Gabby,

As I mentioned during our phone conversation today, some areas are excluded from use for septic disposal due to surface features such as drainage ways or steep slope (>30%). The enclosed maps are made using LiDAR. These data assign an elevation to every 2.5 square foot with a maximum error of about 5 inches. This allows you to see the surface of the earth every accurately.

I created an approximate boundary of the tract (as shown in a light blue line in all maps) based on the Hickman County website. Understand that the original boundary may not be correct, and I have estimated that line.

Here is an explanation of the maps derived from LiDAR data –

Shaded Relief – This shows the elevation as bands of colors and provides shading for a 3D effect. White is the highest elevation and the lighter green is the lowest at the southwest point. Also, you can see the large drainageway that runs NE-SW and the drain that goes nearly to the top of the hill and drains due west. By state rule, these areas require a 20-foot setback. Also, note the line of what appears to be debris piled up on the slope. This may evidence the soils above have been scraped or graded lightly.

Contours – Every point along the contour line is the same elevation. Shown are lines that are 2 feet different in elevation (light brown) and 10 feet different in elevation (dark brown). These contours are displayed over the shaded relief map.

Slope_exclusions – This map shows the slope class ranges as shown in the legend. Green is the flattest, less sloping and red the most sloping ranging from 30 percent to 125 percent. By state rule, areas over 30 percent slope are generally excluded from use for septic disposal. The black striped area is a combination of the drain setbacks and areas greater than 30% slope that occur on this property. These are areas that cannot be used for septic disposal.

3dscene – This map shows an actual 3D view of the map above looking NE, up the large drainage area.

SUMMARY

This data analysis shows that the most logical building site and associated septic area is located on top of the hill in the WNW portion of the property. This area is approximately 1 acre. If the soils are suitable, this could possibly fit a house, driveway, and the primary and duplicate septic areas. This is the area I will focus my field investigation.

This data analysis does not interpret soil properties to be suitable or not suitable and does not guarantee a permit from TDEC for septic installation.

1/15/2020