#### National Park Service U.S. Department of the Interior

#### **Fletcher's Boathouse Transportation Upgrades** Washington, DC

Assessment of Effects Cultural Resources Technical Memorandum Fletcher's Boathouse Transportation Upgrades

#### Prepared for:

National Park Service Chesapeake & Ohio Canal National Historical Park 1850 Dual Highway, Suite 100 Hagerstown, MD 21740

#### Prepared by:

Rachel Lloyd, Historical Landscape Architect Scott Seibel, Archeologist Lauren Tuttle, Environmental Planner Claire Sale, Project Manager 3101 Wilson Boulevard Suite 900 Arlington, Virginia 22201

NOVEMBER 2019





Assessment of Effects

Cultural Resources Technical Memorandum

Fletcher's Boathouse Transportation Upgrades

# **TABLE OF CONTENTS**

1.	INTRODUCTION	3
2.	PROJECT SUMMARY	4
З.	HISTORICAL SUMMARY OF THE PROJECT AREA	7
3.1	Area of Potential Effect	8
4.	EXISTING SITE CONFIGURATION	10
5.	PROJECT ALTERNATIVES	13
5.1	Elements Common to Action Alternatives	13
5.2	Upper Parking Lot Access Action Alternative (Alternative B)	14
5.3	Upper and Lower Parking Lot Access Action Alternative (Alternative C)	19
6.	Historic and Archeological Resources	24
6.1	Historic Resources	24
6.2	Archeological Resources	
7.	EFFECTS ASSESSMENT	32
7.1	Historic Resources	32
7.2	Archeological Resources	36
8.	AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES	
9.	SOURCES	40
10.	APPENDIX A	41
Figure	e 1: Fletcher's Boathouse Transportation Upgrades Project Area Context	6
Figure	e 2: Area of Potential Effect	9
Figure	e 3: Project Area Existing Conditions	11

Figure 6: Section and Elevation of Upper Parking Lot Access Alternative (Alternative B) (detailed	
and full section of site)	16
Figure 7: Axonometric View of Upper Parking Lot Access Alternative (Alternative B)	17
Figure 8: Upstream Axonometric View of Upper Parking Lot Access Alternative (Alternative B)	18
Figure 9: Upper and Lower Parking Lot Access Alternative	20
Figure 10: Section and Elevation of Upper and Lower Parking Lot Access Alternative (Alternative C) (detailed and full section of site)	21
Figure 11: Axonometric View of Upper and Lower Parking Lot Access Alternative (Alternative C)	
Figure 12: Upstream Axonometric View of Upper and Lower Parking Lot Access Alternative (Alternative C)	23
Figure 13: Contributing and Potentially Contributing Resources in the C&O Canal National Historical Park	27
Figure 14: View from the South Donaldson Scenic Overlook	29

# NOTE

The National Park Service (NPS) is proposing transportation upgrades for the project area referred to as "Fletcher's Boathouse" (officially named Fletcher's Cove). In this document, "Fletcher's Boat House Office and Snack Bar" and "Bike Shop" are used to refer to buildings in the Chesapeake & Ohio Canal National Historical Park. The National Register of Historic Places eligibility of these buildings is currently undetermined. The "Boathouse" and "Concessions" buildings as identified in the description of the Action Alternatives, the historical summary of the project area; **Figure 3**, **Figure 5**, and **Figure 9** refer to these same buildings as the "Fletcher's Boat House Office and Snack Bar" and "Bike Shop," respectively.

# 1. INTRODUCTION

The National Park Service (NPS) is proposing transportation upgrades for the Fletcher's Boathouse area (Fletcher's Cove) along the Potomac River in Northwest Washington, DC. As a federal undertaking, the project is subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (36 Code of Federal Regulations [CFR] Part 800) "Protection of Historic Properties" (Section 106). This technical memorandum has been prepared as part of the continuing consultation between the NPS, the District of Columbia Historic Preservation Office (DC SHPO), Virginia Department of Historic Resources (DHR) (Virginia's State Historic Preservation Office), Delaware Tribe Historic Preservation Office (DTHPO), Delaware Nation Historic Preservation Office, and the Pamunkey Indian Tribe. Section 106 consultation for the proposed transportation upgrades was initiated with these state and tribal historic preservation offices in letters dated in June and July 2019 (**Appendix A**).

The NPS has developed this Technical Memorandum in support of the proposed transportation upgrades to document the presence of historic properties, defined as those that are listed or eligible for listing in the National Register of Historic Places (NRHP), for the purposes of Section 106 review. Identification of historic buildings, structures, sites, objects, districts, and cultural landscapes was undertaken within the Area of Potential Effect (APE) established for this project. The NPS consulted with SHPOs, THPOs, and interested parties regarding the APE. Work was directed and conducted by staff that meet the *Secretary of the Interior's Professional Qualification Standards* (36 CFR Part 61) in the disciplines of Historical Landscape Architecture, Archeology, and History.

As part of the National Environmental Policy Act (NEPA) process, the NPS developed two action alternatives for the proposed transportation upgrades for Fletcher's Boathouse. The focus of this memorandum is on these action alternatives.

# 2. PROJECT SUMMARY

The approximately 15-acre project area is located on federal land bound by Canal Road NW to the east and the Potomac River to the west, adjacent to the intersection of Canal and Reservoir Roads (**Figure 1**), approximately three miles upstream from Georgetown. The Chesapeake & Ohio Canal National Historical Park administers the project area. (All streets referred to in this document are NW unless otherwise noted).

The purpose of the proposed project is to provide more direct and safer transportation connections between Canal Road and the Fletcher's Boathouse, the Chesapeake & Ohio (C&O) Canal towpath, and the Capital Crescent Trail.

The transportation upgrades are needed to address the following concerns and ongoing issues affecting the Fletcher's Boathouse area:

- The single-lane entrance ramp provides the only access between the area and Canal Road for entering and exiting traffic, which can result in unsafe traffic situations
- Safe access from Canal Road's eastbound/inbound traffic is nearly impossible due to the entrance ramp's configuration immediately adjacent and parallel to Canal Road
- The geometry and grade differential between the entrance ramp and Canal Road creates inadequate sight distances for entering and exiting traffic
- A one-lane road culvert (tunnel) with low clearance and poor sight distance provides the only vehicle access to the larger, lower parking lot west of the C&O Canal
- Large fire trucks, ambulances, and river rescue crews are severely challenged in gaining unfettered access to the area during an emergency
- Large equipment and trucks have very limited access to the area to perform repair and maintenance to park facilities and the DC Water Odor Abatement Facility
- Existing pedestrian access routes to the project area from outside the park are unsafe and cause pedestrian/vehicular conflicts
- Some portions of the area are not fully compliant with accessibility standards

The proposed action alternatives include the following:

- Add a new ramp or a new ramp and bridge for vehicle access between Canal Road and the Fletcher's Boathouse site
- Relocate or reconfigure the upper parking lot
- Reconfigure the lower parking lot
- Modify the existing vehicle circulation loop north of the lower parking lot
- Resurface all vehicle circulation areas, except the towpath

- Add a new unpaved route for maintenance vehicle access
- Update the landing area by the boathouse and concessions to be fully accessible
- Add new stairs and accessible ramps connecting the towpath, Capital Crescent Trail, boathouse and concessions area
- Implement multiple small-scale improvements throughout the project area

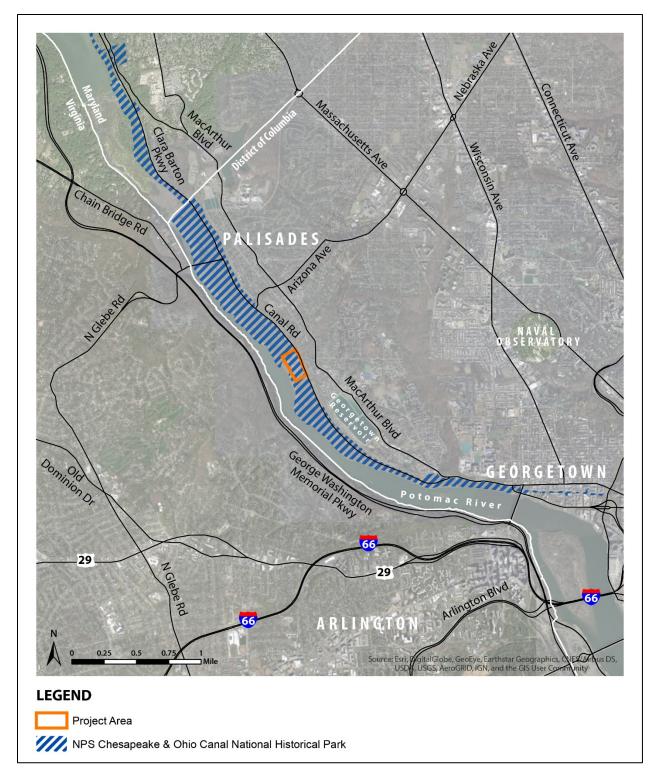


Figure 1: Fletcher's Boathouse Transportation Upgrades Project Area Context

# 3. HISTORICAL SUMMARY OF THE PROJECT AREA

Previous archeological excavations have revealed prehistoric occupation within some portions of the APE. Intact evidence for intensive Middle Woodland (500 B.C.-A.D. 900) occupations as well as disturbed Early to Late Archaic (8000-1000 B.C.) components have been revealed. The general area around the APE has experienced human occupation since at least the Paleoindian period (10000-8000 B.C.).

