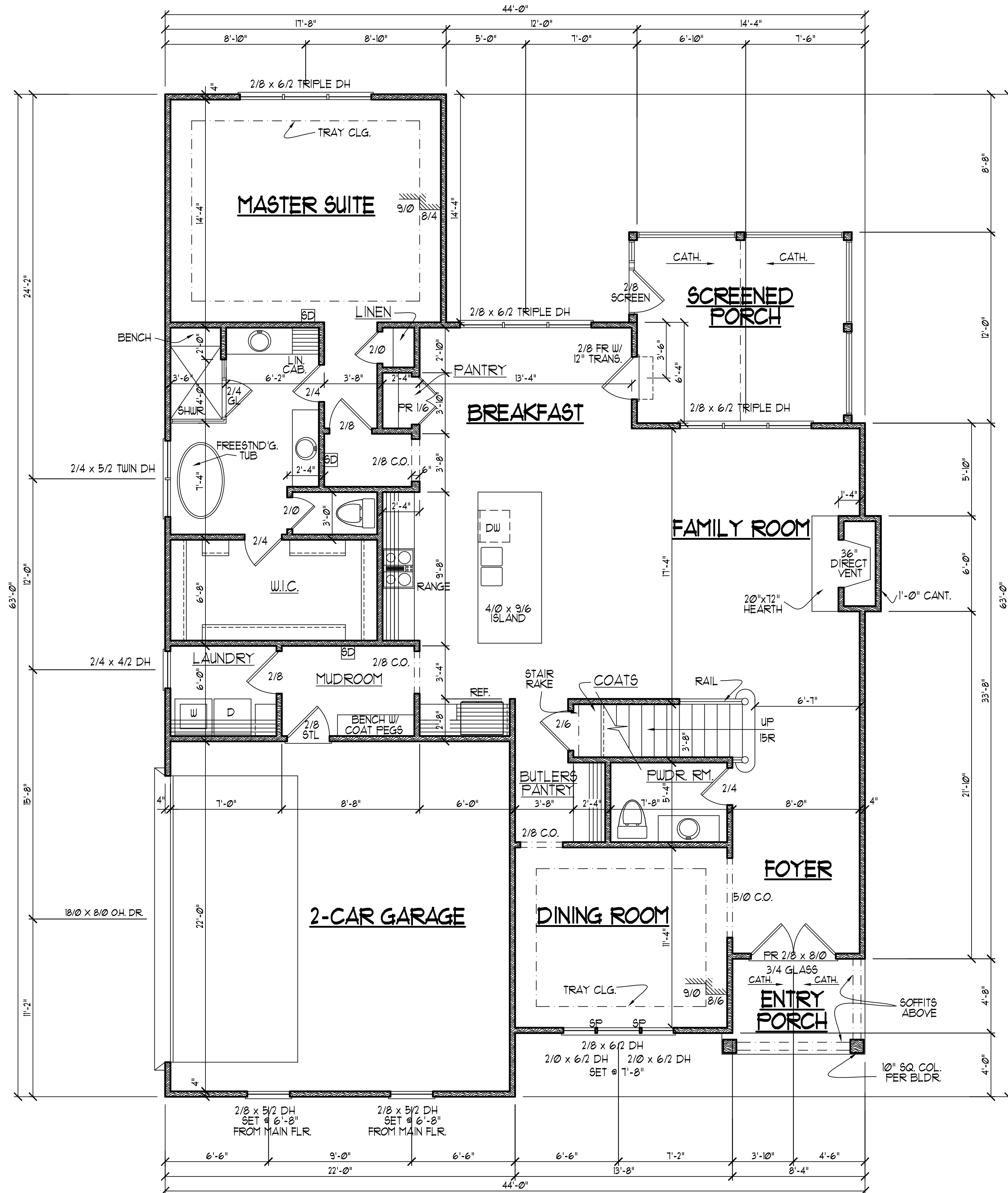
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- FIRST FLOOR NOTES:**
- 1) 9'-0" CLG. HGT. (TYP.) UNO.
  - 2) SET WINDOWS @ 8'-0" AFF. (TYP.) UNO.
  - 3) STAIRS: UP 15 RISERS @ 8" (+) (TYP.) UNO. (VERIFY W/ FLR. SYSTEM)
  - 4) PROVIDE 5/8" TYPE 'X' GYPSUM @ GARAGE CEILING ADJACENT TO HTD. SPACES. PROVIDE 1/2" GYPSUM @ GARAGE WALLS ADJACENT TO HTD. SPACES.
  - 5) ALL WALLS FIGURED AT 4" WIDTHS FOR STUDS, 9" WIDTHS FOR STUD/BRICK (TYP.) UNO.
  - 6) VERIFY ROUGH OPNG'S, SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF.
  - 7) SD = SMOKE DETECTOR

**SQUARE FOOTAGE (w/o brick)**

	HTD.	UNHTD.
• BSMT.		
• FIRST FLR.	1692	485
• SECOND FLR.	862	361
• ATTIC (3rd. FLR.)		
<b>TOTAL</b>	<b>2554</b>	<b>846</b>
<b>MISC.</b>		
• COVERED ENTRY		51
• SCREENED PORCH		165
•		
•		
•		

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

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12-19-10		TUG	PLAN
1-1-11		TUG	PLAN

