

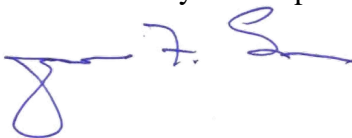
Town of Simsbury

933 HOPMEADOW STREET ~ SIMSBURY, CONNECTICUT 06070

Engineering Department

MEMORANDUM

To: Michael Glidden, Director of Planning and Community Development

From: Jerome F. Shea, P.E., Town Engineer 

Cc: Daniel F. Gannon, Project Engineer

Subject: **Engineering Comments – Self Storage Development
20 Tariffville Road**

Date: July 19, 2021

I have completed a review of the Site Plan Amendment Application for development of 20 Tariffville Road received by our department on June 21, 2021:

1. Plan set titled “Lands of Stardust, LLC” prepared by J.R. Russo & Associates, LLC, revised June 14, 2021.
2. Drainage Report prepared by J.R. Russo & Associates, LLC, revised July 12, 2021.

The following comments are based on a review the submitted revised materials. *Italicized* comments are outstanding comments from our July 2, 2021 letter and **bold** comments are new comments:

1. **Comment has been adequately addressed by applicant.**
2. *Provide pipe analysis and inlet capacity calculations for all proposed closed storm drainage system as referenced in Section III.E of the Drainage Report. An inlet appears to be proposed as part of the CDS hydrodynamic separator; provide inlet capacity calculations for the CDS unit, if appropriate.*

The inflow in the HydroCAD pipe analysis does not match up with the inflow in the inlet capacity calculations for the Yard Drain to Catch Basin. Below is a table showing the discrepancies:

<u>Inlet type</u>	<u>HydroCAD (Pipe Analyses)</u>	<u>Inlet Capacity Analyses</u>
Yard Drain to Catch Basin	3.70 cfs	2.95 cfs

3. **Comment has been adequately addressed by applicant.**

4. **Comment has been adequately addressed by applicant.**
5. **Comment has been adequately addressed by applicant.**
6. **Comment has been adequately addressed by applicant.**
7. **Comment has been adequately addressed by applicant.**
8. **Comment has been adequately addressed by applicant.**
9. **Comment has been adequately addressed by applicant.**
10. *Please indicate flow path for time of concentration on pre and post development mapping in the Drainage Report.*
The grades and associated time of concentration for post-development mapping reflect the grades from the previous submission. Specifically, there is now a swale and berm along the northern property line. Therefore it appears that runoff from Subcatchment S1 does not cross the property to the north. Despite the discrepancy in the drainage report, the design has been acknowledged as adequate and this comment is satisfactory.
11. **Comment has been adequately addressed by applicant.**
12. **Comment has been adequately addressed by applicant.**
13. **Comment has been adequately addressed by applicant.**
14. **Comment has been adequately addressed by applicant.**
15. *A 40-foot wide emergency overflow is provided at elev. 155.5. Please describe the design, identify the location on the plan set, and provide a detail for this overflow.*
The peak elevation of the basin for the 25-year storm is 154.81' and the peak elevation of the basin for the 100-year storm is 155.39'. The 40-foot wide emergency spillway is shown at elevation 155.5' and is acknowledged by the design engineer that this spillway will not be utilized during storms equal or lesser to the 100-year storm event. This 0.11' of freeboard is sufficient given the access road which is located directly adjacent on the downstream side of the basin. This comment has been adequately addressed by the applicant.
16. **Comment has been adequately addressed by applicant.**
17. **Comment has been adequately addressed by applicant.**
18. *Final plans related to stormwater management shall be stamped and sealed by a professional engineer.*
It appears that only the drainage report was stamped and sealed by a professional engineer. The professional engineer at a minimum shall stamp sheets U-1 and U-2.

I recommend approval of this application subject to resolution of these outstanding comments to the satisfaction of the Engineering Department prior to final sign-off of the project.