Since the early nineteenth century, the APE and its immediate vicinity have been used for residential, industrial, and transportation purposes. The Potomac Company was established in 1784 under the leadership of George Washington with the mission to establish year-round transportation between Western Maryland and Washington. The Potomac Company's Little Falls Skirting Canal, completed in the early nineteenth century, once ended in the vicinity of the APE. Some of the earliest known developments within the APE occurred with the construction of the extant 1801 Abner Cloud House and a contemporaneous, nonextant grist mill immediately northwest of the APE that was originally known as Lock Mill and later developed into an industrial complex for guano production. The next major development came with the C&O Canal, which was intended to move goods east and west from regional sources to markets. The broader section of the C&O Canal that passes through the APE, including the canal prism and the towpath, was constructed between 1828 and 1831. Throughout the second half of the nineteenth century, additional buildings were constructed within the vicinity of Maddox Branch, which runs from under Canal Road to the Potomac River along the northern portion of the APE. These buildings appear to have been primarily residential, but, beginning in the 1850s, also included the early iterations of Fletcher's Boathouse.

The C&O Canal remained operational and was eventually acquired by the Baltimore and Ohio (B&O) Railroad. By 1910, the B&O Railroad had installed a line into Georgetown that partially paralleled the canal; within the APE, the line followed the west side of the canal. The first half of the twentieth century saw the construction of additional buildings within the APE, largely between the canal and what is now Canal Road NW. At least eight buildings are shown partially or wholly within the APE on a 1945 map, including the Abner Cloud House. All of the buildings depicted on the 1945 map except the Abner Cloud House appear to have been demolished in the second half of the twentieth century.

The project area has been the focus of recreation since the late 1850s. The earliest boathouse dates to the mid nineteenth century, although the current boathouse and concession stand both date to the twentieth century.

Today, the only buildings within the APE include the Abner Cloud House, the boathouse and concession stand, and the DC Water Odor Abatement facility. The DC Water Odor Abatement Facility was constructed in 2009 as part of odor abatement project for the Potomac Interceptor, a sanitary sewer that runs from Washington Dulles International Airport to the Blue Plains Advanced Wastewater Treatment Plant. The Potomac Interceptor runs east of the C&O Canal

and was installed in 1960. The existing steps and accessible ramps connecting the towpath, boathouse, and concessions area were constructed in the mid-1960s. The existing bridge over the C&O Canal was added in 1998 (Seibel and Regan 2019).

## 3.1 Area of Potential Effect

The APE for historic resources is identical with that defined in the project's Environmental Assessment (EA) for these resources (**Figure 2**). The APE encompasses the project area and landscape beyond the project area's boundaries to the north, west, and south. The APE includes sections of the C&O Canal National Historical Park and the George Washington Memorial Parkway. The APE for archeological resources is the area of ground disturbance within the APE for historic resources.

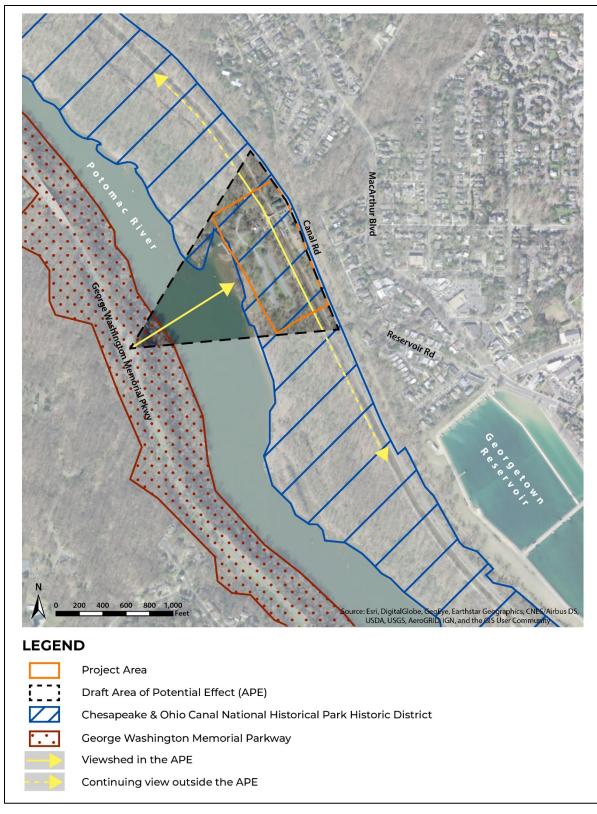


Figure 2: Area of Potential Effect

# 4. EXISTING SITE CONFIGURATION

Fletcher's Boathouse is a renowned fishing and recreational area located between Canal Road and the Potomac River (**Figure 3**). The C&O Canal, towpath, and Capital Crescent Trail traverse the project area. To the east of the C&O Canal, the project area includes an entrance ramp, an upper parking lot, the Abner Cloud House, and the DC Water Odor Abatement facility, which includes public restrooms. A lower parking lot, boathouse, and concession stand are located west of the C&O Canal.

## Vehicle Circulation

A single-lane ramp connecting to Canal Road provides visitor and official use vehicle access to and from the project area. A traffic signal at the bottom of the ramp facilitates two-way traffic movement on the ramp at different times.

Visitor and official use vehicle parking is provided on both sides of the C&O Canal in the upper and lower parking lots. A road culvert provides vehicle access to and from the lower parking lot, boathouse, concessions, and Potomac River west of the canal. The one-lane road culvert provides vehicle circulation in both directions but is not currently signalized.

Large official use vehicles currently access the project area west of the canal via the existing pedestrian bridge over the canal to the towpath, and then use an access ramp across the Capital Crescent Trail to the lower parking lot.

## Pedestrian and Bicycle Circulation

The existing ramp, towpath, and Capital Crescent Trail currently provide pedestrian and bicycle access to and from the project area. A crosswalk at the signalized intersection of Canal Road, Reservoir Road, and the ramp connects the project area and a sidewalk on the west side of Reservoir Road.

Pedestrians and bicycles circulate between the east and west sides of the C&O Canal through 1) the existing road culvert and/or 2) the existing bridge over the canal. Steps and accessible ramps connect the boathouse and concessions area with the Capital Crescent Trail, towpath, and bridge over the canal. The landing area by the boathouse and concessions does not meet accessibility standards.

Pedestrian access to the ground floor of the Abner Cloud House is provided on the west side of the building. Pedestrian access to the second floor of the Abner Cloud House is provided on the east side of building adjacent to the existing ramp.

