



ENGINEERING, INC.

Consulting Structural and Civil Engineers

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

March 13, 2024

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

**Re: Soil Inspection – 2219 SW Hook Farm Drive, Lees Summit, MO
Lot 115 Hook Farms – Second Plat**

Mr. Shaw,

At your request, I have inspected the soil conditions at the above referenced site. The inspection took place on March 12 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 is a drainage creek at the west side of the property and a low area to the south and east of the property. There are two levels of subgrade, one under most of the basement and the other at the rear of the basement. At the main level, probe resistance was stiff at all locations tested. I would estimate that a safe bearing pressure is 2000 psf which would mean the foundation can be installed as shown on the approved plans. At the rear of the basement, probe resistance was moderate at perimeter footing locations and the rearmost column footing(s). 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.

