

P Street Bridge
Spanning Rock Creek and Potomac Parkway
Washington
District of Columbia

HAER No. DC-48

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PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD
P STREET BRIDGE
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- Location:** P Street Bridge crosses Rock Creek valley in the northwest section of Washington, D.C. Rock Creek and the Rock Creek and Potomac Parkway roadway pass underneath its two spans.
- Date of Construction:** 1933-35.
- Designer and Builder:** Designed by Albert L. Harris, D.C. municipal architect, and Clifford R. Whyte, D.C. engineer of bridges. Pecora-Gaskill Engineering and Construction Corporation and A. T. Carozza of Baltimore, builders.
- Present Owner:** Department of Public Works, District of Columbia.
- Present Use:** Vehicular and pedestrian bridge.
- Significance:** This graceful, low-slung stone-faced concrete bridge on axis with P Street maintains the understated Neoclassical styling typical of many of the bridges that cross over Rock Creek and Potomac Parkway, with which it was planned to harmonize.
- Project Information:** The documentation of Rock Creek and Potomac Parkway was undertaken as a two-year pilot project to help establish standards and guidelines for recording the structures and landscape features of park roads and parkways. This project was a joint effort of the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, deputy chief, Safety Services Division. The project supervisor was Sara Amy Leach, HABS historian.
- The Washington-based summer 1992 documentation team was headed by landscape architect Robert Harvey (Iowa State University-Department of Landscape Architecture) who served as field supervisor; the landscape architects were Deborah Warshaw (University of Virginia) and Dorota Pape-Siliwonczuk (US/ICOMOS-Poland, Board of Historical Palaces and Gardens Restoration); the architects were Evan Miller (University of Colorado-Boulder), Steven Nose (University of Maryland), and Tony Arcaro (Catholic University). The historians were Tim Davis (University of Texas) and Amy Ross (University of Virginia). Jack Boucher made the large-format photos; Air Survey Corporation of Sterling, Virginia, produced the aerial photography and digital mapping from which site-plan delineations were made.
- This written report was adapted from an historic structures report (1993) prepared for the District of Columbia by Oehrlein and Associates Architects of Washington, D.C., in association with the Jackson Group, Nersesian Consulting Engineers, and Turner and Associates.

History of the Crossing

The site of the first P Street bridge was the first location north of the mouth of Rock Creek unaffected by tides and shallow enough for simple fording; it was also on axis with Boundary Street (today Florida Avenue), which predated the establishment of the federal city. According to historic maps, the first span at this site was Paper Mill Bridge, a covered wood span built ca. 1855, named after its proximity to a mill on the east bank of the creek north of P Street.¹

In 1871 it was replaced with a more substantial steel Pratt truss bridge that was 44' above the creek bed across the ravine, and on axis with P Street. It measured 112' long and 56' wide. Co-financed by Georgetown and Washington, the construction cost was \$43,000. In 1893 its superstructure was rebuilt, and in 1923 the wood joists were replaced by steel beams. At the time, the bridge could carry a maximum weight of 6 tons, which required street cars to pause at the valley edge before proceeding slowly across, and the surroundings consisted of ash heaps and trash dump. With Rock Creek and Potomac Parkway under construction below, a wider arch span was necessary, and it was generally clear that a new bridge was needed.

History of the Design

Frederick Law Olmsted, Jr., an adviser on the parkway's development, commented on the design of the new P Street Bridge in 1931: "A new P Street Bridge is to be constructed immediately, in such a manner as, with due regard for economy, will add as much to and subtract as little from the general excellence of the parkway as practicable." Amid discussion of traffic flow onto neighborhood streets, he especially objected to a proposal to make the bridge a double-deck because of added cost, low headroom, and the unattractive appearance from the parkway roads. He also recommended exit and entrance ramps from the westerly ends of the roadway, and an entrance road moving northbound on the east side. The difficulties of this proposal, which should be handled in "a scenically agreeable manner," were in part overcome; today the northbound entrance is on the east side, the southbound entrance on the west.² The design of the parkway also required shifting the path of the creek to accommodate the roadway, and the topography of the site was greatly altered. The road lay approximately where the creek had flowed, with the waterway pushed west, and much of the west bank of the ravine was cut away.

The design for the bridge was presented to the Commission of Fine Arts in November 1931:

The design was considered with Lieut. Col. U. S. Grant III, Director of Public Buildings and Public Parks, who said he was vitally interested in it because of the Rock Creek Parkway which the bridge crosses. The bridge will be built of reinforced concrete and will be 200' in length. It will have a 90' span and be about 35' high from the bottom of the parkway. It is to be a two-arched bridge, providing ample room for a 40' parkway. . . . The architect members of the Commission gave the design particular attention and recommended omitting the pylons and carrying a parapet treatment throughout the length of the bridge. . . . The commission thereupon gave their tentative approval to the design.³

¹ "Georgetown and the City of Washington," J. H. Colton and Co. printers, ca. 1855.

