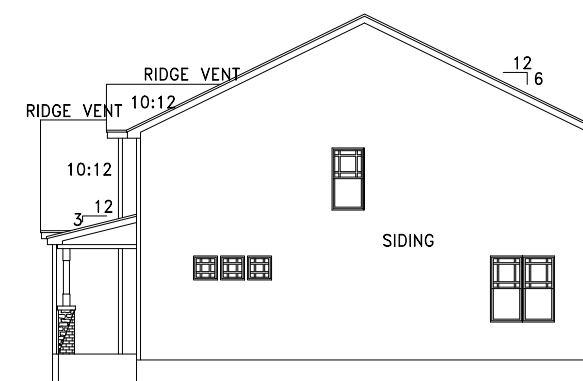
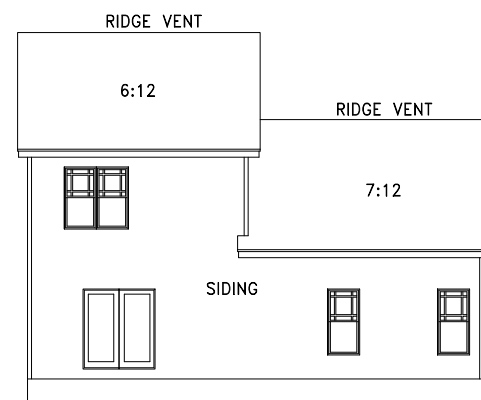
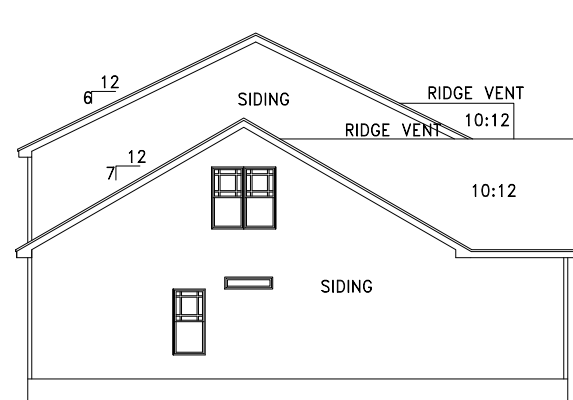


<h2 style="text-align: center;">ATTIC SPACE VENTILATION</h2>	
<p>REQUIRED</p> <p><u>1701</u> SQ. FT. OF CLG. / 150 = <u>11.34</u> SQ. FT. REQUIRED</p>	
<p>REFER TO SECTION R806 (ROOF VENTILATION) IN NORTH CAROLINA STATE INTERNATIONAL RESIDENTIAL BUILDING CODES.</p>	

MEAN ROOF HGT.			
Soffit Hgt. From Assumed Grade	+ Highest Ridge Hgt. From Assumed Grade	÷ 2	= Mean Roof Hgt.
20'-5"	+ 33'-9"	÷ 2	= 27'-1" Mean Roof Hgt.



# Alton Fields Lot 10 - 13 Sundrops Trail

1C	DATE 3/7/2016	DESIGN ADS	LE	<p><b>Els</b></p>	<p><b>Crawlspace Elev. "C"</b></p>		<p><b>ADAMS &amp; HODGE ENGINEERING, PC</b></p>	<p>314 EAST MAIN STREET CLAYTON, NC 27520 info@adamsandhodge.com 919.234.1332 FIRM # C-4187</p>	<p>REVISIONS: 1/27/2021</p>
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ADAMS & HODGE  
ENGINEERING, P.C.



103

F	

DESIGN  
ADS

RAWN  
ADS

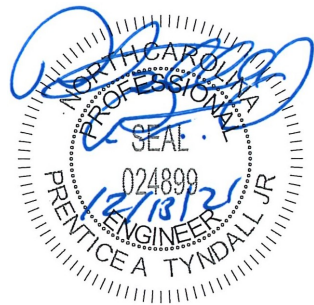
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DATE  
3/7/2016

