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MEMORANDUM

To North Castle Planning Board

From James J. Hahn, P.E.

Town Consulting Engineer

Dated September 7, 2023

STUDIES

Site Plan and SWPPP Review **Subject**

> 45 Bedford Road (The Gateway) Section 108.03, Block 1, Lot 65

Drawings

Reviewed Prepared by Langan Engineering: :

"Cover Sheet", Dated 8/7/23, Sheet CS001.

"Legend and General Notes", Dated 8/7/23, Sheet GI101.

"Existing Conditions and Removals Plan", Dated 8/7/23, Sheet CD101.

"Site Plan", Dated 8/7/23, Sheet CS101.

"Grading and Drainage Plan", Dated 8/7/23, Sheet CG101.

"Drainage Profiles", Dated 8/7/23, Sheet CG201.

"Utility Plan", Dated 8/7/23, Sheet CU101.

"Sanitary Sewer Profile", Dated 8/7/23, Sheet CU201.

"Soil Erosion & Sediment Control Plan", Dated 8/7/23, Sheet CE101.

"Details (1 of 3)", Dated 8/7/23, Sheet CS501. "Details (2 of 3)", Dated 8/7/23, Sheet CS502.

"Details (3 of 3)", Dated 8/7/23, Sheet CS503.

"Planting Plan", Dated 8/7/23, Sheet LP101.

"Planting Details and Notes", Dated 8/7/23, Sheet LP501.

"Site Lighting Plan", Dated 8/7/23, Sheet LL101.

"Site Lighting Details and Notes", Dated 8/7/23, Sheet LL501.

Prepared by Design Development, PLLC:

"Floor Plans", Dated 8/7/23, Sheet A-101.

"Floor Plans", Dated 8/7/23, Sheet A-102.

"Floor Plans", Dated 8/7/23, Sheet A-103.

"Floor Plans", Dated 8/7/23, Sheet A-104.

"Floor Plans", Dated 8/7/23, Sheet A-105.

"Elevations", Dated 8/7/23, Sheet A-201.

"Elevations", Dated 8/7/23, Sheet A-202.

"Elevations", Dated 8/7/23, Sheet A-203.

"Elevations", Dated 8/7/23, Sheet A-204.

ENVIRONMENTAL AND CIVIL ENGINEERING REPORTS

DESIGN

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Documents

Reviewed: Cover Letter from Anthony F. Veneziano, Jr., Dated 8/4/23.

Town of North Castle Resolution, Dated 6/28/23.

Application for Site Development Plan Approval, Dated 8/3/23. Full Environmental Assessment Form, Part 1, Dated 8/3/23. Preliminary Site Plan Completeness Review Form, Dated 8/7/23.

Floodplain Development Permit Application, Dated 8/3/23.

Wetlands and Drainage Application, Dated 8/7/23. Stormwater Pollution Prevention Plan, Dated 8/7/23.

At the request of the Town of Bedford, the referenced plans and documents have been reviewed for compliance with Town Code and the SPDES General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001). The applicant is proposing to construct 34 townhouses units on 4.2 acres in the R-MF-DA zoning district. Additional work includes stormwater mitigation, flood plain mitigation, parking area, and utility connections.

The amount of disturbance for the project is proposed to be 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.

Pursuant to our review, the following items should be addressed by the applicant.

- 1) The proposed project includes work within wetland buffer areas. A mitigation plan should be prepared in accordance with Town Code Chapter 340 "Wetlands and Watercourse Protection".
- 2) The proposed project includes work within a FEMA Special Flood Hazard Area. The applicant should demonstrate conformance with all required parts of Town Code Chapter 177 "Flood Damage Prevention".
- 3) It should be determined if the proposed project is located within 100 feet of Wampus River. If so, a Westchester County Stream Permit may be required.
- 4) Part B. of the EAF should be revised to include all required permits, including NYSDEC SPDES General Permit, MS4 SWPPP Approval, and Town Building Permit.

