

COLONIAL NATIONAL HISTORICAL PARK
ROADS AND BRIDGES
~~Yorktown to Jamestown Island~~
Yorktown Vicinity
York County
Virginia

HAER No. VA-115

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
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HISTORIC AMERICAN ENGINEERING RECORD

COLONIAL NATIONAL HISTORICAL PARK ROADS AND BRIDGES

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Location: The park's interpretive road system encompasses a right-of-way for the Colonial Parkway (HAER No. VA-48) that extends 21.44 miles through James City and York counties, Virginia, and tour roads on Jamestown Island (HAER No. VA-116) and the Yorktown battlefield (HAER No. VA-117), Yorktown vicinity, York County, Virginia.

East end: Yorktown quadrangle
UTM: 18/366250/4121250
West end: Surry quadrangle
UTM: 342400/4119500

Date of Construction: 1931-1957

Type of structures: Vehicular roads and bridges.

Designer/Engineer: Eastern Division, Branch of Plans and Design, National Park Service; and the U.S. Department of Agriculture, Bureau of Public Roads, Region 15

Owner: National Park Service

Significance: Constructed between 1931 and 1957, the Colonial Parkway links Jamestown Island, Williamsburg and Yorktown, as part of the Colonial National Historical Park. Established in 1930, Colonial NHP was part of the Park Service's efforts to expand its mission to include the preservation and restoration of historic sites in the east. Integral to the park's conception, Colonial Parkway was designed as a scenic drive that incorporates historical and natural features of Tidewater Virginia. At both the Yorktown and Jamestown termini of

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the parkway, interpretive tour roads provide a more specialized visitor experience for those sites.

Project Historian: Michael Gallagher Bennett, HAER 1995

Project Information: Documentation of the Colonial National Historical Park Roads and Bridges took place during the summer of 1995 under the direction of project leader Christopher H. Marston. The HAER field team included supervisor Robert R. Harvey, Iowa State University; landscape architect Magdalena Bielecka, Warsaw, Poland; architect Catherine Lee Doar, Varina, Virginia; landscape architect Kevin Doniere, Cincinnati, Ohio; and HAER historian Michael G. Bennett, Waterford, Virginia.

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PREFACE

The construction of the Colonial Parkway marks an important change in National Park Service road-building programs. Along with other NPS parkway projects of the 1930s (including the Mount Vernon and Blue Ridge parkways), the design of Colonial integrates landscaping ideals developed by the NPS Western Field Office in the 1920s, with parkway construction standards established by the Westchester County, New York, Parks Commission in the early twentieth century.

Under Thomas C. Vint, the Western Field Office established a new professional approach to landscape architecture in the National Park Service. The office developed innovative park design standards which emphasized harmonization with the natural environment. Following the writings of prominent landscape theorists of the nineteenth century such as Andrew Jackson Downing and Frederick Law Olmsted, NPS landscape architects used nature as the central model for their work. Native building materials were utilized to blend structures into the natural surroundings and special attempts were made to preserve existing conditions rather than alter them. ("As far as practicable" was a common qualifier in NPS design specifications).

Concurrent with these changes, highway building practices were evolving, particularly through the work of landscape architect Gilmore D. Clarke, engineer Jay Downer, and others associated with the conception and design of the Bronx River Parkway. To heighten the safety and pleasure of automotive travel, roads were being laid out in broad, meticulously planted right-of-ways with limited access to allow for a continual flow of traffic. Commercial development and other intrusions that could distract motorists' attention from beautiful surroundings were avoided. These linear parks became known as "gardens for machines," providing radial corridors away from America's increasingly congested urban areas (primarily in the northeast) for those with the means and time to tour the countryside.

The designers of the Colonial Parkway incorporated these ideals of modern highway design and utilized the region's material culture traditions as the inspiration for structural features

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along the road. Culvert headwalls and many bridges, for instance, are clad with hand-made "Virginia style" brick laid in English and Flemish bonds. The pavement was hand broomed and acid washed to expose the extra large aggregate in the concrete, simulating the marl and shell roads built around Yorktown in the eighteenth century. The parkway is aligned along portions of the James and York rivers to integrate broad vistas of the waterways vital to the region's historical and geographical development.

From the inception of the park in 1930, the parkway has been a central component in its interpretive mission. It unites the sites of Jamestown, Williamsburg, and Yorktown--three pivotal areas in American colonial history--into the coherent entity of Colonial National Historical Park. Its design, furthermore, is thought to provide continuity in the physical transition from one historical era to another. The parkway is one element of the park's interpretive road system that also included tour roads around Jamestown Island and the Yorktown battlefield.

This overview history is part of a project to document the roads and bridges of the Colonial National Historical Park with measured drawings, photographs, and histories. Five major themes encompass the scope of this study: the historical and geographical development of the tidewater region; the administrative history of the Colonial National Historical Park; the planning of the Colonial Parkway; the engineering of the parkway's construction; and the evolution of the park road system from the completion of the parkway in 1957 to the present.

The staff of the Colonial National Historical Park has been indispensable to this undertaking. In particular the author would like to thank chief historian James Haskett, engineer Roy Bigelow, curator Richard Raymond, cultural resource manager Jane Sundberg, chief of maintenance Skip Brooks, park superintendent Alec Gould and the park's administrative staff.

SIGNIFICANCE OF THE VIRGINIA TIDEWATER

In the language of late nineteenth and early twentieth century antiquarians, Jamestown, Williamsburg and Yorktown were "sacred shrines of national life and liberty."¹ The geographic proximity of the three sites, known as the "historic triangle," neatly chronicles three aspects of American colonial history from the first permanent English settlement at Jamestown to the subsequent surrender of a large segment of the British forces in America. In the words of W. A. R. Goodwin, the preservation-minded rector of Bruton Parish church noted for his involvement in the Williamsburg restoration, "Williamsburg is Jamestown continued, and Yorktown is Williamsburg vindicated."²

Jamestown, Williamsburg, and Yorktown are encompassed within a unified geographic area located between the York and the James rivers. As part of the Coastal Plain, the peninsula is characterized by tidal bays and estuaries, the physical remains of submerged stream valleys. The land is comprised of unconsolidated sediment of boulders, pebbles, sand, clay and marl (a native stone). The transitional zone between water and forest consists of marshes and lagoons, the most prominent features of the Virginia drainage system. These wetlands led to the regional place name "Tidewater" and provide access to an abundance of navigable waterways vital the region's historical development.³

¹William Robinson, Jr. "The Conception, Purpose, and Development of Colonial National Monument," *The Yorktown Book: The Official Chronicle and Tribute Book* (Richmond, VA: Yorktown Sesquicentennial Association, 1932), 103.

²Goodwin's quote comes from an undated letter to Horace Albright in file 630-C-2, "Planning the Parkway, 1931," collection of the Colonial National Historical Park.

³William Bullock Clark and Benjamin LeRoy Miller, *Physiography and Geology of the Coastal Plain Province of Virginia*, Virginia Geological Survey, Bulletin No. IV (Charlottesville: University of Virginia Press, 1912), 13-16.

Taking the broadest view, the exploration and settlement of the region was part of a larger continuum of the outward expansion of western European society which accelerated during the late fifteenth century. A combination of commerce and crusade, this movement was primarily predatory in nature, seeking to gain the quickest and greatest return on the investment of money, time, and lives.⁴ In 1606, numerous mercantile ventures in England were consolidated into the Virginia Company and granted a charter to lands along the Atlantic coast of North America.

At a great expense of lives and resources, an English foothold was established in Virginia about forty miles inland on a swampy yet defensible site along the James River (Powhatan River) in 1607. In honor of King James I, the settlement was named "James Towne" and a fort was constructed. According to cultural geographer D. W. Meinig, "The whole venture was a speculative commercial undertaking: there were no women in these first vessels and the men were all company employees, whose main task was to develop a profitable enterprise, not to initiate a new society overseas."⁵

A more intensive colonization program emerged by the 1620s with the establishment of subsidiary companies, known as "hundreds." The founding of separate colonies led to a distinct spatial and social order rooted in the traditions of Anglican England. These colonies, however, lacked any coherent political base and acted as separate entities controlled by certain wealthy families who established the basis of the Tidewater plantation society.⁶ While it remained the capital and primary port of entry for almost a century, Jamestown never developed into anything more

⁴D. W. Meinig, *The Shaping of America: A Geographical Perspective on 500 Years of History*, Vol. 1 *Atlantic America, 1492-1800* (New Haven, CO: Yale University Press, 1986), 4-8.

⁵Meinig, 38.

⁶Meinig, 136-150; David Hackett Fisher, *Albion Seed: Four British Folkways in America* (New York: Oxford University Press, 1989).

than a colonial village.

By the middle of the seventeenth century, the population had grown to nearly 20,000. A rural commercial society dominated by a small planter class who sought to adopt the cultural life of Stuart England flourished. While tobacco was dominant, efforts to diversify the agricultural base of the region were successful with the infusion of wheat, corn and livestock. Toward the end of the century, however, there was still no regional focus or urban orientation to the landscape. Due to the exhaustive nature of tobacco cultivation, fields and homesteads were discarded as quickly as new ones emerged. Dissatisfied with Jamestown's swampy environment, the capital of Virginia was moved a few miles inland to Williamsburg--the site of an 1632 settlement known as "Middle Plantation"--in 1699. Reflecting the baroque forms of European capitals, Williamsburg was elaborately planned with broad boulevards, open squares, and Georgian inspired architecture.⁷ From its small beginnings, Williamsburg developed into the social, cultural, and political center of greater Virginia.

During the initial phases of settlement in the 1620s, fortifications were established along the peninsula to protect English interests from the retaliations of Indians in the region. One of these forts along the York River was built by French military engineer Nicholas Martiau, and became the site of Yorktown. As part of the Act of Ports in 1691, land was purchased and Yorktown was surveyed to be a shipping and receiving port for the region. The town developed into a thriving tobacco port and received commercial goods from England desired by the emerging elites of the Tidewater. A vigorous commercial trade was curtailed with the American Revolution and the Siege of 1781 which resulted in the eventual surrender of the British forces under the command of General Cornwallis on 19 October. With this event, Yorktown became a symbol of American strength, determination and liberty, as well as the recognized site of the end of the colonial era of American history--an era

⁷Meinig, 153-160.

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which began with the founding of Jamestown just 20 miles away.⁸

⁸Clyde Trudell, *Colonial Yorktown* (Greenwich, CO: Chatham Press, 1971), 37-56.

PRESERVING VIRGINIA TO PRESERVE AMERICA

On 29 October 1781, just ten days after the surrender of Cornwallis, the American congress passed a resolution to construct "a marble column, adorned with emblems of the alliance" in memorial to the victory at Yorktown. While the monument was not constructed until the centennial of the battle in 1881, Yorktown was already recognized as a site of national significance and various memorial activities occurred in the first half of the nineteenth century. In 1880, Congress authorized the formation of the Yorktown Centennial Commission to plan a celebration and find an appropriate site for the monument to be built under the direction of the Secretary of War. On 19 October 1881, ceremonies were opened by the laying of a marble cornerstone by an order of Masons.⁹

The monument was constructed fifteen years after the establishment of the Yorktown National Cemetery in 1866. Originally administered by the War Department, the cemetery was set aside for the reinterment of Union soldiers killed during the Civil War. The erection of the Yorktown monument mobilized a local movement to create a historic military park out of the Temple farmstead--the site of the Moore House where the terms of surrender were written in 1781--that would unify the cemetery and the monument into a single reservation.¹⁰ While plans to create a commemorative park continued through the 1880s and 1890s, a 1892 bill in particular called for the construction of a road to

⁹"Yorktown Monument," unpublished manuscript in file 101 C-2, "History General-1930-November 1952," collection of Colonial National Historical Park.

¹⁰The creation of a military park in Yorktown had precedents in other preservation efforts of the late nineteenth century including the establishment of parks in Antietam (1890), Shiloh (1894), Gettysburg (1895), and Vicksburg (1899). The cemetery was transferred to Colonial National Historical Park in 1933.

provide access to the sites from the Yorktown wharf.¹¹

Despite the commission's inability to gain widespread support in Congress for a military park in Yorktown, the activities surrounding the centennial helped invigorate a regional preservation movement. According to James Lindgren, the dominant motives behind the movement was a "cultural crusade" to promote symbols of Virginia's traditional society during the postbellum period of social, political and economic upheaval. At the forefront of the movement was the Association for the Preservation of Virginia Antiquities (APVA), founded in Richmond in 1889 and modeled after the Mount Vernon Ladies Association (1856). During their first public meeting in 1890, Virginia historian Thomas Nelson Page pleaded with the audience:

Go to Jamestown, the sacredest spot on this continent, with its crumbling or long crumbled wall, its very ground perishing under the advancing tides of our great river; go to Williamsburg, still redolent of the perfumes wafted from the most romantic society which ever existed in this hemisphere, where the echoes have hardly died away of the daring words which called a nation into being; go to Yorktown, where tyranny was smitten down; go to the old graveyards through the length and breadth of this Commonwealth, where sleep in unmarked graves a race the like we shall never see again. What will you find? Desolation and ruin; cowpastures and sheep walks.¹²

For the founders of the APVA, most of whom were women, the

¹¹Charles E. Hatch, Jr., "The Evolution of the Concept of Colonial National Historical Park: A Chapter in the Story of Historical Conservation," 28 July 1964, 5-12. Unpublished manuscript in the collection of the Colonial National Historical Park.

¹²James M. Lindgren, "For the Sake of Our Future: The Association for the Preservation of Virginia Antiquities and the Regeneration of Traditionalism," *The Virginia Magazine of History and Biography*, 97 (January 1989): 47.

deterioration of Virginia's landscape symbolized the eroding of their traditional culture. Guided by a white, conservative and primarily Protestant membership, the APVA created a "civil religion" out of preservation activities in Jamestown and Williamsburg. The distinctions between patriotism, Christianity, and Virginia became undistinguishable. In 1893, the APVA gained control of 22.5 acres on Jamestown Island and sponsored pilgrimages to the site to instill a sense of the sacred in the public. Many of the activities of the APVA, however, were exclusionary. Black groups, for instance, were often denied access to the island.¹³

During the tercentennial celebration of the founding of Jamestown in 1907, Page argued that, "this country belongs to the English speaking race and the civilization which it represents."¹⁴ Such rhetoric, combined with the use of preservation for its symbolic value to promote a traditional way of life, brought criticism to the APVA. Critics of the APVA's moral and inspirational mission argued for a more professional preservation program to actually save and restore historically significant structures. In the early twentieth century a more pragmatic approach toward preserving Virginia's past emerged through the association of heritage with economic growth. For state policy makers, historical tourism became a viable alternative to an industrial base economy.

As early as 1909, the City Council of Williamsburg passed a resolution "to secure an appropriation for the building of a macadamized road connecting the historic places of Jamestown on the James River and Yorktown on the York River, a distance of about 20 miles." Recognizing the historical relationship and geographic proximity of the sites, the council stated that the road should follow "the most convenient and feasible route," and be constructed out of "such materials as may be found most

¹³Lindgren, 57-62.

¹⁴Lindgren, 72.

suitable and best fitted."¹⁵ While the road was to promote economic growth in the region, it was presented to Congress as a "military" road, perhaps to help justify its construction. Although the project failed to gain support in Congress, other road-building and preservation plans emerged from the highest levels of the state government in the 1920s. These projects recognized the increasing numbers of Americans who owned automobiles and had the leisure time to visit sites of historical importance.

In 1926, newly elected Virginia Governor Harry Flood Byrd established the Conservation and Development Commission (CDC) to create an economic stimulation plan for Virginia. Heading up the agency was William Carson, a political activist who had deep roots in the state's Democratic party. In a Jeffersonian attempt to avoid rampant industrialization, Carson and his associates promoted Virginia's cultural and natural resources as agents of economic growth. Carson argued that such an approach could transform the state into a "recreational mecca."¹⁶ In 1929, Governor Byrd was able to proclaim, "America is on wheels and Virginia is now awake to the dollar value of the tourist trade," identifying the state as a "virtual museum of the founding and growth of America."¹⁷ By the 1930s, development programs and a vigorous promotional campaign made Virginia the second leading tourist destination on the east coast behind Florida.

Integral to Virginia's emerging heritage programs were the changing policies of the National Park Service, an agency of the Department of the Interior established in 1916 to administer the

¹⁵Hatch, "The Evolution of the Concept," 27-28; Memorandum by Margaret Ferrell, 24 October 1931, file 501.03, "Newspaper Clippings October 1931-December 1939," collection of the Colonial National Historical Park.

¹⁶John F. Horan, "Will Carson and the Virginia Conservation Commission, 1926-1934," *The Virginia Magazine of History and Biography* 92 (October 1984): 397.

¹⁷Horan, 392-397.

nation's parks and national monuments. Under the leadership of Stephen T. Mather and his assistant and eventual successor Horace M. Albright, the National Park Service broadened its holdings and expanded its conservation mission in the East in order to foster greater public and congressional support. This change in policy was hampered by the lack of natural areas that met Park Service standards and the high rate of private land ownership.¹⁸

An avenue for eastern involvement emerged by the end of the 1920s as the Park Service's idea of recreation and stewardship began to include the interpretation and preservation of historic sites. This was not completely a new role for the federal government. Since the late nineteenth century the War Department had administered military parks in the east. Horace Albright, who became director of the Park Service in 1929, argued that the Park Service was better equipped to manage historical sites than under the War Department's control.¹⁹ This policy change proved advantageous to Virginia where a "park movement" was emerging with Carson's efforts to create the Shenandoah National Park (established in 1926 but not created until 1935).²⁰ The desire to create a historic park in Virginia was reinvigorated by the CDC's work with the National Park Service in Shenandoah, and was influenced in a large part by preservation activities just getting underway in Williamsburg.

Appalled at the dilapidated state of the colonial capital by the early 1920s, W. A. R. Goodwin, rector of Bruton Parish church, actively pursued philanthropists to fund a massive restoration of the entire town. While lecturing in front the New York City

¹⁸Barry MackIntosh, *The National Park Service: Shaping the System* (Washington, DC: Department of the Interior, Government Printing Office, 1991), 18-22.

¹⁹MackIntosh, 21; see also Horace Albright with Robert Cahn, *The Birth of the National Park Service: The Founding Years, 1913-1933* (Salt Lake City, Utah: Howe Brothers Publishers, 1985), 240-261.

²⁰Horan, 398-403.

chapter of Phi Beta Kappa in 1924, Goodwin met John D. Rockefeller, Jr. Accepting an offer from Goodwin, Rockefeller and his son David travelled to Williamsburg for a private tour. By 1926, Rockefeller was so enthused with the idea of restoring the town that he authorized the hiring of an architect to develop site drawings of what the village might become.²¹

That same year, Goodwin hired the Boston architectural firm of Perry, Shaw and Hepburn. In order to avoid community suspicions, the architects often did their field work under cover of the night. Such covert actions continued during the early years of the restoration. When Rockefeller began negotiations to purchase his first structure, the Ludwell-Paradise house, he would wire Goodwin about the "antique," and sign the message "David's father." By 1927, Rockefeller decided to undertake a complete restoration of the village, a novel and ambitious preservation project at the time. It was left to Goodwin to help secure properties and the community's support, both of which he accomplished.²² Because of its geographic proximity and historical relationship to Jamestown and Yorktown, the Williamsburg restoration had a major impact on the development of the Colonial National Historical Park in the 1930s.

In 1928, Kenneth Chorley, head of the Williamsburg restoration and long time Rockefeller associate, visited Horace Albright while he was superintendent of Yellowstone National Park to discuss the work in Williamsburg. Meeting Albright again in Jackson Hole, Wyoming, where Rockefeller was actively pursuing the preservation of the scenic valley, Chorley brought up the idea of creating a historical park in Virginia. Writing to Chorley in 1929, Albright stated, "I am so enthusiastic over this proposed historic park that I can hardly restrain my

²¹George H. Yetter, *Williamsburg Before and After: The Rebirth of Virginia's Colonial Capital* (Williamsburg, VA: The Colonial Williamsburg Foundation, 1988), 49-52.

²²Yetter, 52-58.