SHEET

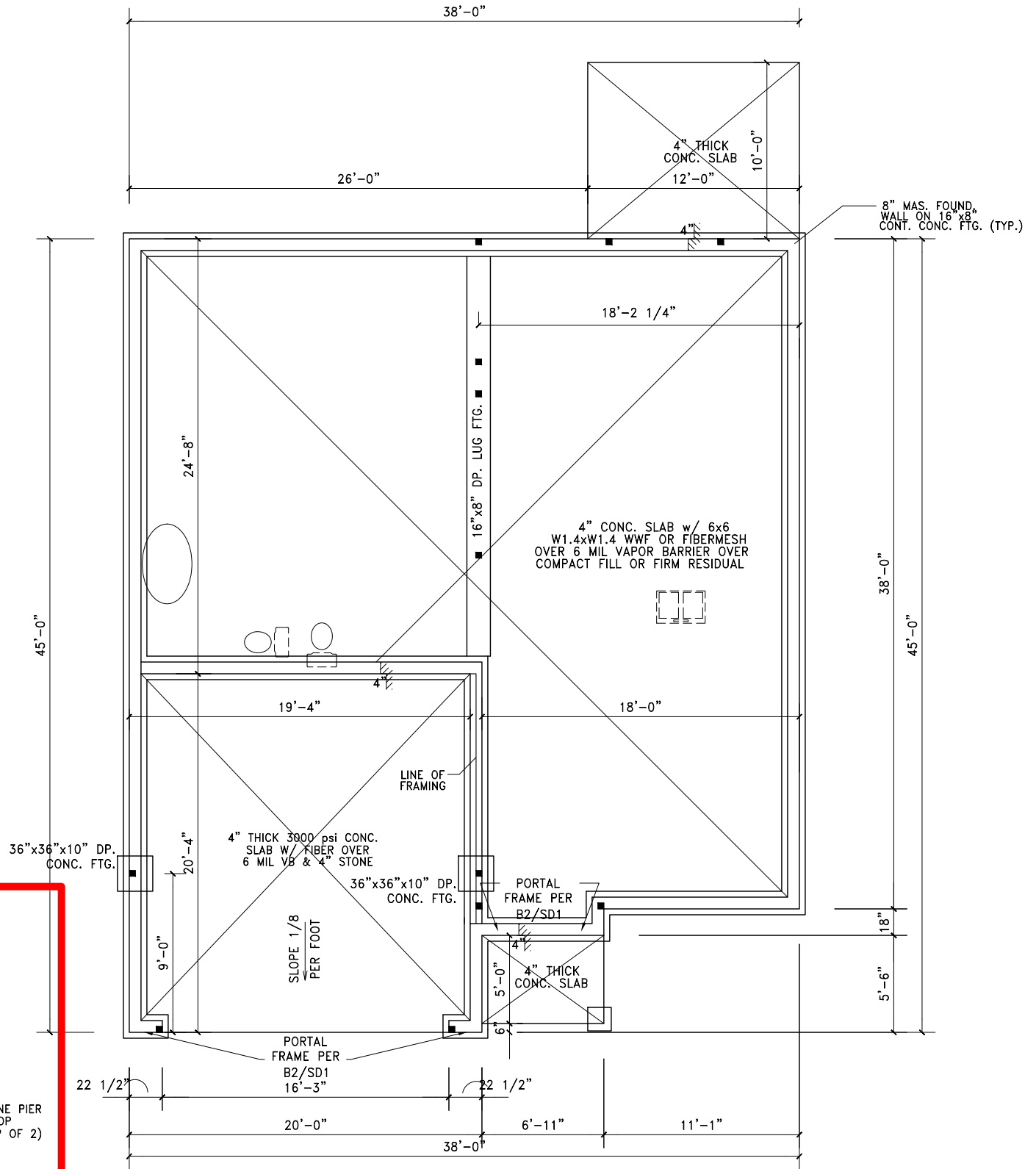
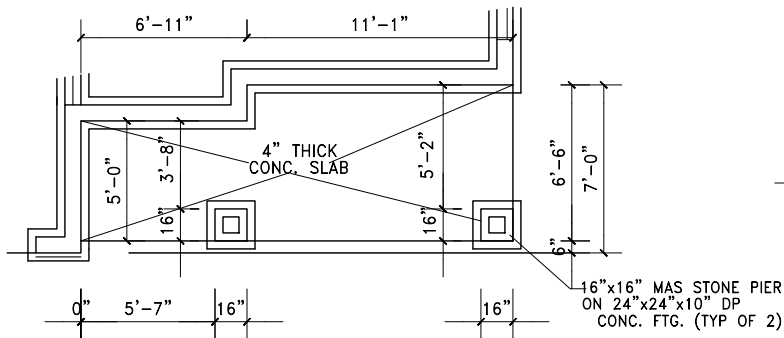
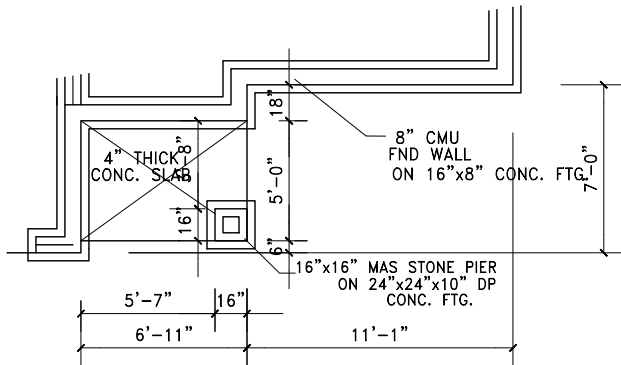
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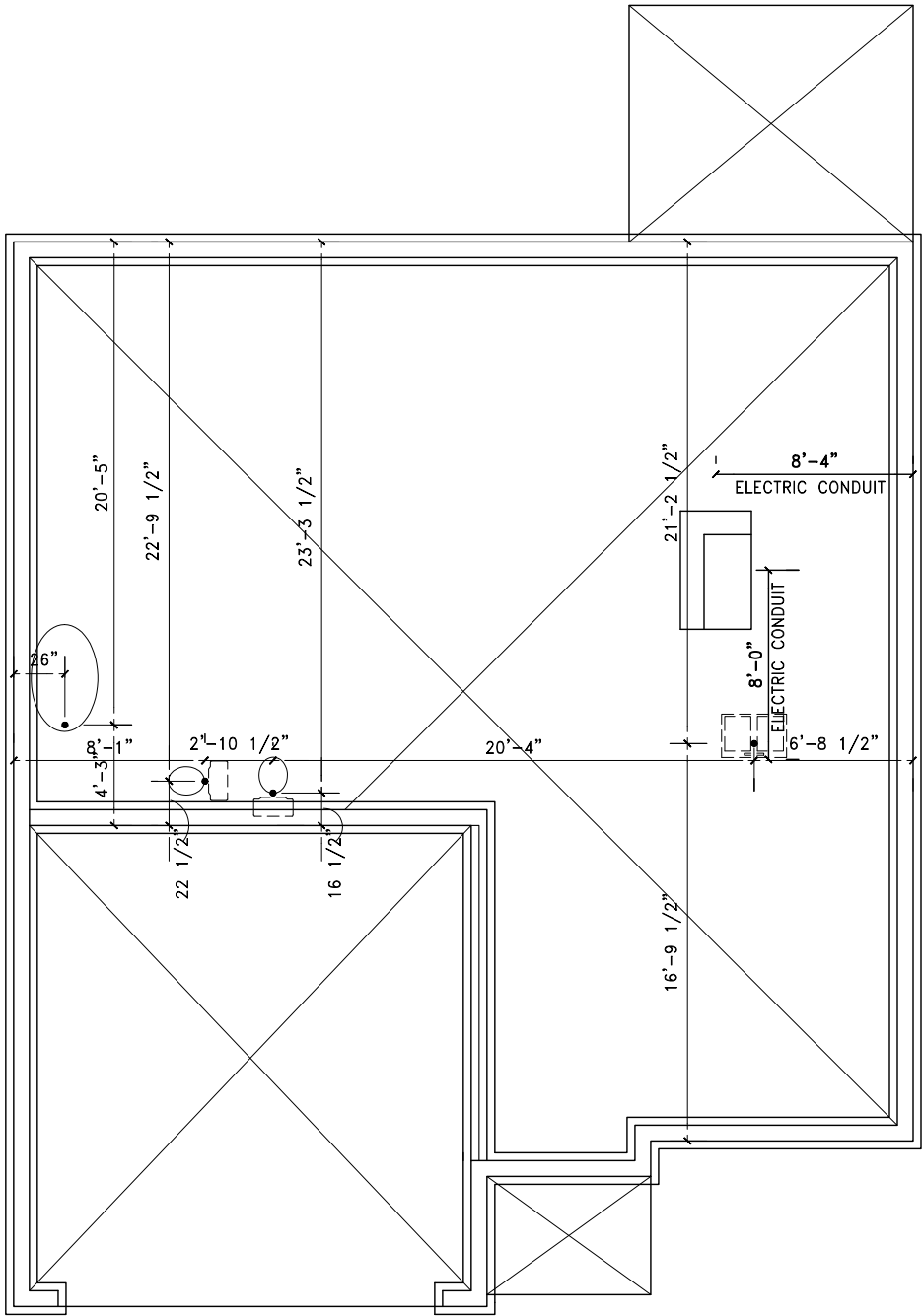
Project Number: 2101-010054  
\* Structural analysis based on NC Residential Building Code 2018

