KELLARD SESSIONS

John Kellard, P.E.
David Sessions, RLA, AICP
Joseph M. Cermele, P.E., CFM
Jan K. Johannessen, AICP

MEMORANDUM

TO: Kathleen Savolt, Chairperson

CC: Village of Mamaroneck Planning Board
Frank Tavolacci, Building Inspector

FROM: John Kellard, P.E.
Consulting Village Engineer

DATE: September 23, 2022

RE: Site Plan Approval
David & Bonnie Bleustein
1310 Flagler Drive
Section 9, Block 61, Lot 239

PROJECT DESCRIPTION

At the request of the Village of Mamaroneck Planning Board, Kellard Sessions Consulting has reviewed the site plan and supporting documents submitted in conjunction with the above-referenced application. The applicant is proposing the demolition of an existing residence and the construction of a new residence. The project site is 0.8 acres in size and is located in the R-20 Single-Family Residential Zoning District. The property is within the FEMA VE Flood Zone (BFE of 14 and 17), New York State Department of Environmental Conservation (NYSDEC) Coastal Erosion Hazard Area and within the Village wetland buffer.

The proposed project will disturb approximately 0.7 acres of area. Impervious coverage will be reduced from 19,734 s.f. to 12,536 s.f. The applicant is proposing mitigation of stormwater with a rain garden within the rear yard and infiltration system located within the front yard.

GENERAL COMMENTS

1. The Existing Conditions/Demolition Plan states that the existing dwelling, greenhouse, deck, driveway, patios, basketball court and walkways will be removed and disposed of off-site. The only existing site improvements which will remain include the sea wall along Long Island Sound and the existing pool which is proposed to be modified.

   The applicant will need to provide additional documentation to the Building Department regarding the demolition procedures at the time a demolition application is submitted. Please include the

following note with regarding to disposal of demolition material on the Existing Conditions/Demolition Plan: "All demolition materials shall be removed from the project site and disposed of in accordance with Federal, State and Local Regulations."

2. The project site is located within the FEMA VE and AE Flood Zones. The portion of the site closest to the Long Island Sound is within the VE Zone with a Base Flood Elevation of 17 feet while the remainder of the site is within the VE Zone with a Base Flood Elevation of 14 feet. An extremely small area within the northeast corner of the site is within the AE Zone with a Base Flood Elevation of 13 feet. Flagler Drive is also within the AE Zone with a Base Flood Elevation of 13 feet.

   The proposed residence will be within the FEMA VE Zone with a Base Flood Elevation of 14 feet. VE Zones are areas along coasts subject to inundation by the 1% chance of flooding with additional hazards due to storm induced waves.

   The applicant has submitted a Floodplain Development Permit Application which requires Village Approval. The proposed residence has a garage slab elevation of approximately 12 feet and a finished floor elevation of 17 feet, three (3) feet above the Base Flood Elevation. AC units appear to be raised above the base elevation and utilities and mechanical equipment appear to be at the first flood level, Elevation 17 feet. The application should be referred to the Village Building Department to confirm the building design is in conformance with FEMA building requirements.

   The applicant also submitted a Flood Storage Analysis Plan which analyzes the floodplain storage for the site under existing and proposed conditions. The analysis analyzes the on-site volumes in increments of one (1) foot between the lowest on-site elevation (between 9 and 10 feet) and the highest ground elevation found on-site (between 12 and 13 feet). During each one (1) foot increment, the available storage volume will increase from the existing to proposed condition. The total available groundwater storage volume has increased by approximately 13%. The majority of the increase can be attributed to the design of the new residence which provides for flood storage below the lowest finished floor.

   The proposed condition floodplain analysis does, however, uses the rain garden for compensatory storage between Elevation 9 and 10 feet. Stormwater mitigation practices can not be used for compensatory storage according to the FEMA Regulations. The applicant should adjust the calculations accordingly.

