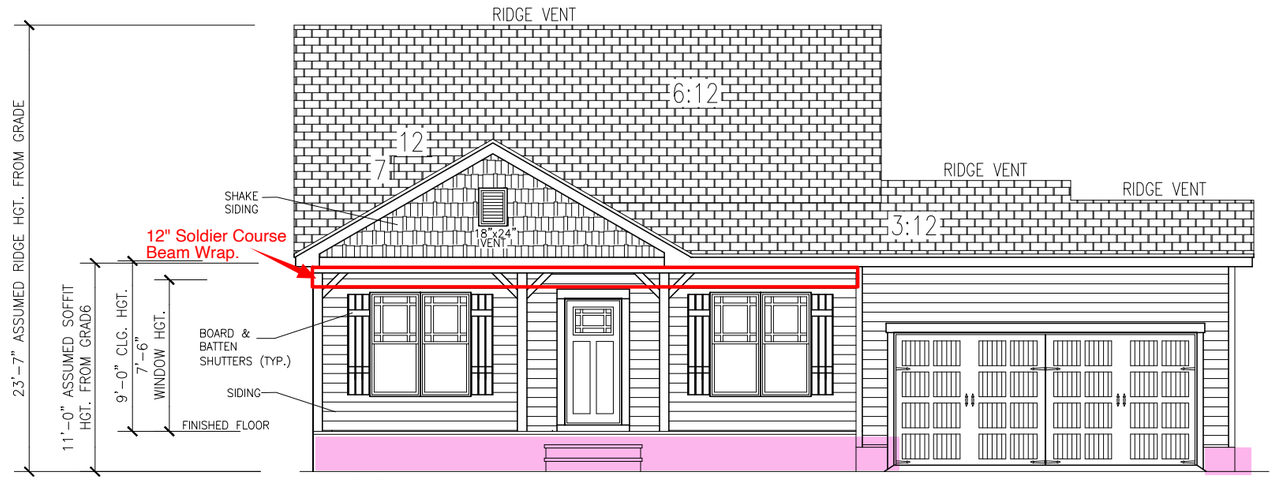
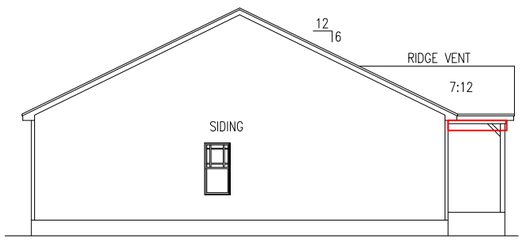
ATTIC SPACE VENTILATION
REQUIRED 1978 SQ. FT. OF CLG. / 150 = 13.19 SQ. FT. REQUIRED
REFER TO SECTION R806 (ROOF VENTILATION) IN NORTH CAROLINA STATE 2018 INTERNATIONAL RESIDENTIAL BUILDING CODES.

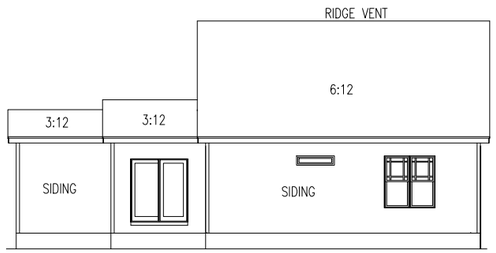
MEAN ROOF HGT.			
Soffit Hgt. From Assumed Grade	+ Highest Ridge Hgt. From Assumed Grade	÷ 2	= Mean Roof Hgt.
11'-0"	+ 23'-7"	÷ 2	= 17'-3 1/2" Mean Roof Hgt.



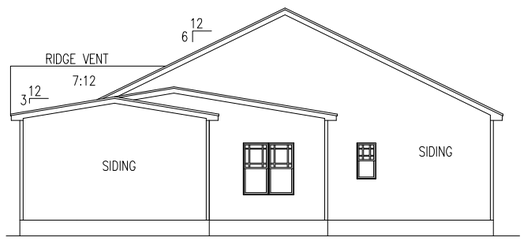
FRONT ELEVATION "D"



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

Mason Landing Lot 12 - 196 Sawyer Mill Drive

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

REVISIONS:
8/15/19

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ADAMS & HODGE ENGINEERING, PC

Slab Elevation "D"