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SCALE  
24"x36" = 1/4"=1'-0"  
11"x17" = 1/8"=1'-0"

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Floating Slab Foundation	
Els	
FILE	
DESIGN	ADS
DRAWN	ADS
CHECKED	
DATE	3/7/2016
SHEET	2S



PLUMBING LAYOUT

SCALE	
24"X36"	= 1/4"=1'-0"
11"X17"	= 1/8"=1'-0"

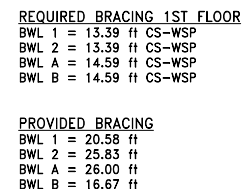
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A&H	
Plumbing Layout	
Els	
FILE	
DESIGN	ADS
DRAWN	ADS
CHECKED	
DATE	3/7/2016
SHEET	2A

- 1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- 2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DISCREPANCY FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- 3) ALL LUMBER SHALL BE #2,  $\pi$ 2 (UNO)  
ALL LUMBER IS TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND  $F_b$  = 2600 PSI,  $E$  = 1.9M PSI  
(I.E. LEARING CMLXAM)
- 4) ALL LOAD BEARING INTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 5'-6" SHOULD BE A (2) 2x10 w/ (1) 2x4 KING STUD AND (1) 2x4 JACK NAILED TOGETHER W/ (2) 10d @ 8" O.C. PRIOR TO THE TOP OF THE WINDOW HEIGHT IS 1'-6", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6", OTHERWISE REFER TO TABLE 5502.5(1).
- 5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLE 5502.5(1) FOR JACK STUD REQUIREMENTS FOR HEADERS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
- 6) REFER TO 2018 NC BUILDING CODE SECTION 9602 FOR CONSISTENCY OF ALL WALLS OVER 10'-0" IN HEIGHT.
- 7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 IN GRADE.  $F_y$  = 50 KS MIN. (UNO)
- 8) ALL EXTERIOR LUMBER TO BE #2  $\pi$ 2 SPF
- 9) ALL CONCRETE, 16 3000 PSI MIN.
- 10) PROVIDE BEARING CAPACITY 2000 PSF
- 11) 1/2" x ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE EMBEDDED 8" INTO CONCRETE FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
- 12) ALL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- 13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 14) PROVIDE CONTINUOUS SHEATHING PER SECTION 610.10.4 OF THE 2018 IRC
- 15) MAXIMUM MASONRY PER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONSIDERED Y CHANGING.
- 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED ALIKE.

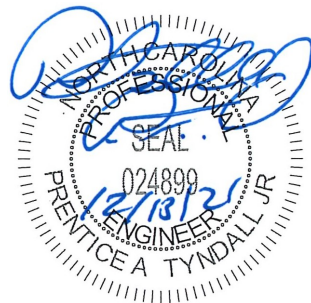


**Project Number: 2101-010054**  
**\* Structural analysis based on NC Residential Building Code 2018**

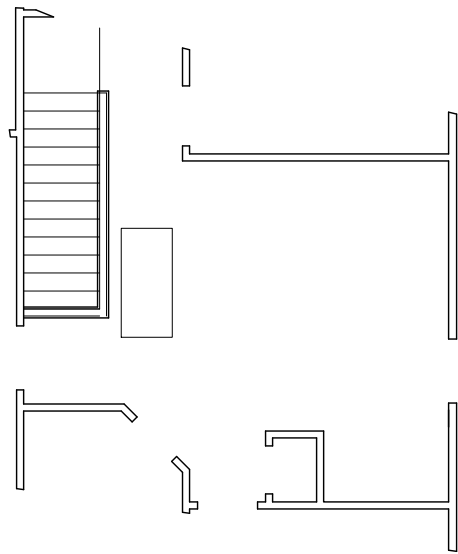
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SCALE	
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11"X17"	= 1/8"=1'-0"



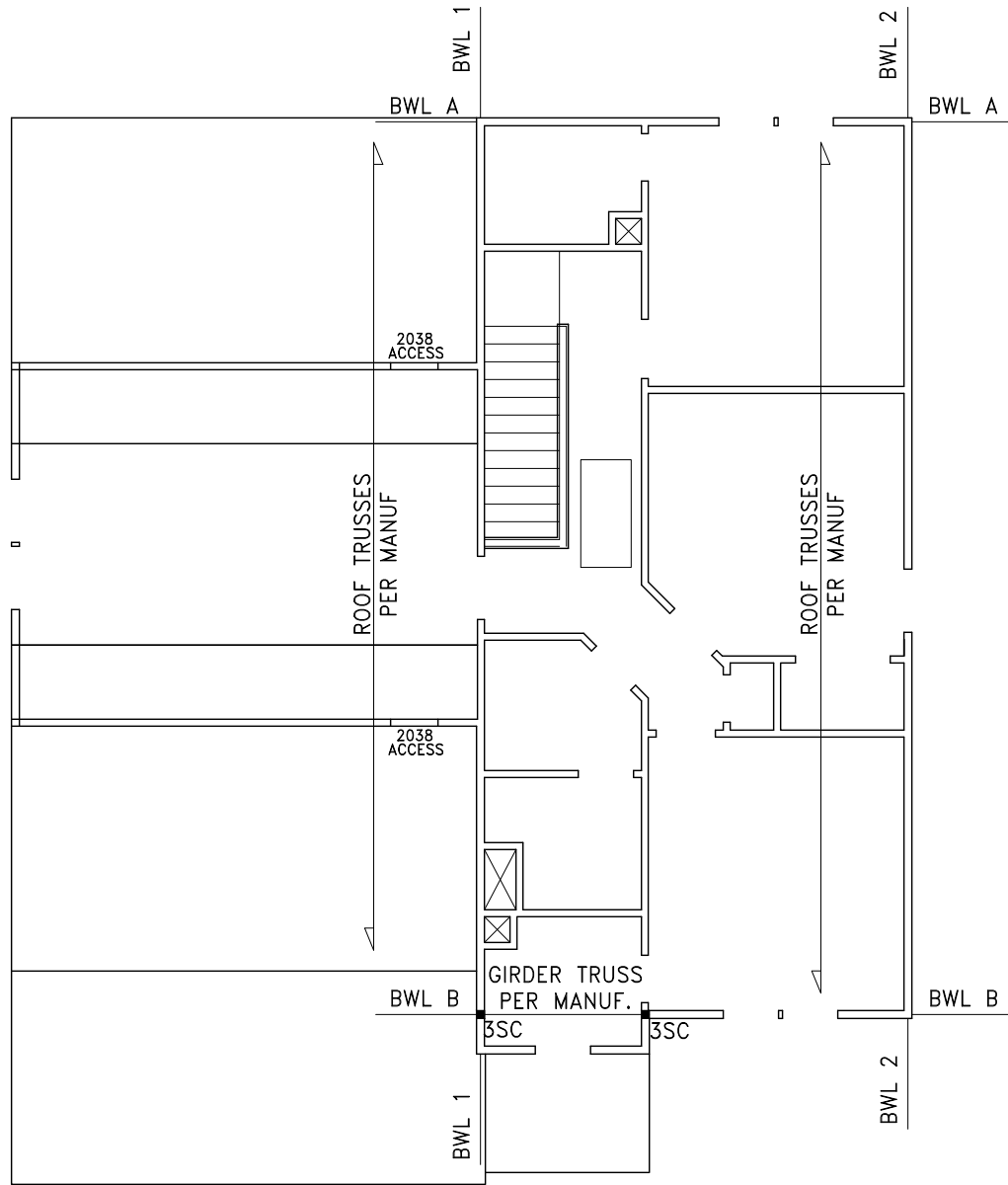
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LOFT OPTION