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imagination."²³ While Albright and Chorley recognized the possibilities of a Tidewater park, it was William Carson who formalized a plan to unite Jamestown, Williamsburg, and Yorktown by a connecting parkway under the stewardship of the National Park Service.²⁴ In a letter to Albright dated 26 March 1929, Carson stated,

These three areas, which are closely adjacent, if combined in an historic national park, or state and national park, would present to the Nation and to the world many of the most salient facts associated with the birth of the Nation and the birth of the Nation's liberties.²⁵

Echoing earlier road-building proposals, Carson continued to write that, "Yorktown and Williamsburg and Jamestown should be connected by a memorial highway," a physical link to the historical triangle.²⁶ In an effort to enlist support for the project, Carson and the CDC organized tours of the peninsula for congressmen and their wives. During November 1929, Carson organized a trip for Albright and Michigan congressman Louis C. Cramton, Chairman of the Sub-Committee of the Committee of Appropriations in the House of Representatives, that included a visit to Governor Byrd in Richmond.²⁷ The idea to create a historical park that celebrated nearly two hundred years of

²³Albright to Kenneth Chorley, 27 March 1929, file 101 C-2, "History General-1930-November 1952," collection of the Colonial National Historical Park.

²⁴Hamilton Eckenrode, "Origin of the Colonial National Monument," 16 October 1933, file 101 C-2, "History General-1930-November 1952."

²⁵Verne E. Chatelaine, "The Origin of the Colonial National Monument Idea," 25 March 1932, file 101 C-2, "History General-1930-November 1952."

²⁶Ibid.

²⁷Horan, 403; Albright to Eckenrode, 13 January 1933, file 101 C-2, "History General--1930-November 1954."

America's colonial heritage within a radius of a few miles appealed to Cramton. After the trip, Cramton wrote,

I would like the visitor to Jamestown to be able to drive on to Williamsburg and to Yorktown, without the impression of the early days being driven from his mind by a succession of hot-dog stands and tire signs, etc., along the highways and hence would like a new highway as a part of the new park, on a strip sufficiently wide to protect it by trees shutting out all conflicting modern development, this highway not to be a glaring modern pavement but as much as feasible giving the impression of an old-time road.²⁸

Subsequent meetings between Cramton, Albright and Carson led to the introduction of H.R. 8434, known as the "Cramton Bill," on 10 January 1930. The bill, which called for the creation of Colonial National Monument, received the full support of Virginia representatives. It was believed that the bill's introduction by a Michigan representative would broaden its national appeal. Initial reactions from the Department of the Interior and the Committee on Public Lands were favorable but local critics quickly emerged, culminating in what is known as the "Williamsburg Revolt." Led by Judge Frank Armistead and Channing M. Hall, a group of Williamsburg residents, already divided over the Rockefeller restoration, opposed the bill on the grounds that the federal ownership of lands would decrease the taxable property in the city. APVA leaders were also concerned for their land on Jamestown island which they believed would be condemned and taken by the government.²⁹

A series of public meetings through the spring of 1930 resulted in a compromise between the National Park Service, the city of Williamsburg, and the APVA. On 6 May 1930 an amendment was attached to the bill to protect the APVA lands and to provide for only a 200' right-of-way through the city of Williamsburg. The

²⁸Eckenrode (1933), n.p.

²⁹Hatch, "The Evolution of the Concept," 35; and Chatelaine (1933), n.p.

revised bill was brought before the Senate by Gerald P. Nye of North Dakota and later approved by President Herbert Hoover on 3 July 1930.³⁰ Appropriations in the bill provided for the establishment of the Yorktown Sesquicentennial Association to organize a national celebration in October 1931, and to fund a preliminary survey of the region. This survey was undertaken during the fall of 1930 by NPS engineer Oliver G. Taylor and landscape architect Charles E. Peterson, formerly of the Western Field Office in San Francisco.³¹ The Taylor/Peterson survey of 1930 established a proposed boundary of the park for President Hoover's official proclamation of the parks founding in December. The survey was significant for its impact upon later design and alignment decision concerning the parkway and its development into a scenic highway rather than a "country road."

The creation of the Colonial National Monument marked an important development in Virginia's conservation and preservation movement. It also represents the introduction of the National Park Service into the field of historic preservation. The work of both the Colonial Williamsburg Foundation and the Park Service in the 1930s had a profound effect on the study of American architectural history, and historic preservation in America. Architectural historian Dell Upton has written that restoration architects, "helped create the impression that preservation was a highly technical, quasi-scientific enterprise." He continues:

Williamsburg and Park Service architects synthesized and codified research practices inherited from the previous generation of Colonial Revival architects. They combined the techniques of physical analysis that men like Isham (Norman Islander Isham) had inherited from English antiquarians, the artful measured drawings of Colonial

³⁰Hatch, "The Evolution of the Concept," 36-38.

³¹Oliver Taylor, Superintendent's Monthly Narrative Reports, January - August 1930, file 207.02.3, collection of the Colonial National Historical Park.

Revival architects, and careful documentary research. They also created a standardized format, now called a historic structures report, for this total documentation of a building's structural, legal, and sometimes human history."³²

Critics have argued that the efforts of the park and Colonial Williamsburg helped perpetuate the myth of a well groomed colonial past. While there is truth in this statement, the work at Williamsburg and Colonial represents innovative approaches toward preservation and interpretation in the 1920s and 1930s. More contemporary scholarship has done much to broaden understanding of the diversity of Virginia's colonial architecture. From this research, new interpretive programs continue to be developed to enhance visitor understanding of American colonial history.

³²Dell Upton, "New Views of the Virginia Landscape," *The Virginia Magazine of History and Biography* 96(October 1988): 415.

COLONIAL NATIONAL MONUMENT AND THE COLONIAL PARKWAY

On 30 December 1930, President Hoover officially proclaimed the creation of the Colonial National Monument "for the preservation of the historical structures and remains thereon and for the benefit and enjoyment of the people."³³ While the language was typical of the National Park Service, being adapted from the 1916 Organic Act which created the bureau, Colonial represents a marked departure for Park Service conservation efforts. Those officially associated with the Monument, particularly director Horace Albright, assistant director Arthur E. Demaray, park superintendent William Robinson, park historians B. Floyd Flickinger and Elbert Cox, and the Eastern Division of the Branch of Plans and Design under Charles E. Peterson, were part of a pioneering effort to develop an interpretive plan which portrays a broad segment of American colonial history through site preservation and restoration. In 1933 NPS chief historian Verne Chatelaine noted, "This social-political-economic emphasis in (the) Colonial National Monument idea, as contrasted with its military aspects, should receive the widest recognition."³⁴

During spring 1931, three projects dominated work at Colonial, including the often controversial process of land acquisition, preparations for the sesquicentennial celebration to be held in October, and the planning and construction of the Colonial Parkway to provide a scenic link between Jamestown, Williamsburg and Yorktown.³⁵ In January 1931, the proposed boundary of the park was published in regional newspapers. It included 2,500 acres around Yorktown, all of Jamestown Island and a 500' right-of-way for the Colonial Parkway to connect them (except through Williamsburg, as mentioned above). From Yorktown, the right-of-way followed the York River to Felgates Creek, where it turned

³³Robinson, "Colonial National Monument, Its Beginning and Present State of Development," *Historical Notes* 1 (January-February 1932): 3.

³⁴Hatch, "The Evolution of the Concept," 2.

³⁵Robinson, 3.

inland toward Williamsburg through the tidewater woodlands. Passing Williamsburg to the east (a spur road would provide access to the town), the parkway turned south through Kingsmill Neck, then followed the James River where it finally connected with the island on its eastern shore.³⁶

Cramton's initial bill allocated \$500,000 for the purchase of land and the development of a suitable infrastructure for the sesquicentennial celebration. Because of the problems during the development of the Shenandoah National Park, there was a concern over the process of land acquisition with the hope of avoiding condemnation proceedings.³⁷ On 6 February 1931, money became available to Colonial which led to the purchase of 1296 acres on the Yorktown battlefield, options for an additional 402 acres in Yorktown, and 230 acres for the parkway right-of-way between Yorktown and Williamsburg.

After the river route was accepted, Albright and Demaray persuaded Secretary of the Interior Ray Lyman Wilbur to approach President Hoover with the idea of routing the parkway through Navy lands. A long time friend of Hoover's, Wilbur got the President to transfer six miles for a 500' right-of-way along the shoreline through Navy lands without discussing the idea with the Secretary of the Navy. The Navy was reportedly not happy with the transaction, but a provision was included to allow for the closing of the parkway in times of war. Writing to the Secretary of the Navy in 1931, acting Secretary of the Interior Joseph Dixon presented the planning and design of the parkway through Navy lands as a cooperative venture between the Navy and the Park Service.³⁸ The two groups did collaborate on the design and

³⁶"Chart of Colonial Monument Area to Embrace Williamsburg, Jamestown, Yorktown," *Newport News Times-Herald*, 10 January 1931.

³⁷A. E. Demaray, Assistant Director, National Park Service, in "Historic Virginia Section Planned as U.S. Monument," *The Evening Star*, 11 July 1930.

³⁸Joseph Dixon, Acting Secretary of the Interior to the Secretary of the Navy, 3 July 1931, file 630-C2-44, "Planning the

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construction of a brick wall and sentry box adjacent to the parkway at a new access gate to the marine barracks. Yet, conflicts often arose over issues ranging from the dumping of dredged materials in sensitive areas along the parkway to unsupervised burning on Navy lands.

In addition to the acquisition from the Navy, four miles of right-of-way was gained in spring 1931 through the Penniman property, a large tract of land between the mine depot and Hubbard Lane, which was owned by the firm of Curtis and Dozier. The firm planned to build a new development called Colonial Monument Estates, and received assurances from the NPS to construct access roads onto the parkway throughout the development. In return, Curtis and Dozier transferred a 500' right-of-way through their property thinking that the parkway would increase the value of their land. While few of the access roads or the homes were ever built due to World War II, the park received ten miles of the parkway's route free. This allowed for the commencement of parkway construction between Yorktown and Williamsburg in the summer of 1931.³⁹

On 3 March 1931, a congressional act enlarged the boundary of the park from 2,500 acres to 4,500 acres and increased the appropriations for the park to \$2 million. Land acquisitions were negotiated by J. W. Rader of the Virginia Conservation Commission, under the direction of William Carson.⁴⁰ Field surveys, deed research and interviews with property owners were used to create maps and land descriptions of property within the proposed boundary. Upon approval from the NPS Washington office, appropriations were allocated to purchase tracts of land.

Parkway, 1931," collection of the Colonial National Historical Park.

³⁹Charles E. Peterson, interview with James Haskett, 4 February 1986, "Recollections of the Years 1930-1935," 9-10, collection of the Colonial National Historical Park.

⁴⁰Taylor, Superintendent's Monthly Narrative Reports, February-March 1931, 5.

Because of the deepening Depression, initial appropriations were delayed by Hoover's economy program initiated in summer 1931. If an owner refused the offer, the government had the authority to initiate a declaration of taking to be settled in federal court. Despite attempts to gain the cooperation of the public, the Park Service was forced to initiate condemnation hearings in the Eastern District Court of Virginia concerning some tracts.⁴¹

Oliver Taylor's Superintendent's Monthly Narrative Reports for the spring and summer of 1931 highlight the extensive planning that went into the 1931 celebration. Preparation of the celebration grounds, the installation of an adequate sewage and water system, comfort facilities, the construction of a "tent city" to house exhibits and dignitaries, and the grading and surfacing of roads by the state occupied the majority of the time. Held between October 16 and 19, the celebration included exhibitions, battle recreations, historical pageantry, patriotic oration and the official dedication of the Colonial National Monument by President Hoover. The celebration itself was organized by both the Park Service and the Yorktown Sesquicentennial Association, whose members included prominent Virginia businessmen, military officers, and state representatives from each of the former thirteen colonies. Despite its regional orientation, the celebration was international in scope with both American and European dignitaries in attendance. Ironically, there were parking spaces for 24,000 cars, about one for each of the soldiers involved in the 1781 siege of Yorktown.⁴²

⁴¹"Condemnation of Lands In Monument Area to be Put Before Jury on August 10," *Newport News, Daily Press*, August 1931, 1-2; and "Economy Program May Curtail Work on National Park," *Newport News, Daily Press*, 31 July 1931, 1.

⁴²*The Yorktown Sesquicentennial Celebration, 1781-1931: Its Purpose and Plans* (Yorktown Sesquicentennial Association, 1931); *Official Program of the Yorktown Sesquicentennial, Yorktown, Virginia, 1931* (Richmond, VA: Yorktown Sesquicentennial Association, 1931); *The Yorktown Book: The Official Chronicle and Tribute Book* (Richmond, VA: Yorktown Sesquicentennial Association, 1932). Colonial National Historical Park

On 20 October 1931, the day after the closing ceremonies, William Robinson, a civil engineer from Augusta, Georgia, officially began his tenure as superintendent of Colonial. Oliver Taylor completed his work by clearing and replanting the celebration grounds, and returned to the Washington office.⁴³ Robinson was left with the daily administrative responsibilities and was directed to develop an interpretive management plan for the park. Throughout the 1930s, Colonial was a coordinating park for all southern Revolutionary War sites and other eastern historical sites. Funds for road and trail building, maintenance and administration of these parks were funnelled through the Yorktown office. These added responsibilities stretched Colonial's already thin resources. Despite the hiring of two historians, B. Floyd Flickinger and Elbert Cox, new historical scholarship developed slowly due to the lack of an adequate research library, the absence of archeological specialists and overriding administrative duties.

In 1933, the park issued its first "Outline of Development," which restated the mission and guiding principles behind park programs. The document recognized the "broad mandate" of the park to preserve and restore the colonial character of the region "to commemorate and interpret the Colonial and Revolutionary periods in the development of the Nation."⁴⁴ The plan articulated the primacy of the cultural landscape of Tidewater Virginia which would provide visitors a "visualization of the past." The outline argued that the restoration of the area would

collection.

⁴³Robinson, Superintendent's Monthly Narrative Reports, October 1931.

⁴⁴Robinson, "Outline of Development," 12 July 1933, file 600.03.4. Colonial National Historical Park collection.

be based upon documentary and archeological investigation to insure "strict accuracy." When information was lacking, the park was to portray "the spirit of the period."⁴⁵

The "Outline of Development," identified four individual areas within the Colonial National Monument--Jamestown, Williamsburg, Yorktown, and the Colonial Parkway--that were part of the park's interpretive mission. Jamestown, the site of the first permanent English settlement in America, was to chronicle the early colonial period, although the island had problems of limited access and few above-ground remains. Williamsburg proved more problematic since its relationship to Colonial was unclear. Consequently, the Park Service left the interpretation of the colonial capital to the Colonial Williamsburg Foundation and John D. Rockefeller, Jr. Yorktown's primary mission was to commemorate the siege of October 1781 and the subsequent victory of the American Revolution. Secondary consideration was given to the geological history of the Yorktown Cliffs, the role of Yorktown as a colonial port and the Civil War. In fact, the majority of earthworks which surrounded Yorktown were rebuilt during the Civil War on top of Revolutionary-era fortifications. As early as 1931, the park decided to integrate the colonial roads surrounding Yorktown into the park's road system to provide a way for visitors to experience the cultural and natural resources of the battlefield.⁴⁶

The parkway was to serve a somewhat different role to tie the three areas together as, "a single coherent reservation."

⁴⁵"Outline of Development, 1933," 44. The work of the park in the 1930s was extremely innovative for its time, and influenced the course of historic preservation in America. Certainly, much of this work was an extension of the restoration of colonial Williamsburg, which was in its sixth year by 1933. According to Charles Peterson, architects for both the park and Williamsburg often socialized together, sharing ideas, concerns, and experiences in the restoration of Virginia's architectural history.

⁴⁶"Outline of Development, 1933," 44-51.

Its function as a unifying factor transcends mere considerations of transportation. Its location and design should contribute, as far as practicable, to the general commemorative purposes of the Monument.⁴⁷

Exactly how the parkway was to be designed and routed to enhance the "commemorative purposes" of the park was an issue of considerable debate in the early 1930s. There were two general trains of thought concerning the proper character of the parkway. On the one hand were those who advocated the construction of a colonial-style road, following a metes-and-bounds alignment with irregularities of grade and curvature through historical areas. On the other hand, many associated with the Park Service were in favor of constructing a modern highway that incorporated the ideals of contemporary parkway design.

Together, Jamestown, Williamsburg, Yorktown and the parkway were considered dynamic and changing landscapes, with functional public space designed to "avoid the appearances of artificiality and fossilization." Consequently, administrative, circulation and utility needs were met, when possible, through the restoration and reproduction of colonial era structures and roads. Because of the lack of historical research, the "Outline" argued that interpretive planning was difficult and at only the initial stages until documentary and archeological data was uncovered and analyzed.⁴⁸ As with many national and state parks, Colonial benefited immensely from the creation of Emergency Conservation Works programs in the 1930s.

On 31 March 1933, under the urging of newly elected President Franklin D. Roosevelt, Congress passed legislation to establish the Civilian Conservation Corps (CCC) to provide emergency relief work and employment opportunities during the Depression. The National Park Service was allocated sixty-two camps, generally of 200 men each. In addition to the labor, \$24,000,000 was

⁴⁷"Outline of Development, 1933," 51.

⁴⁸Ibid.

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earmarked for road construction in the national parks.⁴⁹ In the spring and summer of 1933, two black CCC companies were established in Yorktown to work on the Colonial National Monument. Camp Number One (Company 352), supervised by Eugene A. Grisse, was responsible for maintenance of the Yorktown battlefield area, archeological work, and the store room tool repair. Stewart M. Woodward supervised Camp Number Two (Company 323) in parkway work, including the grubbing of the right-of-way, forest improvements (removal of dead trees, underbrush, and other fire hazards), planting, and shore protection (construction of riprap sea walls along the York River).⁵⁰

High unemployment in York County resulted in a large number of applicants who wanted to join the CCC camps. By October, two additional camps were established at Yorktown bringing the total work force to about 800 men. The CCC camps accomplished a great deal of technical work for the park, and included historical technicians, archaeologists, photographers, artists, carpenters and laborers among their ranks. Camps were built on the Yorktown battlefield site, and were administered by the chief ranger who distributed supplies and equipment to camp supervisors.⁵¹ For a decade the CCC actively restored the park's landscape, and much of the innovative work accomplished during the 1930s was done so only because of their involvement. Today, the restoration work completed by the CCC holds up better than projects initiated just twenty years ago.

Throughout the 1930s, legislative amendments to the original Cramton bill expanded Colonial's physical boundaries and

⁴⁹Memorandum From Director Horace Albright To All Superintendents and Monument Custodians, 9 August 1933, file 101.C2, "History General-1930-November, 1956," collection of the Colonial National Historical Park.

⁵⁰Robinson, Superintendent's Monthly Narrative Reports, July 1933, 15.

⁵¹Robinson, Superintendent's Monthly Narrative Reports, June 1933, 3.

interpretive mission. On 3 March 1931, the acreage of the Yorktown Battlefield was enlarged from 2,500 to 4,500 acres. By 1933, Colonial had grown to 2690.32 acres, 577 of which were for the right-of-way for the Colonial Parkway between Yorktown and Williamsburg.⁵² On 5 June 1936, furthermore, three sites were authorized for transfer under the administrative control of Colonial: Green Spring's plantation site, Rosewell plantation site, and Carter's Grove plantation. These areas, which were to be linked by scenic parkways, helped fill interpretive gaps which prior to their inclusion neglected the extensive settlement period in the region after 1620 (only Green Spring plantation is part of the park today, and plans to build a spur road to the site were dropped in the 1970s). This amendment also changed the designation of Colonial National Monument to Colonial National Historical Park.⁵³

While the administrative and historical staff of Colonial provided the intellectual basis for the park's development, its landscape, and the parkway in particular, were under the control of landscape architects and highway engineers. The parkway, however, was just one part of an integrated circulation system that included tour roads, utility roads and foot trails. Together, these elements provide for visitor movement and historic interpretation within the park.

⁵²"Outline of Development, 1933," 25-26.

⁵³George F. Emery, acting superintendent, "Master Plan of Colonial National Historical Park," August 1964, 6-7, collection of the Colonial National Historical Park, Engineer's office, Maintenance Division.

PLANNING THE COLONIAL PARKWAY AND THE PARK ROAD SYSTEM

The Colonial Parkway is part of an evolutionary change in road-building practices that emerged during the late nineteenth century. In 1893, the Office of Road Inquiry was established in the Department of Agriculture to promote rural road development. The Office of Road Inquiry initiated an education and research program, that included the construction of "object-lesson" roads to teach local communities technical methods of road-building. Central to the movement was a social justification that "mud-bound" rural residents deserved access to the same political, social and economic opportunities found in urban areas.⁵⁴ Within this ideal, however, roads were not designed to be beautiful, but instead provided a means to get from one place to another with the greatest efficiency and safety.

