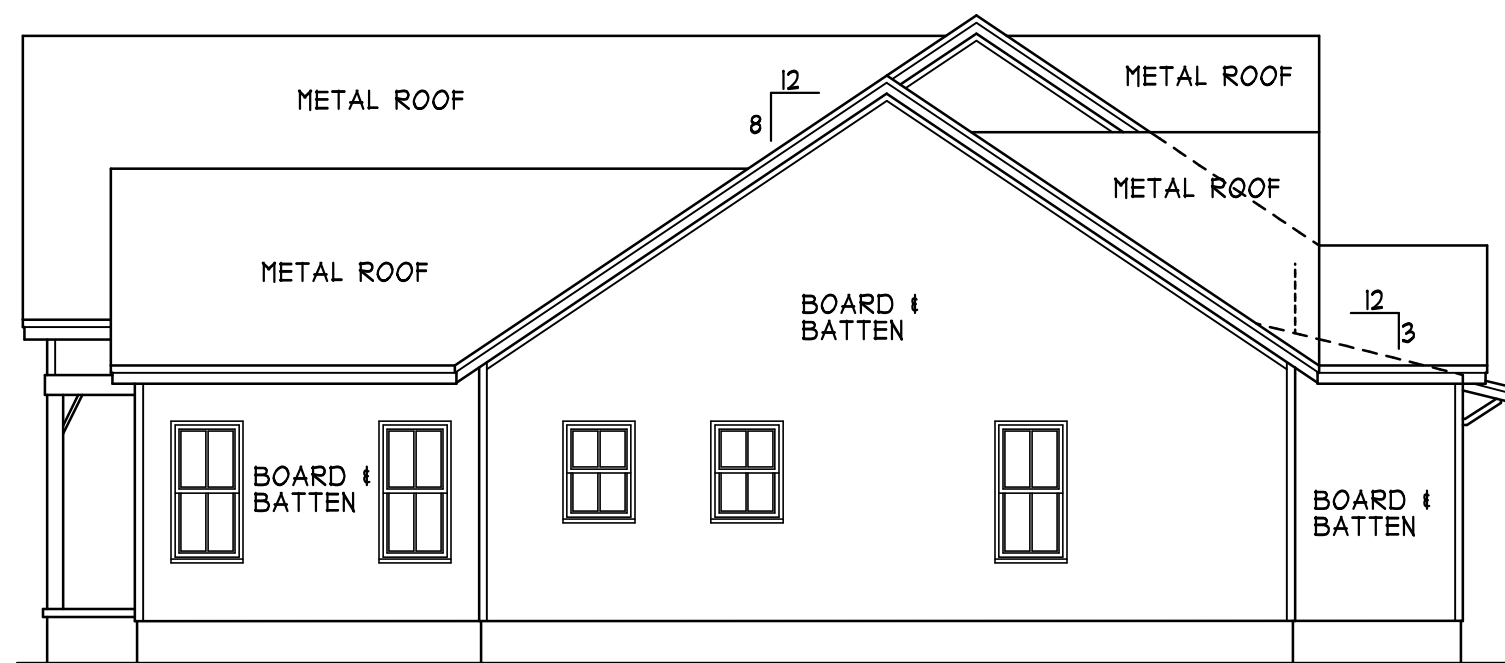
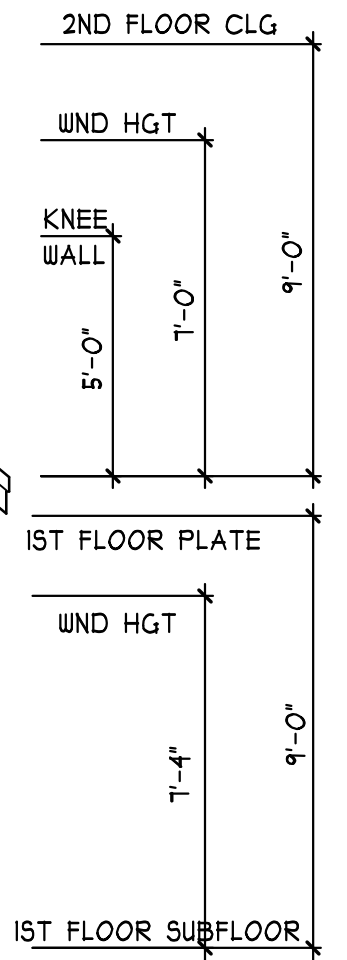
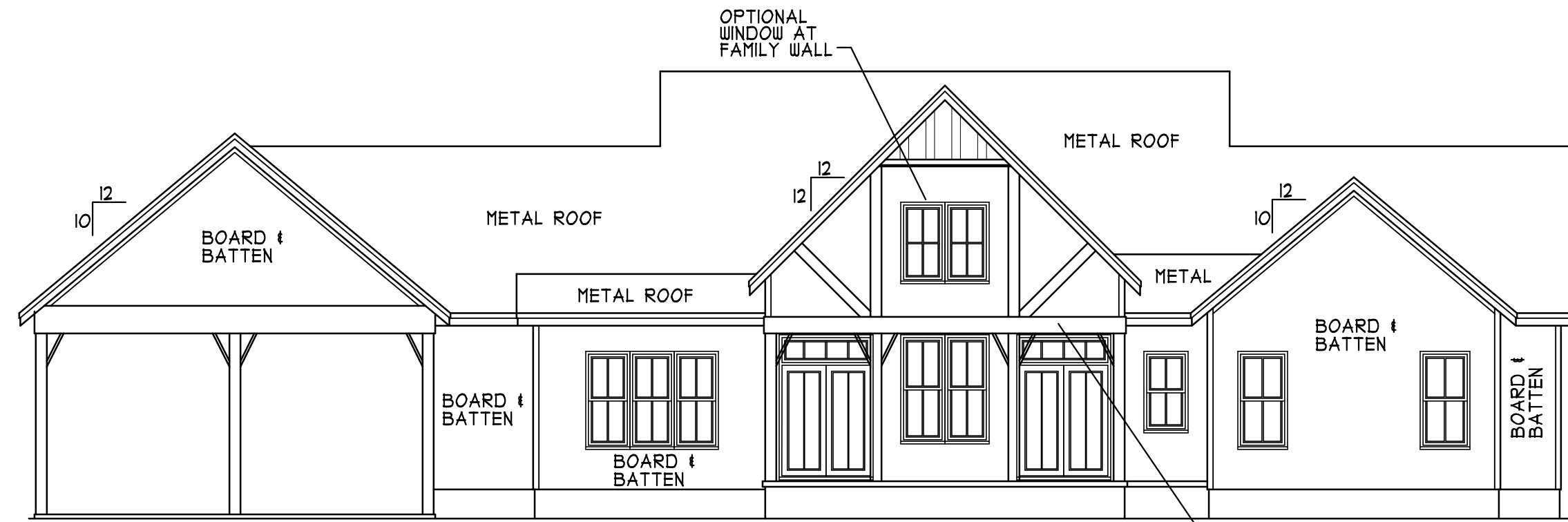