REQUIRED BRACING 1ST FLOOR  
BWL 1 = 4.00 ft CS-WSP  
BWL 2 = 4.00 ft CS-WSP  
BWL A = 6.82 ft CS-WSP  
BWL B = 6.82 ft CS-WSP

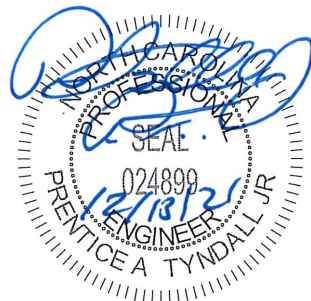
PROVIDED BRACING  
BWL 1 = 24.17 ft  
BWL 2 = 35.33 ft  
BWL A = 13.54 ft  
BWL B = 11.20 ft



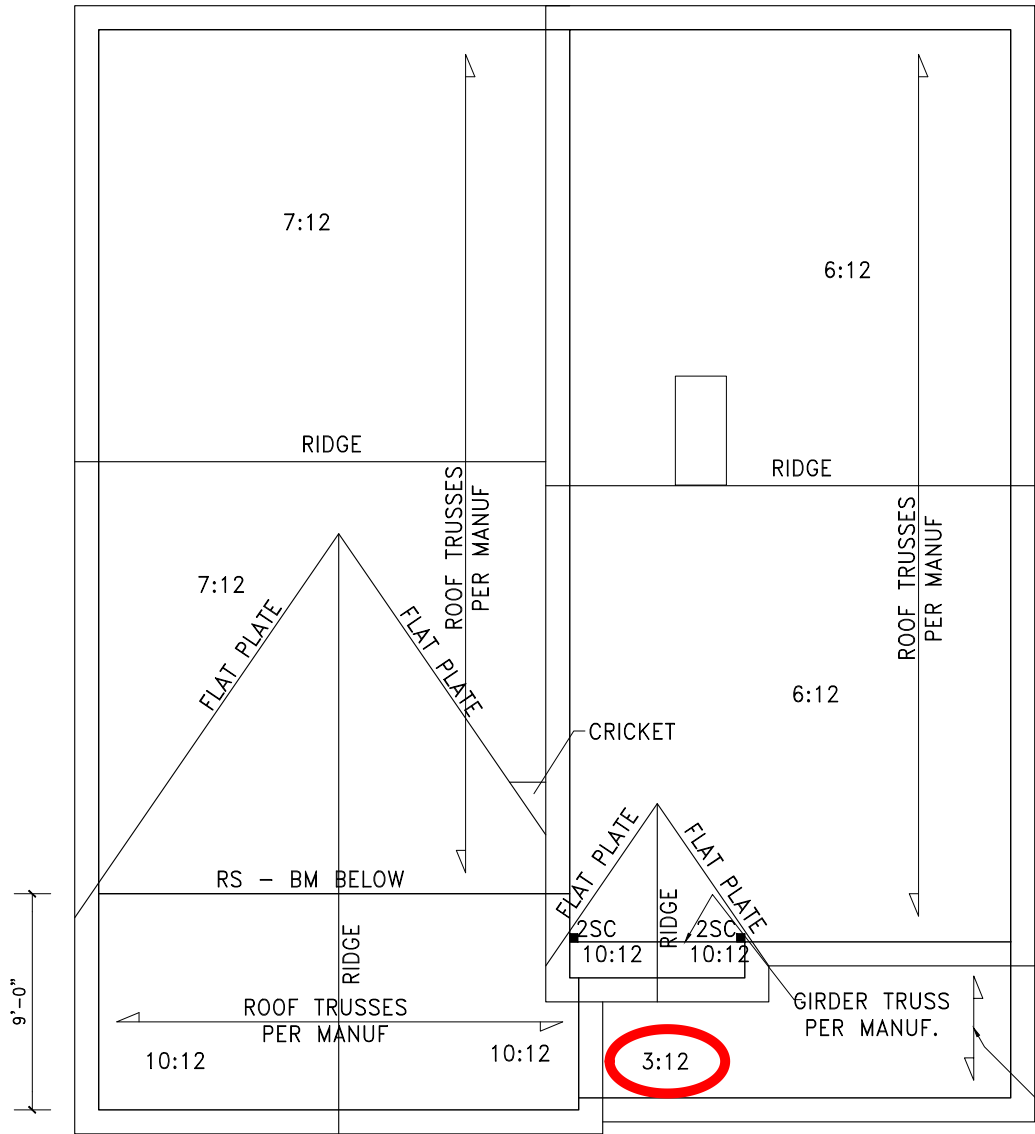
SECOND FLOOR PLAN

SCALE  
24"x36" = 1/4"=1'-0"  
11"x17" = 1/8"=1'-0"

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2nd Floor Structurals	
EIs	
FILE	
DESIGN	ADS
DRAWN	ADS
CHECKED	
DATE	3/7/2016
SHEET	4



Project Number: 2101-010054  
\* Structural analysis based on NC Residential Building Code 2018  
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**DOUBLE PAPER**  
ELV. "C"

ROOF TRUSSES PER MANUF. or  
STICK FRAMED w/ 2x6 @ 16"  
O.C.

