

BOSWELL

Headquarters
330 Phillips Avenue
South Hackensack, NJ 07606

O 201 641 0770
info@boswellengineering.com
boswellengineering.com

October 23, 2024

Board of Adjustment
Township of Verona
600 Bloomfield Avenue
Verona, New Jersey 07044

Attention: Ms. Caitlin Kester, Zoning Board Secretary

Re: Cristina Queiroz
Board of Adjustment Application - Rear Patio
110 Linden Street
Block 901, Lot 29
Township of Verona
Our File No. VAES-191

Dear Board Members:

We have received copies of the following documents relative to the above referenced application:

- a. Submission Letter prepared by Rosemary Stone-Dougherty, Esq., dated April 25, 2024.
- b. Township of Verona Board of Adjustment Application, dated April 25, 2024, including the following:
 - Amendment to Application
 - Zoning Data – Variance Information
 - Affidavit of Ownership, dated April 25, 2024
 - Tax Certification, dated April 4, 2024
 - 200 Foot Property Owner's List, dated April 8, 2024
 - Property Photos
- c. Zoning Denial Letter prepared by Kathleen Miesch, dated September 25, 2024.
- d. Survey (1 sheet) entitled, "Location Survey of Property of Cristina Queiroz, Borough of Verona, Essex County, N.J.", prepared by Manno Surveying, Inc., dated July 7, 2023.

Following our review of the above referenced documents, we offer the following comments:

Application

1. The Applicant/Owner in this matter is:

Cristina Queiroz
110 Linden Street
Verona, New Jersey 07044



The Applicant must notify the Township of any changes in this information.

2. The site (Block 901, Lot 29) is an interior lot located on the north side of Linden Avenue. It lies in the R-50 High-Density Single-Family Zone.
3. The lot is currently developed with a two-story single-family dwelling, attached garage, front concrete porch, steps, paver sidewalk, rear paver patio, fire pit, shed, fence, walls, and paver drive.
4. The Applicant is seeking approval for replacing the existing asphalt side walkway with brick pavers and installing a new paver patio with fire pit in the rear yard. These improvements were constructed without obtaining appropriate permits from the Township.
5. The Applicant received a zoning denial (# 2024-112) for the proposed improvements dated September 24, 2024 outlining variances associated with the application.

Submission Status

6. The application is deemed **complete** for a public hearing with respect to the items of the Municipal Code that the Municipal Engineer is charged to review

Variances

7. The following variances are required as indicated in the Zoning Denial Letter dated September 24, 2024:
 - a. Minimum Patio Setback from Property Line: Per Section 150-5.3 C (6) the minimum required patio setback from property line is 5 feet. The new patio has side yard setback of 1 foot. A variance is required.
 - b. Maximum Impervious Coverage: Per Section 150-17.5 D (4) maximum permitted impervious coverage is 40% in the R-50 Zone. The overall increased impervious coverage is 53.6% with the new patio. A variance is required.
 - c. Maximum Aggregate Area Covered by Accessory Structures: Per Section 150-17.5 F (4) maximum permitted aggregate area covered by accessory structures is 15%. The overall increased rear yard coverage is 33.2% with the new patio. A variance is required.

Plot Plan

8. The Applicant should provide testimony as to when the rear yard patio improvements were constructed. Google images from May 2023 show that the increase in patio surface was not present. The Applicant should submit a property survey prior to the patio improvements to determine the increase in impervious coverage as a result of the new construction. The increase in impervious coverage may affect the stormwater management required.
9. Spaces for signature shall be provided for the Board Chairman, Board Secretary, and Township Engineer.



10. The Applicant shall indicate if approvals were previously obtained for the existing shed and fence in the rear yard of the property.
11. The Applicant shall provide testimony and summarize all site modifications.
12. The Applicants shall be aware of their responsibility to repair any damage to improvements within the Linden Avenue Township Right-of-Way including, but not limited to, sidewalk, curb, and asphalt, caused by construction activities associated with the improvements on the subject lot.

Stormwater Management

13. Per Section 150-25.2, minor developments are defined as any development that results in 400 or more square feet of new impervious surface. The proposed net increase in impervious coverage shall be provided. We anticipate the project will qualify as a minor development and stormwater management is required in accordance with Section 150-25.7 of the Township Code.

A grading and drainage plan shall be submitted for review.

14. Per Section 150-25.7 A (1), for each square foot of new impervious surface, two gallons of stormwater is required to be managed using green infrastructure practices for minor developments.

Support drainage calculations shall be provided to confirm the required and proposed runoff storage volume.

