From: William Haskell <WHaskell@gorrillpalmer.com>

Sent: Wednesday, August 31, 2016 3:12 PM

**To:** Amanda L. Lessard; Lisa Fisher; Douglas Fortier; Heather McNally; 'Dustin

Roma'

**Subject:** 2786.95 Little Mountain Retail & Self Storage - Peer Review

Hi Amanda,

We received the following information by email on 8/25/16:

- Plan Set with 7 sheets, dated 8/22/16, prepared by DM Roma Consulting Engineers
- Site Plan Review Application, dated 8/22/16, prepared by DM Roma Consulting Engineers

We have reviewed the application materials for conformance with the Town's Ordinances and general engineering standards and offer the following comments:

## Application

- 1. The site is located in the NPDES MS4 area and will be required to comply with the Town of Windham Post-Construction Stormwater Ordinance.
- 2. Provide documentation for the infiltration rate used in the stormwater model for IB-1, which is located in the hydrologic soils group C. The stormwater model indicates the infiltration rate is 2.41 inches per hour, but we are concerned that the native soil infiltration rate may be less than this.
- 3. The stormwater model indicates the overflow from IB-1 is 5.47 cfs for the 25 year storm. Does the ditch and downstream culvert have adequate capacity to convey this flow?

## Plans

- 4. The survey and plans show a 20' wide drainage easement to Maine DOT on the parcel. Given that this easement will be partially intercepted by a new paved parking area and building, has the DOT been contacted to discuss their needs associated with this easement?
- 5. Drawing GU-1 Site grading appears to extend beyond the easterly property line onto the McNulty property. Title, Right, or Interest from abutting property owner shall be provided indicating the authorization to perform such work on the abutting property.
- 6. Drawing GU-1 Site grading appears to extend beyond the westerly easement line onto Proposed Lot B. Title, Right, or interest from abutting property owner shall be provided indicating the authorization to perform such work on the abutting property.
- 7. Drawing GU-1 a 1:1 riprap slope is proposed along the easterly side of the lot towards the back. This slope drops down from the neighboring storage buildings. Given that there is a drive aisle along the end of these existing storage buildings, should a guardrail be installed along this edge to keep customers safe while driving around the existing storage buildings.
- 8. Drawing GU-1 the overflow outlet for infiltration IB-1, along easterly side of the site, is somewhat difficult to visualize/interpret on the plans. We would recommend that this be clearly labeled and the ditch down to the culvert closer to Roosevelt Trail be stabilized to convey the anticipated peak flows.
- 9. Drawing GU-1 It appears that the inlets to the infiltration basins just have riprap outlet aprons. We would recommend constructing sediment forebays at the pipe inlets to help contain any sediment from contaminating the entire infiltration basin surface. The inlet apron/forebay

- at the southerly end of infiltration basin 1 (easterly side of the site) should extend down to the bottom of the basin to avoid erosion between the end of the apron and the bottom of the basin.
- 10. Drawing GU-1/SWP-2 the overflow spillway for infiltration basin 2 (IB-2, westerly side of the site) discharges onto the 'Proposed Lot B' parcel. Plan SWP-2 shows a stormwater reach (R11) that extends from IB-2 to a culvert labeled as R10. It is not clear on the GU-1 plan how that water will make its way from the spillway at IB-2 to the R10 culvert inlet. Is there a ditch that is not reflected in the existing topography?

Thank you,

William C. Haskell | Principal



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