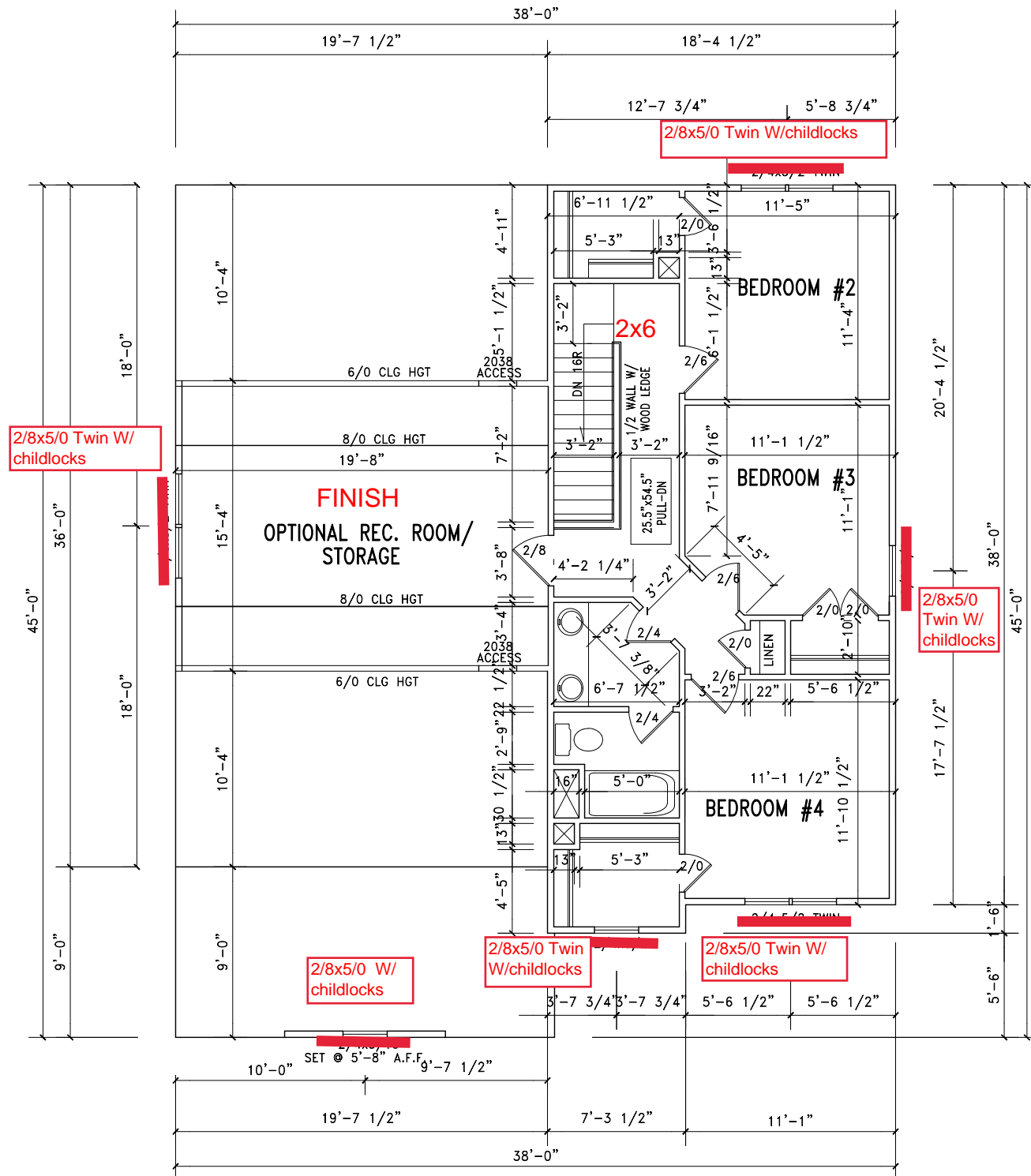
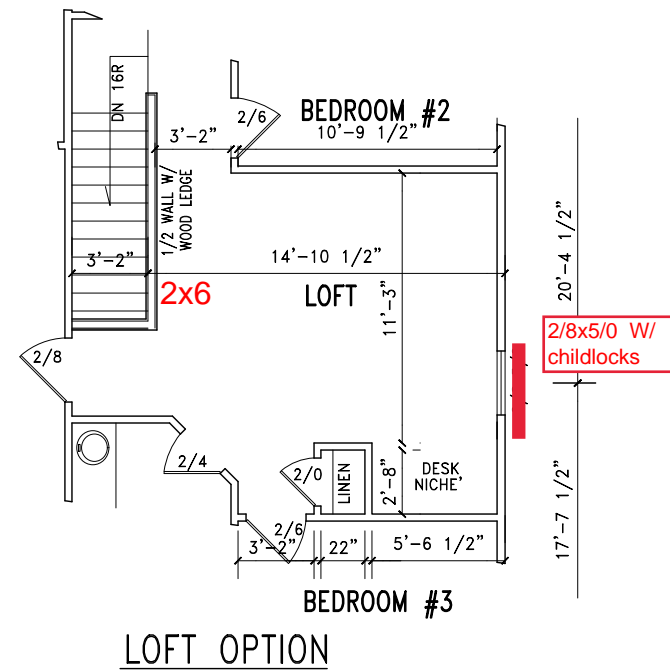
ROOF FRAMING PLAN

SCALE	
24"x36"	= 1/4"=1'-0"
11"x17"	= 1/8"=1'-0"

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Roof Framing	
Els	
FILE	
DESIGN	ADS
DRAWN	ADS
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DATE	3/7/2016
SHEET	5C

