

# Town of Windham

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## MEMO

DATE: November 23, 2018

TO: Windham Planning Board  
FROM: Amanda Lessard, Planner *AL*  
Cc: Dustin Roma, P.E., DM Roma Consulting Engineers  
Development Review Team

RE: 18-13 Highland Woods Subdivision– Preliminary Subdivision Plan  
Planning Board Meeting: November 26, 2018

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### Overview –

The applicant is proposing a 22-lot cluster subdivision on a 38 acre property located on Highland Cliff Road. A new 2,200 foot dead-end road is proposed to the development. The applicant proposes public access to the open space in exchange for a density bonus.

This project appeared as a Preliminary Plan at the Board meeting on August 13, 2018. At that meeting the Board discussed the potential to connect to abutting proposed subdivision on Land of Nod Road and the quantity of material that was proposed to be removed from the site while there is a moratorium on mineral extraction. The Board approved waiver requests for the requirement for contiguous open space and a minor increase in peak stormwater runoff, and found the preliminary plan application complete. Since that meeting the applicant has submitted a revised preliminary plan that reflects a proposed land swap with the abutter (Map 7 Lot 29) in order to allow the road to end at the property to better connect with the abutting proposed development. Evidence of the right, title, and interest in the abutting land must be submitted. The applicant will also need to request a waiver from the dead end street cul-de-sac requirement.

New comments from the staff memo dated August 9, 2018 appear as underlined text below.

Tax Map: 7, Lots: 36 and 29, Zone: Farm (F).

### SUBDIVISION REVIEW

#### Staff Comments:

1. Waivers:
  - a) §911.K.4.b.2 – Cluster subdivision, open space requirement performance standard.  
*Approved June 25, 2018*

- b) §911.K.4.g – Cluster subdivision, open space performance standard.  
*Approve August 13, 2018*
  - c) §911.M.5.b.6.ii – Sidewalks or shoulders performance standard.  
*Approved June 25, 2018*
  - d) §911.M.5.b.5.ii – Public Dead-end Street performance standard.  
*Section 911.K.3.f requires that streets constructed within a cluster subdivision meet a public street standard. Public dead-end streets shall be constructed to provide a cul-de-sac turn-around. This waiver would allow the road to be constructed with a hammerhead turn-around to allow for a connection to the abutting proposed development.*
- 2. Complete Application: Preliminary Plan application found complete August 13, 2018.
  - 3. Public Hearing: A public hearing was held the Planning Board meeting on June 25, 2018.
  - 4. Site Walk: A site walk was held on Monday June 25, 2018 at 5:30pm.

Findings of Fact and conclusions for the

**Windham Planning Board,**

**MOTION:** The Preliminary Subdivision application for 18-13 Highland Woods Subdivision on Tax Map: 7, Lots: 36 and 29 is to be (**approved with conditions/denied**) with the following findings of fact and conclusions.

FINDINGS OF FACT

A. POLLUTION

- A portion of the subdivision is within the mapped 100 year floodplain of a tributary to Colley Wright Brook that is located just beyond the northern corner of the property. The 100-yr floodplain is shown on the rear of Lots 14 and 15.
- This subdivision is not located over a significant sand and gravel aquifer.
- A hydrogeologic assessment must be submitted as part of the Preliminary Plan as the subdivision is not served by public sewer and the subdivision has an average density of more than one dwelling unit per 100,000 square feet.
- A hydrogeologic assessment prepared by Stephen B. Marcotte, P.G. of Summit Geoengineering Services dated July 23, 2018 concludes that the proposed subsurface wastewater disposal systems will not result in an increase of nitrate-nitrogen above 10 mg/L in groundwater at the property boundary.
- A hydrogeologic assessment prepared by Stephen B. Marcotte, P.G. of Summit Geoengineering Services dated October 26, 2018 concludes that the proposed subsurface wastewater disposal systems will not result in an increase of nitrate-nitrogen above 10 mg/L in groundwater at the property boundary.

- In an email dated November 20, 2018, Town Engineer Jon Earle P.E., asked for clarification as lots 9-22 appear to have the test pit located outside of the footprint where the disposal field is being proposed and subsequent plume.

B. WATER

- All lots will be served by individual wells.
- The closest fire hydrants are located on Pope Road at Albion Road and at Roosevelt Trail at Pope Road, over a mile from the subdivision. At the Development Team meeting on May 1, 2018, Fire Chief Brent Libby recommended that the new houses in this subdivision include sprinkler systems that meet NFPA standards.
- A note should be added to the plan that all new homes shall be equipped with sprinkler systems that meet NFPA and the Town of Windham standards.
- In accordance with cluster subdivision standards in Section 911.K3.b the applicant must demonstrate on the plan that it is possible to locate a subsurface wastewater disposal field and a well on each lot. When determined that it is necessary for specific lots, by the Planning Board, as a Condition of Approval, the location of these elements shall be elements of the subdivision plan, and any future changes to the location of these elements will require an amended subdivision review.
- A plan of wastewater disposal systems is shown on Sheet WW-1 dated July 23, 2018.
- A plan of wastewater disposal systems is shown on Sheet WW-1 dated October 26, 2018. Well exclusion areas should be noted the subdivision plan.

