

MEMORANDUM

To : North Castle Planning Board

From : James J. Hahn, P.E.
Town Consulting Engineer

Dated : November 27, 2023

Subject : Site Plan and SWPPP Review
45 Bedford Road (The Gateway)
Section 108.03, Block 1, Lot 65

Drawings Reviewed : Prepared by Langan Engineering:
“Cover Sheet”, Revised 11/13/23, Sheet CS001.
“Legend and General Notes”, Revised 11/13/23, Sheet GI101.
“Existing Conditions and Removals Plan”, Revised 11/13/23,
Sheet CD101.
“Site Plan”, Revised 11/13/23, Sheet CS101.
“Grading and Drainage Plan”, Revised 11/13/23, Sheet CG101.
“Drainage Profiles”, Revised 11/13/23, Sheet CG201.
“Utility Plan”, Revised 11/13/23, Sheet CU101.
“Sanitary Sewer Profile”, Revised 11/13/23, Sheet CU201.
“Soil Erosion & Sediment Control Plan”, Revised 11/13/23,
Sheet CE101.
“Details (1 of 3)”, Revised 11/13/23, Sheet CS501.
“Details (2 of 3)”, Revised 11/13/23, Sheet CS502.
“Details (3 of 3)”, Revised 11/13/23, Sheet CS503.
“Planting Plan”, Revised 11/13/23, Sheet LP101.
“Planting Details and Notes”, Revised 11/13/23, Sheet LP501.
“Site Lighting Plan”, Revised 11/13/23, Sheet LL101.
“Site Lighting Details and Notes”, Revised 11/13/23, Sheet LL501.
“Fire Truck Movements”, Revised 11/13/23, Sheet FG01.
Prepared by Design Development PLLC:
“Proposed Site Turning Lane”, Dated 11/13/23, Sheet A-SK-001.

Documents Reviewed : Response Letter from Michael Tucker, P.E, Dated 11/13/23.
Draft Stormwater Control Facility Maintenance Agreement, Undated.
Stormwater Pollution Prevention Plan, Revised 11/13/23.

At the request of the Town of North Castle, the referenced plans and documents have been reviewed for compliance with Town Code, the SPDES General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001), and our previous memorandum dated October 19, 2023. The applicant is proposing to construct 34 townhouse units on 4.2 acres in the R-MF-DA zoning district. Additional work includes stormwater mitigation, floodplain mitigation, parking areas, and utility connections.

A wetlands permit and floodplain development permit will be required. Per §267-8 B.(1) of the Town Code, a performance guarantee for the construction of the stormwater system may be required by the Town.

The amount of disturbance for the project is proposed to be more than 3.7 acres. Therefore, the project must obtain coverage under SPDES GP-0-20-001. The applicant must file a Notice of Intent (NOI) with New York State Department of Environmental Conservation (NYSDEC) and prepare a Stormwater Pollution Prevention Plan (SWPPP) that incorporates post-construction practices. Easements and maintenance agreements between the Town and the property owner are required which must be filed with the Town and Westchester County. When the project is completed, pursuant to §267-8 A. (2) of the Town Code, “as-built” plans must be prepared and the applicant must file a Notice of Termination (NOT) with NYSDEC.

The applicant has not provided sufficient demonstration in accordance with Town Code Chapter 177 that the proposed project will not adversely impact existing floodway and floodplains. As a result, several of our previous comments have been reproduced below. Pursuant to our review, the following items should be addressed by the applicant.

