



PRELIMINARY SEPTIC REPORT

We have been requested by Holly Bennett and Cathy Wade Shepard of Sotheby's International Realty to review and report on preliminary septic expansion. This report has been prepared to summarize our septic evaluation on Wednesday, May 16th 2018 at 6405 Enterprise Road in Glen Ellen, CA (APN: 055-040-031). The purpose of our meeting was to review soil and site conditions in areas determined suitable for future septic improvements.

Five (5) profiles were explored in the residential portion of the property. Refer to the attached site map for location of the test pits. Site soils generally include loam topsoil, with clay loam below it underlain by bedrock at approximately 48-inches. An individual breakdown of each test pit is included in the septic summary. A preliminary Soil Application Rate (SAR) of 0.50 gallons/SF and a linear loading rate (LLR) of 5-6 gallons/ft have been concluded after review of onsite soils. Note: The SAR and LLR will need to be officially agreed upon with a county inspector at a Pre-Perc Site Evaluation. It is anticipated that a greater SAR will be agreed upon during a pre-perc meeting, but 0.50 gal/sf has been selected to remain conservative in the preliminary stage. Site slopes are greater than 5-percent, so it is anticipated that season groundwater testing will not be required. The parcel was created in before 1971. Therefore 100% expansion area shall be provided in accordance with Sonoma County PRMD requirements. Setbacks to property lines and the onsite structures shall be provided.

Test Pits A, C and D have the best soil conditions. Potential septic systems that will be supported in the vicinity of these profiles are: mound, at-grade, sub-surface drip, and maybe a filled land system depending on exact depth of limiting condition of rock percentage. Areas of Test Pits B and E shall be avoided due to large amounts of rock or clay.

A 6-bedroom sub-surface drip system with a SAR of 0.50 gallons/sf/day shall require approximately 1440 sf of septic area. A reserve of 1440 sf will be required as well. Preliminary



Preliminary Soil Profiles

Test Pit A:

0-24 inches loam soil

24-48 inches clay loam soil

48+ bedrock (limiting condition)

Notes: Good roots and pores in top 48-inches, soil is friable but firmness increases with depth, rock is less than 50-percent in top 48-inches.

Potential systems: Mound system, At-Grade System, Sub-Surface Drip, Filled Land

Test Pit B:

Rock exceeds 50-percent (limiting condition)

This area shall be avoided.

Test Pit C:

0-24 inches loam soil

24-48 inches clay loam soil

48+ bedrock (limiting condition)

Notes: Good roots and pores in top 48-inches, soil is friable but firmness increases with depth, rock is less than 50-percent in top 48-inches.

Potential systems: Mound system, At-Grade System, Sub-Surface Drip, Filled Land

Test Pit D:

0-48 inches loam soil

48+ bedrock (limiting condition)

Notes: Good roots and pores in top 48-inches, soil is friable, rock is less than 50-percent in top 48-inches.

Potential systems: Mound system, At-Grade System, Sub-Surface Drip, Filled Land

Test Pit E:

0-24 inches loam soil

24+ clay (limiting condition)

Notes: Clay is extremely firm and not suitable for septic. Topsoil is satisfactory, but area shall be avoided.



field measurements indicate that there is approximately 5000 square feet of usable septic area in the vicinity of Test Pits C and D, which are more than 100-feet away from the onsite private well.

Preliminary testing, review and findings of the subject property reveal that it has suitable areas and soil conditions for a new class 1 septic system with a minimum bedroom count of 6 using a sub-surface drip disposal system. These preliminary findings are based upon exploration on the date mentioned earlier. Changes to site conditions (grading, new well or drainage installation, etc.) may affect future findings for the subject property. Please do not hesitate to call me if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Moll", written over a horizontal line.

Chad Moll, PE
Bear Flag Engineering, Inc.
Principal Engineer



Untitled Map

Write a description for your map.

Legend

 6405 Enterprise Rd

EX SEPTIC TANK

EX RESIDENCE

100-FT WELL SETBACK

EX WELL

A

B

C

D

E

 6405

Tienne Rd

Google Earth

© 2018 Google



100 ft

