Town of Windham

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MEMO

DATE: June 1, 2018

TO: Tony Plante, Town Manager

FROM: Amanda Lessard, Planner and Jon Earle, P.E., Town Engineer

Cc: Town Council

RE: 17-11 Majestic Woods Phase III

The Majestic Woods Subdivision Phase 3 is a twenty-two (22) lot residential cluster subdivision on Swett Road identified on Tax Map: 6, Lot: 63-13, in the Farm zoning district. Lot 63-13 is a 39 acre property retained by the developers of the Majestic Woods Subdivision, which was originally approved by the Planning Board on January 27, 2014, as a 13 lot subdivision. These 13 lots included 12 residential lots developed along Chute Road (Phase 1, 7 lots) and Swett Road (Phase 2, 5 lots) and the oversized Lot 13 which is the subject of this application.

The Planning Board considered the Phase 3 application at the following meetings:

- April 24, 2017 Review of subdivision sketch plan application
- October 21, 2017 Site Walk
- January 8, 2018 Review of preliminary subdivision plan application
- March 12, 2018 Review of preliminary subdivision plan application & Public hearing. Three abutters commented on the project.
 - Approved waiver requests.
 - O Performance Standard. Minor Street Road Standards, Sidewalks or Shoulders (Section 911.M.5.b.6.c). Vote: 5-0. The standard requires either sidewalks or an additional one foot of paved shoulders on each side.
 - O Performance Standard. Cluster Subdivision Open Space (Section 911.K.4.b.2). Vote: 3-2. The standard calls for at least fifty percent (50%) of the land suitable for development to be included in the common open space. The subdivision plan shows that 12.69 acres is the minimum required net area in open space but only 10.88 acres is provided, approximately 42.7% of the total net area.
 - O Submission requirement. Traffic Impact Assessment (Section 910.C.1.c.5). Vote: 5-0. This submission is required for subdivisions projected to generate more than 140 vehicle trips per day. Phase 3's 22 residential lots will generate 220 vehicle trips per day and 22 peak hour trip-ends. Phase 2 included improvements to Swett Road and the Board added a condition of approval to require pavement of Swett Road from the Phase 3 road to the Chute Road intersection.
 - Approved preliminary plan with conditions. Vote: 5-0.

The minutes from the March 12, 2018 meeting are attached and include the Board's findings of fact and conclusions for approving the preliminary plan.

At the March 12, 2018 meeting the Planning Board requested information on the reasons for Colley Wright Brook's impairment. A watershed inventory table prepared by Cumberland County Soil & Water Conservation District was provided to the Planning Board at their meeting on April 9, 2018. Colley Wright Brook is impaired for high E. Coli levels and low dissolved oxygen. The impairment is attributed to nonpoint source pollution. New subdivision development must comply with the Town's Land Use Ordinance performance standards relative to stormwater management, erosion and sedimentation control and ground water quality to demonstrate that the project will not adversely impact the water body.

Additionally, while not specific standards the Town enforces, the State has produced the following reports:

- Maine Statewide Bacteria TMDL (August 2009)
 - o Sets a goal of meeting bacteria water quality criteria at the point of discharge for all sources in order to meet water quality standards throughout the waterbody.
- DRAFT Colley Wright Brook Nonpoint Source Pollution TMDL (December 2015)
 - o Recommends targets in TMDL pollutant loads (sediment, nitrogen, and phosphorus).

Planning Staff offers the following responses to comments found in Ms. Rhein's submission dated March 15, 2018 addressed to Ben Smith and the Planning Board.

Comment 1: Impact on groundwater – I have a carbon filter on my well that I must replace every two months. However, my neighbor had to have a complete water filtration system on his well costing him 1,200 dollars once my home was built. We are both on 2 acres and the homes that will be built in Phase 3 will be upland and on a half to three fourths of an acre.

Response 1: The Town's primary performance standard for subdivision projects related to groundwater is the nitrate/nitrogen standard. This standard requires that the project does not discharge more than 10 mg/L of nitrate as nitrogen at any point along the property line. For this project, a nitrate impact analysis was completed in March, 2018 by St. Germain Collins showing this standard has been met. Nitrate discharge plumes from each proposed septic system location were shown on plan sheet N-1 by DM Roma Consulting Engineers dated March 2, 2018. The report and plan could be peer reviewed by another licensed hydrogeologist at the Planning Board's request. A carbon filter on a domestic water system typically is installed to removed sediments introduce into the home by the well pumping operations. There are many other chemicals and contaminants for which her neighbor's complete water filtration system could have been installed to address. Without knowing what this system is removing, it's difficult to know whether it was installed to remove something aesthetic (like hydrogen sulfide) or a drinking water contaminant (like radon).