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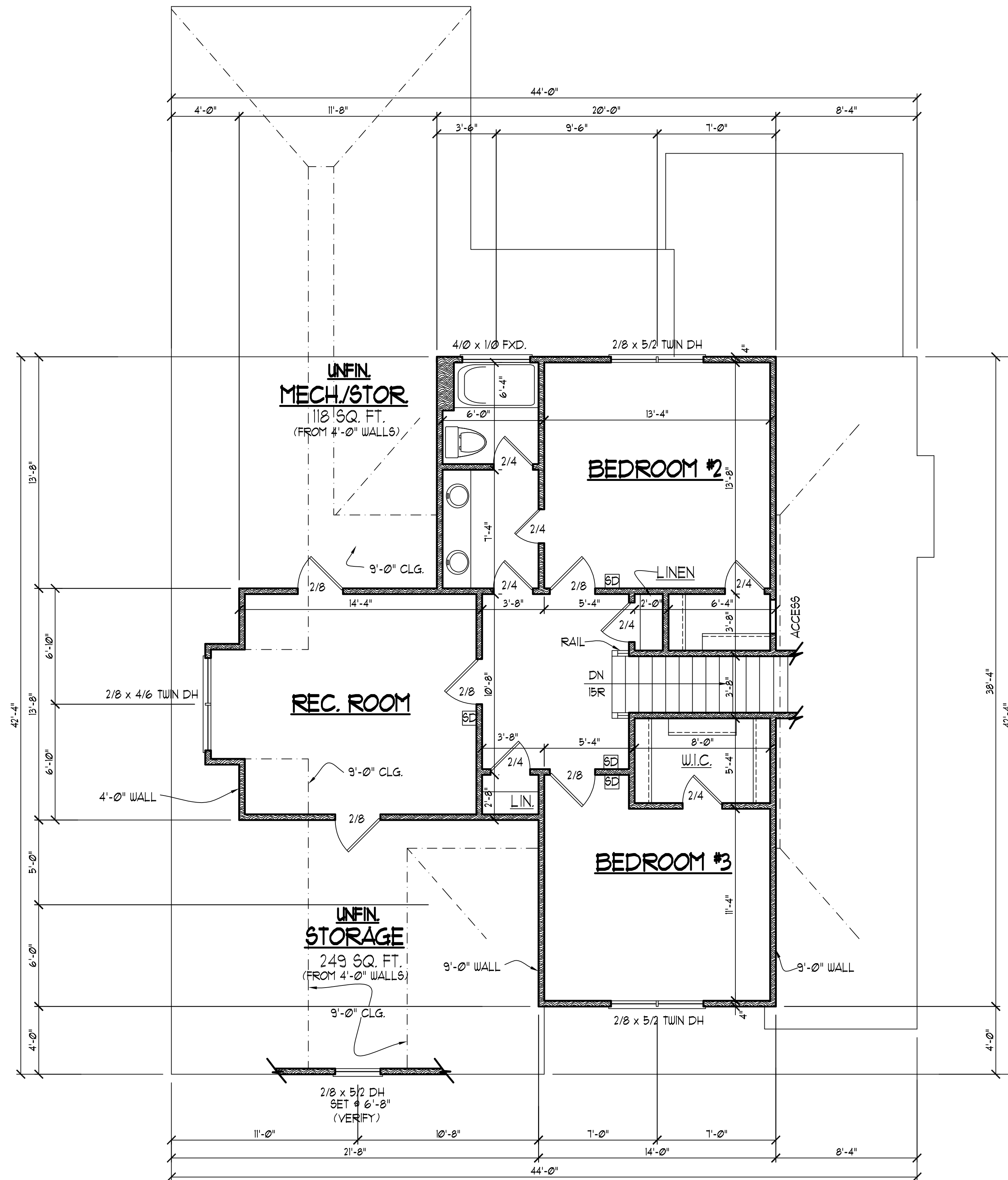
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**FIRST FLOOR PLAN**  
 SCALE: .....1/4" = 1'-0"

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**SECOND FLOOR NOTES:**  
 1) 9'-0" CLG. HGT. (TYP.) UNO.  
 2) SET WINDOWS @ 1'-4" AFF. (TYP.) UNO.  
 3) STAIRS: N/A (VERIFY ATTIC ACCESS W/ BLDG.)  
 4) ALL WALLS FIGURED AT 4" WIDTHS FOR STUDS, 9" WIDTHS FOR STUD/BRICK (TYP.) UNO.  
 5) VERIFY ROUGH OPNG'S, SPECS. FOR CODE REQUIREMENTS WITH WINDOW MANUF.  
 6) SD = SMOKE DETECTOR

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**SECOND FLOOR PLAN**  
 SCALE: .....1/4" = 1'-0"

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HALCYON HOMES  
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6-6-10	TUG	PLAN
12-19-10	TUG	PLAN
1-1-11	TUG	PLAN

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**FRAMING NOTES**

- NC (2018 N.C.R.C.) 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 SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAIL AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
  - EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING (WSP) EXPOSURE B: 7/16", EXPOSURE C: 15/32". SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"X12" 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 PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP 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.
  - "HD" = HOLD-DOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.
    - \*SECOND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET (OR EQUIV)
    - \*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 1" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (1) 8d NAILS.
  - INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
  - INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 3/8" WSP SHEATHING WITH 8d NAILS AT A 6"X12" 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 SUPPORTS.

**WOOD "I" JOISTS**

- (SHALL BE ONE OF THE FOLLOWING):
- TJI 210 BY TRUS JOIST
  - LFI 20 PLUS BY LP
  - BOI 5000S 1.8 BY BC
- ALL WOOD "I" JOISTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL SQUASH BLOCKS, WEB STIFFENERS, ETC. AS REQUIRED BY AND ACCORDING TO THE I-JOIST MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.
- HANGERS FOR I-JOISTS ARE THE RESPONSIBILITY OF THE I-JOIST SUPPLIER.

**PORCH POST NOTES:**

- 4x4 (6x6) TRTD POST (OR EQUAL).
  - ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.
- POST CAP: SIMPSON AC4-MAX (AC6-MAX)
  - POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH RIND; ADD (1) SIMPSON H6.
  - POST BASE: SIMPSON ABU44 (ABU66).
    1. MIN. 2" ANCHOR (EMBED 1")
    2. CMU: 3/8" ANCHOR (EXTEND TO FOOTING - HIGH RIND ONLY)
  - POST BASE, WOOD FOUNDATION: (2) SIMPSON CS16 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.
- \*NOTE: EQUIVALENT POST CAP AND BASE ACCEPTABLE.

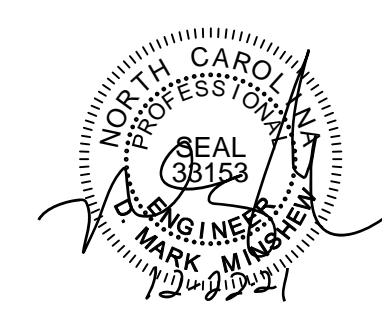
**HEADER/BEAM & COLUMN NOTES**

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (1) 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 NCDOT COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020.
  - UP TO 3' SPAN: (1) 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

