



MEMORANDUM

TO: Members of the Planning Board

CC: Mr. Gregory Cutler, Village Planner
Mr. Dan Gray, Village Building Inspector

FROM: Alvaro Alfonso-Larrain, P.E., Consulting Village Engineer

DATE: May 25, 2018

RE: 416 Waverly Avenue (560 Fenimore Avenue)
Site Plan Review

The purpose of this memorandum is to provide the Planning Board with an update of our initial review of the documents received related to the proposed improvements at 416 Waverly Avenue (560 Fenimore Avenue). The application is proposing the demolition of existing structures and the construction of a self-storage facility, parking, landscaping, and associated stormwater management infrastructure improvements.

Our review is focused on general site engineering design and the associated Village Code requirements in accordance with the following:

- Village of Mamaroneck Code, Chapter 294 *Stormwater Management and Erosion and Sediment Control*, and other sections, as applicable.
- New York State Department of Environmental Conservation (NYSDEC) *Stormwater Management Design Manual (SMDM)*, last revised January 2015.
- *New York State Standards and Specifications for Erosion and Sediment Control* dated November 2016.

DOCUMENTS REVIEWED

- Cover Letter, "Re: Application of East Coast Properties, Inc. for Site Plan Approval, Mamaroneck, New York", by Eric L. Gordon, dated May 10, 2018.
- NYSDEC, "Full Environmental Assessment Form", by East Coast North Properties LLC, dated February 15, 2018.
- Village of Mamaroneck Planning Board Application, by Eric L. Gordon, dated February 8, 2018.
- Stormwater Pollution Prevention Plan & Drainage Analysis, "Self Storage Addition, 416 Waverly Avenue, Mamaroneck – New York", by Hudson Engineering & Consulting, P.C., dated February 8, 2018.
- Engineering Drawings, "Self Storage Building Addition, 416 Waverly Avenue, Village of Mamaroneck, Westchester County – New York", by Hudson Engineering & Consulting, P.C., including sheets "C-1" to "C-5", dated February 8, 2018.



DISCUSSION

The limits of disturbance for the proposed construction activities has been depicted to be roughly 32,000 square feet. Therefore, the Applicant is required to provide stormwater quality and quantity controls. Stormwater quantity controls include attenuation of the post-development 25-year storm event to predevelopment flow rates. Stormwater quality controls require the Applicant to provide treatment for the Water Quality Volume (WQv). The project site is located within the 100 and 500-year flood plain.

The following is a summary of our comments. It should be noted that additional comments may be added upon receipt of additional information:

1. The Applicant is proposing to connect to an existing Aquaswale Unit to receive flows/provide treatment for the WQv generated from a portion of the site. The following comments pertain to the existing Aquaswale unit:
 - a. The Applicant shall provide the specifications of the existing Aquaswale unit to demonstrate that the unit has been designed to handle the peak Water Quality Flow (WQF) generated from the tributary drainage areas. Note that proprietary water quality units need to comply with the NYSDEC performance criteria.
 - b. The Applicant shall assess and report the current conditions of the existing Aquaswale unit.
 - c. The Applicant shall clarify the ownership of the existing Aquaswale unit as it is located outside of the subject property. If the existing Aquaswale unit is intended to receive flows/provide treatment from the development, then the existing Aquaswale unit shall be relocated within private property and outside the Village of Mamaroneck's right-of-way, as requested by the Stormwater Management Officer.
2. The Applicant shall clarify the total amount of reduction in impervious surface. The provided Stormwater Pollution Prevention Plan & Drainage Analysis (SWPPP) dated February 8, 2018, claims an impervious reduction of 617 square feet. However, upon comparing the existing and proposed impervious areas depicted on Sheets C-1 and C-2 (both dated February 8, 2018), it appears that the reduction in impervious surface in the proposed conditions is less than 300 square feet. Note that in the "*Watershed Map – Proposed*" (dated January 18, 2018), Watershed 1B includes a landscaped area that is not depicted on Sheet C-2.
3. In the provided SWPPP (dated February 8, 2018), the Applicant has stated that providing attenuation of stormwater runoff at the project site will exacerbate flooding conditions. In order to substantiate this claim, the Applicant shall provide a hydrologic and hydraulic watershed analysis of the drainage areas tributary to the Sheldrake River to demonstrate that providing attenuation will indeed exacerbate flooding conditions. Alternatively, the Applicant can provide an analysis of the pre and post-development flow rates and demonstrate that the post-development flow rates will not exceed predevelopment flow rates for the project site.
4. The Applicant shall provide a watershed map depicting the existing drainage areas and design points for the predevelopment conditions. The existing condition watershed map shall clearly depict flow paths, flow types, time of concentration, and tie-in locations to the Village of Mamaroneck infrastructure.
5. The Applicant is proposing to route/connect Watershed 3A (which includes approximately 14,000 square feet of impervious area) to an existing Village of Mamaroneck catch basin



structure located in Fenimore Road. The Applicant shall provide a stormwater evaluation of the pre and post-development flow rates at this catch basin design point. The post condition flow rate to the existing catch basin structure point cannot exceed pre-condition flow rates.