C. SOIL EROSION

- An erosion and sedimentation plan, prepared by DM Roma Consulting Engineers, dated June 4, 2018, has been submitted as part of the Preliminary Plan. Notes and details are shown on Drawing D-1.
- Phase 1 of his project will require a Stormwater Permit Maine Department of Environmental Protection (DEP). Phase 2 of this project will require a Site Location of Development permit from Maine Department of Environmental Protection (DEP). The permits must be submitted with the applicable Final Plan submission.
- A stormwater management plan that meets the water quality and quantity standards as well as the flooding standard of Section 3 DEP Chapter 500 Stormwater Management must be submitted as part of the Preliminary Plan.
- Wetlands were delineated by Sweet Associates on September 8, 2017. Freshwater wetlands are shown on the plan. This project requires a Maine Department of Environmental Protection (DEP) Natural Resources Protection Act (NRPA) Tier-1 permit for wetland alterations. The permit must be submitted with the Final Plan. Note 1 on Sheet PP-1 state that there will be approximately 14,365 S.F. of total wetland impact associated with the proposed development. This note should also be on Sheets SB-1 and ASB-1.
- A stormwater management plan has been submitted as part of the June 4, 2018 Preliminary Plan submission. The project proposes to treat the 3.09 acres of new impervious area with five (5) underdrained filter basins.

- The stormwater treatment table is shown on Sheet SWP-2 of the preliminary subdivision plan set. A note should be added to the recording plan that describes the assumed impervious and developed area for each lot.
- Note 10 on the subdivision plan sheets SB-1 and SB-2 states that all buildings will require the installation of a roof drip edge filter for stormwater treatment.
- The plan also includes an inspection, maintenance and housekeeping plan. The owner is responsible for the maintenance of all stormwater management structures and related site components until such time that a homeowner's association is created.
- In an email dated June 14, 2018, Town Engineer Jon Earle P.E., notes that a waiver from the flooding standard for minor increase in peak flows should be requested for Study Point #1 (10 and 25 year storm) and Study Point #3 (10 year storm). Chapter 500 water quality standard have been met. He also noted that the minimum culvert size allowed in a public way is 15 inches and requested additional ground topography for the footprints for each of the 5 filter basins rather than relying on the LIDAR aerial survey.
- In an email dated July 31, 2018, Town Engineer Jon Earle P.E., stated that stormwater comments from June 14<sup>th</sup> have not been addressed.
- The November 5, 2018 preliminary plan submission includes a wetland delineation by Mainely Soils LLC dated October 2, 2018. The preliminary plan note 5 that there will be approximately 14,365 square feet of wetland impact associated with the proposed development.
- The November 5, 2018 preliminary plan submission includes a high-intensity soil survey prepared by Longview Partners, LLC dated October 2018.
- Revised stormwater treatment calculations have been submitted as part of the November 5, 2018 Preliminary Plan submission.
- In an email dated November 20, 2018, Town Engineer Jon Earle P.E., requested a table with the individual lot assumptions for impervious and developed areas in addition to the watershed subcatchment assumptions for impervious/developed areas.

D. TRAFFIC

- The subdivision lots will have frontage on a new 2,200 foot long subdivision street which intersects with Highland Cliff Road, a paved public road.
- The new road will be built to a Minor Local Street standard, as is required in cluster subdivisions.
- Street design standards for dead end streets in Section 911.K.4.g requires a hammerhead turnarounds every 1,000 feet. The sketch plan shows a hammerhead at approximately 750 feet.
- Sight distance at Maysens Way for both directions along Highland Cliff Road should be shown on the Preliminary Plan. The preliminary plan submission dated June 4, 2018 states that the site distance exceeds 500 feet looking left and exceeds 700 feet looking right.
- Section 911.M.3.d states that streetlights may be required at intersections with existing public streets. A streetlight on Highland Cliff Road at the intersection of Maysens Way would comply with the Town of Windham Streetlight Policy, adopted June 25, 2013.
- Based on the distance to uses that would generate pedestrian trips, sidewalks are not required. When sidewalks are not required for local streets, Section 911.M.5.b.6.ii requires

that the applicant construct a sidewalk or a street with a widened shoulder. One (1) additional foot of paved shoulder, on each side of the street, shall be added to the required minimum shoulder width.

