

Memo

To: Board of Adjustment Chairperson McGinley and Secretary Carpinelli
Verona Board of Adjustment (BoA)

From: Plan Review Committee of the Verona Environmental Commission

c: Verona Environmental Commission Chair

Date: August 11, 2025

Re: **Case # 2024-06**
33 Cypress Avenue [Block 1104, Lot 2]
Verona, New Jersey

Zone: R-60 (Residential Medium Density-Single Family)

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 33 Cypress Avenue in Verona submitted by Nhi and Nick Stanlaw, which we received on June 25, 2025. We understand that the Applicant is seeking to obtain variances to construct an in-ground pool, patio, wall, relocation of a shed and accompanying ramp which exceeds total improved lot coverage and accessory structure coverage in the rear yard. The comments below are provided for the Board's consideration:

- 1) Based on the topographic site plan provided in the application and prepared by First Sight Surveying, Precautionary Steep Slopes exist on site with slopes between 15% and 25% (greater than 400 ft² roughly estimated in the attached annotated plans). While we understand that properties in R-60 Zones are exempt from Verona's Steep Slope Ordinance, we recommend that the Applicant be cognizant of the potential for erosion and downgradient sedimentation during construction and plan appropriately.
- 2) Existing and Proposed Total Improved Lot Coverage is listed as 31.7% (2,663 ft²) and 47.8% (4,014 ft²) on the Sheet 1, respectively. Scaling off the drawing, we calculated an Existing Improved Lot Coverage of 31.9% based on an Existing "Improved Area" of 2,671.5 ft² (please see attached annotated pdf). Furthermore, we calculated a Proposed Improved Lot Coverage of 46.4% based on a Proposed "Improved Area" of 3,895.1 ft² (an increase of about 1,224 ft²) assuming the permeable pavement is maintained with a 20% void area. We understand that the maximum Improved Lot Coverage for the R-60 Zone is 40%. Due to the proposed size of the pool, this accessory structure exists in the rear yard setback. Perhaps a slight reduction in scope would eliminate this issue.
- 3) The VEC PRC notes that the Applicant is proposing to add a permeable paver patio surrounding the proposed in-ground pool. The system is set to pipe stormwater to the south side of the patio into a Cultec detention and recharge system. The VEC PRC wonders if the Cultec system should be moved farther east on the lot to a lower elevation to aid the transport of stormwater capture from the patios.
- 4) Joint spacing should make up at least 20% of the area of the permeable paver system. Additionally, we recommend that the permeable paver system be tested, post-construction, for infiltration using ASTM C1781 titled, "Standard Test Method for Surface Infiltration Rate of Permeable Unit Pavement Systems." The final approval of the

permeable paver system should be contingent upon meeting criteria set by Applicant's Engineer.

- 5) The proposed retaining wall includes a detail for a PVC drainage tile behind the wall. If this detail is implemented, where are the weep holes located on the wall and where will the water daylight for this 3- to 3.8-foot high wall? What are the impacts on downgradient property for those weep holes and the sheet flow that will cascade down the wall, especially near the relocated shed and the proposed equipment pad?
- 6) The VEC PRC understands that the Applicant wishes to remove a tree for this project. However, we were not able to locate the tree on the plans. We recommend that the Applicant consult with Verona's [Recommended Plant Selection List](#) included in Verona's Zoning Code, §150 for a wide selection of replacement trees.
- 7) We recommend that other downspout pipes on the home be disconnected from storm drains and redirected to flow away from the home, or neighboring homes, and over the property's permeable areas, gardens, and lawns.
- 8) In addition to the above comments, please see attached the Low Impact Planning and Construction Checklist. This suggested list was compiled by the VEC based on best available practices.

Low Impact Checklist: Construction

This suggested list has been compiled by the Verona Environmental Commission based on best available practices. This is not a requirement of the uniform construction code. It is intended to be beneficial to all residents considering renovations and new construction. The purposes of this list are to 1) assist those planning construction projects to do so in a manner that causes the least disruption to the environment; 2) establish a healthy setting for those occupying the new or renovated space; and 3) reduce waste and save resources. Implementing environmentally friendly practices can be economical when considered at pre-construction stages and are often beneficial in the long term.

General Construction

- ☐ Recycle and/or salvage non-hazardous construction and demolition debris
- ☐ Use renewable building material and products
- ☐ Incorporate renewable energy (i.e. geothermal, solar)
- ☐ Use local products (i.e. local and sustainable woods)
- ☐ Use local construction products and companies
- ☐ Conserve energy and reduce electricity use as much as possible

Grounds & Landscaping

- ☐ Create a sedimentation control plan to prevent sediment from moving off site.
- ☐ Use native plantings (Native plants are adapted to thrive in local conditions)
- ☐ Use captured rainwater or recycled grey water for irrigation
- ☐ Provide bicycle parking to help reduce overcrowded streets and CO2 emissions.