² F. L. Olmsted [Jr.], "Memorandum in Regard to Design of P Street Bridge and of Rock Creek Parkway in its Vicinity," February 24, 1931 (D.C. Records Department, file No. 154313).

³ Commission of Fine Arts Minutes, November 2-3, 1931, and reported in the [Washington] Evening Star, November 2, 1931: B-1.

A rendering of the bridge, as it was eventually built, appeared in the newspaper two weeks later.⁴ Most construction drawings were complete by mid 1932, along with the design for a new temporary steel trestle to be built north of the bridge to carry streetcar and pedestrian traffic during the construction period.

Albert Harris (1869-1933), while a municipal architect for the District of Columbia, is credited with designing P Street Bridge along with other officials. Born in Wales, he lived in Pittsburgh and Virginia before becoming an apprentice in the Chicago office of Henry Cobb. By 1897 he returned to the Washington area and went to work at Hornblower and Marshall where he became chief draftsman and later a partner. Harris then formed his own firm and taught at George Washington University and Catholic University. In 1921 he was named municipal architect for the capital city, and in this capacity he oversaw a five-year program building schools and firehouses.⁵

John C. Gotwals (1882-1946) was engineer commissioner during the design phase of the bridge. A graduate of Pennsylvania State College he joined the Army Corps of Engineers in 1913. He was appointed to the D.C. post in 1930 and served in that capacity for four years.⁶

History of Construction

Funding for the bridge and its approach routes was provided by the National Industrial Recovery Act, as approved by the District Engineer August 3, 1933.⁷ Twenty-seven bids were received to build the bridge; the lowest was submitted by Pecora-Gaskill Engineering and Construction Corporation with A. T. Carozza of Baltimore. The cost was divided into three items: the detour trestle, \$14,000; removal of existing bridge, \$14,000; and construction of the new bridge, \$171,347, for a total of \$199,347.⁸

Award of the contract was delayed, however, because of claims made by the Washington Railway and Electric Company, which was asked to pay for expenses related to reconstruction of its tracks where grade changes were required at each end of the bridge, and installation of tracks over the detour trestle, estimated at \$46,000. The company eventually performed the work, even as it was debated into the construction process.

The construction contract was approved September 19, and work commenced shortly thereafter. The course of the creek was temporarily shifted west about 20' using bags of dirt, so the support structure for the temporary trestle and a sewer line under the creek could be installed. The trestle was ready for its track to be put down about mid November⁹; cantilevered wood footpaths flanked the center track. All construction above the main steel structure was done by the construction company; the railway company installed its own ties, track, and pedestrian walkway.

By the end of 1934, however, the rail company decided to eliminate the P Street line, which

⁴ "Beautiful New Bridge for Rock Creek Valley," [Washington] Evening Star, November 16, 1931: B-1.

⁵ Emily Hotaling Eig, "Lothrop Mansion" National Register of Historic Places nomination, March 1988, p. 8-9.

⁶ "Col. John C. Gotwals, Commissioner Here in 1930-to 1934, Dies," [Washington] Evening Star, January 16, 1946.

⁷ Clipping (no name, date), D.C. Records Department file.

⁸ Undated and unidentified typed [carbon] estimate found in the files of the Engineering Department.

⁹ H. C. Whitehurst, Director of Highways, Letter to the Engineer Commissioner.

necessitated some changes to the design of the new bridge. One option was to "carry out the construction as originally planned and to fill up the trolley trough area with cinder concrete and to place a roadway slab over the entire car track area." The second idea--to "redesign certain portions of the work"--was the one selected.¹⁰ Engineer Whyte explains:

Either plan involves a small force account item. This is due to the fact that the short center dams had been fabricated and placed[,] and that openings had been left in the abutment and pier walls to permit passage of the underground trolley system. With removal of the underground system[,] the wall openings will have to be closed in any event[,] and as removal of trackage results in an alteration in the roadway crown[,] the short dams in place must be removed and replaced with a continuous section set to a slightly different grade. The force account extra order covers the necessary cutting and drilling of concrete to remove the existing dams and to set dowels for closure of the wall openings.¹¹

By the end of March 1935, this change was reflected in the construction drawings. Work progressed very slowly, however, thanks to poor weather conditions and the creek that overflowed in the spring and fall. There were also coordination problems with the railway company and its work on the bridge. As a result, the construction company filed a number of claims for additional costs and time, few of which were honored by the District of Columbia. Pecora-Gaskill and A. T. Carozza went into receivership, with Henry G. Perring of Baltimore appointed as receiver December 27, 1934. He guided the completion of work on the bridge.