During the early twentieth century there was a increasing professionalization of trade groups who lobbied state and federal legislatures to pass road construction bills. Along with their lobbying efforts, many of these groups built material testing labs to develop standardized construction specifications for roads. Public support and federal spending continued to rise, culminating in the what historians have termed the "golden age" of American highway building--the period between 1921 and 1936. Not only was this a time of tremendous growth in terms of road miles built, but it was a period of cooperation between planners, landscape architects, and engineers who responded to the increasingly dangerous conditions found in urban areas with their narrow right-of-ways congested with commercial development, and at-grade rail and vehicular crossings.⁵⁵ Integrating landscape theories from the late nineteenth century with a modern approach to road construction, early twentieth designers created new types of roadways that emphasized the landscape as much as the

⁵⁴Bruce E. Seely, *Building the American Highway System: Engineers as Policy Makers* (Philadelphia, PA: Temple University Press, 1987), 7-15.

⁵⁵Seely, 67-135; Phil Patton, *Open Road: A Celebration of the American Highway* (New York: Simon & Shuster, 1986), 67.

pavement.

The intellectual base for parkways derived from the romantic landscape traditions of the urban parks movement of the nineteenth century. The term "parkway" was coined by Calvert Vaux and Frederick Law Olmsted, designers of New York's Central Park, in their proposal to link the city's parks with pleasure roads. Lined with green space, parkways were to act as linear parks, designed with sequential vistas and a variation of roadside vegetation to heighten the scenic value of public space. Following Olmsted's and Vaux's plans, these roads were to be man-made urban landscapes designed to look and feel natural. Parkways accomplished two goals by increasing the amount of land for parks, a primary mission of urban reformers, and creating necessary transportation corridors. Consequently, parkways came to be considered "gardens for machines."⁵⁶

Although the design principles were by no means new, the distinguishing characteristics of parkway design were unified in the construction of the Bronx River Parkway, completed in 1923 by the Westchester County, New York, Parks Commission. Begun as a program to cleanup the Bronx River Valley, the original fifteen miles of the Bronx River Parkway, designed by chief engineer Jay Downer and landscape architect Gilmore D. Clarke, was a continuous strip of concrete set in a broad, tree-lined right-of-way intended to curtail commercial development. Access to the road, with its gentle sweeping curves, was limited, and most grade crossing were eliminated to create a safe flow of traffic. Primary regard was given to the landscape features of the parkway through the use of native building materials for bridges, extensive planting and selective cutting, and slope maintenance to integrate the roadway with the surrounding environment.⁵⁷

⁵⁶Patton, 68-71; Carl Condit, *American Building Art: The Twentieth Century* (New York: Oxford University Press, 1961), 274-280.

⁵⁷Norman Newton, *Design on the Land: The Development of Landscape Architecture* (Cambridge, MA: Harvard University Press, 1971), 596-615; Clarke, "Is There a Solution for the Through

These design principles emphasized unity, variety, and character.

Full scale parkway design in the National Park Service began with the establishment of the Eastern Division of the Branch of Plans and Design under Charles E. Peterson in Williamsburg. Assisted by landscape architect Vivian R. Ludgate and draftsman William M. Haussman, Peterson and the Eastern Division were responsible for numerous projects at Colonial, George Washington's birthplace at Wakefield, Shenandoah National Park, Hot Springs National Park and Acadia National Park. In May 1931, their offices were moved to the park administrative building in Yorktown, at which time architect J. R. Thower and landscape architect H. J. Brodrick joined the division. By November 1931, Edward Zimmer came to Yorktown to serve as resident landscape architect for Colonial. In 1933, Peterson and the landscape division were transferred to the Washington office to work on other Park Service projects including Skyline Drive in Shenandoah National Park and the Blue Ridge Parkway.⁵⁸ Although design directives originated in Washington, Zimmer stayed in Yorktown as the resident landscape architect.

The Eastern Division standardized design principles for NPS parkways by integrating the aesthetic and engineering practices developed in Westchester County with the road-building traditions of the Western Field Office of the National Park Service. As an integral aspect of a park's conservation and interpretive program, parkways were designed to harmonize with a region's natural and cultural landscape. Consequently, efficiency and ease of construction were secondary to vista development, landscaping and recreational considerations that furthered the

Traffic Problem?," *Parks & Recreation* 3(July-August 1930): 367-375; Clarke, "Westchester Parkways," *Landscape Architecture*, 28(October 1937):40-41; George R. Chatburn, *Highways and Highway Transportation*, (New York: Thomas Y. Crowell Company, 1923), 382-417.

⁵⁸Taylor and Robinson, Superintendent's Monthly Narrative Reports, April, May, and November 1931. Peterson is also noted as the founder of the Historic American Building Survey.

mission of a particular park. The design of roadway structures, furthermore, utilized local materials to blend with the surrounding landscape.⁵⁹ By the end of 1931, the Colonial Parkway was considered one of the National Park Service's "outstanding" road building projects.⁶⁰

The Park Service distinguished parkways between the metropolitan type, such as the George Washington Memorial Parkway, and the purely scenic type, such as the Blue Ridge Parkway. While officially Colonial was not designated a metropolitan parkway, its design and construction has been effected greatly by regional traffic patterns. According to NPS assistant chief architect Dudley Bayliss,

On the metropolitan type there is always justification for construction from existing regional traffic demands. The recreational values of this type of parkway are not to be discounted, but the major considerations are traffic volume and movement. On the pure scenic type, which is still in its infancy, the traffic demands are as yet unknown. It is believed that such a parkway will develop its own traffic not only because of its scenic qualities, but from its design for safe, comfortable driving.⁶¹

Primary to the Park Service's road-building program was an interagency agreement with the Bureau of Public Roads (BPR), an

⁵⁹Linda Flint McClelland, *Presenting Nature: The Historic Landscape Design of The National Park Service* (Washington, DC: US Department of the Interior, National Park Service, 1993), 11-19 and 75-79; Dudley C. Bayliss, "Parkway Development Under the National Park Service," *Parks and Recreation* 20 (February 1937): 255-259; Bayliss, "Planning Our National Park Roads and Our National Parkways," *Traffic Quarterly* (July 1957): 417-440.

⁶⁰McClelland, 135. From the beginning of the project, park staff thought that Colonial was going to evolve into the most popular scenic highway in the country.

Bayliss, "Parkway Development," 258.

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agency of the Department of Agriculture, signed on 18 January 1926. The cooperation between Park Service landscape architects and BPR highway and bridge engineers ensured that park roads utilized the most modern highway engineering practices and removed the survey and construction functions from the control of the Park Service. The agreement between the NPS and the BPR also helped integrate park roads into surrounding roadway development. According to Park Service historian Linda McClelland,

The agreement made it possible for the National Park Service to cooperate with state highway departments and the U.S. Forest Service on a general scheme of improvements that would result in an interconnected system of highways."⁶²

All surveys and plans set forth by BPR field engineers were subject to review and approval by Park Service landscape architects and park superintendents. In 1931, a BPR field office was established in Williamsburg under the direction of senior highway engineer H. J. Spelman and resident engineer William H. Smith. Early that year, the BPR hired between fifteen and twenty men to survey the proposed route for the parkway in order to set concrete right-of-way markers, and develop plans, specifications, and estimates for the first phases of construction. In May of 1931, these plans were approved by the Washington office and bids were received in Yorktown for construction contracts.⁶³

Generally, all bids were opened in Yorktown, although some were directed out of the Department of the Interior's Washington office. As a rule, the low bid received the contract unless none of the bids were acceptable. With the first ten miles of the parkway's right-of-way acquired by the summer of 1931, work was divided into five units which extended from an area just south of Ballard Creek to Hubbard Lane, a distance of about eight miles. From this initial survey it was evident that the parkway was going to incorporate modern highway practices of tangents,

⁶²McClelland, 109.

⁶³Taylor, Superintendent's Monthly Narrative Reports, January - May 1931.

sequential radial curves and heavily landscaped slopes. To create a road with a unique character, the pavement was limited to three 10' lanes that were specially treated to expose the aggregate in the concrete. All drainage structures and underpasses were clad in "colonial style" brick.

Unlike most western parks, which incorporate native building materials such as stone and timber into their landscape design, designers of the Colonial Parkway took forms from the material culture traditions of the region. According to Peterson, both Horace Albright and Arthur E. Demaray proposed the use of brick as a primary building material to heighten the "colonial" character of the road.⁶⁴ Certainly, the architectural restoration in Williamsburg had a major impact on the work at Colonial. Many of the physical features of the city, including brick walls with their half-round molded parapets and the characteristic use of English and Flemish bonds, were incorporated into structures along the Colonial Parkway. Because of his work in the west with Chorley and Rockefeller, Albright was always well aware of the architectural restorations in Williamsburg.⁶⁵ Furthermore, Foundation architects and landscape architects were often made available to assist the Park Service on development plans for Colonial. In April 1931, plans for the treatment of brickwork along the parkway were drawn by draftsman William M. Haussman and approved by Charles Peterson.

According to Peterson, the parkway's route was established during the first survey of the area in the fall of 1930. While original plans for the Colonial Parkway called for an interior route along Revolutionary era roads, site problems such as modern development, extensive tangents and grade crossings were considered by some to be deterrents from the aesthetic character-

⁶⁴Interview with Charles Peterson, 13 July 1995.

⁶⁵According to Peterson's interview with James Haskett in 1986, most of the official discussions between Foundation and Park Service officials occurred at a high level. It is also noted that many of the architects and landscape architects from both groups spend a considerable amount of social time together.

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istics of parkway design ideals. To avoid all this "visual junk," as Peterson referred to it, he proposed routing the parkway along the York River after touring the Navy lands with Oliver Taylor. The route received the endorsement of W. A. R. Goodwin who thought that it would emphasize the importance of the rivers in the historical and geographical development of the region. Referring the route as a "splendid scenic passage," Peterson emphasized the dramatic river views and the lack of "artificialities" along the way.⁶⁶ In effect, the route was able to accomplish two goals of the road--to provide a pleasure drive between historic sites while incorporating distinct aspects of the region's natural and cultural landscape.

Laying out the route, however, was difficult due to the lack of adequate maps and the areas swampy environment. There was no existing direct route to Williamsburg along the York River since no road was ever constructed, or even considered, across the marshlands of Indian Field, Felgate, and King creeks on the lands of the Navy Mine Depot. A mosaic was prepared from aerial photographs taken by Army personnel from Langley Air Force Base, and new maps were made of the area. Commenting on the route Peterson noted,

We had the York River bank to follow and it just so happened by accident or an act of God that the alignment for a long stretch was one single-centered curve. We laid it out so automobilists could see the River but keeping a controlled fringe of trees in between.⁶⁷

With the alignment established between Yorktown and Williamsburg, questions arose about the character of the road between Williamsburg and Jamestown. The debate centered around the issue of whether the road was going to continue as a modern parkway, advocated by Peterson, or a historical road desired by

⁶⁶Field Report, Peterson to Albright, 15 October 1930, file 630-C2-44, "Planning the Parkway, 1933-1936," collection of the Colonial National Historical Park.

⁶⁷Peterson, interview with Haskett, 5.

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superintendent Robinson. According to NPS Chief Civil Engineer Frank A. Kittredge, "it seems to me that in a country so full of historical features as Jamestown, Williamsburg and Yorktown, that we can hardly hope to make the connecting roads touch all of the minor historical points." With this in mind, Kittredge continued to write, "my recommendation is that the previous plan be continued,--that is, that the road from Jamestown to Williamsburg be a high standard, modern parkway."⁶⁸ Kittredge argued that by keeping historical roads cleared and marked, visitors would have access to other sites of interest without distracting from the scenic character of the Colonial Parkway.

The BPR's 1931 plans for the parkway included an alignment devoid of tangents and with all long radius curves superelevated. In response to this plan, Robinson argued for steeper grades and slight irregularities in the alignment to add a "country road" feel to the parkway. This idea, however, was rejected by Albright, Demaray, Kittredge, Peterson and Spelman, who advocated the construction of a modern parkway. In 1933, a conference called by Demaray approved the original BPR proposal to guide future construction, and Spelman was directed to study the costs and requirements of a three lane, concrete road. Prior to the decision to expose the aggregate in the concrete pavement, the landscape division considered various treatments, including the use of dyed concrete to blend the pavement with the natural landscape. The plan also suggested that drainage ditches be constructed just beyond the 30' section of pavement. These were to be backfilled and seeded to bring the vegetation to the edge of the concrete. Curbs and gutters would be used where needed to facilitate surface run-off to protect the foundation of the pavement from saturation.

Planning the parkway's design progressed concurrently with the development of the parkway's alignment beyond the York River. As early as fall 1930, Colonial Williamsburg Foundation and Park

⁶⁸F. A. Kittredge to Albright, 19 June 1933, file 630, "Parkway--Unit V--Surfacing, Access Roads, Parking Areas," collection of the Colonial National Historical Park, Engineer's office, Maintenance Division.

Service personnel were debating the routing of the parkway in the vicinity of Williamsburg. It is obvious from the correspondence that a major problem concerned the differentiating ideas as to the role of Williamsburg in the Colonial National Monument, as well as the Foundation's own restoration plans which were well underway. Peterson originally proposed that the parkway would go through Williamsburg by way of Francis Street. This idea was quickly rejected by Foundation officials who sought to keep all traffic away from the historic district. By 10 November 1930, Peterson wrote,

If in the Colonial Monument picture Colonial Williamsburg is to be regarded as an exhibit to which the visits of only professional and other discriminating persons are to be encouraged, then the planning of the Parkway approach to the city should proceed along different lines from those of which I have heretofore considered.⁶⁹

Writing to William Carson in 1931, Kenneth Chorley stated that the Foundation's primary concern was that the parkway not interfere with restoration plans. According to Chorley, however, the route outside of the city limits "does not concern us."⁷⁰ For representatives of the Williamsburg Foundation, the best possible route around the city was away from the restoration to the north and west rather than to the east. Known as the "Shurcliff line" after consulting landscape architect Arthur Shurcliff, the route avoided the property around Bassett Hall which was purchased as the private residence of John D. Rockefeller, Jr. The Foundation's desire to avoid Bassett Hall, however, was never used put forth as their official position. Instead, they mislead the Park Service by advocating a route that incorporated the historic resources north and west of the city, despite the existence of modern development in those areas. In

⁶⁹Peterson to Albright, 10 November 1930, file 630-C2-44, "Parkway Planning, 1933-1936," collection of the Colonial National Historical Park.

⁷⁰Chorley to Carson, 31 October 1931, collection of the Colonial National Historical Park, file 630-C2-44.

response to Shurcliff's alignment, Peterson stated "such outrageous surroundings are not compatible with the dignity of Colonial National Monument."⁷¹

Throughout the 1930s, the Williamsburg question was addressed by leaders in the field of highway design and landscape architecture, including both Gilmore Clarke (also a consultant on the Mount Vernon Memorial Parkway) and Jay Downer.⁷² Various routes were proposed to by-pass Williamsburg, but they were all variations on the "Shurcliff line" north and west, and the "Peterson line" south and east. Compounding this problem were the plans of the Virginia Department of Highways to construct a Williamsburg by-pass for the Route 60 highway connecting Richmond and Newport News. Desired by the Foundation but not the local merchants of Williamsburg, the by-pass would remove commercial traffic from the Duke of Gloucester Street, the historic main street of the colonial capital.⁷³ Commissioner H. J. Shirley of the Virginia Department of Highways challenged both Robinson and Albright about the parkway, often arguing that Route 60 was more important to the region than any "recreational or historic pleasure road."⁷⁴ Without an set route for the parkway, however, the state was unable to proceed with its planned road which was slated to intersect with the parkway at some point east of Williamsburg.

Perhaps to avoid continued conflict, the Park Service revised its plans to align the parkway following Shurcliff's suggestions in

⁷¹Ibid.

⁷²Taylor and Robinson, Superintendent's Monthly Narrative Reports, January-December 1931, for lists of consultants and visitors to the park.

⁷³"Highway Department Will Not Hold By-Pass Hearing," *Daily Press*, 5 March 1933; and "Says Williamsburg By-Pass Would Not Hurt City Business," *Daily Press*, 4 February 1933.

⁷⁴See correspondence in file 630-C2, "Planning the Parkway, 1931," collection of the Colonial National Historical Park.

1933.⁷⁵ Despite this, the landscape division continued to informally develop plans in the vicinity of Kingsmill Neck south of Williamsburg to take the parkway east of College Creek and along the James River. At the request of the National Park Service, the Foundation made the services of Shurcliff available for roadway planning, and other landscape work (in particular the development plan for landscaping the Moore House, formerly owned by John D. Rockefeller, Jr. who transferred the house to the National Park Service). Shurcliff would make some significant contributions to the development of the parkway, including the idea to construct a combined road and rail crossing for the Chesapeake & Ohio Railroad underpass, and a underpass at Capitol Landing Road (which also carried Route 60) rather than the original traffic circle proposed by the Park Service. Shurcliff also suggested that the C & O underpass have separate roads for pedestrian and horse drawn traffic and that the parapet walls be high enough to block the sights and sounds of trains. By 1935, Shurcliff began to develop plans for numerous open traffic circles on the parkway north and south of Williamsburg to provide connections to the city's road system.⁷⁶ Only one of these circles was constructed. Laid out in the late 1930s, the "Williamsburg Rotary," connected the parkway with Route 132 and provided one major entrance into the city.

In March 1934, land agent J. W. Rader and park superintendent B. Floyd Flickinger, who replaced William Robinson, reached an

⁷⁵This issue needs additional research to flush out some questions which still linger concerning the routing of the parkway around Williamsburg. From reading the correspondence, it seems that both Robinson and his successor B. Floyd Flickinger were not inclined to challenge the Colonial Williamsburg Foundation and John D. Rockefeller.

⁷⁶H. J. Spelman to Albright, 23 January 1933; Arthur Shurcliff to Demaray, 16 March 1934, file 630-C2 "Planning the Parkway," collection of the Colonial National Historical Park. Many of Shurcliff's studies for traffic circles can be found in the architectural archives of the Colonial Williamsburg Foundation Library, Williamsburg, Virginia.

agreement with Vernon Getty of the Foundation on the transfer of lands to the government for the parkway in the vicinity of Windmill Point between Capitol Landing Road and the C&O rail lines.⁷⁷ Consequently, by 1935 projects were underway for the clearing and grading of the right-of-way between Hubbard Lane and the C & O lines, and plans were being drawn for the underpasses at Capitol Landing Road and the C&O rail lines. Continual planning for the extension of the parkway to Jamestown, however, highlighted the weaknesses inherent in Shurcliff's route as the James River was almost nonexistent from the alignment. By early 1936, a variation of Peterson's original route along the James River returned to the debate with an added element--a tunnel beneath Williamsburg.

The first mention of the tunnel idea can be found in the Superintendent's Reports for April 1936, along with reports of new proposed routes along the James River to the island. In a letter to A. E. Demaray dated 9 May 1936, Flickinger stated,

I understand, confidentially, that the tunnel idea is primarily Dr. Goodwin's, and that there seems to be no appreciable sentiment on the part of the Restoration officials at this time to push the tunnel idea.⁷⁸

While no corroborating evidence has been found to support this statement, other correspondence between Park Service staff note that "prominent" Williamsburg citizens were in favor of the tunnel idea although no reasons are given as to why. In May 1936, St. Louis planning and traffic consultant Harland Bartholomew was brought in by the Foundation to study the plans in relation to Williamsburg's growing traffic problems. Meeting

⁷⁷B. Floyd Flickinger, Superintendent's Monthly Narrative Reports, March 1934, 8.

⁷⁸Letter found in file 630, part I, "Parkway-Williamsburg to Jamestown," collection of the Colonial National Historical Park, Engineer's office, Maintenance Division. If Goodwin did come forth with the idea to construct a tunnel, it is a testament to his ability to push plans forward in the face of conflict.

with representatives from both the Park Service and the Foundation, Bartholomew recommended the tunnel route as the best possible solution because it created one main entrance to the city, included a direct access to the business district by way of Henry Street, utilized structures already constructed and required less of a right-of-way. One of the negatives pointed out by Bartholomew, however, was that the tunnel would distract from the aesthetics of the parkway.⁷⁹ While the idea to construct a tunnel took everybody by surprise, by the end of the year planning for the tunnel was in full swing.

