State of New Jersey
DELAWARE AND RARITAN CANAL COMMISSION
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STAFF REPORT

DRCC #: 25-4777B
DATE: May 27, 2026
PROJECT NAME: 17 Hillside Terrace -- Proposed Residence
Latest Submission Received: May 27, 2026

Applicant:
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Project Location:

Road	Municipality	County	Block(s)	Lot(s)
17 Hillside Terrace	Montgomery Township	Somerset	12001	10.01

Jurisdictional Determination:

Zone B	Major	Nongovernmental

Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X			

Documents Received: Plot Plan (1 sheet) dated July 10, 2025, revised January 29, 2026; Stormwater Management Report dated July 2025, revised January 2026; prepared by Mueller Engineering Associates, P.C.

THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL. NO CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL HAS BEEN ISSUED.

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The application is complete and shall be presented to the Commission for their action with a staff recommendation of approval at the June 17, 2026, meeting based upon the following analysis:

Existing Conditions: The project site is a 3.5-acre lot located approximately 330 feet west of the intersection of Fairview Road and Hillside Terrace in the Skillman section of Montgomery Township, Somerset County, approximately 4.56 miles northwest of the Delaware and Raritan Canal and within Commission Review Zone B.

The project area is bounded by single-family residential developments on comparatively large lots to the north, west, and east, while the area to the south consists of agricultural land. In the existing condition, the project site consists of lawn with a small area of woods located at the rear of the property.

A review of historic aerial imagery indicates that the project site was agricultural land in 1979, and that the construction of Hillside Terrace and the present residential development located on that cul-de-sac street appears to have commenced around 1991 and concluded by 1995. The residential subdivision, which contains the project area lot, appears to have been the subject of a Commission application submitted in 1984 (DRCC #84-0560 -- Rawson Development Co.). The Commission also approved a project to construct a single-family home on Block 12001, Lot 10.06, located at the westerly end of Hillside Terrace, in 2016 (DRCC #16-477A).

Proposed Project: The applicant proposes to construct a single-family residential dwelling, along with an attached garage, driveway, patio, shed, septic system, stormwater management system, utilities, and other associated amenities. Based upon the submitted information, the proposed project will result in approximately 11,757 square feet (0.27 acre) of new impervious surface coverage and the disturbance of approximately 59,000 square feet (1.35 acre) of land.

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Stream Corridor: The project site is located within the Millstone River (below and including Carnegie Lake) Watershed and within the Millstone Watershed Management Area. An unnamed tributary to Black Brook, which does not drain into the Delaware and Raritan Canal, is situated approximately 870 feet east of the project site. No other regulated waters are situated near the proposed project site. Based on the distance of the nearest regulated watercourse from the project site, Commission staff has determined that the project is not subject to stream corridor impact review pursuant to N.J.A.C. 7:45-9.1(a).

Stormwater Runoff Quantity: As noted above, the project proposes the construction of a single-family residential dwelling with a driveway, patio, garage, storage shed, septic system, stormwater management system, utilities and other amenities.

- Existing conditions: In the existing condition, the site contains lawn with a small area of woods at the rear of the property. Stormwater runoff generated from the site flows overland in a southerly direction, and ultimately it leaves the site along the southeasterly property boundary (i.e., point-of-analysis).

- Proposed conditions: In the proposed condition, the site would consist of the single-family residential dwelling and other improvements mentioned above. The applicant proposes the construction of a best management practice (BMP) measure consisting of a bio-retention basin in the rear yard of the property near the southeasterly property boundary, to which stormwater runoff from most of the developed portion of the site will drain.

There are some bypass areas that will not drain to the proposed stormwater BMP measure. These bypass areas were taken into consideration while demonstrating compliance with stormwater management requirements. The bypass areas do not contain vehicle trafficked areas; thus, the runoff from these areas does not require water quality treatment. A stormwater outfall will discharge the runoff from the proposed basin in the southerly direction in the rear yard of the property at a controlled rate. Ultimately, the runoff leaves the site at the same point-of-analysis as is the case in the existing condition.