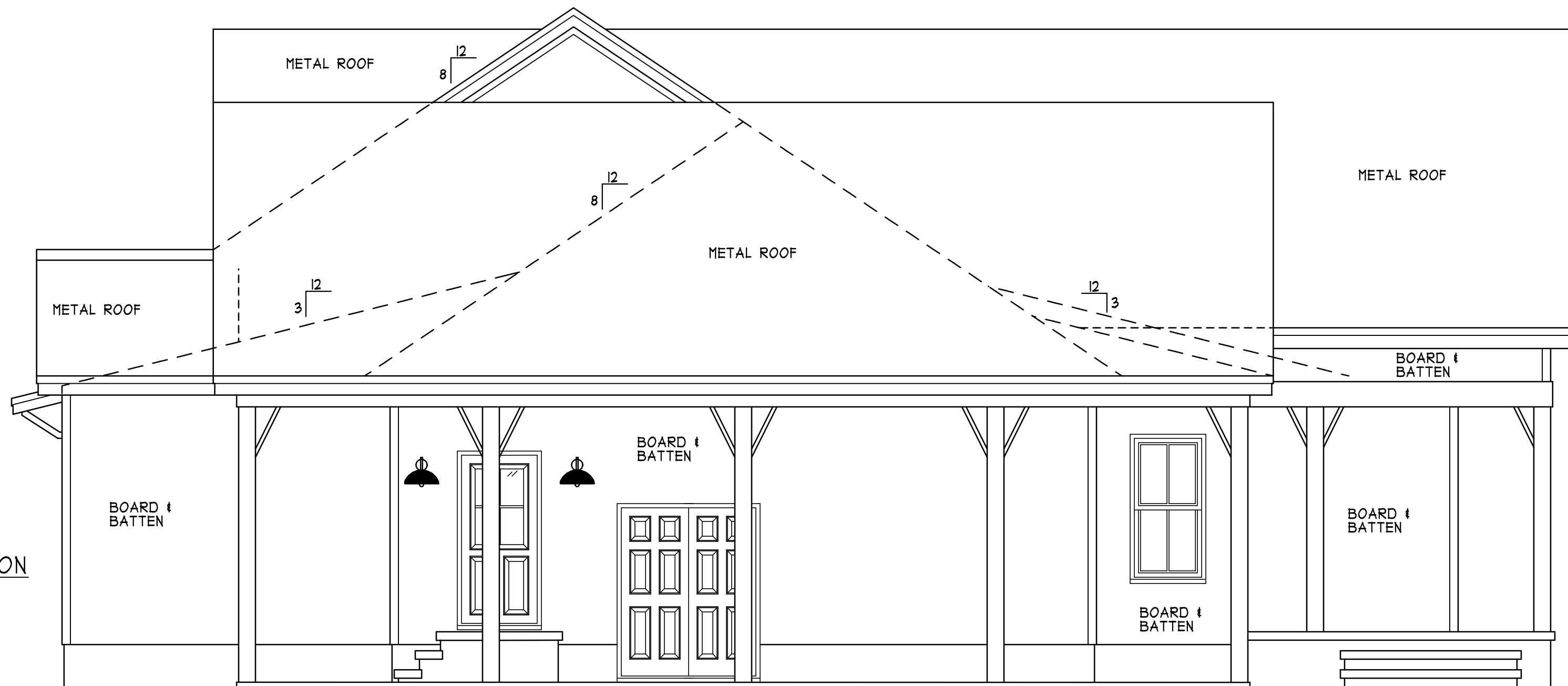
FRONT ELEVATION  
SCALE 1/4" = 1'-0"



LEFT ELEVATION  
SCALE 1/8" = 1'-0"



REAR ELEVATION  
SCALE 1/8" = 1'-0"



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

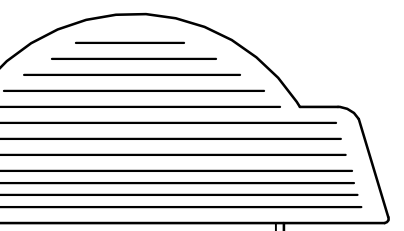
**ATTIC VENTILATION:**

THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE 1 TO 300, PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION TO BE PROVIDED BY EAVE OR CORNICE VENTS.

GROSS ATTIC AREA TO BE VENTILATED 4345 SQ.FT.  
4345/150 = 28.97 SQ.FT. NET FREE AREA

**ENERGY COMPLIANCE**

ZONE 3 = MAX. GLAZING U-FACTOR .35  
R-VALUE = CEILING R38, WALLS R15, FLOORS R19  
FOR JOHNSTON, SAMPSON, WAYNE COUNTY  
ZONE 4 = MAX. GLAZING U-FACTOR .35  
R-VALUE = CEILING R38, WALLS R15, FLOORS R19  
FOR WAKE, DURHAM, ORANGE COUNTY



BLAKE & EDIE  
DENNING RESIDENCE

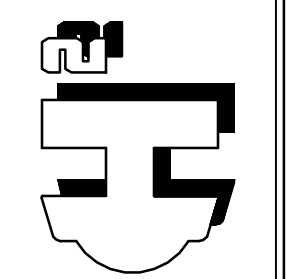
#2692

HEATED FOOTAGE:  
# 2692  
= 190  
= 441  
= 1016

SQUARE FOOTAGE:  
FIRST FLOOR  
FRONT PORCH  
REAR PORCH  
OPEN CARPORT

DESIGNED BY:  
HEATHER or JOHNATHAN HALL  
165 HEATHERSTONE CT  
BENSON NC 27504  
(919) 207-1403

H SQUARED  
HOME  
DESIGN, INC.



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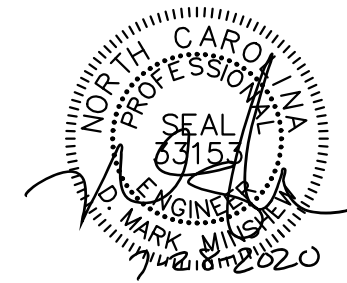
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DATE:  
01/14/20