Hibernia

FILE

DESIGN ADS

DRAWN ADS

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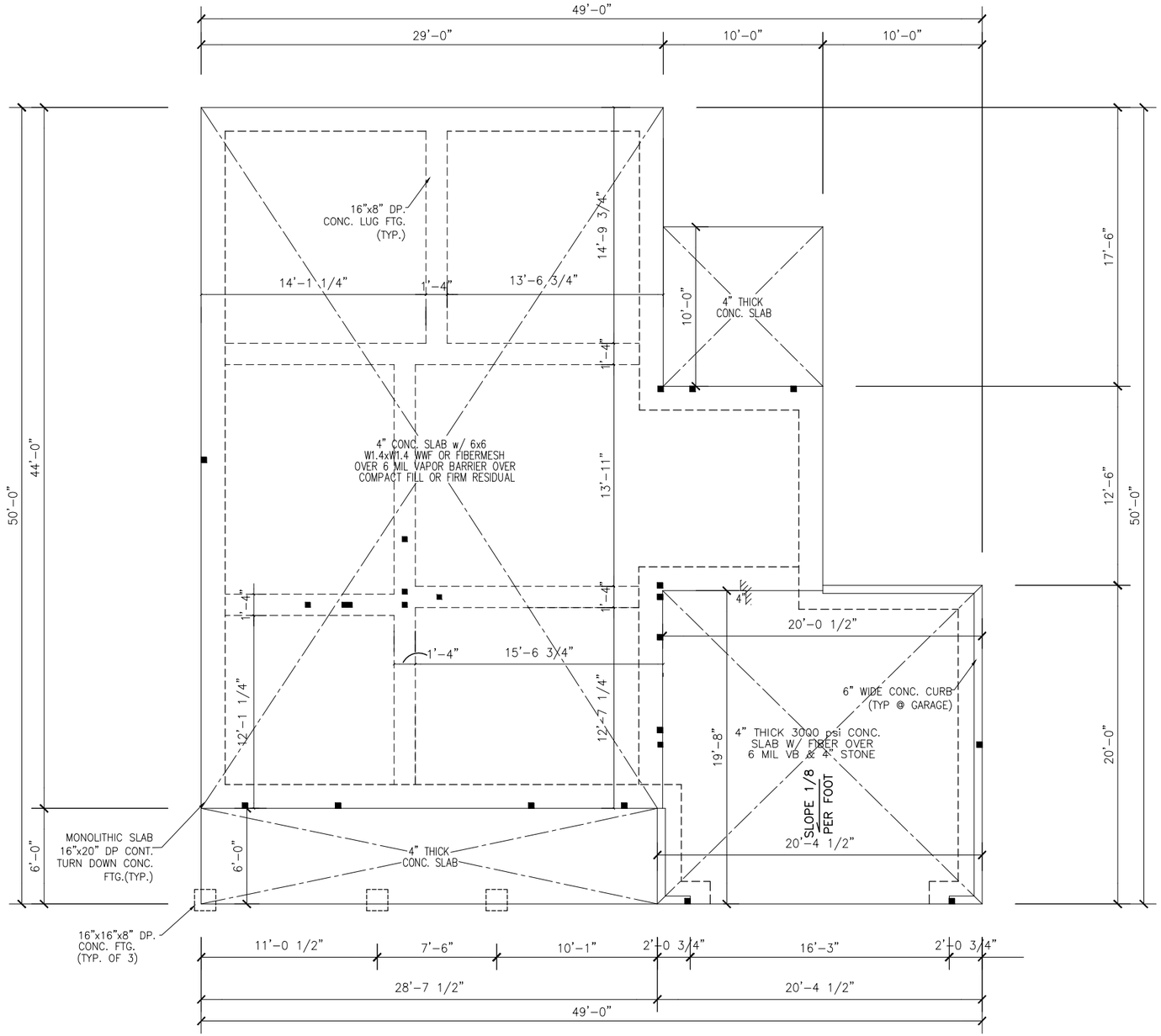
DATE 10/10/2017

SHEET 4



FOUNDATION "D"

NORTH CAROLINA PROFESSIONAL SEAL 45675 ENGINEER PATRICK S. EDWARDS
10/08/19

TYNDALL ENGINEERING & DESIGN, P.A.

Project Number: 1701-010336

* Structural analysis based on NC Residential Building Code 2018

The Engineer's seal applies only to structural components on this document. The seal does not include construction means, methods, techiques, procedures, or safety precautions. Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, PA. Failure to do so will void Tyndall Engineering's Liability.

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REVISIONS:

8/15/19

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ADAMS & HODGE ENGINEERING, PC

