MAYOR JACK MCEVOY DEPUTY MAYOR ALEX ROMAN COUNCILMEMBERS KEVIN J. RYAN EDWARD GIBLIN CHRISTINE MCGRATH

VERONA COMMUNITY CENTER 880 BLOOMFIELD AVENUE VERONA, NEW JERSEY 07044

Date: December 21, 2020

Township of Verona Engineering Dept. Re: Engineer Review

Owner: Ms. Seneta Whiting Applicant 175 Grove Avenue Verona, NJ 07044 Property: 175 Grove Avenue Lot 6.01 Block 1101 Zone: R-60 (Medium Density)

TOWNSHIP OF VERONA

COUNTY OF ESSEX, NEW JERSEY



MUNICIPAL BUILDING 600 Bloomfield Avenue Verona, New Jersey 07044

> (973) 239-3220 www.VeronaNJ.org

TOWNSHIP MANAGER MATTHEW CAVALLO TOWNSHIP CLERK JENNIFER KIERNAN TOWNSHIP ATTORNEY BRIAN J. ALOIA, ESQ.

DEPARTMENT OF PUBLIC WORKS 10 COMMERCE COURT VERONA, NEW JERSEY 07044

This office is in receipt of and has reviewed the following plans and documents which were submitted by the applicants engineer on behalf of the owner/applicant for consideration.

These documents were also reviewed for technical completeness so that they can be forwarded onto the board for consideration and subsequent approval or denial.

- Engineering Summary Review prepared by Onello Engineering, dated November 3, 2020.
- Plans entitled "Site Plan, zoning analysis & soil movement" Prepared for Whiting, #175 Grove Avenue, Lot 6.01 Block 1101, Township of Verona, Essex County, New Jersey." Prepared by Onello Engineering, dated 11/03/20. Sheets 1 through 6.

Based upon our review the applicant is seeking to install;

An irregular shaped in-ground swimming pool, pool equipment (filter and pump) the applicant has also included a concrete/paver pool deck, Pool fencing required, however fencing for pools and self-latching gates are under the purview of the Township Building Department. The plans call for a minimal amount of soil movement, regrading, stormwater control and replacement of a low landscape type modular block wall along the right side property line.

Township of Verona Steep Slope Ordinance

The property in question is not situated within the areas defined as steep slopes as per Ordinance 3-16 and is therefore exempt from those requirements.

Engineering Review and Comments:

• The existing conditions plan indicates that the existing roof leaders all connect into a subsurface 6 inch pvc pipe that ultimately discharges into the existing stormwater catch basin located in front of the dwelling on Grove Avenue. The Site Engineering Plan calls for the installation of a series of 4 inch deck/perimeter drains which ultimately connect into the existing roof leader pipes. Since the basis of the zoning denial is for impervious coverage beyond the maximum permitted the applicants engineer should verify that the existing roof leader system is adequately sized to accommodate the proposed stormwater collected and discharged into the existing system which discharges to the catch basin in the street. The plan calls for the option of installing a "perimeter crushed stone patio edge drain" which collects the additional impervious

coverage area(s). If this method is chosen then stormwater design & storage volume calculations must be submitted to the engineer's office for review and approval prior to installation. The engineering office would prefer the applicant install a NJDEP approved BMP (best management practices) detention system, either structural or non-structural to capture the existing and proposed roof run-off.

- The owner is responsible for the discharge of any and all pool water in regards to pool cleaning or pool mechanical equipment backwashing. All pool water which is discharged must be directed away from the adjoining properties. The engineer's office suggests that water be discharged into the existing roof leader system (if capacity) or into the designed BMP. The owner shall be the sole person responsible for any rutting, erosion or water ponding and flooding as a result from the discharge of pool water either above or below the ground on this property or on adjoining properties as well.
- The applicant should be aware that the Township of Verona has a Tree Removal Ordinance and any trees sought to be removed for this project are subject to review and approval by permit only.
- The owner shall be required to install and maintain throughout the duration of the project until its completion all necessary soil erosion and sediment control measures to ensure that no sediment leaves the immediate project area. The owner should review and understand what (if any) measures are necessary by following the guidelines for soil erosion and sediment control in the State of NJ defined in "The Standards for Soil Erosion and Sediment Control in NJ", 7th Edition January 2014 revised July 2017.

https://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf

Roof Leaders - Sump Pump Discharge, Grading and Property Maintenance Guidelines

Leader drains and sump pumps must be discharged in a fashion that controls the run off onto neighboring and common properties and further, does not cause erosion on any property. The surface discharge of leader drains and sump pumps must not be directly pointed towards the adjoining properties. Erosion control measures should be utilized at each point of discharge to prevent scouring and rutting of the existing grade. An example of this would be to secure the end of the leader with river rock stone. This will provide an energy dispersal of the waters emanating from the point of discharge. All residents should be mindful of how their properties stormwater might be negatively impacting the surrounding properties.

Exposed gutters and downspouts should try to be colored to blend in with the surface to which they are attached.

Slope all roofs and outdoor areas to positively direct water away from buildings. Connect all roof drains to an approved storm water drainage system where and when possible. If a subterranean leader system is to be utilized then that system must be approved by the Township Engineer.

Direct discharge of storm water and sump pump discharges onto the public roadway through the curb creates hazardous icing conditions during the winter and therefore is not permitted, any existing discharge onto the street through the curb can remain until such time the street is fully reconstructed, at that time an underdrain system will be provided within the right of way so that each property has the ability to make a positive connection into the municipal drainage system thereby reducing the amount of on-site drainage discharge.

Please be reminded of the following;

Water which historically flowed from one property to another prior to the uphill home or developed area being built may continue to flow in the same direction after the home is built or area developed only if ;

(1) There is no diversion or channeling which results in the water flow being concentrated in one area and

(2) There is no substantial construction on the uphill lot resulting in increased rates of surface run-off.

If a detrimental change in the natural pattern of drainage on the uphill lot has occurred, the uphill property owner is responsible for interception and piping or directing surface water to natural drainage areas or the storm water drainage system.

The downhill property owner is responsible for providing proper drainage for water flow that occurs in accordance with natural drainage patterns, which existed prior to construction.

Due to the inherent difficulty in accurately predicting post-construction water flow from a property, changes in water flow may not be discovered until well after the construction is completed. In such cases, if it is determined that the lot is generating an additional flow or intensity of storm-water across an adjacent property, in excess of what existed prior to construction, the applicant, at the applicants expense, will undertake all measures necessary to abate the excess flow of storm-water.

Michael C. DeCarlo

Michael C. DeCarlo Engineering Manager – Zoning Official