The applicant has provided engineering calculations to verify that for stormwater leaving the site, the post-construction peak runoff rates for the 2-, 10- and 100-year storm events will be no greater than 50, 75, and 80 percent (%), respectively, of the pre-construction peak runoff rates. The submitted calculations utilized the Natural Resource Conservation Service (NRCS) Technical Release No. 55 (TR-55) hydrologic methodology, a standard unit hydrograph, NOAA -- Type C rainfall distribution, and 2100 (future) New Jersey 24-hour rainfall frequency data for Somerset County to compute peak runoff flow rates. The post-developed peak flows were calculated by creating separate pervious and impervious hydrographs for post-developed conditions and combining to develop total post-developed hydrographs.

In addition, a detailed soil investigation report has been submitted confirming that the soil investigation was completed in accordance with the requirements of Chapter 12 of the NJ Stormwater BMP Manual. Also, Commission staff has confirmed that the groundwater mounding would not adversely impact any nearby structure as well as the function of the

proposed stormwater BMP measure. Thus, Commission staff has confirmed that the proposed bio-retention basin will function as designed.

Therefore, Commission staff has determines that the project is in compliance with the specific stormwater runoff quantity standards at N.J.A.C. 7:45-8.6.

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 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.

Based upon the submitted application, the project involves the construction of a new paved driveway area. Therefore, the stormwater runoff generated from the new vehicular areas must be treated to an 80% TSS removal rate. The applicant has proposed construction of a bio-retention basin to provide the required 80% TSS removal rate for the runoff generated from the proposed vehicle trafficked areas. The stormwater runoff generated from the proposed driveway will drain to the proposed bio-retention basin.

A detailed soil investigation report has been submitted confirming that the soil investigation was completed in accordance with the requirements of Chapter 12 of the NJ Stormwater BMP Manual. Also, the Commission's staff has confirmed that the groundwater mounding would not adversely impact any nearby structure as well as the function of the proposed stormwater BMP. Thus, Commission staff has confirmed that the proposed bio-retention basin will function as designed.

Therefore, Commission staff determines that the project is in compliance with the specific water quality standards at N.J.A.C. 7:45-8.7.

Groundwater Recharge: The Commission 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.

A groundwater recharge analysis calculation (NJDEP GSR-32 spreadsheet) has been submitted, which demonstrates that the annual groundwater recharge deficit for the entire site is 12,418 cubic feet. The submitted stormwater report notes that to mitigate for this deficit, runoff from the portion of the proposed project site will be infiltrated back into the ground by means of the use of a BMP measure consisting of a bio-retention basin located in the rear of the site.

A detailed soil investigation report has been submitted confirming that the soil investigation was completed in accordance with the requirements of Chapter 12 of the NJ Stormwater BMP Manual. Also, the Commission's staff has confirmed that the groundwater mounding would not adversely impact any nearby structure as well as the function of the proposed stormwater BMP. Thus, Commission staff has confirmed that the proposed bio-retention basin will function as designed.

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Therefore, Commission staff determines that the project is in compliance with the specific groundwater recharge requirements at N.J.A.C. 7:45-8.5.

Non-Structural Methods: The Commission requires that non-structural stormwater management strategies be incorporated into the stormwater design of a development project. 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 Nonstructural Strategies Point System (NSPS) spreadsheet has been completed for this project. The NSPS results indicate that the ratio of proposed to existing site points (115%) exceeds the required site points ratio (106%). Therefore, the Commission staff has confirmed that the project's proposed non-structural measures are adequate, and the project is designed in accordance with N.J.A.C. 7:45-8.4.

Stormwater Management Maintenance Plan: The applicant has submitted an operation and maintenance plan for the proposed stormwater management system. Therefore, Commission staff has determined that the project meets the specific stormwater management maintenance requirements at N.J.A.C. 7:45-8.8.

Staff Recommendation: Staff recommends approval.

Sincerely,

John Hutchison
Executive Director

c. Somerset County Planning Board
Montgomery Township Planning Board

Please refer to the Commission project number (DRCC #) when making a submission, a resubmission, or transmitting project correspondence or documents.