By July 1937, both the Capitol Landing (Route 60) and the C&O railroad underpasses were completed and plans for the completion of the parkway into Williamsburg were accepted and approved in September. Funds, however, were lacking to open bids for contracts, and work along the parkway, except CCC planting operations, slowed considerably between 1937 and 1940.⁸⁰ The delay became a major public relations problem for the Park Service, as residents of the area called for the quick completion of the road, in particular the paving between Hubbard Lane and North England Street.⁸¹ Local speculation concerning the routing of the parkway, and the status of the proposed tunnel under Williamsburg became major stories in local newspapers. In response to test borings to take earth samples in 1937, a local paper noted,

⁷⁹Flickinger, Superintendent's Monthly Narrative Reports, May 1936; Harland Bartholomew, "Notes on Williamsburg, May 1936," file 630, part I, "Parkway--Williamsburg to Jamestown," Engineer's office, Maintenance Division. From the correspondence between Park Service officials, no mention was ever made that the tunnel would distract from the appearance of the parkway. Their main concern from the beginning was the public relations problems related to the construction of a tunnel.

⁸⁰Flickinger, Superintendent's Monthly Narrative Reports, July-December 1937.

⁸¹See the Newport News Daily Press, 7 February 1937.

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Although no announcement has ever been made by the National Park Service as to the route the park will take around or through Williamsburg, it has been accepted locally for some time that the road will continue from its present terminus near the Governor's palace to a point by the Nicholson school, enter a tunnel and passing under the green and Duke of Gloucester and Francis streets, emerge at a point southwest of the city-county court house.⁸²

Writing to Director Albright on 12 February 1937, superintendent B. Floyd Flickinger stated,

Information concerning the proposed tunnel under Williamsburg has now become common knowledge and has become very embarrassing... I feel that the tunnel may prove to be one of our worst stumbling blocks and will probably cause us more trouble than any project we have yet attempted in this park.⁸³

Flickinger's letter also suggests that by 1937, the Williamsburg Foundation supported the tunnel idea as a viable alternative to by-pass the city. Not only was the city already in a constant state of construction, but the tunnel effectively removed the parkway from the historic district. Originally intended to unify Williamsburg with Jamestown and Yorktown, the parkway became a means to by-pass the colonial capital of Virginia. Flickinger was in a difficult position as spokesman for the park; he could not be a major player in planning issues since discussions with

⁸²"Boring Being Made Near Old School Site; Samples of Earth Will Be Taken," *Newport News Daily Press*, 19 November 1937; "Drilling Machine Working On Green," *Daily Press*, 23 November 1937, "Taking Samples of Earth Again At Court House," *Daily Press*, 9 December 1937.

⁸³Confidential memorandum to Albright from Flickinger, 12 February 1937, file 630, "Parkway--Hubbard's Lane--Williamsburg," collection of the CNHP, Engineer's office, Maintenance Division.

Colonial Williamsburg generally took place at the highest levels of the Park Service.

For the citizens of Williamsburg the idea of additional disruption to their town created considerable opposition to the project. To proceed with the tunnel plan, Flickinger argued, would result in "considerable loss of public support, some of which is very essential to this area."⁸⁴ Instead, Flickinger advocated the completion of the parkway to North England Street and the end to other construction projects until extensive study and public meetings could produce a plan acceptable to the public. While the Park Service did find funds to continue the paving of the parkway, Flickinger's concerns were disregarded, and planning continued for the tunnel and the Jamestown extension. In December 1938, a field survey conducted by Foundation representatives, Jay Downer and Arthur Shurcliff, NPS representatives V. R. Ludgate and W. G. Carnes, and BPR engineer William H. Smith, established a tunnel route from two earlier proposals. Architectural treatments for the portals were also developed following the colonial forms utilized on both the Capitol Landing and C&O railroad structures.⁸⁵

During this time, Rockefeller was very active in the planning process, often coming to the monthly meetings and developing ideas of his own for the landscape treatment of the parkway in the vicinity of Williamsburg. In February 1939, Flickinger announced his resignation from the park, effective 17 May. He was replaced by Morristown NHP superintendent Elbert Cox.⁸⁶ The summer and fall of 1939 were a decisive period for the Colonial Parkway. A centerline for the tunnel was approved, and in September an agreement was reached between the NPS, the city of Williamsburg and the Foundation in preparation for tunnel

⁸⁴Ibid.

⁸⁵Flickinger, Superintendent's Monthly Narrative Reports, December 1938 4.

⁸⁶Flickinger, Superintendent's Monthly Narrative Reports, February-May 1939.

construction and the relocation of utility lines. The following month a declaration of taking was initiated for the lands between Scotland Street and College Creek as part of the efforts to continue construction to Jamestown island.⁸⁷

J. W. Rader was still the primary land agent, but he enlisted the help of Richmond real estate agent Thomas Clark who acted as an expert land appraiser. According to Rader, the process of gaining the right-of-way between Williamsburg and Jamestown was a "highly controversial subject," due to the already strained relations between the Park Service and the city of Williamsburg. By this time, the government was forced to pay base damages to land owners on top of the straight land value.⁸⁸ The land agents followed an alignment drawn in 1939 and approved in 1940, which continued south from the tunnel, east of College Creek and along the James River to Glasshouse Point where a recreated isthmus would connect the parkway to its terminus at Jamestown island. Plans called for hydraulic fill to create the isthmus and suitable road embankments at the mouths of Mill and College creeks and Glebe Gut. The plans also called for the relocation of State Route 31 north of the parkway to a new ferry wharf west of Powhatan Creek. The original Scotland ferry wharf was located on the southwest shore of the island, accessible by a causeway which carried Route 31 over the Back River.⁸⁹

One area of particular concern was the right-of-way through the lands of the National Memorial to the Progress of the Colored Race in America (NMPCRA). In 1936, the Elder Lightfoot Solomon

⁸⁷Elbert Cox, Superintendent's Monthly Narrative Reports, June-November 1939.

⁸⁸Memorandum for the Director, 21 February 1941, file 601.13, "Lands, Parkway Right-of-Way, Williamsburg Tunnel - Williamsburg, Jamestown," collection of the Colonial National Historical Park.

⁸⁹Drawing Pky-Col 1905, Eastern Office of the Branch of Plans and Design, 1940, collection of CNHP, Engineer's office, Maintenance Division.

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Michaux, a prominent African American radio minister and presidential advisor, purchased 500 acres along the James River east of Route 617 where he believed Africans were first brought to America. It was Michaux's dream to develop a self sufficient black community complete with a college, farms, libraries, auditoriums, a radio broadcasting station, homes and recreational facilities.⁹⁰ Michaux's actions raised concerns among Park Service officials about the impact of such a development on the park and the parkway. With a proposed parkway route to Jamestown island established in 1939, Radar and Clarke went to work trying to acquire a right-of-way through Michaux's lands. A central decision which needed to be made was whether or not the park would try to acquire all the riverfront land, or just a suitable 500' right-of-way adjacent to the beach.

NPS Chief landscape architect Thomas C. Vint argued that if possible, the Park Service should gain all rights to the riverfront property, and establish a right-to-lease agreement with NMPCRA for their continued use of the beach. This would allow the park the opportunity to control any development which might arise adjacent to the parkway.⁹¹ Although it is unclear why the decision was made, on 15 July 1940, the Park Service put a bid in for a right-of-way which did not include the riverfront. Michaux, however, neglected to respond to the offer, forcing the government to initiate condemnation hearings in August 1940. In 1941, nearly 11 acres were transferred to the Park Service providing a right-of-way through NMPCRA lands. In 1946, an additional 19 acres were acquired by the NPS from the lands of the NMPCRA and the Gospel Spreading Association of God, another

⁹⁰"Cooperative Negro Farming Community to be Developed on James City County Site," *Newport News Daily Press*, 22 October 1936; "Michaux Discusses Memorial Planned to Honor Negroes," *Newport News Daily Press*, 23 July 1937.

⁹¹Correspondence concerning Michaux's property can be found in the Colonial National Historical Park Land Records, file "Deed #65 National Memorial to the Progress of the Colored Race in America."

of Michaux's organizations.⁹² In 1943, another substantial tract of land was acquired from the Benson-Phillips Company, Inc. by declaration of taking initiated on 26 August 1942. Comprised of the right-of-way between Glasshouse Point and Route 31, the land included the site of the Route 31 causeway to the Scotland ferry wharf. Later attempts of the Benson-Phillips Company to get a "continuance of use" permit for the ferry causeway was rejected by the NPS.⁹³

Bids for the tunnel construction were opened in November of 1939, and in December test piles were driven at Halfway, College and Mill creeks.⁹⁴ In 1940, construction began on the tunnel from the south portal northward, and clearing and grubbing operations extended toward Halfway Creek, the location of the next bridge. William G. Fyfe, former engineer on the Blue Ridge Parkway, and landscape architect Robert W. Andrews were transferred to Colonial to oversee work between Williamsburg and Jamestown.⁹⁵ The numerous problems encountered in building the tunnel exasperated the park's public relations dilemma as residents complained about everything from the muddy conditions to the closure of Duke of Gloucester Street.

While appropriations for paving the tunnel were not part of the construction contract, Cox lobbied for additional funds for this purpose to open the tunnel as soon as possible. In a 1941 letter to NPS Director Newton B. Drury, Cox stated that, "I believe that once the tunnel is in use the people who are inclined to criticize it will come to consider it a useful and satisfactory

⁹²"Elder Michaux Group Gets \$10,000 for Seized Lands," *Newport News Daily Press*, 24 July 1946.

⁹³Correspondence concerning the acquisition of the Benson-Phillips Co. property found in Colonial National Historical Park Land Record, file "Deed 74-Benson-Phillips, Co., Inc."

⁹⁴Cox, Superintendent's Monthly Report, November-December 1939.

⁹⁵Cox, Superintendent's Monthly Report, January 1941.

feature."⁹⁶ Barricades were put up to close the portals, but the tunnel was still accessible in the event of an emergency. As acting superintendent Jean C. Harrington stated, "although it would probably not provide a desirable bomb shelter, in the event of an air raid, we might be condemned if we were to make it unavailable to citizens."⁹⁷ The tunnel did not open to traffic until May 1949 after a suitable surface, lighting, and a ventilation system were installed.⁹⁸

While internal divisions hampered progress on the Colonial Parkway, America's entry into World War II after the bombing of Pearl Harbor placed new demands on Colonial and the entire National Park system.⁹⁹ As early January of 1941, fifteen acres of park lands were transferred to the Navy for construction of a housing project in connection to defense expansions of the depot facilities.¹⁰⁰ Increased stresses were put on the parkway as new utility lines were built across the right-of-way to serve the power needs of a defense build-up. Considered "scars" by park

⁹⁶Memorandum for the Director, 14 July 1941, file 630, "Parkway, Williamsburg--Jamestown, Tunnel--General," collection of the CNHP, Engineer's office, Maintenance Division; and "Highway to Go Under Colonial Williamsburg," *New York Herald Tribune*, 21 October 1941; and "Tunnel May Be Put in Service," *Newport News Daily Press*, 4 August 1942.

⁹⁷Memorandum to the Regional Director, 29 May 1943, file 630, "Parkway--Williamsburg to Jamestown--Williamsburg Tunnel--General," collection of the CNHP, Engineer's office, Maintenance Division.

⁹⁸"Tunnel Under City May Open Shortly," *Newport News Daily Press*, 8 August 1948; "Glory Be! Tunnel May Open Shortly," *Daily Press*, 26 April 1949; "Williamsburg Tunnel Opened At Ceremony," *Daily Press*, 11 May 1949.

⁹⁹MackIntosh, *The National Parks*, 44-53.

¹⁰⁰Cox, Superintendent's Monthly Narrative Reports, January 1941.

landscape architects, many trees were destroyed in the process. In addition, the Navy's requests to train convoy drivers on the parkway were declined until America's declaration of war which closed the parkway from Jones Mill Pond to the Yorktown terminus between 15 November 1942 and August 1945. Much of the landscaping completed along the parkway during the 1930s was destroyed during World War II through the construction of access roads for troop training on the parkway. Materials and labor shortages and the disbanding of the CCC camps continued through the 1940s.¹⁰¹

At the end of World War II the park resumed normal activities, and began to look forward to future development. In August 1945, the Navy agreed to halt all transports on the parkway and help in the maintenance and re-landscaping of the right-of-way.¹⁰² Without the added labor of CCC camps, landscape architect Ludgate and engineer Smith proposed putting landscaping provisions on construction contracts. Insufficient funding, however, limited the resumption of construction on the parkway. In fact, the only major new construction during the late 1940s was a separated grade structure at the intersection of Route 168 (now Rt. 143) and the parkway, built by the Virginia Highway Department, and the paving and lighting of the tunnel prior to its opening in 1949.

Planning for the parkway's extension to Jamestown following the 1939-1940 alignment became increasingly urgent by 1949. It became a priority of the National Park Service to realize its original plans after nearly twenty years of work. Additional manpower and funds were directed toward Colonial, and Park

¹⁰¹Accounts of the Navy's use of park lands during the War can be found in Superintendent's Monthly Narrative Reports. Additional research is needed to shed more light on the Navy's involvement on the park's landscape, and in particular, the Colonial Parkway. In 1954 the parkway was declared a "Civil Defense Highway."

¹⁰²Jean Harrington, Superintendent's Monthly Narrative Reports, August 1945-May 1946.

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Service officials, including Thomas Vint and Dudley Bayliss, began to spend more time with issues concerning the completion of the parkway.¹⁰³ In 1949, landscape architect Stanley Abbott was brought to Colonial to study the parkway's terminus at Jamestown Island and to develop a land use plan for the island itself. Abbott had been actively working on the design and construction of the Blue Ridge Parkway prior to his involvement at Colonial. In 1953, Abbott became superintendent of the park and directed the massive redevelopment programs of the mid-1950s.

During the fall and winter of 1949, meetings were held with the Army Corps of Engineers concerning the use of hydraulic fill along the James River. Despite the park's original plan to completely cut off the Back River channel with a reconstructed isthmus, allowances had to be made to keep stream channels clear for recreational and commercial boaters and fishermen. Meetings were also held with the state highway department in conjunction with the relocation of Route 31 in anticipation of the parkway's completion.¹⁰⁴ The first contract to continue the road south of Williamsburg was awarded in January 1952 to the C. H. Lawson Company for grading and the construction of drainage structures from the tunnel to Tazewell Hall Avenue.

Park-sponsored research activities were stepped up in order to develop new interpretive programs for Jamestown Island and the Yorktown battlefield, including construction of historical tour roads. Landscape architect Nelson Royal (in 1953 Nelson was transferred to the Regional office and replaced by Robert L. Steenhagen) and chief historian Charles Hatch collaborated on an interpretive sign program for the park and the parkway. These historical markers, which still exist today, were fabricated by prisoners at the District of Columbia Department of Corrections at Lorton, Virginia. The park continued to cooperate with the APVA in the development of interpretive programs on Jamestown

¹⁰³Their involvement can be chronicled in the Superintendent's Monthly Narrative Reports of Edward Hummel, 1948-1952.

¹⁰⁴Hummel, Superintendent's Monthly Narrative Reports, May-December 1949.

Island. As early as 1940, the APVA created a committee for the cooperation with the National Park Service, and the following year a joint admission ticket to the island was initiated.

The increased activity in the 1950s coincided with the upcoming 350th anniversary of the founding of Jamestown in 1957. In November 1952, the Virginia General Assembly appointed representatives to serve on the Virginia 350th Anniversary Commission to facilitate the planning of the celebration. Two years later, the U.S. Congress appropriated funds for the establishment of the U.S. Jamestown-Williamsburg-Yorktown Celebration Commission. Held during the height of the Cold War, the celebration also served as a reaffirmation of American freedoms and the birth of democratic principles.¹⁰⁵

The state organization was responsible for developing a statewide exhibition that would help focus community attention on local history throughout the state. It was also in charge of developing recreational areas not associated with federal programs, such as the Jamestown Festival Park. The federal commission had a different role from either the Park Service or the state, though cooperation was encouraged. Their primary attention was directed toward entertainment, reducing the average

visitor to "a hypothetical Mr. Smith, only mildly history-minded and inclined to benevolent domination by his wife and two children aged five and fourteen."¹⁰⁶

¹⁰⁵Information from the Superintendent's Monthly Narrative Reports between 1950 and 1954. For an exhaustive review of celebration planning and execution, see U.S. Jamestown-Williamsburg-Yorktown Celebration Commission, *The 350th Anniversary of Jamestown, 1607-1957*, Final Report to the President and Congress, (Washington, DC, 1958).

¹⁰⁶*The 350th Anniversary of Jamestown, 1607-1957*, 33. An interesting avenue of study would be the differentiating themes between the Yorktown celebration of 1931 and the Jamestown celebration of 1957. From the civil religion promoted by people like W. A. R. Goodwin in 1931, to the statistically correct

On 16-17 June 1954, superintendent Abbott attended a Congressional Committee hearing of supplemental appropriations for the Department of the Interior for park improvements for 1955-1957 in anticipation of the anniversary. These hearings culminated in the "President's Budget for Parkways, Roads, and Trails, and Buildings and Utilities" put forth in the 1955 budget. Beginning in January 1955, field conferences attended by regional officials of the Park Service were held in Yorktown to review the extensive park construction programs slated for completion between 1955 and 1957.¹⁰⁷ Although it is evident that Colonial would have received additional funds in preparation for the celebration, the motivation for the redevelopment came out of the same thinking that led to the servicewide Mission 66 programs initiated by NPS Director Conrad L. Wirth.

In 1951 Wirth took over a Service whose resources were severely stressed under the postwar increases in visitation and the related automotive travel in national parks. Park appropriations, which had been declining in relative terms since the 1930s, could not handle the new demands on housing, sanitation, utilities, and road and trail use. Wirth and his staff devised a ten year development program for American parks in preparation for the NPS 50th anniversary in 1966. With the support of Congress, in 1956 appropriations for NPS increased dramatically in order to upgrade park facilities and expand park holdings. Along with additional funds, a new administrative bureaucracy was established to specialize the management of natural, historical and recreational areas under NPS control.¹⁰⁸ Because Colonial had redevelopment plans in hand by the time of the Mission 66 directive, it was able to efficiently distribute funds to become

middle class suburban values of the 1950s, the celebrations provide insights into changing cultural values in America.

¹⁰⁷Stanley Abbott, Superintendent's Monthly Narrative Reports, June 1954 through January 1955.

¹⁰⁸MackIntosh, 62-65.

the first national park to accomplish its Mission 66 objectives.¹⁰⁹

Permits for the hydraulic fill and bridges along the James River were given by the Army Corps of Engineers in January 1955. Except for preliminary clearing and grubbing between Williamsburg and College Creek, this was the first step in beginning the parkway extension, for much of the construction was dependent upon the creation of a suitable road grade.¹¹⁰ The grading of the parkway to Jamestown was a massive engineering undertaking which necessitated the movement of over one half a million cubic yards of earth and the dredging of 1.7 million cubic yards of fill. During the spring of 1955, contracts were awarded for the construction of bridges over College, Mill and Powhatan creeks and a bridge along the recreated isthmus linking Glasshouse Point to Jamestown Island. Like the Yorktown end, a variety of views and alignments were incorporated for the motorist's transition from the hills and woods around Williamsburg to the relatively flat shoreline providing wide-sweeping vistas of the river.

Extensive historical research, particularly around the Kingsmill Neck areas of Archers Hope and Papermill Creek, was undertaken to develop historical markers for scenic and interpretive overlooks. Much work went into the interpretation of the extensive settlement period of the mid-seventeenth century to fill gaps in the historical mission of the park. Complimenting the historical offerings of this leg of the parkway, a variety of plant life, including pines, hickories, oaks, tulip and beech trees, trailing arbutus, yellow jessamine, and cross vines, and species of galax

¹⁰⁹It is unclear how much emphasis should be given to Mission 66 programs in relation to projects at CNHP between 1954 and 1957. While additional funds were directed toward Colonial prior to Mission 66, the reinvigorated system certainly carried over into the implementation of new construction projects.