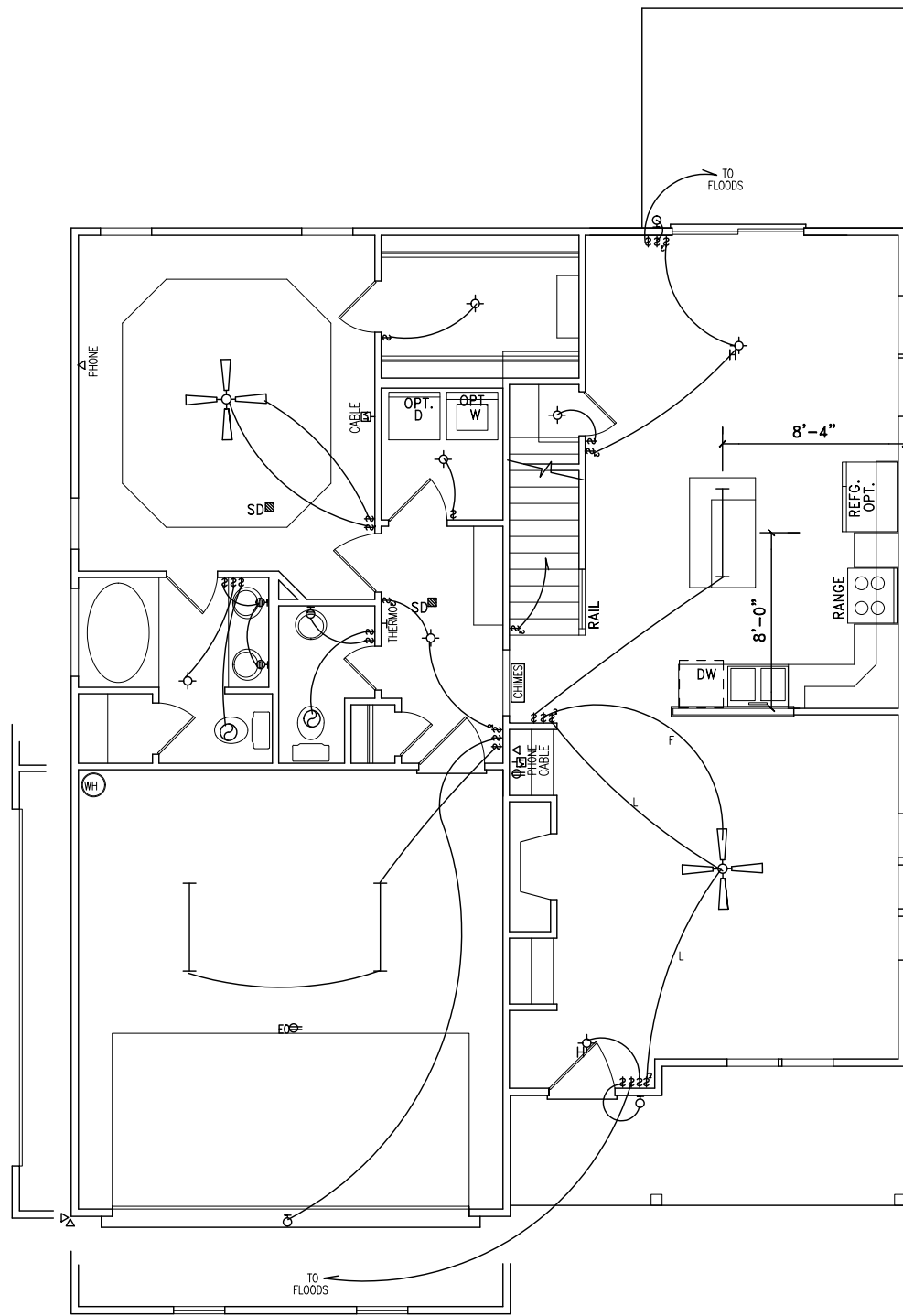




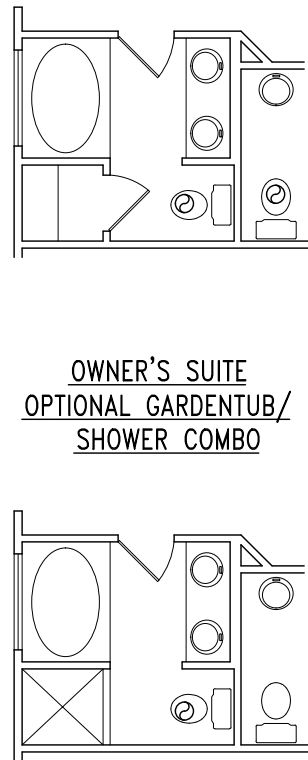


SECOND FLOOR PLAN

SCALE  
24"x36" = 1/4"=1'-0"  
11"x17" = 1/8"=1'-0"

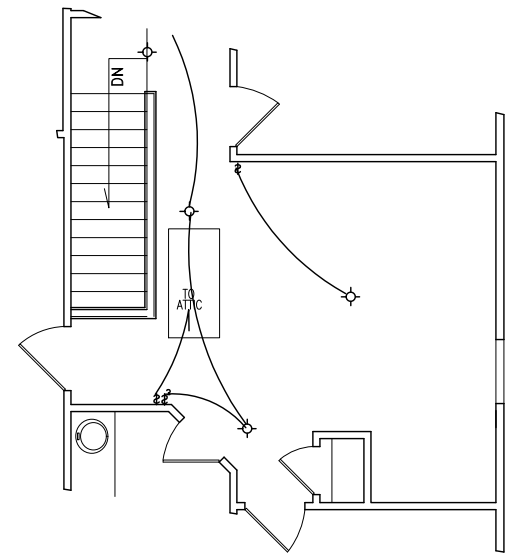
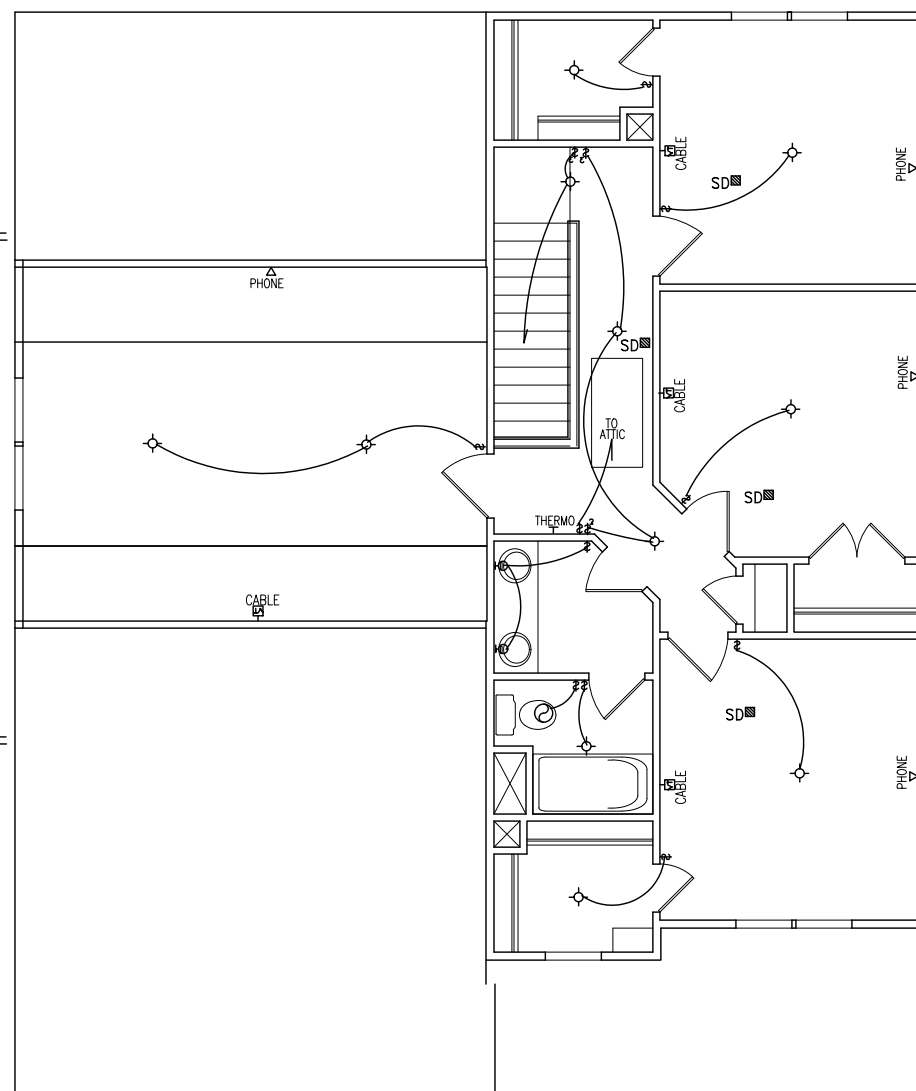


