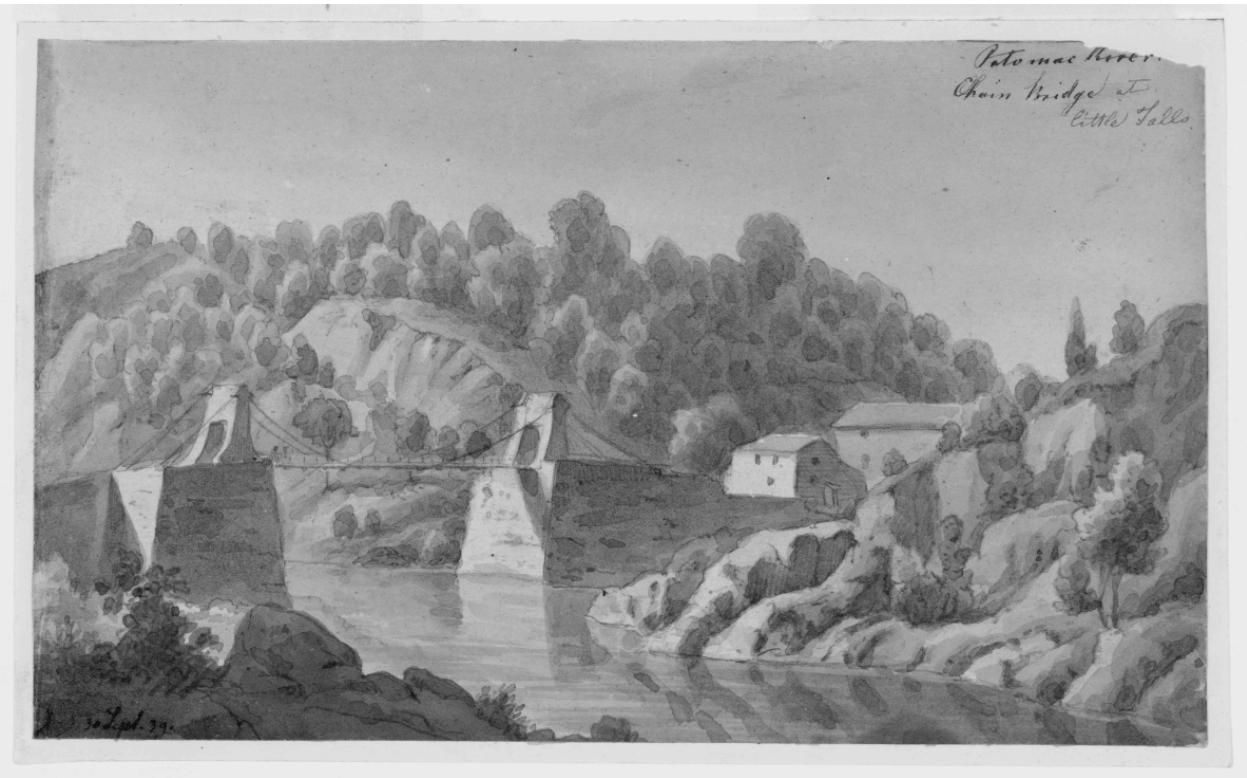
The Potomac Gorge Below the Falls:

Historic Resources Study of the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run Area

George Washington Memorial Parkway, Arlington and Fairfax Counties, Virginia, Montgomery County, Maryland, and Washington, DC



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Cover Image: “Potomac River, Chain Bridge at Little Falls” by August Köllner, 1839. Library of Congress Prints and Photographs Division, Washington, DC.

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This historic resources study (HRS) of the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run area was conceived as a project between the University of Maryland and the National Park Service through the Chesapeake Watershed Cooperative Ecosystems Study Unit (CW-CESU). It was considered an initial step towards a nomination of the landscape of the Potomac Gorge to the National Register of Historic Places. A Letter of Research Interest was distributed by the NPS in the summer of 2011, and the kickoff meeting was held on October 27, 2011 between Scott, Virta, Gregory Anderson of the NPS, and Matthew Palus and Paul Shackel, both of the Center for Heritage Resource Studies (CHRS) of the Department of Anthropology at the University of Maryland College Park. Virta and Anderson shared pertinent research materials held at the Turkey Run headquarters of GWMP, accompanied Shackel and Palus on site visits where many of the resources identified in this study were located and photographed, and provided support and guidance as necessary, functioning as primary contacts with the author.