Monolithic Slab Foundation

Hibernia

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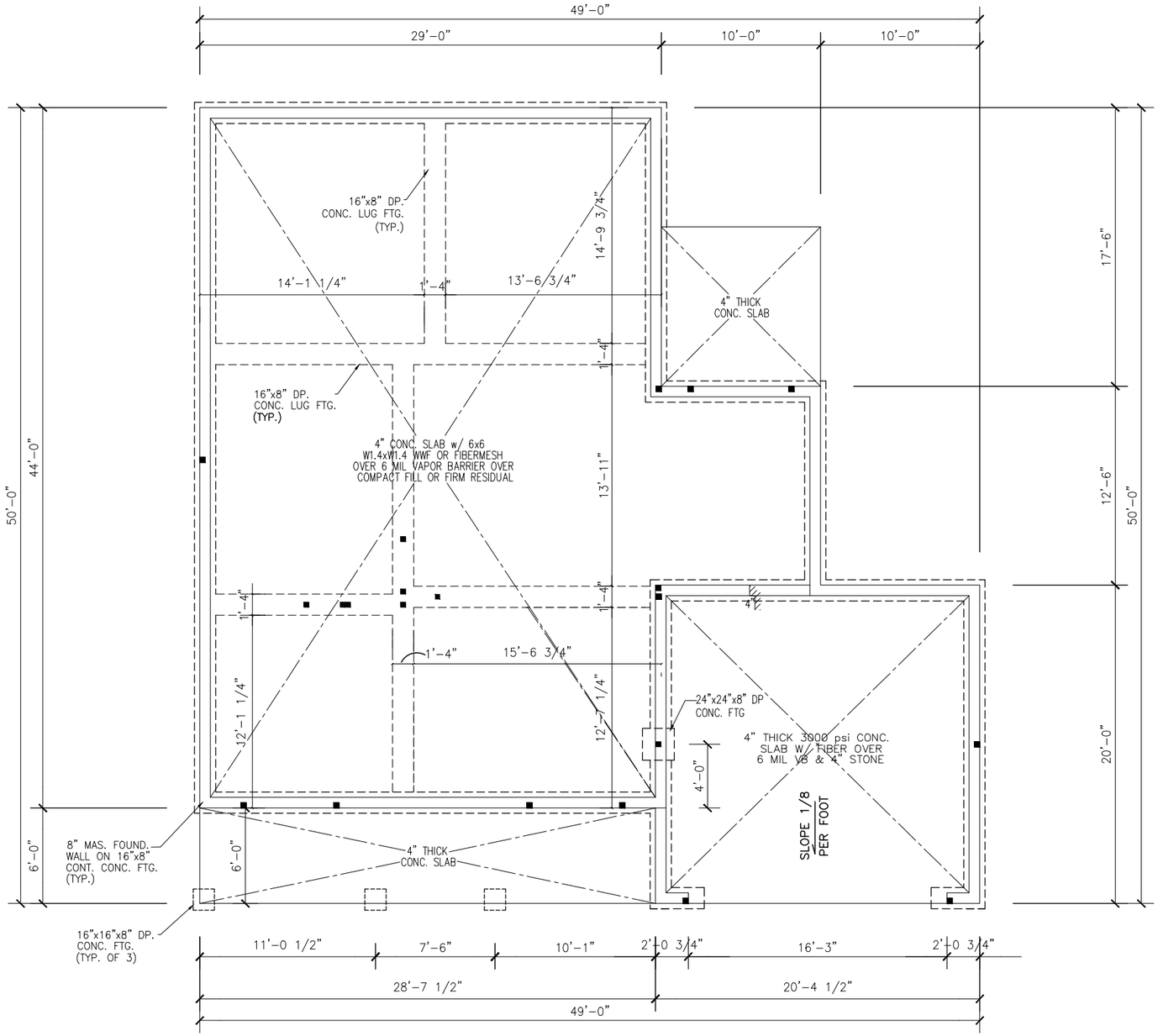
SHEET 2



FOUNDATION "D"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 45675 PATRICK S. EDWARDS 10/08/19

TYNDALL ENGINEERING & DESIGN, P.A.

Project Number: 1701-010336

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SCALE
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REVISIONS:

8/15/19

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ADAMS & HODGE ENGINEERING, PC

