

SAMPSON "C" (Farmhouse-FH) Lot 57, Bent Tree

FOUNDATION

1. CONCRETE AND MASONRY FOUNDATION WALLS SHALL BE SELECTED AND CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OR IN ACCORDANCE WITH ACI 318, NCM A TR66-A, OR ACI 530/ASCE 5/TMS 402.
2. MASONRY AND POURED CONCRETE WALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH TABLES R404.1.1 (1 THROUGH 4) OF THE NORTH CAROLINA RESIDENTIAL CODE.
3. WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH ½" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT SPACED A MAXIMUM OF 6" O.C. AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION.
4. THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
5. CENTERS OF PIERS SHALL BEAR IN THE MIDDLE THIRD OF THE FOOTINGS, AND GIRDERS SHALL CENTER IN THE MIDDLE THIRD OF THE PIERS.

DESIGN LOADS

TABLE R301.4	LIVE LOAD (PSF)	DEAD LOAD (PSF)
DWELLING UNITS	40	10
SLEEPING ROOMS	30	10
ATTICS WITH STORAGE	20	10
ATTICS WITHOUT STORAGE	10	10
ROOF SNOW	20	10
STAIRS	40	10
DECKS	40	10
EXTERIOR BALCONIES	60	10
PASSENGER VEHICLE GARAGES	50	-
FIRE ESCAPES	40	10
GUARDRAILS AND HANDRAILS	200	-

MATERIALS

1. FRAMING LUMBER SHALL BE #2 SPRUCE PINE FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES:
F_b = 875 PSI F_v = 70 PSI E = 1.4E6 PSI
2. FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE #2 SOUTHERN YELLOW PINE (SYP) TREATED IN ACCORDANCE WITH AWP A C22 WITH THE FOLLOWING DESIGN PROPERTIES:
F_b = 1050 PSI F_v = 95 PSI E = 1.6E6 PSI
3. ENGINEERED WOOD BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
F_b = 2900 PSI F_v = 285 PSI E = 1.9E6 PSI
4. STRUCTURAL STEEL SHALL CONFORM TO ASTM A-36 MINIMUM GRADE.
5. BOLTS SHALL CONFORM TO A307 MINIMUM GRADE.
6. REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60.
7. POURED CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN ACI 318 OR ASTM C 1157.
8. CONCRETE LOCATED PER TABLE R402.2 SHALL BE AIR ENTRAINED WITH THE TOTAL AIR CONTENT NOT LESS THAN 5 PERCENT OR MORE THAN 7 PERCENT.
9. MASONRY UNITS SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 AND MORTAR SHALL COMPLY WITH ASTM C 270.
10. ALLOWABLE SOIL BEARING PRESSURE 2000 PSF.

ABBREVIATIONS

CONC	CONCRETE
CONT	CONTINUOUS
DBL	DOUBLE
DJ	DOUBLE JOIST
DSP	DOUBLE STUD POCKET
EA	EACH
FL PT	FLAT PLATE
FTG	FOOTING
HGR	HANGER
LVL	LAMINATED VENEER LUMBER
NTS	NOT TO SCALE
OC	ON CENTER
PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED
SC	STUD COLUMN
SP	STUD POCKET
TJ	TRIPLE JOIST
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

ENERGY COMPLIANCE:

TABLE N1102.1 - REFER TO TABLE N1101.1 TO DETERMINE THE CLIMATE ZONE BY COUNTY AND REFER TO TABLE N1102.1 FOR R VALUE INSULATION REQUIREMENTS LISTED BY ZONE.

TABLE N1102.1 - ZONE 3 - MAX. GLAZING U FACTOR: 0.30, MIN. INSULATION R VALUES: CEILING R-38, WALLS R-15 or 13+2.5^b, FLOORS R-19, BASEMENT WALLS R-5/13^c, SLAB PERIMETER R-0, CRAWL SPACE WALLS R-5/13.

TABLE N1102.1 - ZONE 4 - MAX. GLAZING U FACTOR: 0.30, MIN. INSULATION R VALUES: CEILING R-38, WALLS R-15 or 13+2.5^b, FLOORS R-19, BASEMENT WALLS R-10/15^c, SLAB PERIMETER R-10 (2 FT DEEP), CRAWL SPACE WALLS R-10/15^c.

* "10/15" means R-10 continuous insulated sheathing on the interior or exterior of the home or R-15 cavity insulation at the interior of the basement wall or crawl space.

CONSTRUCTION

1. STEEL FLITCH BEAMS SHALL BE FASTENED TOGETHER WITH 1/2" DIAMETER BOLTS WITH WASHERS PLACED UNDER THE THREADED END OF THE BOLT. BOLTS SHALL BE SPACED AT MAXIMUM 24" O.C. STAGGERED TOP AND BOTTOM OF BEAM WITH A MINIMUM 2" EDGE DISTANCE. TWO BOLTS SHALL BE LOCATED AT 6" FROM EACH END OF FLITCH BEAM.
2. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ANCHORED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS.
3. ENGINEERED WOOD BEAMS SHALL BE INSTALLED WITH ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
4. ALL BEAMS SHALL BE CONTINUOUSLY SUPPORTED Laterally AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF THREE STUDS.
5. SOLID BLOCKING SHALL BE PROVIDED AT ALL POINT LOADS TO TRANSFER LOADS THROUGH FLOOR LEVELS. COLUMNS SHALL BE CONTINUOUS TO THE FOUNDATION OR TO OTHER STRUCTURAL ELEMENTS.
6. ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS SHALL BE PROVIDED FOR REVIEW AND COORDINATED WITH THE ENGINEER OF RECORD. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. WALL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION R602.10 OF THE NORTH CAROLINA RESIDENTIAL CODE.
8. BRICK LINTELS SHALL BE 3 1/2 x 3 1/2 x 1/4 STEEL ANGLE FOR UP TO 60" MAXIMUM SPAN AND 6 x 4 x 5/16 FOR SPANS GREATER THAN 60".
9. BRICK LINTELS AT SLOPED AREAS SHALL BE 4 x 3 1/2 x 1/4 STEEL ANGLE WITH 16d NAILS IN 3/16" HOLES IN 4" ANGLE LEG AT 12" O.C. TO DOUBLE RAFTER. WHEN THE SLOPE EXCEEDS 4:12 A MINIMUM OF 3 x 3 x 1/4 PLATES SHALL BE WELDED AT 24" O.C. ALONG THE STEEL ANGLE.

GENERAL

ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CERTIFY ARCHITECTURAL LAYOUT OR DIMENSIONAL ACCURACY. ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS OR ANY DEVIATION FROM THE PLANS.

ALL CONSTRUCTION, WORKMANSHIP, MATERIAL QUALITY AND SELECTION SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE - RESIDENTIAL CODE 2018 EDITION FROM THE INTERNATIONAL RESIDENTIAL CODE 2018 (IRC), AND LOCAL CODES AND REGULATIONS. DIMENSIONS SHALL GOVERN OVER SCALE AND CODE SHALL GOVERN OVER DIMENSIONS.

ADDITIONAL LOADS

FIGURE R301.2(4) - BASIC DESIGN WIND SPEED 115 MPH

FIGURE R301.2(2) - SEISMIC DESIGN CATEGORY B

TABLE R301.2(4) - DESIGN POSITIVE AND NEGATIVE PRESSURE FOR DOORS AND WINDOW FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF

TABLE R301.2(2) - COMPONENT AND CLADDING LOADS FOR A MEAN ROOF HEIGHT OF 30 FEET OR LESS LOCATED IN EXPOSURE B

ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE DESIGNED BASED ON ROOF PITCHES AS FOLLOWS:
45.4 PSF FOR 0:12 TO 2.25:12, 34.8 PSF FOR 2.25:12 TO 7:12 AND 21 PSF FOR 7:12 TO 12:12
WALL CLADDING IS DESIGNED FOR A 24.1 PSF POSITIVE AND NEGATIVE PRESSURE

ATTIC VENTILATION

1454 SQ. FT. OF ATTIC / 1509±69 SQ. FT.
TOTAL NET FREE VENTILATING AREA

VENTILATION MAY BE REDUCED 50%, PROVIDED AT LEAST 50 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3'-0" ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.

MEAN ROOF HEIGHT

1 STORY = 11'-0"
CLADDING POSITIVE & NEGATIVE PRESSURE = 21 PSF

1 1/2 STORY = 19'-0"
CLADDING POSITIVE & NEGATIVE PRESSURE = 34.8 PSF

2 STORY = 19'-0"
CLADDING POSITIVE & NEGATIVE PRESSURE = 34.8 PSF

ANCHOR BOLTS

INSTALL ANCHOR BOLTS, NUTS, AND WASHERS PER CODE AT ALL EXTERIOR WALL TREATED PLATES AND AT INTERIOR BEARING WALL TREATED PLATES ON SLAB FOUNDATIONS. TO BE A MINIMUM OF 6" O.C. AND WITHIN 12" FROM THE ENDS OF EACH PLATE.

DESIGN PRESSURES

MINIMUM RATING: 25 PSF

SILVER LINE 2200 SERIES

LOW E-GLASS WINDOWS

SQUARE FOOTAGE CHART

HEATED AREA		UNHEATED AREA	
FIRST FLOOR	848 S.F.	FRONT PORCH	115 S.F.
SECOND FLOOR	1156 S.F.	COVERED PATIO	120 S.F.
		GRILL PATIO	36 S.F.
		GARAGE	409 S.F.
		UNFIN. ATTIC FLOOR	509 S.F.
TOTAL HEATED SQ. FOOTAGE	2004 S.F.	TOTAL UNHEATED SQ. FOOTAGE	1189 S.F.
GROSS HEATED AND UNHEATED SQ. FOOTAGE			3193 S.F.

TABLE N1102.1.2 (R402.1.2) CLIMATE ZONES 3-5

CLIMATE ZONES	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,k}	CEILING ^m R-VALUE	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE ⁱ	FLOOR R-VALUE	BASEMENT ⁿ WALL R-VALUE	SLAB ^d R-VALUE AND DEPTH	CRAWL SPACE ^o WALL R-VALUE
3	0.35	0.55	0.30	38 or 30ci	15 OR 13+2.5 ^b	5/13 or 5/10ci	19	5/13 ^f	0	5/13
4	0.35	0.55	0.30	38 or 30ci	15 OR 13+2.5 ^b	5/13 or 5/10ci	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30ci	19 ⁿ OR 13+5 ^h OR 15+3 ^h	13/17 or 13/12.5 ^a	30 ^g	10/15	10	10/15

- a. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.
- b. THE FENESTRATION U-FACTOR COLUMN EXCLUDES SKYLIGHTS. THE SHGC COLUMN APPLIES TO ALL GLAZED FENESTRATION.
- c. "1/2" MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-15 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.
- d. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAB DOWNWARD TO THE BOTTOM OF THE FOOTING OR A MAXIMUM OF 24 INCHES BELOW GRADE, WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24 INCHES, WHICHEVER IS LESS (SEE APPENDIX D).
- e. DELETED.
- f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE 1101.7/ OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.
- g. THE FIRST VALUE IS CAVITY INSULATION. THE SECOND VALUE IS CONTINUOUS INSULATION. SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 CONTINUOUS INSULATION. IF STRUCTURAL SHEATHING COVERS 25 PERCENT OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED WHERE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF EXTERIOR, STRUCTURAL SHEATHING SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2.
- i. THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR OF THE MASS WALL.
- j. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
- k. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
- l. R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH OF THE ATTIC ROOF DECK.
- m. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF, THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BAFFLE.
- n. R-19 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2X6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2X4 WALL IS NOT DEEMED TO COMPLY.
- o. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.



Drawn By: AJMV

Checked By: AJMV

Date: 7/19/2019

Revision No.	Revision Date

Designer Signature

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Client:

Royal Oaks
Building Group
1210 Trinity Road - Cary, NC 27513 - (919) 223-3333
BENT TREE
Lot # 57

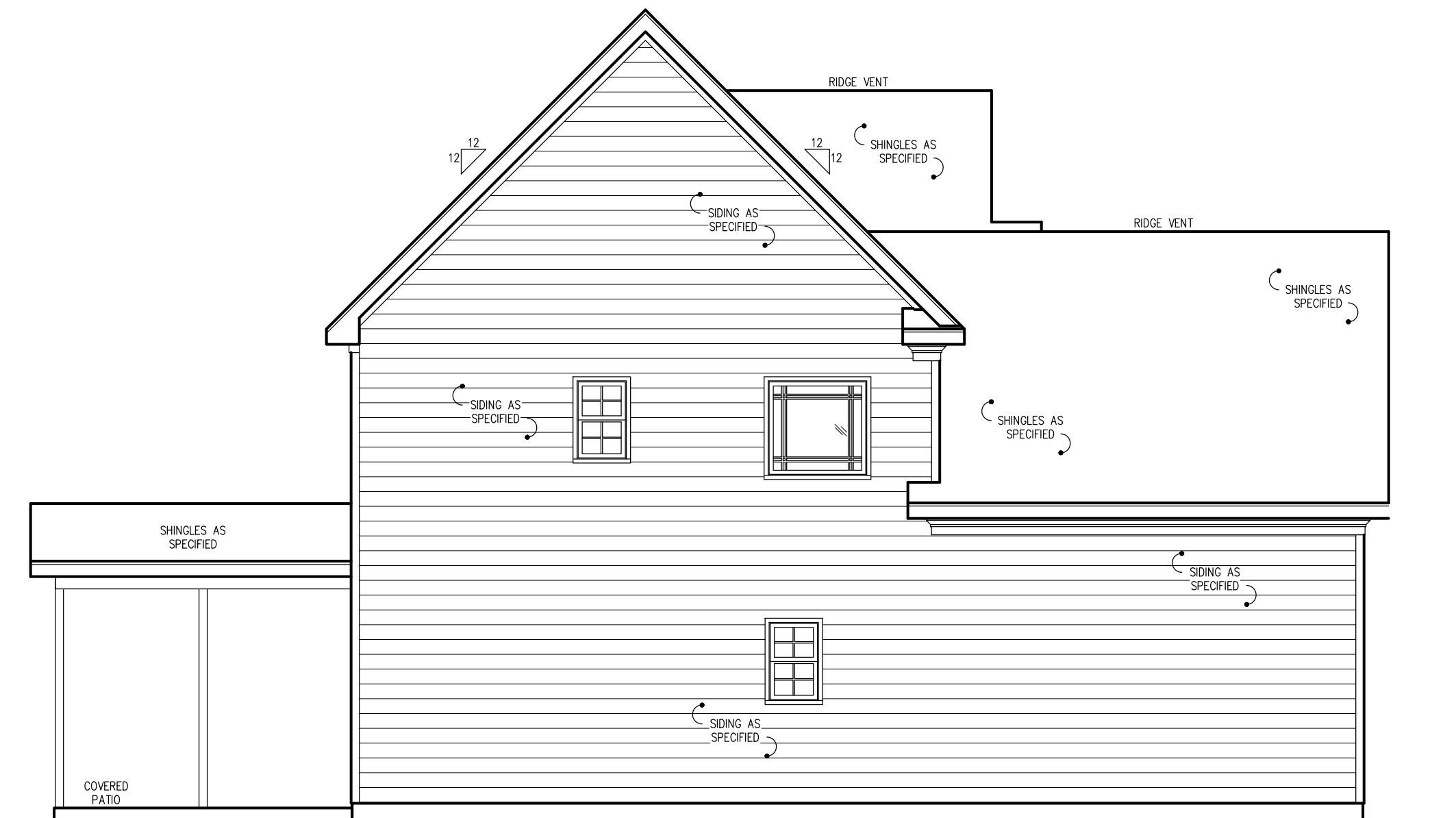
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Title:

COVER
SHEET

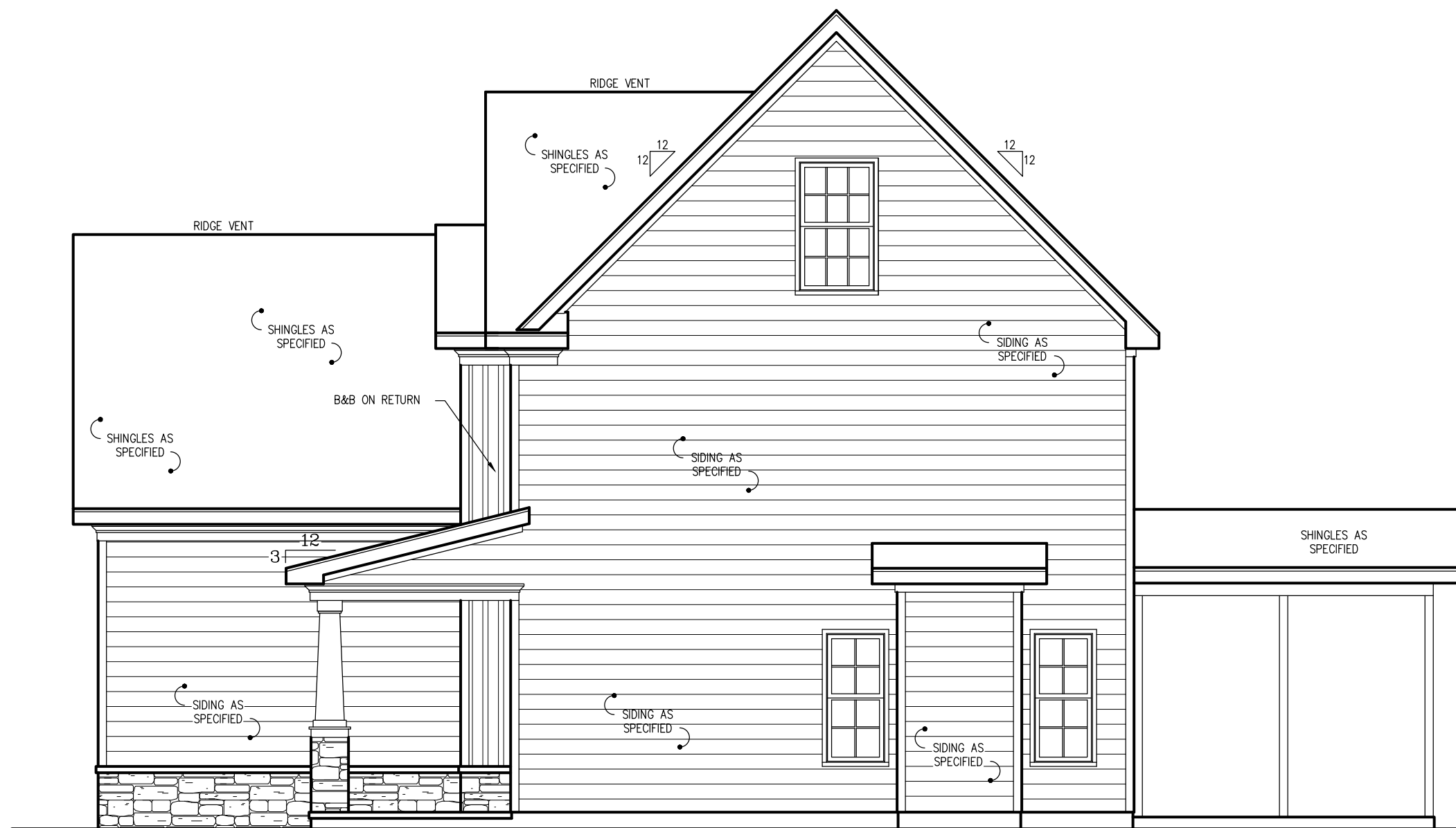
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SAMPSON
R37D
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Sheet No. of

Plan No.
SAMPSON
R37D
EL-1
Sheet No. _____ Of _____



1 LEFT SIDE ELEVATION
SCALE: 3/16" = 1'-0"

NOTE: ROOFS WITH PITCHES LOWER THAN 4:12 REQUIRE (2) LAYERS OF FELT PAPER



2 RIGHT SIDE ELEVATION
SCALE: 3/16" = 1'-0"

NOTE: ROOFS WITH PITCHES LOWER THAN 4:12 REQUIRE (2) LAYERS OF FELT PAPER

Drawn By: AJMV

Checked By: AJMV

Date: 7/19/2019

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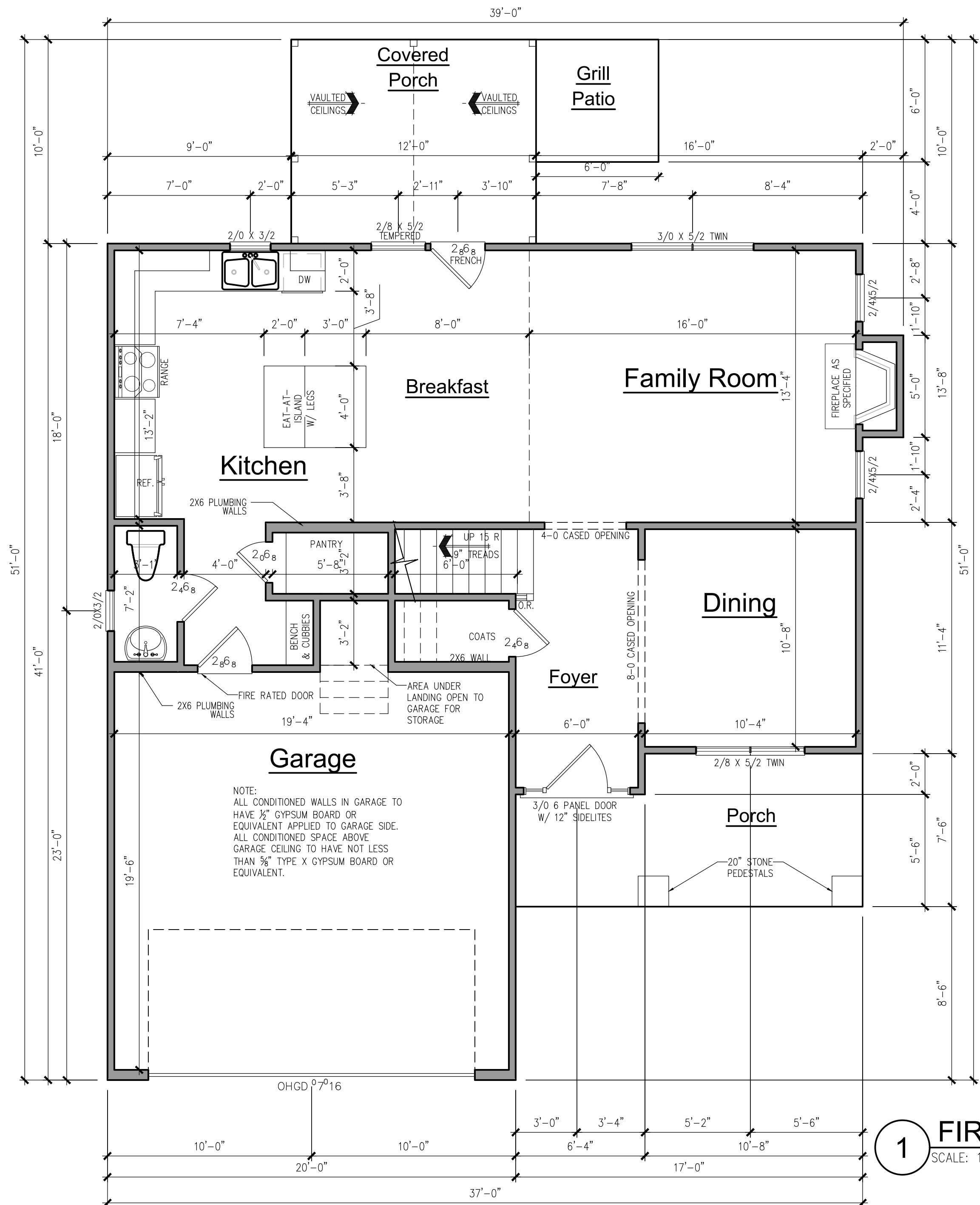
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1210 Trinity Road - Cary, NC 27513 - (919) 233-3333
BENT TREE
Lot # 57

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Title:
LEFT & RIGHT
ELEVATIONS

Plan No.
SAMPSON
R37D
EL-2
Sheet No.



SQUARE FOOTAGE CHART			
HEATED AREA		UNHEATED AREA	
FIRST FLOOR	848 S.F.	FRONT PORCH	115 S.F.
SECOND FLOOR	1156 S.F.	COVERED PATIO	120 S.F.
		GRILL PATIO	36 S.F.
		GARAGE	409 S.F.
		UNFIN. ATTIC FLOOR	509 S.F.
TOTAL HEATED SQ. FOOTAGE		TOTAL UNHEATED SQ. FOOTAGE	1189 S.F.
GROSS HEATED AND UNHEATED SQ. FOOTAGE		3193 S.F.	

GENERAL NOTES

WALLS:
ALL WALLS ARE DRAWN 4" THICK U.N.O.
ANGLED WALL ARE DRAWN @45° U.N.O.

SMOKE DETECTORS:
LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

EGRESS:
ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

ATTIC ACCESS:
MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

WALL/CEILING HGT.
WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE.
KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

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



Drawn By: AJMV

Checked By: AJMV

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Royal Oaks Building Group
1210 Trinity Road - Cary, NC 27513 - (919) 233-3339
BENT TREE Lot # 57

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Title:

FIRST FLOOR PLAN

Plan No.

SAMPSON R37D

Sheet No. **A-1** of

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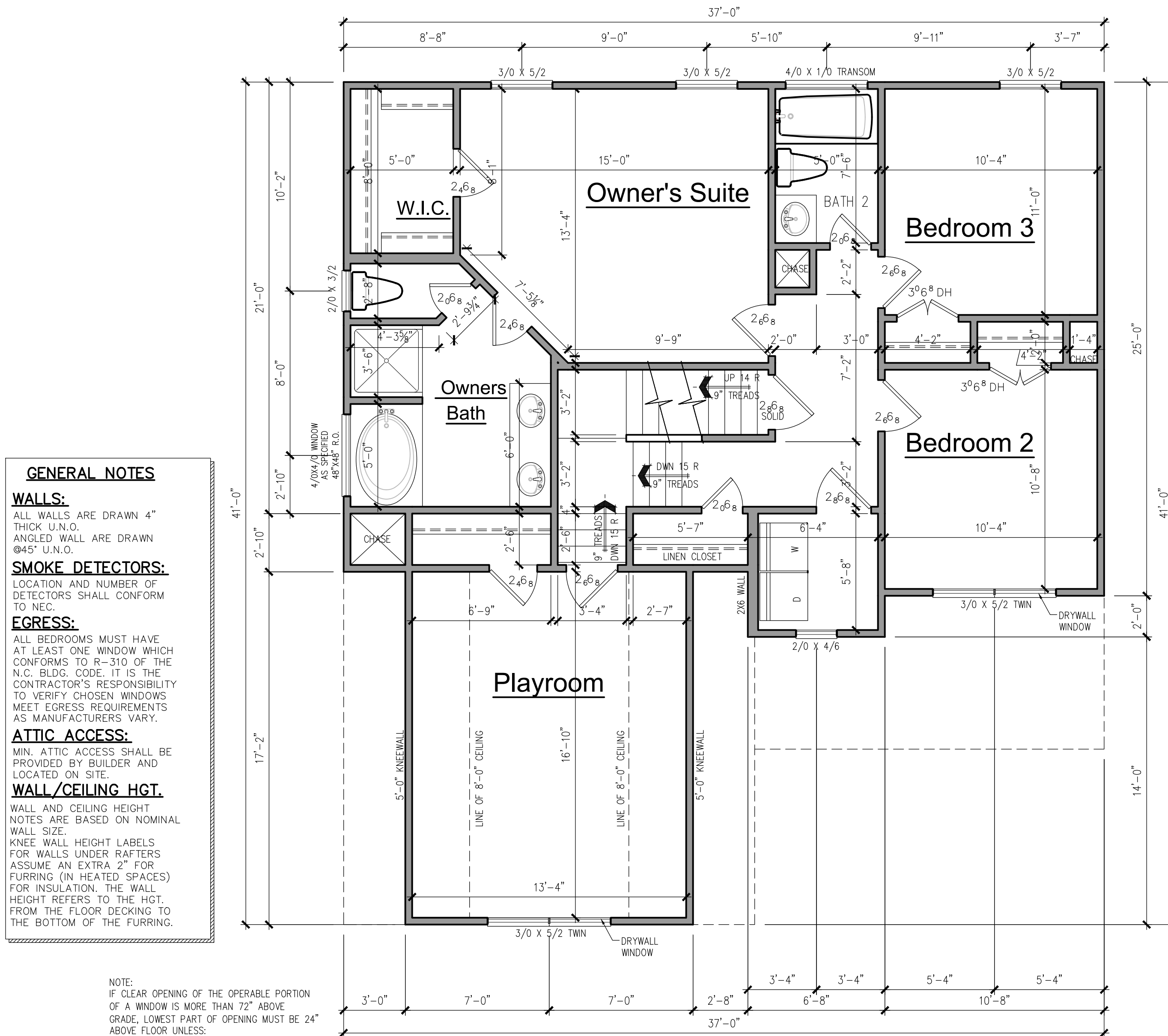
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BENT TREE
Lot # 57

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Title:
SECOND FLOOR PLAN

Plan No.
SAMPSON
R37D
A-2 of
Sheet No. _____



GENERAL NOTES

WALLS:
ALL WALLS ARE DRAWN 4" THICK U.N.O.
ANGLED WALL ARE DRAWN @45° U.N.O.

