

STAFF REPORT

PLEASE REFER TO DRCC # WHEN SUBMITTING
ADDITIONAL DOCUMENTS



DRCC #: 21-5679

DATE: August 11, 2025

PROJECT NAME: 16 Butterfoss Avenue -- Proposed Residence

Latest Submission Received: July 15, 2025

Applicant:

Ralph and Robin Wesner
317 W. Poplar Avenue
Linwood, NJ 08221
akimboarch1@aol.com

Engineer:

Eric B. Rupnarain, P.E.
Goldenbaum Baill Engineering, Inc.
1509 Route 179
Lambertville, NJ 08530
ebr@gbamail.com

Architect:

Ralph Wesner, Architect
RWA Architecture
317 W. Poplar Avenue
Linwood, NJ 08221
rhwarch@verizon.net

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
16 Butterfoss Avenue	Hopewell Township	Mercer	130	87-92

Jurisdictional Determination:

Zone A	Minor	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X		

**THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN
COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL.**

PO BOX 539 STOCKTON, NJ 08559 609-397-2000
www.nj.gov/dep/drcc/

DATE: August 11, 2025**PROJECT NAME:** 16 Butterfoss Avenue -- Proposed Residence**NO CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.**

Documents Received: Exterior Color Selection Narrative (1 page), dated April 11, 2021, attributed to Ralph Wesner, AIA. Site plan (1 sheet) dated September 23, 2019, last revised February 25, 2021; Elevations (1 sheet) dated September 23, 2019; Rain Garden Location Plan and Sizing Calculations, dated September 23, 2019; prepared by RWA Architecture. Plan of Survey (1 sheet) dated April 19, 2019, prepared by Frank R. Klapinski. Plot Plan (3 sheets) dated April 22, 2024, last revised July 11, 2025; Stormwater Management Waiver Narrative (8 Pages), dated July 18, 2024; Hydrological Report dated September 16, 2024, last revised July 11, 2025; Cost Estimate (1 page) dated December 15, 2024; prepared by Goldenbaum Baill Engineering, Inc.

Staff comments continued below.

The application is complete and shall be presented to the Commission for their action with a staff recommendation of approval at the August 20, 2025, meeting based upon the following analysis:

Existing Conditions: The project area is composed of six contiguous lots totaling 45,000 square feet (1.033 acre) located on Butterfoss Avenue in the Titusville neighborhood of Hopewell Township, Mercer County, approximately 925 feet northeast of the Delaware and Raritan Canal. The project is located in both Commission Review Zones A and B.



The project area is bounded by single-family residences along Wruck Avenue to the south, residential developments on Butterfoss Avenue to the east and north and preserved

DATE: August 11, 2025**PROJECT NAME:** 16 Butterfoss Avenue -- Proposed Residence

open space to the west. In the existing condition, the lots are undeveloped and consist of trees and brush.

Proposed Project: The applicant proposes to construct an approximate 2,172 square-foot, two-story, single-family residential dwelling on the existing tract property, along with an approximate 4,110 square-foot pervious pavement driveway with a 240 square-foot paved driveway apron. The driveway would be constructed on a portion of Butterfoss Avenue that has been vacated by Hopewell Township. A covered deck of approximately 250 square feet and a covered deck of approximately 100 square feet are also proposed. An onsite underground septic system is proposed to be constructed in the backyard.

Based upon the submitted application, the total amount of impervious surface area onsite after construction will be approximately 6,522 square feet (0.15 acre). The proposed project would result in an area of disturbance of approximately 16,988 square feet (0.39 acre).

Stream Corridor: As noted above, the project site is located approximately 925 feet from the Delaware and Raritan Canal. The site is located within the Lower Delaware River HUC12 watershed area and between two watercourse streams. One tributary to the Delaware and Raritan Canal is located about 550 feet to the southeast of the property. A second watercourse stream, Fiddlers Creek, is located about 260 feet to the northwest of the property. A tributary to Fiddlers Creek is also located about 80 feet to the northwest of the property but drains less than 50 acres. No other mapped watercourses or floodplains lie directly on or nearer to the project site. Therefore, this project is not subject to stream corridor impact review pursuant to N.J.A.C. 7:45-9.1(a).