1 STORY

FILE:  
040820

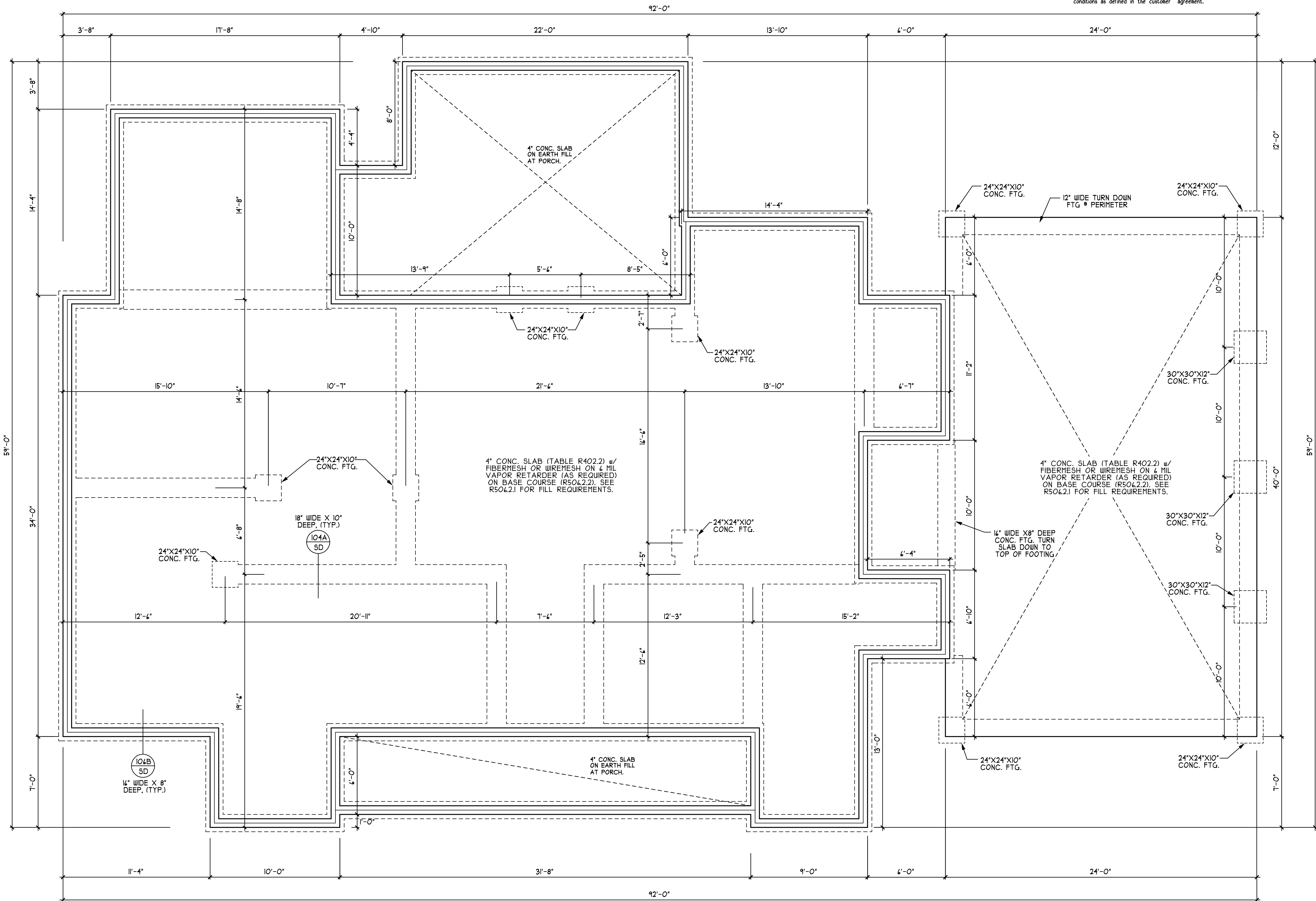
STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
3114 BENSON DR., RALEIGH, NC 27609  
LICENSE: C-1281, PHONE: 919-818-1471  
PROJECT #: 20-1689



NOTE ASSUMED SOIL BEARING CAPACITY = 2000  
PSF CONTRACTOR MUST VERIFY SITE CONDITIONS  
AND CONTACT SOILS ENGINEER IF MARGINAL OR  
UNSTABLE SOILS ARE ENCOUNTERED

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



**ANCHOR BOLTS**

ANCHOR BOLTS TO BE  
PLACED WITHIN 12' OF  
EVERY CORNER AND FROM  
EVERY SPlice AND AT 4'-0"  
O.C. WITH 1' MIN. IN CONC.

**DAMP PROOFING**

FOR DRAINAGE, DAMP PROOFING  
& WATER PROOFING REFER TO  
SECTION 405 & 404 IN 2018  
EDITION NC RES. CODES

RAISED SLAB FND  
**FOUNDATION PLAN**  
SCALE 1/4" = 1'-0"

BLAKE & EDIE  
DENNING RESIDENCE

#2692

HEATED FOOTAGE:

= 2692  
= 180  
= 441  
= 1016

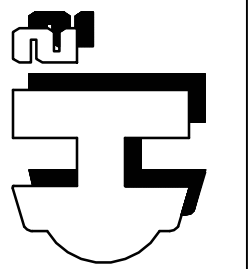
SQUARE FOOTAGE:

FIRST FLOOR  
FRONT PORCH  
REAR PORCH  
OPEN CARPORT

DESIGNED BY:

HEATHER or JOHNATHAN HALL  
165 HEATHERSTONE CT  
BENSON NC 27504  
(919) 207-1403

H SQUARED  
HOME  
DESIGN, INC.



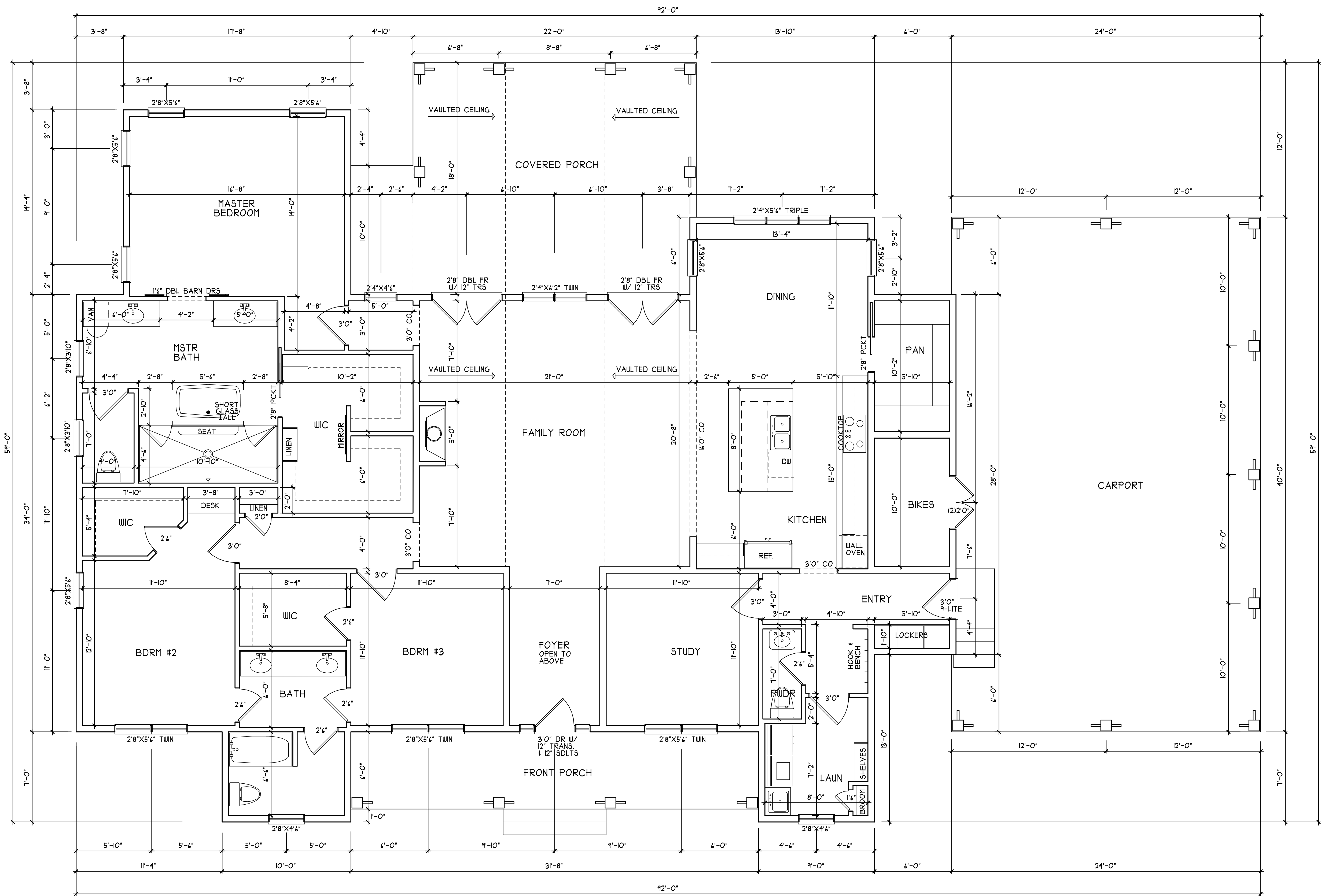
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DATE:  
01/14/20

