

Laying of rip rap for seawall construction along the York River, 1935. (COLO)

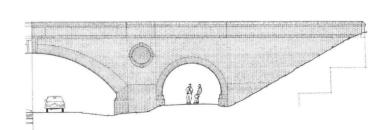
ENGINEERING IN THE TIDEWATER REGION

The decision to align the parkway along the rivers provided landscape architects dramatic scenic possibilities, but it challenged builders who had to traverse tidal marshes with a modern highway. Like the Mount Vernon Memorial Highway, extensive use of hydraulic fill was required to create a suitable roadbed at an elevation of eleven feet above sea level. Over three miles of the parkway was constructed on dredged material which requires constant maintenance (on the Jamestown portion) to repair damage caused by settling.

In 1933, three concrete deck bridges were constructed over Indian Field, Felgates, and Kings creeks along the York River. The bridges' simple, low-level designs blend with the surrounding environment of coastal bluffs and marsh grasses, providing unobstructed views in all directions. These bridges became the model for stream and marsh crossings along the entire parkway route. Due to the region's unconsolidated soil, unusually deep foundation piles were required for all the structures.



Workers grade river slopes prior to placing sod to conrol erosion, 1935



 $\label{lem:colonial-style} Detailed \ rendering \ of the \ C\&ORR \ underpass \ with \ its \ colonial-style \ brick \ facing. \ (Harlen Groe, HAER)$

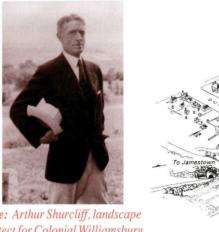
COLONIAL LANDSCAPE

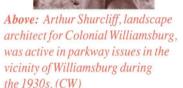
Landscape architects integrated the region's natural and cultural resources into the overall design of Colonial Parkway. To create the "colonial atmosphere" thought necessary for visitor experience, culvert headwalls and parkway underpasses were clad in antiqued "Virginia-style" brick laid in English and Flemish bonds. In the vicinity of Williamsburg, numerous grade separation structures were required to bypass the region's expanding road system. These simple, brick-clad arched bridges reinforce colonial themes and are perhaps the most characteristic features of the parkway. A labor intensive process of brooming and acid washing was used to expose the aggregate in the pavement to simulate the shell and marl roads of colonial Yorktown.

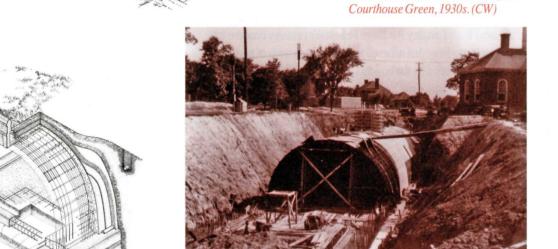
In 1932, NPS landscape architect Edward Zimmer developed a planting plan that guided tree placement and vista development. Four Civilian Conservation Corps (CCC) camps were established in Yorktown in 1933, one of which was involved in parkway planting operations. Pines, cedars, dogwoods, redbuds, tulip and beech trees were planted along slopes to create a "natural" environment along the road. Special attention was made to create a canopy cover along the Yorktown to Williamsburg stretch in order to provide a shady tunneling effect.

COUNTRY ROAD VS. MODERN PARKWAY

In response to the parkway's modern design, park superintendent William Robinson, Jr. (1931-1933) advocated the incorporation of steeper grades and irregularities of alignment to create a "country road" feel more representative of colonial-era road building. Despite Robinson's efforts, NPS officials decided to continue its efforts to construct a modern parkway. A more controversial issue, however, arose concerning routing of the parkway in the vicinity of Williamsburg.







Cutaway isometric of Williamsburg Tunnel. (Robert Harvey, HAER)

THE WILLIAMSBURG TUNNEL

As early as 1930, questions concerning the role of Williamsburg within the Colonial National Monument strained relations between the two organizations as Williamsburg Foundation officials voiced their objections to a modern parkway intruding upon the historic capital.

