Documenting Rock Creek and Potomac Parkway

Sara Amy Leach

Documentation of historic landscapes, especially "natural" ones, is a challenge that encompasses bridges and buildings, vegetation and vistas. The embodiment of such a complex site is the parkway or park road, which caught the attention of HABS/HAER after several years of recording landscapes and bridges as separate entities. In the case of Rock Creek and Potomac Parkway in Washington, DC, which was documented over the summers of 1991 and 1992, the project as a whole falls under the aegis of HABS, which assessed the overall landscape and two adjacent service stations; ten vehicular and pedestrian bridges are cataloged as HAER sites. Study of this 2.5-mile corridor was designed as a pilot project, aimed at developing documentation standards, with the sponsorship of the Park Roads and Bridges Program of the Engineering and Safety Services Division, National Park Service.

The team members who worked on the project reflect the multifaceted nature of the site, and undertaking historic research as the first step proved essential. During summer 1991, a landscape architect and a historian conducted background research, preparing much of the overall history and ascertaining the availability of hundreds of historic drawings and photographs. As a conclusion to this initial investigation, draft in-house guidelines for documenting a parkway or park road were compiled, using graphics from the Rock Creek and Potomac Parkway. This past summer, five architects and landscape architects, and a historian were added to the original historian and landscape architect to form a larger team.

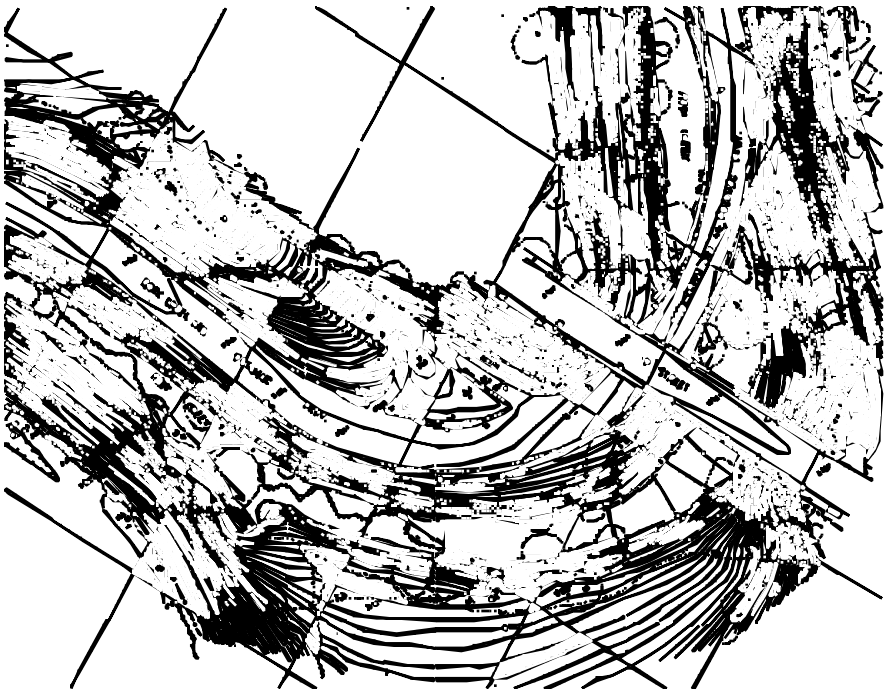
The Rock Creek and Potomac Parkway project was sponsored by the Park Roads and Bridges Program of the National Park Service, John Gingles, deputy chief, Engineering and Safety Services Division. The project supervisor was Sara Amy Leach, HABS historian. The Washington-based summer 1992 documentation 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 E. Boucher made the large-format photographs, thanks to the U.S. Park Police-Aviation Division; Air Survey Corporation of Sterling, VA, produced the aerial photography and digital mapping from which the site-plan delineations were made. In summer 1991, Davis and Warshaw were the investigators, and Will Rieley, principal of Rieley Associates of Charlottesville, VA, served as a consultant.

Aerial perspective-corrected photograph of area south of P Street to Waterside Drive. Air Survey Corporation, 1992.

Rock Creek and Potomac Parkway was authorized in 1913 to enable the reclamation and conservation of the polluted Rock Creek, which had served as a dumping ground for nearby industries and tenement dwellers. In keeping with the function of a parkway, it was designed to link two major parks—the National Zoological Park at the north terminus and the Potomac River parks on the south. Today it is the oldest thread of a larger, metropolitan tapestry of five major parkways and several minor border or strip roads. Noteworthy for the graceful path it makes along the creek, into the cavernous valley where Rock Creek Park begins, by 1937 this scenic drive was also considered a critical commuter artery where local one-way traffic patterns were introduced.

Rock Creek and Potomac Parkway was selected as the model for HABS/HAER's study because of its uncontested historic significance, integrity, size, and proximity to the HABS/HAER Washington office; the work was timed to conclude before park officials initiated rehabilitation, which is slated to begin in 1996. The cost of the first year of the project was $28,000; the second year cost slightly more than $100,000, approximately 25% of which was spent on the aerial photography and digitization.

