# Memo

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| **To:** | Board of Adjustment Chairperson McGinley and Zoning Official Miesche<br>Verona Board of Adjustment (BoA) |
| **From:** | Plan Review Committee of the Verona Environmental Commission |
| **c:** | Verona Environmental Commission Chair |
| **Date:** | April 29, 2024 |
| **Re:** | **Case # 2024-06**<br>12 Lynwood Road [Block 1404, Lot 25]<br>Verona, New Jersey |
| **Zone:** | R-50 (Residential High Density Single Family) |

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 12 Lynwood Road in Verona submitted by Ms. Rachael Wagner, which we received on April 17, 2024. We understand that the Applicant is seeking to obtain variances in conjunction with installing an inground pool, patio, and pool equipment in the backyard of the property. The comments below are provided for the Board's consideration:

1) The proposed construction in the form of and in-ground pool and patio will likely add to the overall impervious surfaces for the property. The property appears to contain additional impervious surfaces not identified on the submitted application as depicted in publicly available Google images; this includes a front porch built after October 2020 approximately 180 $ft^2$ in area. The Applicant does not indicate whether the property has gone before the Board of Adjustments for a variance related to exceeding the permissible Improved Lot Coverage. Have all improved areas on property been properly permitted? Can the Applicant document the approval of the exceedance of the existing Improved Lot Coverage?

2) Scaling off the provided site plan and reviewing Google images of the property, we calculated an Existing Improved Lot Coverage of 42.1% based on an estimated "Improved Area" of 2,551.5 $ft^2$ (please see attached annotated pdf). We calculated a Proposed Improved Lot Coverage of 43.2% based on a Proposed "Improved Area" of 2,615.5 $ft^2$. We have assumed that the temporary tent located in the backyard would be removed to facilitate the construction of the in-ground pool. We understand that the maximum Improved Lot Coverage for the R-50 Zone is 40%.

3) The plans indicate a proposed deck drain adjacent to the in-ground pool, but do not indicate where the drain is conveyed to. We recommend that the Applicant provide testimony to clarify stormwater management on their property. Additionally, 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.

4) 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_2024-04-29 Comments 12 Lynwood Rd.docx