1 STORY

FILE:  
040820



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

**BLAKE & EDIE**  
**DENNING RESIDENCE**

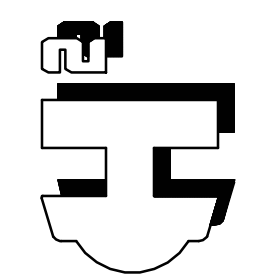
**#2692**

HEATED FOOTAGE:  
= 2692  
= 180  
= 441  
= 1016

SQUARE FOOTAGE:  
FIRST FLOOR  
FRONT PORCH  
REAR PORCH  
OPEN CARPORT

DESIGNED BY:  
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01/14/20

1 STORY

FILE:  
040820

**TRUSS SYSTEM REQUIREMENTS**

NC (2018 NCRCC): Wind: 115-120 MPH

1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.
5. INSTALL A TRUSS BELOW PARALLEL NON-LOAD BEARING WALLS OR BLOCK BETWEEN TRUSSES (BY TRUSS SUPPLIER) UNDER WALLS.

**PORCH POST NOTES:**

- 4"x4" (4"x4") TRT'D POST (OR EQUAL).
- ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.
- 1. POST CAP: SIMPSON AC4-MAX (AC4-MAX)
- 2. POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER); HIGH WIND; ADD (1) SIMPSON H4.
- 3. POST BASE: SIMPSON ABU44 (ABU44), (3) MONO: 5/8" ANCHOR (EMBED 1') 3/2" DIA; 5/8" ANCHOR (EXTEND TO FOOTING - HIGH WIND ONLY)
- 4. POST BASE: WOOD FOUNDATION: (2) SIMPSON CS14 STRAPS AT POSTS, EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.
- NOTE: EQUIVALENT POST CAP AND BASE ACCEPTABLE.

**FRAMING NOTES:**

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

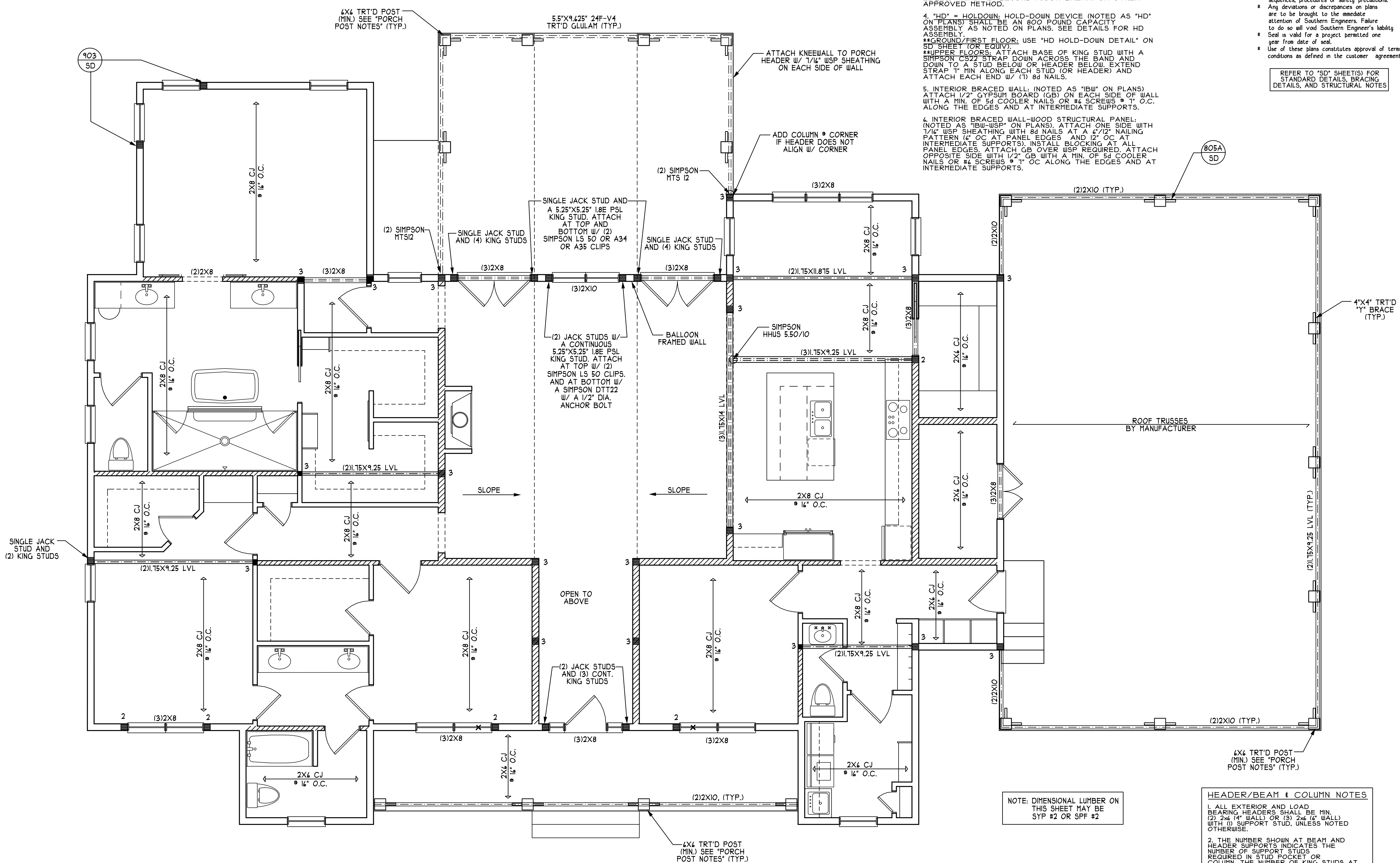
1. BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP; CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
2. EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 1/4" EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
3. WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE BLOCK AT ROOF AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM WITH BLOCKING AT PANEL EDGES, MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
4. "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 (FOR EQUIT).
  - \*\*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.
5. 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 #4 SCREWS @ 1" 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 1/4" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #4 SCREWS @ 1" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.



