

### Memo

To: Board of Adjustment Chairperson McGinley and Secretary Metwaly

Verona Board of Adjustment (BoA)

From: Plan Review Committee of the Verona Environmental Commission

c: Verona Environmental Commission Chair

**Date:** July 29, 2024

**Re:** Case # 2024-12

15 Parkhurst Street [Block 1604, Lot 41]

Verona, New Jersey

**Zone:** R-70 (Low Density Single Family)

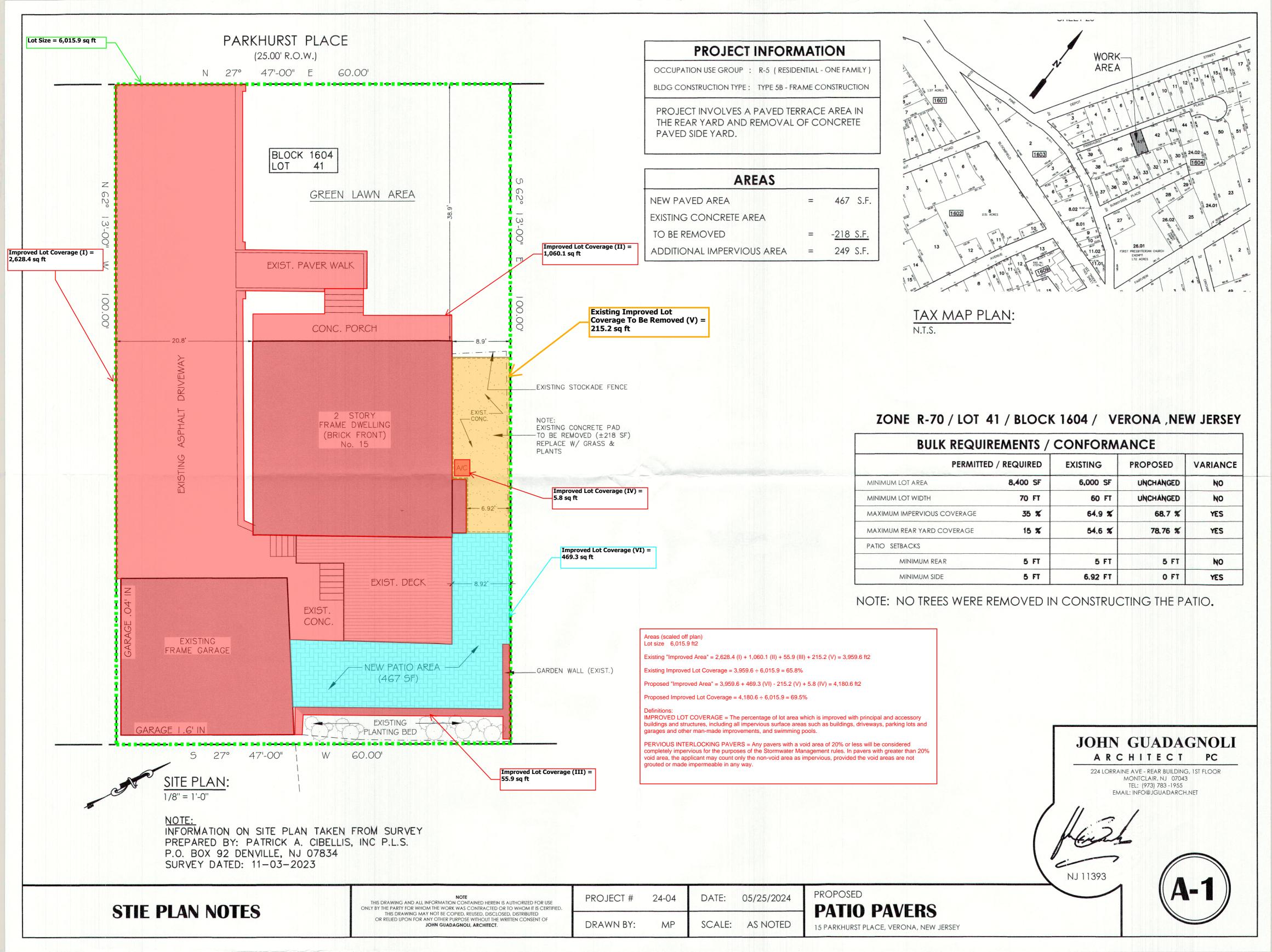
The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 15 Parkhurst Street in Verona submitted by Mr. Allteni, which we received on July 9, 2024. We understand that the Applicant is seeking to obtain variances for the installation of a rear yard patio, installed without permits, for exceeding total allowable lot coverage and without the required installation of stormwater mitigation. The comments below are provided for the Board's consideration:

- 1) The VEC PRC notes that the total improved lot coverage on the property, prior to the installation of the paver patio, was presented as nearly 65% in the application. However, in the existing condition at the site (patio already installed without permit), the existing total improved lot coverage on the property is about 73%, as indicated in Township of Verona Zoning Department Letter dated January 25, 2024. The proposed property alterations, which include the paver patio, result in a proposed total improved lot coverage of nearly 69%, as presented in the application. The for each site condition presented, the total improved lot coverage for the property exceeds the allowable limits of 35% by nearly double.
- 2) Existing and Proposed Improved Lot Coverage is listed as 64.9% and 68.7% on the application, respectively. Scaling off the drawing, we calculated an Existing Improved Lot Coverage of 65.8% based on an Existing "Improved Area" of 3,959.6 ft² (please see attached annotated pdf). Furthermore, we calculated a Proposed Improved Lot Coverage of 69.5% based on a Proposed "Improved Area" of 4,180.6 ft². We understand that the maximum Improved Lot Coverage for the R-70 Zone is 35%.
- 3) The removal of the 218 ft² of concrete on the north side of the home is a step in the right direction. However, even this modest removal of impervious surface will not mitigate the excessive impervious coverage that exists or is proposed for this site. The Applicant is still proposing an increase in new impervious coverage of about 467 ft² for the new patio area.
- 4) The VEC PRC understands that the Applicant has exceeded the 400 ft<sup>2</sup> of new impervious surface, which requires stormwater management mitigation using green infrastructure as per §150-25.7 Stormwater Management Requirements for Minor De

<u>velopment</u>. The PRC recommends that the Applicant provide testimony as to which green infrastructural best management practices are planned for installation and where they will be installed on the property. The Applicant should also provide any planned planting lists in accordance with <u>Recommended Plant Selection List</u> included in Verona's Zoning Code, §150.

5) 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/STD/WS] VEC\_2024-07-29 Comments 15 Parkhurst Street.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)
☐ 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

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

#### 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
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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 - <a href="http://www.npsnj.org">http://www.npsnj.org</a>

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 - <a href="http://greenmanual.rutgers.edu">http://greenmanual.rutgers.edu</a>

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

Rutgers Center for Green Building - <a href="http://greenbuilding.rutgers.edu">http://greenbuilding.rutgers.edu</a>

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