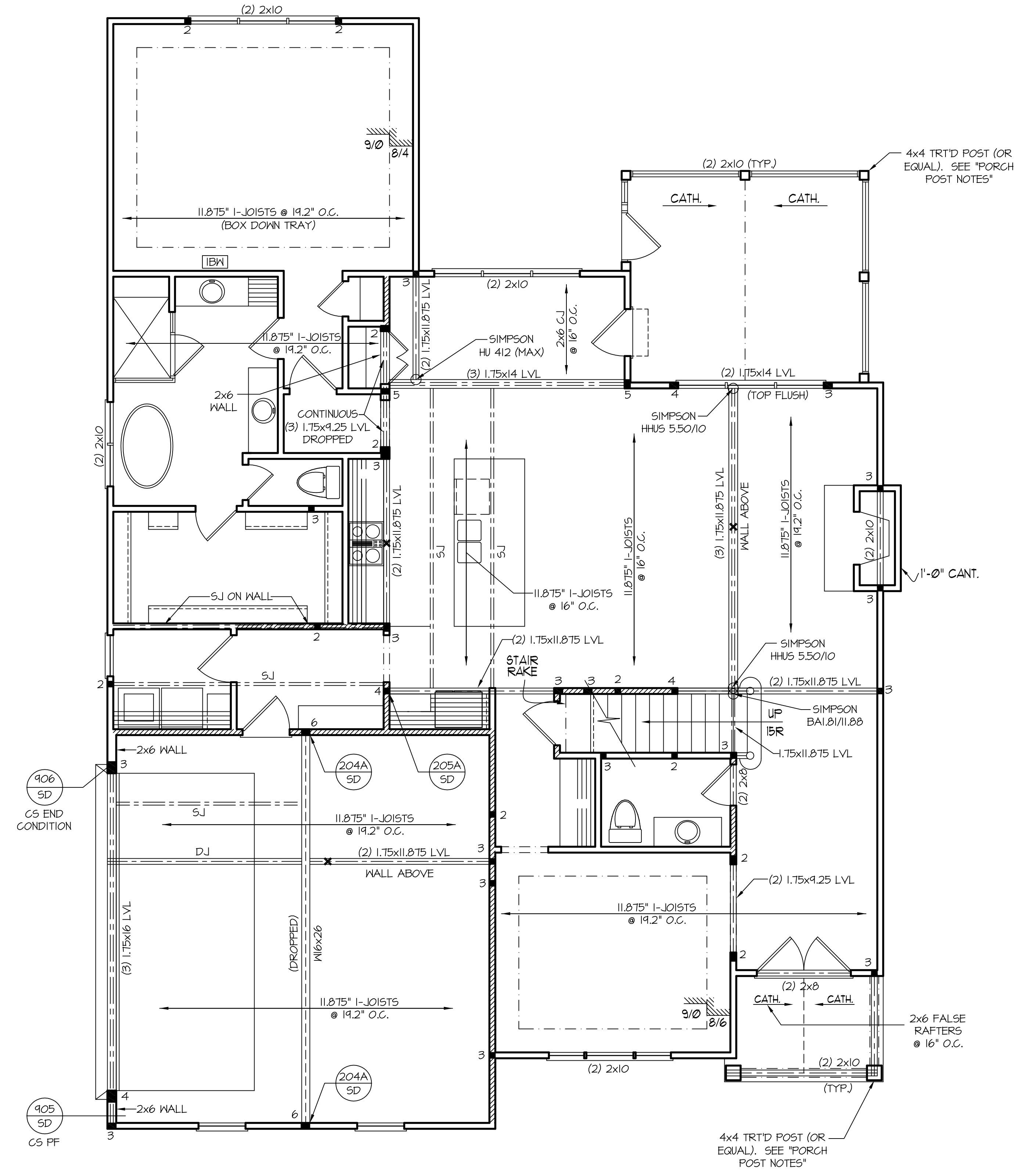
FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR 5YP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

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: 919-870-1617  
PROJECT #: 21-2911(GL)



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**FIRST FLOOR CEILING STRUCTURAL PLAN**  
9'-0" CLG. HGT.

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**FRAMING NOTES**

NC (2018 NCR.C); 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 SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 7/16"; 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 PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP 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.
- "HD" = HOLD-DOWN: 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 (OR EQUIV)
  - \*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 1" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (1) 8d NAILS.
- INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1" OC. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
- INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 3/8" 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 SUPPORTS.

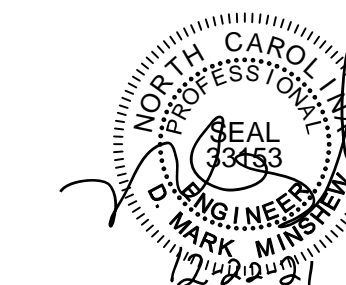
**HEADER/BEAM & COLUMN NOTES**

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (1) 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 NCDOT COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020.
  - UP TO 3' SPAN: (1) 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

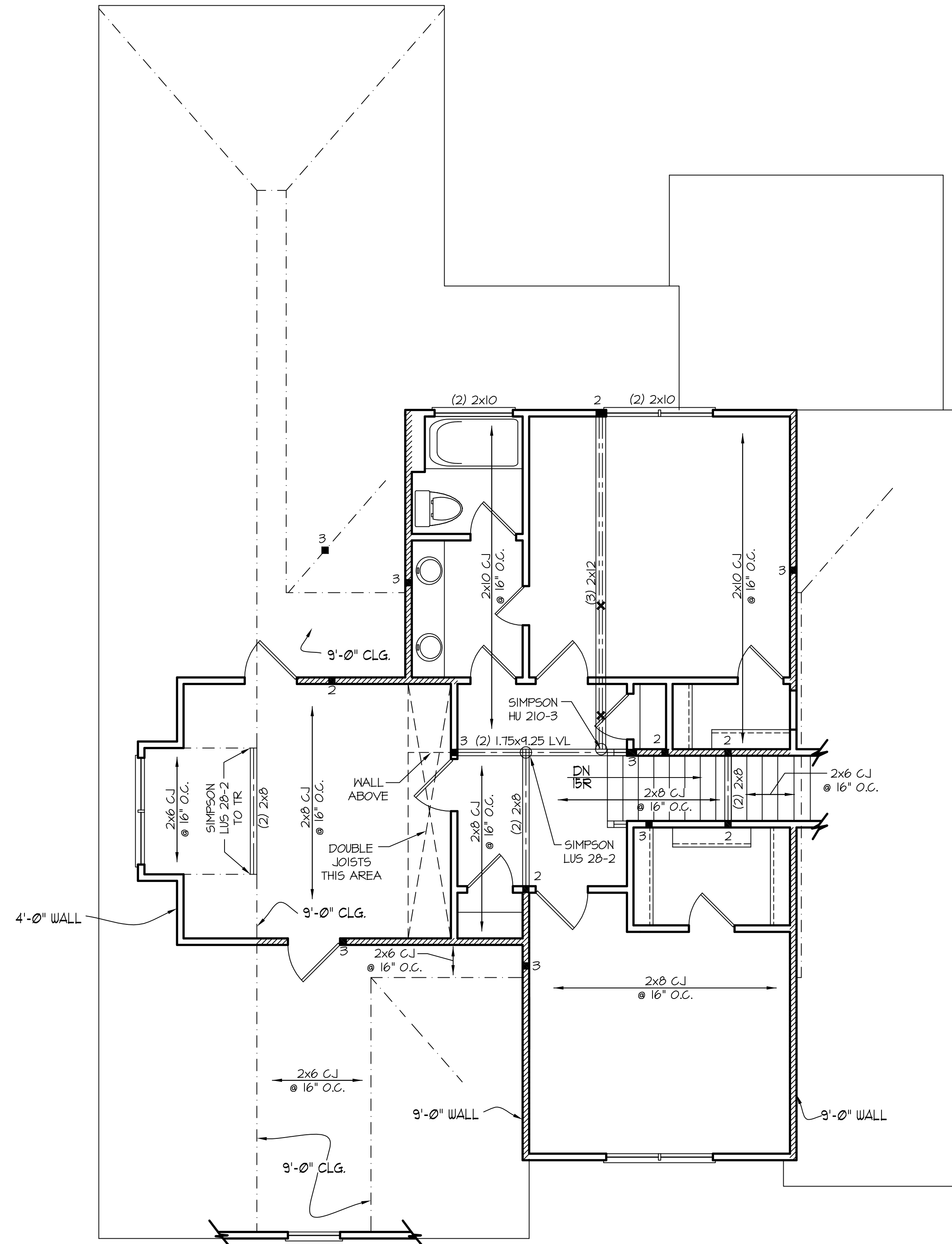
FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR 5YP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

