

**From:** Mark T. Arienti  
**Sent:** Tuesday, January 21, 2020 10:59 AM  
**To:** Jennifer Curtis  
**Cc:** Jeff Amos  
**Subject:** Sunrise Cove Subdivision Application

I have reviewed the following for the above subdivision application.

- Preliminary Plan Application: Sunrise Cove Retirement Community, dated 12/23/19
- Plan Set, Sunrise Cove, 19 Roosevelt Trail, Windham, Maine, dated 12/23/19
- Stormwater Management Plan, Sunrise Cove, Windham, Maine

#### Stormwater

The application includes a Stormwater Management Plan as required by Windham Subdivision Ordinance and Maine DEP Stormwater Management Law for a development that includes 5.07 acres of impervious area. Based on the amount of impervious area and the location of the property within the Highland Lake Watershed, the development is required to meet the Ch. 500 Basic (4B), General (4C) and Phosphorous Standards (4D). The submitted plan appears to address each of these requirements, but there are a several questions with regard to the plans and calculations as noted below:

- The required stormwater permit from Maine DEP should be submitted when received from DEP.
- Please provide additional clarification on the numbers used to arrive at the phosphorous export factors for Use Patterns 1 and Use Pattern 2 particularly with regard to High vs. Low Export option in DEP Phosphorous Manual Table 3.1.
- Provide calculation summaries for % treated for impervious and developed areas to demonstrate compliance with Ch. 500.
- Sheets C-2.0 and C-2.1 refer to detailed drawings on Sheets C-5.4, C-5.5, and C-5.6 for Gravel Wetland #1, Gravel Wetland #2, and Gravel Wetland #3, respectively, but Sheet C-5.6 does not include the details for Gravel Wetland #3, while Sheet C-5.5 appears to show the details for Gravel Wetland #3, but it is mislabeled as Gravel Wetland #1. The detail sheet for Gravel Wetland #2 appears to be missing.
- The underdrain invert elevation shown in the outlet control structure detail on Sheet C-5.5 is 191.75', which does not seem to correlate with the elevations shown on the plan or section views on that sheet.
- Please clarify the discrepancy in the elevations of the 6" underdrain and the 1" orifice as shown on Sheet 5.4 versus what is shown in Hydrocad. The invert shown on the plan for the 6" pipe is 191.75' but then the Hydrocad shows it as 194.17' with the 1" orifice as 193.90'.
- A corrugated arch culvert is proposed to be installed to convey the stream flow under the road at approximately STA 5+50. Please provide a detail for this culvert.

#### Traffic

- A Traffic Impact Study was included in the application as required. The report states that sightline distance from the center of the road meets or exceeds the 580 feet required for a Mobility Corridor with a 40-mph speed limit. However, it also states that site distance looking right from the driveways will require minor clearing of all small trees and low-level vegetation to ensure acceptable site distance is provided. A note should be included in the overall site plan to this effect as well as to show measured site distance.
- The report also states that a MDOT driveway entrance permit will be required for both driveways.

#### Wastewater

- A Hydrogeologic assessment prepared by Mark Cenci Geologic was included in the application to model the impact from eight subsurface wastewater disposal systems that include aerobic pretreatment. The assessment concludes that the nitrate plumes from the systems will not go beyond the site boundary lines.

To make this clearer, the 10 mg/l plume extent should be shown on one of the plan sheets.

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