



Field Report

Project	Residential Structural Observation	Project No.	23-F025
Location	1185 Joe Collins Rd Lillington, NC 27546	Report No.	1
Client	Eunice Bucur	Day & Date	Tuesday, 04.18.23
Contact	eunicebucur@gmail.com	On-Site Time	1.00 hr
		Report Prep.	3.00 hr
		Travel Time	2.00 hr
		Total	6.00 hr

Trip Charges	N/A
Tolls/Parking	N/A
Total Mileage	60
Time of Arrival	10:30A
Time of Departure	11:30A
Chargeable Items	N/A

I arrived on site, as requested, to perform a Structural observation in accordance with 2018 North Carolina State Residential Code. This observation pertains to existing LVL framing and other framing concerns raised by an AHJ inspection. Structural Observation does not include or waive the responsibility for the inspections required by other sections of the building code.

Observations:

1- Basement Level

- a. Beam B1 = 3-ply 16" LVL supported by minimum 4 ~ 2 x 4 jack studs each end.
- b. Attach double PT 2 x 12 deck joists on either side of the cantilevered chimney to the ledger with Simpson Strong Tie "LS50" angle, using 4 ~ 8d x 1½" nails into the ledger and 4 ~ 8d common nails into the double joist.
- c. Notched joists to allow plumbing penetration shall be acceptable as observed. No additional repair shall be required.
- d. Observed toenailed connection between header and floor joist by plumbing penetrations shall be adequate.

2- First Floor Plan

- a. Beam B2 = 4-ply 11⅞" LVL supported by minimum 4 ~ 2 x 4 jack studs each end.
- b. Beam B3 = 4-ply 11⅞" LVL supported by minimum 5 ~ 2 x 4 jack studs at one end and 4 ~ 2 x 8 jack studs on the other end..
- c. Garage girder = 3-ply 24" LVL supported by minimum 4 ~ 2 x 4 jack studs each end.
- d. Garage Beam 1 = 3-ply 9¼" LVL supported by minimum 4 ~ 2 x 4 jack studs at one end and Simpson Strong Tie "HU610" face-mount hanger at supporting 24" LVL.
- e. Garage Beam 2 = 2-ply 9¼" LVL supported by minimum 3 ~ 2 x 4 jack studs at one

- end and Simpson Strong Tie “HU410” face-mount hanger at supporting 24” LVL.
- f. Garage door header = 2-ply 24” LVL supported by minimum 3 ~ 2 x 4 and 4 ~ 2 x 4 jack studs (7 ~ total) each end.
- g. Notched header at 2-story foyer shall be acceptable as observed. No additional repair shall be required.
- h. Notched header at Living Room/Optional Bedroom 6 shall be acceptable as observed. No additional repair shall be required.
- i. Notched header at Bedroom 5/Study shall be acceptable as observed. No additional repair shall be required.

3- Second Floor Plan (Ceiling framing)

- a. Beam B4 at top of 2-story foyer = 2-ply 9¼” LVL supported by minimum 3 ~ 2 x 4 jack studs at each end.
- b. Beam B5 between master bedroom and hallway = 2-ply 11⅞” LVL supported by minimum 3 ~ 2 x 4 jack studs at each end
- c. Beam B6 between master bedroom and sitting area = 2-ply 9¼” LVL supported by minimum 3 ~ 2 x 4 jack studs at each end
- d. Beam B7 between master bath and hallway = 2-ply 9¼” LVL supported by minimum 2 ~ 2 x 4 jack studs at each end.

- 4- All 4-ply LVL’s shall be attached with one Timberlok screw (or equal), minimum 6½” long at 16” o.c.(staggered).