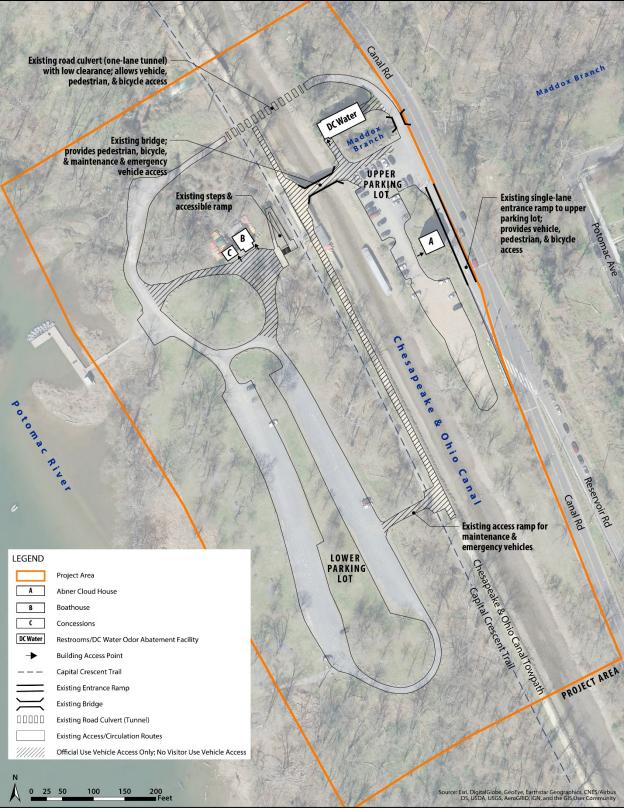


Figure 3: Project Area Existing Conditions

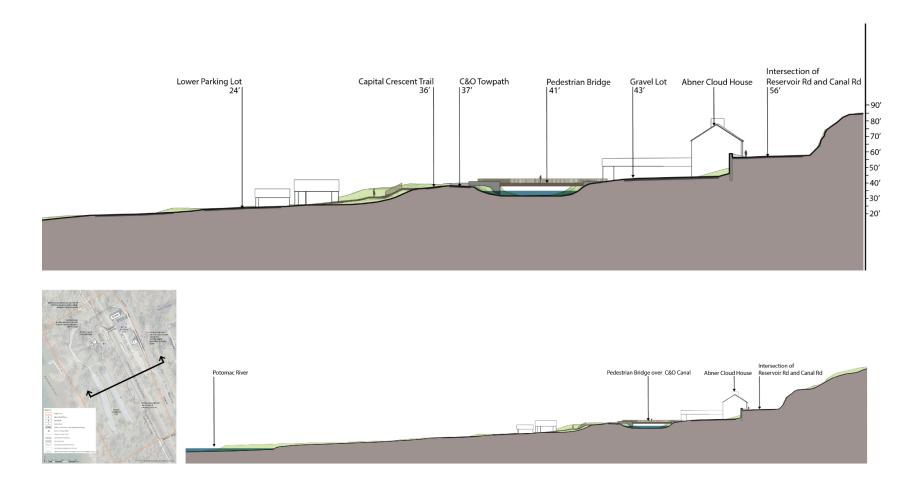


Figure 4: Section and Elevation of Existing Conditions (detailed and full section of site)

# 5. PROJECT ALTERNATIVES

The following section describes the alternatives to address the purpose and need, the Upper Parking Lot Access Action Alternative (Alternative B) and the Upper and Lower Parking Lot Access Action Alternative (Alternative C); Alternative A represents the No Action Alternative and is addressed in the Environmental Assessment. Other alternatives considered but dismissed are described in Appendix A of the Environmental Assessment.

# 5.1 Elements Common to Action Alternatives

## Vehicle Circulation

The Action Alternatives propose to separate the modes of traffic for visitors entering or exiting the project area. The Action Alternatives would add a new vehicular ramp between Canal Road and the Fletcher's Boathouse site; pedestrians and bicyclists would be prohibited from using the new entrance ramp. The existing ramp would be retained for pedestrian and bicycle access but closed to most vehicle access. In cases of emergency, vehicles could use the existing ramp. The existing ramp. The existing bridge over the Maddox Branch would be updated in its current location to meet the most recent applicable engineering standards.

The upper and lower parking lots would be resurfaced. The upper parking lot would be either relocated to an area south of the Abner Cloud House or reconfigured west of the Abner Cloud House. Both of these options would provide a development buffer for the historic building. The lower parking lot would be reconfigured to improve parking efficiency and to accommodate large official use vehicles. The existing vehicle circulation loop north of the lower parking lot would also be modified to accommodate large vehicles.

## Official Use Vehicle Circulation

A new unpaved access route, approximately 10 feet wide and 345 feet long, parallel to the C&O Canal, would provide emergency and maintenance vehicle access from the upper parking lot to the area south of the new ramp between the C&O Canal and Canal Road. The paved area south of the DC Water Odor Abatement Facility would be expanded to accommodate large official use vehicles.

## Pedestrian and Bicycle Circulation

The existing steps and accessible ramp connecting the towpath, Capital Crescent Trail, boathouse, and concessions area would be retained. The landing area by the boathouse and concessions would be updated to meet accessibility standards, which would require modifications to the existing grade. To account for these grade modifications, two new sets of steps and accessible ramps would connect the landing area, boathouse, and the existing steps and ramp. Crosswalks and pedestrian pathways would be installed to facilitate safe pedestrian circulation.

#### Small-Scale Improvements

The Action Alternatives would also include multiple small-scale improvements:

- NPS would work with the District Department of Transportation (DDOT) to improve the
  pedestrian and bicycle access routes at the intersection of Canal Road, Reservoir Road, and
  the new ramp; NPS would design project site's access point so as not to limit future
  improvements to Canal Road
- Protective safety measures would be installed near the top of the existing ramp to separate pedestrians and bicycles from Canal Road vehicle traffic and prevent vehicle access to the ramp from Canal Road
- Signage would be installed to direct safe circulation on site.

# 5.2 Upper Parking Lot Access Action Alternative (Alternative B)

#### Vehicle Circulation

The new entrance ramp for vehicle access between Canal Road and the project site would connect to the upper parking lot (**Figure 5**). The upper parking lot would be reconfigured west of the Abner Cloud House, with overflow parking available downstream of the entrance ramp; the reconfigured parking would increase the buffer around the Abner Cloud House. In order to provide circulation between the upper and lower parking lots, the existing road culvert would be retained for visitors arriving by personal vehicle, bicycle, or on foot.

#### Official Use Vehicle Circulation

The existing pedestrian bridge over the C&O Canal, which also serves official use vehicles (including emergency vehicles), would be replaced with a wider bridge. The bridge landing to the west of the canal would be modified to accommodate official use vehicles to and from the towpath. The existing ramp for official use vehicle access between the towpath and lower parking lot would be improved to provide better sight lines between vehicles on the ramp and pedestrians and bicycles on the towpath and Capital Crescent Trail. The ramp approach up to the towpath from the lower parking lot would be widened and vegetation obstructing sight lines would be removed.

#### Small-Scale Improvements

An access gate would be installed along the approach road to the east entrance of the existing road culvert to prevent vehicle access during floods. The existing road culvert would also be signalized, i.e. use a traffic signal or other indicator, to safely accommodate two-way traffic.

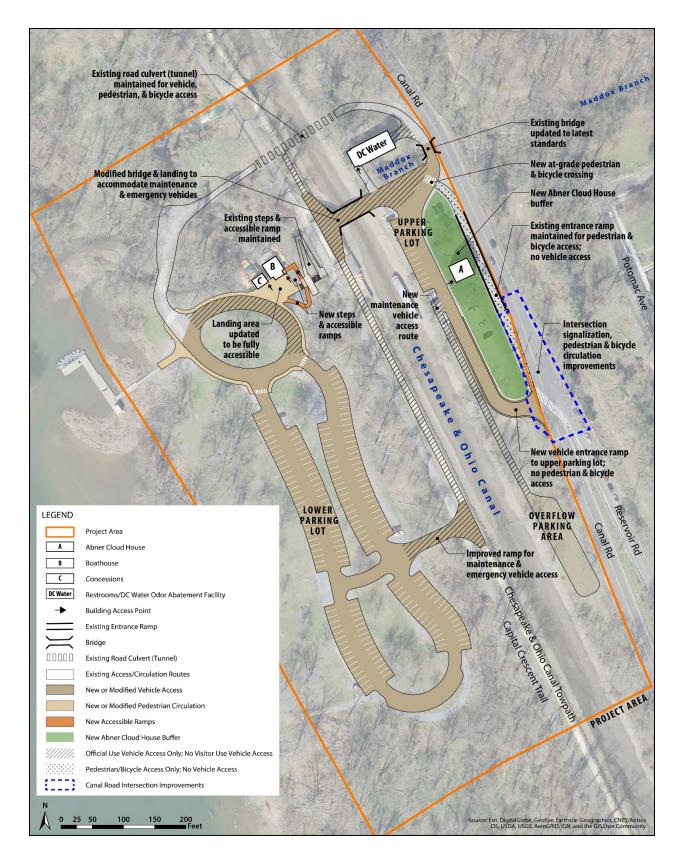


Figure 5: Upper Parking Lot Access Alternative

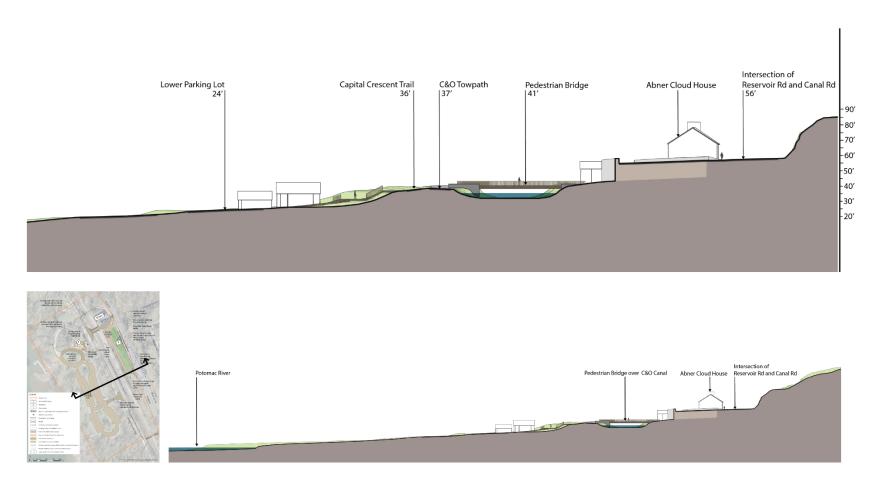


Figure 6: Section and Elevation of Upper Parking Lot Access Alternative (Alternative B) (detailed and full section of site)