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

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PROJECT #: 21-2911(GL)



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**SECOND FLOOR CEILING STRUCTURAL PLAN**  
9'-0" CLG. HGT.

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HALCYON HOMES  
PRINCE PLACE  
LOT #66

DRAWN BY: TUG  
DATE: 2-11-18  
FILE NAME: 156-2-2554

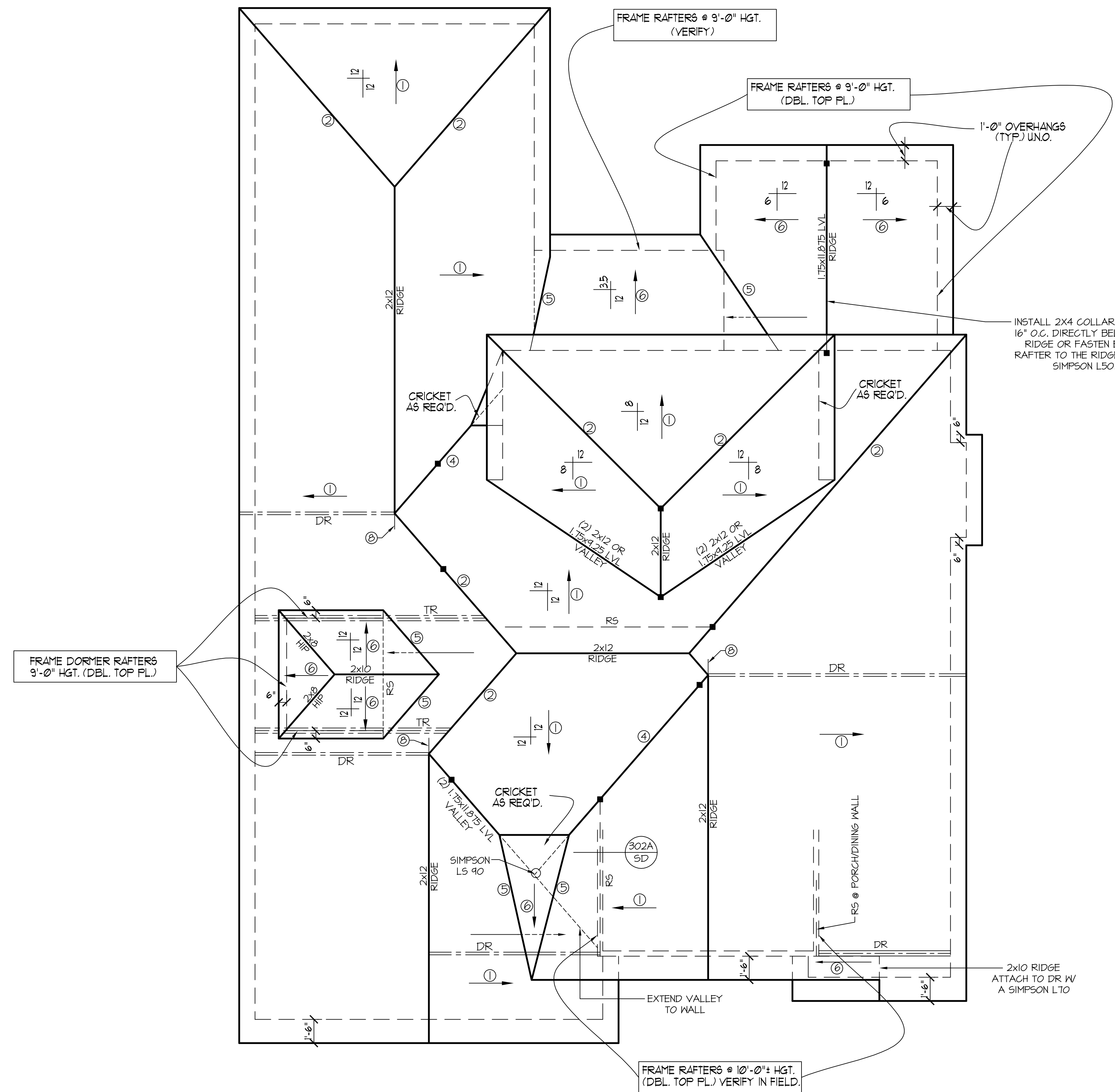
REVISIONS	TUG	PLAN
6-6-18	TUG	PLAN
12-19-18	TUG	PLAN
1-1-21	TUG	PLAN

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**ROOF FRAMING NOTES:**  
 1) ALL ROOF PITCHES TO BE 14/12 (TYP.) UNO.  
 2) PROVIDE 2x4 COLLAR BEAMS EVERY OTHER RAFTER (TYP.)  
 3) PROVIDE "HURRICANE CLIPS" AT ALL VALLEYS AND OPPOSING DBL. RAFTERS  
 4) PROVIDE DBL. HEADERS AND TRIMMERS AT ALL ROOF OPENINGS (EX: DORMERS, SKYLIGHTS, CHIMNEYS, ETC.)  
 5) 2x8 RAFTERS @ CATH. OR VAULTED CLGGS. TO BE FURRED DOWN OR USE DEEFER RAFTERS (VERIFY BRNG-HGT.) FOR PROPER INSULATION PER CODE  
 6) VERIFY ALL RAFTER BRNG. HGTS. BEFORE CONSTR. HAS BEGUN

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

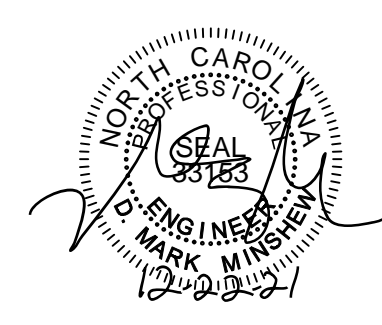
- 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
- (2) 2x10 OR 1.75x11.875 LVL HIP. (2) 2x10 HIPs MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER
- (2) 2x10 OR 1.75x4.25 LVL VALLEY. DO NOT SPLICE VALLEYS
- 1.75x11.875 LVL OR (2) 1.75x4.25 LVL VALLEY
- FALSE FRAME VALLEY ON 2x10 FLAT PLATE
- 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.
- 2x10 RAFTERS @ 16" O.C. W/ 2x12 RIDGE, UNO.
- 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-25A" 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.