- A traffic impact analysis must be submitted with the Preliminary Plan submission as the subdivision is projected to generate more than 140 vehicle trips per day.
- The preliminary plan submission dated June 4, 2014 states that the proposed 22 residential lots are expected to generate 22 peak hour trip ends.
- There is a large property which abuts the proposed subdivision (Map 7 Lot 29). Section 911.M.3.a (page 9-51) and Section 911.M.5.b.5.iii (page 9-60) allows the Board to require the dedication of a right-of-way to provide continuation of the road where future development is possible.
- A road plan and profile, prepared by DM Roma Consulting Engineers, dated June 4, 2018, shown on Sheet 4, 5 and 6, was submitted as part of the Preliminary Plan. The roadway cross section is shown on Sheet 10.
- The Preliminary Plan dated June 4, 2018 shows on Sheet ASB-1 a private right-of-way to the abutting property Lot 32A, near the property line of Lot 29. This future right-of-way should also be shown on Sheet SB-1 and offered to the Town when the road right-of-way is offered for public acceptance.
- In an email dated June 14, 2018, Town Engineer Jon Earle P.E., asked if the road would be offered for public acceptance prior to the start of Phase 2. Binder pavement must over winter prior to surface paving. The site distance is noted in the narrative but should also be shown on the plan. A stop sign and detail should be added to the plans.
- A traffic assessment prepared by William J. Bray, P.E. of Traffic Solutions dated July 22, 2018 concludes that the 22 lot residential subdivision can be expected to generate 209 daily trips; seventeen (17) trips in the morning peak hour and 22 trips during the afternoon peak commuter hours. Maine Dot's most recent three year accident safety audit shows a total of 4 vehicle crashes have been reported for the full length of Highland Cliff Road, and that vehicle sightlines measured in both direction from the proposed subdivision entrance onto Highland Cliff Road exceeds the sight distance standard.
- The road profile shown on Sheet D-1 dated July 23, 2018 reflects the waiver approved by the Planning Board on June 25, 2018 to require an additional foot of paved shoulder, and a reduced width gravel shoulder.
- In an email dated July 31, 2018, Town Engineer Jon Earle P.E. requested sight distance shown on the subdivision plan and a stop sign and construction detail.
- The Preliminary Plan dated November 5, 2018 shows a proposed land swap with the abutter to allow for the subdivision road to terminate at the property line for a connection to a future development.
- The sketch plan shows a hammerhead turnaround at end of the proposed street. The Minor Local Street Standard requires a cul-de-sac. A written waiver request should be submitted.
- A road plan and profile, prepared by DM Roma Consulting Engineers, dated November 5, 2018, shown on Sheet 4, 5 and 6, was submitted as part of the Preliminary Plan. The roadway cross section is shown on Sheet 10.

E. SEWERAGE

- The development will be served by individual private subsurface wastewater disposal systems.
- Soil test pit analysis prepared by Alexander A. Finamore, LSE dated June 8, 2018 show that each lot has adequate soils to support a private septic system. Test pit locations are shown on the plan.
- Additional soil test pit analysis prepared by Alexander A. Finamore, LSE dated October 17, 2018 show that each lot has adequate soils to support a private septic system. Test pit locations are shown on the plan.

F. SOLID WASTE

- Residents of the single family dwellings will participate in the Town's pay-per-bag garbage program.
- Development of these lots should not produce an undue burden on the Town's ability to collect and dispose of solid waste.

G. AESTHETICS

- The site is currently undeveloped. It is wooded and includes a large contiguous wetland area near the center of the parcel.
- There are no documented rare botanical features or significant wildlife habitat documented on the site.
- A landscape plan is required for the preliminary plan submission. Street trees are required at least every fifty (50) feet (§ 911.E.1.b). Street trees are not shown on the plan.
- Limits of tree clearing are shown on the plan. Note 11 on the preliminary plan states that clearing of trees is not allowed in areas where tree cover is depicted on the plan for a period of at least five (5) years from the date of Planning Board approval.

H. CONFORMITY WITH LOCAL PLANS AND ORDINANCES

- Comprehensive Plan:
  - The plan does meet the goals of the 2017 Comprehensive Plan.
- Land Use Ordinance:
  - All lots fall within the minimum and maximum lot sizes of 30,000-50,000 square feet (one lot 60,000 sf max) and frontage (100 feet or 50 feet on cul-de-sac) for cluster lots in the F zoning district.
  - Net residential density calculations are shown on the Plan.
  - No more than 30% of the lots have direct vehicular access onto an existing public road.
  - The total area of reserved open space equals or exceeds 50% of the gross land area of the property to be subdivided.
  - The open space reserved does not include 50% of the land suitable for development. The applicant has submitted a waiver request from this standard. The preliminary plan shows ~48.88% of the net area provided in the common open space. The Board approved a waiver from this standard.

