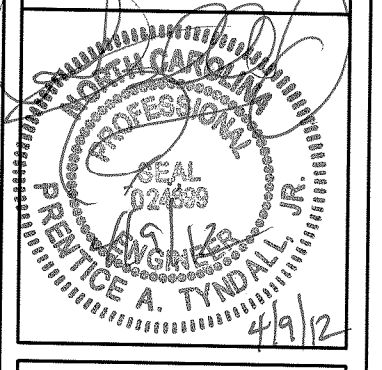


Engineers shall not include construction means, methods, techniques, sequence, procedures or safety precautions.  
 Any deviation or discrepancy on plans are to be brought to the attention of the client at the time of the next meeting.  
 Tyndall Engineering & Design, P.A. is not responsible for any errors or omissions on these documents.  
 Tyndall Engineering & Design, P.A. will not be held liable for any errors or omissions on these documents.  
 All dimensions are in feet and inches unless otherwise noted.  
 All dimensions are to be taken from the centerline of the member unless otherwise noted.  
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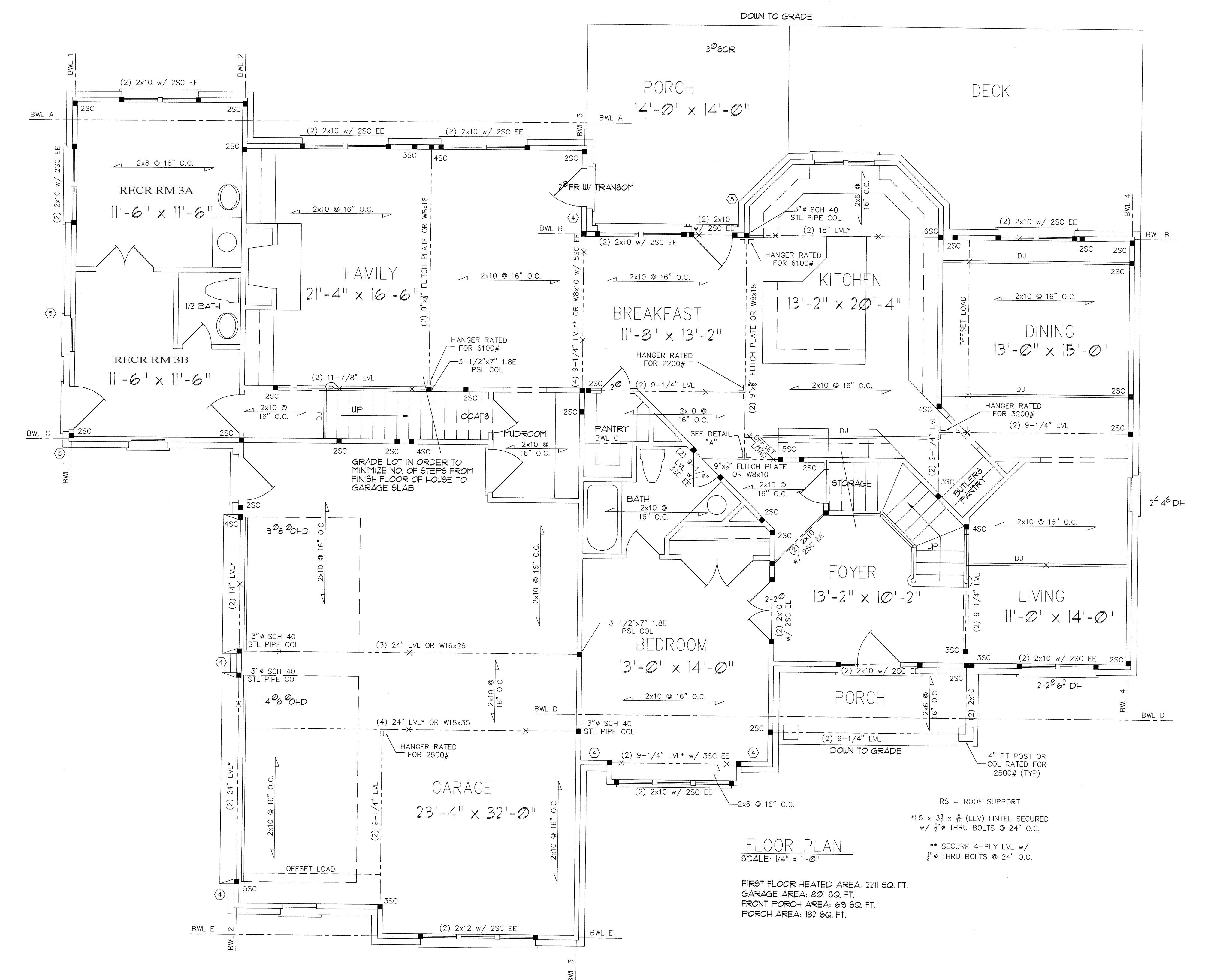
Client: **JEFF & LYNN POLSTON**  
 1707 FARM LAKE DRIVE  
 HOLLY SPRINGS, NC 27540  
 Project: **POLSTON RESIDENCE**  
 VUNCANNON DESIGNS