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

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

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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1-1-21	TUG	PLAN	

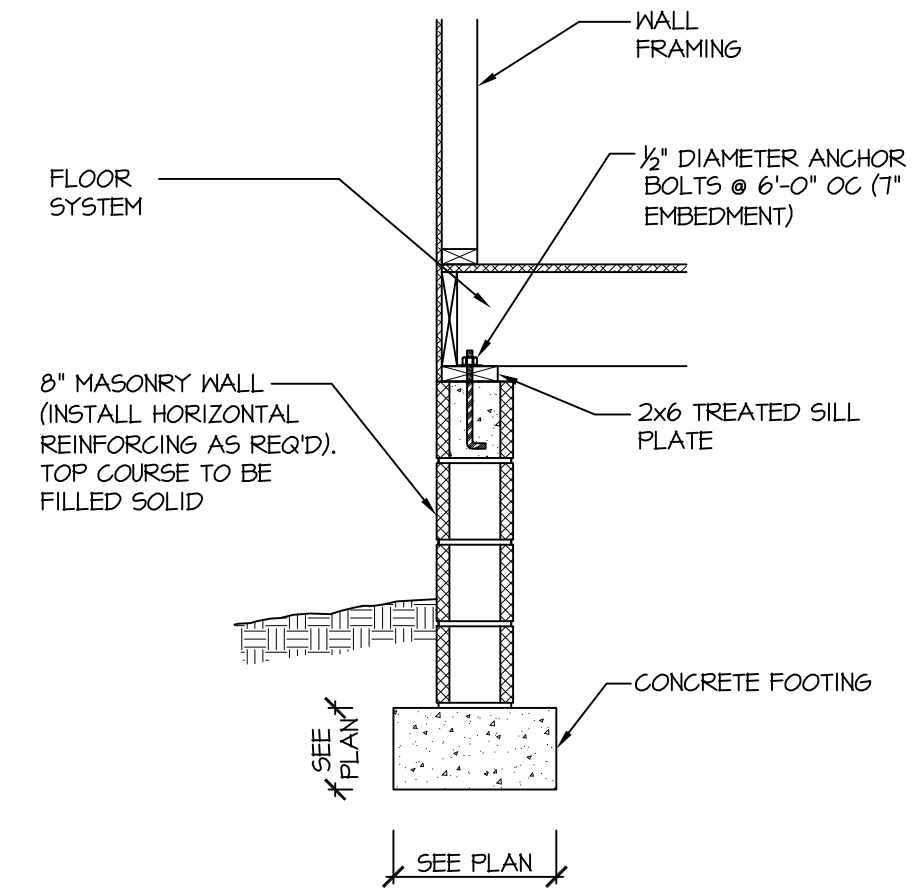
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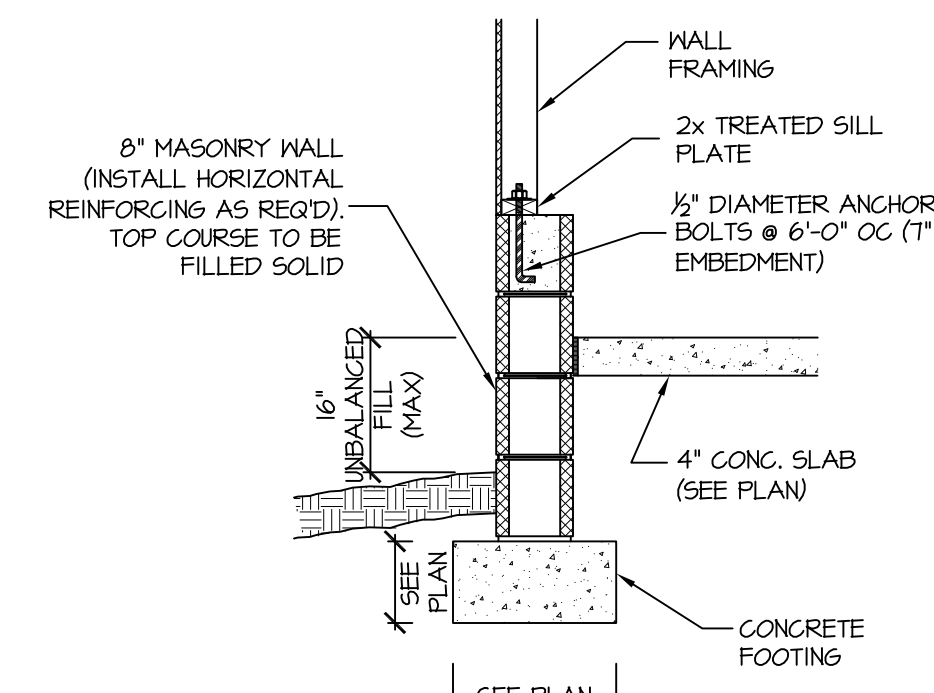
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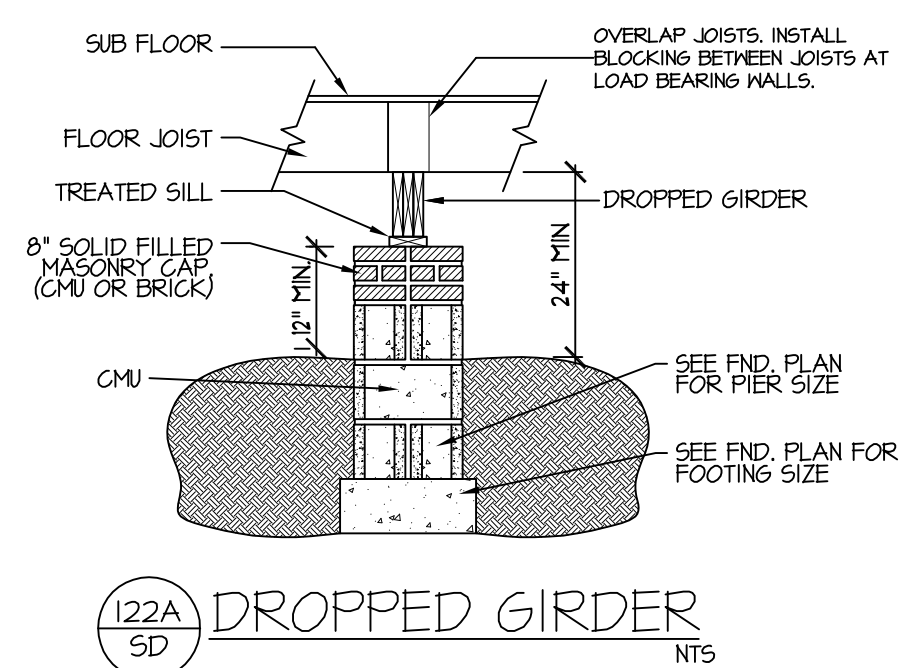