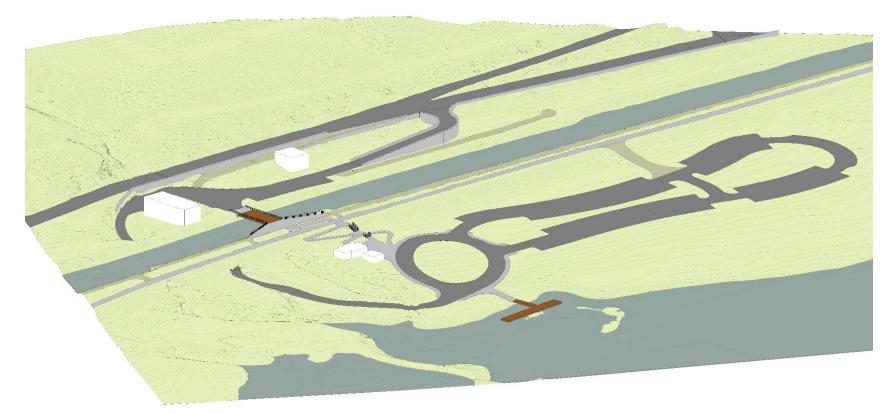


Figure 7: Axonometric View of Upper Parking Lot Access Alternative (Alternative B)

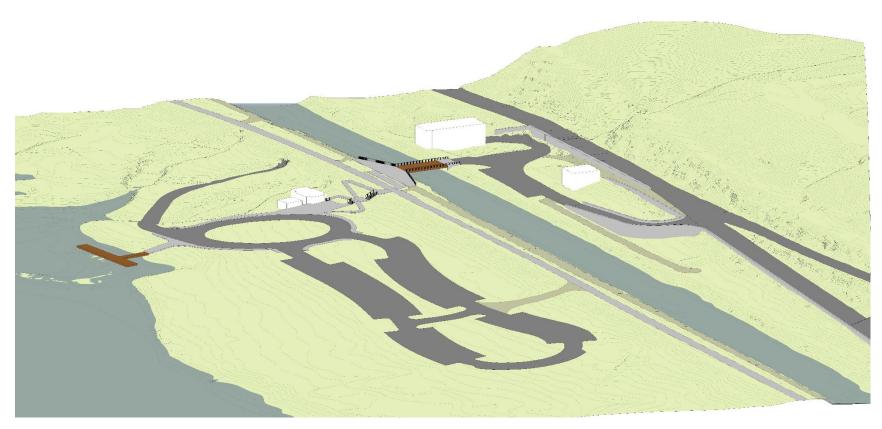


Figure 8: Upstream Axonometric View of Upper Parking Lot Access Alternative (Alternative B)

## 5.3 Upper and Lower Parking Lot Access Action Alternative (Alternative C)

#### Vehicle and Official Use Vehicle Circulation

A new ramp for vehicle access would provide direct connections to both the upper parking lot and to the lower parking lot via a bridge. The bridge to the lower parking lot would cross over the C&O Canal, towpath, and the Capital Crescent Trail. Official use vehicles would access areas of the site via the ramp from Canal Road. The upper parking lot would be moved south of the Abner Cloud House, with overflow parking available downstream of the entrance ramp. The relocation of the upper parking lot would increase the buffer around the Abner Cloud House Both parking lots would be paved and striped. All vehicle circulation areas, except the towpath, would beresurfaced.

#### Pedestrian and Bicycle Circulation

The existing road culvert would be converted to pedestrian and bicycle circulation only. The road culvert (tunnel) would be closed to vehicles.

#### Small-Scale Improvements

Access gates or other barriers would be installed to prevent visitor use vehicle entry to circulation areas for official use vehicles only.

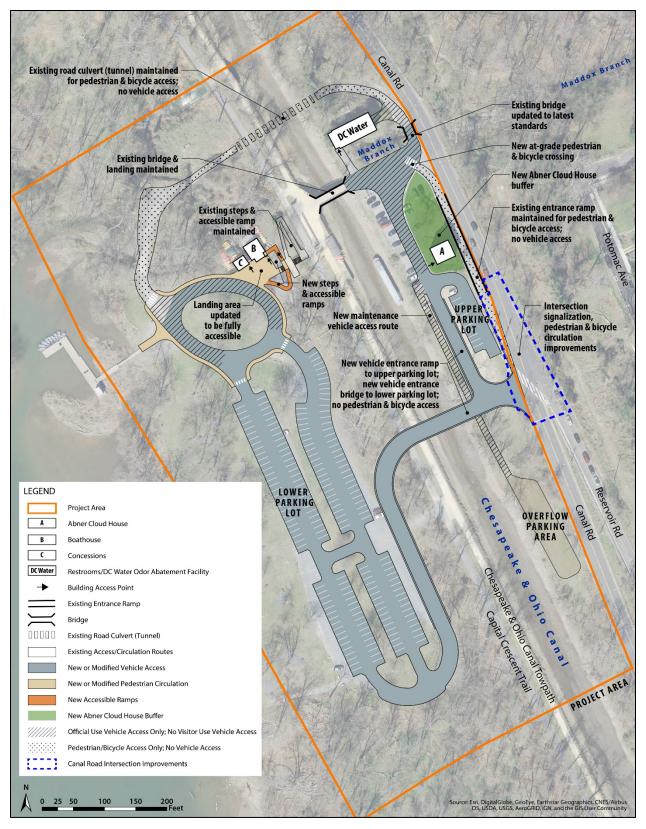


Figure 9: Upper and Lower Parking Lot Access Alternative

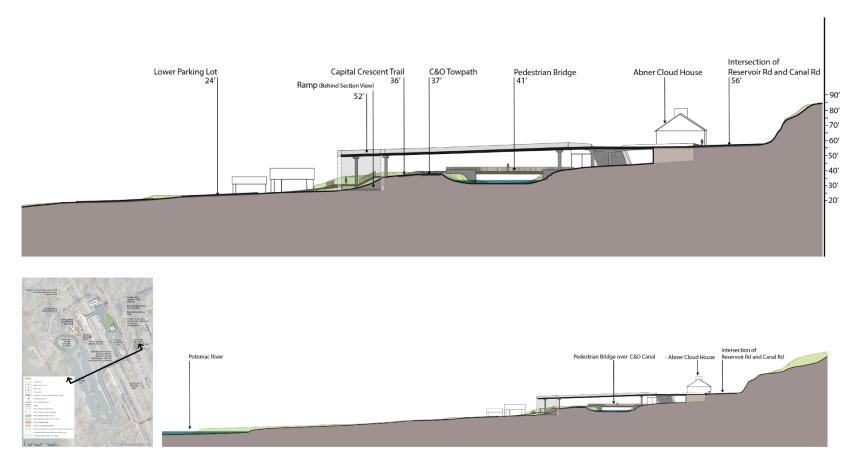


Figure 10: Section and Elevation of Upper and Lower Parking Lot Access Alternative (Alternative C) (detailed and full section of site)

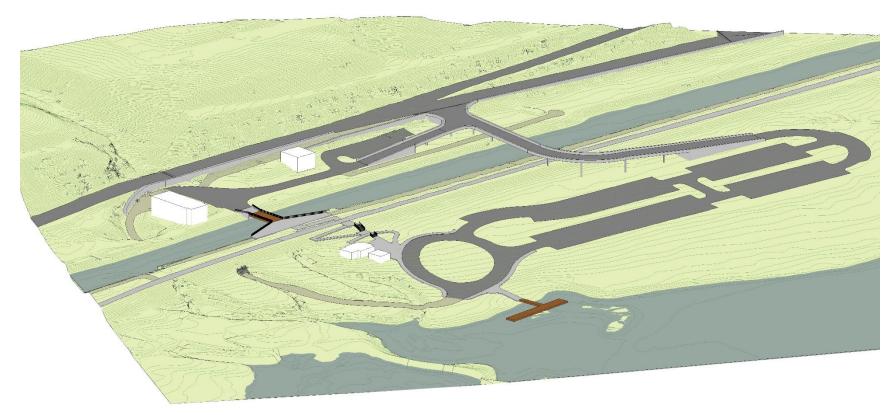


Figure 11: Axonometric View of Upper and Lower Parking Lot Access Alternative (Alternative C)