SMOKE DETECTORS:
LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

EGRESS:
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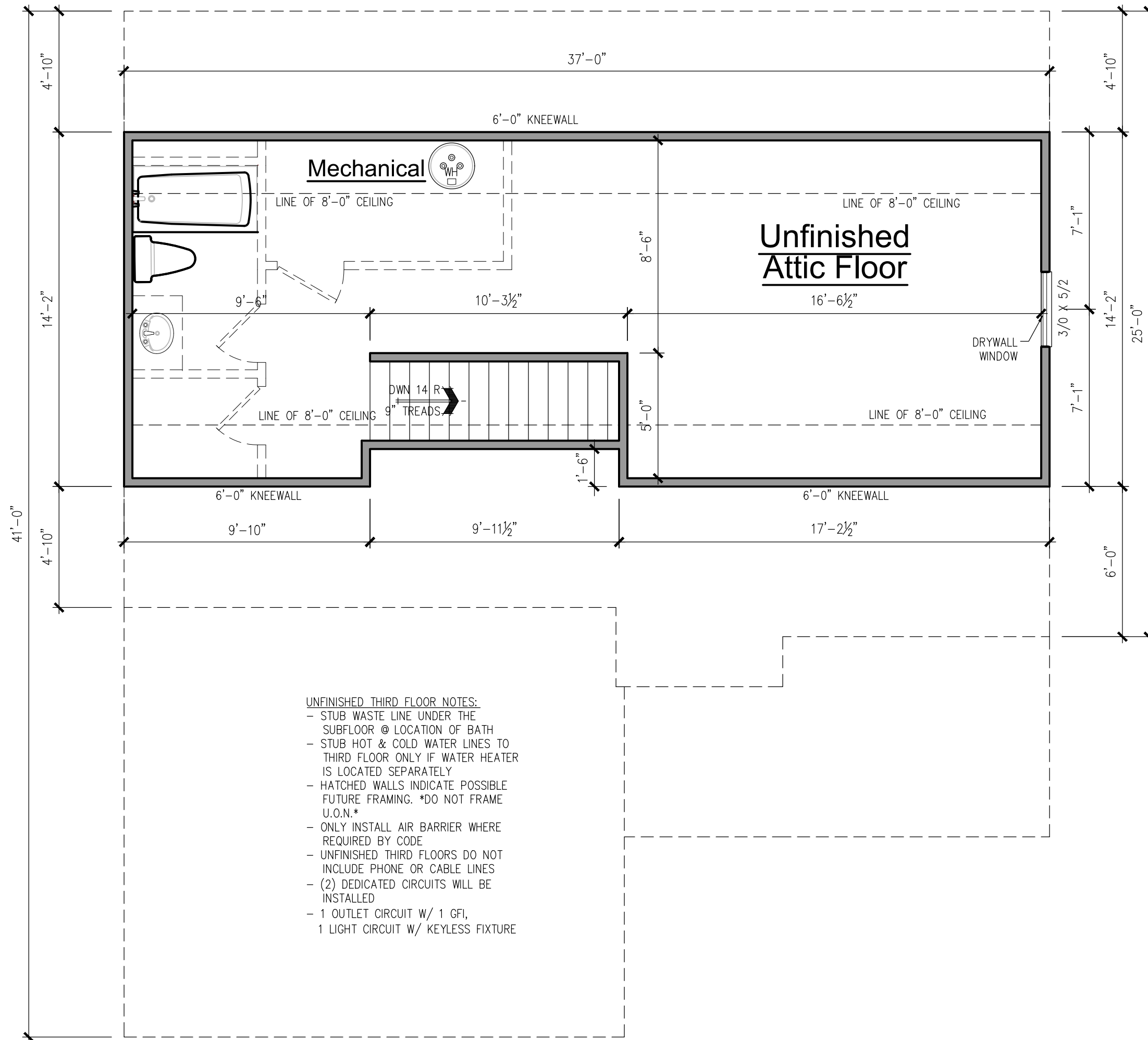
ATTIC ACCESS:
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WALL/CEILING HGT.
WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE.
KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

NOTE:
IF CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS MORE THAN 72" ABOVE GRADE, LOWEST PART OF OPENING MUST BE 24" ABOVE FLOOR UNLESS:

A. WINDOW IS FIXED UNIT
B. OPENING DOES NOT ALLOW PASSAGE
C. WINDOW IS EQUIPPED WITH FALL PREVENTION DEVICE
D. WINDOW IS EQUIPPED WITH AN APPROVED LIMITING DEVICE

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



UNFINISHED THIRD FLOOR NOTES:
- STUB WASTE LINE UNDER THE SUBFLOOR @ LOCATION OF BATH
- STUB HOT & COLD WATER LINES TO THIRD FLOOR ONLY IF WATER HEATER IS LOCATED SEPARATELY
- HATCHED WALLS INDICATE POSSIBLE FUTURE FRAMING. *DO NOT FRAME U.O.N.*
- ONLY INSTALL AIR BARRIER WHERE REQUIRED BY CODE
- UNFINISHED THIRD FLOORS DO NOT INCLUDE PHONE OR CABLE LINES
- (2) DEDICATED CIRCUITS WILL BE INSTALLED
- 1 OUTLET CIRCUIT W/ 1 GFI,
1 LIGHT CIRCUIT W/ KEYLESS FIXTURE

- NOTE:
IF CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS MORE THAN 72" ABOVE GRADE, LOWEST PART OF OPENING MUST BE 24" ABOVE FLOOR UNLESS:
- A. WINDOW IS FIXED UNIT
 - B. OPENING DOES NOT ALLOW PASSAGE 4" d SPHERE
 - C. WINDOW IS EQUIPPED WITH FALL PREVENTION DEVICE
 - D. WINDOW IS EQUIPPED WITH AN APPROVED LIMITING DEVICE

GENERAL NOTES

WALLS:

ALL WALLS ARE DRAWN 4" THICK U.N.O.
ANGLED WALL ARE DRAWN @45° U.N.O.

SMOKE DETECTORS:

LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

EGRESS:

ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

ATTIC ACCESS:

MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

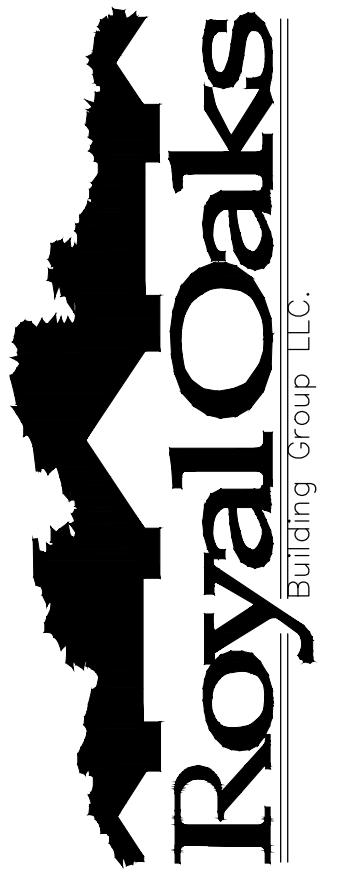
WALL/CEILING HGT.

WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE.
KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

1

UNFINISHED ATTIC FLOOR PLAN

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



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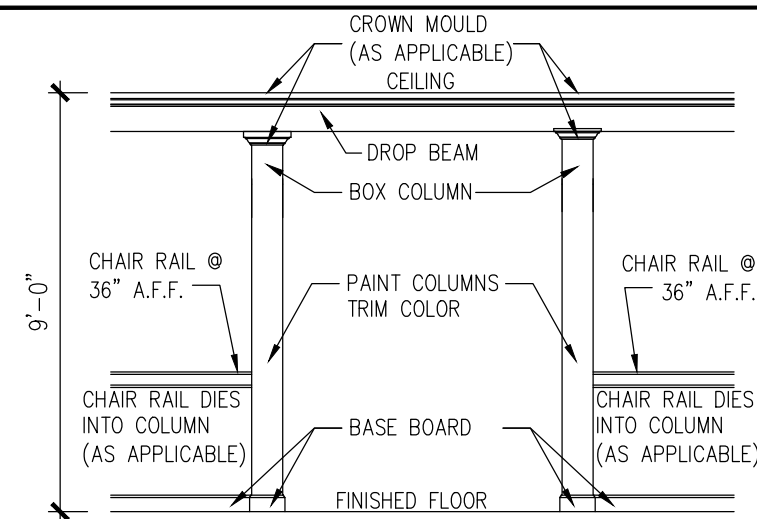
Client:

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1210 Trinity Road - Cary, NC 27513 - (919) 233-3392
BENT TREE
Lot # 57

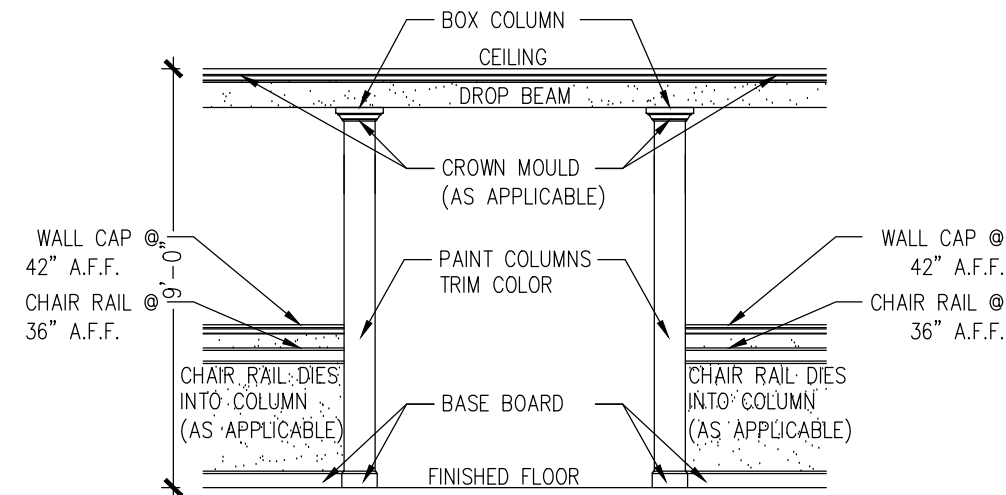
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Title: UNFINISHED
ATTIC FLOOR
PLAN

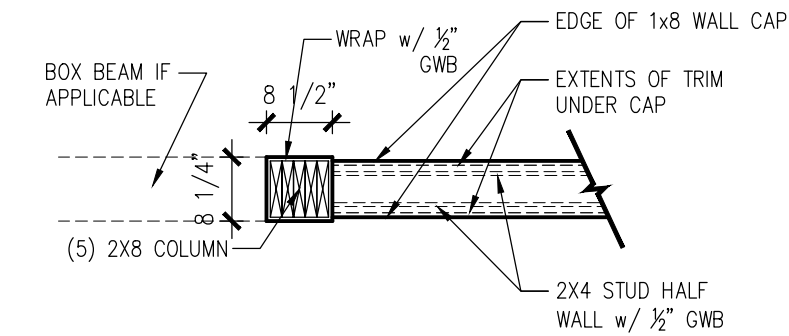
Plan No.
SAMPSON
R37D
A-2
Sheet No. of



**Typical Interior Column Detail
With Drop Beam**

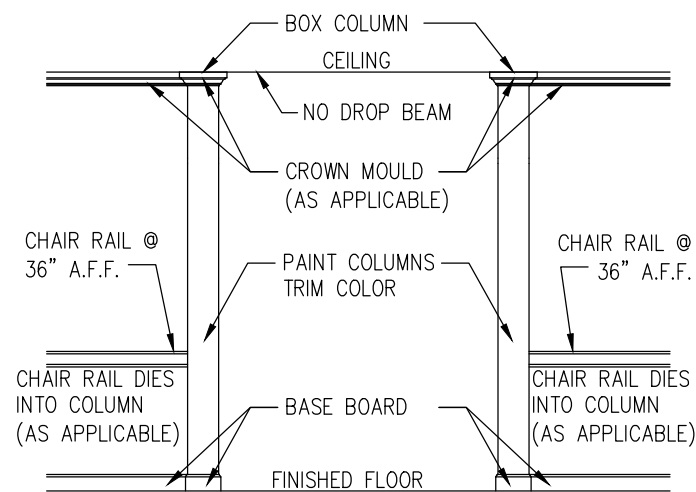


**Typical Interior Column Detail
With Half Walls**

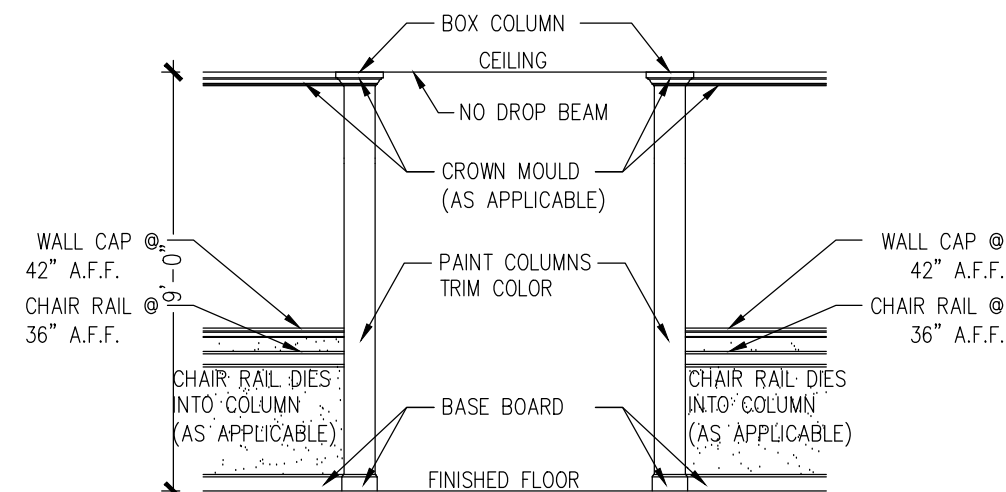


Typical Column Framing Detail

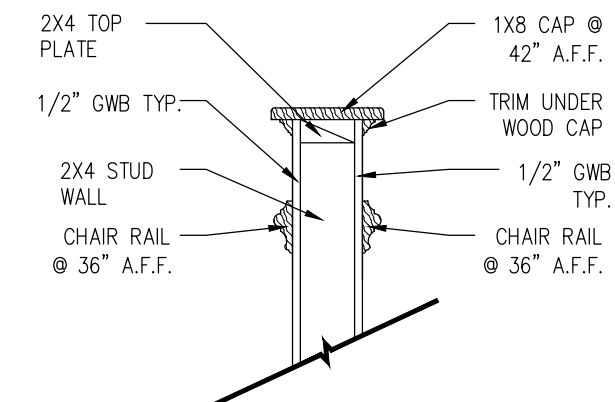
RELIABUILT PLANS
-PLANTATION POINTE -PARKSIDE
-GRAY'S CREEK -PARKER POINT
-ROCKBRIDGE -LEXINGTON