Stormwater Runoff Quantity: The proposed project would result in an increase of 6,522 square feet in the amount of impervious surface coverage. This increase in impervious surface will result in an associated increase in runoff volume and peak flow rate when compared with the existing condition if unmitigated.

To mitigate for these impacts, the applicant proposes to control and collect stormwater runoff through the construction of a best management practice (BMP) measure, which would consist of one small-scale bio-retention basin system. The proposed bio-retention basin would be located east of the proposed residential dwelling. Because of the existing steep topography in the area of the basin, reinforced concrete walls will be used to construct the basin.

The site has been designed and graded to direct stormwater runoff from the proposed driveway and dwelling into the bio-retention basin. Stormwater runoff from the disturbed vegetated area will flow uncontrolled into the offsite stream. Runoff from the vegetated area combines with the runoff from the basin to produce the total developed conditions runoff.

The applicant submitted a design for stormwater management measures which demonstrates that the post-construction peak runoff rates for the 2-, 10- and 100-year

DATE: August 11, 2025

PROJECT NAME: 16 Butterfoss Avenue -- Proposed Residence

storm events are 50, 75 and 80 percent (%), respectively, of the pre-construction peak runoff rates pursuant to N.J.A.C. 7:45-8.6(a)1 to comply with the Commission stormwater quantity review standard. The applicant submitted a stormwater analysis to compute pre- and post-construction peak runoff rates for the 2-, 10- and 100-year storm events. The submitted calculations utilized the Natural Resource Conservation Service (NRCS) Technical Release No. 55 (TR-55) hydrologic methodology, NOAA Region C unit hydrograph rainfall distribution, standard peak rate factor, and current New Jersey 24-hour rainfall frequency data for Mercer County to compute peak runoff flow rates and volumes.

Table 1 represents the comparison of the existing condition runoff rates to the required reductions necessary to comply with the Commission's regulations, which in turn results in the allowable peak flow rates for the 2-, 10- and 100-year storm events. Table 2 then indicates the allowable and developed condition peak rates of runoff:

Table 1: Peak Rate of Runoff Comparison

Storm Frequency	Existing Peak Flow (cfs.)	Required Reduction (%)	Allowable Peak Flow (cfs.)
2-year	0.4	50	0.2
10-year	0.9	25	0.7
100-year	2.2	20	1.8

Table 2: Developed Peak Rate of Runoff

Storm Frequency	Allowable Peak Flow (cfs.)	Developed Peak Flow (cfs.)
2-year	0.2	0.3 (See below)
10-year	0.7	0.6
100-year	1.8	1.6

Therefore, pursuant to N.J.A.C. 7:45-8.6(a)1, the stormwater management design is compliant for the 10- and the 100-year storms; however, the project is not compliant under this section of the Commission's regulations for the peak rate reduction for the 2-year storm. Therefore, pursuant N.J.A.C. 7:45-8.6(a)3, the applicant has demonstrated that the project design does not increase the peak rate or volume of runoff for the 2-year storm event. Specifically, under the existing condition, the runoff volume is 1,311 cubic feet, while under the proposed condition, the runoff volume is 1,237 cubic feet. Because the project reduces both the peak rate and volume of stormwater runoff for the 2-year storm event, the project is in compliance with N.J.A.C. 7:45-8.6(a)3. Accordingly, using both of the criteria in the Commission's regulations, the project is in compliance with the stormwater quantity control requirement, and the proposed measures will address the specific water quantity standards at N.J.A.C. 7:45-8.

Water Quality: The Commission requires that all proposed full-depth pavement, including newly constructed and reconstructed parking and access drives that are being renewed, shall comply with water quality standards at N.J.A.C. 7:45-8.7. This includes

DATE: August 11, 2025**PROJECT NAME:** 16 Butterfoss Avenue -- Proposed Residence

reduction of the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm by a rate of 80% of the anticipated load from the developed site, expressed as an annual average. Non-vehicular travel surfaces (building roofs, plaza/amenity areas, sidewalks, etc.) are not subject to the stormwater runoff water quality requirements.