# FIRST FLOOR FRAMING PLAN

Project #: 1201-010129  
 Date: 04-09-12  
 Drawn/Design By: AWL  
 DWG. Checked By: PAT  
 Scale: 1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks

Sheet Number  
**S2**  
 of 4



DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION
FLOOR (primary)	40	10	L/360 L/240
FLOOR (secondary)	40	10	L/360 L/240
ATTIC (no storage)	20	10	L/240 L/180
ATTIC (no access)	10	10	L/240 L/180
EXTERNAL BALCONY	60	10	L/360 L/240
ROOF	20	10	L/180 L/180
ROOF TRUSS	20	20	L/240 L/180
WIND LOAD	BASED ON 100 MPH (EXPOSURE B)		
SEISMIC	BASED ON SEISMIC ZONES A, B & C		

- STRUCTURAL NOTES:
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2012 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, P.A. IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
  - ALL LUMBER SHALL BE SPF #2 (UNO)
  - ALL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND F<sub>b</sub> = 2800 PSI, E = 1.9M PSI (I.E. LEVEL MCDOLAM)
  - 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 TABLE R502.5(1).
  - ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLE R502.5(1) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
  - REFER TO 2012 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
  - ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 F<sub>y</sub> = 50 KSI MIN. (UNO)
  - ALL EXTERIOR LUMBER TO BE #2 SYP PT
  - ALL CONCRETE, f<sub>c</sub> = 3000 PSI MIN.
  - PRESUMPTIVE BEARING CAPACITY = 2000 PSF
  - 1/2" ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE AND 15" INTO MASONRY. THERE SHALL BE A MIN. (2) ANCHOR BOLTS PER PLATE SECTION.
  - PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 8'-0" (UNO)
  - PROVIDE A MINIMUM OF 500# UPLIFT CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
  - PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4
  - MAXIMUM MASONRY RIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
  - METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

- STRUCTURAL SHEATHING NOTES
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 100 MPH OR LESS
  - WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2012 NC RESIDENTIAL CODE.
  - BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.1.2(1) AND R602.10.1.2(2)
  - REFER TO SECTION R602.10.6 & R602.10.7 FOR REQUIRED BRACED WALL PANEL (BWP) CONNECTION & SUPPORT.
  - REFERENCE R602.10.7
  - INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.2 (UNO)
  - 1/2" GYPSON BOARD (GB) MINIMUM LENGTH OF 8'-0", 3'-0" IF BOTH SIDES ARE SHEATHED. PROVIDE BLOCKING PER TABLE R602.10.1.2(1) AS REQ'D.
  - 3/8" WOOD STRUCTURAL PANEL (WSP)
  - EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.4 (UNO)
  - ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS) SHALL BE SHEATHING WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8".
  - LENGTH REQUIREMENTS FOR BRACED WALL PANELS WITH CS-WSP METHOD SHALL BE IN ACCORDANCE WITH TABLE R602.10.4.2
  - 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 R602.10.4.4(1). IN LIEU OF A 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.
  - MINIMUM 800# HOLD-DOWN DEVICE

REQUIRED BRACING  
 BWL 1 = 8.7 ft CS-WSP  
 BWL 2 = 31.3 ft GB/WSP  
 BWL 3 = 32.9 ft GB/WSP  
 BWL 4 = 23.0 ft CS-WSP  
 BWL A = 8.3 ft CS-WSP  
 BWL B = 11.2 ft CS-WSP  
 BWL C = 28.1 ft GB/WSP  
 BWL D = 14.1 ft CS-WSP  
 BWL E = 11.8 ft CS-WSP

PROVIDED BRACING  
 BWL 1 = 10.4 ft  
 BWL 2 = 34.3 ft  
 BWL 3 = 42.5 ft  
 BWL 4 = 27.7 ft  
 BWL A = 19.5 ft  
 BWL B = 17.2 ft  
 BWL C = 33.8 ft  
 BWL D = 23.8 ft  
 BWL E = 14.0 ft

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

FIRST FLOOR HEATED AREA: 2211 SQ. FT.  
 GARAGE AREA: 801 SQ. FT.  
 FRONT PORCH AREA: 63 SQ. FT.  
 PORCH AREA: 182 SQ. FT.

FILENAME: \\MAP\DATA\RESIDENTIAL ENGINEERING\2012 STRUCTURAL PROJECTS\1201-010129\DWG S2.DWG - POLSTON RESIDENCE - 04/09/12 2:13 PM  
 DRAWN BY: JEFFREY TYNDALL  
 CHECKED BY: PATRICIA TYNDALL  
 DATE: 04/09/12