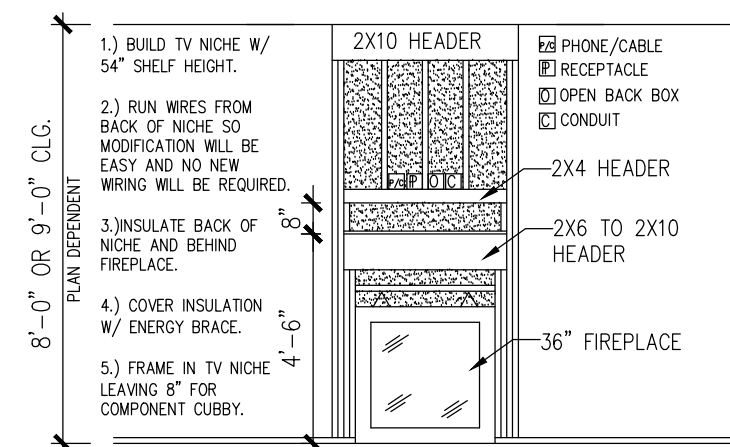
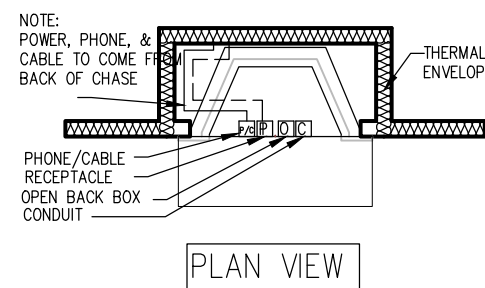
**Typical Interior Column Detail
No Drop Beam**



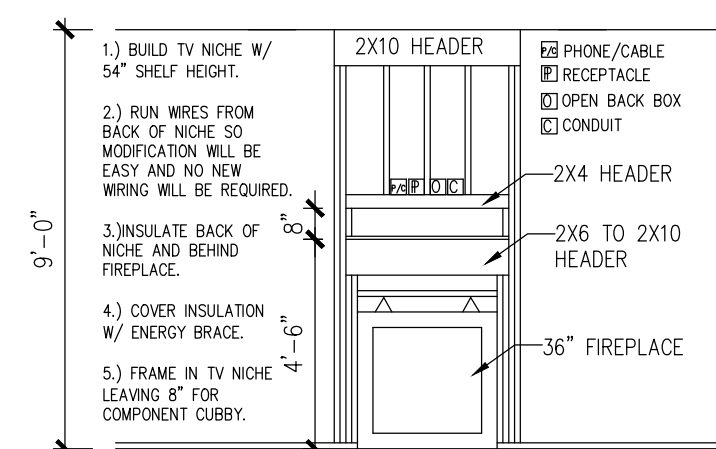
**Typical Interior Column Detail
No Drop Beam w/ Half Wall**



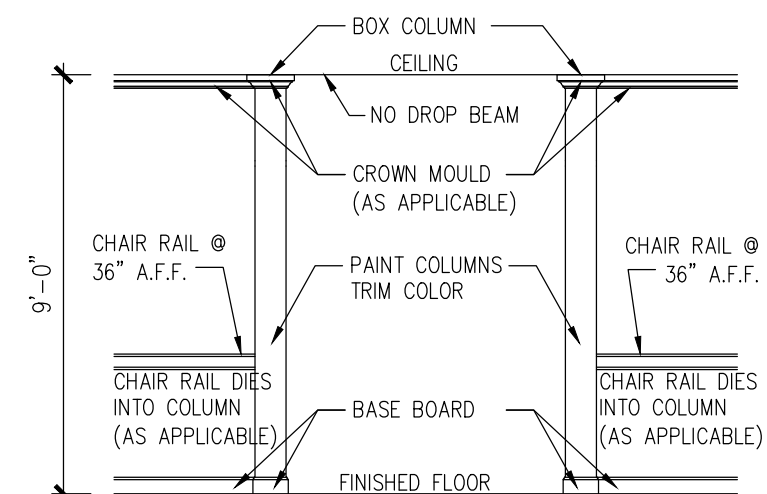
Typical Half Wall Cap Detail



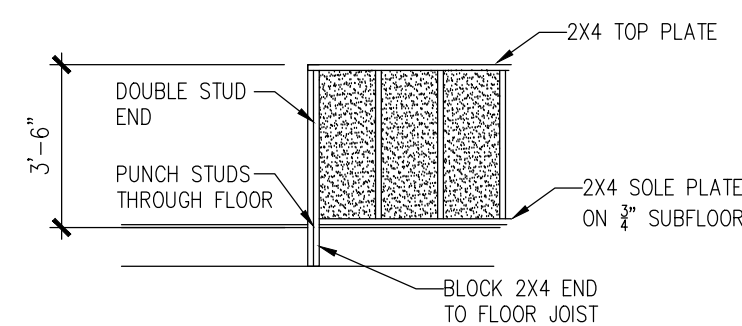
Typical Fireplace Niche/ Cubby Detail



Typical Fireplace Detail



Typical Interior Column Detail



Typical Knee-Wall End Detail

NON SLAB FLOORS ONLY



Drawn By: AJMV

Checked By: AJMV

Date: 7/19/2019

Revision No.	Revision Date

Designer Signature

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Client:
Royal Oaks
Building Group
1210 Trinity Road - Cary, NC 27513 - (919) 233-3535
BENT TREE
Lot # 57

All plans, dimensions, and features are subject to contract changes, community standard features and construction matrix. Please verify all plan information with project manager for confirmation

Title:
**FRAMING &
TRIM DETAILS**

Plan No.
**SAMPSON
R37D
D-1**
Sheet No. **D-1** of



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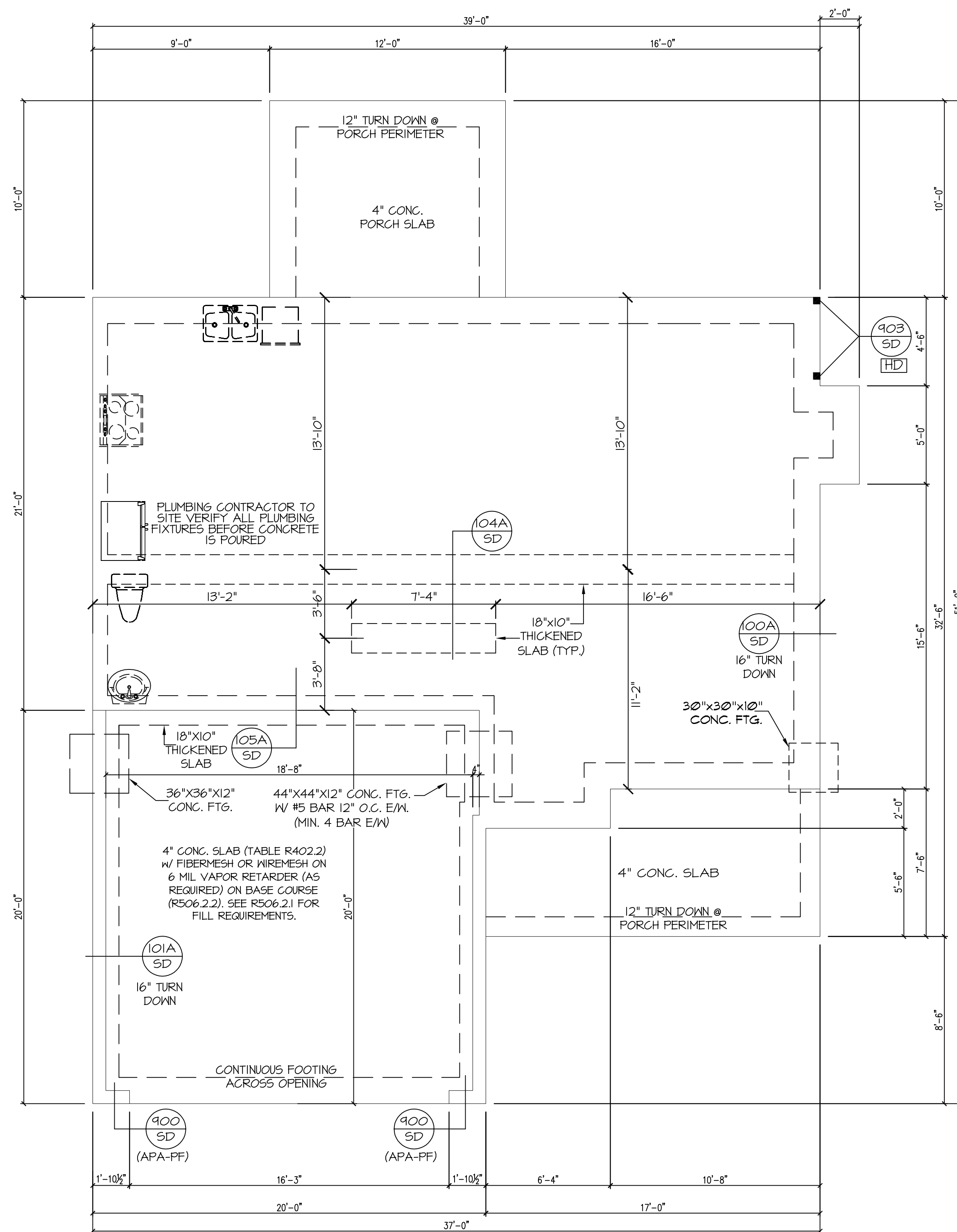
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Royal Oaks Building
Group. LLC

The Sampson C

Lot 57, Bent Tree

S-1



FOUNDATION STRUCTURAL PLAN

SCALE: $\frac{1}{4}" = 1'-0"$

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

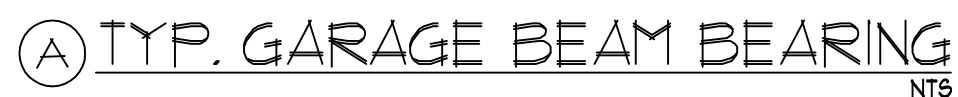
1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" 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

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

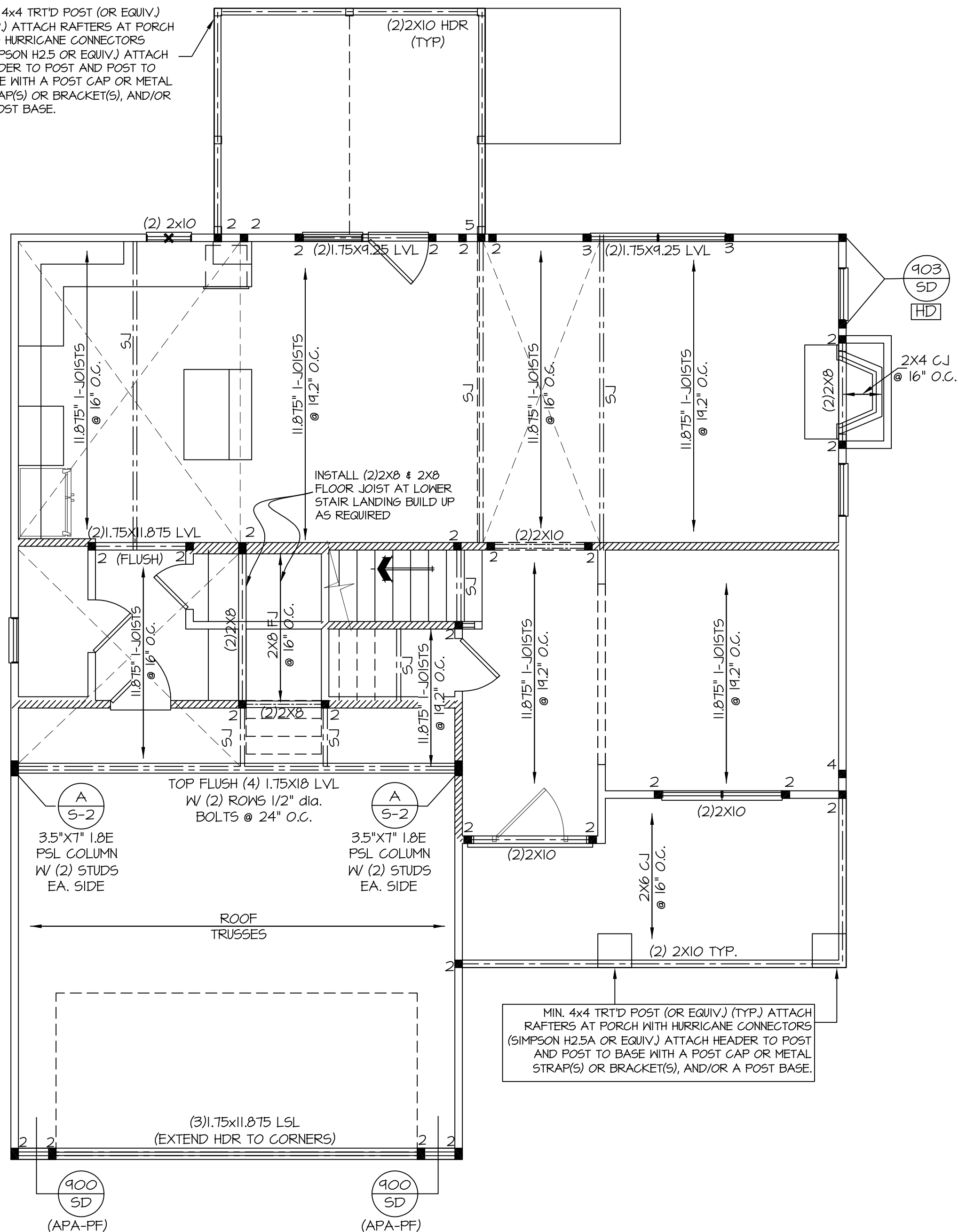
1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING 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.

(SHALL BE ONE OF THE FOLLOWING (U.N.O):

- TJI 210 BY I-LEVEL
- LPI 20 PLUS BY LP
- IB 400 BY INTERNATIONAL BEAMS
- 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.



MIN. 4x4 TRT'D POST (OR EQUIV.)
(TYP.) ATTACH RAFTERS AT PORCH
WITH HURRICANE CONNECTORS
(SIMPSON H2.5 OR EQUIV.) ATTACH
HEADER TO POST AND POST TO
BASE WITH A POST CAP OR METAL
STRAP(S) OR BRACKET(S), AND/OR
A POST BASE.