Based upon the applicant's submission, motor vehicle pavement areas in the form of a 4,110 square-foot pervious pavement driveway and 240 square-foot paved driveway apron are proposed for the project. To provide water quality treatment for runoff leaving the site, the applicant has proposed a BMP measure consisting of a pervious pavement system.

A pervious pavement system is a stormwater management facility used to address the impacts of land development. The system consists of a durable, permeable surface course, which allows stormwater runoff to move through it; this surface course is placed over a transition layer and a storage bed of open-graded (i.e., devoid of fine particles and aggregate). There are two types of systems: underdrained systems and systems designed to infiltrate into the subsoil. When designed in accordance with this chapter, the TSS removal rate is 80%.

Based upon a review of the submitted stormwater design, Commission staff has determined that the water quality calculations and the measures to be provided will address the specific water quality standards at N.J.A.C. 7:45-8.7.

Groundwater Recharge: The Commission's regulations require that stormwater management measures maintain 100% of the average annual pre-construction groundwater recharge volume for the site, or that any increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated. The proposed improvements will result in an increase in the amount of impervious surface coverage onsite. This increase in impervious surface will result in an associated decrease in the amount of groundwater recharge or recharge deficit as compared to the existing conditions if unmitigated. To address groundwater recharge, the applicant has proposed a BMP measure consisting of a small-scale bio-retention system.

The bio-retention basin has been designed to infiltrate up to 12 inches of runoff. The basin bottom is set at elevation 95.0 feet, and the lowest orifice has been set at elevation 96.0 feet. Runoff above elevation 96.0 feet would be routed through the outlet structure and flow offsite into the existing stream. Under the existing condition, the runoff volume for the 2-year storm is 1,311 cubic feet and, under the proposed condition, the runoff volume is 1,237 cubic feet.

Based upon a review of the submitted stormwater design, Commission staff has determined that the project is in compliance with the groundwater recharge requirements at N.J.A.C. 7:45-8.5.

Non-Structural Methods: Pursuant to N.J.A.C. 7:45-8.4, the Commission requires that non-structural stormwater management strategies be incorporated into the stormwater

DATE: August 11, 2025

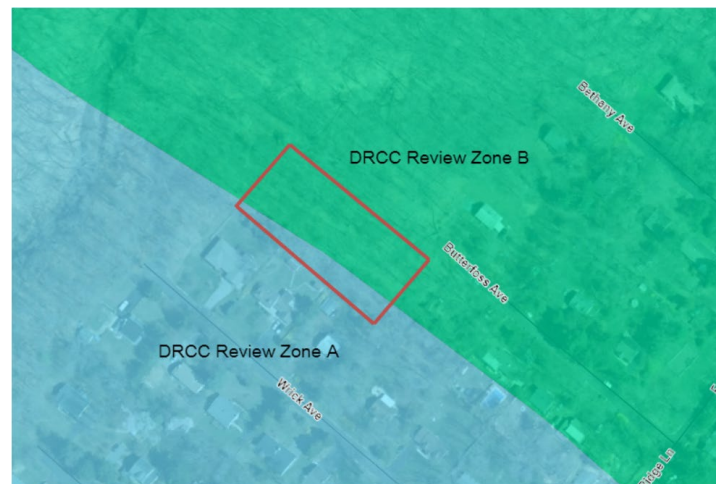
PROJECT NAME: 16 Butterfoss Avenue -- Proposed Residence

design of a development project “to the maximum extent practicable.” To assist in determining that sufficient non-structural stormwater management strategies have been incorporated into the project site design “to the maximum extent practicable,” the NJDEP Nonstructural Strategies Point System (NSPS) spreadsheet has been completed for this project. The results indicate that the ratio of proposed to existing site points (77%) is equal to the required site points ratio (77%). Therefore, the project has proposed non-structural measures that are adequate, and the project is designed in accordance with N.J.A.C. 7:45-8.4.

Stormwater Management Maintenance Plan: A stormwater management operation and maintenance plan document has been prepared and submitted for the proposed new stormwater BMP measures for the residence project. The plan includes maintenance details for the proposed BMP measures. The plan has been prepared in accordance with the requirements of N.J.A.C. 7:45-8.8.