¹¹⁰Abbott, Superintendent's Monthly Narrative Reports, January 1955.

and mountain laurel not associated with the ecology of Tidewater Virginia, are abundant.¹¹¹

The completion of the parkway was just one component of a redevelopment program that included the construction of visitor centers in Yorktown and on Jamestown Island, restored tour roads, upgraded interpretive features and modernization of the park's infrastructure. Central to this program of development was the integration of park facilities through unified education programs, and an enhanced park road system.¹¹² The reevaluation of the park road system was a major step in this direction, with the Colonial Parkway the transitional avenue to provide continuity for visitors as they motor from one historical era to another. Since the 1930s, this continuity was thought to be essential to the visitor's experience of the park. As was written in a 1955 edition of *The Commonwealth Magazine of Virginia*

Even the most impervious Sunday drivers may share with others a little thrill at crossing the trails of Indians, English adventurers, and perhaps Spanish fathers of nearly four centuries ago--and all on a scenic drive as modern as chromium and white-walled tires.¹¹³

The modernization and reconstruction of the park's road system was as much in response to the increasing stress of regional development on the park as to the celebration of 1957. Unable to meet initial proposals to remove all through traffic in the Yorktown area, the park sought to cooperate with the state to

¹¹¹Lon Dill, "Colonial Parkway Extension to Jamestown," *The Commonwealth Magazine of Virginia* 22(September 1955): 20.

¹¹²Gilmore D. Clarke, who collaborated with the Park Service on parkway design in the 1930s, also served as a consultant to the celebration committees in the 1950s. See report to Director Wirth, 27 December 1954, collection of Colonial National Historical Park.

¹¹³Dill, 21.

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balance the needs of regional traffic with park use and conservation programs. A integrated circulation system was not developed until the 1950s, although it had antecedents in 1930s and 1940s programs. In the park's first master plan of 1936, it was hoped that all commercial traffic, particularly on Route 238 and U.S. 17, would be rerouted around the park's boundaries. Smaller commuter roads were to be integrated into the historic roads around the battlefield as part of a tour road system.¹¹⁴ Similar to other parks, different classes of roads served varying functions within the park.

BPR engineers and park historians collaborated on field surveys of the battlefield area to identify and map historic road traces to develop tour roads that incorporated significant sites in the battle of 1781. To access more remote areas on the battlefield, foot trails were constructed from parking loops off the tour roads. Two trail units, including a Headquarters loop and Campsite loop, provided over 20 miles of foot trails through the battlefield area. These trails were designed to serve both visitor use and fire control. Developed during the 1930s and 1940s, these roads and trails were upgraded in the 1950s when a similar program was initiated on Jamestown Island (For a more detail discussion of the tour roads see HAER No. VA-116 and VA-117.) As part of the redevelopment of Jamestown Island, "wilderness roads" were constructed to the interior of the island. The island road circuit, comprised of two loops, was supplemented with suggestive paintings of settlers by local artists Sidney King mounted at wayside turnouts. These roads were to recreate the primitive isolation of the seventeenth century frontier. According to the park, "The loop roads can be looked upon as an experience in history, leading the most interested visitors deeper in to the thoughtful process of

¹¹⁴"The Master Plan, Colonial National Historical Park, Edition of 1936," U.S. Department of the Interior, National Park Service. Drawings NM-COL 1210-1218, Engineer's office, Maintenance Division.

understanding the colony."¹¹⁵

Central to the circulation plan was a desire to control both access into the park and visitor movement while in the park. Consequently, many sections of smaller roads which bisected park boundaries were obliterated, and the portions located on park lands were incorporated into either tour or utility roads. While many routes, including 638 and 704, were removed from the battlefield area in the 1950s, other roads like Route 238 and U.S. 17 were rerouted and expanded, particularly with the construction of the Coleman Memorial Bridge in 1952 carrying U.S. 17 to Gloucester Point.¹¹⁶ Within the evolution of the park's road system, the Colonial Parkway continued to function as a scenic and historical corridor between Jamestown, Williamsburg, and Yorktown. Particularly in relationship to commercial and residential development on the peninsula, the parkway became a unique element to the region's cultural landscape:

It excludes most of the distraction of modern life so much evident in other portions of the peninsula area, and enable the visitor, once he has placed himself in the mood of the historic period, to retain that mood as he motors from Jamestown to Williamsburg to Yorktown.¹¹⁷

¹¹⁵"Master Plan for the Preservation and Use of Colonial National Historical Park," Mission 66 Edition, April 1961. Collection of the CHNP, Engineer's office, Maintenance Division.

¹¹⁶Hummel, Superintendent's Monthly Narrative Reports, 1950-1952.

¹¹⁷"Master Plan, Mission 66 Edition," Chapter 2, 3.

PARKWAY CONSTRUCTION, 1931 TO 1960

The construction of the parkway was a changing and continual process with overlapping contracts, re-engineering and extensive planning. Ideas concerning grading, slope development, and planting evolved as the project began to take shape. Both landscape architects and engineers were cognizant of practical concerns which were not addressed in the original plans and specifications for the parkway. Landscape architects, architects and draftsmen from the Branch of Plans and Design worked closely with foresters, engineers and historians in developing park roads. While BPR engineers were responsible for the design and supervision of parkway construction, landscape architects directed them on the final appearance of the roadway, from how slopes were graded to what type of trees to plant.¹¹⁸

The first phase of construction between Yorktown Cliffs, just south of Ballard Creek, and Hubbard Lane, a distance of about eight miles, was divided into five units. These five contract units, supplemented with landscaping work by the CCC after 1933, set the standards which guided the design principles throughout the construction of the parkway. Unit I included grading, excavation and the construction of drainage structures; Unit II covered the hydraulic fill, Unit III involved the construction of a sentry box and wall by the marine barracks of the Navy Mine Depot; Unit IV encompassed the construction of three bridges on King, Felgate and Indian Field creeks; and Unit V was the paving of the roadway (for a discussion of contractors, costs and timetables see HAER No. VA-48). To cut costs on Unit I and II construction, the BPR and the Justice Department worked out an agreement with the state in 1932 to use prison labor from Fort Eustis in grubbing, clean up, and some seeding along the right-of-way. By September as many as 40 prisoners were engaged in

¹¹⁸Flickinger Press release, 27 September 1934, file 501.03, "Newspaper Clippings, October 1931-December 1939," collection of the CNHP.

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work on the parkway.¹¹⁹ This agreement was continued until the establishment of CCC camps in 1933.¹²⁰

Consistent with Park Service standards, special attention was given to the preservation of landscape features along the road. According to Unit I specifications,

Any timber or other landscape features scarred or damaged by the contractor's operations shall be removed, neatly trimmed up as required by the engineer, or restored as nearly as possible at the contractor's expense."¹²¹

Many tree wells were constructed around the base of trees located in areas of slope fill to protect the roots during grading work. Contractor camps were only allowed within the cleared right-of-way, and special requirements were made to keep stockpiled materials in areas that were easily damaged.

All trees, stumps, brush, and other "objectionable" matter was removed from the right-of-way within an staked area which extended to the width of the slopes of the road. It was the responsibility of the supervisory engineer, William H. Smith, to clearly mark trees within the slope-zone for preservation. All locust and cedar trees with a diameter of at least 6" were cut to board length and saved for future use. The burning of stumps and brush was also strictly regulated to certain areas, especially through the lands of the Navy Mine Depot. These restriction, however, did not keep the Secretary of the Navy from complaining

¹¹⁹Robinson, Superintendent's Monthly Narrative Reports, September 1932.

¹²⁰Robinson to Peterson, 17 June 1932, in "Planning the Parkway, 1931," collection of the Colonial National Historical Park.

¹²¹U.S. Department of Agriculture, Bureau of Public Roads, "Special Provisions, Proposal and Contract Forms for Colonial National Monument Parkway, Unit 1," file 630.C2.4, "Planning the Parkway, 1931," Colonial National Historical Park collection.

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to the Secretary of the Interior about burning operations adjacent to the extremely combustible Depot lands.¹²²

Following specifications from the BPR, graded sections of 41' in cuts and 38' in fills were established with slopes varying between 2:1 and 5:1. Where cut slopes intersected with level grade ground, edges were rounded to create a more natural transition. According to Unit I estimates, 236,148 cubic yards of excavation and 84,552 cubic yards of borrow, consisting of a sandy loam and clay free of rock, were used. Grades were relatively light, being no more than 5.04 percent, and an alignment was created with a maximum curvature of 5° 15'. All tangents were eliminated and all curves greater than one degree were superelevated. The elevation of the road grade varies from 11' to 89' above mean sea level.¹²³

For all structures that would be in view of the motorist, special attempts were made to recreate the "colonial atmosphere" of the region. While reinforced concrete pipe was used for all pipe culverts of 18" to 24", one length of vitrified clay pipe was attached to both ends to screen the "modern" concrete on the interior walls of the culverts. Drainage structures with required openings greater than 24" were constructed as reinforced concrete arches with spans of 4', 6' and 8'. All exposed concrete surfaces, including culvert headwalls, walls of arches, and bridges were clad with oversized "hand-made Virginia style" brick manufactured by the Jamestown Brick Company of Virginia, following plans drawn by William Haussman in April 1931.¹²⁴

¹²²See correspondence in file 630, "Planning the Parkway, 1931," collection of the Colonial National Historical Park.

¹²³William Smith, U.S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report--1932, Colonial National Monument Parkway Units I and II," 6 May 1933, 3, collection of CNHP, Engineer's office, Maintenance Division.

¹²⁴Ibid, 3-4; and correspondence in "Planning the Parkway, 1931."

To ensure an antique finish, all clay for bricks was pit-pugged for twelve hours, and was ordered in a variety of shades. The bricks were sand struck and oversized, averaging 2 5/8" x 8 1/2" x 4". The contractor was required to hire only "expert" bricklayers, and use both Flemish and English bonds depending upon the location of the structure and the plans drawn under Charles Peterson's supervision for architectural treatments. Beveled and half-round bricks were specially produced for use on all parapet walls parallel to the parkway, and arch rings were pre-molded and delivered on site packed in sawdust for protection. Mortar consisted of one part portland cement, one part lime putty, and three parts salt free sand. Upon completion, brick headwalls and parapets were scrubbed with bristle brushes and a solution of water mixed with 10 percent muriatic acid.¹²⁵

Special attention was made to bond brickwork to the concrete in order to insure a lasting joint. According to Unit I specifications

Just before concrete is to be deposited against the masonry, the surfaces shall be thoroughly washed with a stream of water from a hose. The brick masonry shall be coated with a mixture of neat cement and water immediately ahead of the placing of the concrete. The concrete backing shall be placed in layers not more than six inches thick. All bonding pockets shall be completely filled and the concrete worked around the projecting headers and thoroughly spaded and worked until it is brought into intimate contact with every part of the back face of the brick.¹²⁶

All stream crossings between Ballard and King creeks were at tidewater level and provided extremely poor foundation materials for drainage structures. Consequently, untreated timber piles of varying lengths were required under the footings for all culverts and bridges. Trenches for culverts were cut to the grade and

¹²⁵"Special Provisions, Unit I," 15-17.

¹²⁶Ibid, 16.

flow specified in the plans, and were wide enough to allow working space between the concrete and earth. After piles were driven and footings poured, 2" to 3" Wakefield pilings were driven into the earth and anchored to the concrete by hook bolts. For arch culverts, formwork had to be constructed before concrete could be poured. Generally, only class A and class B concrete was used for the culverts and footings in Unit I construction of the parkway. Once the concrete had set up, the trenches were carefully packed and backfilled.¹²⁷

Along with the ubiquitous culverts, three major structures were constructed as part of the Unit I contract, including a 98' long overpass above the Naval Mine Depot railway tracks (see HAER No. VA-48-A), a 14' arch culvert at Bracken's Pond (HAER No. VA-48-F), and a 18' arch spillway and earthen dam along the Jones Mill Pond (HAER No. VA-48-G). The landscapes around Bracken's Pond and Jones Mill Pond in particular became focal points for vista development, providing views of both marine and freshwater wetlands. Certainly, the most dramatic views along the Yorktown to Williamsburg stretch of the parkway were of the York River where special attempts were made to bring the roadway as close to the water as possible.

The decision to align the parkway along the York River while avoiding interference with Navy properties required the use of hydraulic fill to create a suitable roadway embankment along the confluence of both Felgate and Indian Field creeks with the river. Familiar with the work done along the Mount Vernon Parkway, Peterson called for an embankment 11' above sea level, with a width of 60' by the Navy officer's quarters and 100' by the mouths of the creeks. The 4400' fill along Indian Field Creek, and the 1200' fill along Felgates was to have slopes between 1:25 and 1:30. On 3 June 1931, the Arundel Corporation of Baltimore, Maryland, was awarded the contract for the fill,

¹²⁷U.S. Department of Agriculture, Bureau of Public Roads, "Specifications for Concrete," supplement to FR 50 Specifications for Forest Road Construction, February 1931.

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and work began the following month after dredging permits were obtained from the War Department.¹²⁸

Timber bulkheads were constructed at the location of bridges to be built at both Indian Field and Felgates creeks, and posts were driven at the centerline of the embankment. The bleeding process of hydraulic fill was utilized by which an 18" discharge pipe was placed at the centerline of the embankment through which dredged material was pumped and allowed to settle naturally. Generally, no material was dredged closer than 500' from the centerline of the embankment. While the material adjacent to Indian Field Creek consisted of coarse sand suitable for fill, material around Felgates Creek was fine and hard to control within the proposed limits, spreading between twenty and thirty times as wide as it was deep. According to Charles Peterson, the result was, "the most wonderful beach anyone had ever seen."¹²⁹

Although attempts were made to conserve the natural environment, any time fill is used to close stream mouths, a alteration of the environment will result, often with negative consequences. Not only did the fill bury many trees, but by cutting off the stream channels, the water level on the inland side of the fill began to rise. Consequently, the Arundel Corporation was directed to dig out trees and provide additional drainage in specified areas in the spring of 1932. Peterson also directed engineer Spelman to level and shorten the slopes of the embankments to bring the road closer to the water.¹³⁰

With the fill complete along the York River, planning continued for the construction and landscaping of a brick wall and sentry box in front of the Marine barracks. In an attempt to separate the Mine Depot from the parkway, the Navy erected a wire fence

¹²⁸Smith, "Final Construction Report, Units I and II," 6-7.

¹²⁹Peterson, interview with Haskett, 7 May 1986, 5; Smith, "Final Construction Report," 6-7.

¹³⁰Peterson to Spelman, 7 January 1932, "Unit II" file, collection of the CNHP, Engineer's office, Maintenance Division.

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along the right-of-way monuments about 250' from the centerline of the road. A landscape plan was developed to screen the barracks from motorist's view and provide a new access to the parkway through a brick gate and sentry box. Under Peterson's direction, a plan was drawn by the Branch of Plans and Design for a colonial style brick structure. The plans called for a 6' barbed wire fence along the right-of-way line supported by iron posts set 10' apart. To screen the fence, posts and arms were painted green, and the Navy assisted in the planting of shrubs and marsh grasses. Constructed by the P. T. Withers Company of Gastonia, North Carolina with hand labor between 1932-1933, the fence included double swing gates to allow access to the parkway in case of emergency.¹³¹

The sentry box and gate were constructed only 21' from the edge of the future pavement. The plans were signed reluctantly by superintendent Robinson who believed the wall was too close, inhibiting the chance of future development of bridle trails, or the possible expansion of the right-of-way. Instead Robinson called for the brick structure to be built at least 50' from the pavement, at a higher elevation to block the view of the barracks from parkway motorists.¹³² In spring 1930, however, NPS chief landscape architect Thomas Vint reviewed the plans on the ground with Peterson, and approved the location.¹³³

Planning continued for three bridges over Indian Field, Felgate, and King creeks, and the extension of the parkway toward Capitol Landing Road in Williamsburg and to the Royal Welsh Fusiliers'

¹³¹Smith, "Final Construction Report 1933-Colonial National Monument Parkway-Unit III," collection of CNHP, Engineer's office, Maintenance Division.

¹³²Robinson to Albright, 6 May 1932, file 630, "Unit III," collection of CNHP, Engineer's office, Maintenance Division.

¹³³Correspondence of Vint found in file 630-Parkway, "Boundary Fence Between U.S. Navy Mine Depot and Parkway Right-of-Way, Unit III," collection of CNHP, Engineer's office, Maintenance Division.

Redoubt near Yorktown. Grading also continued between King Creek and Hubbard Lane, where the slopes were moved back from the centerline of the road to create a broader surface for the roadway and shoulders.¹³⁴ Peterson also directed the seeding of slopes once the proper grade was attained to "freeze" the contours. As part of a landscaping plan laid out by Edward Zimmer in 1932 under the direction of Peterson, a recommendation for grassing the slopes along the parkway was made, and a mixture of seed was agreed upon (the mixture was composed of 20 percent orchard grass, 15 percent Timothy, 20 percent Korean Lespedza, 20 percent Domestic Italian Rye, 10 percent Kentucky Blue Grass, 10 percent Red Top, and 5 percent sheep feces.)¹³⁵

Maintenance became an issue for park staff as soon as construction began on the parkway.. Culverts and other drainage features had to be cleared regularly and replaced if faulty, slopes damaged by heavy rains were remodeled, and fill settlement often required stabilization and regrading. Monthly surveys of the parkway were made by both park and BPR staff from the region, as well as staff from both Washington offices. Any problems that were encountered were reported to the resident engineers and landscape architects. Tours of the road were also given on a regular basis to representatives of the Colonial Williamsburg Foundation, including John D. Rockefeller Jr., officials of the state highway administration and the Virginia Conservation and Development Commission.¹³⁶

By 1933 bridges were constructed at Indian Field (HAER No. VA-48-H), Felgate (HAER No. VA-48-I), and King (HAER No. VA-48-J) creeks, providing the final step before the first section of the

¹³⁴Robinson, Superintendent's Monthly Narrative Reports, March - April 1932.

¹³⁵"Recommendations for Grassing Parkway Slopes," 12 July 1932, file 630-C-2-48, "Landscaping the Parkway, 1931-1932," collection of the CNHP.

¹³⁶For accounts of visitors to the park see the Superintendent's Monthly Narrative Reports.

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parkway could be paved and opened to traffic. Originally, there were two alternative designs for the Unit IV bridges put forth by the BPR. Alternative One was a reinforced concrete deck slab, wide enough for a 30' roadway and two 2' sidewalks, constructed on steel I-beams on concrete bents and piers. Alternative two, considered the low cost model, utilized a reinforced concrete deck slab on steel I-beams supported by a timber trestle. There was also an ongoing debate between the landscape architects as to the final treatment of the structures. Initial plans called for sand-blasting the handrails and staining the concrete brown to simulate a wood finish. These plans were dropped, and the all concrete alternative was adopted. It was thought that the concrete would blend with the pale color of the hydraulic fill.¹³⁷

Stanford & Brooks Company of Baltimore, Maryland, was awarded the contract and began construction in October 1932. To facilitate construction, a floating concrete plant was constructed for work on the center footings and piers while a land plant handled the abutments and decks. Heavy winds and surf hampered progress on the pile-driving, erection of cofferdams and excavations of abutments. When completed the low-level bridges allowed for extensive views of both the inland marshes and the York River. Characteristic of Park Service bridges, their simple unadorned design fit into the surrounding landscape and did not distract from visitors' experience of the Tidewater environment. Final inspection of the bridges was made in September 1933, during which Edward Zimmer noted

The three bridges built under this contract are extremely well executed and I believe the best examples of concrete construction to be seen in this part of the country. The contractor's superintendent is to be commended for his excellent and thorough interpretation of the plans.¹³⁸

¹³⁷Robinson, Superintendent's Monthly Narrative Reports, August - October 1932; and correspondence in file 630-C-2-48, "Landscaping the Parkway, 1931-1932," collection of the CNHP.

¹³⁸This note is included in the U.S. Department of Agriculture, Bureau of Public Roads, "Final Construction Report,

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With all grading and drainage features completed by the end of 1933, BPR engineers and Park Service landscape architects focused upon paving the road. Although Albright approved \$150,000 from the Emergency Relief Appropriations for paving in 1932, the park decided to delay paving to allow the hydraulic fill to settle and to study the available types of paving material that would best suit the character of the parkway. NPS engineer Frank Kittredge wrote:

I am wondering if eventually we might not want to lay a concrete foundation on top of the crushed rock base, and then pave the road with brick. Brick was certainly an old time product, and I believe would harmonize, so far as I know landscape ideas. Vitrified brick are very durable, and will last for generations under automobile traffic if well laid.¹³⁹

Historical research played a role in developing a suitable pavement for the parkway. Diaries of eighteenth century travelers to Yorktown comment upon the high quality of roads in the area which were surfaced with a mixture of marl (a native stone) and shells. Robinson and resident engineer Spelman discussed the idea of paving the parkway with a marl and shell topping with a cement binder to prevent dust. While they decided that a marl and shell road could not hold up under the stresses of a modern highway, Robinson continued to search for an acceptable alternative, "which would (more) nearly simulate a colonial road than would concrete."¹⁴⁰ In the interim, a gravel and slag base course was laid upon the graded surface and topped

Project No. 1, Colonial Parkway, Unit IV Bridges," 13 December 1933, collection of CNHP, engineer's office, Maintenance Division.