*(**Parkway**—continued on page 6)*



Detail of area as digitally mapped, showing 1' contours, tree bases, and probable canopies. Air Survey Corporation, 1992.

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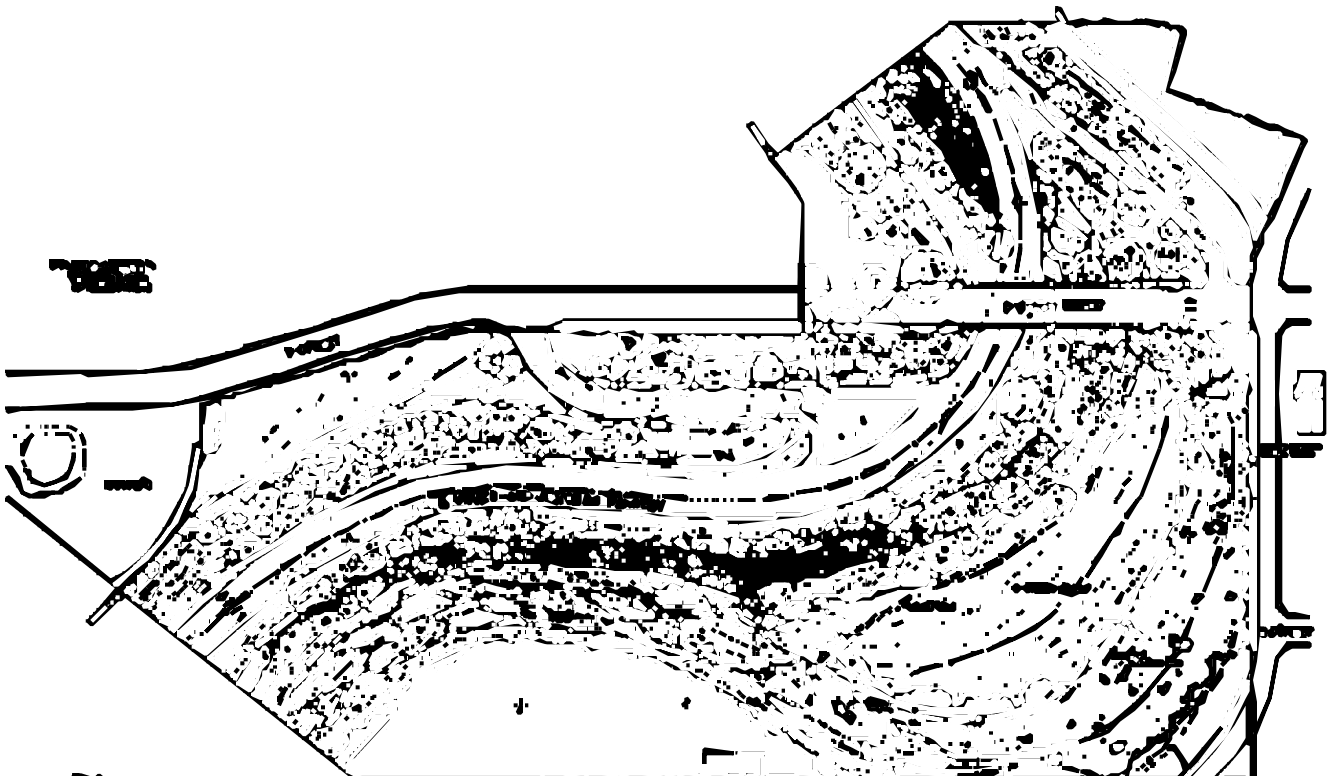
The foremost documentation decision was to contract for aerial photogrammetric photographs of the parkway as the basis for digitized mapping and interpretive drawings. There were no comprehensive contemporary plans showing land patterns, much less at the scale of the original drawings, of which many exist. The flyover in Washington's much-restricted airspace was made just prior to the leaves budding out on the trees so the bold topography is fully exposed, but as late as possible to gain as high and bright a sunlight as possible. More than a dozen 9" x 9" color contact prints were made. The plan and its features were generated at 1"=40'—the same as the 1920s-30s plans—a generous scale that dictated an average flying elevation of 1,800'. The breadth of the survey swath was set at 100' on either side of the parkway or the creek, whichever was farthest, though the parkway's legal right-of-way is much wider. In retrospect this was insufficient, since the termini of the bridges are usually beyond this edge, as are some interesting details and vistas; subsequent field visits fleshed out these areas. HABS/HAER requested the depiction of 1' contours, tree canopy with trunk placement for specimen species, bridges with spot heights and saddles, and the road and creek themselves. It took several weeks between photography and completion of the mapping on 24" x 36" Mylar sheets; to facilitate Federal Highway Administration (FHWA) work in the future, the base digitization was backed up on computer tape, which will go to the National Capital Region along with copies of other products upon completion of the project.

