



2018-015-125
July 2, 2020

Suzanne Rubinstein
1979 Township Drive
Marlboro, NJ 07746

**RE: TENNANT ROAD WASH & LUBE, LLC
BLOCK 122, LOT 33
TOWNSHIP OF MARLBORO, MONMOUTH COUNTY, NEW JERSEY**

Dear Ms. Rubinstein:

The applicant in the above entitled matter has considered the input of the board professionals in their technical review reports to date, as well as the feedback provided by the planning board at the regular meeting of June 9, 2020. As a result of the feedback provided certain modifications to the site design are contemplated to specifically address the stormwater management aspects of this application for Site Plan approval, and the pending waiver request related to the groundwater recharge requirements.

The applicant has elected to no longer pursue the waiver previously requested from the standards related to post-development groundwater recharge, and now intends to fully comply with all requisite design standards as outlined in §220-150.D of the Marlboro Township Land Development Ordinance. All other aspects of the site layout and design remain as submitted and currently pending before the board.

We have performed the necessary engineering design computations to verify that the site grading and stormwater management systems may be modified to fully comply with the standards for major development, including runoff peak rate attenuation, water quality improvement and groundwater recharge, as prescribed by the Township Ordinance.

The stormwater management system as originally designed for this site is specifically intended to be modified as follows:

- a. The cistern system designed to collect roof runoff and re-purpose for vehicle washing operations shall be eliminated from the site design. The roof area will be connected via underground piping to the stormwater collection system.
- b. The easterly detention basin situated in the front yard along Tennent Road shall be re-designed to function as water quality basin and infiltration Best Management Practice (BMP) meeting the standards of Chapter 9.5 of the *NJDEP Stormwater Best Management Practices Manual*. The basin has been sized to collect runoff from the site resulting from the water quality storm and infiltrate that volume to groundwater. In making the determination as to the ability of such a design to meet all engineering standards, a series of soil borings were conducted on the site since the time of the last hearing to verify permeability of soils and seasonal high groundwater levels.

- c. The design of the water quality basin was further substantiated by analyzing annual groundwater recharge volume, as well as the impact on groundwater mounding beneath the basin. The analyses undertaken indicate that the volume of groundwater recharge deficit resulting from development shall be adequately offset with the infiltration of runoff from the water quality storm events; and that the basin floor shall lie suitable above the seasonal high groundwater level to ensure that the mounding of groundwater shall have no adverse impact upon the long term basin performance.
- d. A water quality swale shall be designed along the easterly property line adjacent to the bank driveway, intended as a non-structural stormwater strategy. The water quality swale shall meet each of the standards outlined in Chapter 9.12 of the BMP Manual and shall further aid in the removal of non-point source pollutants from the portion of the site functioning as the car wash stacking lanes.
- e. The curb which separates the stacking lanes from the water quality swale shall be designed as a gap granite block curb, which will permit runoff from the driveway to enter the water quality swale without concentrating to discharge points. As a result, the runoff time of concentration shall be elongated in accordance with the BMP Manual guidance.
- f. The portion of the site which receives runoff from the car wash tunnel exit shall be grade separated from the infiltration basin, and shall instead be directed to a manufactured treatment device (MTD) specifically intended for hydrocarbon and phosphates removal. The BMP selected is certified by NJDEP to meet the 80% TSS removal standard, and has been located in a portion of the site easily accessible by maintenance equipment to facilitate long term maintenance.

The balance of the site improvements shall remain as submitted to the board and testified to at the June 9th hearing. It is the applicant's intent to comply with the review comments contained in the board professional review report dated June 5, 2020.

It is intended that the balance of expert testimony shall be entered at the upcoming scheduled site plan hearing before the board, and should a favorable decision be reached the plans shall be revised to address each of the engineering review comments as a resolution compliance step. Notwithstanding this intent, included herewith is certain evidence to demonstrate how the amended site design as described above shall meet the requisite standards, including:

1. Soils report and permeability testing undertaken at the site by Cara Smith, PE.
2. Groundwater Recharge Spreadsheet prepared based upon the site re-design and demonstrating compliance with the minimum standards.



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3. Engineering details of the Manufactured Treatment Device selected for this particular engineering application.
4. An amended Site Plan Rendering graphically depicting the above described alterations to the site design.

Should you require any further information please do not hesitate to call me.

Very truly yours,

CRANMER ENGINEERING, P.A.

A handwritten signature in blue ink, appearing to read 'David A. Cranmer', is written over a faint, illegible typed name.

David A. Cranmer, PE, PP, CME, M.ASCE
Principal Engineer