TOWN OF HARWICH PLANNING BOARD ENGINEERING REVIEW OF DEFINITIVE SUBDIVISION PLAN FOR CONFORMANCE WITH THE TOWN OF HARWICH SUBDIVISION RULES AND REGULATION

Plan Title: Definitive Subdivision Plan of Land in Harwich, Mass.

Location: Wildlife Circle (Off Littlefield Pond Road), Harwich, MA 02645

Applicant: Daniel A. Ojala, PE., PLS. (Representative)

Down Cape Engineering, Inc.

939 Main Street (Route 6A), Yarmouth Port, MA 02675

Applicant's Engineer: Daniel A. Ojala, PE.

Down Cape Engineering, Inc.

939 Main Street (Route 6A), Yarmouth Port, MA 02675

Plan Date: January 26, 2022 Review Date: November 15, 2022

VHB No.: 15825.00

The plans were reviewed for conformance to the Town of Harwich Rules and Regulations Governing the Subdivision of Land (adopted 11/12/2008). The Applicant had previously filed a Preliminary Plan in 2019. VHB has been supplied with the following information for review:

- (2) Completed Applications Form B-1
- (2) Copies Project Narrative and Proposed Street Names
- (2) Copies of Current Deeds: Book 29526 Page 215, Book 30127 Page 311, and Book 30127 Page 308
- (2) Copies of Municipal Lien Certificates
- (2) Copies of Board of Health Preliminary Subdivision Approval dated July 17, 2019
- Definitive Subdivision Plan of Land, Off Littlefield Pond Road, Harwich, Ma prepared for R.B.Our Co. Et Al, dated January 26, 2022; 1 mylar; (6) full size (24"x36") at 1"=40' scale; (11) reduced (11"x17"), plus one full size and one 11"x17" set for the Town Clerk
- Roadway Profile & Detail Sheet to accompany Definitive Subdivision Plan of Land (2-page set); (3) full size sets; (11) reduced (11"x17"), plus one 11"x17" set for the Town Clerk
- (2) Sketch Plan to accompany Subdivision Plan of Land at 1" = 100' scale
- (2) Copies of Drainage Calculations
- (2) Copies of Subdivision Protective Convenants Draft
- A requested waiver from Subdivision Rules and Regulations
- Narrative letter detailing the proposed subdivision dated September 20, 2022

The following comments note non-conformance with specific sections of the Rules and Regulations and questions/comments on the proposed design and VHB's recommendations/ suggestions.

Rules and Regulations Governing the Subdivision of Land

- 1. Section 400-10.B.4-Appendix 4B, line 63: There is no approximate limit of clearing shown on the plans. We suggest the clearing limits for roadway construction be added to the approved plans.
- 2. Section 400-12.A.2 Appendix 2, Table 1: The horizontal curve at Sta 3+08.99 appears to have a centerline radius of approximately 80-feet which is below the minimum of 150-feet for ways and minor roadways. In our opinion this is an acceptable design for this location given the transition from Fish & Game Drive to Wildlife Circle will naturally slow drivers down and act similar to an

- uncontrolled intersection. The presence of the Fish & Game existing driveway will also likely lower speeds here.
- 3. Section 400-12.A.4 Appendix 3, Figure 3: The roadway typical section which notes water & gas lines are on the south/east side of the road does not align with Town standard details in Appendix 3, Figure 3 which proposes water on the south/east and gas on the north/west side of the road. In this case we agree with the Applicant's proposed utility layout due to the need for drainage pipes to be installed along the west side of Wildlife Circle. This utility layout avoids conflicts and unnecessary crossings between the drainage pipes and the water & gas utilities.
- 4. Section 400-14.M.7: We agree with the reasons the Applicant has stated in the narrative letter regarding waiving the construction of sidewalk as identified in the narrative letter.

Per this section: If a waiver of sidewalk construction is granted, the applicant will pay, in lieu of performance, an amount equivalent to the cost of constructing the waived sidewalk to the Town of Harwich to be used for sidewalk construction. The amount of the payment will be calculated by the Town Engineer and provided to the Planning Board and the applicant before the waiver request is considered.

We have calculated the cost of constructing 750-feet of sidewalk at 4 feet paved width (from the intersection with Littlefield Pond Rd to the beginning of the cul-de-sac) to be \$22,000.

General Comments/Questions

1. What is the proposed pavement section for the driveway apron to be constructed to connect Fish & Game Drive to the existing Cape Cod Fish & Game driveway? Suggest adding this detail or clarifying with callouts on the approved plans.

Reviewed by:	Stefen Nguyen Civil Engineer – Highway and Municipal	Date: _	11/15/22	
Checked by:	Stephen Rhoads, P. E. Project Manager – Highway and Municipal	Date:	11/15/22	