COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

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Commissioner

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April 29, 2025

County of Albemarle
Department of Community Development
401 McIntire Road
Charlottesville, VA 22902

Attn.: Syd Shoaf

Re: CBI Forest School - Dudley
SP-2024-00023

Mr. Shoaf:

The Department of Transportation, Charlottesville Residency Transportation and Land Use Section, has reviewed the above referenced submittal as prepared by Line and Grade Civil Engineering; and has the following information:

1. Existing conditions for Rte. 706, Dudley Mountain Road:
    a. Secondary route, bidirectional.
    b. Prescriptive easement except for an area along Green Loft Farm SUB201600065.
    c. Total road width varies from a range of 15' to 18'.
    d. Speed limit is 35 mph, many areas have 25 mph warning signs.
    e. ADT 130, reported 2018.
    f. Road was surface treated in 2013.
2. The proposed project appears to increase existing Average Daily Traffic (ADT) from a design standard applicable for less than 400 ADT to a design standard applicable for greater than 400 ADT to 2000 ADT, and according to the Road Design Manual Appendix A1, the following are the minimum considerations:
    a. Minimum pavement width of 20'.
    b. Stopping sight distance 305'.
    c. Minimum width of graded shoulder 3’.

In addition, a substantial increase in traffic on a road that is not designed to handle the volume may result in an increase in maintenance needs and cost. For example, a road that is too narrow is likely to deteriorate on the edges of the asphalt as vehicles shift to the outside edge in passing.

Another consideration when evaluating proposed developments in a rural setting is the existing conditions of adjoining intersections. Dudley Mountain Road connects to Red Hill Road, statutory 55 mph, to the west and Old Lynchburg Road, posted 45 mph, to the east, which corresponds to an intersection sight distance of 610’ and 500’, respectively. Recognizing a limitation in the available sight distance left when exiting Dudley Mountain Road to Red Hill Road, the Department completed a County Safety and Operational Improvement project in fall of 2023 to improve sight distance at the intersection. Because the purpose of the funding source for this improvement is to make a betterment and not necessarily meet all current standards, an engineering review of pre- and post-sight distance was not conducted. No improvements have been made at the intersection of Dudley Mountain Road and Old Lynchburg Road; however, sight distance may also be limited when considering the posted speed limit of 45 mph.