Two routes emerged which came to be know as the "Shurcliff Line" north and west of the city, named for Foundation landscape architect Arthur Shurcliff, and the "Peterson Line" east and south of the city, named for Charles Peterson. For Peterson, the route east and south of Williamsburg was more open, and balanced the York River section with sweeping views of the James River. This alignment, however, crossed the property of Bassett Hall which was purchased by Rockefeller as a family home. For Colonial Williamsburg the "Shurcliff Line" became a way of avoiding Rockefeller's home, but it neglected the balanced character of Peterson's original alignment.

Debate continued until the spring of 1936, as the parkway approached Williamsburg with brick-clad, arched overpasses at Capital Landing Road and the Chesapeake & Ohio Railroad and Lafayette Street crossings just north of town. A proposal to construct a tunnel under Williamsburg, advocated by prominent Williamsburg citizens, took most people involved with the project by surprise. Although initially discounted as too ambitious, traffic consultants saw it as the most effective way to bypass Williamsburg.

Aerial view of Williamsburg, showing

Tunnel under construction through the

the historic district.

(Robert Harvey HAFR)

Cut-and-cover construction was employed to build a 30-foot wide reinforced concrete tunnel. Earth was excavated along the route, requiring certain structures to be moved or supported while the tunnel's concrete shell was poured. Upon completion of the lining, earth was then placed over the structure and landscaped. Poor supervision and heavy rains that caused numerous cave-ins hampered construction and turned public opinion against the project. Although completed by 1942, the tunnel did not open for traffic until 1949.

A CIVIL DEFENSE HIGHWAY

As part of the original agreement between the Navy and the NPS, the parkway was closed through Navy lands during World War II. New utility lines and access roads were built across the parkway to serve defense needs and the road was used for convoy training. In 1945 the Navy agreed to halt all transports on the parkway and help in the restoration of the landscape destroyed during three years of wartime use. Heavily reliant upon federal works projects during the 1930s, the park found itself with shortages of both funds and labor during the post-war years.

Right: Aerial
photo showing
parkway extending
south from the City
of Williamsburg
through then-rural
James City County
towards Jamestown
crossing Halfway
Creek and College
Creek, 1955.
(COLO)



CONSTRUCTION, WILLIAMSBURG TO JAMESTOWN

After the completion of the tunnel in 1942, only a few projects were undertaken for over a decade. In 1949, the NPS made the completion of the parkway a priority. That year it sent landscape architect Stanley Abbott to the area to begin planning for the extension of the parkway to Jamestown. Abbott's involvement in the parkway's completion expanded in 1953 when he was made superintendent of the park. During the early 1950s the park finalized plans to complete the parkway following the high design standards established in the 1930s. With Mission 66 funding, based upon an ambitious redevelopment directive set forth by NPS director Conrad Wirth in 1956, Colonial NHP was able to realize its plans to unify the park.

JAMESTOWN'S 350th ANNIVERSARY

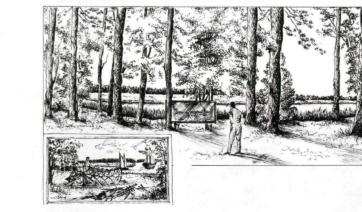
The impetus for a more concerted effort to complete the parkway was the anticipation of the 1957 anniversary of Jamestown's founding. The parkway was but one aspect of a comprehensive construction program for the park which resulted in new visitor centers, recreational facilities, modernized tour roads, and an integrated interpretive plan for the park complete with historical markers mounted along the entire parkway corridor.

The period between 1955 and 1957 was extremely active for the park

Permits for hydraulic fill and bridge location were acquired from the Army Corps of Engineers and contractors proceeded to create an adequate roadbed. Perhaps the most ambitious project was the recreation of a connecting isthmus between Jamestown Island and the mainland that had existed in the 17th century. Parkway construction was hampered by bad weather in the spring of 1957, requiring contractors to complete paving operations on twenty-four hour workdays under flood lights. The push to complete the road resulted in severe damage to pavement and bridges in fill areas which did not receive adequate time to settle. Despite the problems, on April 27, 1957 the Colonial Parkway was opened for traffic along the entire route between Yorktown and Jamestown.