STRUCTURAL DESIGN BY:  
SOUTHERN ENGINEERS, P.A.  
314 BENSON DR., RALEIGH, NC 27609  
LICENSE: C-1281, PHONE: 919-818-1471  
PROJECT #: 20-1689

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



NOTE: DIMENSIONAL LUMBER ON THIS SHEET MAY BE SYP #2 OR SPF #2

**HEADER/BEAM & COLUMN NOTES**

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x6 (4" WALL) OR (3) 2x4 (4" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
2. 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 4 IN TABLE R402.3(5) OR AS BELOW:
  - UP TO 4' SPAN: (1) KING STUD
  - OVER 4' UP TO 8' SPAN: (2) KING STUDS
  - OVER 8' UP TO 12' SPAN: (3) KING STUDS
  - OVER 12' SPAN: (4) KING STUDS

**BLAKE & EDIE**  
**DENNING RESIDENCE**

**# 2692**

HEATED FOOTAGE:  
= 2692  
= 190  
= 441  
= 106

SQUARE FOOTAGE:  
FIRST FLOOR  
FRONT PORCH  
REAR PORCH  
OPEN CARPORT

DESIGNED BY:  
HEATHER or JOHNATHAN HALL  
165 HEATHERSTONE CT  
BENSON NC 27504  
(919) 207-1403

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DATE:  
01/14/20

1 STORY

FILE:  
040820

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

**HEADER/BEAM & COLUMN NOTES**

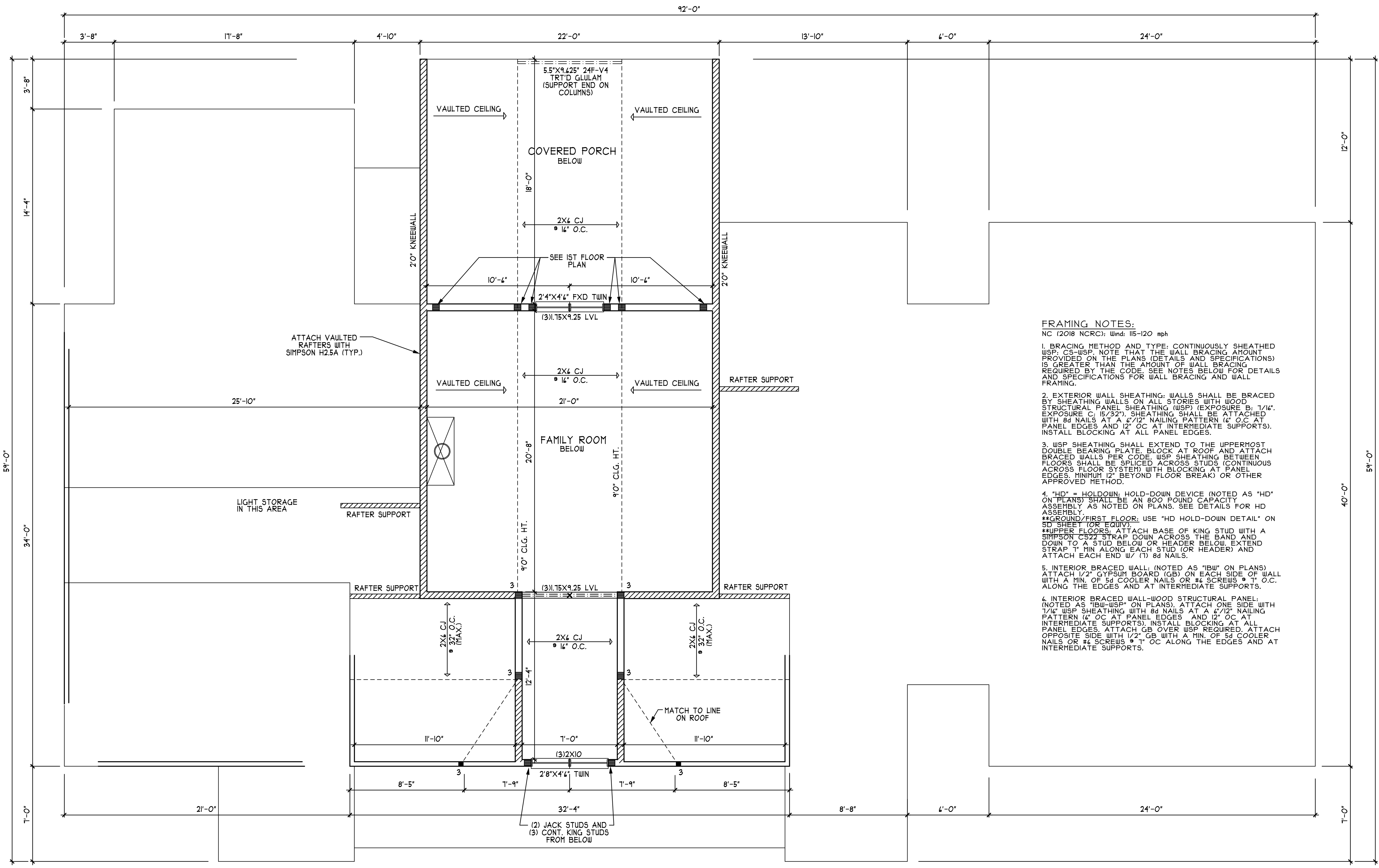
- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x6 (4" WALL) OR (3) 2x6 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM 2 IN TABLE R602.3(5) OR AS BELOW:
  - UP TO 4' SPAN: (1) KING STUD
  - OVER 4' UP TO 8' SPAN: (2) KING STUDS
  - OVER 8' UP TO 11' SPAN: (3) KING STUDS
  - OVER 11' SPAN: (4) KING STUDS

STRUCTURAL DESIGN BY:  
 SOUTHERN ENGINEERS, P.A.  
 3716 BENSON DR., RALEIGH, NC 27609  
 LICENSE: C-1281, PHONE: 919-878-1411  
 PROJECT #: 20-1689

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



- 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.
  - EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B; 1/4" EXPOSURE C; 5/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" O.C. AT PANEL EDGES AND 12" O.C. 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. WSP SHEATHING BETWEEN FLOORS SHALL BE SPICED 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 #4 SCREWS @ 1' O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
  - INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS) ATTACH ONE SIDE WITH 1/4" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #4 SCREWS @ 1' O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

NOTE: DIMENSIONAL LUMBER ON THIS SHEET MAY BE SYP #2 OR SPF #2

BLAKE & EDIE  
 DENNING RESIDENCE

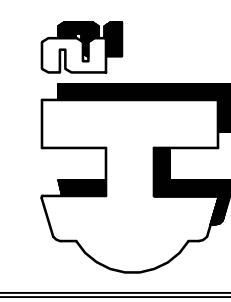
#2692

HEATED FOOTAGE:  
 = 2692  
 = 180  
 = 441  
 = 1016

SQUARE FOOTAGE:  
 FIRST FLOOR  
 FRONT PORCH  
 REAR PORCH  
 OPEN CARPORT

DESIGNED BY:  
 HEATHER or JOHANNATHAN HALL  
 165 HEATHERSTONE CT  
 BENSON NC 27504  
 (919) 207-1403

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DATE:  
 01/14/20

1 STORY

FILE:  
 040820

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

**TRUSS SYSTEM REQUIREMENTS**  
NC (2018 NCRC): Wind: 115-120 MPH

1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURERS.
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.
5. INSTALL A TRUSS BELOW PARALLEL NON-LOAD BEARING WALLS OR BLOCK BETWEEN TRUSSES (BY TRUSS SUPPLIER) UNDER WALLS.

