

Memo

To: Board of Adjustment Chairperson McGinley and Secretary Kester

Verona Board of Adjustment (BoA)

From: Plan Review Committee of the Verona Environmental Commission

c: Verona Environmental Commission Chair

Date: November 26,.2024

Re: Case # 2024-23

38 Forest Avenue [Block 1602, Lot 15]

Verona, New Jersey

Zone: R-60 (Residential Medium Density)

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 38 Forest Avenue in Verona submitted by Ms. Courtney Rombough, which we received on November 19, 2024. We understand that the Applicant is seeking to obtain multiple variances for the installation of a two story addition and a deck which will include an increase impervious coverage over the total allowable coverage for the R-60 Zone.

- 1) Existing and Proposed Total Improved Lot Coverage is listed as 33.8% and 43.5% on the application, respectively. We understand that the maximum Improved Lot Coverage for the R-60 Zone is 40%.
- 2) The VEC PRC understands that the Applicant proposed a net increase of 648 ft² after removing the paver patio and cites the requirement for Stormwater management on their site plans, as the increase exceeds the 400 ft². However, the Applicant has not included any stormwater mitigation system in the plans nor filed the minor development stormwater management application and/or other necessary calculations for Board and Engineer review, as required in Zoning Code §150-25-10.
- 3) According to the Stormwater Ordinance in Verona's Zoning Code §150-25.7A(1) the Applicant is required to use of green infrastructure for on-site retention. Table 7 lists multiple green infrastructure BMP's (best management practices) for potential installation and use. The strategies include pervious paving systems, small scale bioretention basins, cisterns, swales, etc. The Applicant may also consider planting trees on the site to help aid in stormwater retention.
- 4) The Applicant may also provide any planned planting lists in accordance with Recommended Plant Selection List included in Verona's Zoning Code, §150.
- 5) We recommend that downspout pipes on the home be disconnected from storm drains and redirected to flow away from the home, over the property's permeable areas, gardens, and lawns.

6) 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.

[JP/WS] VEC_2024-12-18 Comments 38 Forest Ave.docx

Verona Environmental Commission

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

Verona Environmental Commission

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 plans 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

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