¹³⁹Kittredge to Robinson, 13 August 1932, file 630, "Parkway--Unit V--Surfacing, Access Roads, Parking Areas," collection of CNHP, Engineer's office, Yorktown, Virginia.

¹⁴⁰Robinson to Kittredge, 5 August 1932, file 630, "Parkway==Unit V--Surfacing, Access Roads, Parking Area."

with oil to provide a suitable road grade for passage of construction vehicles. BPR engineers thought the use of the road for two or three years would produce the needed settlement to pave such a new road.

The inspiration for the finish of the parkway's pavement most likely came from Williamsburg, where restoration architects were experimenting with brushing the concrete to expose the gravel and stone aggregate. Robinson and Peterson were aware of this operation by 1932, and at some time a decision was made to adopt this method, although it was by no means a simple task.¹⁴¹ On 4 May 1934, the Roberts Paving Company of Salisbury, Maryland, won the contract for the 9.4 miles of the parkway between Ballard Creek and Hubbard Lane. Sub-contractors were responsible for the pre-paving grade work, establishment of seven overlooks and the construction of guardrail along certain sections of the road.

A light skimmer was used to re-grade the roadway surface, and additional gravel was laid to create a two course sub base between 9" and 1' deep. Marl for the concrete pavement was quarried out of a local "gravel pit" near Yorktown.¹⁴² Modified rails comprised the form work for the 10' X 40' sections of the pavement. Once the pavement had set, the rail forms were removed and a cork filler was poured in the 40' longitudinal joints. Final grading prior to the pouring of concrete created a specially shaped surface 8" deep at the edges and 6" deep at the center. All sections of the parkway not superelevated, were crowned with a slope not more than 1 1/4" from the centerline. Approximately 2" below the surface of the pavement, a reinforcing mat comprised of No. 00 and No. 5 gauge steel was laid. Painted and oiled 5/8" smooth wooden dowels fitted with metal expansion sleeves were placed 3 1/2" below the surface at the transverse joints of each section. Cut to a length of 4', four dowels were

¹⁴¹Ibid.

¹⁴²Flickinger, Superintendent's Monthly Narrative Reports, September 1934, 12.

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used at the joint. At the approach slabs to bridges and access roads, special 9" concrete headers and construction joints were built to handle the added stress.¹⁴³

Utilizing a Rex paving machine, cement, aggregate and sand were mixed on site and poured in the center lane first beginning on 15 June 1934. Under the close watch of landscape architects Edward Zimmer and James H. Brooks, a water hose was used to flush out the cement in order to expose the aggregate. BPR engineer Spelman, however, prohibited the use of this method after he determined that it was excessively destructive to the concrete. Directed by Zimmer and Spelman, the contractor switched to a mixed aggregate of 75 percent large stones and 25 percent small stones (compared to a 60/40 ratio used before), and a brooming operation was commenced soon after the concrete was poured.¹⁴⁴ The concrete was first brushed with stiff wire brushes, after which the mortar was broomed away from the surface. A mixture of water and 10 percent muriatic acid was used to clean the cement from the exposed aggregate. This labor intensive method proved more successful in creating a fairly uniform finish, and was tentatively recommended for acceptance by engineers Spelman and Smith, as well as the landscape division.¹⁴⁵

By August, however, Smith questioned the whole operation of exposing the aggregate and called for a complete inspection of the pavement laid thus far. Not only was it considered excessive

¹⁴³U.S. Department of the Interior, National Park Service, "Colonial National Monument Parkway, Unit No. 5, Paving and Incidental Construction," Collection of the CNHP, Engineer's office, Maintenance Division.

¹⁴⁴In August 1934, the Roberts Paving Company was allowed to use Piscataway Creek gravel for the aggregate in the parkway's pavement.

¹⁴⁵Flickinger, Superintendent's Monthly Narrative Reports, June 1934, 13; James H. Brooks, Junior Landscape Architect, to Peterson, 20 June 1934, file 630, "Parkway--Unit V--Surfacing, Access Roads, Parking Area."

in labor time spent, but Smith also identified numerous minor defects in the construction (particularly the joints) and appearance.¹⁴⁶ Although common by the 1950s, the use of exposed aggregate in the 1930s was a novel and ambitious undertaking. Despite Smith's desire to abandon the exposed aggregate finish, the paving continued and was completed by the end of October 1934. Only finishing work, including grinding down high spots, replacing defective workmanship and pouring the expansion joints remained.¹⁴⁷

While paving continued, planting activities intensified, particularly after the establishment of CCC camps in 1933. Funds for plant material were allocated as part of Emergency Conservation Works programs. Following Zimmers' 1932 planting plan, trees such as pines, cedars, dogwoods, redbuds, tulip and beech were purchased from local suppliers and planted to create the desired landscaping effect. Many existing trees were moved into more appropriate locations. This process of planting and transplanting vegetative cover became officially known within the NPS as "landscape naturalization." Planting became a higher priority of the NPS in the late 1920s after the hiring of junior landscape engineer Ernest Davidson. In 1929, Davidson submitted a report on planting operations which received considerable support within the Service. Additional appropriations were sought to plant vegetation for both beautification and maintenance (to curb slope erosion for instance).¹⁴⁸

Concurrent with planting operations, dead wood, brush and any other fire hazards were removed from the forest floor and replaced by a stable understory. Understory planting consisted of small dogwoods, bayberry, sumac and a variety of other shrubbery. Agreements were made with adjacent landowners to

¹⁴⁶Smith to Spelman, 8 August 1934, file 630, "Parkway--Unit V--Surfacing, Access Roads, Parking Area."

¹⁴⁷Flickinger, Superintendent's Monthly Narrative Reports, October 1934.

¹⁴⁸McClelland, 149-153.

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trade trees from their land in exchange for minor grading and surfacing of roads on their property.¹⁴⁹ In 1938, it was reported that over 200,000 trees had been planted between Yorktown and Williamsburg, the highest percentage of which were dogwoods. Locally, the parkway became known as "dogwood drive."¹⁵⁰

Crews were also active in both selective and vista cutting along specified areas of the parkway. Particular attention was placed upon the creation of a pine canopy over the road to form a shaded drive for motorists. Viewsheds were framed with well pruned trees. Following contemporary landscaping procedures, operations were meticulously planned and crafted to shape the visitor's experience of the parkway. Fundamental landscaping principles of unity, variety and character guided the development of the parkway to create a road of beauty as well as utility.¹⁵¹ Planting operations, however, also caused considerable damage to the roadway as simultaneous work crews often cluttered the parkway with trucks, equipment and men. In 1934, BPR engineers complained to superintendent Flickinger about excessive damage done to the parkway's gravel and earth shoulders by CCC trucks.¹⁵²

Other landscaping features completed with the paving of the road were the installation of peeled locust log guardrails, timber tree enclosures, log curbs, and parking overlooks. While initial plans called for concrete guardrails molded to look like wood,

¹⁴⁹Flickinger, Superintendent's Monthly Narrative Reports, December 1935, 12.

¹⁵⁰Press release from Colonial National Historical Park, 16 April 1938, file 871, "Virginia Conservation Commission," collection of CNHP.

¹⁵¹H. K. Bishop, "Tourist Parkways," in "Discussions on Highway Location," *Transactions of the American Society of Civil Engineers* 96(1932): 477-480; and George R. Chatburn, "Highway Esthetics," in *Highways and Highway Transportation* (New York: Thomas Y. Crowell Company, 1923), 382-421.

¹⁵²Smith to Flickinger, 4 January 1934, file 630, "Parkway--Unit V--Surfacing, Access Roads, Parking Area."

the rustic architecture common in western parks was utilized. The lintels were generally 8" wide, supported by 10" wide, 1'-8" high posts. The sub-contractor was not able to find enough locust to finish the job, so cedar logs were substituted where necessary. Generally, guardrails were constructed around overlooks, along steep embankments, and along bridge toe walls and culvert parapets. In all, seven overlooks were constructed between Yorktown and Williamsburg during the first phases of construction.¹⁵³

With the paving and planting of the parkway as far as Hubbard Lane nearly complete by early 1935, clearing to Capitol Landing Road and negotiations for the right-of-way to the C & O Railroad were well underway. Land parcels between .10 and 22 acres were acquired from both private and public property owners. Access rights into Williamsburg proper were attained in 1935, and plans were drawn for underpass structures at Capitol Landing and the C&O Railroad (see HAER Nos. VA-48-B and VA-48-C). In 1936-1938, there were four major projects completed along the parkway, including the two underpass structures, the grading, drainage and paving between Hubbard Lane and North England Street, and the extension of the parkway to a new terminus comprised of a traffic U and parking area by the Royal Welsh Fusiliers' Redoubt in Yorktown.

The grading and paving contractor T. E. Ritter Company, Inc., followed the same standards of alignment and grade established between Yorktown and Hubbard Lane. Cross sections called for a 44' wide roadway with slopes in cuts and fills varying from 2:1 to 5:1. The greatest degree of curves was 3 percent, and all grades were under 5 percent except for a 400' section with a 5.7 percent grade. Along with pipe culverts, four arch culverts were built with spans of 4' and 6' with brick-clad headwalls. Because of the terrain, excavations were comparatively heavy, requiring

¹⁵³Flickinger, Superintendent's Monthly Narrative Reports, 1934-1935; and plans for Unit V paving and incidental construction, drawing 1086-D, Eastern Division of the Branch of Plans and Design, 5 September 1933.

the stockpiling of about 20,000 cubic yards of soil.¹⁵⁴ As mentioned earlier, many landscape features of this section of the parkway were directed by the Colonial Williamsburg Foundation. From the design and treatment of underpasses to the planting and view shed development, Arthur Shurcliff and others associated with the restoration played an important role in shaping the character of the road in the vicinity of Williamsburg.

While there was a continuity in the BPR field engineers Smith and Spelman, Park Service resident landscape architects experienced high turnover rate. By the time the parkway approached Williamsburg, Zimmer had been transferred to the Washington office, later to become chief of the Eastern Office of Design and Construction (EODC), and was replaced by James Brooks. In 1938, Brooks was replaced by associate landscape architect Ray A. Wilhelm. Others were also involved in the parkway, including landscape foreman Eugene R. DeSilets who oversaw planting and other work until 1938 when he was transferred to the Natchez Trace Parkway. Like Zimmer, DeSilets went on to become head of the EODC, and later President of the American Society of Landscape Architects.¹⁵⁵

Due to a lack of funds which slowed progress on the parkway during the late 1930s, more of the landscape architect's time was spent directing maintenance crews along completed sections. Trees had to be pruned, culvert needed clearing, and mudjacking operations were required to level pavement where sinking had occurred. Typical of engineering practices on hydraulic fill, mudjacking became a yearly task of the park as early as 1937 to stabilize and protect the pavement. The operation consisted of

¹⁵⁴Smith, "Final Construction Report, Project 1C1, Colonial National Historical Park," 15 September 1937, collection of CNHP, Engineer's office, Maintenance Division.

¹⁵⁵Cox, Superintendent's Monthly Narrative Reports, October 1938; and Peterson, interview with James Haskett, 12.

pumping "grout," a mixture of soil, cement, and water, through bored holes in the pavement. The sections are raised to the desired level, and the grout hardens to retain the road grade.¹⁵⁶

As the parkway was completed to North England Street, planning for the tunnel and right-of-way access south of Williamsburg was well underway. In March 1940, CCC forces began to strip the sod along the tunnel route and telephone lines were moved. Construction of the tunnel proceeded south to north by the "cut and cover" method. A large trench was dug on a curve of 1° 45'. The trench averaged 50' wide, although in many places the width doubled due to numerous cave-ins that caused considerable damage to structures and many injuries to workers. Extensive shoring, comprised of timber sheeting and steel H-beams, was needed to stabilize the trench walls and nearby structures. Under the tunnel footings, an 18" cast iron sewer was placed in a 2' x 2' reinforced concrete box. The tunnel's footings were built upon hard marl without the use of piles. Numerous underground springs that were encountered during digging were siphoned by piping and underdrains. All excavated material was spread on the grubbed right-of-way between Williamsburg and Halfway Creek.

A concrete mixing plant was constructed adjacent to the trench and fitted with an elevated shaft to empty concrete into chutes attached to the tunnel's form work. With the footings of the south portal complete by July, concrete for a 30' horizontal span

tunnel arch was poured in 30' sections. The steel forms for the arch were comprised of "arch rib trusses spaced 30" center to center with 30" x 30" steel plates, inside and outside, and tied with 1" x 1/2" flat steel tie bars." Once set, the concrete was waterproofed with hot tar, fabric and asphalt plank, and encased with 12" of gravel sheathing. In order to reopen streets

¹⁵⁶Mudjacking operation were generally reviewed in the Superintendent's Monthly Narrative Reports, but for a more detailed account of the work see Glenn Farrar, U.S. Department of the Interior, National Park Service, "Mudjacking, Yorktown-Jamestown Section of Parkway," 24 February 1959, collection of CNHP, Engineer's office, Maintenance Division.

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effected by the cut as soon as possible, backfill operations began on completed sections before the entire cut had been made to the north portal (for additional construction details see HAER No. VA-48-D).¹⁵⁷

In November, a CCC crew began work on the first extension of parkway work south of Williamsburg, beginning clearing and grubbing operations between Papermill and Halfway creeks.¹⁵⁸ Through 1940 and early 1941, the right-of-way to Halfway Creek was cleared and marked but progress on the tunnel was exceedingly slow due to poor supervision and numerous problems. In January, NPS engineer William G. Fyfe was transferred to Colonial from the Blue Ridge Parkway to oversee parkway construction.¹⁵⁹ The slow progress on the tunnel worsened as increased defense activity in the region drained manpower and materials from the project.

By April 1941, piles were being driven for a bridge over Halfway Creek, but the contractor, Frank T. Wescott of North Attleboro, North Carolina, experienced similar difficulties in finding materials and labor. The turnover of landscape architects continued in June with the replacement of Ray A. Wilhelm, who was transferred to the Great Smoky Mountains National Park, by Robert W. Andrews from Region I. Although these changes may have affected other work at Colonial, they do not seem to effect the progress of the parkway which continued to be an independent construction project run by the BPR.

Backfilling operations at the tunnel were completed by February

¹⁵⁷Cox, Superintendent's Monthly Narrative Reports, March-August 1940; Smith, "Final Construction Report, Project 1D3, Colonial National Historical Park, Williamsburg Tunnel, James City County, Virginia," 15 June 1943, collection of CNHP, Engineer's office, Maintenance Division.

¹⁵⁸Cox, Superintendent's Monthly Narrative Reports, November 1940.

¹⁵⁹Cox, Superintendent's Monthly Narrative Reports, January 1941.

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1942, and remaining CCC forces began to replace the topsoil along the path of the cut. The Colonial Williamsburg Foundation was responsible for landscaping the area, and chief architect A. E. Kendrew developed plans to screen the north portal with trees and shrubs for visitors on Nicholson Street.¹⁶⁰ During the spring, brickwork on the north portal, and excavations around the north approach continued to attain the proper landscape effect. A final inspection of the tunnel was made in September, at which time acceptance was approved. The following year a temporary gravel surface was placed on the tunnel road bed. Halfway Creek Bridge was completed and accepted in December 1942 (see HAER No. VA-48-K for bridge construction details).¹⁶¹ Except for an underpass structure at Route 168 east of Capitol Landing Road, built by the state in 1948, these two projects mark the last major construction operation on the parkway until the final completion of the road between 1955 and 1957 (Route 168 became Route 143 when Interstate 64 was built in 1964).

As noted earlier, planning for the parkway's extension continued during the early 1950s. War again, this time in Korea, limited funding available to the park for new construction projects. One exception was the bridge over Powhatan Creek just east of Glasshouse Point. An appropriation for the bridge's construction was made in 1950 and plans were drawn and approved. When bids were returned in September, however, the lowest came in at \$100,000 over the engineer's estimate, and all bids were rejected which delayed the construction of the bridge for five years. In 1951, BPR survey crews began to place concrete right-of-way markers between Williamsburg and College Creek, and between Route 31 and Powhatan Creek. Plans were also prepared in consultation

¹⁶⁰Memorandum to Regional Director, Region One from park superintendent Elbert Cox, 29 June 1942, file 630, "Parkway, Williamsburg-Jamestown, Williamsburg Tunnel-General," Engineer's office, Maintenance Division.

¹⁶¹Cox, Superintendent's Monthly Narrative Reports, April-December 1942.

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with A. E. Kendrew of Colonial Williamsburg on a connection with Tazewall Hall Avenue south of the tunnel.

Begun in February 1952, the C. H. Lawson Company of Williamsburg was awarded the contract for the grading, drainage, and temporary paving with hot asphalt through the tunnel to Tazewall Hall Avenue.¹⁶² In November, the extension was open to public transportation but the connection was only temporary; it was replaced by a concrete arch underpass in 1957.

When Stanley Abbott became park superintendent in 1953, he was the first landscape architect to fill that position. He would have a major impact upon the completion of the parkway, and was responsible for continuing the design principles established in the 1930s. The following year, resident landscape architect Nelson Royal was transferred to the EODC and replaced by Robert L. Steenhagen. In September 1954 it was announced that Warren Lewis, associated with the Blue Ridge Parkway like Abbott, would set up an office as field representative of the Eastern Office of Design and Construction with temporary assistance from Edward Deetz. Abbott, Steenhagen and Lewis provided the professional guidance for the massive redevelopment projects of the mid-1950s.¹⁶³

As mentioned earlier, the impetus for the completion of the parkway was the increased funding through Mission 66 programs in 1956 and 1957. More than \$ 4.5 million in heavy construction funds went into the completion of the parkway complex between

¹⁶²Smith, "Final Construction Report, Project 1D13, Colonial Parkway," collection of CNHP, Engineer's office, Maintenance Division.

¹⁶³Most of this information is taken directly from the Hummel and Abbott, Superintendent's Monthly Narrative Reports, 1951-1954; September report of the landscape architect's office filed on 5 October 1954, A-2827, "Monthly Reports (park engineers) January 1954-December 1957," collection of CNHP.

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1954 and 1958.¹⁶⁴ The first project toward this end began in 1954 with the contract for the construction of Powhatan Creek Bridge. The bridge was the first of four bridges (not counting Halfway Creek) constructed between Williamsburg and Jamestown Island in the 1950s. It was the only remaining bridge that did not require hydraulic fill before it could be built. Built by the Malpass Construction Company, the structure is a 725' reinforced concrete girder bridge supported by concrete bents and piers. Initial excavations and the placement of footings proceeded at an extremely slow rate due to marshy conditions encountered at the site. A temporary railroad trestle was constructed parallel to the bridge to facilitate the movement of equipment to specific sites along the structure. When completed in April 1956, the low level concrete bridge matched the character of other parkway bridges along the rivers, providing extensive views of the surrounding landscape.¹⁶⁵

There was a concerted effort to coordinate concurrent construction projects for the park and the parkway. In January 1955, a two day field conference was held at Yorktown during which the entire staff was briefed about projects slated for the next two years. That same month, the Park Service received permits from the Army Corps of Engineers for the hydraulic fill and bridges at College and Mill creeks and between Glasshouse Point and Jamestown Island.¹⁶⁶ The parkway was also affected by other interpretive projects being planned at the same time. Historical markers were prepared and additional overlooks, parking and picnic areas were planned by the Eastern Office of Design and Construction. A new visitor center in Yorktown, furthermore, necessitated the extension of the parkway from its terminus west of the Royal Welsh Fusiliers' Reboubt behind Yorktown to the

¹⁶⁴Jamestown, 1607-1957, 42.

¹⁶⁵Emery, "Completion Report of Construction Project Bridge, Powhatan Creek," collection of CNHP, Engineer's office, Maintenance Division.

¹⁶⁶Abbott, Superintendent's Monthly Narrative Reports, January 1955.

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river bluffs east of the town where the new complex was built.