15. Our office is required to inspect the construction of the drainage improvements. All inspection requests shall be made at least 48 hours prior to the required inspection.
16. The property owner is responsible for maintenance of the stormwater management facilities. All stormwater management facilities are recommended to be inspected annually.
17. The final grading of the lot must ensure additional surface runoff does not adversely impact any adjoining properties. Any required modifications shall be the property owner's responsibility, in coordination with their engineer.

Tree Removal

18. The Applicant shall indicate if any trees were removed during construction of the rear patio. If so, map and identify size of trees removed.

Retaining Walls

19. The survey shows wall around the rear patio. A construction detail shall also be provided for this wall with the maximum exposed height labeled and identified.
20. Top and bottom wall elevations shall be provided on plan.
21. Please be advised, all retaining walls greater than three (3') feet in exposed height require retaining wall stability calculations to be provided by a licensed professional engineer in the



State of New Jersey. The calculations must be signed and sealed, for the Township's review and approval prior to construction.

Soil Movement

22. Soil movement quantities shall be provided on plan for the patio construction.
23. The Township of Verona has a Soil Removal Ordinance (Section 440) and any soil to be moved is subject to review and approval by Township Council.
24. We anticipate the disturbance due to patio was less than 5,000 square feet. Therefore, approval from HEPSCD is not required.
25. Any damage to the Township roadway, curb or storm drainage will be the responsibility of the property owner to satisfactorily address as per the Township Engineer.

Roof Leaders, Sump Pump Discharge, Grading and Property Maintenance Guidelines

26. Sump pump, roof leaders and storm water pipe drain discharge shall preferably be directed onto an absorbent surface as grass, mulch, rock or soil so the discharge will be dissipated and not immediately drain to the Township Right-of-Way or adjacent properties. The discharge location shall be as approved by the Engineer or Public Works Manager or his/her designee. In the event it is not feasible to direct discharge on to an absorbent surface, the discharge may be directed to a storm sewer, swale, ditch, detention basin, drainage basin or other drainage facility or location as approved by the Engineer, Public Works Manager or his/her designee. If a connection to the storm sewer is approved, a permit will be required from the Engineer, Public Works Manager prior to installation. The connection must also be inspected by the Engineer or Public Works Manager.
27. The discharge location shall not create a public nuisance. This includes any condition or act which is or may become injurious or hazardous to the public.
28. The discharge shall not create a build-up of icing, standing water or algae growth on the street, sidewalk or public Right-of-Way.
29. The discharge shall not be directed towards an adjacent property in such a manner as to cause damage to the adjacent property or create a nuisance.
30. No person shall connect, or cause or permit to be connected, any sump pump, pipe drain, floor drain, surface drain, subsoil drain or leader pipe with the house sanitary sewer, or to use the sanitary sewer connection or any pipe or drain connected therewith for the purpose of receiving and discharging drainage of any kind other than from plumbing fixtures.
31. Sump pump and pipe drain discharges may not be directed into a Township Street or Right-of-Way unless permission is granted by the Engineer, Public Works Manager or his/her designee.
32. Roofs and outdoor areas shall be sloped to direct water away from buildings. Roof drains shall be connected to an approved storm water drainage system where and when possible. If a subterranean leader system is to be utilized, the system must be approved by the Township Engineer.



33. Please note the following:

- a. Water runoff which historically flowed from one property to another prior to an uphill home or developed area being built may continue to flow in the same direction after the home is built or area developed only if:
 - There is no diversion or channeling which results in the water flow being concentrated in one area, and;
 - There is no substantial construction on the uphill lot resulting in increased rates of surface run-off.
- b. If a detrimental change in the natural pattern of drainage on an uphill lot has occurred, the uphill property owner is responsible for interception and piping or directing surface water to a natural drainage area or a storm water drainage system.
- c. The downhill property owner is responsible for providing proper drainage for water flow that occurs in accordance with natural drainage patterns, which existed prior to construction.
- d. Due to the inherent difficulty in accurately predicting post-construction water flow from a property, changes in water flow may not be discovered until well after the construction is completed. In such cases, if it is determined the lot is generating an additional flow or intensity of storm-water across an adjacent property, in excess of what existed prior to construction, the Applicant, at the Applicant's expense, will be responsible for all measures necessary to abate the excess flow of stormwater.

Thank you for your kind attention to this matter. Should you have any questions or require additional information, please do not hesitate to contact me.

Very truly yours,

Peter C. Ten Kate, P.E.

PCTK/rs

Cc: Cristina Queiroz – via email
Rosemary Stone-Dougherty, Esq.
Vincent Manno, P.E. - via email
Kristin Spatola – via email
Kathleen Miesch – via email
Caitlin Kester – via email.
Marisa Tiberi P.E. – via email
Sarfeen Tanweer – via email

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