Paul Shackel, director of the CHRS, served as the Principal Investigator for the study. The text of the study was researched and written by Matthew M. Palus, with Shackel reviewing the text and providing research support and other resources available through the CHRS and the Department of Anthropology at the University of Maryland. University of Maryland graduate students Adam Fracchia and Megan Springate proofread the text of this study and provided substantive feedback on the clarity, completeness, format, and organization of the text. Camille Westmont formatted the final text for printing and prepared other materials for transmittal to the NPS. Megan Springate authored a National Register nomination accompanying this study, drawing on the following text but also exceeding it. Her thinking on how the nomination should be prepared informed the conclusions to this study.

Adrienne Allegretti created a Geographic Information System (GIS) for the study, and used this data to produce the historic basemap and many original map figures included in this volume. Kriston Barnes, GIS specialist at GWMP, provided assistance in obtaining spatial data from the GIS maintained by GWMP, including the locations of many historic resources described in this study, as well as boundaries on NPS property within the study area, and historic aerial photographs depicting the study area. Ben Helwig at GWMP provided access to digital land acquisition records and directed the author towards additional resources at National Capital Headquarters, where further assistance with land records for GWMP was received from Julie Young and Lum Fube of the Lands, Resources and Planning Section, National Capital Region Headquarters of the NPS. Gregory Anderson and Matthew Virta reviewed the outline, research bibliography, and first draft of this study; Stephen Potter also reviewed portions of the study. Matthew Virta reviewed the second draft and assisted in bringing the project to completion in the autumn and winter of 2015.

EXECUTIVE SUMMARY

The Center for Heritage Resource Studies (CHRS) at the University of Maryland College Park has completed this historic resources study of the lower portion of the Potomac Gorge on behalf of the George Washington Memorial Parkway (GWMP) under Task Agreement No. P11AT31053 of the Chesapeake Watershed Cooperative Ecosystem Studies Unit (CESU), focusing on the area between Little Falls and the environs of Pimmit Run, Chain Bridge, and Fort Marcy associated with the Civil War defenses of Washington, DC The study encompasses resources on both sides of the Potomac, from ancient Native American contexts through to the completion of the parkway lanes on the eastern side of the Potomac, designated as Clara Barton Parkway during the 1980s. The resulting synthesis provides a historical database for interpretation of resources along the Potomac River below Little Falls.

This study was conceived as a synthesis of available scholarship, and the focus is the area defined by the segment of the Potomac River and adjacent lands that fall between Little Falls and Chain Bridge. Pimmit Run enters the Potomac River just south of Chain Bridge, and Fort Marcy, a remarkable network of earthen fortifications associated with the Civil War Defenses of Washington, lies atop a bluff above Pimmit Run and the Virginia abutment of Chain Bridge. This set of landmarks – a crossroads of sorts – lies at the core of the study area. The partners in this study embrace a wider regional approach, arguing for the relevance of histories associated with the broader landscape of the Potomac to our account of historic resources within this tight little locality. Hence, the sites and features addressed in this historic resources study extend over several miles along both shores of the Potomac, from Sycamore Island and the stream valley associated with Walhonding Brook to the north, to the former location of the Little Italy community in the stream valley for Donaldson Run in Arlington County to the south.

The cultural resources present within the study area hold historical significance and retain integrity sufficient to justify nomination to the National Register of Historic Places as a district of associated resources, unified by the cultural landscape of the Potomac Gorge, and the Potomac River crossing at Chain Bridge. This study describes these resources and their historical associations in detail, and provides a series of recommendations towards production of a National Register nomination, as well as further opportunities for public interpretation, and research.

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CHAPTER 1

Historic Resources of the Potomac Gorge below the Falls

I. Introduction

The George Washington Memorial Parkway (GWMP) is a national park of approximately 7,428 acres in Maryland, Virginia, and the District of Columbia. This unit of the National Park Service (NPS) is comprised by a highly diverse set of resources, including natural, cultural, historical and recreational sites, unified to a great degree by the parkway itself, which was authorized by an act of Congress in 1930. The legislation establishing the GWMP designates its purpose:

> …to include the shores of the Potomac, and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia Side, except within the city of Alexandria, and from Fort Washington to a similar point above the Great Falls except within the District of Columbia, and including the protection and preservation of the natural scenery of the Gorge and the Great Falls of the Potomac, the preservation of the historic Patowmack Canal, and the acquisition of that portion of the Chesapeake and Ohio Canal below Point of Rocks (Public Law 71-284, quoted in Mackintosh 1996:29).

