

Mr. Bruce Flower, Chairman (Via email) Town of Wappinger Planning Board Wappingers Falls, NY 12590

September 27, 2023

Re: U-Haul, Stage Door Road

Tax Parcel # 13689-6156-02-820883

# 13869-6156-02-794847 # 13689-6156-02-771855 # 13689-6156-02-777824

CPL #R22.14926.23

Dear Chairman Flower and Planning Board Members:

This office received copies of the following documents:

- Cover letter, dated September 11,2023 prepared by William Povall III, PE.
- 8 page plan set, dated, revised September 25, 2023 prepared by Povall Engineering PLLC
- 2 page building elevations, dated August 28, 2023 prepared by a&m Associatees
- Project narrative, dated, revised September 11,2023 prepared by Povall Engineering PLLC
- 5 page truck movement figures, dated September 11, 2023 prepared by Povall Engineering, PLLC
- Cover Sheet dated September 12, 2023 prepared by Bea Ogunti

Based on our review we offer the following engineering related comments:

## <u>General</u>

- 1. Correspondence with and approval from DCDBCH should be submitted when available.
- 2. The applicant should provide correspondence and approval of variances when available.
- 3. Approved driveway permits should be submitted when available.

## <u>Plans</u>

1. Top and bottom elevations of the gravity block retaining walls, concrete loading dock wall and forebay concrete retaining walls were shown. Submit drawings and calculations signed by a NYSPE for retaining walls when available.





- 2. Provide well, pump house, water piping and trenching, sanitary piping and trench, and sanitary pump station details when available
- 3. The truck movement plans now show how vehicles will maneuver through the entrance, into shunting lanes and out of the lanes. The previous comment was intended to ask how how truck / trailer rental vehicles would move from the parking spaces designated with general note 5 (for rental vehicles and trailers) and enter the shunting lanes for customer pick up, and then exit the shunting lanes. It should also be shown how returning rentals will move through the entrance back to the designated parking spaces, assuming that the shunting lanes are partially full. These truck movement should be added to the truck movement figures.

## SWPPP

Note that all comments from our July letter remain to be resolved. The original comments are as follows:

- 1. The narrative identifies two culverts crossing below Route 9 as design points. The hydrocad modelling backup only provides 1 year, 10 year, and 100 year stormwater flow data for the overall watershed in the post-development conditions. The preparer provides post-development hydrocad backup for the 25 year storm at a more granular level (but not the 1 year, 10 year, and 100 year).
  - The preparer must:
    - indicate the size of both culverts (currently, only the sizing of the northern culvert is provided in the drawings) and include the sizing in the hydrocad calculations;
    - b. provide full hydrocad backup/calculations for the 1 year, 10 year, and 100 year for the post conditions so that the flow distribution at the two design points may be checked;
    - c. if at least one culvert is receiving more post condition flow than it receives in the pre-conditions, the preparer must account for all flow that the culvert will receive; this includes expanding the catchment bounds off-site of the property (for example: it appears flow from Stage Door Road enters the site via catch basins and conveyance) and/or provide an explanation of why the use of two design points is not needed.
- 2. The preparer should identify/callout all components of the hydrocad modelling on the pre-development and post-development watershed mapping and use consistent labeling for both the model and the plan.
- 3. The hydrocad modelling uses two different methods of analysis. The TR-20 method of analysis is used for the pre-development conditions and the Rational Method is used for the post-development conditions. The preparer needs to use the same analysis type for both pre and post; TR-20 is suggested.
- 4. The Preparer uses a curve number (CN) of 98 for impervious surfaces on the predevelopment condition modelling and a C/CN of 90 for impervious surfaces on the post-development condition modelling. The modeling should use consistent numbers for impervious surfaces so that peak flow rates are not distorted.



- 5. Spot checks of subcatchment on the post-development watershed mapping plan reveal areas that are at odds with the modeling for the scale indicated on the drawing. For example, P-B (bioretention pond) was measured as approximately 15,300 SF on the plan and approximately 19,200 SF is used in the modelling; F-B2 (Forebay B2) was measured as approximately 2,400 SF on the plan and approximately 3,200 SF is used in the modelling; other areas, such as the building roof areas, appear accurate. A summation of the areas is difficult due to the lack of consistent labeling and full delineation of subcatchment areas on the plans (comment 2). Please correct these inconsistencies.
- 6. Please provide a plan of existing site conditions and include existing conditions (i.e. cover type) in pre-development watershed mapping.
- 7. The Preparer must indicate limits of disturbance in the post-development watershed mapping.
- 8. The Preparer should include a draft copy of the NOI for review.
- 9. The data from the test pits needs to be provided prior to submission of the SWPPP to determine if the groundwater level and/or the bedrock depth will have a significant impact on the design of the proposed stormwater practices.
- 10. The narrative lists Appendix J for the correspondence with the NYS Historical Preservation Office; this appears to be Appendix K; please correct.
- 11. The Preparer has made a significant effort to provide practices with RRv capacity in the proposed project. However, the provision of practices with RRv capacity still falls below the 100% target (9,282 cf RRv / 15,981 cf WQv). Please provide 100% capacity; otherwise, provide a more thorough description in the narrative that details the site constraints or any other factor (outside of typical financial impact) that prevents achieving the 100% target.

Should you have any questions or require additional information, please do not hesitate to contact me at (845) 686-2305, or email at jbodendorf@cplteam.com.

Very truly yours, CPL

Jon Bodendorf, P.E.

Senior Municipal Engineer

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JDB/rb



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cc: Barbara Roberti, Zoning Administrator (by e-mail copy)
Susan Dao, Building Inspector (by e-mail)
James Horan, Esq., Attorney to the Planning Board (by e-mail copy)
Malcolm Simpson, Planning Board Planning Consultant (by e-mail copy)
Nicholas Maselli, Planning Board Member (by e-mail copy)
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