The bridge was formally dedicated July 22, 1935, in a ceremony arranged by the Dupont Circle, Georgetown, and Georgetown Progressive Citizens Associations.¹² Civic leaders proposed naming the bridge after Robert Fulton, inventor of the steamboat who lived on the banks of Rock Creek at Kalorama.¹³ The District Commissioners formally approved of this and so dedicated the bridge, but plaques calling it "P Street Bridge" had already been installed. The dedication included a ribbon-cutting ceremony at both ends, as well as a parade with the U.S. Marine Corps band, members of the American Legion, and several drum and bugle corps. Less than a year later, Rock Creek and Potomac Parkway opened, and it was hailed as "one of the grandest automobile parkways in the world."

Description

The bridge is a double elliptical arch faced with random multi-colored ashlar outlined by smooth granite. The arches are decorated with simple keystones that are capped by a strong horizontal band and solid parapet wall. The arches spring from wide cut-stone pilasters that extend up through the parapet wall and form overlooks at the sidewalk level. The parapet is smooth granite, articulated by shallow pilasters.

Each arch is composed of three ribs; the center one is double the width of the outer ribs. The area between them is filled by a thin, flat concrete screen. A grid of beams lies directly on top of the

¹⁰ H. C. Whitehurst, Director of Highways, Letter to the Engineer Commissioner, January 7, 1935.

¹¹ C. R. Whyte, letter to Capt. H. F. Clark, January 24, 1935.

¹² "Rites Tomorrow to Mark Opening of P Street Span," [Washington] Evening Star, July 21, 1935, B-1.

¹³ "New Span Recalls Fulton," [Washington] Evening Star, July 18, 1935, A-14.

arches, and on columns rising from the arches; this, in turn, supports the roadbed and sidewalks above. Concrete sidewalks flank the asphalt-covered, four-lane roadbed, separated by granite curbs and shallow brick gutters. The underside of the arches and inside faces of the abutments are gray, cast-in-place concrete, as is the interior of the bridge.

The interior of the bridge is accessed through a manhole and wall-mounted ladder at the center of the bridge. There has been no significant alteration to the bridge since its completion, other than repairs to the roadbed and sidewalk.

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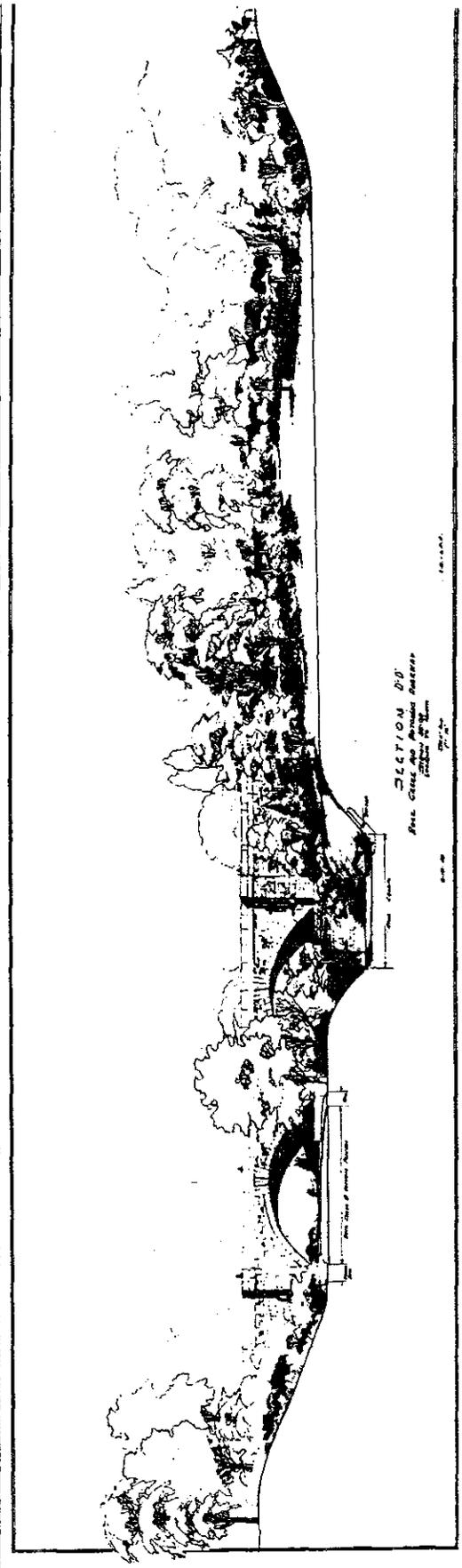
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Maps

"Georgetown and the City of Washington." J. H. Colton and Company Printers, ca. 1855.

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Section D-D, Rock Creek and Potomac Parkway, showing P Street Bridge, June 14, 1940. National Capital Parks, 91.3-218-4.