

# Memo

To:	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:	May 31, 2022
Re:	<b>Case # 2022-07</b> 18 Franklin Street [Block 1002, Lot 18] Verona, New Jersey
Zone:	R-60 (Medium Density Single Family Residential)

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 18 Franklin Street in Verona submitted by Craig Burden, which we received on May 17, 2022. We understand that the Applicant is seeking to obtain multiple variances for a partially installed pool and surrounding decking that exceeds the maximum building coverage, maximum allowable total lot coverage, and rear yard setback allowance for that zone. The comments below are provided for the Board's consideration:

- 1) The Applicant has partially installed the footings and framing for decking, adjacent to an installed above ground pool and related pool equipment. These installations will increase total improved lot coverage from 32.5% to 48.3% when 40% is the maximum allowable in the R-60 Zone.
- 2) It is also noted that this application has not been reviewed for any related mechanical equipment that may be related to the pool, which may add further impervious coverage for installation padding which would support such equipment.
- As per the requirement to comply with the Verona Stormwater Ordinance, §455-17, as a minor development (greater than 400 ft<sup>2</sup> of impervious surface added) and cited by the Zoning Code Officer's Letter of Denial, dated March 11, 2022:
  - a) Stormwater mitigation calls for the installation of green infrastructure measures. It appears that the Applicant has proposed a planted basin area on the sheet entitled "General Notes & Details". However, the engineer's notes do not indicate a list of planned planting for this area. The VEC PRC respectfully recommends that, should this the Applicant be given approval, that he be asked to plant native grasses, groundcovers, perennials, shrubs, and trees in those delineated areas.
  - b) The Sheet entitled "Plot Plan" details white stone as being placed at the area beyond the pool and towards the rear fencing. The Applicant should testify as to the extent of the areas that are proposed to receive white stone and the extent of the area proposed for the retention basin area. Also, what type of surface is proposed for the retention basin area?
  - c) The Applicant should disconnect any connected roof leaders and direct them towards the stormwater retention basin or other green infrastructure element.

- d) The Applicant should give testimony on the maintenance of this planned, planted retention basin.
- 4) 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.
- 5) 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/AC] VEC\_2022-05-31 Comments 18 Franklin St.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<sup>®</sup> 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>