



ROUTE 23, NORTHBOUND BRIDGE OVER PEQUANNOCK RIVER CONSTRUCTION PUBLIC INFORMATION CENTER

ENGLISH TRANSCRIPT

Slide 1 - Introduction

00:00 Welcome to the Virtual Public Information Center for the Route 23 Northbound Bridge over Pequannock River project which is entering the construction phase. The New Jersey Department of Transportation, referred to as NJDOT, is committed to providing transportation improvements that best balance transportation needs, the environment, community concerns, and costs. This Virtual Public Information Center, which is open to all members of the public, is being held to provide local residents, officials, businesses, and the general public with information on the project.

Slide 2 - Presentation Agenda

00:41 The following topics will be covered during this Virtual Public Information Center:

- The project limits and existing conditions
- The project purpose and need and other project goals and objectives
- A detailed description of the proposed improvements
- An outline of the construction sequence and staging for the project
- And at the end of the presentation, the public will be provided information on how to submit comments and ask questions about the project

Slide 3 - Project Location

01:10 The Route 23 Northbound Bridge over the Pequannock River is located on the border of West Milford Township in Passaic County and Jefferson Township in Morris County, New Jersey. The project limits on Route 23 Northbound are from milepost 25.13 to milepost 25.70 between Reservoir Road and Canistear Road for a total length of approximately 3,000 feet. Route 23 is a four-lane divided highway with a wooded median that is approximately 100-foot wide in the vicinity of the bridge. The New York Susquehanna & Western Railway runs along the east side of Route 23 with an access driveway located northeast of the bridge.

Slide 4 - Existing Bridge Information

01:58 The Route 23 Northbound Bridge was originally built in 1968. Photos of the bridge from the north approach looking south and an elevation view are shown on the right.

The bridge is a single span structure over the Pequannock River. The bridge measures 47 feet-2¼ inches long and is 46 feet-10 inches wide.

The existing structure has a concrete deck supported by 36 inch deep prestressed concrete I-beams. This superstructure rests on reinforced concrete abutments with spread footing foundations.

The existing bridge furnishes a roadway width of 37 feet between curbs for two 12-foot northbound lanes, a 3 foot inside shoulder on the left, and a 10 foot outside shoulder



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on the right. Along the right side there is a 6-foot wide sidewalk, but sidewalks are not present at the roadways approaching the bridge.

Slide 5 – Existing Bridge Condition

03:00 Based on recent bridge inspection reports, the bridge is rated in overall “Poor” condition and is classified as “Structurally Deficient” due to the condition of the deck and substructure.

The existing deck and abutments are in poor condition. There are cracks in the deck surface around previous deck repairs. There is heavy rust and section loss on the steel deck forms underneath the concrete deck. There are fine to wide cracks with heavy efflorescence and rust stains throughout the abutments and wingwalls, along with localized areas of severe scaling and spalls.

Slide 6 - Existing Roadway Information

03:39 Route 23 is part of the National Highway System and is classified as an Urban Principal Arterial within the project limits, with an Average Daily Traffic volume of 10,915 vehicles per day.

The posted speed limit on Route 23 Northbound within the vicinity of the project is 55 miles per hour.

The roadway approaches to the bridge consist of two 12-foot-wide travel lanes, a 3-foot wide left shoulder, and a 10 foot-wide right shoulder.

Slide 7 - Existing Roadway Design

04:15 The grade of the roadway extends uphill past the bridge, but the bridge is located within a sag curve. Due to the vertical sag curve in the profile, the vertical stopping sight distance does not meet current design standards.

Due to the horizontal curve and the vegetation in the median, the horizontal stopping sight distance is also substandard.

Additionally, the guiderail present within the project limits and the roadway superelevation cross slopes do not meet current design standards.

Slide 8 - Environment at the Site

04:49 The Pequannock River is a freshwater, Trout Production Category 1 Waterway, with a 300-foot riparian zone along both sides of the river. Three wetlands were also identified within the project limits. Two of the wetlands are forested floodplain wetlands associated with the Pequannock River and one isolated wetland was identified within the median to the north of the existing bridge. Additionally, the identified wetlands have a 150-foot transition area.



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Habitat for the endangered bobcat and wood turtle exists on both sides of the bridge. The New Jersey Department of Environmental Protection, referred to as NJDEP regulations require wildlife passages be incorporated into reconstructed bridge designs. A 3-foot wide wildlife passage will be provided along each abutment to permit these species to pass beneath the bridge. Additionally, the federally endangered Indiana bat was identified within the project limits by the NJDEP and tree clearing will not be permitted between April 1st and September 30th.

Slide 9 - Purpose and Need

06:05 The purpose of the Route 23 Northbound Bridge over the Pequannock River project is to replace the existing "Structurally Deficient" bridge with a cost-effective and low maintenance structure.

The design of the project also addressed several goals and objectives in addition to addressing the project's purpose and need that include:

- Improve Horizontal and Vertical Stopping Sight Distance
- Minimize impacts to vehicular traffic during construction
- Minimize environmental, utility, and right-of-way impacts.

Slide 10 – Proposed Improvements

06:44 The design of the project addressed the purpose and need and goals and objectives of the project through a variety of improvements which include:

- A full bridge replacement with the new bridge measuring 51'-9" long and 51'-1" wide out-to-out.
- The roadway profile will be raised between 18 and 27 inches in the vicinity of the bridge to satisfy Vertical Curve Stopping Sight Distance requirements.
- The vegetation along the left side of the roadway will be trimmed, and the left shoulder will be widened to improve the Horizontal Stopping Sight Distance along the curve.
- A 3-foot wide wildlife passage will be provided in front of each abutment beneath the bridge.
- Guiderail within the project limits will be replaced to meet current NJDOT standards.
- The superelevation of the roadway will be improved to meet current design standards.