PROJECT #
19-1930

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The Sampson C

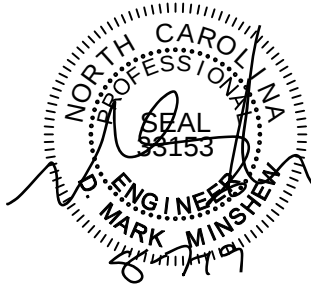
Lot 57, Bent Tree

S-2

FIRST FLOOR STRUCTURAL PLAN

SCALE: $\frac{1}{4}" = 1'-0"$

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



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Lot 57, Bent Tree

S-3

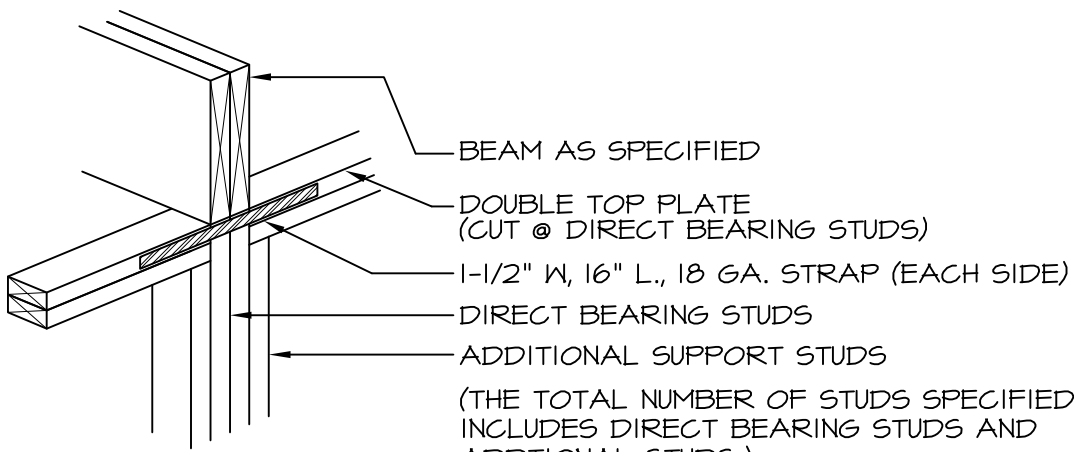
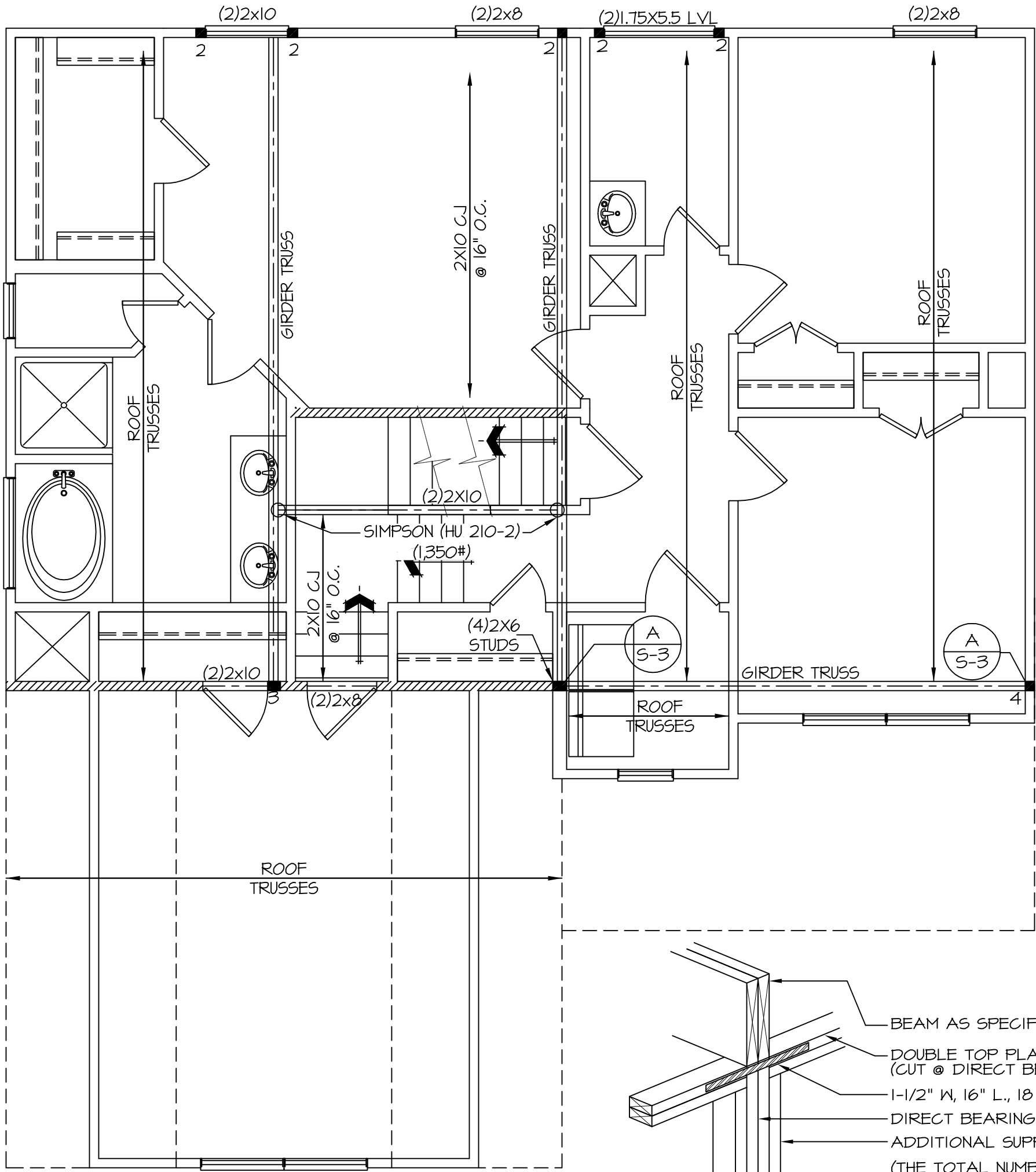
HEADER/BEAM & COLUMN NOTES

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 - OVER 8' UP TO 11' SPAN: (3) KING STUDS
 - OVER 11' SPAN: (4) KING STUDS

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 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.

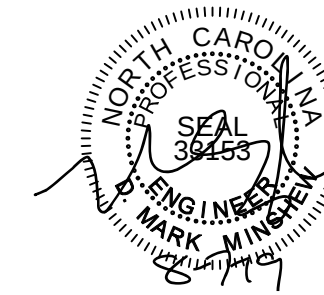


Ⓐ DIRECT STUD BEARING
NTS

SECOND FLOOR STRUCTURAL PLAN

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

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



PROJECT #
19-1930

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S-4

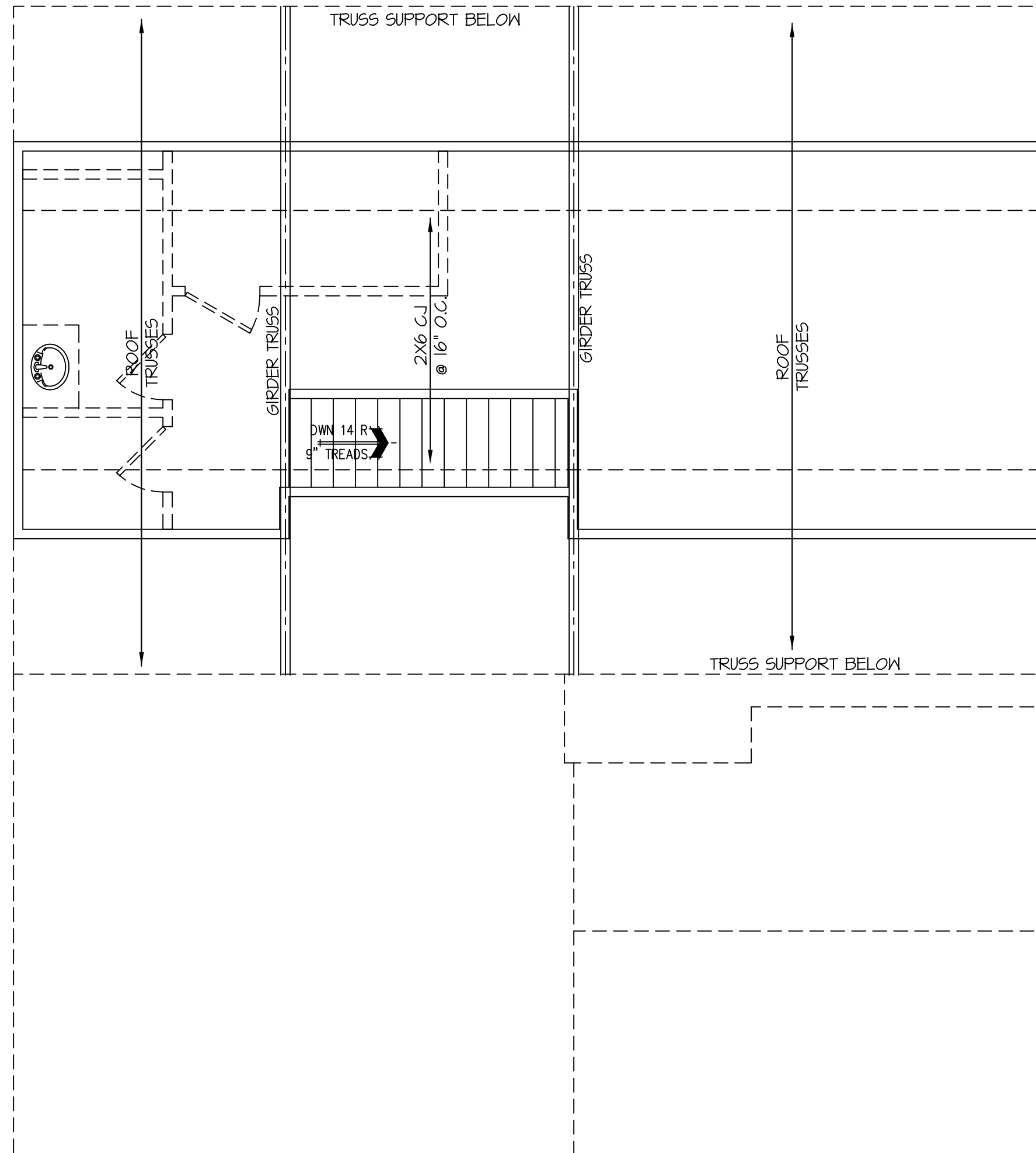
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 - OVER 8' UP TO 11' SPAN: (3) KING STUDS
 - OVER 11' SPAN: (4) KING STUDS

TRUSS SYSTEM REQUIREMENTS

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

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- ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
- ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.



THIRD FLOOR STRUCTURAL PLAN

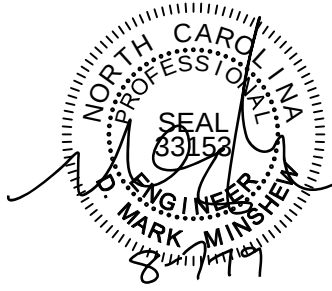
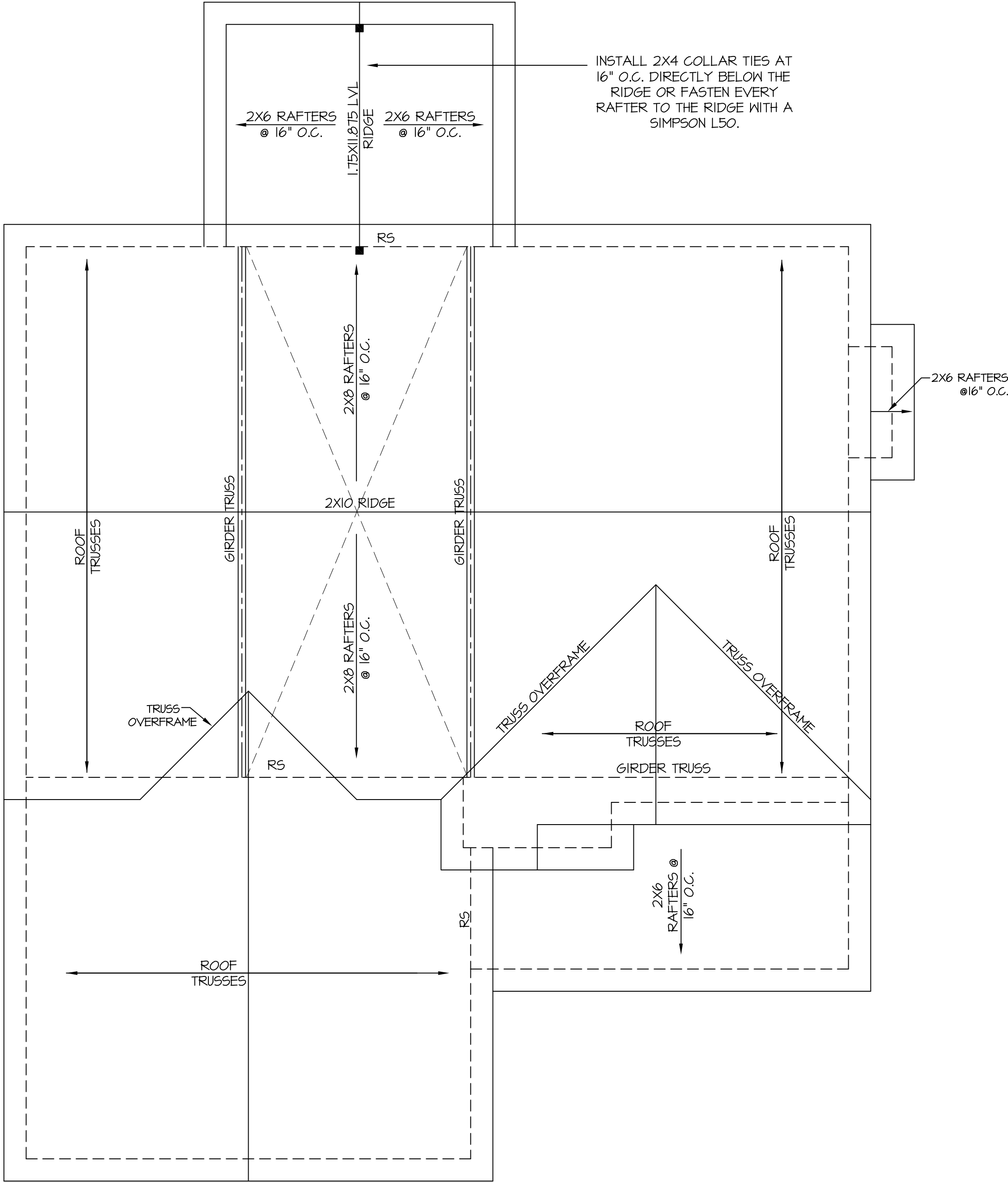
SCALE: 1/4"=1'-0"

REFER TO "5D" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES

TRUSS SYSTEM REQUIREMENTS

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

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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.



PROJECT #
19-1930

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The Sampson C
Lot 57, Bent Tree

S-5

ROOF STRUCTURAL PLAN

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

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

STRUCTURAL NOTES

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

1.

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 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, 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)
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 (DGA6) 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 1/D. (I.E. 4" CONCRETE SLABS SHALL HAVE ¼" 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 DRAINSURFACE 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=1.9x10⁶ PSI.

9.1.

P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2.0x10⁶ PSI.

9.2.

L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10⁶ PSI.

INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.
10.

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.
11.

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.
12.

REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60.
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'-0". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION R703.7.3 LINTELS.