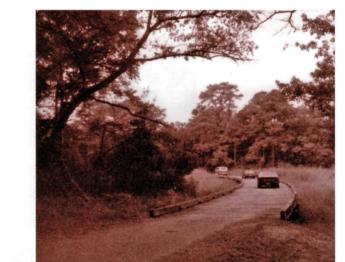
to Jamestown, (Jack
Boucher, HAER, 1995)
Below: Rendering of
one of Sidney King's
"Gallery-in-the-Woods"
murals on Jamestown
Island... (Magdalena
Bielecka HAER)



TOUR ROADS

Like many parks, Colonial NHP has a system of loop or circuit roads providing visitor access to areas of scenic and historical significance outside the main parkway corridor. In the 1930s, a battlefield tour road was developed around Yorktown which touched upon the significant sites of the siege and battle of 1781. Engineers, landscape architects, and historians worked closely to identify colonial-era road traces from which an integrated single-lane tour could be developed. Simple road grades and rustic bridges characterized the original routes through the heavily forested battlefield, but increases in visitation over the past twenty years have required more substantial paving and bridge replacement.

Jamestown Island roads were slower to develop due to a general lack of historical knowledge about the island and the "wilderness area" designation that protected the flora and fauna typical of 17th-century Jamestown. In preparation for the 350th anniversary, however, a two-circuit loop road was constructed to the interior of the island with automobile-accessible roadside exhibit areas that feature interpretive paintings by local artist Sidney King. Simple timber trestle bridges span interior wetlands and provide visitors with an up-close view of the region's diverse ecosystem. Historical markers were put in place along both tour roads integrating them within the interpretive framework of the main parkway corridor.



Simple timber bridges of hand-built appearance cross the marshlands of Jamestown Island, providing visitors with unobstructed views of the tidal landscape.
(Jack Boucher, HAER, 1995)



Crossing the Isthmus Bridge with a view of the James River. (Jack Boucher, HAER, 1995)

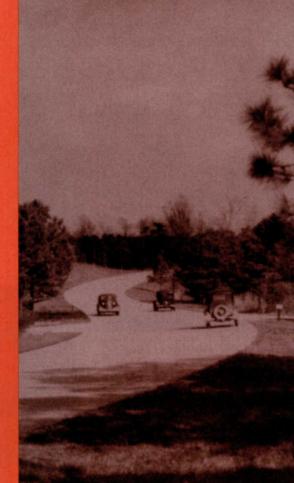
COLONIAL PARKWAY FOR THE FUTURE

Since the completion of the parkway in 1957 the park has been aggressive in its attempts to limit access and fight visual encroachments along the road. Numerous grade crossings have been eliminated by bridges and interchanges and many scenic easements have been acquired to preserve the experience of motoring on a scenic roadway. Rapid regional growth is placing increasing demands upon the natural and cultural resources of Colonial National Historical Park. Sections of the parkway between Williamsburg and Yorktown have become popular commuter corridors despite objections of the park. With increased traffic comes increased stresses upon the roadway and new dangers from more and larger vehicles traveling at speeds in excess of what the parkway was designed to handle. Despite these problems, the park has succeeded in balancing the needs of highway safety while retaining the integrity of the parkway's original design as a scenic road. Between 1985 and 1995 a massive three-phase restoration program was undertaken along the parkway. Along with needed structural work on the bridges, construction joints on the pavement were replaced and safety features such as steel-backed timber guardrails were built along much of the road. The restoration insures that Colonial Parkway will continue to provide motorists a way to experience the cultural and natural resources of Tidewater Virginia well into the 21st century.

Highways in Harmony Colonial Parkway

Jamestown, Williamsburg, Yorktown

Virginia



Motoring tourists out for a Sunday drive on Colonial Parkway, ca. 1940 Photo courtesy of Colonial National Historical Park Archives [COLO],

U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

REGION, PARK AND PARKWAY

Colonial Parkway is a meticulously crafted landscape that integrates the region's natural and cultural resources into a memorial roadway of the American colonial experience. It marks an important change in the history of National Park Service (NPS) road-building traditions as the first NPS-designed parkway that unifies dispersed sites as part of a cohesive