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

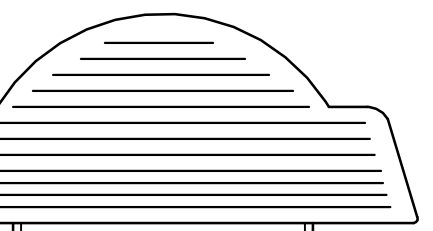
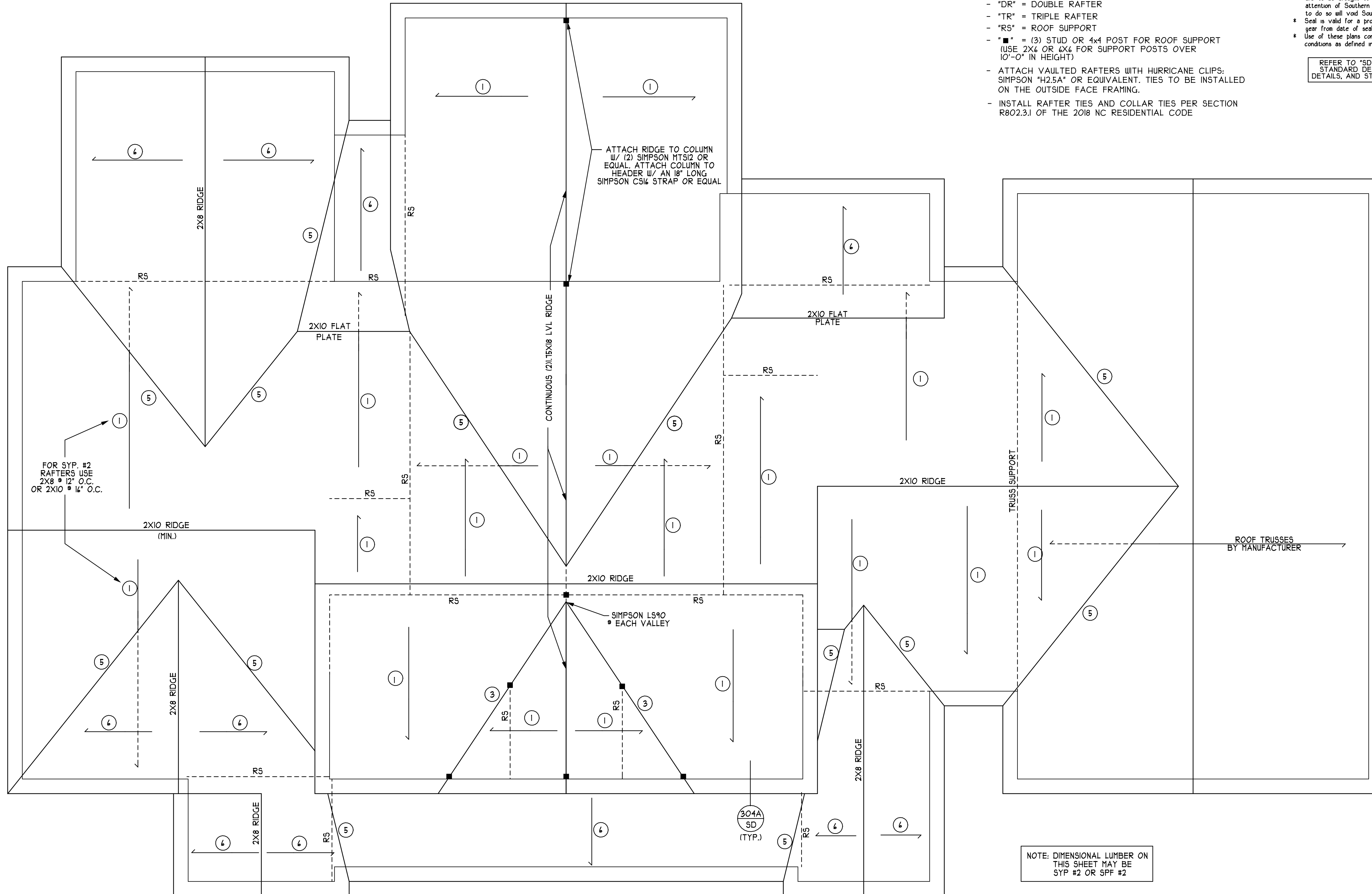
1. 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
2. (2) 2x10 OR 1.75x1.875 LVL HIP. (2) 2x10 HIP5 MAY BE SPLICED WITH A MIN. 4'-0" OVERLAP AT CENTER
3. (2) 2x10 OR 1.75x1.25 LVL VALLEY. DO NOT SPLICE VALLEYS
4. 1.75x1.875 LVL OR (2)1.75x1.25 LVL VALLEY.
5. FALSE FRAME VALLEY ON 2x10 FLAT PLATE
6. 2x4 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 OR 4X4 FOR SUPPORT POSTS OVER 10'-0" IN HEIGHT)
  - ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS: SIMPSON "H2.5A" OR EQUIVALENT. TIES TO BE INSTALLED ON THE OUTSIDE FACE FRAMING.
  - INSTALL RAFTER TIES AND COLLAR TIES PER SECTION R802.3.1 OF THE 2018 NC RESIDENTIAL CODE



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3714 BENSON DR., RALEIGH, NC 27609  
LICENSE: C-1281, PHONE: 919-818-1471  
PROJECT #: 20-1689

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**BLAKE & EDIE  
DENNING RESIDENCE**

