

Memo

То:	Mrs. Ashley Neale Verona Board of Adjustment (BoA) Acting Administrator
From:	Plan Review Committee of the Verona Environmental Commission
C:	Verona Environmental Commission Chair
Date:	February 10, 2021
Re:	Case # 2021-05 19 Hamilton Road [Block 801, Lot 35] Verona, New Jersey
Zone:	R-50 (High Density Single Family)

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 19 Hamilton Road in in Verona submitted by Mrs. Meghan Kelly, which we received on January 25, 2021. We understand that the Applicant is seeking to obtain a variance for deck construction that will increase total improved lot coverage over the current existing 45% up to 49.62% when 40% is permitted. The comments below are provided for the Board's consideration:

- 1) It appears that no trees or plantings would require removal to install the decking.
- Should this application be approved, we recommend that native grasses, ferns, wildflowers, sedges, and/or shrubs be added around the deck perimeter to aid with moderate stormwater runoff.
- 3) We recommend that the applicant properly dispose of and or recycle all construction waste and use green products and building practices for the proposed construction.
- 4) In addition, please see attached the Low Impact Planning and Construction Checklist. This suggested list was compiled by the VEC based on best available practices.

[STD/JP/JD] VEC_2021-02-10 Comments 19 Hamilton Rd.docx

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)

 \Box 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

 \Box 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

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

 \Box Create landscapes that limit the need for lawn chemicals and maintenance

 \Box 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

 \Box 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)

 \Box 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
- \Box 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 - <u>http://www.npsnj.org</u> The Association of New Jersey Environmental Commissions - <u>http://www.anjec.org</u> US Green Building Council NJ Chapter - <u>http://usgbc.org</u> New Jersey Green Building Manual - <u>http://greenmanual.rutgers.edu</u> The New Jersey Department of Transportation Master Plan - <u>http://njbikepedplan.com</u> Rutgers Center for Green Building - <u>http://greenbuilding.rutgers.edu</u> The Verona Environmental Commission - <u>http://www.veronaec.org</u>