OPTIONAL SIDE ENTRY



OWNER'S SUITE  
OPTIONAL GARDENTUB/  
SHOWER COMBO

OWNER'S SUITE  
OPTIONAL SUNLITE  
GARDEN TUB

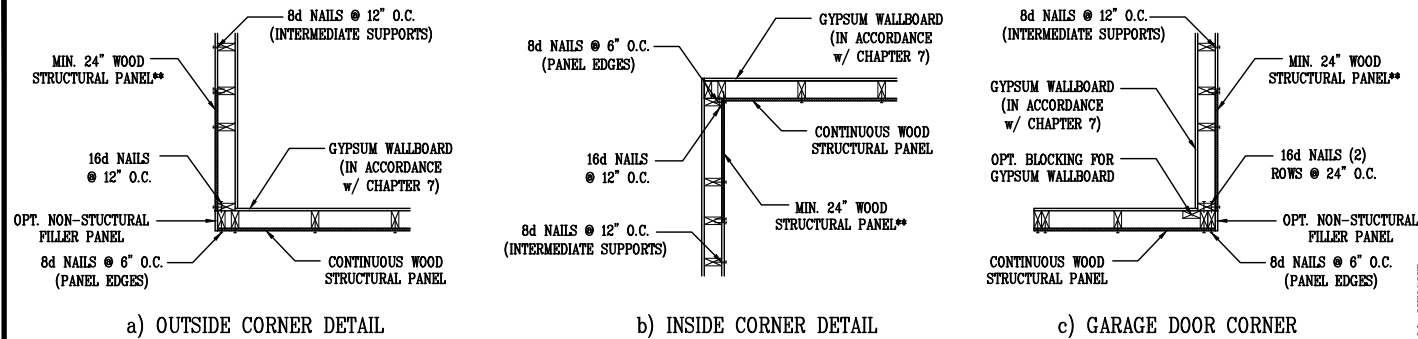


LOFT OPTION

ELECTRICAL SYMBOLS			
	CEILING MOUNTED LIGHT FIXTURE		SINGLE RECEPTACLE OUTLET
	DIRECTIONAL CLG. LIGHT FIXTURE		DUPLEX RECEPTACLE OUTLET
	RECESSED LIGHT FIXTURE		QUADRUPLEX RECEPTACLE OUTLET
	WALL MOUNTED LIGHT FIXTURE		FLOOR OUTLET
	EXTERIOR FLOOD LIGHT		DUPLEX RECEPTACLE OUTLET SPLIT USED
	TRACK LIGHT FIXTURE		220 VOLT OUTLET
	CHIMES		WATER PROOF OUTLET
	SINGLE POLE WALL SWITCH		TELEPHONE OUTLET
	3-WAY POLE WALL SWITCH		TV OUTLET
	FOUR-WAY SWITCH		GROUND FAULT INTERCEPTOR
	GROUND FAULT INTERCEPTOR		RECESSED LIGHT FIXTURE ANGLE CUT
	WATER PROOF SWITCH		PULL CHAIN LIGHT FIXTURE
	DIMMER SWITCH		FLUORESCENT LIGHT BOX
	TIMER SWITCH		CEILING FAN
	FLUORESCENT LIGHT		EXHAUST FAN
	ELECTRICAL OUTLET GARAGE DOOR OPENER		SMOKE DETECTOR
	HANGING LIGHT FIXTURE		EXHAUST FAN/LIGHT
	CEILING FAN/LIGHT		SHOWER LIGHT

NOTE:  
(1) ALL RECEPTACLE PLACEMENT TO CODE.  
(2) PLEASE NOTE RECEPTACLE PLACEMENT PER BUILDER.

SCALE  
24"X36" = 1/4"=1'-0"  
11"X17" = 1/8"=1'-0"



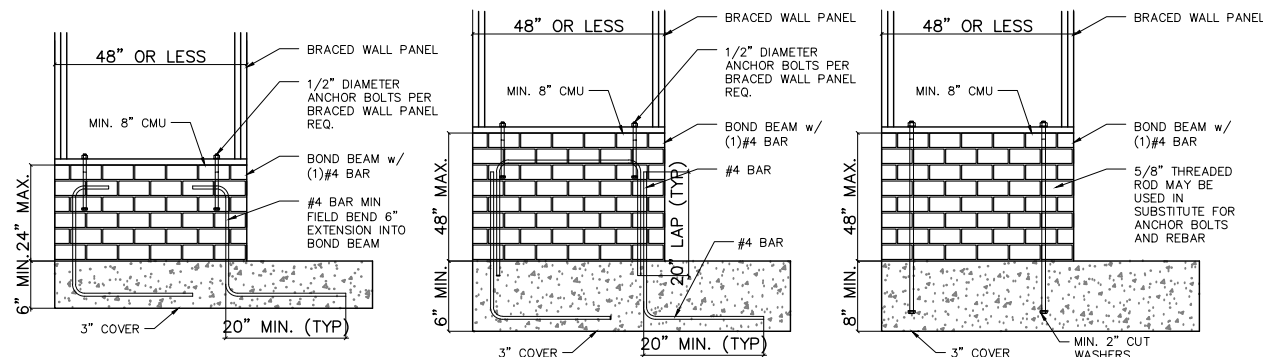
\*\* IN LIEU OF THE 24" (MIN.) CORNER RETURN, A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE CORNER STUD AND TO THE FOUNDATION OR FRAMING BELOW.