**#2692**

HEATED FOOTAGE:  
= 2692  
FIRST FLOOR = 190  
FRONT PORCH = 441  
REAR PORCH = 106  
OPEN CARPORT

DESIGNED BY:  
HEATHER or JOHANNATHAN HALL  
165 HEATHERSTONE CT  
BENSON NC 27504  
(919) 207-1403

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1 STORY

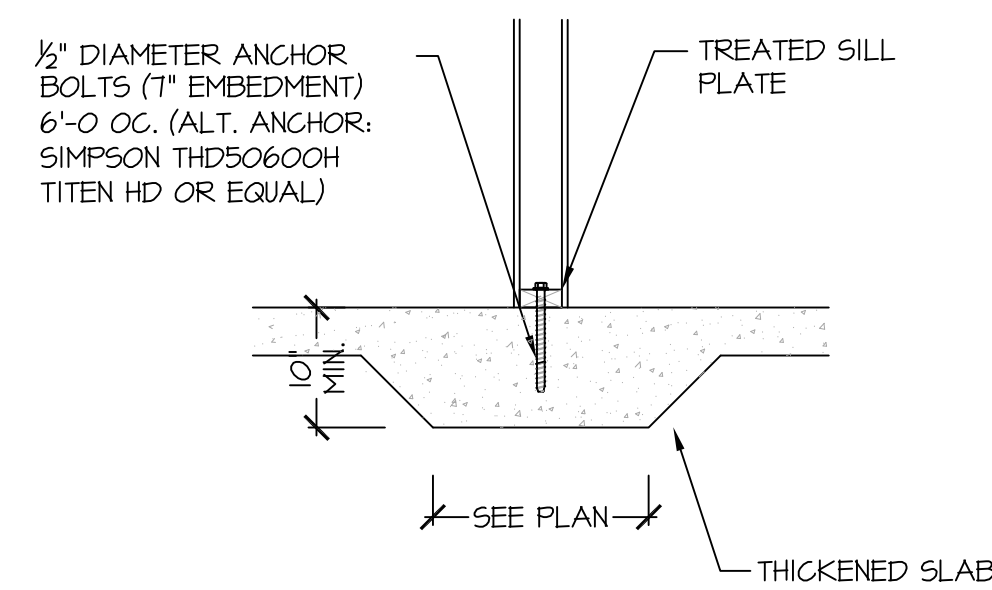
FILE: 040820

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

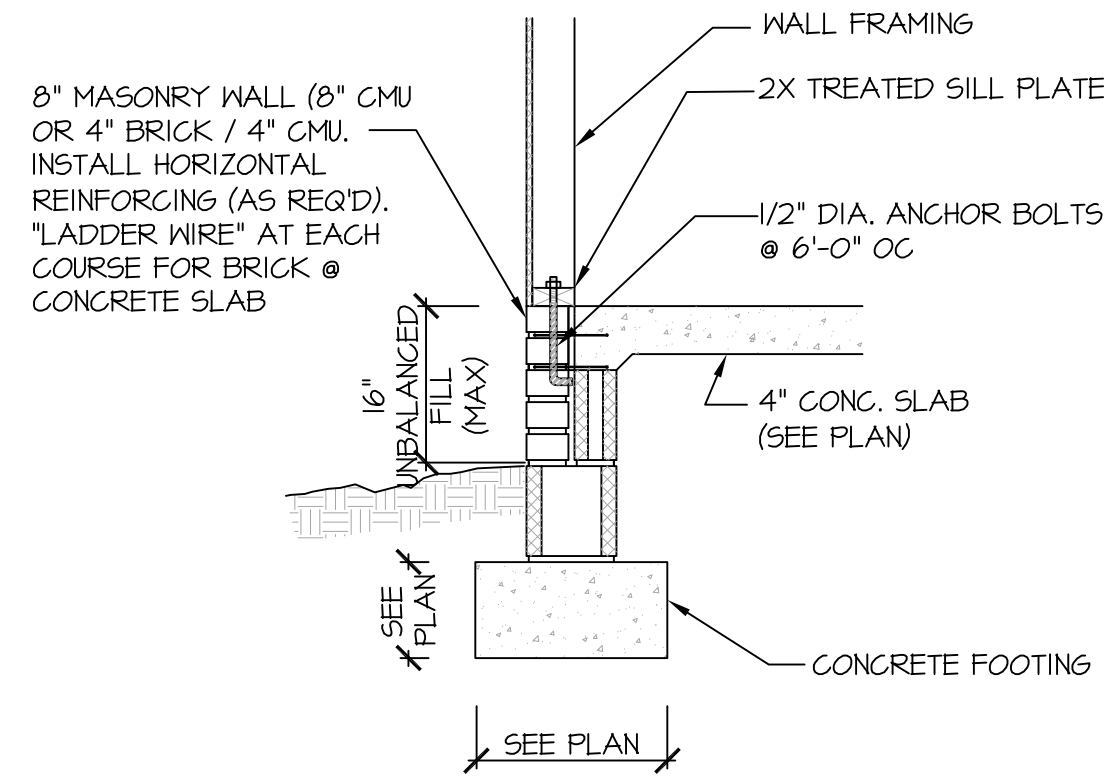
**STRUCTURAL NOTES**

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

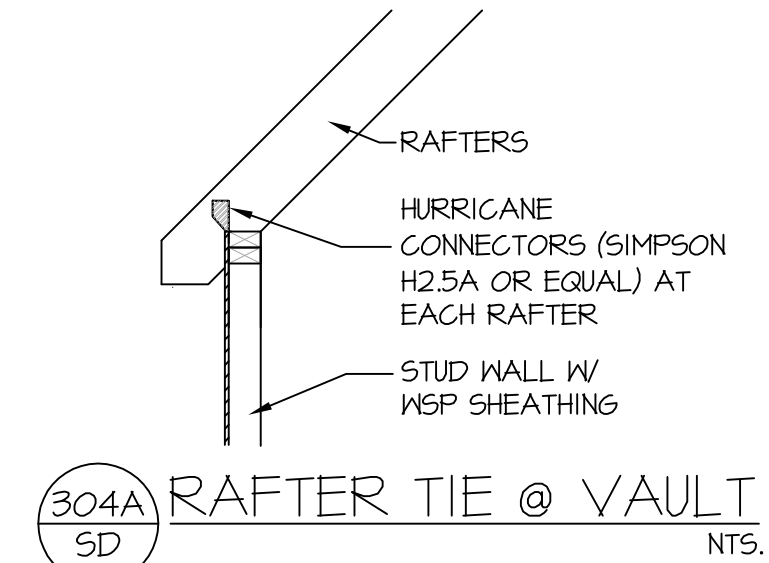
- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL 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 (DCA6) 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 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 1/D. (I.E. 4" CONCRETE SLABS SHALL HAVE 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A +10'-0" x +10'-0" GRID).
- 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 50 AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- ALL FRAMING LUMBER SHALL BE SPF #2 ( $F_b = 875$  PSI) UNLESS NOTED OTHERWISE (INO). ALL TREATED LUMBER SHALL BE SYP #2. PLATE MATERIAL MAY BE SPF #3 OR SYP #3 ( $F_c(perp) = 425$  PSI - MIN).
- L.V.L. SHALL BE LAMINATED VENEER LUMBER:  $F_b=2600$  PSI,  $F_v=285$  PSI,  $E=1.9 \times 10^6$  PSI.
  - P.S.L. SHALL BE PARALLEL STRAND LUMBER:  $F_b=2400$  PSI,  $F_v=240$  PSI,  $E=2.0 \times 10^6$  PSI.
  - L.S.L. SHALL BE LAMINATED STRAND LUMBER:  $F_b=2250$  PSI,  $F_v=400$  PSI,  $E=1.55 \times 10^6$  PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
- 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 MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- 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. LAP ALL REBAR SPLICES 30 BAR DIAMETERS.
- REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.
- 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.
- 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'-0". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION RT03.B.3 LINTELS.