Conclusion:

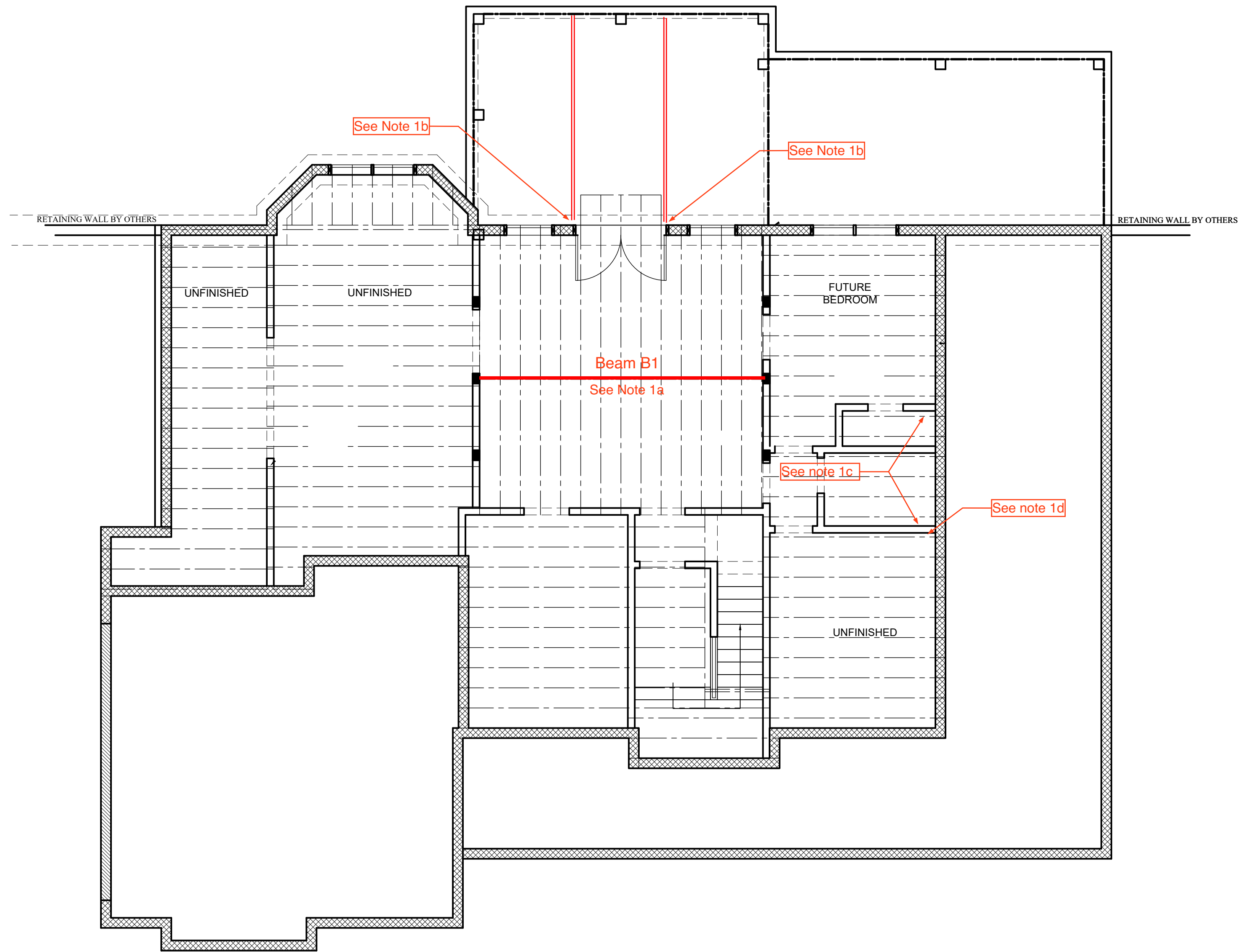
It is my professional opinion that the above described framing conditions shall be adequate for all expected residential loading conditions.

Brian Moskow, PE
Principal

This structural observation has been provided as a general review of the project at the appropriate stage during construction as requested. The objective was to become familiar with the progress and quality of the work performed and to determine if the work observed was progressing in general accordance with the structural contract documents. This observation should not be considered as part of a program of Special Inspections, if one is required, and does not involve detailed inspections to provide exhaustive or continuous project review. Red Engineering & Design, Inc. does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any contractor, subcontractor, supplier, or any other entity furnishing materials or performing work on this project.