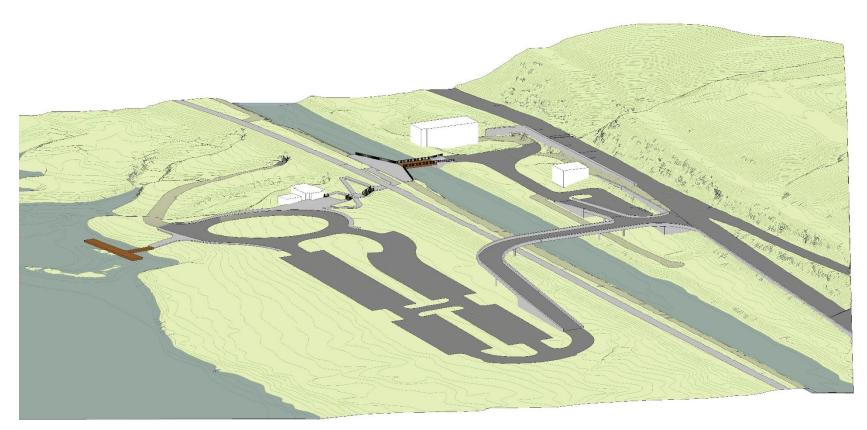


Figure 12: Upstream Axonometric View of Upper and Lower Parking Lot Access Alternative (Alternative C)

# 6. Historic and Archeological Resources

# 6.1 Historic Resources

Historic resources in the APE include the C&O Canal National Historical Park and the George Washington Memorial Parkway.

# C&O Canal National Historical Park

The C&O Canal National Historical Park extends from Georgetown in Washington, D.C. to Cumberland in western Maryland. The district encompasses approximately 20,500 acres, of which 7.8 acres are within the APE. The 184.5–mile route of the constructed waterway follows the District of Columbia/Maryland side of the Potomac River.

The C&O Canal National Historical Park was listed in the NRHP in 1979, with a boundary expansion in 2015, under multiple criteria:

- Criterion A for transportation; industry and commerce; military; ethnic heritage; conservation and recreation; agriculture; community development; and recreation.
- Criterion C for engineering; and architecture.
- Criterion D for its prehistoric and historic archeological significance.

The C&O Canal represents a pivotal phase in the first half of America's nineteenth century transportation revolution, in which engineered waterways played a crucial role in the economic development of the young nation. It is one of the best-preserved of those built in the United States during the great boom of canal construction from 1820 to 1840. The canal prism and towpath reflect the primary elements of nineteenth century flat-water canals. Structures associated with its water system, such as dams and wasteweirs, illustrate the height of nineteenth century engineering methods used to control the flow and depth of water in the canal prism. The canal also played an important role as a major mid-to-late nineteenth century commercial artery in the Potomac River Valley and Western Maryland that spurred economic growth and commercial development regionally.

The C&O Canal features a linear canal prism primarily bordered by a towpath and natural vegetation, with adjacent structures and open lots. The canal's character was primarily utilitarian and rustic, with little ornamental vegetation. Paving was generally packed soil or gravel.

The district contains many canal-related resources including a canal prism, towpath, lift locks, dams, bypass flumes, culverts, wasteweirs, and lockhouses. Contributing elements present within the APE include the following (**Figure 13**):

• **Canal Prism:** The canal prism is a linear structure forming the canal waterway. On one side of the prism, a berm stabilizes the adjacent earth slope, and on the other a towpath. The prism, along with the towpath, forms a linear view corridor that provides open views to the Abner Cloud House. The waterway was also used for pleasure cruises.

- **Towpath:** The 12-foot wide towpath is a linear structure along the prism and was constructed from the soil removed to build the prism. Its surface was smooth and hard, made of crushed rock or other material available in the immediate area. Due to repeated flood damage, the towpath material has often been replaced and repaired.
- Abner Cloud House: Built in 1801, the Abner Cloud House is a two-story stone house with a fully exposed basement on the river front and a wide chimney on the upstream side for two fireplaces on each of the three floors. The exterior was restored in the summer of 1976, with the interior rehabilitated for new uses. The treatment was completed in 1978. The house is the last remaining building of the original mill complex. The house is a single building set in an open, utilitarian lot with a few trees. The northwest section of the building's landscape space has been used for parking.
- **Culverts:** Canal construction on the District of Columbia and Maryland river banks blocked the natural passage of inland drainages into the Potomac. Therefore, the canal company built culverts of varying sizes under the berm bank, canal, and towpath. Where the path of the canal moved inland from the river bank, leaving a flood plain, culverts provided vehicular passage to isolated farms, grazing land, or landings for ferry boats that transported products between Maryland, Virginia, and West Virginia via the Potomac. Contributing culverts present within the APE include the following:
  - **Battery Kemble Culvert:** The circa 1830 stone culvert is six feet wide. The inflow stone face is exposed, whereas the outflow side is joined by a concrete structure added after 1900 when the railroad was built on the towpath side of the canal.
  - Fletcher's Road Culvert (Road Culvert at Fletcher's): The circa 1830 stone culvert is 14 feet wide covered by an arch with a 9.5 foot rise. A concrete extension was added in the early 1900s when the railroad was built on the towpath side of the canal. Heavy traffic associated with Edes Mill, an early mill using the river water for power, and a long-established commercial fishery center, required access over the river.
- Wasteweir #3: Wasteweir #3 (1850) is a concrete replacement or repair of an earlier stone dual opening weir, which was likely closed by wicket gates, to provide water for powering Edes Mill. Wasteweirs functioned to regulate the water level in the canal by providing an outlet for excess water or for draining the canal. They were generally located on the towpath side of the canal. The original wasteweirs were built of stone with planks across the top forming a towpath bridge. Many were replaced by concrete weirs between 1906 and 1914.
- Archeological Sites: Archeological sites that contribute to the C&O National Historical Park and are present in the APE include the Fletchers Boat House Archeological Site (8000 BCE-1600 CE), the Edes Mill Complex Archeological Site (19<sup>th</sup> century), and the Pierce Mill Ruins (Edes Mill) (1801). Descriptions of these sites are included in 6.2 Archeological Resources.

Resources within the APE potentially contributing to the C&O Canal National Historical Park include the Fletcher's Boat House Office and Snack Bar (1962), Bike Shop (1972), and Metal Shed (1963) (**Figure 13**). The 2015 boundary expansion of the C&O Canal National Historical Park identified these resources, which were less than 50 years old in 2015, as non-contributing resources (NPS 1979, 2015; Seibel and Regan 2019). However, some of these resources may have achieved significance within the past 50 years and may now qualify as contributing resources. Fletcher's Boathouse Office and Snack Bar is a one-story wood building with a pitched roof. The front of the building faces downstream and features a covered wood porch, which is accessible from the porch's east end. The Metal Shed is located on the upstream, or back, side of the building. The Bike Shop is a one-story concrete block building. The front of the building also faces downstream and features a covered foundation with metal railings. The foundation is accessible at the west end via steps or at the east end at ground level. The front of Fletcher's Boathouse Office and Snack Bar and Bike Shop are within an open, utilitarian setting with trees and natural, unmanaged vegetation located behind these buildings.

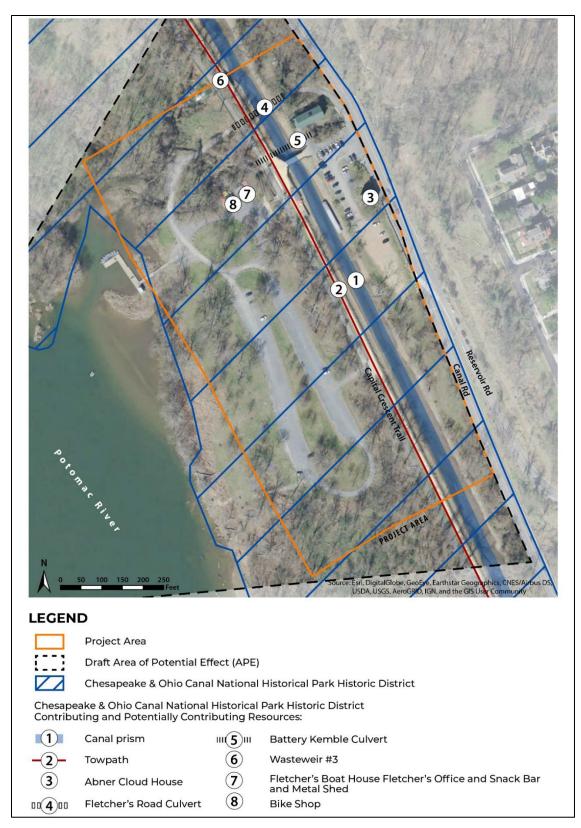


Figure 13: Contributing and Potentially Contributing Resources in the C&O Canal National Historical Park

#### George Washington Memorial Parkway

The George Washington Memorial Parkway was listed as a historic district in the NRHP in 1995 and is a designed roadway system and cultural landscape that extends 38.3 miles along the Potomac River in Virginia, Maryland, and the District of Columbia. The George Washington Memorial Parkway is a scenic roadway that commemorates the life of George Washington and preserves the natural and historic character of the Potomac River, including the Potomac River Gorge. The NHRP nomination, which was updated in 2017, used the following significance criteria:

- Criterion A for association with the broader planning of Washington, DC and commemoration of the life of George Washington.
- Criterion B for its association with George Washington.
- Criterion C for parkway construction, engineering and transportation innovations, and landscape architecture.