Stem Wall Foundation

Hibernia

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SHEET 2

CRAWL SPACE VENTILATION

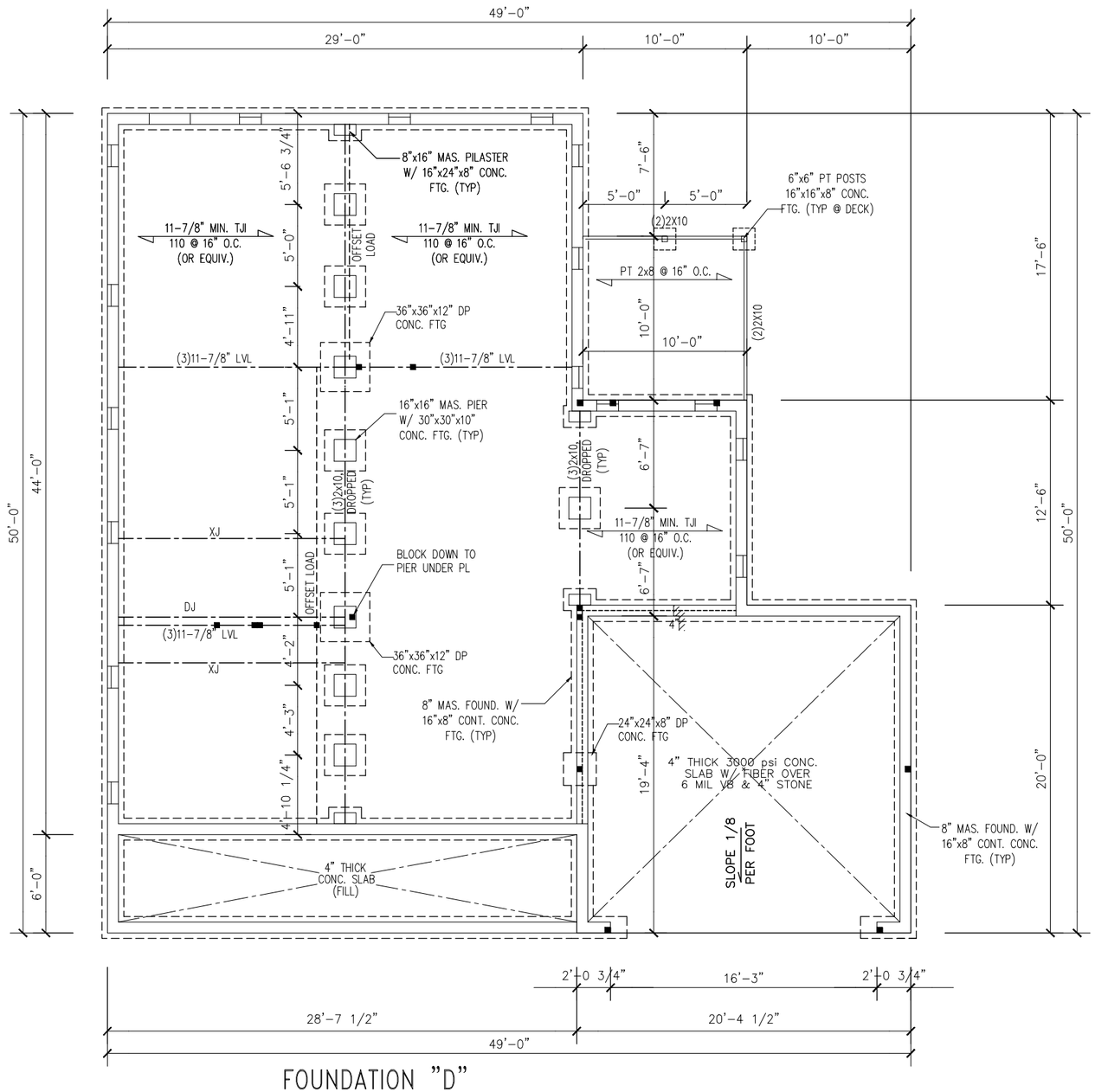
REQUIRED

1404 SQ. FT. / 150 = 9.36 SQ. FT. OF VENTILATION

PROVIDED

0.6 SQ. FT. / VENT = 16 VENTS 9.6 (SQ. FT. OF VENTILATION)

THE MINIMUM NET AREA OF VENTILATION OPENINGS SHALL NOT BE LESS THAN 1 SQ. FT. FOR EA. 150 SQ. FT. OF UNDER-FLOOR SPACE AREA. ONE SUCH VENTILATING OPENING SHALL BE WITHIN 3 FT. OF EA. CORNER OF SAID BUILDING.



FOUNDATION "D"

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TYNDALL ENGINEERING & DESIGN, P.A.

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ADAMS & HODGE ENGINEERING, PC

Crawlspace Foundation

Hibernia

FILE	
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DATE	10/10/2017
SHEET	2

DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

STRUCTURAL NOTES:

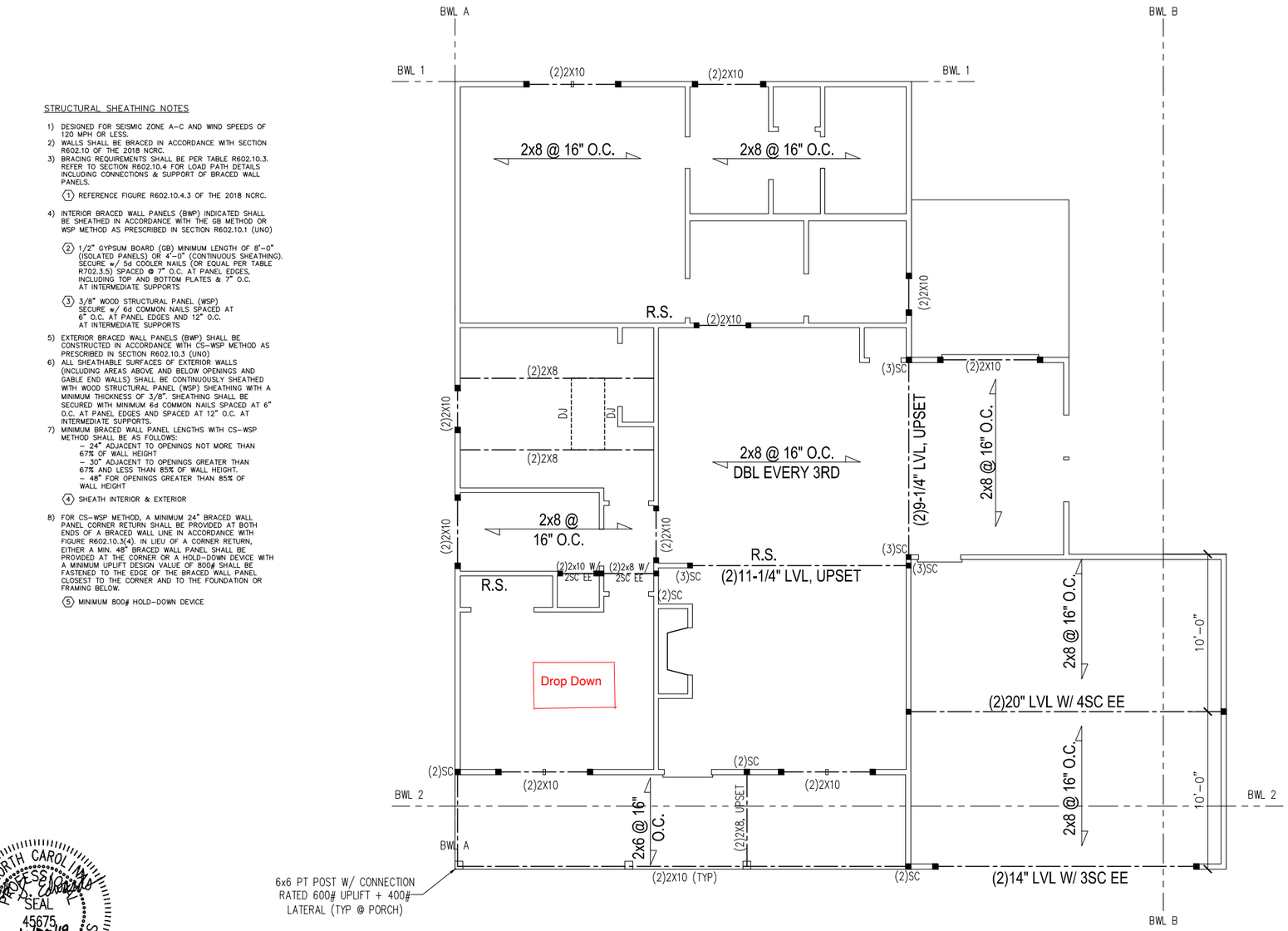
1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
2) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
3) ALL LUMBER SHALL BE SYP #2 (UNO)
   ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. ILEVEL MICROLAM)
   ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI)
4) ALL LOAD BEARING EXTERIOR WINDOW HEADERS WITH MAXIMUM SPAN OF 5'-6" SHOULD BE A (2) 2x10 w/ (1) 2x4 KING STUD AND (1) 2x4 JACK STUD NAILED TOGETHER w/ (2) 10d @ 8" O.C. PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6", OTHERWISE REFER TO TABLES R602.7(1) & R602.7.5.
5) ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLE R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO)
8) ALL EXTERIOR LUMBER TO BE #2 SYP PT
9) ALL CONCRETE, fc = 3000 PSI MIN.
10) PRESUMPTIVE BEARING CAPACITY = 2000 PSF
11) 1/2"ø 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 SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY.
12) PSL 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 602.10.4 OF THE 2018 IRC.
15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
3) 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.
   (1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
4) 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)
   (2) 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) 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
5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
6) 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.
7) 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
   (4) SHEATH INTERIOR & EXTERIOR
8) 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.
   (5) MINIMUM 800# HOLD-DOWN DEVICE

BRACING PANEL LENGTHS REQUIRED:
BWL A = 6.2 FT
BWL B = 6.2 FT
BWL 1 = 6.3 FT
BWL 2 = 6.3 FT

BRACING PANEL LENGTHS PROVIDED:
BWL A = 37.0 FT CS-WSP
BWL B = 20.0 FT CS-WSP
BWL 1 = 18.8 FT CS-WSP
BWL 2 = 17.6 FT CS-WSP



FLOOR PLAN STRUCTURALS
ELEVATION "D"

TYNDALL ENGINEERING & DESIGN, P.A.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 45675 10/08/19 PATRICK S. EDWARDS

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SCALE
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REVISIONS:
8/15/19

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Floor Plan Structurals Elev. "D"