Comment 2: Impact on wetlands that abut my property are down slope and are a serious environmental concern. There is a beautiful treeline directly above the brook that runs through my backyard and 2 other neighbors' backyards. That brook flows directly into already endangered Cooley Wright Brook.

Response 2: Wetland delineation for the project was completed by Longview Partners, LLC and incorporated onto the subdivision plans by DM Roma Consulting Engineers. Because this project is being reviewed by DEP under Site Law, a high intensity soils survey was completed which includes a higher level of field verification and test pit data to confirm wetland boundaries. Additionally, the work by Longview Partners, LLC has indicated that none of the wetlands are classified as being of special significance nor are there any vernal pools present which would impose restrictions as to the portions of the site which could be developed. Depending on the square footage of wetlands being disturbed, permitting will be required through the Army Corps of Engineers prior to final project approval by the Planning Board. A Tier 1 Army Corps of Engineers permit would be required if more than .1 AC of wetlands are being disturbed. The applicant has indicated that less than .1 AC of wetlands are being disturbed and staff will confirm this calculation as it relates to the building envelopes for each lot shown on the plan.

Comment 3: Impact of 3 groundwater retention areas is another important environmental concern – one is located directly above the brook in my backyard that already has a 2 foot wide waterfall during heavy rains and spring snow melting. The other two stormwater retention areas are located directly above a 100 year flood plain, a stream water protection area, and already endangered Cooley Wright Brook.

Response 3: Under both Town Ordinance and Maine DEP Chapter 500/Site Law, the project will need to meet the flooding standard for the 2-yr, 10-yr, and 25-yr storm recurrence intervals. This means that the peak runoff flows from the site in the developed condition will need to be reduced to levels at or below the predeveloped condition. The stormwater management report narrative for the project has been reviewed and staff is in agreement that the flooding standard is being met for the project. This information has also been submitted to MDEP for review.

Comment 4: The last concern is about soil quality. The map listing the types of soils shows Scantic and Nicholville (SWP). The detailed explanation of Scantic soil is most important because it states "Hazard to Flooding: May flood occasionally on lowest fringes during spring and periods of excessive precipitation." The Nicholville (SWP) stated "Development with stormwater: "Nicholville (SWP) is somewhat poorly drained soil exhibiting a seasonal high groundwater table 1.0 to 1.5 beneath the soil surface in the spring and during periods of heavy precipitation." Again this area is directly below the stormwater detention area which is directly above the brook that runs through my backyard and that flows directly into already endangered Cooley Wright Brook.

Response 4: It is not uncommon for a site this size to have soils ranging from well drained to poorly drained. For this project, a majority of the project is being developed (roads and building envelopes) in Hydrologic Soils Group 'C' on an A-D scale. Type 'C' soils are general somewhat poorly drained as noted in the description of Nicholville, which is a 'C' soil. The pre and post development stormwater modeling takes into account the soil types for the entire site and assigns a runoff volume from each soil type which is cumulatively analyzed. Where the flooding standard is being met for the project, it is staff's opinion that the development utilizes the best available soils onsite and adequately meets the Town's flooding standard.

Comment 5: There is a discrepancy over the total acreage for the project. This is based upon 2 maps provided by the developer's engineer. The final approved map for Phase -1 which was for my home states 35.57 acres, but the preliminary map of 12/18/17 stated 39.09 acres. In addition to that, the preliminary map had only net wetlands acreage. There is no wetland acreage Specifically for Phase -3.

Response 5: The applicant responded to this comment in a submission dated February 19, 2018: "The parcel identified as Lot 63-13 was listed as having an area of 35.57 acres. We calculated the area of the lot to be 39.09 acres, which we confirmed as being correct with the Licensed Land Surveyor who assisted in the preparation of the previous plan." The Assessing Department plotted Lot 63-13 and confirmed the error on the original subdivision plan. The subdivision ordinance requires the calculation for net residential density for the entire lot proposed for subdivision, which in this case is all the land in Phases 1, 2, and 3. Section 536.B of the Land Use Ordinance describes the items that must be subtracted from the gross acreage of the lot.