The South Donaldson Scenic Overlook, located west of the project area across the Potomac River, contributes to the George Washington Memorial Parkway. The overlook allows northbound travelers to park their vehicles and provides sweeping views of the Potomac River Gorge, Georgetown, and Washington. The overlook illustrates the original design intent of the park, which emphasized recreation and visitor enjoyment of the beautiful scenery of the Potomac River Gorge (NPS 2017).



Figure 14: View from the South Donaldson Scenic Overlook

## 6.2 Archeological Resources

Previous cultural resources investigations indicate the presence of Early Archaic through Middle Woodland occupations of varying intensity within the APE. While these investigations did not provide coverage for the entire APE, their results suggest that its Pleistocene and younger Holocene terraces served as favorable locations for short- and long-term encampments. These relatively level, well-drained landforms overlook the Potomac River and would have provided prehistoric occupants with an easily accessible, reliable source of fresh water, various river and shoreline food resources, and raw materials for tool production. Historic and modern uses of the APE do not appear to have significantly disturbed the archeological evidence for these occupations, much of which has been preserved intact beneath several feet of fill and/or flood deposits. Only those areas of deep ground disturbance (e.g., C&O Canal, major public utility infrastructure) are likely to have disturbed or destroyed such resources; these areas represent a minor portion of the overall APE.

The APE and its immediate vicinity have been used for residential, industrial, and transportation purposes since the early nineteenth century. As described in **Section 3**, the development of the site within the APE in the nineteenth century included the extant 1801 Abner Cloud House and the C&O Canal. Additional buildings were constructed in the nineteenth and twentieth centuries but have since been demolished.

The APE has a moderate to high potential to contain undocumented archeological resources. Previous investigations have provided evidence for intensive prehistoric occupations within relatively deeply buried soils in various locations throughout the APE. This evidence suggests that other, untested portions of the APE have a high potential to contain intact prehistoric archeological resources. The only areas with a low potential for such deposits are those that have been impacted by deep ground disturbances, such as those associated with the construction of the C&O Canal, the mainline of the Potomac Interceptor east of the canal, and the related odor abatement building.

There is a moderate to high potential for historic archeological resources. Previous investigations have revealed intact deposits near the Abner Cloud House, and a review of historic mapping indicates that the APE once included numerous historic buildings and structures that are no longer extant. These structures were concentrated between the C&O Canal and Canal Road NW, but also included some developments in the vicinity of Maddox Branch both east and west of the canal. Many former historic building locations were not subsequently redeveloped, suggesting there is a moderate to high potential for intact historic archeological deposits nearby. Elsewhere within the APE, particularly around the lower parking lot near the Potomac River, there is little evidence for intensive historic occupation and thus a low potential for associated archeological resources. Other areas exhibiting low potential for historic deposits include those that have witnessed extensive modern disturbances, particularly

in the Potomac Interceptor corridor and the associated odor abatement building (Seibel and Regan 2019).

Three archeological sites registered with DC SHPO are located within or directly adjacent to the northern portion of the APE. Despite containing archeological remains, the Abner Cloud House is not recorded as a formal archeological site with DC SHPO. The registered sites include the following:

- Edes Mill Complex Archeological Site (19<sup>th</sup> century) (51NW006): This site represents the remnants of Edes Mill Industrial Complex, first developed by Abner Cloud and originally known as Lock Mill. While the complex initially included a grist mill, operations expanded ca. 1875 to include the Gaskin Guano Factory. This site is a contributing element of the C&O Canal National Historical Park.
- Fletchers Boat House Archeological Site (8000 BCE-1600 CE) (51NW013): Located along both sides of the C&O Canal, this site represents a light scatter of Middle to Late Woodland prehistoric artifacts. This site is a contributing element of the C&O Canal National Historical Park.
- Civil War Battery Archeological Site (19<sup>th</sup> century) (51NW72): This site represents the remnants of what could be Civil War-era earthworks.

# 7. EFFECTS ASSESSMENT

This document records the assessment of effects on the historic and archeological resources identified in the preceding sections. The section below addresses anticipated effects of the Action Alternatives on the project area's and the APE's historic and archeological resources.

# 7.1 Historic Resources

## Upper Parking Lot Access Action Alternative (Alternative B)

# C&O Canal National Historical Park

The Upper Parking Lot Access Action Alternative would retain the linear structure of the canal prism and towpath. The towpath and an earth-stabilizing berm would continue to parallel the prism. The towpath at the C&O Canal bridge landing would be modified to accommodate the new replacement bridge over the canal and official use vehicles to/from the towpath (see Figure 5 through Figure 8).

The linear view corridor of the canal prism and towpath within the APE is reinforced by natural vegetation to the west of the Capital Crescent Trail. Open views to the Abner Cloud House east of the canal are available. The new replacement bridge and modified bridge landing would be directly within the linear line of sight along the canal. To the east of the canal, the new entrance ramp for vehicle access between Canal Road and the upper parking lot would block views from the south to the Abner Cloud House and introduce a new vertical structure in the background of views from the north to the Abner Cloud House. The resurfaced vehicle circulation areas, new access route for official use vehicles, and overflow parking would also be visible.

During the summer, vegetation would largely screen proposed upgrades to the west (Potomac River side) of the canal from the canal prism and towpath, including the updated landing area by the Fletcher's Boat House Fletcher's Office and Snack Bar and Bike Shop, new steps and accessible ramps, and the resurfaced lower parking lot. During the winter, views from the canal prism and towpath to these upgrades would be partially filtered through vegetation. Both views would be similar to existing conditions.

Alternative B would retain the Abner Cloud House in its current location. This alternative would also limit the parking at the upper parking lot to an area along the canal in order to retain the open character of the building's setting. The ground surface would be replaced with a historically compatible paving material. The new entrance ramp and relocated parking on the downstream side of the house would reduce the area of open landscape south of the house, introduce a new vertical structure in the surrounding landscape, and block open views to the house from the south.

The Fletcher's Road Culvert would continue to provide vehicle circulation between the east and west sides of the canal, which is consistent with the culvert's original purpose. However, the culvert would be signalized to better accommodate two-way traffic, and the road within the

culvert and approach roads on either side of the culvert would be resurfaced. No changes to the culvert structure, including its stonework or arch, would occur.

Alternative B would maintain the open, utilitarian setting of the downstream side of the Fletcher's Boat House Fletcher's Office and Snack Bar and Bike Shop. The landing area in front of the buildings would be updated to be fully accessible, requiring modifications to the existing grade and surface material. Two new sets of steps and two new accessible ramps would be added to account for the required grade modifications, including new steps and a new accessible ramp connecting the covered wood porch of the Fletcher's Boat House Fletcher's Office and Snack Bar to the fully accessible landing area and the bottom of the existing steps and accessible ramp, respectively. No changes would occur to the Battery Kemble Culvert or Wasteweir #3.

Alternative B would have an adverse effect on the C&O Canal National Historical Park as a result of the new entrance ramp and modifications to parking lots and vehicle circulation areas through the changes in the setting, circulation, vistas and views, and spatial relationships within the site. The alternative would avoid and minimize adverse effects on the C&O Canal National Historical Park by using materials (e.g., wood, stone) and a design that are compatible with the historic character of the landscape. The bridge replacement, surface materials for the updated fully accessible landing area and associated new sets of steps and accessible ramps, small-scale features associated with proposed upgrades throughout the project area (e.g., railings), and small-scale improvements (i.e., signalization at the Fletcher's Road Culvert, access gates, and signage) would be undertaken in a manner that is consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

## George Washington Memorial Parkway

The project area is visible from the South Donaldson Scenic Overlook. Alternative B proposes multiple transportation upgrades to the project area, including a new entrance ramp for vehicle access between Canal Road and the upper parking lot, relocation and reconfiguration of parking lots, replacement of the existing bridge over the C&O Canal, modified official vehicular access to the towpath, and improved access to boathouse and concessions.