Hibernia

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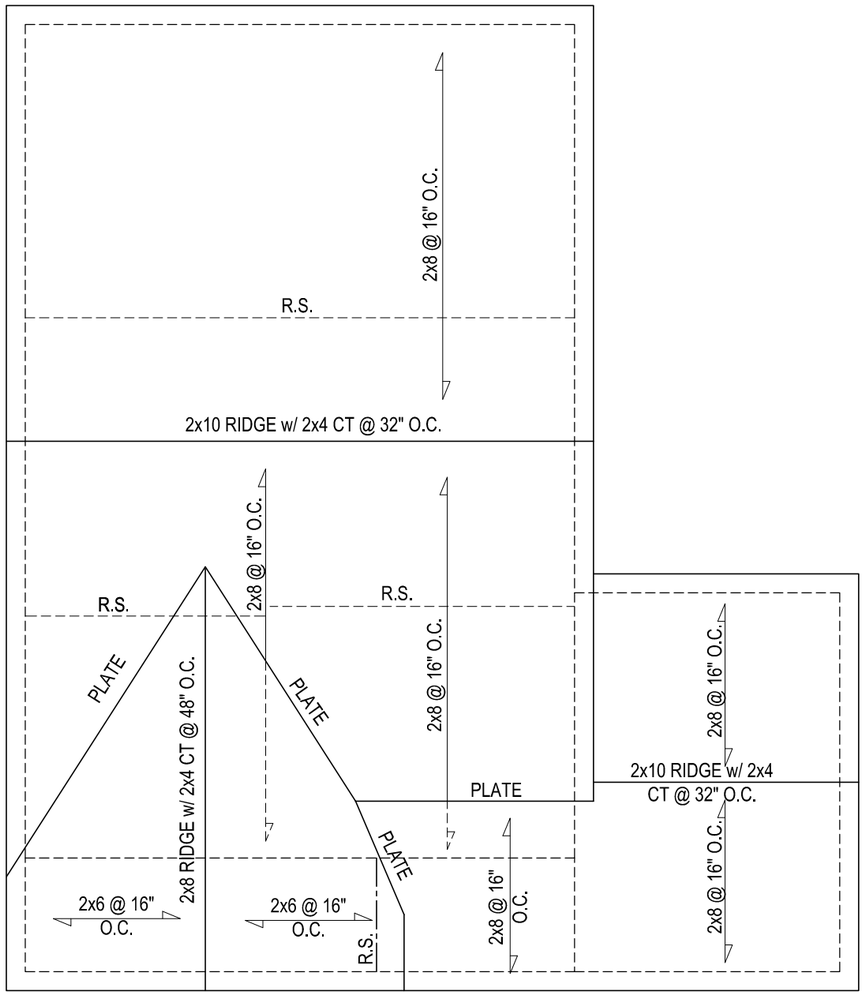
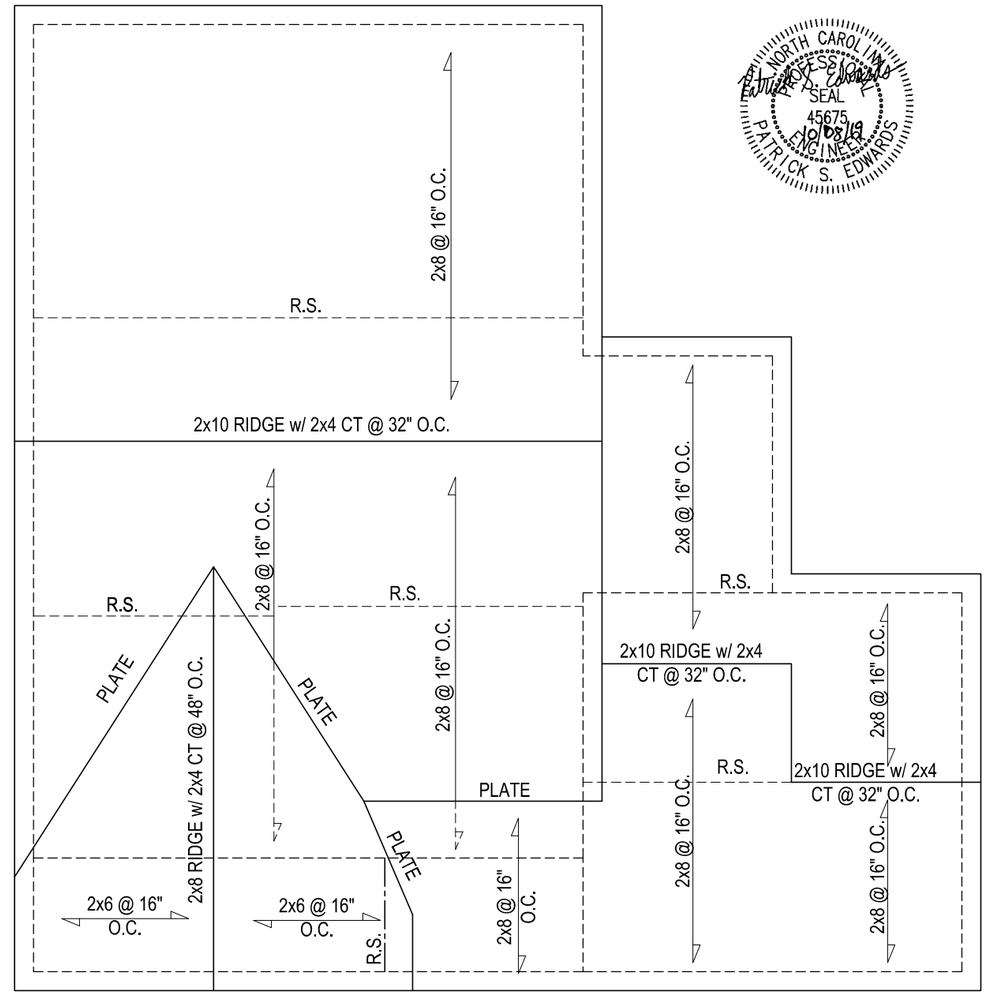
ROOF NOTES:

- PROVIDE UPLIFT CONNECTION PER MANUF. SPECIFICATIONS
  - RS = ROOF SUPPORT
  - SC = STUD COLUMN



ROOF FRAMING PLAN "C"



ROOF FRAMING PLAN "D"

TYNDALL ENGINEERING & DESIGN, P.A.