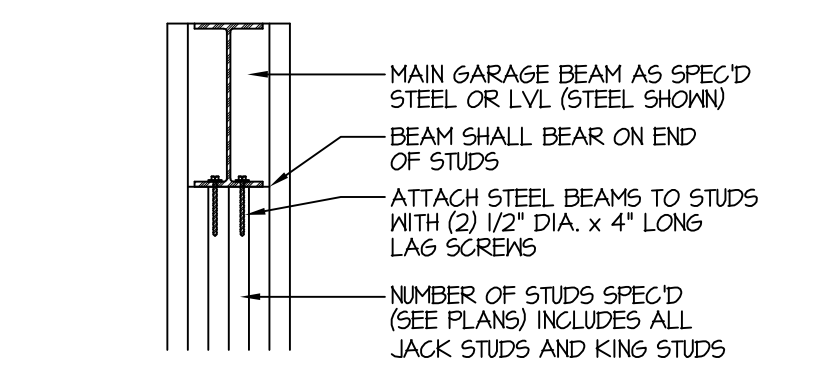
115-120 MPH 110A SD CRAWL SPACE FOOTING (SIDING OR EQUAL)



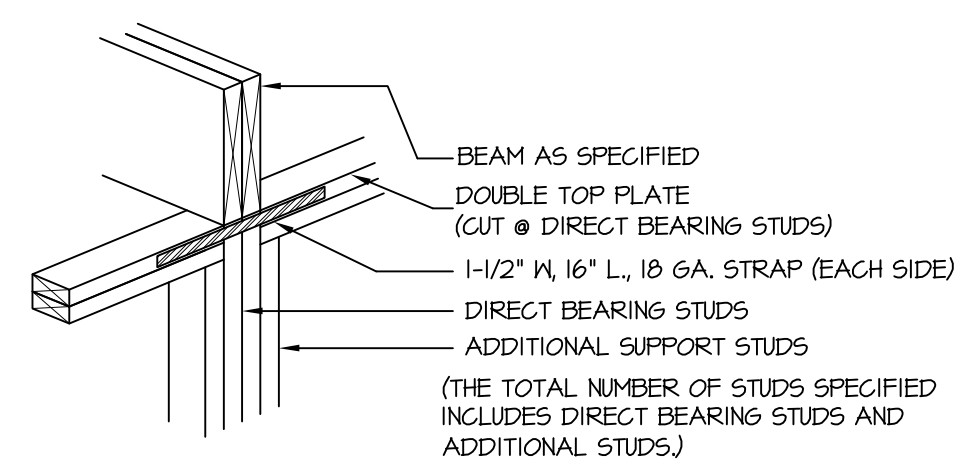
115-120 MPH 111A SD GARAGE WALL FOOTING (SIDING OR EQUAL)