Visual, Historic & Natural Quality Impact: N.J.A.C. 7:45-10.2(a) directs that the Commission shall review all projects in Zone A to determine if the project is in accord with the goals for the Delaware and Raritan Canal State Park as defined in the park’s Master Plan. The visual, historic, and natural quality impact review is intended to assure that a development within Zone A is not harmful to the character of the environmental types identified in the Master Plan as comprising the park. The project area is located in a “Transportation” canal environment as described in the Delaware and Raritan Canal State Park Master Plan. The Transportation canal environment is characterized at N.J.A.C. 7:45-10.2(a) as an area in which the canal park is squeezed between roads, railroads, and river or stream.

As noted in the image taken from the Department of Environmental Protection (DEP) NJ-GeoWeb interactive mapping tool, below, part of the western portion of the project area lies within Commission Review Zone A, while the balance of the project area lies within Commission Review Zone B. Pursuant to the definition of “Review Zone” at N.J.A.C. 7:45-1.3, if any part of a project site is within Zone A, then the entire project shall be considered to be in Zone A.



DATE: August 11, 2025**PROJECT NAME:** 16 Butterfoss Avenue -- Proposed Residence

The provisions of N.J.A.C. 7:45-10.3(a), which direct that major projects are discouraged from those portions of Review Zone A that comprise the Transportation environment of the park and authorize the Commission to prescribe specific compensatory measures to mitigate the project's potential for harmful impact on the park, are inapplicable to the proposed project, which is a minor project.

N.J.A.C. 7:45-10.3(b) directs that, for minor projects proposed to be located in those portions of Review Zone A that comprise the Transportation canal environment of the park, the Commission may require specific compensatory measures to mitigate the project's potential for harmful impact as a condition of approval. These measures can include, but not be limited to the following:

1. Increased setback distances from the Delaware and Raritan Canal Park;
2. At least 40% of the total project site be made available for open space for recreation or conservation purposes, and the location of that open space be as near the park as possible;
3. Extensive landscape development;
4. Development of circulation patterns that direct traffic away from the park;
5. Noise abatement measures;
6. Improvements to adjoining portions of the park; and
7. Signs or other means of interpreting any historic structures or districts relating to the site.

The project includes at least one of the specific compensatory measures listed above. Specifically, the project is set back 925 feet from the Delaware and Raritan Canal State Park, which is greater than the 200-foot setback provision at N.J.A.C. 7:45-10.4(a).

The increased setback does constitute a specific compensatory measure to mitigate the project's potential for harmful impact on the Delaware and Raritan Canal State Park. Commission staff observes that the extended setback, topography, vegetation, intervening structures, and the fact that the project area cannot be seen from the park, all support the staff's determination that the project has proposed a compensatory measure sufficient to mitigate the impact of the project on the park, and that the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(a) directs that projects in Review Zone A shall be set back from the Delaware and Raritan Canal State Park sufficiently far so that the winter visual and natural quality of the park are not adversely affected. For the Transportation canal environment, all structures shall be located 200 feet or more from the park, unless the Commission approves an alternative. As noted above, the project is located approximately 925 feet from the Delaware and Raritan Canal State Park. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(b) directs that projects in Review Zone A shall maintain a reasonable height and scale relationship to nearby structures or vegetation. For the Transportation canal environment, structures shall be limited to a height of 40 feet above existing grade where existing vegetation does not provide adequate winter screening. The applicant's

DATE: August 11, 2025**PROJECT NAME:** 16 Butterfoss Avenue -- Proposed Residence

submission states that the proposed residence will be 28.5 feet above the existing grade when constructed. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(c) directs that for projects located in Review Zone A, the exterior appearances of a project shall be in keeping with the character of the park's individual environments. Specifically, colors used shall harmonize with the man-made or natural surroundings of the project and shall be typical of colors found in the park environment. Additionally, building materials and textures shall harmonize with the surrounding man-made and natural materials.