- 1) As previously mentioned, the applicant is proposing to fill in the floodplain that will reduce the storage volume for the FEMA 100 year flood event, which includes filling in the regulatory floodway. To offset the reduction in volume, the applicant is proposing to remove fill in another location to construct a “floodplain volume compensation area” to provide additional storage. However, the proposed fill is in the location where the floodplain channel enters the site thereby altering the channel dimensions which may reduce the capacity of the channel. Flow entering the site and the flood rise must be analyzed and demonstrated that the proposed floodway filling and floodplain modifications will not result in flood level rise nor adversely impact storage areas. The demonstration should also include a comparison of pre and post development floodplain volumes and cross sections as applicable. Additionally, the limits of the regulatory floodway should be shown on the plans.
- 2) As previously mentioned and contrary to the response memorandum, the proposed floodplain compensation area is being used for both new FEMA floodplain volume compensation storage and site stormwater runoff storage as demonstrated by the inclusion of Node 20P in the HydroCAD model. As a result, the stormwater being detained in the basin will reduce the amount floodplain storage volume. If the basin is intended to provide both FEMA floodplain storage and site stormwater runoff storage, then adequate floodplain modeling

should be provided to demonstrate how the two volumes interact and that there will be adequate floodplain volume during the FEMA 100 year flood event.

- 3) As previously mentioned, as the proposed floodplain basin fills it will backfill the infiltration system “#1P” thereby impacting the storage volume of #1P. The overflow for #1P should be set above the floodplain elevation. The same should also be applied to infiltration system “#2P”.
- 4) As previously mentioned, pursuant to Town Board Resolution Condition #8, the requested sidewalk to Armonk Square should be shown. The applicant has stated that they will work with the Town to find a solution.
- 5) As previously mentioned, the proposed project should be reviewed by the local fire department, the Town Water and Sewer Department and the County Department of Health. Any comments from the reviewing agencies and utility easement descriptions should be addressed. The applicant has acknowledged this.
- 6) As previously mentioned, a network map should be provided for the existing conditions hydrologic model. Additionally, the design data used in the model should be provided, including pond sizing data, outlet information, etc. Based on the information provided, it is unclear how the existing condition peak runoff rates were calculated. The applicant has stated in their response that the existing conditions model was previously approved, implying this information is not needed. This office did not review the “previously approved project” and to our knowledge a MS4 SWPPP Acceptance sign-off was not issued for that project.
- 7) As previously mentioned, it should be demonstrated that the proposed easement for the widening of Bedford Road is wide enough for a future turning lane. The demonstration should include all pertinent information, such as pavement markings, lane widths, queuing, turning movements, etc.
- 8) As previously mentioned, any footing drain discharge locations should be shown. Footing drains should not discharge into the stormwater management system. Discharge locations were not provided.
- 9) As previously mentioned, the location of trees should be coordinated with the utilities plan. Some of the proposed red maple trees are located in close proximity to the sewer main and some of the river birches are located over the infiltration system.
- 10) As previously mentioned, the proposed water main material should be stated on the plans.
- 11) The SWPPP notes that watercourse is USACE jurisdictional. Any required USACE permits must be obtained.

- 12) For the 100-year scenario, the peak elevation of 20P is above the provided available storage and resulted in model oscillations. The model should be reviewed for errors.
- 13) Offsite areas will contribute to the design points, specifically DP-2, and will have an impact on the HydroCAD model. The model should be revised.
- 14) It appears the pre-treatment has been revised to hydrodynamic separators. Pre-treatment sizing should be provided and the SWPPP narrative should be updated.
- 15) Schedule A referenced in the Stormwater Facility Maintenance Agreement should be provided.
- 16) The wetland buffer disturbance area should include the 12 inch diameter pipe in the flood compensation area.
- 17) The limits of disturbance have increased from the previous submission. The area should be listed on Sheet CE101 and the NOI should be revised to match. Additionally, the limits of disturbance should be revised to include all proposed work, including sidewalk replacement and wall installation in the right-of-way.
- 18) A detail for the proposed decorative stone wall should be provided. The wall should not adversely impact existing or future sight distances.

A written response and revised plans responding to the above comments should be provided for further review. Any changes made that do not pertain to our comments should be identified separately in the written response. Additional comments may be generated based on the revised plans.

If there are any questions concerning the above, please contact William J. Angiolillo, P.E. in our office at your earliest convenience.



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