Project Number: 1701-010336

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NORTH CAROLINA PROFESSIONAL SEAL 45675 ENGINEER PATRICK S. EDWARDS 10/08/19

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Roof Framing

Hibernia

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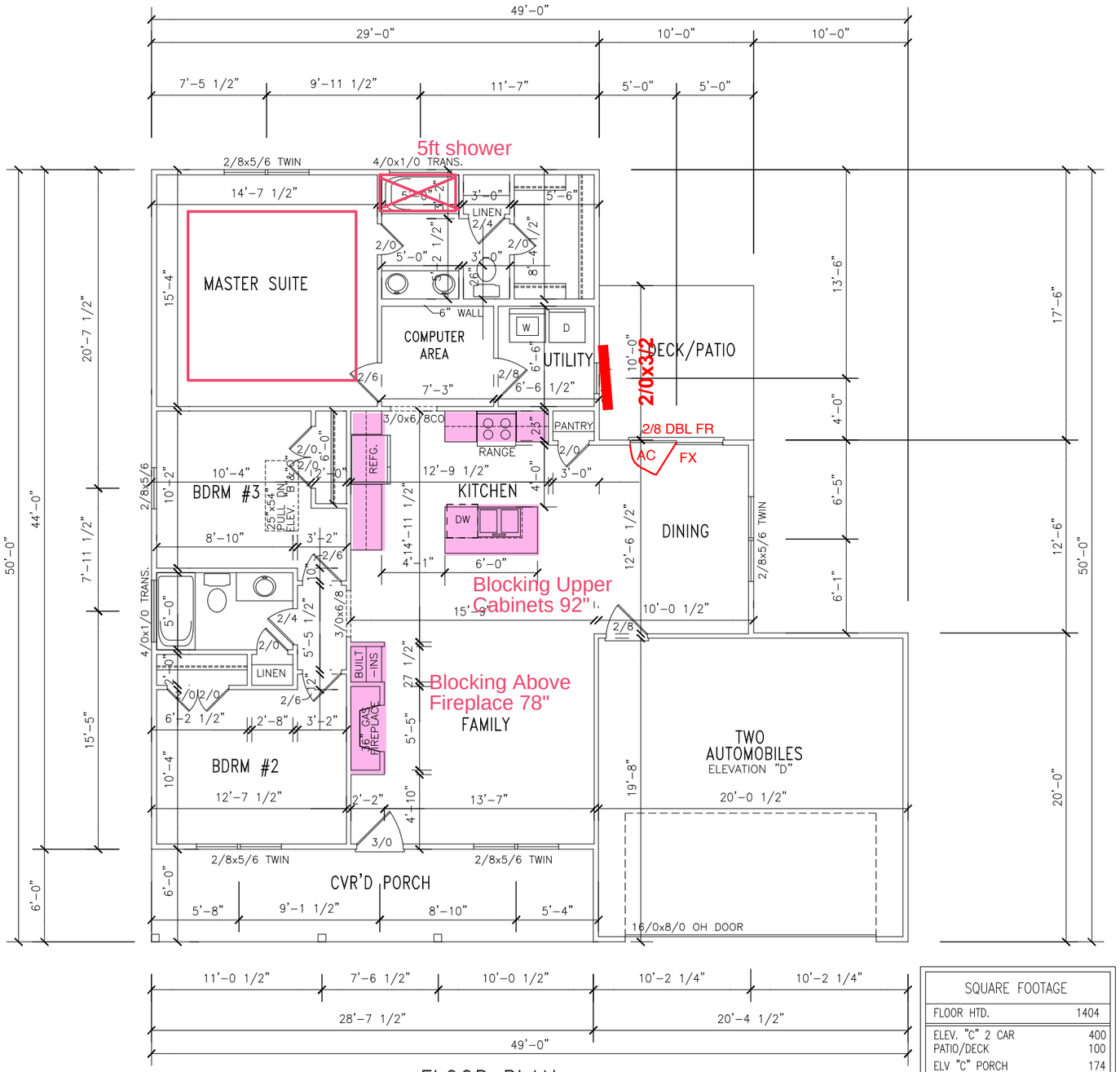
SHEET 4



SQUARE FOOTAGE	
FLOOR HTD.	1404
ELEV. "C" 2 CAR	400
PATIO/DECK	100
ELV "C" PORCH	174

FLOOR PLAN
ELEVATION "D"