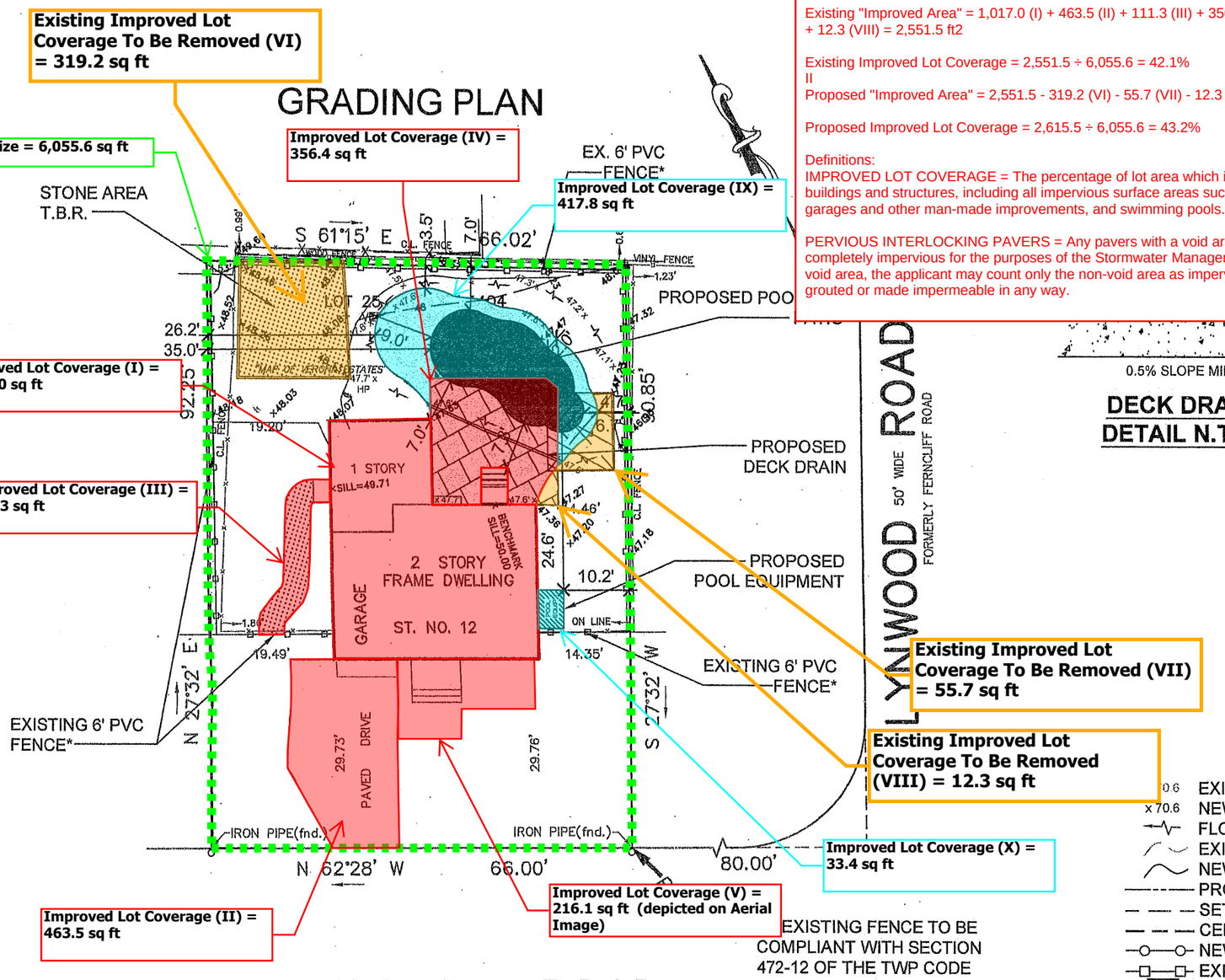
**COVERAGE CALCULATIONS**

| | | |
|---|---|---|
| **TOTAL LOT AREA** | | **6,042 SQ. FT. = 100%** |
| **EXISTING:** | | |
| DWELLING | 1,013 SQ. FT. | |
| FRONT PORCH | 54 SQ. FT. | |
| DRIVEWAY | 461 SQ. FT. | |
| REAR PATIO | 377 SQ. FT. | |
| **SUB-TOTAL EXISTING IMPERVIOUS LOT COVERAGE** | | **1,905 SQ.FT. = 31.5%** |
| **PROPOSED:** | | |
| POOL PATIO | 498 SQ. FT. | |
| POOL WATER | 278 SQ. FT. | |
| REAR PATIO T.B.R. | -377 SQ. FT. | |
| **SUB-TOTAL PROPOSED IMPERVIOUS LOT COVERAGE** | | **399 SQ. FT. = 6.6%** |
| **TOTAL IMPERVIOUS LOT COVERAGE** | | **2,304 SQ. FT. = 38.1%** |
| **MAXIMUM IMPERVIOUS LOT COVERAGE PERMITTED** | | **2,417 SQ. FT. = 40%** |

| | | |
|---|---|---|
| **REAR YARD TOTAL AREA** | | **1,996 SQ. FT. = 100%** |
| **EXISTING:** | | |
| REAR PATIO | | 377 SQ. FT. = 18.9% |
| **SUB-TOTAL REAR YARD LOT COVERAGE** | | **377 SQ. FT. = 18.9%** |
| **PROPOSED:** | | |
| POOL PATIO | 498 SQ. FT. | |
| POOL WATER | 278 SQ. FT. | |
| REAR PATIO T.B.R. | -377 SQ. FT. | |
| **SUB-TOTAL REAR YARD LOT COVERAGE** | | **399 SQ. FT. = 19.9%** |
| **TOTAL IMPERVIOUS REAR YARD LOT COVERAGE** | | **776 SQ. FT. = 38.8%** |
| **MAXIMUM IMPERVIOUS REAR YARD LOT COVERAGE PERMITTED** | | **299 SQ. FT. = 15%** |