Storm Water Management

- ☐ Avoid runoff to other properties by installing an underground cistern or rain garden. This will keep water on your own property and out of the sewer system.
- ☐ Limit impervious surfaces – use an open grid pavement system (at least 50% pervious)
- ☐ Promote infiltration that captures and treats storm water runoff from rainfall
- ☐ Use a water retention system (i.e. rain barrel) to collect rainwater for non-potable uses

Lighting

- ☐ Choose LED lights (the most environmentally-efficient option)
- ☐ Purchase renewable electricity, either directly from your power supplier, from an independent clean power generator, or through renewable energy certificates.
- ☐ Use skylights or solo tubes for natural daytime lighting. Use sensor controls in commercial or industrial settings and solar lighting outdoors.

Foundation & Basement

- ☐ Use environmentally friendly foundation sealants (rather than black tar)
- ☐ Prevent sump pump water from flowing into the sewer system

Roofing

- ☐ Use light color roofing materials to limit heat absorption created by darker roofs
- ☐ Use roofing material with a solar reflectance index (SRI) equal to or greater than 78 for low roofs and 29 for steep-sloped roofs
- ☐ Install tile or metal roofs
- ☐ Consider installing a vegetated roof

Heating & Cooling

- ☐ Use 2 x 6 studs instead of 2 x 4 to increase amount of insulation
- ☐ Install programmable thermostats that adjust temperatures throughout the day
- ☐ Use occupant sensing and/or remote control thermostat technologies
- ☐ Install heat pumps to transfer energy heat and cold Use high-efficiency boilers/furnaces
- ☐ Use attic fans to regulate heating and cooling

Windows

- ☐ Choose ultraviolet window protection to protect against sun damage
- ☐ Install triple pane windows or windows with Argon or Kryton gas between panes

Products

- ☐ Choose products with low VOCs (VOCs are found in adhesives, interior paints, cabinets, etc)
- ☐ Avoid products that contain hazardous chemicals such as formaldehyde and cyanide
- ☐ Choose ENERGY STAR® appliances
- ☐ Install dual flush toilets Install low flow shower heads
- ☐ Avoid garbage disposals and make provisions for composting

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Low Impact Checklist: Planning

This suggested list has been compiled by the Verona Environmental Commission based on best available practices. This list is intended to assist individuals involved in planning and building projects in Verona Township towards submitting low impact plans. The goal of a low impact plan is not only to increase cost savings and add value to your project but to make environmentally responsible choices and eliminate project delays in early stages of the planning process.

General Construction & Design

- ☐ Provide occupants with connection to outdoor space through increased natural light and views
- ☐ Orient buildings facing southwest to maximize potential solar installation
- ☐ Use orientation and design to maximize passive solar heat/cooling
- ☐ Use proper planning to prevent damage to surrounding properties and public spaces
- ☐ Minimize disturbance to soils and vegetation
- ☐ Recycle and/or salvage non-hazardous construction and demolition debris
- ☐ Use renewable building materials and products
- ☐ Use local and sustainable woods
- ☐ Incorporate renewable energy and reduce energy use

Grounds & Landscaping

- ☐ Create a sedimentation control plan Limit altering steep slope areas
- ☐ Encourage landscaping that requires limited moving, trimming, and watering
- ☐ Create landscapes that limit the need for lawn chemicals and maintenance
- ☐ Position evergreens to the north to shield wind/ Position deciduous trees to the south to cool buildings
- ☐ Use native plantings (Native plans are adapted to thrive in local conditions)
- ☐ Place parking spaces in shaded areas
- ☐ Place bicycle parking racks in secure areas near entrances
- ☐ Use paving materials with an SRI value >29. This will reflect, not absorb solar heat.

Storm Water Management

- ☐ Limit impervious surfaces – use an open grid pavement system (at least 50% pervious)
- ☐ Reduce impervious cover to promote infiltration that captures and treats storm water
- ☐ Use a water retention system (i.e. rain barrel) to collect rainwater or recycled gray water for non-potable uses

Foundation & Basement

- ☐ Use alternative practices (rather than black tar) for foundation sealants
- ☐ Encourage aeration and ventilation
- ☐ Draw sunlight into basement areas through access windows

Roofing

- ☐ Use light color roofing materials to limit heat absorbed by dark colored roofs
- ☐ Use roofing material with a solar reflectance index (SRI) equal to or greater than 78 for low roofs and 29 for steep sloped roofs
- ☐ Consider Tile or Metal roofs
- ☐ Construct roofs that can support solar installations

Lighting

- ☐ Use solar lighting outdoors
- ☐ Use skylights or solo tubes for natural daytime lighting
- ☐ Use motion sensor lighting where applicable
- ☐ Choose energy-efficient light bulbs

Products

- ☐ Avoid products that contain hazardous chemicals such as formaldehyde and cyanide
- ☐ Use local products (i.e. local and sustainable woods)
- ☐ Use local construction equipment and companies when possible

For more information and resources please see:

The Native Plant Society of New Jersey - <http://www.npsnj.org>

The Association of New Jersey Environmental Commissions - <http://www.anjec.org>

US Green Building Council NJ Chapter - <http://usgbc.org>

New Jersey Green Building Manual - <http://greenmanual.rutgers.edu>

The New Jersey Department of Transportation Master Plan - <http://njbikepedplan.com>

Rutgers Center for Green Building - <http://greenbuilding.rutgers.edu>

The Verona Environmental Commission - <http://www.veronaec.org>