Slide 11 – Proposed Bridge Improvements

07:48 The approach roadways will maintain the existing two 12-foot lanes, 3-foot left shoulder and 10-foot right shoulder. However, the left and right shoulders will transition from 3-feet to 5-feet and from 10 feet to 17-feet-11-inches, respectively, to meet the new, wider bridge.

The guiderail in the area shown will be replaced to meet current design standards.



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Slide 12 – Proposed Bridge Improvements

08:17 The new bridge will be a 51-foot-9-inch-long single span structure in essentially the same location as the existing bridge.

A cross section of the bridge looking in the direction of travel is shown at the bottom of the graphic. The new bridge will be 51 feet-1 inch wide and carry two 12-foot lanes, a 5-foot left shoulder and a 17-foot-11-inch right shoulder.

The existing Right of Way line separating the NJDOT property to the west and the City of Newark property to the east is shown in red in the top image.

Slides 13-14 – Proposed Bridge Improvements

09:01 The existing eastern bridge wingwalls extend over the Right of Way line from NJDOT property onto property owned by the City of Newark as shown in orange.

09:16 These existing wingwalls will be demolished during construction, and the new wingwalls will be brought in line to follow the roadway and reside entirely within NJDOT's Right of Way.

Slide 15 – Construction Staging

09:31 The construction staging was developed to limit traffic impacts, minimize construction duration and cost, and enhance constructability. Three construction stages will be utilized, with a single northbound lane closed in the first and third construction stages and both lanes open in Stage 2.

Since the Pequannock River is a Freshwater, Trout Production Category C-1 waterway and the project is located within a wood turtle habitat, in-water work is not permitted between September 15 and April 1. Two construction stages are needed to replace the bridge, but both stages of bridge construction cannot be completed within the April 1 to September 15 time frame. To limit the total duration of the lane closure, another stage will be provided where no bridge construction work occurs during the waterway restriction period and both northbound traffic lanes are open for approximately three months. One lane of traffic will be maintained on both the remaining portion of the existing bridge and the newly constructed portion of the bridge.

The existing sidewalk will be removed, and the bridge will be widened to maintain traffic during construction.

Slide 16 - Stage 1 Construction

10:52 Stage 1 construction is anticipated to begin in March 2024 with an anticipated finish in December of 2024, for a total duration of 10 months.



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Slide 17 - Stage 1 Construction

11:06 First, the right lane of northbound traffic will be closed and the work zone, shown in red hatching, will be established. The left lane of traffic will be maintained on the left side of the existing bridge.

Slides 18 - Stage 1 Construction

11:22 Once traffic is shifted, bridge demolition can begin.

The right half of the existing bridge will be demolished, and half of the new bridge will be constructed in its place, as circled in blue in section view in the top right and in plan view at the bottom. This portion of the new bridge will be wide enough to accommodate one lane of traffic, a construction barrier, and shoulders in the next two construction stages.

Slide 19 - Stage 2 Construction

11:56 Stage 2 construction is anticipated to begin in December 2024 with an anticipated finish in March of 2025, for a total duration of 3 months.

In Stage 2, the right lane of traffic will be opened on the newly constructed half of the bridge, while the left lane of traffic remains open on the existing bridge.

No construction will take place this stage since it occurs during the in-water work restriction period. This stage was created to provide a second travel lane during winter months when no work can be progressed.

Slide 20 - Stage 2 Construction

12:34 The left lane will remain on the existing bridge in Stage 2. The newly constructed right half of the bridge and roadway will be opened to traffic.

Slide 21 - Stage 2 Construction

12:46 The two lanes of open traffic will be separated by concrete barriers. Traffic will split before the bridge and the lanes will merge near the Canistear Road exit. An advance warning sign will be provided to direct traffic planning to use the Canistear Road exit to stay in the right lane.

The right lane of traffic on the new bridge will be shifted all the way to the right with a 1-foot shoulder to the right and a 7-foot-6-inch minimum left shoulder to provide adequate horizontal stopping sight distance along the curve.

Slide 22 - Stage 3 Construction

13:25 Once the in-water work restrictions are lifted, Stage 3 can commence. Stage 3 construction is anticipated to begin in March 2025 with an anticipated finish in December of 2025, for a total duration of 9 months.



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Slide 23 - Stage 3 Construction

13:45 First, the left lane of northbound traffic on the existing bridge will be closed and the work zone, shown in red hatching, will be set. The right lane of traffic will be maintained on the right side of the newly constructed bridge.

Slide 24 - Stage 3 Construction

14:03 Once traffic is shifted, demolition of the remaining portion of the existing bridge can begin.

The left half of the existing bridge will be demolished, and the remaining half of the new bridge will be constructed in its place, as circled in blue in section view in the top right and in plan view at the bottom.

Slide 25 – Construction Schedule

14:27 In summary, the current construction schedule is as follows:

- Stage 1 of construction will include the demolition and construction of the right half of the bridge and is anticipated to begin in Spring 2024.
- Stage 2 is a no-work stage to return the second lane to the traveling public and is anticipated to begin in Winter 2024.
- Stage 3 of construction will include the demolition and construction of the left half of the bridge and is anticipated to begin in Spring 2025 with construction completion anticipated in Spring of 2026.

Slide 26 - Public Feedback

15:11 Thank you for taking the time to view this presentation on the Construction Phase for the Route 23 Northbound over Pequannock River Project.

If you have project specific questions or comments about the project, you may submit them via email at RT23NBBridge@dewberry.com or contact Mr. Christopher Yandoli from the NJDOT Office of Community and Constituent Relations.

The New Jersey Department of Transportation appreciates your participation and comments.

Thank you.