NOTE:
1. VARIANCE REQUESTED FOR SECTION 150-7.5 A, POOLS MUST BE A MINIMUM OF 10 FEET FROM SIDE AND REAR PROPERTY LINES. THE PROPOSED POOL IS LOCATED 6.7 FEET FROM THE SIDE PROPERTY LINE AND 7 FEET FROM THE REAR PROPERTY LINE. ✓
2. VARIANCE REQUESTED FOR SECTION 150-7.5 A, POOLS MUST BE A MINIMUM OF 10 FEET FROM PRINCIPAL BUILDING. THE PROPOSED POOL IS LOCATED 7 FEET FROM THE DWELLING. ✓
3. VARIANCE REQUESTED FOR SECTION 150-5.3 C (6), PATIOS MUST BE A MINIMUM OF 5 FEET FROM PROPERTY LINES. THE PROPOSED PATIO IS LOCATED 4.7 FEET FROM THE SIDE PROPERTY LINE AND 3.5 FEET FROM THE REAR PROPERTY LINE. ✓
4. VARIANCE REQUESTED FOR SECTION 150-17.5 F(4), 15% MAXIMUM PERMITTED AGGREGATE AREA COVERED BY ACCESSORY STRUCTURES IN THE REAR YARD. PROPOSED COVERAGE 38.8%. ✓
5. NO TREES ARE TO BE REMOVED FROM THE PROPERTY ✓
6. PROPERTY SITUATED IN ZONE R-50 ✓
7. POOL TOPOGRAPHIC PLAN BASED ON LOCATION SURVEY BY RICHARD T. WATSON, NJPLS #34884 DATED 05/18/2020 AND TOPOGRAPHY BY JONATHAN A. STUHL, NJPLS #43314 DATED 10/12/2023 AND PROVIDED BY THE HOMEOWNER TO POOLTOWN , INC.

# GRADING PLAN




0.5% SLOPE MIN.

**DECK DRAIN DETAIL N.T.S.**

Areas (scaled off plan)
Lot size ≈6,055.6 ft2

Existing "Improved Area" = 1,017.0 (I) + 463.5 (II) + 111.3 (III) + 356.4 (IV) + 216.1 (V) + 319.2 (VI) + 55.7 (VII) + 12.3 (VIII) = 2,551.5 ft2

Existing Improved Lot Coverage = 2,551.5 ÷ 6,055.6 = 42.1%
II
Proposed "Improved Area" = 2,551.5 - 319.2 (VI) - 55.7 (VII) - 12.3 (VIII) + 417.8 (IX) + 33.4 (X) = 2.615.5 ft2

Proposed Improved Lot Coverage = 2,615.5 ÷ 6,055.6 = 43.2%

Definitions:
IMPROVED LOT COVERAGE = The percentage of lot area which is improved with principal and accessory buildings and structures, including all impervious surface areas such as buildings, driveways, parking lots and garages and other man-made improvements, and swimming pools.

PERVIOUS INTERLOCKING PAVERS = Any pavers with a void area of 20% or less will be considered completely impervious for the purposes of the Stormwater Management rules. In pavers with greater than 20% void area, the applicant may count only the non-void area as impervious, provided the void areas are not grouted or made impermeable in any way.

**LEGEND**

| | |
|---|---|
| 70.6 | EXISTING POINT GRADE |
| x 70.6 | NEW POINT GRADE |
| | FLOW / PITCH |
| | EXISTING TOPO LINE |
| | NEW TOPO LINE |
| | PROPERTY LINE |
| | SET BACK LINE |
| | CENTERLINE OF POOL |
| | NEW FENCE LINE |
| | EXISTING FENCE LINE |
| POOL EQUIP. | POOL FILTER LOCATION |

POOL FILTER LOCATION APPROX. ±24.6' FROM WATER LINE

(NOTE: NOT ALL SYMBOLS REQUIRED TO BE SHOWN ON LAYOUT PLAN)


POOL TOWN
POOL TOWN, INC. | 6500 Rt 9 | HOWELL, NJ 07731
TEL: 800.882.0152 | FAX: 732.364.1815
www.PoolTownNJ.com


| No. | Date | Revision/Issue |
|---|---|---|
| 2 | 12/12/23 | ADDRESSED TWP COMMENTS (11/29/23) |
| 1 | 11/09/23 | CHANGED POOL SHAPE |

WAGNER RESIDENCE
BLOCK 1404 LOT 25
VERONA TOWNSHIP,
NEW JERSEY, 07044


THE CANNON GROUP, PC
ENGINEERING, PLANNING, SURVEYING
1466 ROUTE 88 W, SUITE B2,
BRICK, NJ 08724
PHONE: (732) 458.0003
EMAIL: MTC@cannongrouppc.com


PROPOSED SWIMMING POOL GRADING PLAN

Date 10/13/23
Scale AS NOTED
Project 2230911
Sheet 2 OF 2


MICHAEL T. CANNON
NJ PROF. ENGR. & LAND SURVEYOR
NJ LICENSE NO. 34691

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

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

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