Regular meetings were held to monitor the progress of construction. The contract for hydraulic fill went to the Nello L. Teer Company, and the contract for grading and drainage for the entire parkway was awarded W. H. Scott, Inc. of Franklin, Virginia. These projects proceeded concurrently, with grading taking place between Williamsburg and College Creek, and toward the Yorktown terminus so as not to interfere with fill operations. Grading continued to follow standards established in the 1930s except for the use of two long tangents at the parkway's approach to both College and Mill creeks. All grading work and the construction of drainage features along the entire route were complete by September 1956.

The bleeding process was used for fill operations, but more substantial bulkheads were constructed due to problems encountered along the York River. High quality fill material was discovered along the James River by Glebe Gut, prompting the engineers to construct a mile-long discharge pipe along the shoreline to Mill Creek. Completed between April and March 1955, over 2 miles of roadway embankments were created with two dredges and a 28" pontoon discharge pipe pumping over 1.6 million cubic yards of fill. Creek channels were kept open prior to filling by timber bulkheads at the location of the bridges.¹⁶⁷

The Rea Construction Company of Charlotte, North Carolina was the most active contractor on the project, building the concrete deck bridges at College and Mill creeks and the isthmus (see HAER Nos. VA-48-M, VA-48-N, and VA-48-P respectively). The Rea Company also constructed the brick veneered bridges over U.S. 17 (HAER No. VA-48-R) and Yorktown Creek (HAER No. VA-48-Q) on the Yorktown extension of the parkway. The only remaining bridge was the concrete arch, brick veneered underpass at Route 238 near Yorktown constructed by the Case Construction Company of Mount Airy, Maryland. All of these structures were completed in 1956.

¹⁶⁷Emery, "Completion Report of Construction Project-Hydraulic Embankments and other work," collection of CNHP, Engineer's office, Maintenance Division.

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On 24 May 1956, bids were opened for the paving of the parkway, the final and largest contract for the road's completion. The \$1.6 million contract was awarded to the Nello L. Teer Company (the company which received the first contract in 1931), and work began on 26 June 1956. The entire contract included paving the parkway, access roads, interchanges, parking areas, and picnic sites, the laying of base stone, and the construction of curbs, parking areas at both visitor centers. Eleven overlook parking areas were integrated into the Jamestown end of the road, and seven were repaved on the Yorktown end. The maximum degree of curvature is $16^{\circ} 30'$ with a maximum grade of 4.9 percent, and a design speed of fifty miles an hour.

The bulk of the contract involved the construction of about 10 miles of 30' wide reinforced exposed aggregate concrete to match the pavement on the completed portions of the parkway. Two Butler batch concrete plants were erected at station 970 and between Mill Creek and Glasshouse Point. Aggregate was acquired from Dutch Gap, roughly thirty miles up the James River, and was delivered to the site by barge. Except for bridge sections and parking areas, the pavement between Glasshouse Point and Williamsburg was completed in December 1956. Progress slowed considerable during the first three months of 1957 due to snow, ice, heavy rains and a nationwide cement strike. In order to complete the parkway by the beginning of the celebration on 1 April, the contractor was forced bring in floodlights for nighttime work.

The structure of the pavement was different than the original pavement laid in 1934-1935. A uniform 12" base course of gravel underlies a uniform 7" concrete pavement. Sections are 10' wide, but 60' long with 2' steel dowels every 1' along the length of the longitudinal joints, and three 40" tie rods for the transverse joints of each 10' wide section. A reinforcement mat comprised of No. 6 wire and No. 2 steel bars was set approximately $1 \frac{1}{4}$ " below the surface of the pavement. The individual sections were not flush, but fit together with a tongue-and-groove key joint. The center section is crowned to produce a slope of 1" per 1' from the centerline of the pavement to its edges. Between fifteen and twenty men were employed at all times hand brooming the surface to expose the aggregate, after which an

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acid was applied for cleaning. As with the first sections of the parkway, exposing the aggregate caused considerable difficulty and anxiety on the part of engineers and contractors.¹⁶⁸

During completion of the paving contract, substantial settlement occurred in areas of fill which did not receive adequate set up time. Severe undulations and cracking were evident in many areas, particularly around the mouth of Mill Creek. Temporary patching with bituminous concrete was put in place for the duration of the celebration. During the following summer in 1958, mudjacking operations were completed by the park but they failed to attain the desired grade. It was not until 1960 that a proper road grade was created and the damaged sections were replaced.¹⁶⁹ In 1958-1959, the M. E. Howard Construction Company was awarded a contract to regrade slopes between Williamsburg and Jamestown, and the new Yorktown terminus, an area of heavy cuts. Excessive erosion had occurred where slopes were too steep, necessitating the flattening of slopes and the modification of drainage structures. Small scrapers with a 7.5 cubic yard capacity were used to level the slopes, after which they were rolled by a sheepsfoot roller, fertilized, and seeded.¹⁷⁰

Between April and June 1957, 5,192 linear feet of treated timber guard rails were constructed along the new section of road by the R. B. Richie Company. Different from the round log rails along the Yorktown end of the road, the new rails had 5" x 7" cut timber beam on a 1'-1/2" x 1' post, connected with two 5/8" x 14"

¹⁶⁸Information concerning the paving of the parkway from, U.S. Department of the Interior, National Park Service, "Final Construction Report, Colonial Parkway, Project 1A4-B12-D11-E4;" U.S. Department of Commerce, Bureau of Public Roads, "Plans for Project No. 1A4-B12-D11-E4-Paving," February 1956, collection of the CNHP, Engineer's office, Maintenance Division.

¹⁶⁹Ibid.

¹⁷⁰U.S. Department of Commerce, Bureau of Public Roads, Region 15, "Final Construction Reports-Colonial Parkway-Project 1A8-D20-E8," 25 March 1965. CNHP, Engineer's office.

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steel carriage bolts. The rails were about 1'-8" high and were set in the shoulders 5' from the pavement.¹⁷¹ Shoulders were seeded and landscaping crews, under the direction of park landscape architects Warren Lewis and Robert Steenhagen, planted numerous pines, hickories, oaks, tulip and beech trees, along with numerous vines, shrubs and flowers. For the first time, an integrated system of interpretive markers, thirty-two in all, were erected between Jamestown and Yorktown. These cast aluminum markers attempt to fill the historical gaps between 1607 and 1781, focusing primarily on the settlement and plantation period of the region's history. On 27 April 1957, the entire parkway was opened from terminus to terminus, completing a historic link twenty-six years in the making.¹⁷²

¹⁷¹U.S. Department of the Interior, National Park Service, "Completion Report of Construction Project 1A7-B14-D19," 14 May 1958. CNHP, Engineer's office.

¹⁷²Jamestown, 1607-1957, 53; Dill, "Colonial Parkway Extension to Jamestown," 19-20; Information concerning activities during 1957 is limited due to the fact that the park is missing its Superintendent's Monthly Reports for that year.

THE COLONIAL PARKWAY, 1950s TO 1990s

The 1964 edition of the Master Plan for Colonial National Historical Park states that, "The park is in a growing area that is fast becoming urban and suburban with resulting pressures and complexities." Yearly visitation to the park had risen from 367,000 in 1935, to over 6 million in 1964, while the populations of both James City and York counties grew steadily. Under Stanley Abbott, who remained superintendent until 1965, park responsibilities expanded to include a greater involvement in state and county zoning decisions. Under subsequent superintendents, including Lawrence C. Hadley (1966-1968), James W. Corson (1968-1972), and James R. Sullivan (1972-1981), additional land acquisitions and scenic easements were gained between Yorktown and Jamestown to provide buffers along park lands.¹⁷³

Regional road-building projects necessitated the construction of additional grade separated structures to limit public access. But more significant was the need to rehabilitate much of the parkway's infrastructure to meet the increasing safety standards of the Federal Highway Administration (Fhwa). By continuing to treat the parkway as a scenic corridor which incorporates cultural and natural resources of Tidewater Virginia, the park often came into conflict with the FHWA concerning safety regulations and their effects upon the parkway's landscape. The Park Service argued the unique characteristics of park roads are integral to visitor experience, necessitating the retention of the integrity of the original design unburdened with such features as lane striping and excessive use of guardrails.

Attempts to limit public access to the parkway continued after the 1957 celebration. In 1957, Troitino & Brown, Inc. of Asheville, North Carolina constructed a concrete arch, brick veneered underpass structure designed by the regional office of the Bureau of Public Roads to replace the at-grade connection with Tazewell Hall Avenue (This structure is now known as the

¹⁷³See Park Master Plans, 1961 and 1964.

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Newport Avenue Bridge, HAER No. VA-48-U).¹⁷⁴ The following year, a short section of asphalt road connecting Francis Street with the parkway just south of the tunnel was removed. The whole area was stripped, regraded, and replanted by William E. Hodge to recreate a "natural" appearance.¹⁷⁵

Another area of concern for the park was the rapidly growing Queen's Lake development about 4 miles northwest of Williamsburg between the parkway and the York River. In September 1960, the Park Service constructed two collection roads in the area that funnelled traffic onto Route 716 (Hubbard Lane) in order to eliminate several at-grade crossings. State Route 716 became the only commercial and residential throughway into Queen's Lake, and it remained a grade crossing with the parkway until 1964. The secondary Route 641 connected Route 168 with the Cheatham Annex of the Naval Weapons Station. In 1962, a major contract was awarded to the Ferguson Corporation, Newport News, Virginia, for the construction of two separated grade structures for Routes 716 and 641 over the parkway, the relocation of two secondary state routes, and the relocation of a portion of the railroad into Cheatham Annex.

It took two years to complete the project at a cost of about \$500,000. The Route 716 (Hubbard Lane) bridge was constructed as a 3-span, reinforced concrete deck bridge with brick parapets and brick faced wingwalls. The bridge measures 47'-7" out-to-out, and has a 89' through span and 3' parapets. The Route 641 structure is a more substantial bridge crossing both Route 641 and the U.S. Navy railroad. The bridge measures 41'-4" wide, has a 163'-6" span and 3' parapets. To supply the Queen's Lake development, water mains and other utility conduits were

¹⁷⁴Glen C. Farrar, U.S. Department of the Interior, National Park Service, "Completion Report, Concrete arch Overpass Structure and Other Work," 17 September 1959, collection of CNHP, Engineer's office, Maintenance Division.

¹⁷⁵Farrar, "Completion Report of Construction Project-Elimination of Francis St. Access," 1 April 1959, collection of CNHP, Engineer's office, Maintenance Division, Yorktown.

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constructed into the bridge decks. All brickwork followed the same standards established in the 1930s. With the completion of the project officials of the Bureau of Public Roads observed

The completed project is a contribution to the program of human values, as well as in terms of Service values. By providing an underpass at both locations, the former hazardous grade crossings have been eliminated. The improvement will benefit the residents of the local area in safety and in elements of time. Tourists will enjoy more freedom of space in their travels on the Colonial Parkway.¹⁷⁶

In 1965 the Federal Highway Administration completed two separated grade structures for east and west bound traffic on Interstate 64, a major east-west corridor which intersects with the Colonial Parkway about one-half mile east of the Route 716 (Hubbard Lane) Bridge. The following year, a bridge and interchange were constructed at Miller's Crossing, south of the Williamsburg tunnel, to replace a grade crossing built in the 1950s. Along with removing the grade crossing, the bridge provided a safe connection to the Great Neck Picnic Area northwest of the crossing and commercial access across the parkway from Route 619 to the new Kings Point subdivision. During the winter of 1964-1965, plans were prepared by the Bureau of Public Roads and architectural details were designed by the Eastern Office of Design and Construction. The concrete arch, brick veneered bridge was completed in 1966 by the Malpass Construction Company of Norfolk, Virginia. With the completion of the bridge (HAER No. VA-48-Z), the Park Service received release agreements of access to the parkway from landowners on the western side of the right-of-way.¹⁷⁷

¹⁷⁶U.S. Department of Commerce, Bureau of Public Roads, Region 15, "Final Completion Report, Colonial Parkway, Project No. 1B11," collection of the CNHP, Engineer's office, Maintenance Division.

¹⁷⁷Lawrence Hadley, Superintendent's Monthly Narrative Reports, May 1966; and Memorandum to the Director of the Southeast Region from park superintendent James Corson, 16 May

At the time of the completion of the bridge, however, the Virginia Highway Department began planning for a divided four-lane southern by-pass of Williamsburg to connect Route 31 with Interstate 64. Preliminary surveys in 1968-1969 identified the Miller's Crossing site as the best alternative alignment for crossing the parkway. Proposals drawn by the state utilized the existing Miller's Crossing Bridge to carry one direction of traffic and entailed the construction of another bridge to carry two lanes in the opposite direction. Extensive planning was completed during the following two years to come up with an acceptable traffic pattern that would retain safe access for residents south of the proposed route into Williamsburg without having to get onto the faster moving Route 199 traffic.¹⁷⁸

Plans completed in 1970 called for the modification of the wingwalls and parapets of the existing Miller's Crossing Bridge, and the construction of a new identical bridge to the north to become the west bound lane. Park representatives accepted the proposal with conditions, including that the load bearing of the Miller's Crossing Bridge not be altered and that renovations "should not affect or change the appearance of the existing arch span type structure which is faced with colonial type handmade brick."¹⁷⁹ In response to the state's plans in 1972, the NPS regional director observed

Aesthetically it will give the impression of an historic structure in a proper combination of structural concrete and brick masonry using brick that resembles closely the old fashioned hand-made brick, Virginia style. We are confident

1970, file "Williamsburg Southern By-Pass," collection of the CNHP, Engineer's office, Maintenance Division, Yorktown.

¹⁷⁸See file "Williamsburg Southern By-Pass," collection of the Colonial National Historical Park, Engineer's office, Maintenance Division.

¹⁷⁹Memorandum to the Director of the Southeast Region from superintendent James Corson, 16 March 1970, in file "Williamsburg Southern By-Pass."

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that the State will provide proper supervision on this project to assure the highest quality workmanship and performance by the contractor to the satisfaction of the National Park Service.¹⁸⁰

Completed in the mid-1970s, the 199 bridges are one of two double bridge complexes along the parkway (along with Interstate 64). Another important area on the parkway was the grade crossing at Parkway Drive between Route 143 and Capitol Landing Road. It was one of the original through streets in the vicinity of Williamsburg given rights of access when the right-of-way was acquired. Prior to the construction of a separated grade crossing, the intersection was considered one of the more dangerous along the parkway. In 1971, the FHWA prepared plans for the structure with architectural details provided by the EODC following the specifications set for the original Miller's Crossing Bridge of 1966. The bridge (HAER No. VA-48-AA) was completed in 1972 by the Luke Construction Company of Norfolk.¹⁸¹

The 1970s marked an era of increased concern for the conditions of Park Service roads. In 1972, the FHWA National Safety Council prepared its report on "Safety and Risk Management in Selected Areas of the National Park System." Three primary issues were addressed as part of the report, including road surface and shoulder conditions, signs and lane striping. In response to the report road rehabilitation became a top priority in the Park Service and each park was directed to establish a prioritized road inventory form from which a 10 year construction program

¹⁸⁰Ralph D. Maxwell, Acting Superintendent, to Charles E. Owen, state highway engineer, 12 June 1972, file "Williamsburg Southern By-Pass."

¹⁸¹Corson, Superintendent's Monthly Narrative Reports, 1971-1972; U.S. Department of Transportation, Federal Highway Administration, "Colonial Parkway, Plans as Constructed, Project 1C5, Colonial Parkway-Parkway Drive interchange," collection of CNHP, Engineer's office, Maintenance Division, Yorktown.

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could be developed.¹⁸² Many of the bridges along the parkway, particularly at Felgate, Indian Field, and King creeks, were singled out as priority sites because of structural deterioration which had occurred since they were built in 1933. While plans were prepared, no restoration work was completed until 1980 when all the bridges between King Creek and Ballard Creek were rehabilitated prior to the bicentennial of the 1781 siege.

In December 1976, Colonial National Historical Park was instructed to "proceed immediately" with plans to stripe the parkway.¹⁸³ In response to the directive, James Stewart, Director of Planning and Development for the Washington office, questioned the motivation for striping of the parkway and other park roads, and called for a differentiation in the classification of park roads and other Federal Aid Highways. Stewart was able to successfully reformulate the standards of park roads to preserve their character for future park visitors. In so doing, the maintenance of park landscapes that enhance the recreational experience became part of the Park Service's conservation programs. In a 1977 letter, Stewart stated, "Perhaps we need to remind ourselves again that the character and uniqueness of areas of the National Park System are conveyed to an appreciative public."¹⁸⁴

In the mid-1970s, rehabilitation and maintenance continued to be a primary goal of the park, although limited construction funds hampered progress on many projects. A proposal to repair the pavement, primarily the joints, between Yorktown and Glasshouse Point was rejected in 1974. In 1975, the Arch Construction

¹⁸²Memorandum to all Regional Directors from the Director of the National Park Service, 12 April 1974, file D-30, "Colonial Parkway-General 1972-1977," collection of the CNHP.

¹⁸³Memorandum to superintendent of Colonial from the Mid-Atlantic Region, 18 January 1977, file D-30, "Colonial Parkway-General 1972-1977."

¹⁸⁴Letter from James Stewart, 10 January 1977, file D-30, "Colonial Parkway-General 1972-1977."

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Company received a contract to repair the reinforced concrete at College and Yorktown creek bridges, and complete structural work on College and King creek bridges. College Creek in particular had extensive damage to its abutments due to washed out fill. This project, however, was later abandoned due to lack of funds. Mudjacking was a yearly maintenance operation along the parkway, taking five to six years to complete the entire route. FHWA inspection engineers noted that the concrete on the older section of the road held up considerably better than the newer 60' sections between Jamestown and Williamsburg.¹⁸⁵

In preparation for the upcoming bicentennial of the siege of 1781, a new rehabilitation emphasis emerged similar, but less ambitious than preparations for earlier celebrations. For the parkway, two major projects were undertaken, including extensive bridge repair along the York River and the development of a new land use and maintenance plan by the NPS Denver Service Center. While Indian Field and King creeks received new deck slabs and modified post and lintel guardrails to match bridges on Jamestown side, the entire structure at Felgate Creek was replaced due to extensive deterioration of the substructure. In anticipation of the construction of bike trails along the parkway, a 8' wide bike lane was built into the new structure. The contractor, J. Lawson Jones Construction Company, was awarded a \$90,000 bonus for completing the work early. The incentive was devised to push the completion of the project prior to the bicentennial. Work on all the bridges was completed on 16 October 1980.¹⁸⁶

The land use plans spurred a new emphasis upon the maintenance of the parkway as a scenic corridor, and furthered the calls of past

¹⁸⁵Memorandum to the Director of the Mid-Atlantic Region from the Superintendent of Colonial, 17 June 1975, file D-30, "Colonial Parkway-General 1972-1977." No bike trail has been constructed as of yet.

¹⁸⁶J. B. Curd, U.S. Department of Transportation, Federal Highway Administration, "Final Construction Report, Project 1B27, Colonial Parkway," collection of the CNHP, Engineer's office, Maintenance Division.

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land use plans which emphasized landscape variety. Meticulous specifications were prepared to guide the mowing, selective cutting, planting, and the disposal of debris away from the view of motorists. Various trees were identified for exposure, and special attention was made to create layers of vegetative cover along the slopes of the road. Many lower branches of trees close to the road, for instance, were thinned to provide views of the understory behind them. Overgrown vistas were reopened, and a great deal of scrub growth was removed around guardrails, culverts and bridges. In particular, mowing operations were modified to allow for the growth of the Yorktown Onion, a local native allium prized for its giant purple heads. Prior to the plans, the existing conditions were noted:

Along several sections of Colonial Parkway, particularly the Yorktown to Williamsburg portion, uncontrolled plant growth has created long dark tunnels & covered former and potential vistas. This "tunnel" effect is aesthetically unpleasing, as well as being a safety hazard under certain circumstances.¹⁸⁷

Between the fall of 1980 and the spring of 1981, 1-1/4 mile of curbing was constructed at various locations along the parkway between Yorktown and Jamestown to combat the increasing drainage problems caused by the development of the Peninsula region. Following the FHWA's *Standard Specifications for Construction of Roads and Bridges* (FP-70), concrete curbing with a 15" depth and a 3" reveal, and concrete waterway runoffs were constructed on the low side of curves where erosion had become a major maintenance problem. The contractor, AA Builders of Virginia, worked from site to site, digging the curb trench, building the curbs and runoffs, seeding, and finishing, prior to moving to the next

¹⁸⁷U.S. Department of the Interior, National Park Service, "Land Use and Maintenance Plans-Colonial Parkway," collection of the CNHP, Engineer's office, Maintenance Division, Yorktown.

