



TOWNSHIP of HOPEWELL
MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK:

LOT:

ADDRESS:

PROJECT NAME:

REVIEW REPORTS

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TOWNSHIP OF HOPEWELL
201 Washington Crossing-Pennington Road
Titusville, New Jersey 08560-1410
Phone 609.737.0605 Ext. 6280

MEMORANDUM

TO: Hopewell Township Zoning Board of Adjustment

CC: Applicant

FROM: James Hutzemann PE, PP - Board Engineer 

DATE: March 14, 2023

RE: **Engineering Review #1 – ZBA 23-02**
Manoj and Dhaarna Kumar
Bulk Variance: Lot Coverage; VRC-R200
Block 37 Lot 4.17; 1 Applewood Drive

I. Application Submission Items

The following documents were received:

- A. Zoning Board Application Form EZ, with required fees, escrow and authorization forms.
- B. 1-sheet Partial As-Built Survey prepared by Brunswick Surveying Inc, dated 11/10/2022.
- C. Sketch plan with the location and dimensions of the proposed improvements.
- D. 31-sheet Stormwater Management Design for 1 Applewood Drive, Block 37, Lot 4.17.

II. Completeness

The application was deemed administratively complete on March 14, 2023 and a Board Hearing date may be scheduled.

III. Description

- A. The property in question is an approximately 2-acre corner lot located at the intersection of Applewood Drive and Moore's Mill Mount Rose Road. The property is improved with a single-family dwelling and associated residential improvements. The lot is served by an on-site individual septic system and well. The subject property is partially located within the 150-ft. stream buffer, however, it appears that the proposed improvements are located outside of the buffer area. The property is located in the Delaware and Raritan Canal Commissions Zone B, and is surrounded by residential uses. (Figures 1 & 2 below).



Figure 1: Subject property (2D view).



Figure 2: Subject property (3D view).

- B. The applicant proposes to construct a 16 ft. by 10 ft. concrete pad for a future shed with a 4 ft. by 10 ft. walkway, install an 8 ft. by 8 ft. paver patio, and legitimize two existing 12 ft. by 16 ft. concrete pads for future gazebos that were installed without prior zoning approval.
- C. Property records research revealed that the dwelling was built in or about 2001, and in 2022 the subject premises received a zoning permit to construct an in-ground pool and pool patio with a total impervious surface coverage of 9.8% of the lot area. However, an as-built survey revealed that the applicant exceeded the maximum permitted lot coverage

during the construction by adding two additional 16 ft. by 12 ft. concrete pads for future gazebos.

IV. Zoning

- A. The subject property is located within the Valley Resource Conservation (VRC) Zone, and a single-family dwelling is a permitted use in the zone.
- B. The dwelling received a temporary certificate of occupancy prior to September 20, 2001, and therefore, pursuant to § 17-160 (m) of LUDO, the proposed enlargement shall conform to the yard and lot coverage requirements of the former R-200 Zoning District (R-200 District Table).
- C. **Variances:**

The proposed improvements require the following “C” variance(s):

Description	Max. Permitted	Proposed	Variance	Ordinance
Impervious Surface Coverage	10% of lot area	11% of lot area	V	§17-160(m)(1)(c) (R-200 District Table)

V = Variance

1. Impervious Surface Coverage – The applicant proposes to construct a 16 ft. by 10 ft. concrete pad for a future shed with a 4 ft. by 10 ft. walkway, install an 8 ft. by 8 ft. paver patio, and legitimize two existing 12 ft. by 16 ft. concrete pads for future gazebos that were installed without prior zoning approval. The existing impervious surface coverage including the two existing concrete pads is 10.7% and the proposed lot coverage is 11% of the lot area, whereas the maximum permitted lot coverage in the zone for the subject lot is 10% (**§17-160(m)(1)(c) (R-200 District Table)**). The applicant should justify the variance request and provide testimony to satisfy the C-1 (hardship) and/or C-2 (flexible-c) variance criteria of the NJ Municipal Land Use Law, N.J.S.A. 40:55D-70 et seq.:

- a. C-1 Variance – “Hardship” Variance. The Board of Adjustment has the power to grant relief from the strict application of zoning ordinance regulations pursuant to N.J.S.A. 40:55D-70c(1) where, (a) by reason of exceptional narrowness, shallowness or shape of a specific piece of property, or (b) by reason of exceptional topographic conditions or physical features uniquely affecting a specific piece of property, or (c) by reason of an extraordinary and exceptional situation uniquely affecting a specific piece of property or the structures lawfully existing thereon, the strict application of zoning ordinance regulations would result in peculiar and exceptional practical difficulties to, or exceptional and undue hardship upon, the developer of such property.