The GWMP is a scenic parkway connecting a varied assemblage of unique historic and natural resources. In addition to the parkway itself, the superintendent for the GWMP is also responsible for the administration of four units established legislatively as separate parks: Arlington House and the Robert E. Lee Memorial in Virginia; the Clara Barton National Historic Site in Maryland; and the Lyndon Baines Johnson Memorial Grove on the Potomac on Columbia Island and Theodore Roosevelt Island in Washington, DC. The GWMP has administrative responsibilities for other parks in the National Capital Region as well, including Glen Echo Park in Maryland, and Great Falls Park and the historic features associated with the Patowmack Canal in Virginia (Mackintosh 1996:1). Finally, the GWMP manages Clara Barton Parkway on the Maryland side of the Potomac, which was originally planned as a portion of the GMWP connecting with Virginia lanes via a bridge at Great Falls. Lands obtained for the C&O Canal were originally purchased under the GWMP Capper-Cramton Act authority, but became part of the separate C&O Canal National Historical Park when that park was created.

While transportation characterizes most of the property under the GWMP, the park is more fully understood as a means to bring about environmental conservation and preserve natural areas along the Potomac, a conclusion that Mackintosh quickly reaches in his administrative history of the park (Mackintosh 1996:2). The present study provides context for interpretation and evaluation of extant historic resources within an area defined by the vicinity of Fort Marcy, Chain Bridge, Little Falls, and Pimmit Run; these latter two natural features and the Palisades on both sides of the Potomac River provide approximate boundaries on the area addressed in this study **(Figures 1.1** and **1.2)**. While the study focuses on this geographic area, the scope of the study is necessarily expanded to encompass other areas providing a regional context for these historic resources.