   The proposed garage, storage areas, screened porch, hall and bathroom, although located on the lower level, are required to have flood vents to permit equalization of flood waters. The compensatory storage calculations include such storage between Elevation 11-12 feet. The applicant should provide confirmation that these lower areas will have flood vents.

3. The proposed limits of disturbance exceed 2,000 s.f., but are less than one (1) acre. The applicant is required to provide erosion and sediment controls, stormwater quality controls and stormwater quantity controls. Stormwater quantity controls include attention of the post-development, 25-year storm event to pre-development flow rates.

   The applicant has provided water quality and quantity mitigation within two (2) treatment systems. A Storm Brixx infiltration system within the front yard which mitigates runoff from the front of the proposed residence and driveway and a rain garden within the rear yard which mitigates runoff from the rear of the dwelling, pool and patio. Our comments follow:

   a. The proposed infiltration system has three (3) inflow pipes discharging to the system. The southern connection from the proposed drain inlet by the garage includes a bypass structure which allows initial runoff to discharge directly to the pre-treatment isolation row while larger flows will bypass the isolation row and discharge directly to the main infiltration units. The two (2) northern connections should be designed with a similar bypass.

   b. Please include a connection from the pool equipment to the Cultec infiltration system providing means of discharge to mitigate winterization drawdown of the pool.

   c. The applicant has determined the hydrologic soil rating of the on-site soils to be D soils. Infiltration testing, however, resulted in extremely fast infiltration within existing on-site soils. Such designation appears to result in a significantly higher CN value then testing indicates. The applicant should reevaluate the CN values used for the grass cover and revise the RRv calculations.

   d. Section F, Runoff Reduction Volume for Watershed #2 discharges to the rain garden, however, the Report states that the requirement is met by use of Storm Brixx Infiltration Units. Please clarify.

      The report does not include existing peak runoff values during the 25-year storm event. I'm assuming existing flows were not provided since the reduction of impervious surfaces were so significant that it is obvious runoff has decreased regardless of the treatment devices. Please clarify.

   e. Please extend the tree protection fence to the drip line of the trees to be saved.

4. The applicant shall provide a long-term maintenance schedule and procedures for the proposed stormwater management infrastructure.

5. The applicant shall note on the plan the owner's requirement of providing a maintenance agreement for the proposed stormwater management features for review by the Village Engineer, prior to the issuance of a Certificate of Occupancy.

6. The applicant shall quantify in a table on the plans the proposed cut/fill volumes (quantified in c.y.) for the project.

7. The applicant shall clarify the intent of any existing utilities currently serving the development (i.e., those utilities to be removed, remain and abandoned). Please show the prosed sewer and water services to service the project.

8. The applicant shall furnish copies of the approvals for the proposed water service and sewer connection.

In order to expedite the review of subsequent submissions, the applicant should provide annotated responses to each of the comments outlined herein.

PLANS & REPORT REVIEWED, PREPARED BY HUDSON ENGINEERING & CONSULTING, P.C., DATED AUGUST 24, 2022:

- Existing Conditions/Demolition Plan (C-1)
- Sediment & Erosion Control Plan (C-2)
- Stormwater Management Plan (C-3)
- Details (C-4, C-5, C-6)
- Stormwater Pollution Prevention Plan & Drainage Analysis Report

PLANS REVIEWED, PREPARED BY LOUIS FUSCO LANDSCAPE ARCHITECTS, DATED JULY 15, 2022:

- Site Plan (SP-1)
- Coverage Overlay (C-1)
- Planting Plan, Tree Preservation Plan (PL-1)

PLANS REVIEWED, PREPARED BY KELLER/EATON ARCHITECTS, P.C., DATED JULY 15, 2022:

- Site Plan, Zoning Calculations, General Notes (CS-1.0)
- Architecturals (A-1.0, A-1.1, A-1.2, A-1.3, A-2.0, A-2.1, A-2.2, A-2.3)

JK/dc