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NEW YORK, NY

November 2, 2021

## Memo

**To:** Christopher Kok, P.P., Wayne Township Planner

**From:** Christopher P. Statile, P.E., Consultant

**Regarding:** Block 1618, Lot 29  
441 Newark Pompton Turnpike Associates, Inc.  
Site Plan Storm Drainage Review

As requested, we reviewed the site plans for the above application prepared by Darmstatter, Inc., revised to September 8, 2021 consisting of seven sheets and offer the following comments on the drainage design:

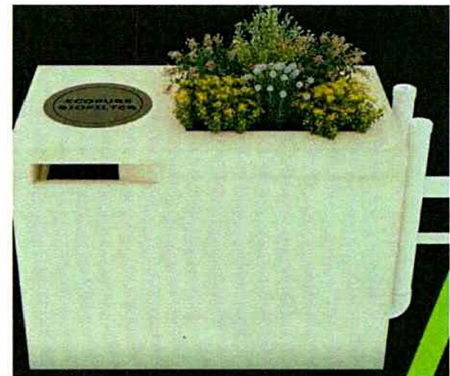
1. The site utilizes proprietary "EcoPure BioFilter" inlets which are composed of a curb opening, to a dual chamber entrapment basin with treatment soil. The treatment soil supports plants at the surface. Nine model sizes were approved by NJDEP for various treatment areas.

The NJDEP certifies the use of the <sup>TM</sup> stormwater treatment system at a TSS removal rate of 80% when designed, operated, and maintained in accordance with the information provided by the manufacturer.

Based on the contributory pavement areas to the four proposed catch basins, Model 8 x 20 is required. **This model size must be noted on the plans.**

The site design must be checked to ensure the required size devices **can be accommodated** without physical conflicts.

**The site design** must be checked to ensure that the treatment device outlet pipe can be connected to a 15" diameter pipe and aligned with the drain routes provided on the site plan i.e. can any connection be made to the unit from any direction?



The **maintenance and operation requirements** of the “EcoPure BioFilter” device must be provided on the site plans.

An “EcoPure BioFilter” does not appear necessary for Inlet B3 since no contributory area requires treatment.

2. The trench drain capture is not being treated before detention.

Connection of a 15” pipe to the trench drain is difficult. We suggest that the 23 LF connecting pipe to the detention system be reduced to 8” Schedule 40 PVC.

3. U/G Basin B appears too shallow for adequate soil/pavement cover and should be checked. The manufacturer recommends 18” of cover to the top of the plastic units *exclusive* of the pavement depth.
4. The exterior salt storage bin is being relocated. Does the Township require the salt to be covered.
5. The stormwater drainage system shown on Sheet No. 1 of 7 runs through adjacent Lot 32 absent a maintenance or access easement. With the increase in runoff volume (not intensity), is the adjacent property owner aware of the changed conditions of the subject site. Presumably, they received notice of the application, but may not be aware of the applicant’s intentions from only the notice card.
6. There is standing water/latency found at the entrance driveway along the Newark Pompton Turnpike gutterline due to a minor grading deficiency. This is a potential icing hazard in the winter.

The standing water must be resolved through corrective paving.

Since no spot grades provided on the site plans along the curblin and driveway, it is difficult to determine whether runoff from the Newark Pompton Turnpike **enters the site** during heavy rainfall. If so, the proposed on-site drainage treatment structures would be insufficient to capture/control this runoff. A depressed curb would address the issue if necessary.

7. The existing Type B storm drain inlet in front of the new warehouse must be converted/reconstructed to a Type E Inlet, and not just “reset.”

8. There is a storm drain located behind the curblin in front of the site. It's routing and connections should be shown on the Site Plan. If filled with debris, the applicant should contact the County for cleaning. A drain is also located in Highpoint Drive.
9. The proposed pavement should be extended to the existing B Inlet at the terminus of the driveway (south of the existing warehouse).
10. Grading for the three proposed barrier-free parking spaces should be checked. It appears the pavement slope exceeds 2%.
11. The NJDEP Freshwater Wetlands Letter of Interpretation number **must appear on the Site Plan** once the wetlands are verified by the State. If the determination finds Extraordinary Resource Value wetlands at flags D-6 to D-7, the required Transition Area would have a great effect on the proposed site work.

CPS/mr

c: Darmstatter, Inc

Wayne Twsp.