- The open space in the subdivision is required to be contiguous but is shown as three areas on the preliminary plan. The Board approved a waiver from this standard.
- Subdivision Ordinance
  - A landscaping plan must be submitted with the Preliminary Plan.
  - Standard notes and the standard condition of approval must be shown on the plans.
  - The subdivision is utilizing the 20% density bonus to gain four (4) additional lots. In order to be eligible, the open space must be open for general public use, not just homeowners within the subdivision. Access easement for the open space must be recorded in the registry prior to the issuance of building permits. See Condition of Approval #2.
  - The Tax Map and Lot numbers provided by the Tax Assessor must be shown on the Final Plan.
  - Subdivision plan data compatible with the Town GIS must be submitted as part of the Final Plan submission.
- Others:
  - Chapter 221 Street Naming and Addressing: The Assessing Department approved the road name, Maysens Way, shown on the preliminary plan.
  - On April 24, 2018 the Town adopted a Moratorium Ordinance on Mineral Extraction. At the Development Team meeting on May 1, 2018 the applicant indicated that existing material found on site would be used for the construction of the roadway. The applicant should specify the amount of material that is proposed to be taken off site.
    - The preliminary plan submission dated June 4, 2018 states the area that will be occupied by the Phase 2 lots will be graded as generally shown on Sheet 7 of the plan set and the sand and gravel material that will be excavated from the Phase 2 area will be used by the landowner and is not intended for public sale. In an email dated June 14, 2018, Town Engineer Jon Earle P.E requested that the excess sand and gravel material be quantified.
    - The July 23, 2018 submission provides an estimate of excavation quantities of a net cut of 78,865 cubic yards.
    - The November 5, 2018 submission includes a revised road plan and profile. In an email dated November 20, 2018 Town Engineer Jon Earle, PE stated that it does appear that the work will result in the same amount of cut and fill volumes. He requested a submission in excavation quantities as part of the final plan submission.

#### I. FINANCIAL AND TECHNICAL CAPACITY

- A cost estimate for the project was included in the November 5, 2018 submission.
- A letter from Andrew M Cook, Senior Vice President at People's United Bank, dated June 7, 2018 was submitted as evidence of financial capacity.
- The applicant has provided information on the licensed professionals working on this project as evidence of technical capacity

J. RIVER, STREAM OR BROOK IMPACTS

- This project is located within the Colley Wright Brook watershed.
- The 75 foot Stream Protection District for the tributary to Colley Wright Brook that is located just beyond the northern corner of the property is shown on the plan at the rear of Lots 14 and 15 on Sheet ASB-1 of the June 4, 2018 preliminary plan set.
- The project will not adversely impact any river, stream, or brook.

CONCLUSIONS

1. The proposed subdivision **will not** result in undue water or air pollution.
2. The proposed subdivision **has** sufficient water available for the reasonably foreseeable needs of the site plan.
3. The proposed subdivision **will not** cause an unreasonable burden on an existing water supply.
4. The proposed subdivision **will not** cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.
5. The proposed subdivision **will not** cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed.
6. The proposed subdivision **will** provide for adequate sewage waste disposal.
7. The proposed subdivision **will not** cause an unreasonable burden on the municipality's ability to dispose of solid waste.
8. The proposed subdivision **will not** have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline.
9. The proposed subdivision **conforms** with a duly adopted site plan regulation or ordinance, comprehensive plan, development plan, or land use plan.
10. The developer **has** adequate financial and technical capacity to meet the standards of this section.
11. The proposed subdivision **is not** situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38, Chapter 3, subchapter I, article 2-B M.R.S.A.
12. The proposed subdivision **will not** alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
13. The proposed subdivision **is** situated entirely or partially within a floodplain.
14. All freshwater wetlands within the proposed subdivision **have** been identified on the plan.
15. Any river, stream, or brook within or abutting the subdivision **has** been identified on any maps submitted as part of the application.
16. The proposed subdivision **will** provide for adequate storm water management.
17. ~~If any lots in the proposed subdivision have shore frontage on a river, stream, brook, or great pond as these features are defined in Title 38, section 480-B, none of the lots~~



- ~~created within the subdivision have a lot depth to shore frontage ratio greater than 5 to 1.~~  
N/A
18. The long-term cumulative effects of the proposed subdivision **will not** unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision.
  - ~~19. For any proposed subdivision that crosses municipal boundaries, the proposed subdivision **will/will not** cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located. (N/A)~~
  20. Timber on the parcel being subdivided **has not** been harvested in violation of rules adopted pursuant to Title 12, section 8869, subsection 14.

#### CONDITIONS OF APPROVAL

1. Approval is dependant upon, and limited to, the proposals and plans contained in the application dated April 23, 2018, as amended November 5, 2018 and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board or the Town Planner in accordance with Section 913 of the Subdivision Ordinance.
2. An access easement for public use of the open space must be recorded in the Cumberland County Registry of Deeds prior to the issuance of building permits.