HABS chose to trace and enhance its rendition of the site plan on its new E-size Mylar that measures 34" x 44"; because of the twists and turns the parkway makes, it would have been awkward to accommodate on the



Detail of same area delineated by HABS team, showing 2' contours, confirmed tree canopies and labeled specimen trees, traffic direction, footpaths, and related buildings, such as the Embassy Chevron. Robert Harvey, 1992, HABS.

smaller size. Fourteen sheets make up the distance from the Lincoln Memorial to the zoo-tunnel headwall, and three versions were generated: the hard features such as roads, bridges, and buildings, and 2' contour lines; the plantings, showing tree canopy, labeled specimen trees with trunk placement; and a photographically combined set of overlays. Alignment of the overlays was achieved using pin-bar registration. Though labor-intensive tasks such as stippling innumerable contour lines and determining boundaries were tedious, techniques such as airbrushing the extensive stream and waterfront area was innovative, fast, and provided a consistency of texture.

In addition to the plans and a key sheet, the architects and landscape architects generated two sheets of historic plans and proposals, two sheets of bridge elevations, and one sheet of landscape sections. The historic plans show the contrasting closed-valley (to contain the creek and fill the void) and open-valley options (as seen today) posed in 1908, followed by the gradual elimination of parkway features, shown in plans of 1916, 1924, and 1933. Nine bridges are drawn at 1"=20' scale, assembled as "poster" sheets. They were not measured because they are under the jurisdiction of the District of Columbia, and funding would have had to come from outside the Park Service. The side-by-side elevations succeed in visualizing the sequence of what appears before the motorist's eyes, from the cluttered area by the mouth of the creek where the simple, low-slung arches are faced with ashlar, to the more elaborate and monumental masonry crossings at the deepest point of the valley.

The historians researched the parkway to its fullest, all the way driving the scope of drawings. A sizable report covers the parkway's chronology from its foundations in the City Beautiful Movement and the early history of Washington, DC, through design options, legislation, acquisition of land, construction, and alterations to it after completion in 1936. The context of related structures is dealt with here, as well as in the form of individual HABS and HAER histories. All the bridges—vehicular and pedestrian—crossing and carrying the parkway are cataloged, as are two privately owned service stations. Though by definition parkways are devoid of commercial buildings, automobile service stations were a necessary evil made tolerable by sympathetic styling, usually rustic or Colonial Revival. Locally, the Shipstead-Luce Act of 1930 required that the design of structures adjacent to Federal park land be reviewed by the Commission of Fine Arts. The two examples along the Rock Creek and Potomac Parkway are a contrast unto themselves—a dark, gabled rustic block with slate roof, and a clean Neoclassical limestone cross plan. Erected on the fringe streets convenient to the parkway, such buildings are integral to studying the motor age while sympathetic to the parkway setting. Higgins Service Station on Virginia Avenue is, in fact, one of the few instances of commercial rustic styling in the city, and indicative of what the Park Service might have built for itself. The historian chronicled the importance of these in terms of designers, engineers, and their role in serving vehicular traffic in the area.

Large-format photography is used to its fullest potential, combining contemporary views with historic images. HABS photographer Jack E. Boucher made aerial views from 500'-1,000', as well as from the pedestrian level, which include details of ornament and construction. Whenever possible, "now" views are taken of constructions, vistas, and sites for which "then" pictures are available.

In retrospect, the documentation of Rock Creek and Potomac Parkway was a productive documentation and pilot project. A comprehensive assemblage of drawings, photographs, and written history more than adequately serves the needs of FHWA and NPS officials, while introducing a new kind of site to the HABS/HAER collection—one served by both engineering and architectural sides of the HABS/HAER Division.

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a unique provision that allowed HABS and, subsequently, HAER to seek and use outside resources to conduct their mandated work. That provision has been the basis for hundreds of cooperative projects undertaken with parks, other Federal, state and local agencies, private organizations, and even individuals.

Increasingly over the past decade, HABS and HAER documentation projects have been driven by stewardship needs. Cultural resource managers use benchmark documentation as the basis for maintenance decisions, for assessing conditions, for planning appropriate treatments, and for public information and interpretation. Stewardship is thus a common thread among recent recording projects. Given the huge number of historic structures in the United States, the need for adequate documentation is clearly enormous but unfortunately the resources to accomplish that work are clearly limited. For that reason, HABS/HAER is developing new techniques and technologies to address that need within the realities of time and fiscal constraints. Several of the articles in this issue of *CRM* highlight recent work with photogrammetry and computer-aided-drafting, or CAD. Another evolution in the two programs derives from the ever-broadening definition of what constitutes the historic built environment. HABS, for instance, is recording the design of highways in the landscape. HAER is studying a major industry, steel, simultaneously in several regions of the country; as well as rapidly evolving, and therefore ephemeral, technologies such as the development of military aviation. The articles which follow were compiled to represent these and other current methodologies, practices, and technologies used in HABS and HAER documentation projects.

John A. Burns, A.I.A., is the deputy chief, HABS/HAER Division. He coordinated this issue of *CRM* and served as guest editor.