

BELLS MILL/ VALLEY GREEN ROAD BRIDGE REHABILITATION PROJECT

About the Bridges

The Bells Mill Road stone masonry arch bridge is a 2-span 206-year-old structure linking Chestnut Hill and Andorra in Philadelphia. It spans over Wissahickon Creek with two recreational trails, Forbidden Drive and Orange Trail, adjacent to the structure. The bridge was built in 1820 providing the only road through Wissahickon Park at the time and is eligible for listing on the National Register of Historic Places and is a contributing element to the Chestnut Hill and Fairmount Park Historic Districts.

The Valley Green Road stone masonry arch bridge is a single span 194-year-old bridge linking Fairmount Park and Chestnut Hill in Philadelphia. It spans over Wissahickon Creek, with two adjacent recreational trails, Forbidden Drive and Orange Trail. Valley Green Inn is also located nearby. The bridge was built in 1832, was renovated in 1915, and is a contributing element to the Chestnut Hill and Fairmount Park Historic Districts.

Over time, the bridges have experienced significant deterioration and it's crucial to repair them to ensure the safety and usability for everyone.

Project Purpose

The purpose of the project is to provide a sustainable crossing over Wissahickon Creek and to improve the safety of the crossing for users in all modes of transportation. In addition, pedestrian accommodation will be improved for Valley Green Bridge.

Improvements

- Removing the pavement and earth fill.
- Removing deteriorated portions of the existing parapets, wingwalls, and spandrel walls (salvaging existing masonry components for reuse on the rehabilitated bridges).
- Reconstructing in-kind, portions of spandrel walls and wingwalls as required.
- Repointing masonry arch barrels and substructure units.
- Placing lightweight concrete fill material and installing a reinforced concrete deck (Bells Mill) or asphalt roadway (Valley Green).
- Replacing the parapets at Bells Mill Road bridge with new stone-faced concrete parapets.
- Filling voids under the foundations with concrete and constructing concrete collars around the perimeter.
- Installing rock protection at all substructure units. The rock will be recessed in the streambed to maintain existing streambed elevations and choked with natural streambed material.
- Conserving and resetting the existing bridge date stones.
- Wetland mitigation will be developed by the creation of wetlands along Wisers Mill Road, between Bells Mill Road and Valley Green Road bridges.

Environmental Clearance (NEPA) and Permits Process

- Section 106 (Historic Properties & Archaeological Resources) Coordination and Effect Finding.
- Section 4(f) (parks and recreation area) Coordination.
- DEP Permit.
- Categorical Exclusion Evaluation.

Anticipated Schedule

Preliminary Engineering
Design

Winter 2025

Final Design Complete

Fall 2026

Construction Begins

Early 2027