



**Planning & Development**  
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**Memo**

Date: September 9, 2022 Updated 9-21-22

To: Planning Board

From: Michael G. Livingston, Town Engineer/Planner

Re: Storage Depot – Map 41, Lot 1B  
Stormwater Management Design Review

**Information Provided**

- Storage Depot Site Plans by ATTAR Engineering, Inc.:
  - Grading and Utility Plan, Sht. 2 dated 7/29/22, rev 9-21-22
  - Site Details, Sht. 3 dated 5/31/22
  - Site Details, Sht. 4 dated 7/18/22
  - Site Details, Sht. 5 dated 5/31/22 rev 9-21-22
  - Existing Conditions Drainage Plan, dated 5/31/22
  - Developed Conditions Drainage Plan, dated 7/18/22
- Stormwater Management Plan dated May 31, 2022 by Lewis Chamberlain, PE #9762 of ATTAR Engineering

**Analysis**

**Methodology:**

- HydroCAD model good
- Rainfall intensity rates good
- Water Quality approach good

**Pre-Development:**

- Two analysis points and basins modelled – good
- Subcatchments well modelled: soils and flow paths good

**Post-Development:**

- Developed areas well isolated to convey stormwater to detention and treatment measures
- Consistent analysis points with pre-development model
- Subcatchments well modelled and linked to analysis points
- Subcatchment areas and flow paths good
- Ponds (25 year Event)
  - Pond 1P, Wetpond. Peak elevation 201.94; Berm 203.0, good; Outlets good; Top of grate on outlet structure higher than spillway, about the same as berm **OK, overflow spillway at 202.0**
  - Pond 2P, USF. Peak elevation 201.72; Berm 203.0, good; Outlets good except two orifice/grates modelled at 201.0 and 201.5 and did not see

represented on Sht. 5 detail. Sht. 5 detail also labels the top of structure at 201.3 which would not be possible with outlets at 201 or 201.5 **Invert confirmed at 201.0 and top of MH structure at 201.9 to accommodate 4" orifice.**

- Pond models of catch basins all good.

Results:

Quantity Calculations indicate a reduction in estimated peak flow rates for each storm event for AP 1, see Table in report. AP 2 is an existing condition, no changes proposed. With minor items to be addressed above, the stormwater management plan will meet Town ordinances.

Operation and Maintenance Plan:

Included in stormwater management plan. Includes operation, 5 year re-certification requirement and sample maintenance logs. Good.

Erosion and Sedimentation Control Plan:

Erosion control barriers depicted on Sht. 2

Notes and details located on Sht. 3

The information provided on the plans meet BMP and Town standards and requirements.