SCALE
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Floor Plan "D" Option

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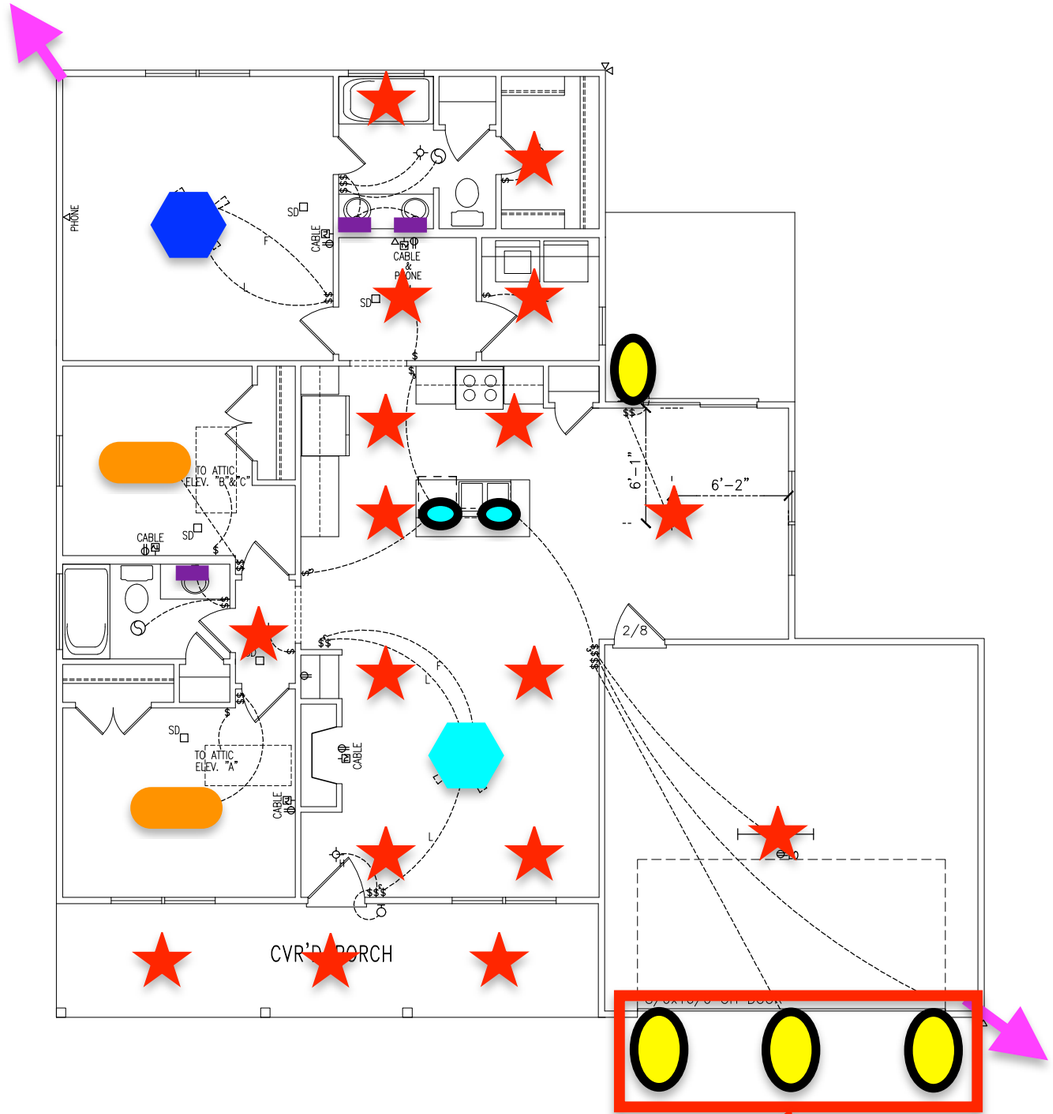
SHEET	5

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	
CHIMES	220 VOLT OUTLET
SINGLE POLE WALL SWITCH	WATER PROOF OUTLET
3-WAY POLE WALL SWITCH	TELEPHONE OUTLET
FOUR-WAY SWITCH	TV OUTLET
GROUND FAULT INTERCEPTOR	GROUND FAULT INTERCEPTOR
WATER PROOF SWITCH	RECESSED LIGHT FIXTURE ANGLE CUT
DIMMER SWITCH	PULL CHAIN LIGHT FIXTURE
TIMER SWITCH	FLUORESCENT LIGHT BOX
FLUORESCENT LIGHT	CEILING FAN
ELECTRICAL OUTLET GARAGE DOOR OPENER	EXHAUST FAN
HANGING LIGHT FIXTURE	SMOKE DETECTOR
CEILING FAN/LIGHT	EXHAUST FAN/LIGHT
	SHOWER LIGHT

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



Disk Lights

Pendant Light

Ceiling Fan

Ceiling Fan Pre-wire

Flush Mounts

Vanity Wall Fixture

Exterior Wall Mount

Flood Light

1 Exterior Wall Mount
OR
2 Exterior Wall Mount

REVISIONS:
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Electricals "D"

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