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specified location. All the sites were identified by Park Service personnel familiar with the drainage problems.¹⁸⁸

After proposals from major rehabilitation of the parkway's bridges and pavement were rejected through the 1970s, plans were again prepared after an "Engineering Study Report for the Colonial Parkway." Undertaken by the Federal Highway Administration in 1984, the document argued that "the Colonial Parkway needs to be rehabilitated to prolong its useful life and reduce more costly future repairs."¹⁸⁹ The report identified a number of areas that needed immediate attention before serious problems arose, including slab repair, extensive joint repair, shoulder regrading, and bridge restoration. Minor work was also identified for the Jamestown island loop road to strengthen the bridges in anticipation of tour bus traffic on the circuit.

The massive ten-year, nearly \$10 million rehabilitation project was divided into three phases: phase I comprised the area between Miller's Crossing and Cheatham Annex (1986-1987); phase II covered the Jamestown end (1989-1990); and the Yorktown end was incorporated into phase III (1993-1994). Only phase II included extensive bridge work since the bridges along the York River were upgraded in 1980-1981. Phase I through Williamsburg was divided into four section to minimize the impact upon tourist traffic in the city. Each pavement slab was given a number which corresponded to plans that identified whether the slab would receive a full or partial replacement. Additional drop inlets and other erosion control devices such as concrete gutter swells

¹⁸⁸Roy Bigelow, U.S. Department of Transportation, Federal Highway Administration/U.S. Department of Interior, National Park Service, "Final Construction Report, Project 1A14, B28, C9, D37, Colonial Parkway," collection of CNHP, Engineer's office, Maintenance Division.

¹⁸⁹U.S. Department of Transportation, Federal Highway Administration, "Engineering Study Report for the Colonial Parkway in the Colonial National Historical Park," collection of the Colonial National Historical Park, Engineer's office, Maintenance Division.

and shoulder edge drains were installed, shoulders were regraded, and joints were either replaced or cleaned and sealed. Culverts were cleaned and upgraded with regrading at both the inlet and outlet ends to remedy erosional problems. Steel backed, 2'-3" post and rail timber guardrails were built at numerous areas along the route. According to Superintendent Alec Gould, the FHWA wanted to construct additional linear feet of guardrail, but the park protested on the grounds that it would ruin the road's scenic qualities.

Pavement repair operations varied depending upon the type of slab and the extent of the deterioration. As stated earlier, pavement slabs were constructed differently between the older Yorktown section and the new section on the Jamestown side. For partial depth replacements, a vertical saw cut was made parallel to the joints to a depth of 1 1/2" to 4". The area was sandblasted to remove all loose particles, and patching involved the placement of an epoxy, bonding grout, and portland cement concrete. Full depth repairs were also made in a similar manner, although a full saw cut was made through to the gravel sub base. Where pavement slabs were 60' long, most transverse expansion joints were removed to a distance of 20' on either side to create three 40' slabs. This operations effectively removed pressure on the joints and decreased slab movement which hastened deterioration. All joints, except for filled transverse expansion joints, were fitted with backer rods and filled with a silicon sealant.¹⁹⁰

According to park civil engineering technician Roy Bigelow, it was necessary to replace almost all joints on the Jamestown end of the parkway where slabs were a uniform 7" thick and 60' long. Bridge work included in Phase II work varied depending upon the needs of individual bridges. All deteriorating concrete was replaced, and joints were repaired. Structural inspections identified areas of potential problems that were alleviated, the

¹⁹⁰Bigelow, "Final Construction Report, Project 1B30, C10, D38"; FHWA, "Plans for Proposed Project PRA-COL 1A15, B3"; FHWA, "Plans for Proposed Project PRA-COL 1D39, E12"; FHWA, "Plans for Proposed Project 1B30, C10, D38," collection of the CNHP, Engineer's office, Maintenance Division, Yorktown.

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bridges were painted and their parapets were modified to accept new guardrails. Some sections of the pavement between Jamestown and Williamsburg were replaced with a concrete mixed with white rather than yellow or brown sand. Consequently, many slabs have a gray tint different from existing pavement. The exposed aggregate finish was attained through a number of methods, including hosing, brooming and the application of a retardant that inhibited setting of the top layer of cement which could be washed off later.

Unlike the Williamsburg Phase of the restoration of the parkway, both the Jamestown and Yorktown ends were closed to traffic completely for the duration of the contract. Despite the protests of local citizens and county administrators, Superintendent Gould argued that keeping one lane open would result in higher costs, additional time and greater danger to motorists and workers. The rehabilitation was not universally accepted as a worthwhile project. A 1994 editorial by W. C. O'Donovan called for the suspension of the final phase because he believed it was "unnecessary and will hurt tourism, which makes this community hum." To O'Donovan, the restoration of the parkway was an example of excessive government waste. O'Donovan continued to write that

Not since Gen. Washington deployed the troops in 1781 has it become so important for people to get from Williamsburg to Yorktown. At this rate, they'll have more detours than he did.¹⁹¹

Despite the protests, the restoration was a major success in terms of retaining the integrity and life of the Colonial Parkway. Efforts were made to continue the design standards established in the 1930s to preserve the parkway as a significant cultural artifact of the Colonial National Historical Park. But the roadway's physical characteristics is just one aspect of the

¹⁹¹Editorial found in Phase III file, collection of the CNHP, Engineer's office, Maintenance Division; see also Ronnie Crocker, "Part of Parkway to close," *Newport News Daily Press*, 14 December 1988.

overall parkway landscape. During the 1970s, 1980s and 1990s, the park actively pursued the establishment of scenic easements and buffer zones between the parkway corridor and the adjacent property to protect the surrounding viewsheds. The park superintendent and staff attended many meetings and talked with local officials and adjacent landowners to ask for consideration of parkway values when developing or zoning adjacent lands.

A 1971 Interpretive Prospective for the parkway states that, "The chief interpretive experience of the Parkway should remain the experience of driving this well-planned and lovely road." The document highlights the need to preserve the "ambience" of the parkway--the overall physical environment. In 1973, the Park Service rejected a request from Anheuser-Busch, Inc. to construct an access road to the Colonial Parkway in the vicinity of their Kingsmill Neck development east of the parkway. It seems that Anheuser-Busch would have thrown their political weight into the fight had it not been for the Watergate scandal and the resignation of President Richard Nixon.¹⁹²

The following year, the National Park Service received a 51-acre scenic easement from Anheuser-Busch covering the marshlands along Halfway Creek east of the parkway. The easement stipulated that no permanent structure could be constructed in the land without the written permission of Colonial National Historical Park. It also notes that no tree more than 4" in diameter could be cut without the consent of the park.¹⁹³ That same year, on 1 July, a fee simple parcel of 130 acres and an easement of 284 acres were acquired on the south side of the James River on Swann's Point. This land was gained from Frank Von Schilling in an attempt to preserve the viewshed from the island which was threatened by VDOT plans to construct a bridge from the ferry wharf across the river to Surry county to handle the increasing numbers of

¹⁹²Chester L. Brooks, Regional Director of the NPS Northeast Region, to Henry Cashen, 15 August 1973, collection of the Colonial National Historical Park, Land Records.

¹⁹³"Deed of Easement," 14 May 1974, Land Records, Deed 270-273, collection of the Colonial National Historical Park.

commuters using the ferry.¹⁹⁴ Despite the protest from VDOT who argued that the NPS agreed to the future construction of a bridge when Route 31 was relocated for the completion of the parkway in the 1950s, the park used the deed to block the construction, stating that the deed's intent was to preserve

the natural features, and scenic values on the north bank of the James River from intrusion, noise, vibration, pollution and the attendant additional vehicle traffic which would be generated by the operation, construction, and maintenance of any bridge.¹⁹⁵

With the threat of a bridge being constructed adjacent to Jamestown Island averted, the park increased its efforts to obtain easements on lands along the parkway. In 1975 a three-way "exchange agreement" was orchestrated between Colonial NHP, the Colonial Williamsburg Foundation and York County. As part of the agreement, the Foundation received title to park lands near the intersection of Route 143 and the parkway, while York County received a parcel north of Williamsburg along Route 60 for the construction of a new high school. As part of the agreement, a buffer zone was established between the parkway and the Foundation's new lands by Route 143. In return, the park gained acquired 312 acres west of the parkway from Halfway Creek south

¹⁹⁴"Deed 251, Von Schilling," Land Records, collection of the Colonial National Historical Park.

¹⁹⁵"Path to James Span Strewn with Obstacles," Newport News Daily Press, 2 November 1986. During the early 1990s VDOT continued to push its plant to construct a bridge to take the place of the ferry. An ad hoc group, the James River Crossing Coalition, was formed by various local agencies and organizations including Colonial NHP. After a giant public information campaign, it became clear to the Commonwealth Transportation Board that public opinion was overwhelmingly against the bridge and it decided not to build the structure. Currently, a plan is on the boards to construct a bridge further north of the island, but still in the island's viewshed.

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to the confluence of College Creek and the York River.¹⁹⁶ The massive wetlands area is one of the more striking vistas along the parkway and adds greatly to the park's stewardship of the region's natural resources.

During the last few years of the 1970s, the park moved to acquire the remaining riverfront holding of the Gospel Spreading Association. The initial declaration of taking in 1941 failed to gain lands along the beach despite the warnings of Thomas Vint and others. Through the 1950s, 1960s and 1970s, the group developed the land with a church, dormitories, auditoriums, dinning hall, museum, motel, sports facilities, and a beach and pier. A farm north of the parkway was also utilized, and included a cattle underpass under the parkway just west of the farm. The development had two access roads to the parkway, and was considered a major scenic obstacle to motorists on the parkway. During the 1960s, Stanley Abbott spent a great deal of money planting trees and other vegetation to screen the development from view without much success.

In 1976, a Declaration of Taking was initiated for the 11 acres of land which comprised the development. In 1979, title to the land was transferred to the government despite the protests of some members of the Gospel Spreading Association. As part of the purchase, a fifteen-year use permit was granted to the Association, after which they had to vacate the property. Attempts of the Association to continue using the land beyond the fifteen years failed. The removal of the development (often considered an "amusement park" by park officials), was an important goal for Colonial considering the mission of the Colonial Parkway. On 20 October 1992, a cooperative agreement between the park and the Association led to the erection of a historical marker, modeled after the existing markers along the parkway, in memory of the Elder Lightfoot Solomon Michaux. In August 1993, the Gospel Spreading Association peacefully vacated the property. The

¹⁹⁶Correspondence and deeds of easement found in Land Records, "Deed 270-273," collection of the Colonial National Historical Park.

following year the development was torn down and the land was replanted providing open views of the James River.¹⁹⁷

In addition to the issues already mentioned, two recent threats to the parkway have also been averted for the time being. In the early 1990s, the Navy proposed the construction of a mammoth industrial pier off of Sandy Point between Indian Field Creek and the north pier of the Naval Weapons Station. This project would have seriously marred vistas and increased traffic on the parkway. The park was able to mobilize local support against the project, particularly in York County. Despite the impact a large construction project would have on the local economy, the York County board of supervisors issued a statement that as a visual/industrial intrusion, the new pier would produce a negative impact upon life in the county and would be a drain on County finances. In the face of this opposition, the Navy announced alternative plans to construct the pier in Earl, New Jersey.¹⁹⁸

Perhaps the greatest current threat to the parkway is the Page Landing Development north of the parkway and west of Route 682, where proposals have been drawn to build between sixteen and twenty homes just 85' from the parkway's pavement. When the original 500' right-of-way was acquired in the 1940s, it included a substantial tract of wetlands along the James River that could not be built upon. Consequently, when road was constructed in the 1950s, it was moved further north of the river, just 85' from adjoining property. Unfortunately for the park, the adjacent property was purchased by Atlantic Homes who began developing the land as "Page Landing at Jamestown" in the 1980s.

¹⁹⁷Alec Gould, superintendent, interview with author, 9 August 1995; Land Records, "Deed 65, National Memorial to the Progress of the Colored Race in America, Inc.," and "Deed 343-Gospel Spreading Association," collection of CNHP. Plans are still on the table for a African American theme park to be constructed north of the parkway between Mill and College creeks. These plans have received the endorsement of prominent political figures, including former Virginia Governor Douglas Wilder.

¹⁹⁸Gould.

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During the early 1990s, the National Park Service actively pursued the acquisition of additional land to provide a adequate buffer between park lands and the new development. While Atlantic Homes was willing to sell the 20-acre tract, the park was bound to a stipulation in the 1938 act which enlarged the boundary of the park that stated any future enlargements along the parkway could only be made through an act of Congress. Because of time limitation, the park approached the Conservation Fund, a non-profit organization, concerning the purchase of the land. The Fund was reluctant to make the purchase, however, because of uncertainty that Congress would authorize the addition and allocate funds to repay them. The mobilization of local support, and assurances from Congressmen, however, calmed fears, and the Conservation Fund bought the land just before construction was to begin.

In June 1993, Congressman Bateman introduced legislation to enlarge the boundary of the park and allocate monies to purchase lands from the Conservation Fund (H.R. 2478). Park superintendent Alec Gould was called to present a testimony before the House subcommittee on National Parks, Forests and Public Lands. Although the House passed the legislation, the Senate did not. The Conservation Fund borrowed the money to purchase the land, and is threatening to sell the land back to the developer to pay back its loans. Currently, Virginia senators Charles Robb and John Warner and Congressman Bateman are working together on the authorization bill and getting an \$950,000 appropriation through Congress.¹⁹⁹

¹⁹⁹During my interview with Alec Gould, he gave me documentation concerning Page Landing which are part of his personal files.

CONCLUSION

Over the past twenty-five years the park has been very aggressive in its attempts to both limit access and fight encroaching visual threats to the Colonial Parkway. Although the park's first articulation of the problems related to regional growth were made in the 1960s, these problems have continued and worsened. Visitation also continues to rise--topping eight million in 1992--with the associated impact on park resources including the Colonial Parkway. For the park, the primary concern is the protection of the historical integrity of the roadway. In many places a 500' right-of-way is not considered effective. It is increasingly difficult to ensure the continuity in transition vital to the parkway experience in the midst of growing traffic levels. NPS looks to York County, the City of Williamsburg, James City County and adjacent land owners to assist with the protection of the visual and physical resources of the parkway environment beyond the right-of-way. In the 1993 General Management Plan, the park restated its mission to

Maintain the Colonial Parkway for safety while retaining the integrity of its design as a scenic roadway. Protect the historic sites, the landscapes, and the underdeveloped vistas of the James and York rivers along the parkway.

The primary visitor experience along the parkway involves enjoyment of the parkway and its surroundings. It is best enjoyed as a limited access road with low to moderate traffic levels and little or no congestion.²⁰⁰

Currently, the park is reassessing the historical and cultural significance of the parkway with the hopes of preparing a nomination form for inclusion on the National Register of Historic Places. An updated land use and management plan will also be prepared to guide efforts to preserve natural and cultural resources along the parkway. New vistas will be

²⁰⁰U.S. Department of the Interior, National Park Service, General Management Plan, Colonial National Historical Park, September 1993, 20.

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identified, and additional planting will further screen areas of visual intrusion. The park is also studying the feasibility of treating the parkway as a multi-use corridor with both bike and foot trails following the original intention of the park in the 1930s. Despite these efforts, it is the policy of the park that the motorist is primary on the road, and trails that would inhibit the view from a automobile will be rejected.

The parkway has served as a scenic pleasure road for sixty years. For the most part the experience of driving along the road today is the same as it was in 1935 when the Yorktown section of the parkway was first opened to traffic. The current character of the road is evidence of the stewardship of park officials who continue to preserve the original mission and design specifications established in the 1930s. From the open vistas of the rivers, to the shady interior of the woodlands, the parkway still provides continuity to the transition from Jamestown island to Yorktown.

The recent change in the perspective of how the parkway is evaluated marks an important development in the historical evolution of the road. During the parkway's first fifty years of use, it was looked upon as a scenic drive that incorporates the natural and cultural resources of Tidewater Virginia. As such, the parkway was a means of experiencing the regional environment. Although the parkway continues to serve this function, today the parkway itself is considered a primary resource of the park, worthy of protection to maintain its integrity. It is more than just trees and vistas which need to be conserved; it is pavement, curbs, guardrails, and bridges. With continued vigilance, and cooperation with local communities, the park is actively trying to preserve one of the most significant cultural artifacts in the national park system.

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APPENDIX I

Colonial National Historical Park

Park Superintendents (1931-1995)

Oliver Taylor *(acting)	1 January 1930 - 19 October 1931
William M. Robinson, Jr.	20 October 1931 - 8 August 1933
B. Floyd Flickinger *(acting)	9 August 1933 - 10 December 1933
B. Floyd Flickinger	11 December 1933 - 16 May 1939
Elbert Cox	17 May 1939 - 1 November 1942
Jean C. Harrington *(acting)	2 November 1942 - 4 March 1946
Jean C. Harrington	5 March 1946 - 30 June 1946
Edward A. Hummel	1 July 1946 - 31 October 1952
Stanley W. Abbott	18 January 1953 - 30 December 1965
Lawrence C. Hadley	16 January 1966 - 27 January 1968
James W. Corson	11 February 1968 - 9 July 1972
James R. Sullivan	23 July 1972 - 16 January 1981
Richard H. Maeder	19 April 1981 - 28 March 1987
David L. Moffitt	29 March 1987 - 9 September 1989
James N. Haskett *(acting)	10 September 1989 - 7 October 1989
Frank Alexander Gould	8 October 1989 - Present

APPENDIX II

COLONIAL PARKWAY SPECIFICATIONS - EXISTING CONDITIONS

Location: York and James City Counties, Virginia

Length: 21.44 miles from the Jamestown National Historic Site to the Yorktown Battlefield. Colonial Williamsburg is near the midpoint of the parkway.

Terrain: Flat to gently rolling. Parkway passes through wetlands and woodlands, and two primary developed areas (Williamsburg and Yorktown).

Function: Scenic drive and access road to several major historical sites. The Yorktown end is also used for regional commuting.

Right-of-Way: Parkway is located within a narrow corridor which averages 500'.

Cross Section: Three 10' lanes (30'), with 5' to 7' stabilized vegetated shoulder (5' in cuts, 7' in fills). The center lane is used for passing, and has a parabolic crown surface.

Pavement: Reinforced concrete with exposed aggregate finish between 7" and 8" thick. A 9" to 12" sub-base underlies pavement.

Design Speed: Varies between 35-40 m.p.h. along the Yorktown section of the parkway, to 50 m.p.h. along the Jamestown section.

Pulloffs: There are 17 at-grade parking pulloffs and recreational overlooks.

Curbs: 6,600 linear feet of low reveal (3") concrete curbs, and 11 paved water runoffs (does not include curbing along parking areas).

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Lighting: There is no lighting along the parkway except for inside the Williamsburg Tunnel and around the Williamsburg Rotary.

Trails/Paths: Currently there are no foot or bike trails along the parkway corridor. This issue is primary concern for park administrators.

Access: There are 10 at-grade intersections and 7 grade-separated interchanges.

Grade Intersections:

1. Route 238 at Yorktown
2. Naval Weapons Station
3. Bellfield Plantation
4. Ringfield Picnic Area
5. Cemetery Access
6. Penniman Lake Access
7. The Rotary-Rt. 132
8. Historic Williamsburg Exit (Parkway Drive)
9. Maintenance Area near Jamestown
10. Jamestown Tour Road (at Tollbooth)

Grade Separated Interchanges:

1. U.S. Route 17 over Parkway
2. Route 238 over Parkway
3. Cheatham Annex (Rt. 199)
4. Queens Lake Road (Rt. 716)
5. Route 163 over Parkway
6. Newport Avenue over Parkway
7. Miller's Crossing (Rt. 199) over Parkway

Accident Rate: There is an average of 50 accidents a year, with few fatalities.

According to a 1985 engineering study, the parkway would not meet today's design standards.

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* The following abbreviations will be used to designate agency responsible for drawings and plans:

NPS	U.S. Department of the Interior, National Park Service.
BPR	U.S. Department of Agriculture (later Commerce), Bureau of Public Roads.
FHWA	U.S. Department of Transportation, Federal Highway Administration.
VDOT	Virginia Department of Transportation.

Note: The majority of plans cited are in the individual structure reports that accompany this overview.

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