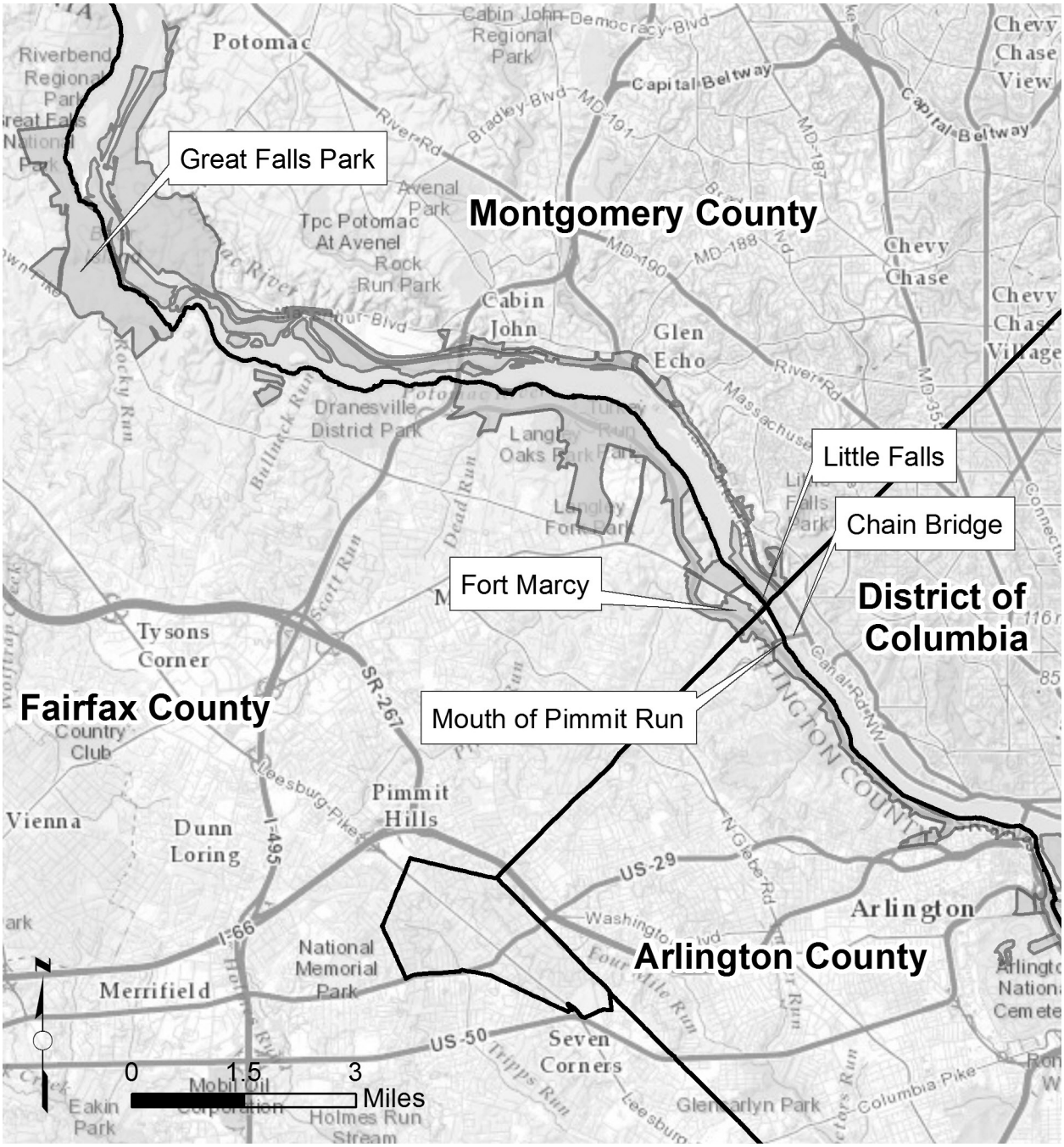


Figure 1.1. Overview of Study Area (Map by Adrienne Allegretti).

II. Environmental Setting

The Great Falls of the Potomac River, northwest of Chain Bridge and Pimmit Run, marks the river's intersection with the Fall Line, a dramatic transition between two different physiographic provinces in the Chesapeake Bay watershed. The gorge itself is a key natural feature; also significant are the heights above the gorge in Maryland and Virginia, featuring excellent views of the Potomac, and the wooded stream valleys associated with tributaries of the Potomac, such as Pimmit Run, which are themselves settings for important natural and historical resources.

Where the Potomac River descends at Great Falls, the Atlantic Coastal Plain meets the Piedmont. A threshold in elevation of 300 feet above mean sea level (AMSL) marks the limit of the Atlantic Coastal Plain. Above the falls, the Piedmont climbs to meet the Valley and Ridge physiographic province at around 1,000 feet AMSL, but more importantly these provinces represent distinct ecological zones that offered a different suite of resources and opportunities to indigenous peoples and subsequent inhabitants. Both the Coastal Plain and the Piedmont would have figured into the seasonal patterns of hunter-gatherers occupying the Middle Atlantic region, and the Fall Line would later mark the boundary of neighboring territories of Native American societies that spoke different languages and held to distinct traditions and economies. During the historic period, the series of waterfalls that occur along the Fall Line as it runs from north to south across the eastern United States provided water power to industries and drew European settlement to cities like Columbia in South Carolina, Richmond and Fredericksburg in Virginia, Georgetown in Washington, DC, Baltimore in Maryland, Philadelphia in Pennsylvania, and Trenton in New Jersey. Like settlements below the Potomac River falls, these cities were also located at the upper limits of navigable waterways.

The dramatic shift in elevation over a relatively short distance can be seen across the historic and natural features of the area. Great Falls occurs at an upper elevation of approximately 140 feet AMSL, and the surrounding landscape climbs to heights of 300 to 350 feet AMSL. At Chain Bridge, the Potomac River bank lies under 10 feet AMSL while the C&O Canal stands at an elevation of approximately 30 feet AMSL in that vicinity. Elevations above the Potomac Gorge to the east of Chain Bridge, in Potomac Heights, are between 125 and 150 feet AMSL with elevations climbing more steeply west of the Potomac River in Virginia, from 150 to 200 feet AMSL **(**US Geological Survey 1994, 2011). The area for this study is located at the mouth of the Potomac Gorge and sits just below the Fall Line.