The applicant has provided details on the proposed colors of all the exterior architectural design elements of the proposed residence. The applicant proposes to stain the wood siding gray, which would also be the color employed for the trim and the synthetic stucco finish proposed for the masonry foundation. The applicant proposes black trim for the proposed window system and the clad casement windows. The standing seam metal roof would be a muted red. Commission staff finds that the proposed colors harmonize with the surrounding man-made and natural environment and are typical of the built environment of the Township of Hopewell. Therefore, the project is in compliance with this requirement.

With respect to proposed building materials, the applicant proposes to construct a residence of Modern architectural design. The proposed residence would feature vertical exterior siding, a standing seam metal roof with snow guards and aluminum gutters, skylights, stucco foundation walls, and PVC lattice covering the area beneath the porch and deck. Commission staff observes that while Cape Cod and ranch style residences of post-World War II vintage predominate in the neighborhood, there are examples of Modern architecture located in the vicinity of the project site on Butterfoss Avenue and Fern Ridge Road. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)1 directs that any electric, telephone, cable television, and other such lines and equipment shall be underground or otherwise not visible from the Delaware and Raritan Canal State Park. The project site is not visible from the Delaware and Raritan Canal State Park due to topography, vegetation, and intervening structures. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)2 directs that any exposed storage areas, out-buildings, exposed machinery service areas, parking lots, loading areas, utility buildings, and similar ancillary areas and structures shall either be completely concealed from view from the Delaware and Raritan Canal State Park, or designed to minimize their visual impact on the park. The applicant proposes no ancillary areas or structures. Therefore, the project is in compliance with this requirement.

The provisions of N.J.A.C. 7:45-10.4(d)3 and 4, respectively, regulate the dimensions and location of commercial signs and outdoor advertising structures. The applicant proposes to erect a "private driveway" sign at the end of Butterfoss Avenue where the proposed driveway begins; however, this proposed sign is not commercial nor is it an advertisement. Therefore, this requirement is inapplicable to the proposed project.

DATE: August 11, 2025

PROJECT NAME: 16 Butterfoss Avenue -- Proposed Residence

N.J.A.C. 7:45-10.4(d)5 directs that wherever possible, natural terrains, soils, stones, and vegetation should be preserved, and that new vegetation, stones, and soils should be native to the environment in which they are placed. The applicant's revised submitted plans propose the removal of 16 existing trees to accommodate the project. The trees proposed for removal include Oak, Hickory, Pine, Maple, and Beech. The applicant has submitted a landscaping plan that consists of the following species:

Scientific name	Common name	Number	Native
<i>Acer Saccharum</i>	Sugar Maple	4	DRCC
<i>Liquidambar styraciflua</i>	Sweet Gum	3	DRCC
<i>Pinus strobus</i>	Eastern White Pine	7	DRCC
<i>Quercus Coccinea</i>	Scarlet Oak	6	USDA
<i>Cornus florida</i>	Dogwood	3	DRCC

All the proposed species are listed on the Commission List of Native Trees or the U.S. Department of Agriculture (USDA) PLANTS database. Therefore, the project is in compliance with this requirement.

N.J.A.C. 7:45-10.4(d)6 directs that projects that are located in any officially designated Federal, State, or local historic district or site shall be assessed for their impact upon that district or site. Recommendations to avoid, minimize, and/or mitigate the impacts of a project on a listed property shall be made in consultation with the New Jersey Historic Preservation Office (SHPO) and based upon the United States Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.

The project is located approximately 625 feet beyond the boundary of the Delaware and Raritan Canal Historic District, which encompasses the canal bed and all structures located within 300 feet of the centerline of the canal. Additionally, the project is located approximately 305 feet east of the boundary of the Titus/Chambers farmstead historic property. Since the proposed project would not impact an officially designated Federal, State or local historic district or site, Commission staff determines that the project is in compliance with this requirement, and that consultation with the SHPO is not warranted in this case.

Staff Recommendation: Staff recommends approval.

Sincerely,



John Hutchison
Executive Director

DRCC#: 21-5679

10

DATE: August 11, 2025

PROJECT NAME: 16 Butterfoss Avenue -- Proposed Residence

- c. Mercer County Planning Board
Hopewell Township Planning Board