FRAMING NOTES

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

1.

BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: C5-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: 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.
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 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" = 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 C522 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/ (7) 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 #6 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 ⅝" 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.

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 2x10 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.
- FOUNDATION STRUCTURAL NOTES
- NC (2018 NCRC): Wind: 115-120 mph - CRAWL
- ①

(3)2x10 SYP#2 OR SPF#2 GIRDER, TYPICAL UNO.

②

CONCRETE BLOCK PIER SIZE SHALL BE:

••	SIZE	HOLLOW	SOLID
••	8x16	UP TO 32"	UP TO 5'-0"
••	12x16	UP TO 48"	UP TO 9'-0"
••	16x16	UP TO 64"	UP TO 12'-0"
••	24x24	UP TO 96"	

 - WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

③

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

④

(4) 2x10 SPF #2 OR SYP #2 GIRDER

⑤

(2) 1.75x9.25 LVL OR LSL GIRDER

⑥

(3) 1.75x9.25 LVL OR LSL GIRDER

7.

"■" 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.
- HEADER/BEAM & COLUMN NOTES
1.

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.

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 "d" 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
- 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 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.
- PORCH POST NOTES:
- 4x4 (6x6) TRTD POST (OR EQUAL).
 - ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.

1.

POST CAP: SIMPSON AC4-MAX (AC6-MAX)

2.

POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH WIND; ADD (1) SIMPSON H6.

3.

POST BASE: SIMPSON ABU44 (ABU66).

3.1.

MONO: ⅝" ANCHOR (EMBED 1")

3.2.

CMU: ⅝" ANCHOR (EXTEND TO FOOTING - HIGH WIND ONLY)

4.

POST BASE: WOOD FOUNDATION: (2) SIMPSON C516 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.

 - NOTE: EQUIVALENT POST CAP AND BASE ACCEPTABLE.
-
- PROJECT #
Multiple
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- Royal Oaks
Building Group
- Standard Details
- SD1



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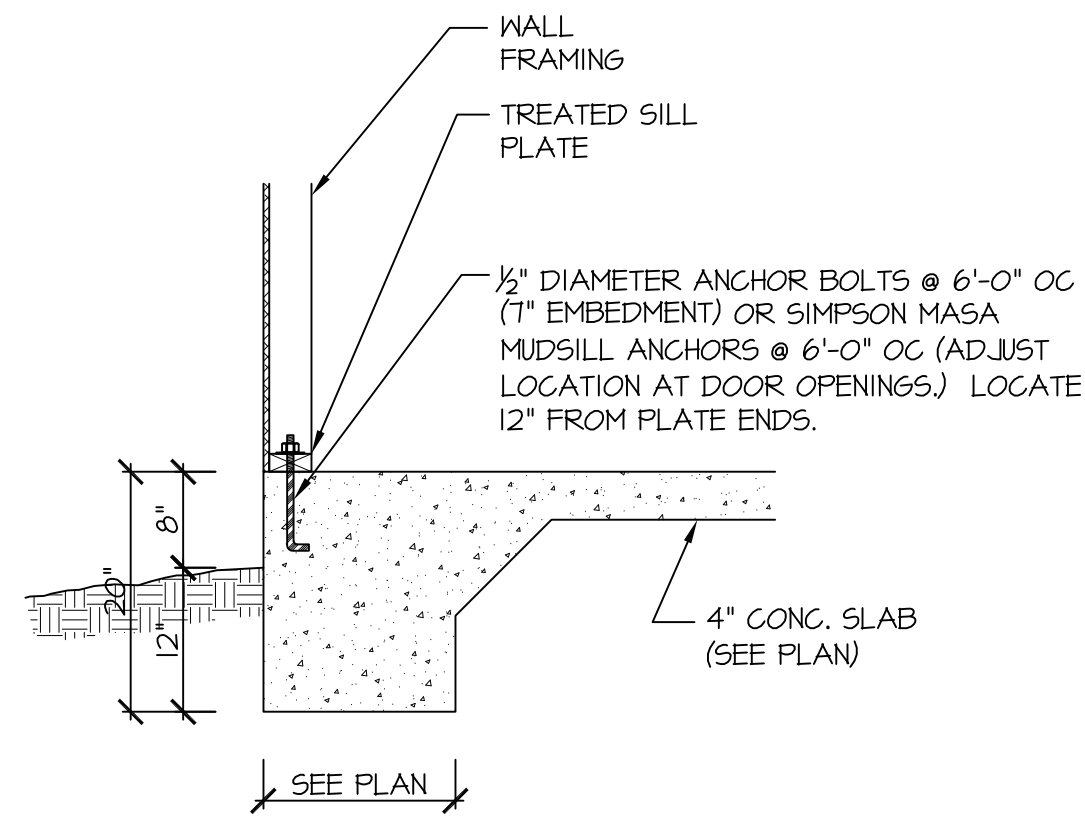
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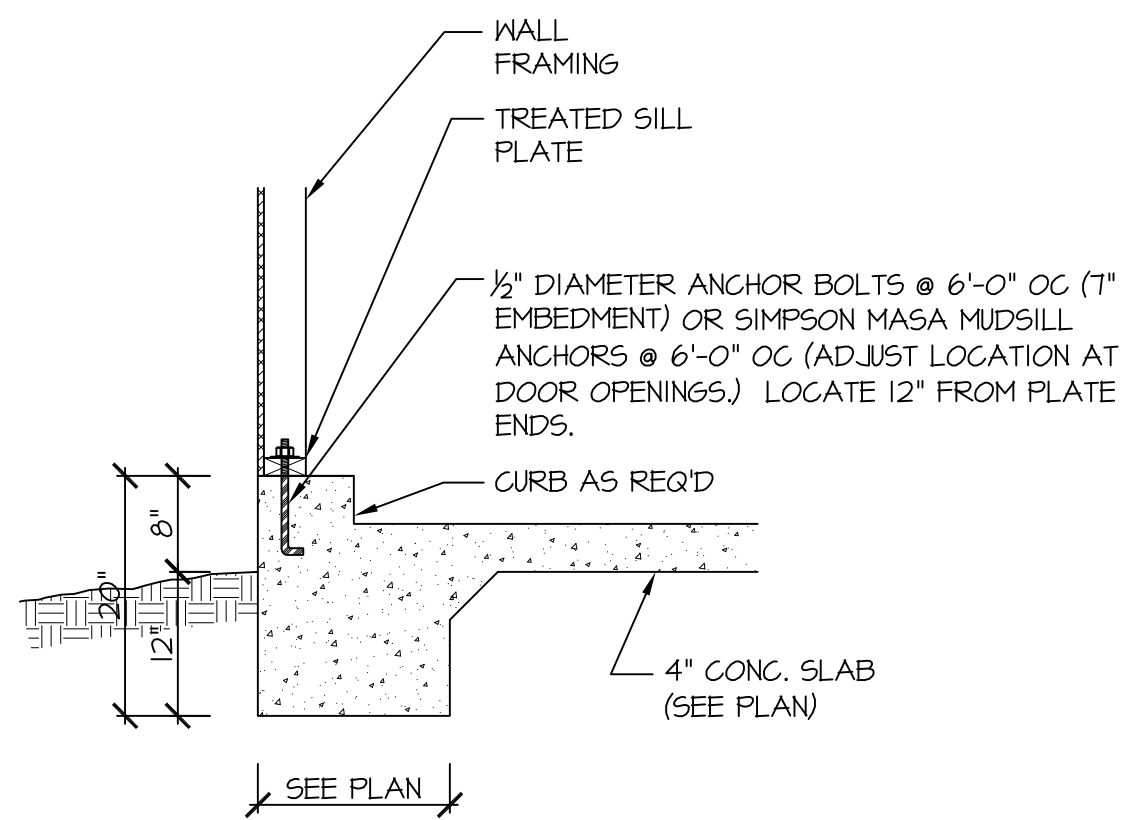
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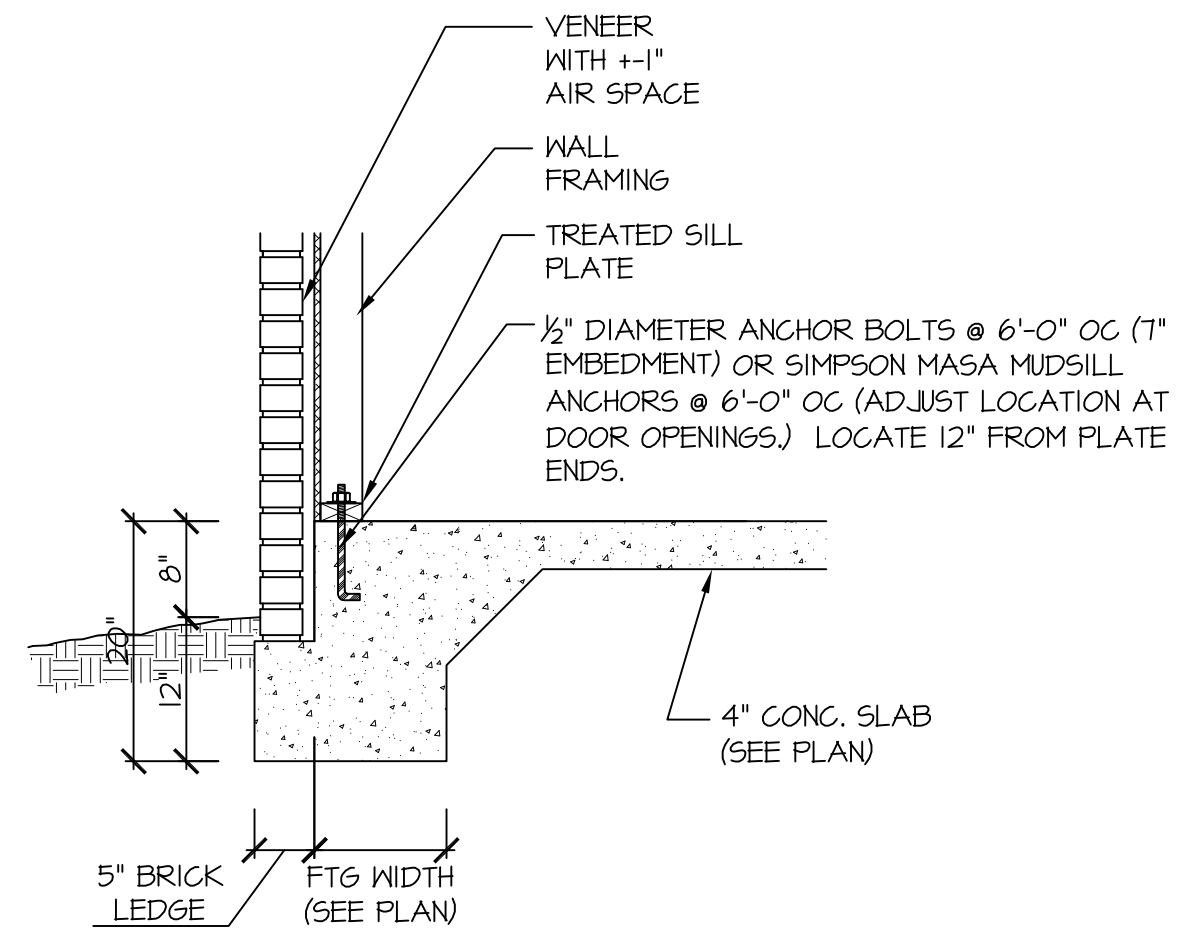
**SD2
Mono**



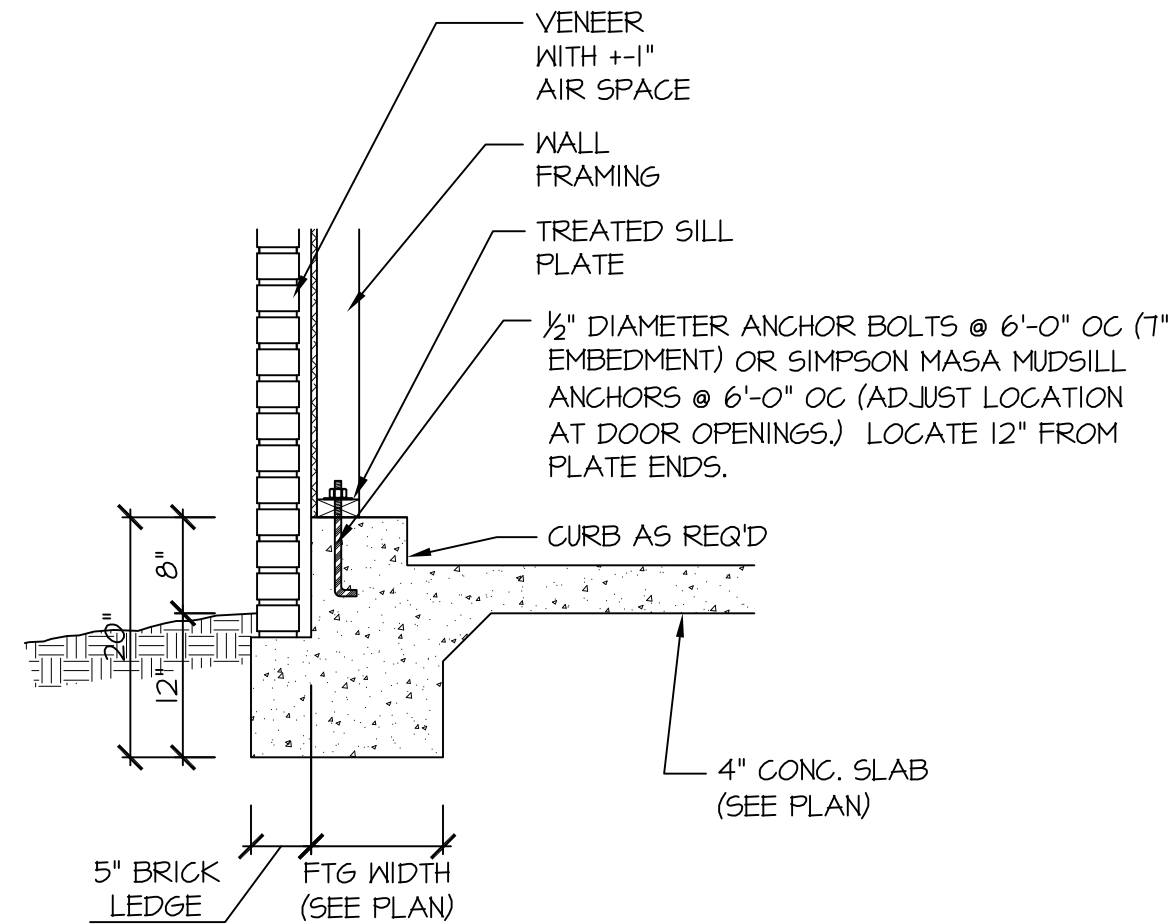
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(SIDING OR EQUAL)