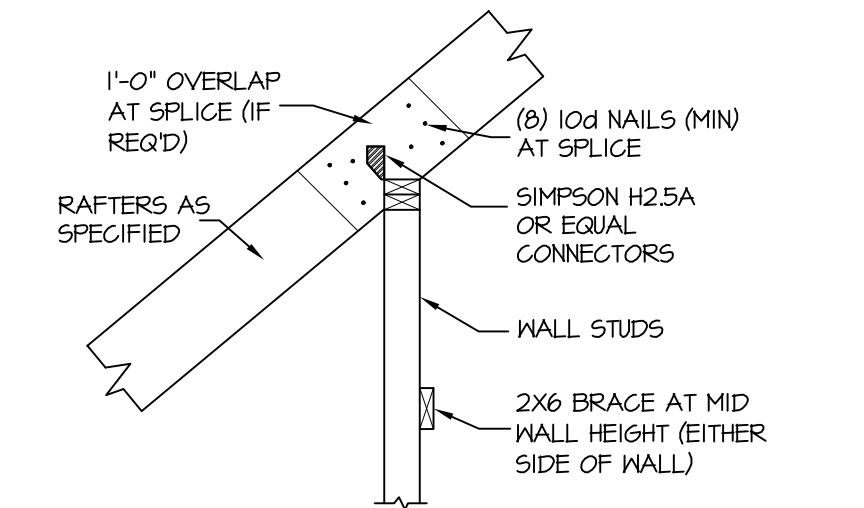
122A SD DROPPED GIRDER NTS



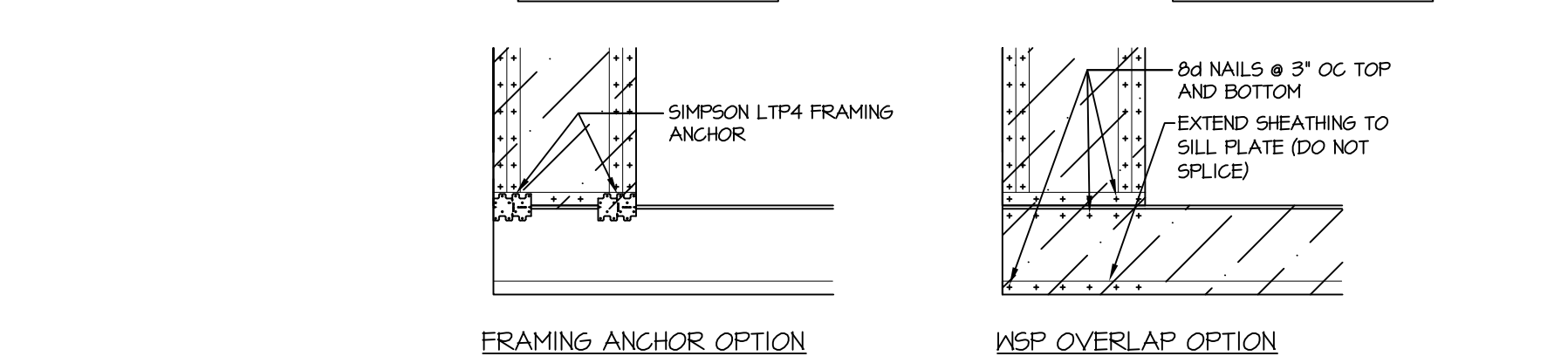
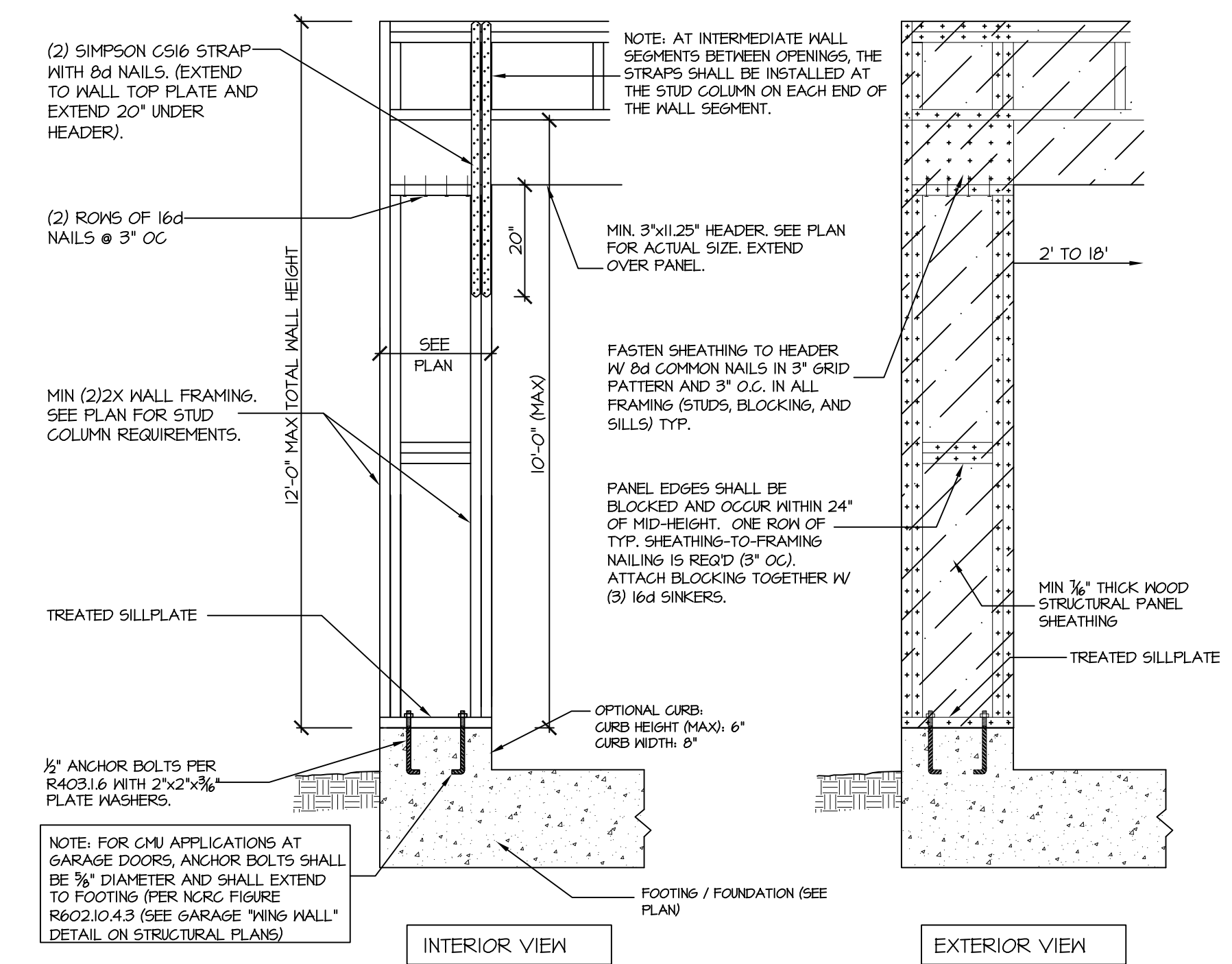
204A SD TYP. GARAGE BEAM BEARING NTS