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

Above: Interstate 64 bridges

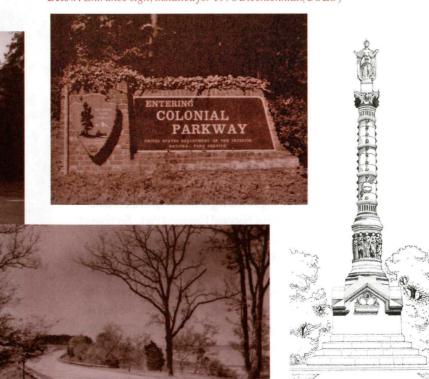
(Jack Boucher, HAER, 1995).

arch over Colonial Parkwa

Colonial Parkway Outline of Development, 1933

10.221-acre unit of the NPS located between the James and York rivers in Virginia. Originally designated a national monument (becoming a national historical park in 1936), Colonial NHP administers and interprets the sites of Jamestown Island and the Yorktown Battlefield. Central to the original legislation which created Colonial NHP was a plan for a scenic highway to link the sites into a "single coherent reservation." Free of any "modern" commercial development, the parkway was designed to provide continuity to the visitor experience of motoring through nearly 400 years of American colonial history. Traversing a diverse environment, the parkway provides visitors with dramatic open vistas of rivers and tidal estuaries as well as shady passageways through pine and hardwood forests.

Below: Entrance sign, installed for 1976 Bicentennial.(COLO)



Authorized in 1930, Colonial National Historical Park is a

(CDC) to create an economic stimulus plan for the state. Under the direction of William Carson, the CDC attempted to transform Virginia into a "recreational mecca" by developing its natural and cultural resources for tourism. By the late 1920s, Governor Byrd began to refer to the state as a "virtual museum of the founding and growth of America," proclaiming, "America is on wheels and Virginia is now awake to the dollar value of the tourist trade."

he APVA for the Jamestown

Yorktown Victory Monument

(Kevin Doniere, HAER)



AMERICA'S "SACRED SHRINES"

Since the late 19th century, preservationists considered Jamestown, Williamsburg and Yorktown, often referred to as the "historic triangle," to be "sacred shrines of national life and liberty." Years of neglect, however, left these "shrines" in near ruin, which came to symbolize the erosion of Virginia's traditional society. Preservation groups such as the Association for the Preservation of Virginia Antiquities (APVA) began to advocate the conservation of colonial sites that embodied the ideals of the Anglo-American experience in North America. In 1893, the APVA acquired twenty-two acres on Jamestown Island and sponsored pilgrimages to the site. This parcel included the only surviving structure from the first capital of Virginia, the church tower, circa 1647. The APVA's program of heritage preservation influenced many state legislators who endorsed tourism as a way to promote statewide economic growth.

In 1926, newly elected Virginia Governor Harry Flood Byrd established the Conservation and Development Commission

By the 1920s the dilapidated condition of Williamsburg was seen by some as a grave injustice to its historical role in the founding and growth of America. Enticed by the lobbying of W. A. R. Goodwin, rector of Bruton Parish Church in Williamsburg, philanthropist John D. Rockefeller, Jr. decided to finance the restoration of Virginia's colonial capital to its former glory. As a preservation project, the restoration of Williamsburg was a novel and ambitious undertaking which had significant ramifications for the development of Colonial

National Historical Park.

Rockefeller had strong connections with the NPS through his Park, Maine. In 1928 Kenneth Chorley, head of the Williamsburg to create a national historic park incorporating the sites of



During the fall of 1930, a survey of the area was undertaken by NPS

engineer Oliver G. Taylor and NPS landscape architect Charles E. Peterson. Taylor and Peterson were directed to establish a proposed boundary for the park and a 500-foot wide right-of-way for the parkway. Initial proposals called for the parkway to follow an inland route along colonial-era roads, but during a tour of the Naval Weapons Station, just north of Yorktown, Peterson decided to align the road along the York River. In Peterson's estimation, the grade crossings extensive tangents, modern intrusions and other "visual junk" encountered along an inland route were incongruous with modern parkway design standards. Because of access restrictions and the extensive tidal wetlands through Navy lands, Taylor and Peterson mapped the river alignment using aerial photographs provided by Army navigators from Langley Air Base. Peterson's primary concern was designing a roadway that adhered to modern standards of parkway aesthetics developed by the builders of the Bronx River Parkway in Westchester County, New York. Tours of the Bronx River Parkway and the federally built Mount Vernon Memorial Highway provided Peterson with a model of a limited access highway with broad sweeping curves, set in a meticulously landscaped right-of-way devoid of commercial development. These features, derived from 19thcentury romantic landscape theories, created a safer and more pleasant drive compared to the increasingly congested urban strips.