## B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING

NO SCALE

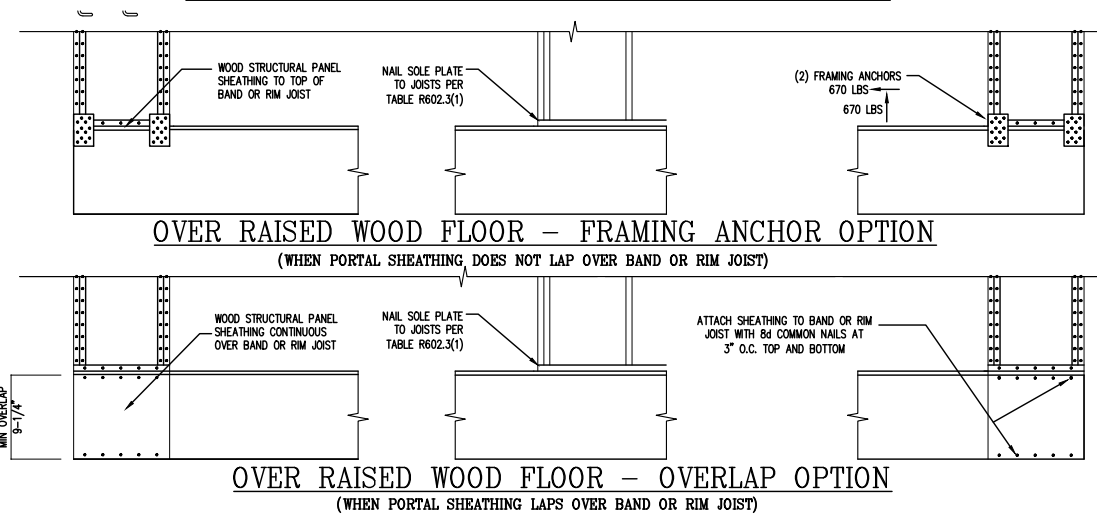
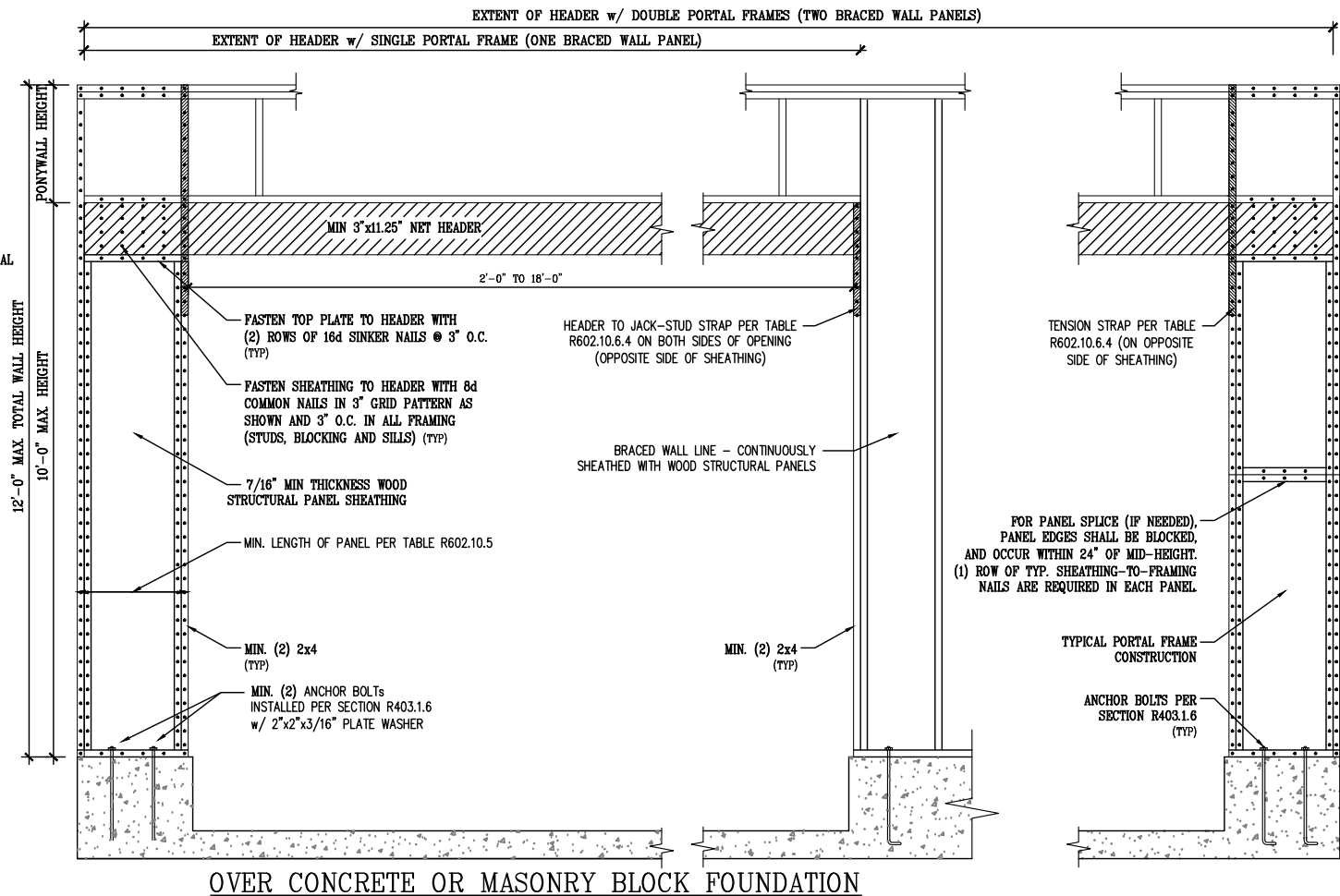
### STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
- BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
  - REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
  - 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS
  - 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
- ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS
- MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
  - 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
  - 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT
  - 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT
- SHEATH INTERIOR & EXTERIOR
- FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3.4. IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.
  - MINIMUM 800# HOLD-DOWN DEVICE



## B5: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS

FIGURE R602.10.9 OF THE IRC  
 NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS



## B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME

FIGURE R602.10.6.4

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			● PANEL EDGES	● INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.

\*\*OR EQUIVALENT PER TABLE R702.3.5

## B4: BRACE WALL PANEL CONNECTIONS

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### REVISIONS:

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 info@adamsandhodge.com  
 919-234-1332  
 FIRM # C-4187

ADAMS & HODGE  
 ENGINEERING, P.C.



BRACING  
 DETAILS

EIS

FILE

DESIGN

ADS

DRAWN

ADS

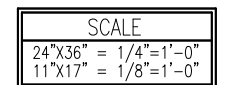
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DATE

3/7/2016

SHEET

SD1



REVISIONS:


## Screen Porch Detail

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GN

VN

CKED

1/15/2013

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