6. The Applicant shall assess and report the existing conditions of the downstream Village of Mamaroneck drainage infrastructure which the development is proposing to connect to. Note that this may require a CCTV inspection.
7. The Applicant shall provide an estimation of the anticipated sewer demands generated from the proposed development.
8. The Applicant is proposing a stormwater planter on the southeastern portion of the site to provide treatment for the WQv generated from the Self-Storage addition (delineated within the SWPPP as Watershed 3A). The following comments relate the proposed stormwater planter:
 - a. In accordance with the NYSDEC SMDM, the ponding depth shall be revised to be a maximum of 12-inches. The provided detail on Sheet C-6 (dated February 8, 2018) depicts the ponding reservoir to exceed 12-inches. The ponding depth includes the interval between the 18-inch sandy loam topsoil layer and the invert of the outlet structures.
 - b. The Applicant shall specify the type/composition of sandy loam topsoil material intended to be use for the stormwater planter for construction purposes.
 - c. The Applicant has provided a HydroCAD model of the stormwater planter (modeled as "Pond 2P") within the provided SWPPP (dated February 8, 2018). The Applicant has modeled that the proposed stormwater planter will provide approximately 1,000 cubic feet of storage. However, the Applicant shall revise the model based on the adjusted ponding depth (i.e. to be no more than 12-inches) and to reflect the percentage of the applicable void storage provided within the soil media (i.e. the soil media is modeled to provide 100% storage).
9. The Applicant shall revise the total amount impervious and pervious areas quantified for Watershed 3 on the "Watershed Map – Proposed" (dated January 18, 2018). It appears that the total amount of impervious and pervious areas depicted on the plans is less than the areas that have been quantified/labeled for Watershed 3.
10. The Applicant shall collect and provide treatment for the WQv generated from Watershed 3.
11. The Applicant shall revise the "Erosion Control Measures" note section on Sheet C-3 (dated February 8, 2018) to read; *"Install all erosion control measures prior to start of construction. Call for inspection from the appropriate municipal agency having jurisdiction at least 2 days prior to installation."*
12. The Applicant shall clarify the intent of any existing utilities currently serving the development (i.e. those utilities to be removed, remained, and abandoned).
13. The Applicant shall depict the proposed utility connections to the proposed 4-Story Self Storage addition on the plans.
14. The Applicant shall clarify the proposed height of the Self-Storage addition. In the introduction section of the provided SWPPP (dated February 8, 2018), the Applicant states that the proposed



addition will only be 2-stories. However, the provided engineering drawings (dated February 8, 2018) indicated that the proposed Self Storage addition will be 4-stories.

15. The Applicant shall revise the municipality name in the provided contractor certification statement to be "*Village of Mamaroneck*".
16. The Applicant shall quantify in a table on the plans the proposed cut/fill volumes (quantified in cubic yards) for the development.
17. The Applicant shall provide a curb cut detail on the plans.
18. The Applicant shall depict the location of concrete washout area and provide the corresponding construction detail in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control*, dated November 2016.
19. The Applicant shall show the intended location of the equipment staging area on the plans.
20. In the "*Construction Sequencing*" section of the SWPPP (dated February 8, 2018), the Applicant indicates that tree protection will be installed as noted on the plans. The Applicant shall clarify/depict any trees to remain, to be removed, and to be protected during construction activities. If trees are proposed to be protected, then a tree protection detail shall be provided.
21. The Applicant shall include a note in the plans which states: "*Any imported soil shall comply with all federal, state, and local requirements for quality and use*".
22. The Applicant shall include a note on the plans which states: "*Off-site disposal of excess cut shall be in accordance with all federal, state, and local requirements*".
23. The Applicant shall prepare a maintenance agreement for the proposed stormwater management systems and shall provide a draft maintenance agreement for review by the Consulting Village Engineer.
24. The Applicant shall provide an As-Built Plan of the stormwater management system (for all stormwater features including, but not limited to, locations of stormwater infrastructure, invert/rim elevations, pipe locations and sizes, final grading, etc.) certified by the Engineer on Record prior to the issuance of the Certificate of Occupancy.
25. The Applicant has submitted a *Full Environmental Assessment Form* (dated February 15, 2018) for the proposed construction activities. Note that certain sections of the *Full Environmental Assessment Form* may need to be revised based on subsequent resubmittals and the responses to the review comments enumerated above. We recommend the submittal of an updated *Full Environmental Assessment Form* once stormwater management, utilities, and general construction related items have been addressed.

Woodard & Curran recommends scheduling a meeting with our office to discuss this review memorandum and how comments may be addressed. In order to streamline future reviews for this project, we also recommend that the Applicant provides a cover letter with all resubmittals and provides a dedicated response to each of the comments in this memorandum.