During the summer, most of the transportation upgrades between Canal Road and the C&O Canal would not be visible from the South Donaldson Scenic Overlook, because trees would screen this section of the project area from view. The top of the new ramp at Canal Road may be visible from the overlook. Transportation upgrades between the C&O Canal and Potomac River may be visible from the overlook.

During the winter, transportation upgrades within the overall project area would be visible from the South Donaldson Scenic Overlook. Views from the overlook to the project area would be partially filtered through trees.

Although the implementation of the transportation upgrades may require some vegetation removal, vegetation removal would be minimal, and the overall natural, vegetated character of

the broad view from the South Donaldson Scenic Overlook across the Potomac River Gorge would be retained. Therefore, Alternative B would result in no adverse effect on the George Washington Memorial Parkway.

#### Upper and Lower Parking Lot Access Action Alternative (Alternative C)

## C&O Canal National Historical Park

Alternative C would have similar effects on the Fletcher's Boat House Fletcher's Office and Snack Bar and Bike Shop as described for Alternative B. No changes would occur to the Battery Kemble Culvert and Wasteweir #3 (see **Figure 9** through **Figure 12**.)

Alternative C would retain the linear structure of the canal prism and towpath. The towpath and an earth-stabilizing berm would continue to parallel the prism. However, the new entrance bridge for vehicle access to the lower parking lot would shorten the linear view corridor of the canal prism and towpath due to the introduction of a new overhead structure.

To the east of the canal, the new bridge and ramp for vehicle access to the upper parking lot would block views from the south to the Abner Cloud House and introduce new vertical structures in the background of views from the north to the Abner Cloud House. The paved vehicle circulation areas and new unpaved access route for official use vehicles would also be visible. The placement of formalized paved parking downstream of the Aber Cloud House would alter the spatial relationship of the house to the rest of the site; the removal of parking along the towpath would open views between the Abner Cloud House and the towpath.

To the west of the canal, the new bridge could require the removal of existing vegetation resulting in a change to the quality of the view from the canal prism and towpath to the new bridge and reconfigured, paved, and striped lower parking lot. During the summer, vegetation would screen most of the updated landing area and new sets of steps and ramps from the canal prism and towpath. During the winter, views from the canal prism and towpath to these upgrades would be partially filtered through vegetation.

The Fletcher's Road Culvert would be closed to vehicle access between the east and west sides of the C&O Canal. No changes to the culvert structure would occur and the culvert would remain open to pedestrians and cyclists.

Alternative C would have an adverse effect on the C&O Canal National Historical Park as a result of the new ramp and bridge, re-located upper parking lot, and paved parking lots and vehicle circulation areas through the changes in the setting, circulation, vistas and views, and spatial relationships within the site. The new entrance bridge over the canal would mitigate adverse effects on the C&O Canal National Historical Park by using a design that avoids using support piers in the canal prism and on the towpath. Surface materials for the updated landing area and associated steps and ramps; small-scale features associated with proposed upgrades throughout the project area (e.g., railings); and small-scale improvements (i.e., access gates and signage) would further minimize adverse effects on the C&O Canal National Historical Park by using materials (e.g., wood, stone) and a design that are compatible with the historic character of the landscape; additional vegetation consistent with the character of the current landscape could also be employed. These design actions would be undertaken in a manner that is consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

#### George Washington Memorial Parkway

Alternative C proposes several transportation upgrades to the project area, including a new entrance ramp for vehicle access between Canal Road and the upper parking lot and lower parking lot via a bridge, relocation and reconfiguration of parking lots, replacement of the existing bridge over the C&O Canal, modified official vehicular access to the towpath, and improved access to boathouse and concessions.

The new bridge providing vehicular access to the lower parking lot would be visible from the South Donaldson Scenic Overlook during the summer and winter. Trees would partially screen the bridge from view during the summer. During the winter, views of the bridge from the overlook would be partially filtered through trees. The remaining proposed upgrades to the project area under the Alternative C would have similar visibility from the South Donaldson Scenic Overlook as described for the Lower Parking Lot Access Action Alternative.

Although the implementation of the proposed upgrades may require some vegetation removal, vegetation removal would be minimal and the overall natural, vegetated character of the broad view from the South Donaldson Scenic Overlook of the Potomac River Gorge would be retained. Therefore, Alternative C would result in no adverse effect on the George Washington Memorial Parkway.

## 7.2 Archeological Resources

#### Upper Parking Lot Access Action Alternative (Alternative B)

Alternative B proposes several transportation upgrades throughout the project area, including upgrades near the Abner Cloud House and in the northern portion of the project area. No changes to the Abner Cloud structure would occur, but Alternative B would re-locate the upper parking lot to south of the Abner Cloud House and add a new ramp for vehicle access, pave vehicle circulation areas, and add a new unpaved route for maintenance vehicle access near the house. Transportation upgrades in the northern area include paved vehicle circulation areas, a new replacement bridge over the C&O Canal and modified bridge landing, updated landing area, and new steps and ramps by the boathouse and concessions.

In general, the APE has a high and moderately-high potential to contain undocumented prehistoric and historic archeological deposits. The exception are those locations impacted by the installation of the Potomac Interceptor sewer system corridor and its associated odor abatement facility. Any ground disturbing activities planned outside of areas previously subject to intensive archeological excavation or deep mechanical disturbance have a high potential to encounter undocumented archeological sites or archeological deposits associated with known archeological resources (i.e., Abner Cloud House, Fletchers Boat House Archeological Site).

Ground disturbance related to the proposed project elements could disrupt or displace unknown archeological resources and result in a loss of integrity of the archeological resource, resulting in an adverse effect. In order to avoid and minimize potential adverse effects, the NPS would undertake archeological investigation for any areas of potential ground disturbance with moderate to high archeological potential as identified in the Phase 1A Archeological Assessment, Fletcher's Boathouse Transportation Upgrades Environmental Assessment. Such investigations would include, at a minimum, pedestrian inspection, close-interval shovel testing, and/or mechanical removal of thick fill overburdens to test potential stable, buried surfaces, and associated geoarcheological investigation to identify areas with the greatest chance of containing buried paleosols. Further investigation would be needed, depending upon the vertical extent of ground disturbance. Geophysical prospection and coring could also be appropriate archeological techniques.

The potential for encountering historic burials or cemeteries is considered low, while the potential for encountering prehistoric burials or cemeteries is considered moderate. Therefore, a protocol for the unanticipated discovery of cemeteries or human remains should be developed for the construction contractor. If any Native American burials, cemeteries, or funerary objects are encountered, NPS would contact federally recognized Tribes with affiliation in Washington, D.C. in accordance with the Native American Graves Repatriation Act (NAGPRA).

#### Upper and Lower Parking Lot Access Action Alternative (Alternative C)

Alternative C proposes several transportation upgrades throughout the project area as described under Alternative B, but would also include a bridge over the C&O Canal leading from Canal Road to the lower parking lot. Therefore, Alternative C would have greater potential to result in effects on known and unknown archeological resources as described for Alternative B. In order to avoid and minimize potential adverse effects, the NPS would undertake archeological investigation for any areas of potential ground disturbance with moderate to high archeological potential as identified in the Phase 1A Archeological Assessment, Fletcher's Boathouse Transportation Upgrades Environmental Assessment. Such investigations would include, at a minimum, pedestrian inspection, close-interval shovel testing, and/or mechanical removal of thick fill overburdens to test potential stable, buried surfaces as well as associated geoarcheological investigation to better identify areas with the greatest chance of containing buried paleosols. Further investigation would be needed, depending upon the vertical extent of ground disturbance. Geophysical prospection and coring could also be appropriate archeological techniques.

The potential for encountering historic burials or cemeteries is considered low, while the potential for encountering prehistoric burials or cemeteries is considered moderate. Therefore, a protocol for the unanticipated discovery of cemeteries or human remains should be developed for the construction contractor. Should any Native American burials, cemeteries, or funerary objects be encountered, NPS would contact federally recognized Tribes with affiliation in Washington, DC in accordance with NAGPRA.