04.28.23



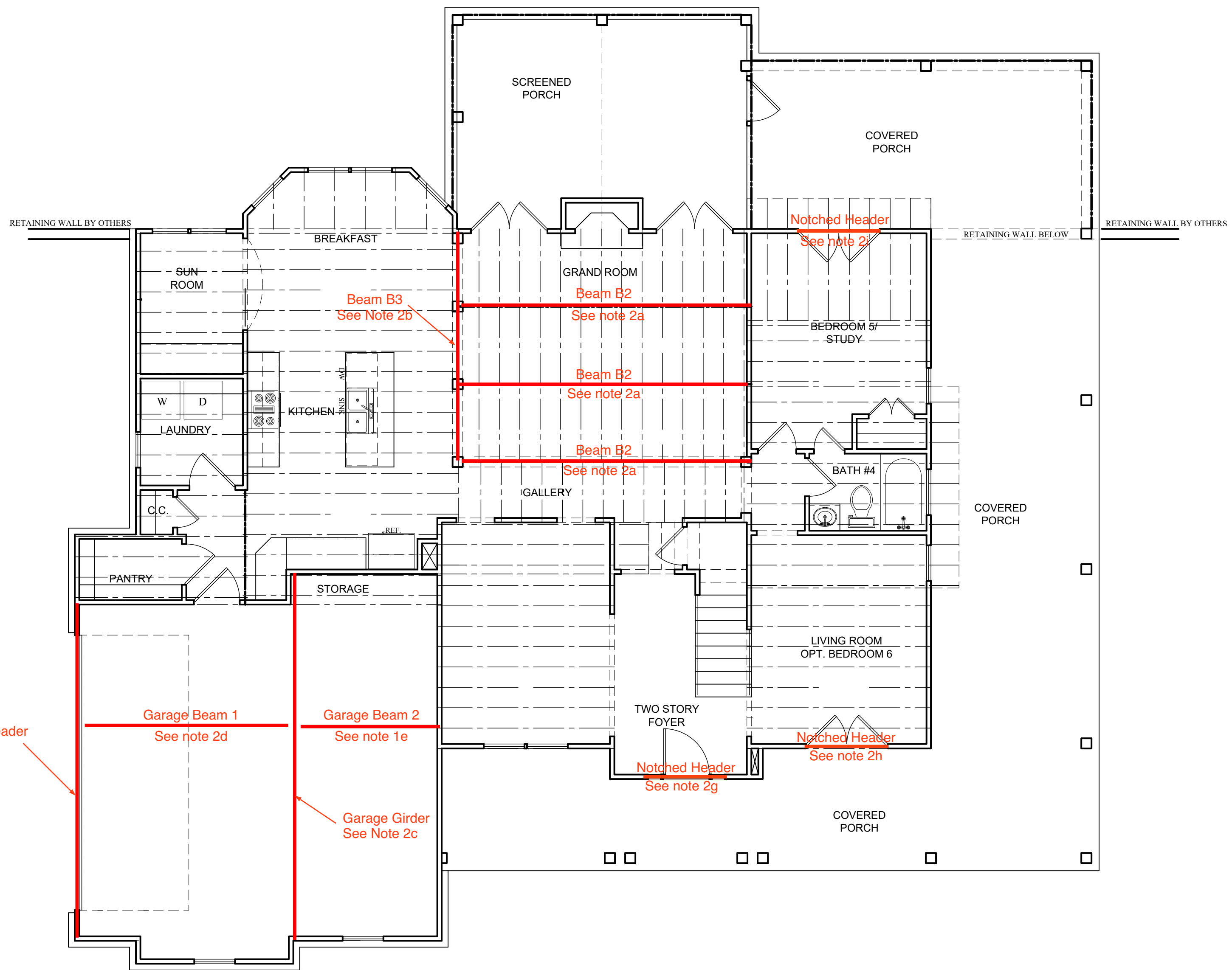
BASEMENT PLAN

3/16"=1'-0"