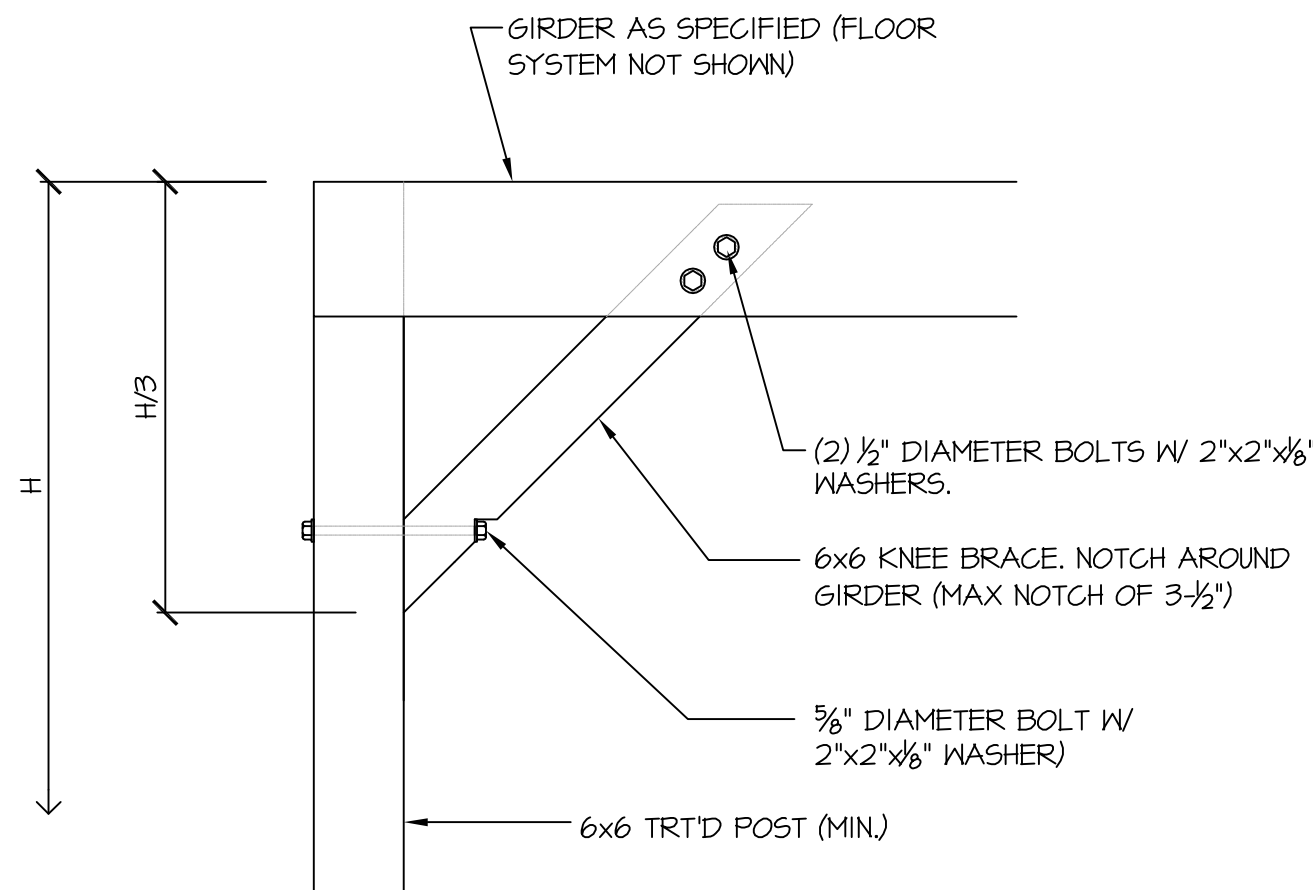
115-120 MPH (104A SD) **THICKENED SLAB**  
(INTERIOR BEARING WALL)



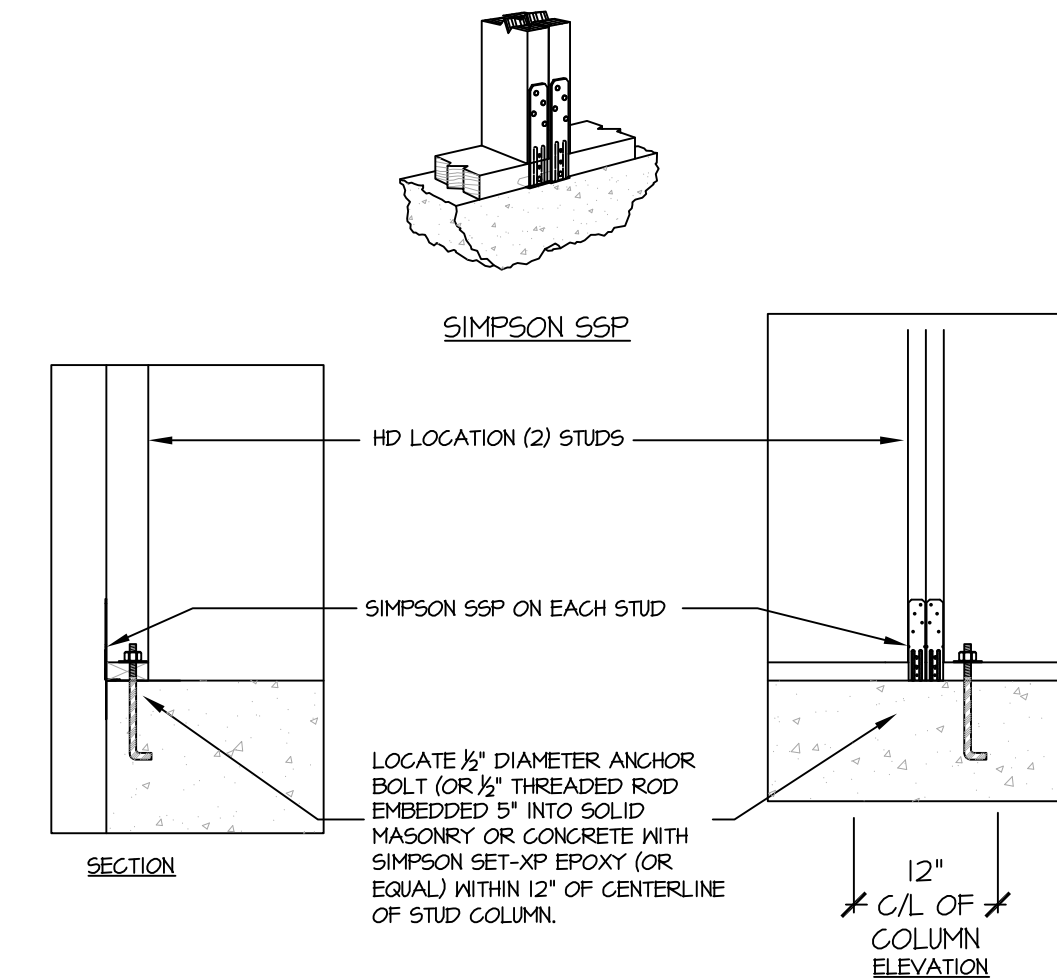
115-120 MPH (106B SD) **STEM WALL SLAB FOOTING**  
(SIDING W/ BRICK SKIRT)



(304A SD) **RAFTER TIE @ VAULT**  
NT5.



(805A SD) **TYP. 6x6 "Y" BRACE**  
(APPROVED ALTERNATE METHODS ACCEPTABLE)



(903 SD) **BRACED WALL END CONDITION "HD" HOLD-DOWN DETAIL**  
NOTE: SIMPSON DTT-1Z IS ACCEPTABLE ALTERNATE  
NOTE: ALTERNATE HD HOLD-DOWN DEVICES OR SYSTEMS MAY BE USED TO MEET THE CODE REQUIRED 800 LB CAPACITY IN LIEU OF THE ABOVE DETAIL.



**PROJECT #**  
**20-1689**

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