NPS landscape architect Charles Peterson (left) and his 1934 sketch of the C&O RR Underpass. (COLO)

Parkway design began in the spring of 1931 with the creation of the Eastern Division of the Branch of Plans and Design under Peterson's direction. NPS landscape architects were responsible for the overall architectural and landscape treatment, but roadway and bridge construction specifications were prepared by engineers from the Bureau of Public Roads (BPR), Department of Agriculture, under a 1926 interagency agreement. In 1931 a BPR field office was opened in Williamsburg to facilitate parkway construction. Special agreements with the Navy and private land owners transferred ten miles of the route between Yorktown and Williamsburg to the NPS free of charge, allowing construction to begin that spring. Despite this fortuitous start, design and routing conflicts, limited funding and war stretched construction over a 26-year period. By 1937 the road was completed only to Williamsburg. Except for the construction of the Williamsburg Tunnel and Halfway Creek Bridge, both constructed in the 1940s, it was not until 1955 that funds were available to extend the parkway to Jamestown Island in anticipation of the 350th anniversary of Jamestown's founding.

During the clearing, all locust and cedar trees of 6" diameter or

more were cut to board length and saved. (COLO)





ree-lane road was ured in 30' x 10' ctions between ktown and liamsburg, $40' \times 10$ ions were poured the Jamestown

stable.(COLO)

CONSTRUCTION, YORKTOWN TO WILLIAMSBURG

In May 1931, bids were opened for the first phase of construction between Yorktown and Hubbard Lane. Workers began clearing the route of trees, stumps and other "objectionable matter." Consistent with NPS landscaping standards, special attempts were made to protect the surrounding environment and preserve as much of the existing vegetation that could be integrated into the roadway's design. To cut costs, agreements were made with the Justice Department to use prison labor from Fort Eustis, Virginia for much of the initial grubbing work.

BPR specifications called for a unique three-lane road so motorists could focus more attention on the surrounding landscape rather than oncoming traffic. The center lane is generally used only for passing.



moved from Jamestown to

by American and French troops leads

W. A. R. Goodwin (left) and John D. Rockefeller, Jr. meet during restoration

conservation efforts in the American west and in Acadia National

restoration, laid out a plan to future NPS Director Horace Albright

Jamestown, Williamsburg and Yorktown. Writing to Chorley the

proposed historic park that I can hardly restrain my imagination."

following year Albright stated, "I am so enthusiastic over this

efforts at Williamsburg, 1928. (Colonial Williamsburg/CW)

WILLIAMSBURG AND THE

PARKS MOVEMENT

Virginia Antiquities

Above: Jones Mill Dam Pond.

where BPR engineers rebuilt a

roadbed for the parkway, 1995.

(Jack Boucher, HABS/HAER)

Right: The newly completed

through the Virginia woodlan

parkway meande

1930s. (COLO)

colonial era mill dam to serve as a

APVA purchases 22

The proposal had the support of Carson and the Virginia CDC, which

was working closely with the NPS to establish Shenandoah National

Park in the mid-1920s. During the fall of 1929, Carson organized a

Louis Cramton (D-MI). Continued meetings between Carson, NPS

Colonial National Monument to commemorate the "high ideals of the

founding of American liberties." The "Cramton Bill" was signed into

I 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

Louis Cramton, 1929

tour of the Tidewater region for Albright and U.S. Representative

officials and Cramton resulted in a bill calling for the creation of a

law by President Herbert Hoover in December 1930.

old-time road.

council attempts to gain appropriation for "historic" road linking Yorktown,

Colonial Williamsburg John D. Rockefeller, Jr. capital at the urging

introduced to create

completed, but not 1949. Parkway

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park recognizes the region and the

sary of the Siege of Yorktown necessiwork on parkway ir

10-year, three-pha upgrade Colonial