GENERAL PERMIT 1



DRCC #: 22-4721C
DATE: August 22, 2022
PROJECT NAME: NJDOT Bridge over Delaware and Raritan Canal at Washington Road -- After-the-Fact Emergency Repairs
Latest Submission Received: July 26, 2022

Applicant:

New Jersey Department of Transportation (NJDOT) 951 Parkway Avenue Ewing, NJ 08625 Brendan.Brock@dot.nj.gov

Project Location:

Road	Municipality	County	Block(s)	Lot(s)
Washington Road (Mercer County Route No. 571)	West Windsor Township	Mercer	N/A	N/A
	Municipality of Princeton			

Jurisdictional Determination:

Zone A	Minor	Governmental

Documents Received: Application received July 26, 2022.

The Delaware and Raritan Canal Commission has reviewed the referenced application for a General Permit authorization pursuant to the requirements of the Regulations for the Review of the Delaware and Raritan Canal State Park at N.J.A.C. 7:45-6.2. The proposed project is authorized by General Permit No. 1, which authorizes projects in

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

DRCC#: 22-4721C DATE: August 22, 2022 PROJECT NAME: NJDOT Bridge over Delaware and Raritan Canal (cont.)

Zone A that are necessary to carry out the repair, rehabilitation, maintenance or reconstruction of a structure, road, utility line, or stormwater management measure or basin lawfully existing prior to January 1980 or approved under this Chapter by the Commission.

The project authorized under this general permit shall not be put to any use other than as specified in any approval authorizing its original construction. Projects authorized under the general permit shall not visibly change, expand, widen or deepen the feature, and shall not deviate from any plans of any prior project approvals, except for minor deviations due to changes in materials or construction techniques. Any such deviations must be shown as necessary to fulfill the purpose of the proposed project and must be consistent with the Master Plan.

Description of the authorized project: Existing Conditions: The project area is the bridge, which conveys Washington Road (Mercer County Route No. 571) over the Delaware and Raritan Canal, at the boundary of the Municipality of Princeton and the Township of West Windsor, Mercer County, and within Commission Review Zone A. The project is also located within the Delaware and Raritan Canal Historic District, which encompasses the canal bed and all structures within 300 feet of the centerline of the canal.



The current bridge (NJDOT Structure No. 3000-156) is a fixed span structure constructed of wood with an asphalt road surface that was completed circa 1954 and converted from a prior King-Post swing bridge that was constructed in the first decade of the 20th century (see image below).



The King-Post Bridge replaced an earlier A-Frame swing bridge, the completion of which dated to the opening of the canal in 1834 (see circa 1900 image below).



The project area also lies within the stream corridor of the Stony Brook.

In 2015 the Commission approved a project for the installation of high-visibility, midblock crosswalk where the Delaware and Raritan Canal State Park multiuse trail crosses Washington Road in the vicinity of the bridge. The project also included the installation of a pedestrian-activated flashing light assembly, Rectangular Rapid Flashing Beacon

DRCC#: 22-4721C DATE: August 22, 2022 PROJECT NAME: NJDOT Bridge over Delaware and Raritan Canal (cont.)

adjacent to each side of the crossing area, and "Trail Crossing" on Washington Road in advance of the crosswalk at both approaches (DRCC#15-4721). This project was subsequently modified in 2016 to permit the replacement of the beacon pole assembly on the south side of Washington Road with an overhead beacon (DRCC#16-4721A).

In 2021, the applicant submitted a request for a General Permit No. 1 proposing emergency repairs to the bridge to correct: depressed/settled asphalt approach pavement along the east approach of the structure; potholing and moderate to severe raveling along the west approach pavement; and, missing, decayed, and moderate to severe section loss in both the east and west abutments (DRCC #21-4721B). Because the applicant proposed the removal of the timber sheeting along both the east and west abutments of the bridge and the replacement of the timber sheeting with a "suitable replacement," possibly consisting of composite material, the applicant was issued a jurisdictional determination requesting additional information regarding the proposed project.

The applicant now proposes the after-the-fact approval of temporary emergency repairs conducted on the bridge following a recent inspection by the Mercer County Engineering Division and other licensed engineers. Those inspections discovered the following defects:

- The approach coming from Route 1 at the canal had significantly settled, which NJDOT states was caused by a washout from the bridge abutment.
- Some of the retrofit piles had shifted and lost considerable bearing area; and
- Some piles were split down the middle.

To remedy the problem, NJDOT closed the bridge and detoured traffic from July 22, 2022, until July 27, 2022. Additionally, traffic signs were installed to warn the motoring public that the bridge was a load posted bridge. NJDOT also installed temporary lateral bracing across the structure and constructed 11 temporary post jacks in the canal along the east abutment.

NJDOT proposes to remove the temporary repairs in two months and replace the repairs with more stable measures, which would last until a permanent solution is devised. NJDOT proposes the replacement of the structure in the future as a permanent solution, which is scheduled to occur in approximately six years.

Permit Conditions: The project allowed by this authorization shall comply with the following conditions. Failure to comply with these conditions shall constitute a violation of the "Delaware and Raritan Canal State Park Law of 1974" (N.J.S.A. 13:13A-1 et seq.).

- 1. This authorization is valid for five years from the date of this letter unless more stringent standards are adopted by rules prior to this date.
- 2. The project as described shall be constructed and/or executed in conformity with the application.

DRCC#: 22-4721C DATE: August 22, 2022 PROJECT NAME: NJDOT Bridge over Delaware and Raritan Canal (cont.)

- 3. No change in plans or specifications shall be made except with prior written permission from the Commission.
- 4. The permittee shall allow the Commission the right to inspect the construction site and shall provide the Commission with written notification seven days prior to the start of the authorized work.
- 5. A complete, legible copy of this permit shall be kept at the work site and shall be exhibited upon request of any person.
- 6. The issuance of this permit shall not be deemed to affect in any way other actions by the Commission on any future application.

Expiration Date: August 22, 2027.

Appeal of Decision: In accordance with N.J.A.C. 7:45-7.1, any person who is aggrieved by this decision may request a hearing within 30 days of the date of decision.

If you have any questions regarding this authorization, please contact the Commission at (609) 397-2000 and reference the above file number.

Sincerely,

Joh State

John Hutchison Executive Director

c. Mercer County Planning Board Municipality of Princeton Planning Board West Windsor Township Planning Board Patricia Kallesser, Superintendent, Delaware and Raritan Canal State Park Michael Sellar, MSCE, NJWSA Facility Manager, Delaware and Raritan Canal Jesse West-Rosenthal, Ph.D., Historic Preservation Specialist 2, DEP SHPO