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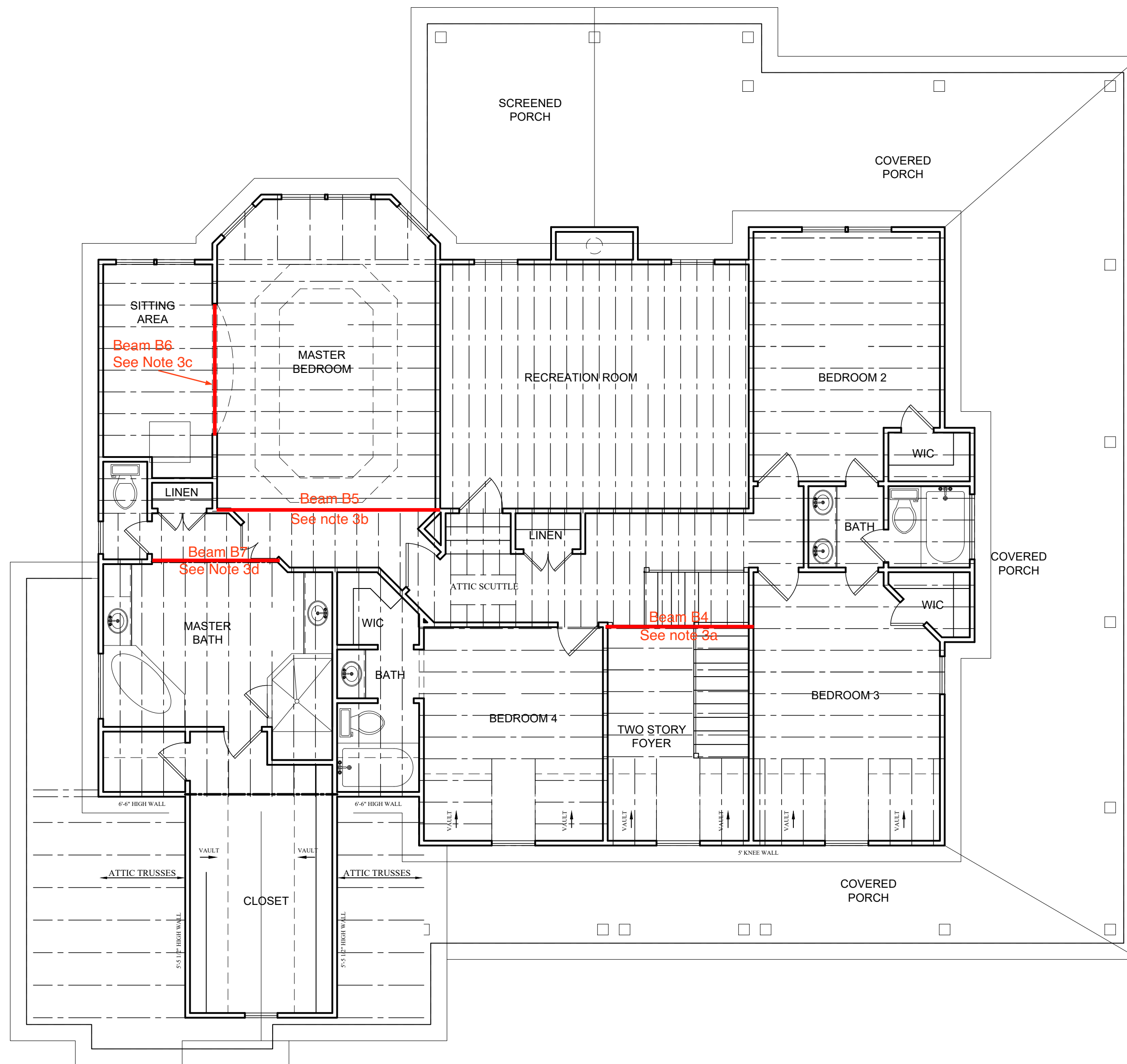
FIRST FLOOR PLAN

3/16"=1'-0"



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SECOND FLOOR PLAN

3/16"=1'-0"



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