# 8. AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

In order to avoid or minimize adverse effects on historic properties, several steps would be undertaken by NPS during implementation of the selected Action Alternative. Steps common to all action alternatives would include the following:

- NPS would avoid disturbing known historic and archeological resources during design and construction to the extent practicable.
- NPS would minimize ground-disturbing activities to the extent practicable during the construction phase, including using existing vehicle circulation areas and construction methods that minimize land disturbance.
- Surface materials for the updated fully accessible landing area and associated new steps and accessible ramps, small-scale features associated with proposed upgrades throughout the project area (e.g., railings), and small-scale improvements (e.g., signalization at the Fletcher's Road Culvert, access gates, and signage) would use materials such as wood or stone and a design that are compatible with the historic character of the landscape. These design actions would be undertaken in a manner that is consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.
- NPS would help screen the parking area and ramp to upper parking lot from view of the canal using natural materials. These could include wood fences, stone walls, stones, or natural vegetation.
- Consultation with DC SHPO would occur to develop strategies to ensure historic features of the C&O Canal National Historical Park are not damaged during construction.
- NPS would conduct archeological investigation for any areas of potential ground disturbance with moderate to high archeological potential. Such investigations would include, at a minimum, pedestrian inspection, close-interval shovel testing, and/or mechanical removal of thick fill overburdens to test potential stable, buried surfaces as well as associated geoarcheological investigation to better identify areas with the greatest chance of containing buried paleosols. All proposed archeological investigations would be planned in consultation with NPS and DC SHPO.
- NPS would develop a protocol for the unanticipated discovery of cemeteries or human remains for the construction contractor.
- NPS would contact federally recognized Tribes with affiliation in Washington, D.C. if any Native American burials, cemeteries, or funerary objects are encountered.

If Alternative B is chosen as the selected Action Alternative, NPS would undertake the following during implementation:

• The new bridge replacement over the C&O Canal would use materials and a design that are compatible with the historic character of the landscape. These design actions would be undertaken in a manner that is consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

If Alternative C is chosen as the selected Action Alternative, NPS would undertake the following during implementation:

• The design of a new entrance bridge over the canal would avoid locating supporting piers in the canal prism and on the towpath.

# 9. SOURCES

National Park Service (NPS)

1979 National Register of Historic Places Inventory – Nomination Form, C & O Canal

NPS

2015 National Register of Historic Places Registration Form, Chesapeake and Ohio Canal National Historical Park Historic District (Additional Documentation & Boundary Increase, 2015) NPS

2017 National Register of Historic Places Registration Form, George Washington Memorial Parkway (Additional Documentation)

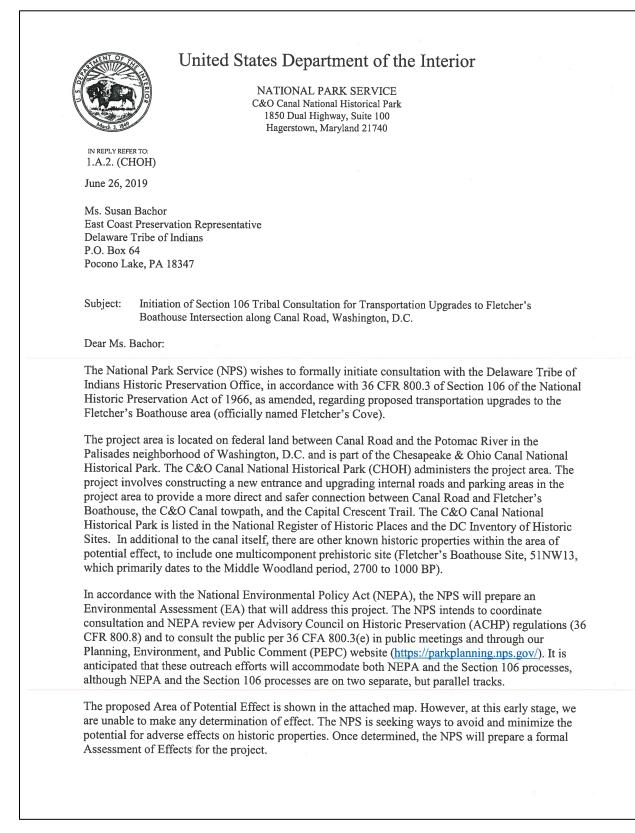
Seibel, Scott, and Peter Regan

2019 Phase IA Archeological Assessment Fletcher's Boathouse Transportation Upgrades Environmental Assessment. AECOM, Germantown, Maryland

U.S. Department of Transportation, Federal Highway Administration

2001 Bridge Inspection Report, Fletcher's Boathouse Bridge #2

# 10. APPENDIX A



We look forward to consulting with you on this project. If you have any questions, please do not hesitate to contact Jeri DeYoung, Chief of Resources Management for CHOH at 301-714-2210 or via email at jeri\_deyoung@nps.gov.

2

Sincerely,

Kevin D. Brandt Superintendent

Enclosure:

Index Map of Maryland

Washington West Quadrangle

Proposed Area of Potential Effect



#### United States Department of the Interior

NATIONAL PARK SERVICE C&O Canal National Historical Park 1850 Dual Highway, Suite 100 Hagerstown, Maryland 21740

IN REPLY REFER TO. 1.A.2. (CHOH)

June 26, 2019

Mr. Robert Gray Chief Pamunkey Indian Tribe 1054 Pocahontas Trail King William, VA 23086

Subject: Initiation of Section 106 Tribal Consultation for Transportation Upgrades to Fletcher's Boathouse Intersection along Canal Road, Washington, D.C.

Dear Mr. Gray:

The National Park Service (NPS) wishes to formally initiate consultation with the Pamunkey Indian Tribe, in accordance with 36 CFR 800.3 of Section 106 of the National Historic Preservation Act of 1966, as amended, regarding proposed transportation upgrades to the Fletcher's Boathouse area (officially named Fletcher's Cove).

The project area is located on federal land between Canal Road and the Potomac River in the Palisades neighborhood of Washington, D.C. and is part of the Chesapeake & Ohio Canal National Historical Park. The C&O Canal National Historical Park (CHOH) administers the project area. The project involves constructing a new entrance and upgrading internal roads and parking areas in the project area to provide a more direct and safer connection between Canal Road and Fletcher's Boathouse, the C&O Canal towpath, and the Capital Crescent Trail. The C&O Canal National Historical Park is listed in the National Register of Historic Places and the DC Inventory of Historic Sites. In additional to the canal itself, there are other known historic properties within the area of potential effect, to include one multicomponent prehistoric site (Fletcher's Boathouse Site, 51NW13, which primarily dates to the Middle Woodland period, 2700 to 1000 BP).

In accordance with the National Environmental Policy Act (NEPA), the NPS will prepare an Environmental Assessment (EA) that will address this project. The NPS intends to coordinate consultation and NEPA review per Advisory Council on Historic Preservation (ACHP) regulations (36 CFR 800.8) and to consult the public per 36 CFA 800.3(e) in public meetings and through our Planning, Environment, and Public Comment (PEPC) website (https://parkplanning.nps.gov/). It is anticipated that these outreach efforts will accommodate both NEPA and the Section 106 processes, although NEPA and the Section 106 processes are on two separate, but parallel tracks.

The proposed Area of Potential Effect is shown in the attached map. However, at this early stage, we are unable to make any determination of effect. The NPS is seeking ways to avoid and minimize the potential for adverse effects on historic properties. Once determined, the NPS will prepare a formal Assessment of Effects for the project.

We look forward to consulting with you on this project. If you have any questions, please do not hesitate to contact Jeri DeYoung, Chief of Resources Management for CHOH at 301-714-2210 or via email at jeri\_deyoung@nps.gov.

2

Sincerely,

KO Bart

Kevin D. Brandt Superintendent

Enclosure:

Index Map of Maryland

Washington West Quadrangle

Proposed Area of Potential Effect

 From:
 Jeri DeYoung

 To:
 justin\_ebersole@nps.cov; Sale, Claire; andrew\_landsman@nps.gov

 Subject:
 Fwd: [EXTERNAL] Transportation Upgrades to Fletcher's Boathouse (DHR File No. 2019-0242)

 Date:
 Thursday, July 18, 2019 10:41:45 AM

FYI

Sent from my iPhone

Begin forwarded message:

From: "Labudde, Gregory" <<u>gregory.labudde@dhr.virginia.gov</u>> Date: July 18, 2019 at 9:35:38 AM EDT To: <jeri\_deyoung@nps.gov> Subject: [EXTERNAL] Transportation Upgrades to Fletcher's Boathouse (DHR File No. 2019-0242)

#### Dear Jeri DeYoung:

Thank you for initiating Section 106 consultation with the Department of Historic Resources (DHR) for the Transportation Upgrades to Fletcher's Boathouse. We believe that the area of potential effects (APE) should include all areas from which the undertaking is visible. Based on the information provided thus far, we agree that the APE should include a portion of the George Washington Memorial Parkway in Virginia.

We look forward to receiving project plans and a formal Assessment of Effects when available. Please reference DHR's project review file number (2019-0242) in future correspondence.

Thank you for your consideration of historic resources. Please contact me if you have any questions or if we may provide any further assistance.

Sincerely,

Greg LaBudde, Archaeologist Review and Compliance Division Department of Historic Resources 2801 Kensington Avenue Richmond, VA 23221 phone: 804-482-6103 fax: 804-367-2391 gregory.labudde@dhr.virginia.gov,