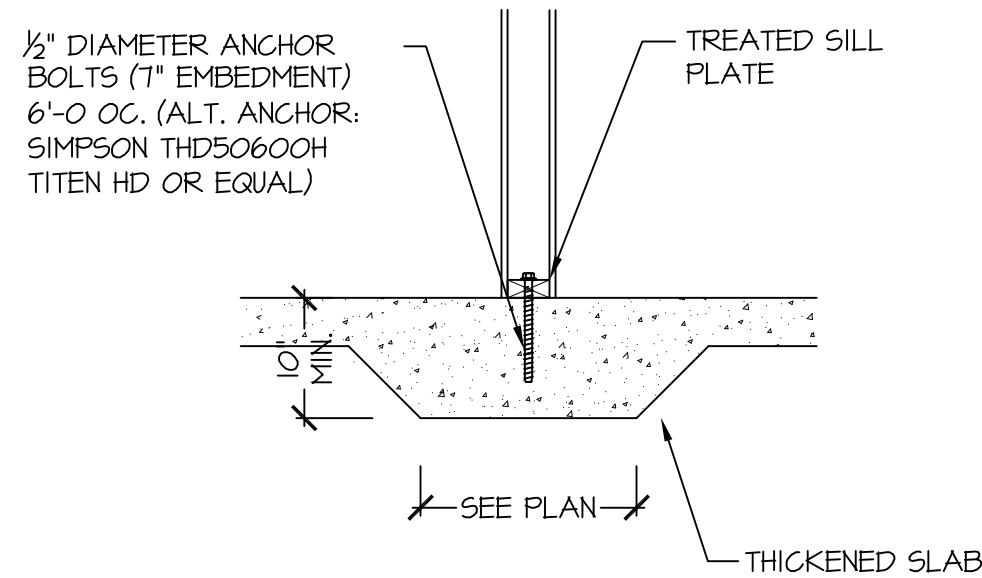
115-120 MPH 101A SD MONOLITHIC SLAB @ GARAGE
(SIDING OR EQUAL)



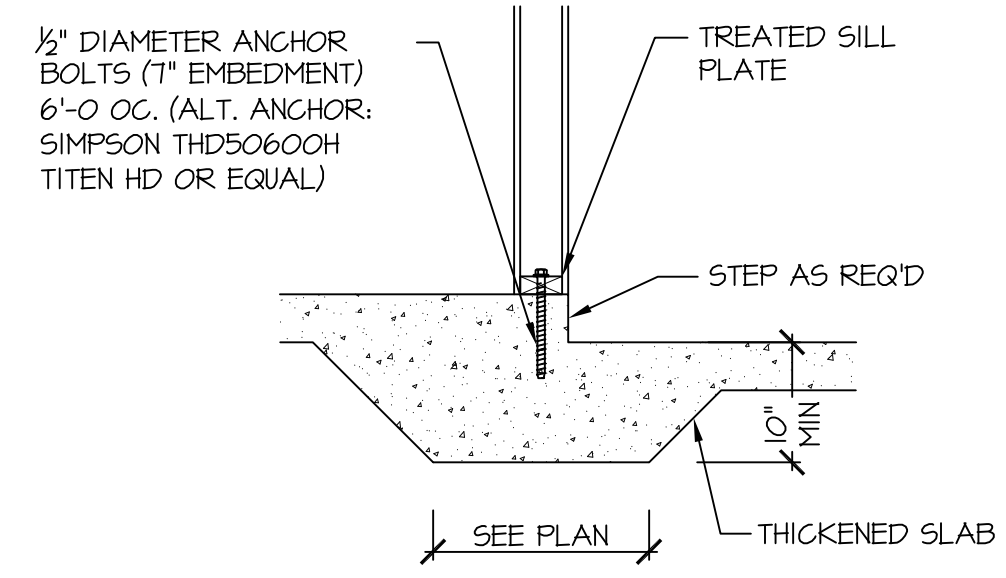
115-120 MPH 102A SD MONOLITHIC SLAB FOOTING
(VENEER)



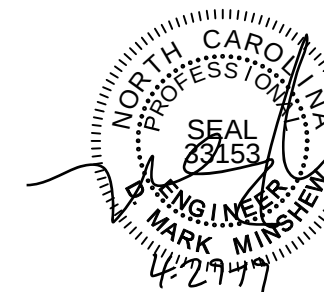
115-120 MPH 103A SD MONOLITHIC SLAB @ GARAGE
(VENEER)



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



115-120 MPH 105A SD THICKENED SLAB @ GARAGE
(INTERIOR GARAGE WALL)



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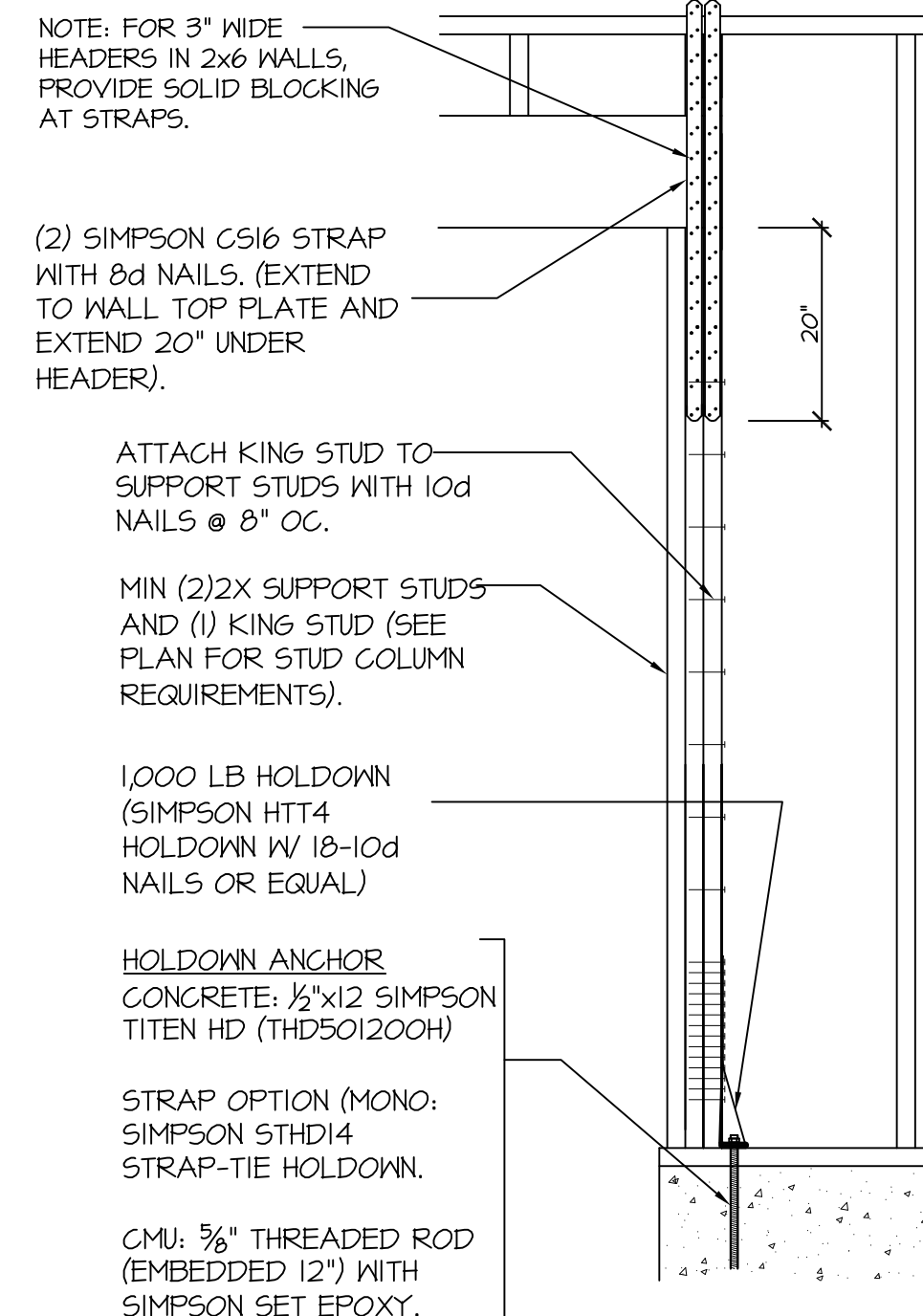
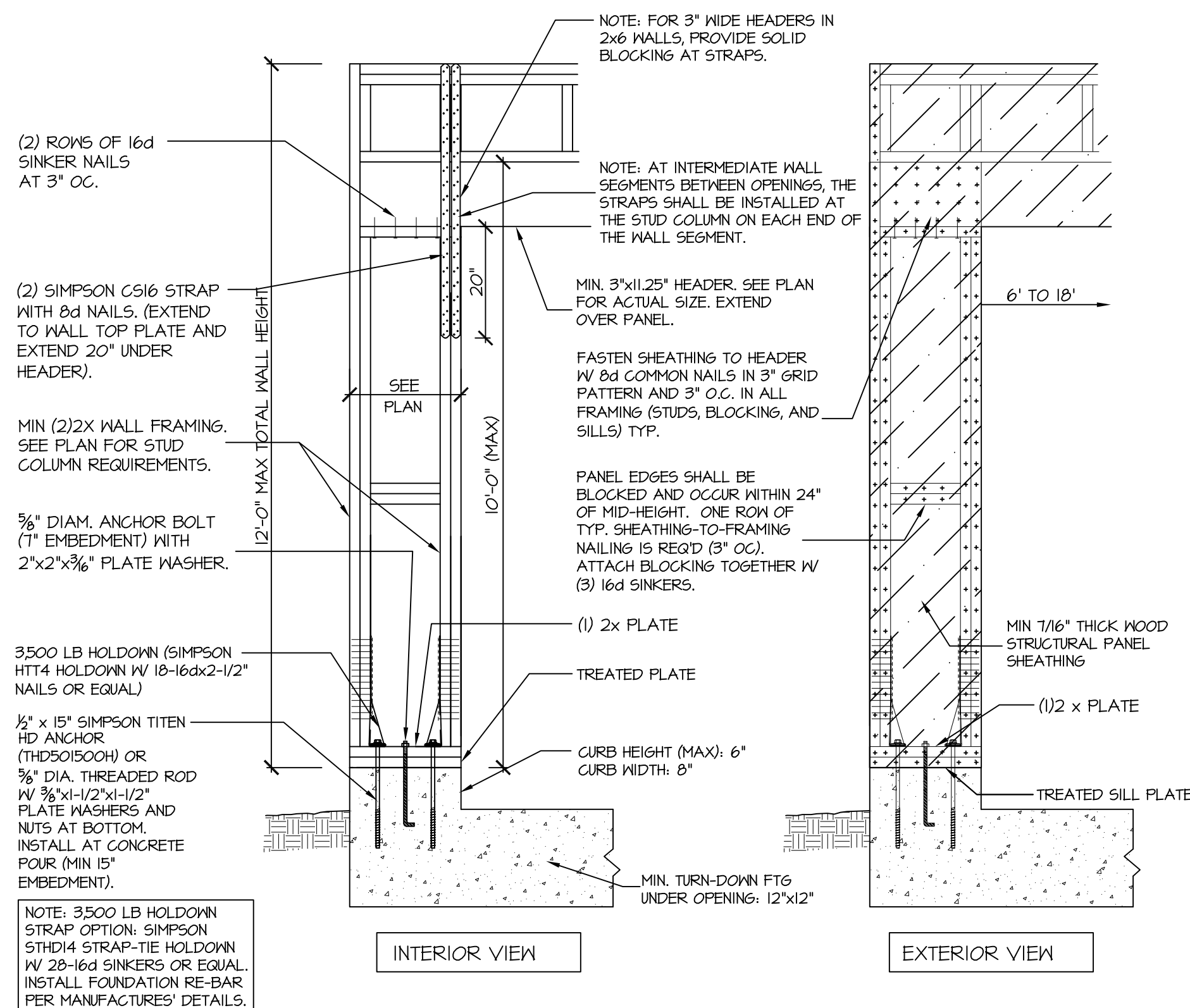
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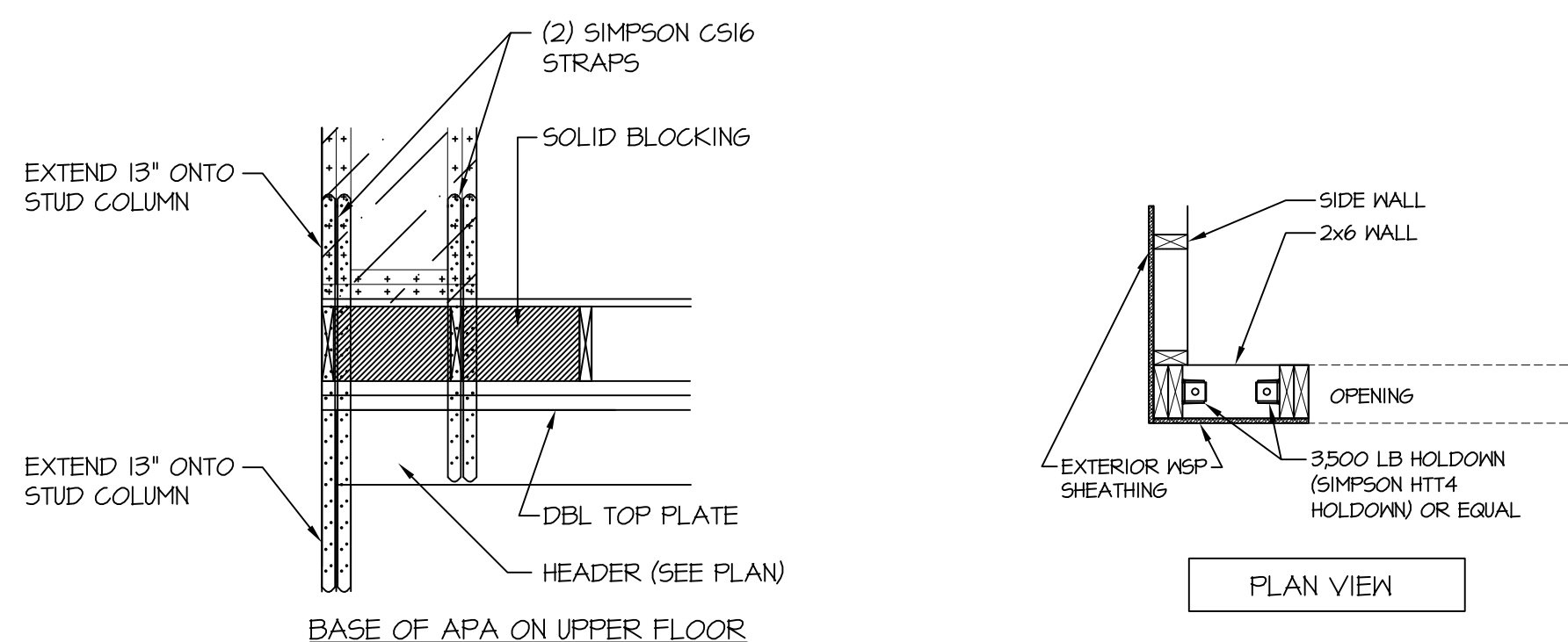
**Royal Oaks
Building Group**