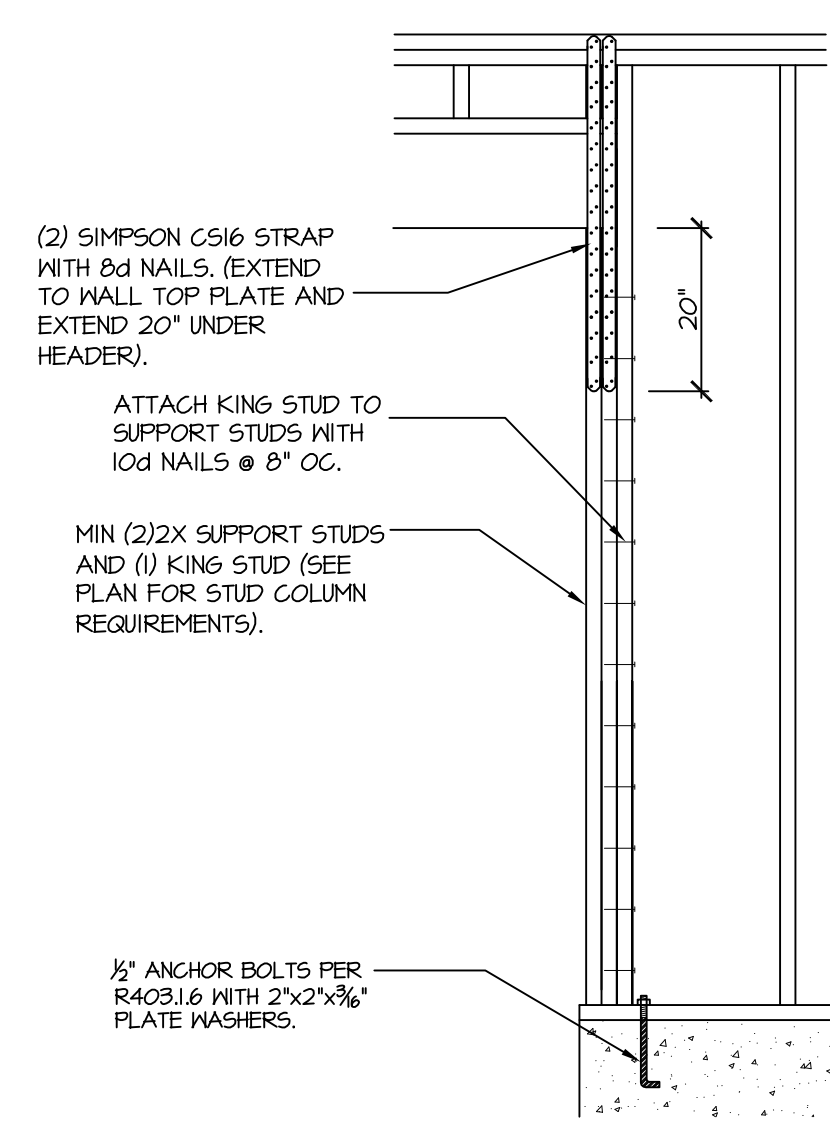
205A SD DIRECT STUD BEARING NTS



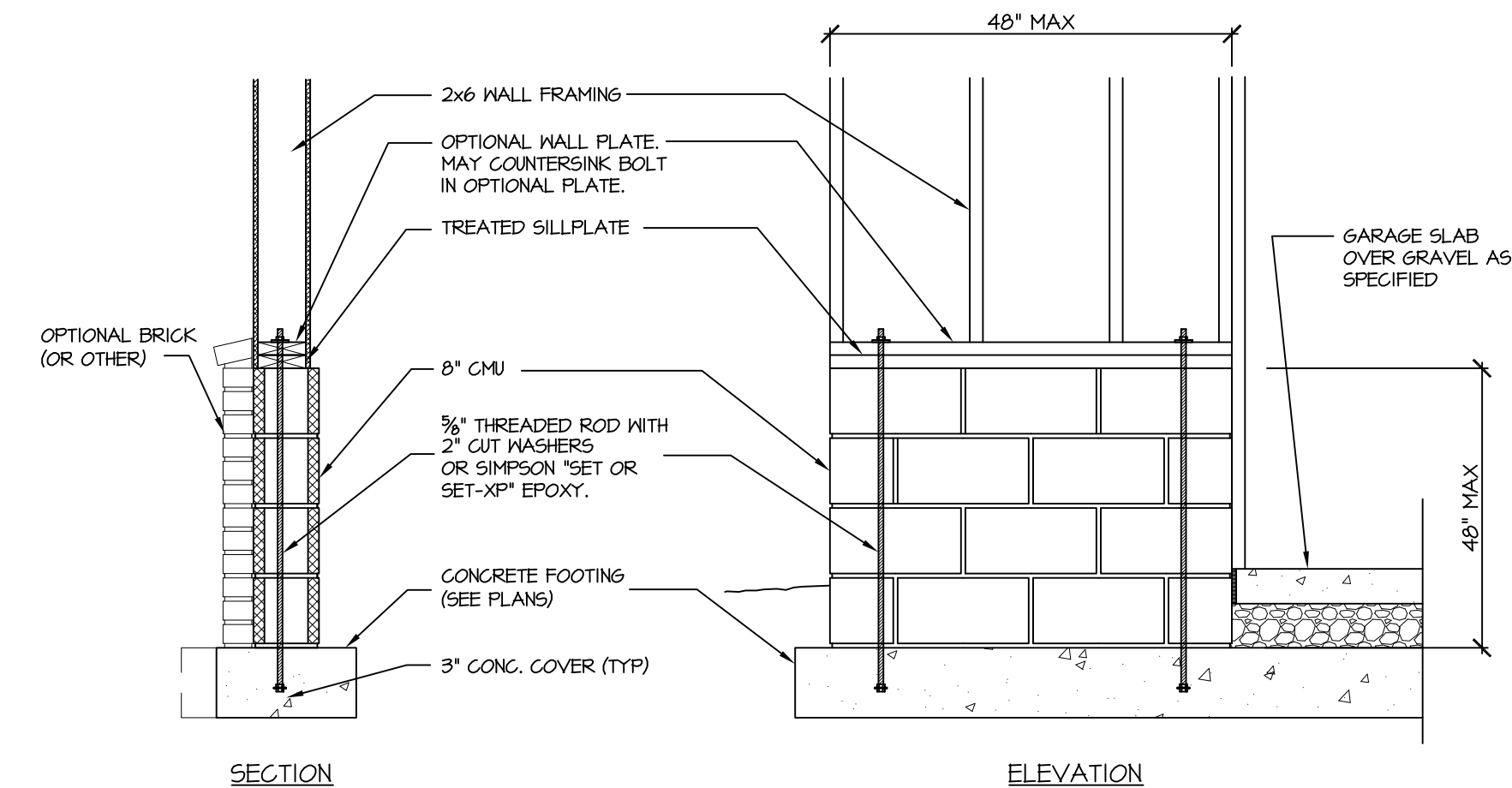
302A SD TYPICAL RAFTER SUPPORT ON ATTIC KNEEWALL NTS



905 SD CS-PF: CONTINUOUS PORTAL FRAME CONSTRUCTION DETAIL AND APPLICATION BASED ON NCRG FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



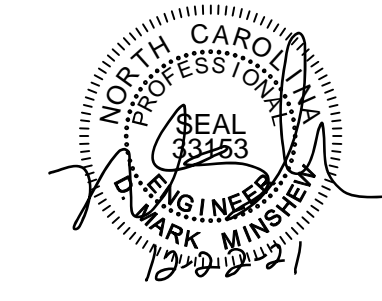
906 SD CS-PF: END CONDITION DETAIL (FOR USE WITH SINGLE CS-PF CONDITION) DETAIL AND APPLICATION BASED ON NCRG FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



907 SD GARAGE 'WING WALL' REINFORCING PER IRC FIGURE R602.10.4.3

**STRUCTURAL NOTES**  
NC (2018 NCRG), 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.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NC 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.
- DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)
  - ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
  - SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
  - ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
  - ATTIC WITHOUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
  - ATTIC WITHOUT STORAGE: (10 PSF, 10 PSF, L/240)
  - STAIRS: (40 PSF, 10 PSF, L/360)
  - EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
  - DECKS: (40 PSF, 10 PSF, L/360)
  - GUARDRAILS AND HANDRAILS: (200 LBS)
  - PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)
  - FIRE ESCAPES: (40 PSF, 10 PSF, L/360)
  - SNOW: (20 PSF)
- WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.
- SEE APPENDIX M (DC46) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES (UNLESS NOTED OTHERWISE (INO)). AIR ENTRAINMENT 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 OF THE CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF 1/4\"/>



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