- 5) The cover letter indicates that water and sewer "will be provided via easement." The proposed easements should be shown on the plans. If the extensions are proposed as water and sewer mains, then Westchester County Department of Health approval may be required. Additionally, proposed water and sewer services should be reviewed by the Town Water and Sewer Department to ensure there is sufficient capacity to serve the project.
- 6) Pursuant to Town Board Resolution Condition #8, the easement for a future turning lane should be shown. Additionally, the requested sidewalk to existing bus stop on Maple Avenue and crosswalk to Armonk Square should be shown.
- 7) The proposed project should be reviewed by the local fire department to determine if adequate access is provided. Additionally, the nearest fire hydrant should be labeled on the plans and emergency vehicle turning movements should be provided.
- 8) The SWPPP and plans should include the required construction inspection per §267-8 A. (1)(a) of the Town Code. The list should include an additional inspection for "installation of stormwater management facilities".
- 9) A stormwater facility maintenance easement or agreement must be provided as required by §267-7 B. and D. of the Town Code.
- 10) 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.
- 11) The referenced NYSOPRHP letter in Section 2.2 of the SWPPP should be included in the SWPPP as an appendix.
- 12) Pre-treatment should be provided and discussed in the SWPPP. The WQv worksheets indicate isolator rows are to be provided, but are not shown on the plans.
- 13) Deep test pits and infiltration tests should be performed in accordance with Appendix D of the Stormwater Management Design Manual. Test results should be included in the SWPPP and test locations shown on the plans.
- 14) 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.
- 15) The HydroCAD model should be revised to match the conditions shown on the plans, including modeling pond "2P" discharging into pond "21P". As the floodplain volume basin fills it will backfill the drainage system and this should be analyzed. Additionally, the pond labels should be shown on the watershed map.

- 16) It is unclear how the floodplain storage StormTech units are intended to function. They should be included in the HydroCAD model.
- 17) On the WQv worksheets only the volume provided in the infiltration systems below the lowest outlet elevation should be considered WQv provided.
- 18) The infiltration system must not be connected until construction is complete and the site is stabilized. A note, stating as much, should be added to the plans and should be included in the construction sequence.
- 19) Per the NYSDEC Stormwater Management Design Manual Section 6.3, infiltration systems should be separated a minimum of 10 feet from structures. This should include the proposed underground flood storage system.
- 20) The locations of inspection ports for the infiltration systems should be shown on the plans.
- 21) Proposed roof leader locations and connections to the drainage system should be shown.
- 22) Information appears to be missing from the drainage profiles, such as storage systems and structure labels. Additionally, the profile to headwall 1 extends outside the boundaries of the profile.
- 23) It appears the sewer profile for "run 1" should be revised to show three drainage pipe crossings. Both profiles should show water crossings.
- 24) Sewer laterals should be shown for all connections. Water and sewer laterals should be separated by a minimum of five feet.
- 25) The existing entrance includes mountable curb and grass pavers. It should be noted if these features are to remain or be removed.
- 26) A fence or barrier should be considered around the proposed floodplain basin.
- 27) A detail should be provided for the catch basins located directly over and connected to the infiltration system.
- 28) A retaining wall detail should be provided. Additionally, top and bottom wall elevations should be provided.
- 29) On March 15, 2019, Con Edison issues a moratorium on new gas connections and limited expansion of existing services. It should be confirmed that Con Edison is able to provide the proposed service. Otherwise, alternative means should be identified.

- 30) Planting trees directly over and adjacent to drainage pipe, sanitary sewers, water pipes and other utilities should be avoided. The planting plan and utilities plan should be coordinated to avoid conflicts.
- 31) Per Chapter 863, Article XXVIII of the Westchester County Code of Ordinances, no fertilizer containing more than 0% phosphorus shall be used unless testing confirms the need for additional phosphorus. This should be noted on the plans.

A written response and revised plans responding to the above comments should be submitted by the applicant directly to this office and to the Town 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.

JH:WJA:cg

cc: Adam Kaufman (akaufman@northcastleny.com)
William Angiolillo, P.E. (wangiolillo@hahn-eng.com)

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