



ENGINEERING, INC.

Consulting Structural and Civil Engineers

5907 Raytown Trafficway
Raytown, Missouri 64133
816-356-1445

June 19, 2024

Mr. Chris Shaw
Shaw Construction
P.O. Box 281
Bates City, MO 64011

**Re: Soil Inspection – 3917 SW Flintrock Drive, Lees Summit, MO
Lot 170 Napa Valley**

Mr. Shaw,

At your request, I have inspected the soil conditions at the above referenced site. The inspection took place on June 18, 2024 and concentrated on the area of the perimeter footings and the interior spread footings. A 4' long soil probe and visual inspection were used to evaluate the soil conditions.

The building pad is situated on what appears to be a previously undeveloped site and has been excavated to subgrade for the basement. There are three levels of excavation, the garage, the basement, and the rear wall. Probe resistance is stiff to moderate, but mostly moderate at all locations. I would estimate that a safe bearing pressure is 1500 psf which would mean perimeter footings 24" wide with 3 #4 continuous and the column footing sizes would need to be 1.33 times the area of what would have been designed for 2000 psf. As an example, a 36" square pad called out on the drawing would need to be 42" square with 5 #4 each way, a 42" square pad called out on the drawing would need to be 54" square with 6 #4 each way, and a 48" square pad called out on the drawing would need to be 60" square with 7 #4 each way.

If there are any questions, please let me know.

Yours truly,

Albert Hermans, P.E.