Standard Details

**SD3
Mono**

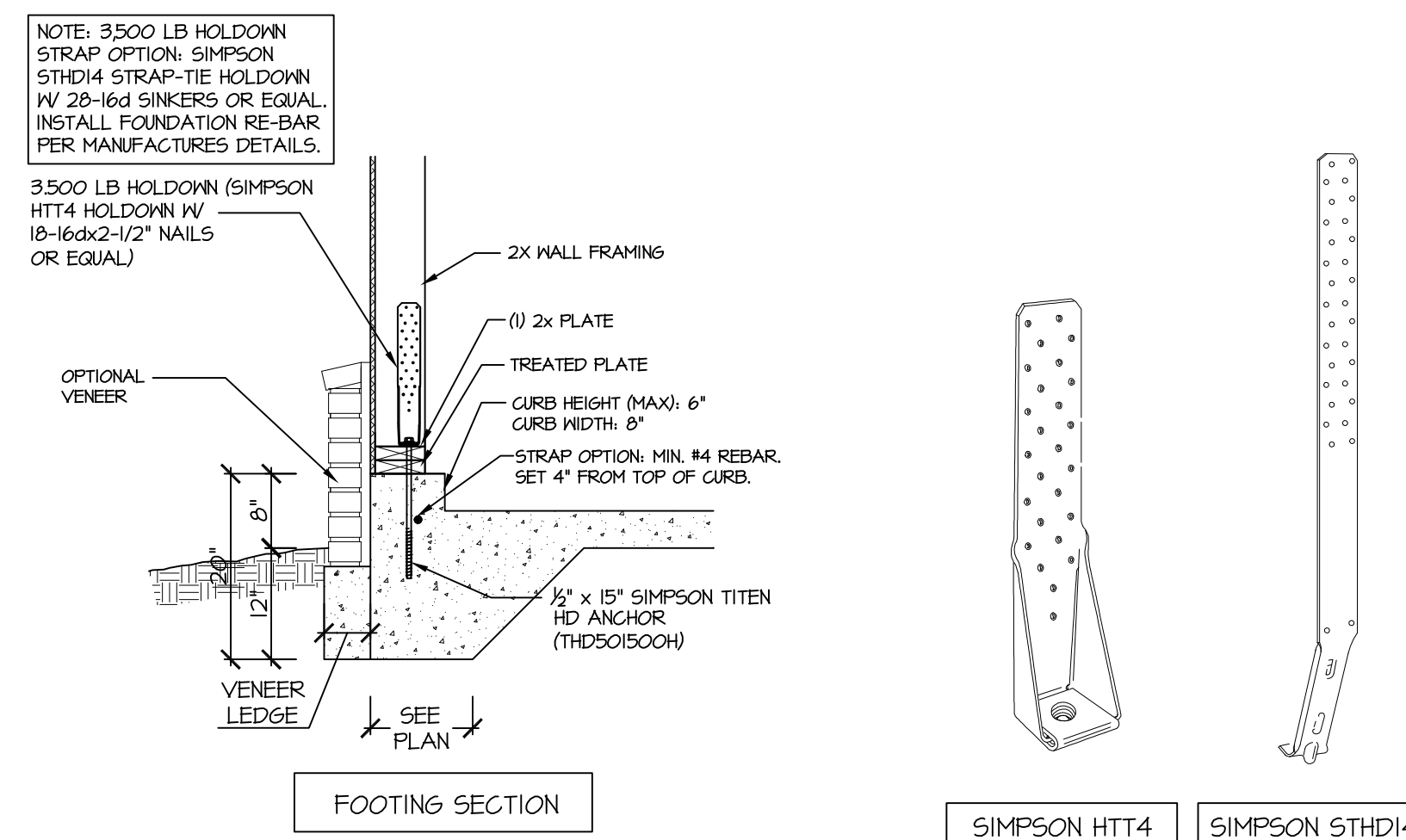


902
SD



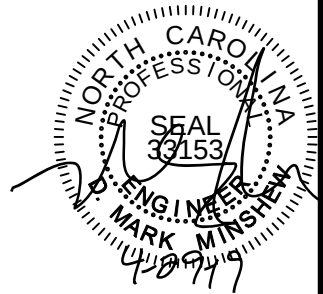
ELEVATION 900
SD

APA PORTAL FRAME W/ HOLD-DOWNS
DETAIL AND APPLICATION BASED ON APA TT-100F WITH USE OF TABLE I FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



SECTION 900
SD

APA PORTAL FRAME W/ HOLD-DOWNS
DETAIL AND APPLICATION BASED ON APA TT-100F WITH USE OF TABLE I FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



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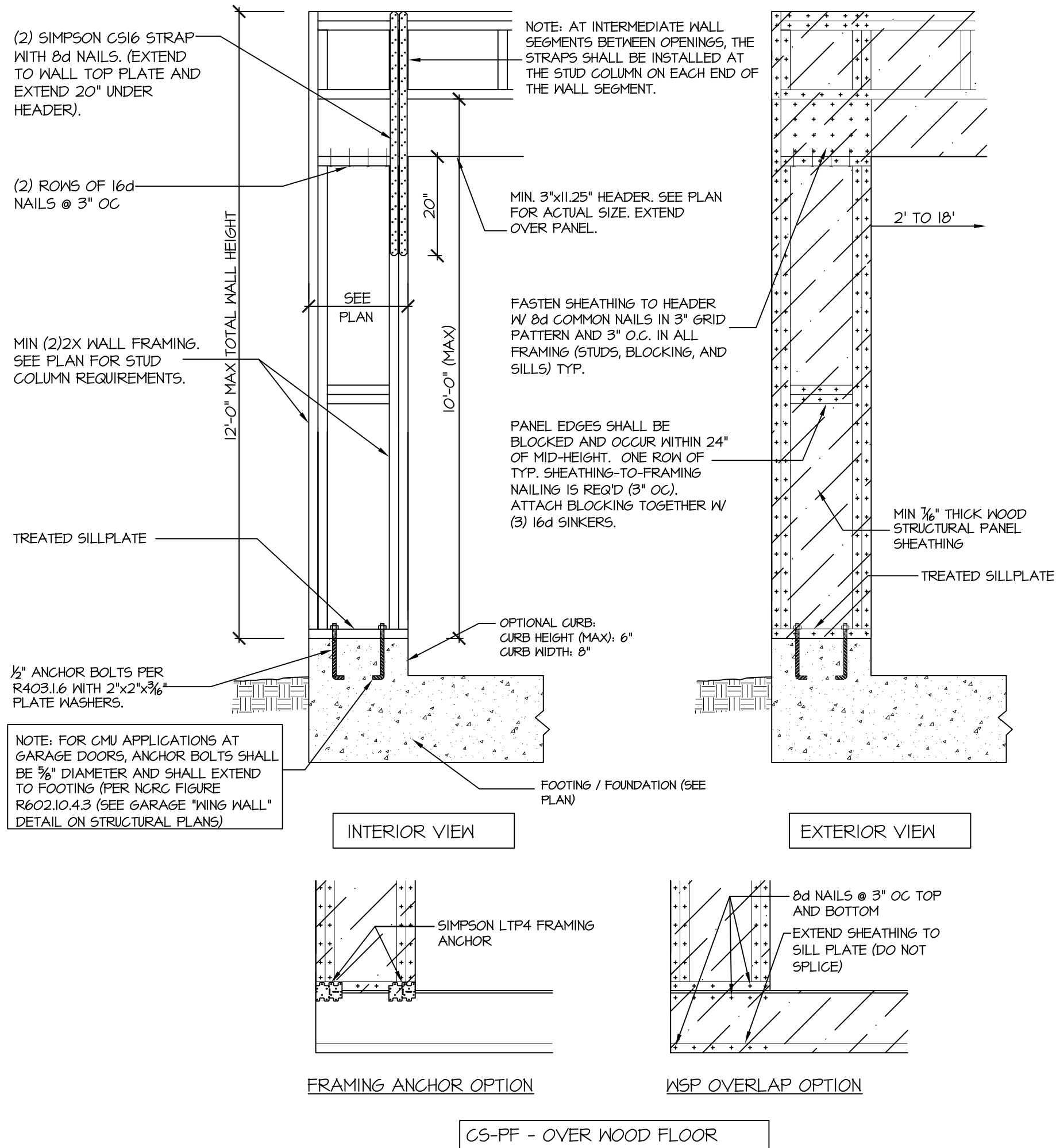
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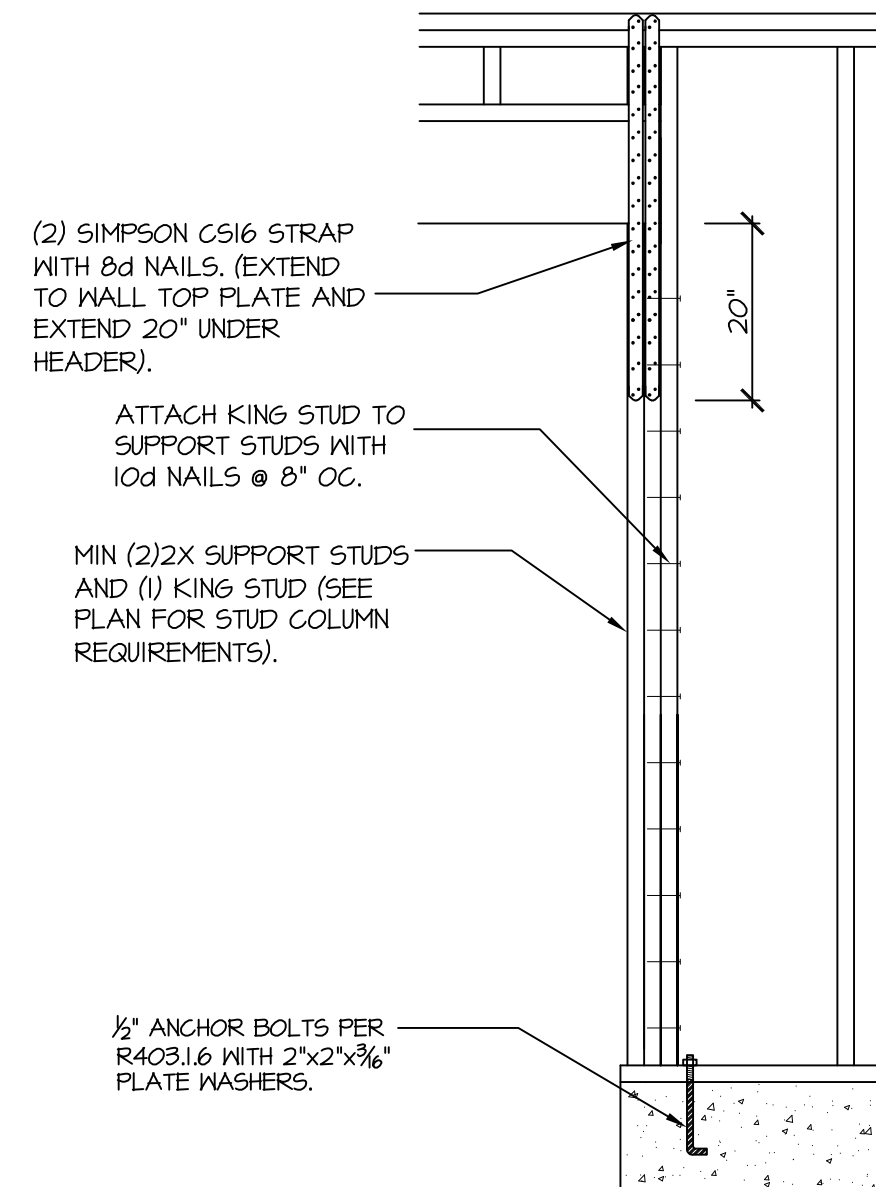
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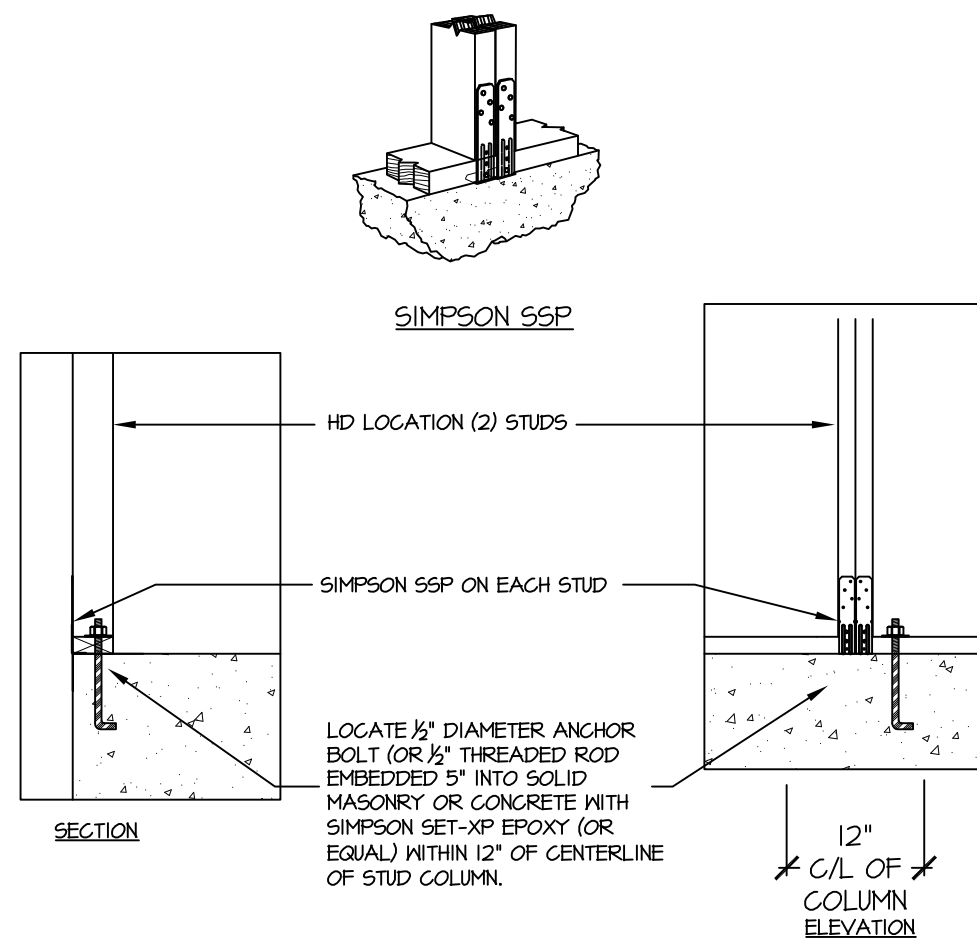
**SD4
Mono**



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



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.