No variance or other relief may be granted without a showing that such variance or other relief can be granted without substantial detriment to the public good and will not substantially impair the intent and purpose of the zone plan and zoning ordinance.

- b. C-2 Variances – “Flexible C” Variance. The Board of Adjustment has the power to grant relief from the strict application of zoning ordinance regulations pursuant to N.J.S.A. 40:55D-70c(2) where in an application or appeal relating to a specific piece of property the purposes of the New Jersey Municipal Land Use Law would be advanced by a deviation from the zoning ordinance requirements and the benefits of the deviation would substantially outweigh any detriment.

No variance or other relief may be granted without a showing that such variance or other relief can be granted without substantial detriment to the public good and will not substantially impair the intent and purpose of the zone plan and zoning ordinance.

V. Engineering

- A. Pursuant to §17-82.3 of LUDO, any development that requires a "C" variance to exceed the maximum lot coverage permitted within the applicable zoning district is subject to minor development stormwater management design standards of §17-82.5. Pursuant to §17-82.5 (d)(2), 120% treatment for all lot coverage beyond the allowable 10% is required.
- B. The required stormwater mitigation is calculated as $1\% * 87,141 \text{ SF} * 120\%$, or the equivalent of 1,045 SF of area to be recharged. The recharge volume is a 3” depth over the 1,045 SF area, or 261 cubic feet (CF).
- C. To satisfy the stormwater management requirements of LUDO, the applicant proposes a small-scale bioretention island, which is an acceptable best management practice (BMP) for groundwater recharge by the NJDEP Stormwater BMP manual. The recharge volume is provided by approximately 1,194 SF of roof area and conveyed by a 4” pipe.

VI. Miscellaneous

- A. The as-built survey revealed that the existing drainage inlets were not shown on the approved plot plan for the in-ground pool. The size, material, alignment, and ultimate discharge of the inlets shall be provided.

VII. Recommended Conditions of Approval

- A. Should this application be approved, we recommend, at a minimum, the following conditions of approval:
 - 1. Continued payment of any required application and escrow fees.
 - 2. The applicant must obtain all applicable zoning and building permits.
 - 3. A grading plan submitted to the Board Engineer for approval showing the construction details of the bioretention island, including a planting schedule with types and quantities of vegetation.

4. A soil log demonstrating that there is a minimum vertical separation of 2 feet between the bottom of the soil bed and seasonal high water.
5. The bioretention basin and the maintenance plan shall be reflected in a deed notice recorded in the Mercer County Clerk's office prior to issuance of a CO. A form of deed notice shall be submitted to the Board Engineer and Board Attorney for approval prior to filing.
6. The bioretention basin shall be subject to inspection by the Board Engineer.

TOWNSHIP of HOPEWELL

MEMORANDUM

TO: Hopewell Township Zoning Board

FROM: Glen Belnay, Ph. D, PP, AICP, CEP
Part-Time Registered Environmental Health Specialist

DATE: March 27, 2023

SUBJECT: Kumar Pool and Patio
1 Applewood Drive
Block 37, Lot 4.17
Case 23-02

The applicants Maroj and Dhaarna Kumar propose the construction of a storm water system to mitigate an exceedance of impervious coverage created by the recent construction of an in-ground swimming pool and patio at their 1 Applewood Drive residence, Block 37, Lot 4.17. A file review and site visit found the well located in the driveway and septic system in the opposite side yard, neither impacted by the pool, patio or proposed storm water management system. As such, the Health Department has no comment on the applicant's proposal.