As a cultural landscape, the area is significant as a conduit between the Coastal Plain and Piedmont physiographic regions, a fording area for migrating humans and animals to cross the Potomac River, and a link between Algonquian and Souian peoples and their respective resources, economies, and traditions (Feest 1978b:253; Humphrey and Chambers 1985:10). Lenik (2009:74) notes the association between this location and Native American occupations at the time of English colonization, specifically John Smith's exploration of the Potomac in 1608 and the ford used by Native Americans to cross the Potomac River. The Fall Line also limited English exploration during the first half of the seventeenth century, a frontier beyond which European ships could not travel.

At the centennial celebration of the establishment of Montgomery County in 1876, one speaker named Thomas Anderson described the conditions in this area during the early colonial period: "The whole extent of our territory was, at the date of its settlement, densely wooded. There was

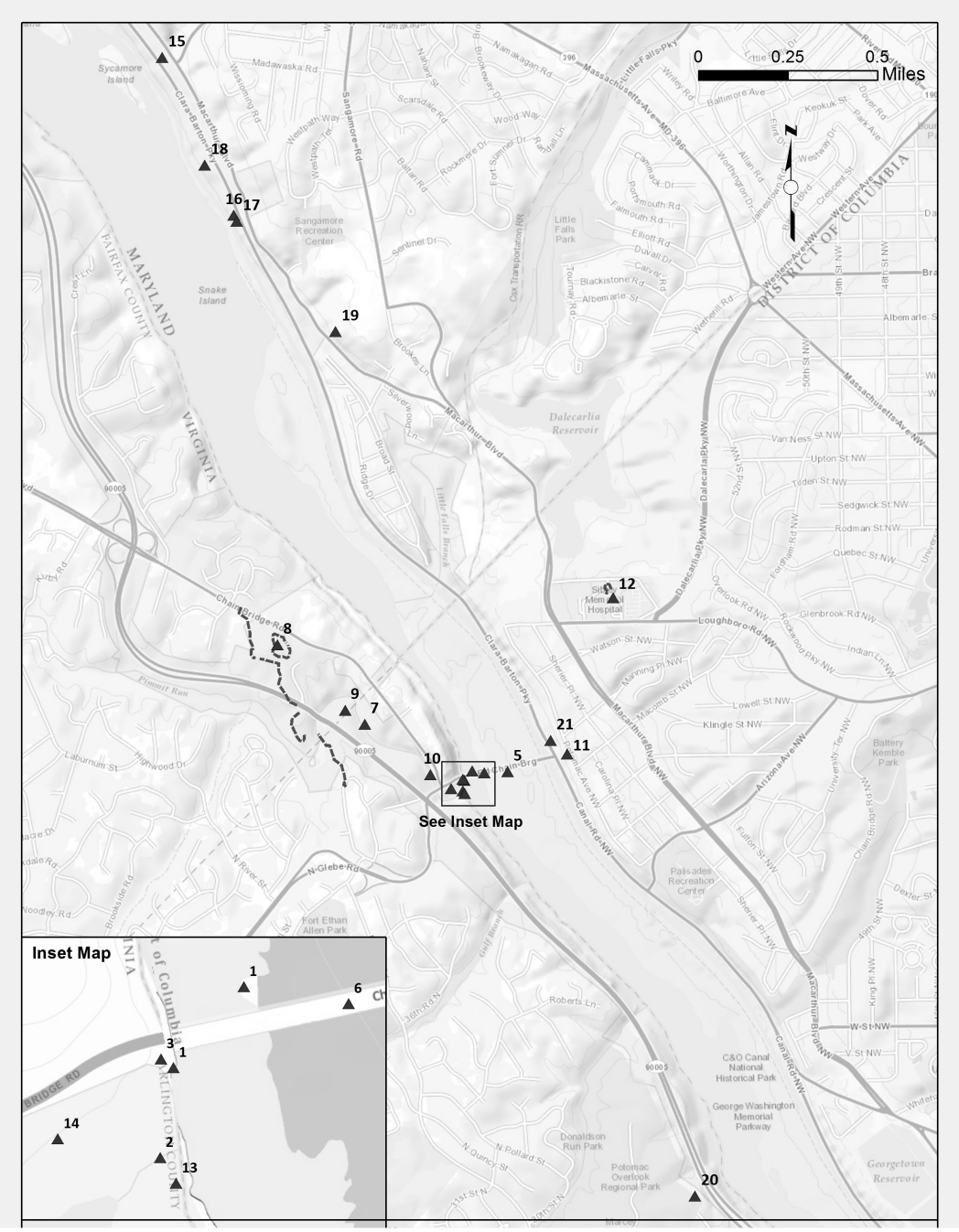


Figure 1.2. Historic Base Map Depicting Historic Resources in the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run Area. Key in Table 1.1, following page (Map by Adrienne Allegretti).

Table 1.1. Key to Historic Resources Depicted in Figure 1.2.

Resource Number	Study Chapter	Description
1	3	Iron Rings on Opposite Shores of the Potomac River
2	3	Stone Foundation or Pier in Pimmit Run
3	3	Western Abutment of Chain Bridge
4	3	Shrine at Western Abutment of Chain Bridge
5	3	Field of Rubble and Debris from Chain Bridge Construction
6	3	Historic Graffiti on Chain Bridge Pier
7	3	Abandoned Segment of the Georgetown Pike
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14	5	Concrete Stairs from Pimmit Run to North Glebe Road
15	5	Washington and Great Falls Electric Railway Trestle at Walhonding Brook
16	5	Concrete Retaining Wall on Clara Barton Parkway
17	5	Stone Retaining Wall on Clara Barton Parkway
18	5	Camp of Eli and Maude Howell Smith
19	5	Commuter Stairway to the Former Army Map Service Facility
20	5	Little Italy Community
21	6	Graded Area East of Clara Barton Parkway at Chain Bridge
22	6	Elevated Sewer Manhole at Little Falls Branch

no open or prairie land. The Potomac was filled with fish, and the surrounding forests abounded in all manner of game" (Saffell 1877:20). Anderson continued to recite Henry Fleet's 1625 description of the region, a part of the basis for these claims. Beginning with Fleet's words:

> "…we set sail for the town of Tohoga, where we came to anchor two leagues short of the falls. This place, without all question, is the most pleasant and healthful place in all this country, and most convenient for habitation: the air temperate in Summer and not violent in Winter. It aboundeth with all manner of fish. The Indians in one night will commonly catch thirty sturgeons in a place where the river is not above twelve fathom broad. And for deer, buffaloes, bears and turkeys, the woods do swam with them; but above this place the country is rocky and mountainous like Canada." No one at all familiar with this country will have any difficulty recognizing in Tohoga the site of Georgetown; or in the place "where the river is not above twelve fathom broad," the narrows immediately below the Little Falls and in the neighborhood of the Bridge (Saffell 1877:20).

The distinctiveness of this locale conveys across nearly four centuries, despite numerous and sometimes radical changes that have taken place on the landscape. The scenic importance of the falls and the availability of this area for recreation are central values today, however there are traces, sometimes buried and seemingly hidden, throughout the area that call out different aspects of the dramatic and varied history of the gorge. The purpose of this study is to assemble a picture from these traces in order to describe how the historic resources extant in the gorge retain sufficient integrity to communicate their significance. Equally as important, this study compiles information from available scholarship under one cover, producing a clear statement on the historical significance of Potomac Gorge below the falls.

III. Methodology

This study proceeded in two major phases. The first phase entailed documentary research, an exhaustive literature search, and a review of existing "grey literature" or limited-circulation reports on previous cultural resources surveys, archeological investigations, National Register of Historic Places nominations, and other descriptions of historic resources within and adjacent to the study area. Documentary research began with a review of available records for the acquisition of lands for the creation of GWMP. Land records held at the Turkey Run Headquarters for the Parkway were examined, and then the land records archived in the Lands, Resources and Planning Section, National Capital Region Headquarters of the NPS were reviewed. Additional documentary research was conducted in the Fairfax Circuit Court Historic Records Center in the Fairfax County Courthouse, which houses will, probate, and other primary documents in addition to historic land records. The Fairfax Circuit Court Historic Records Center also holds a selection of reference works on the history of Northern Virginia. Other repositories and agencies consulted include the Maryland Room at the University of Maryland College Park, the Maryland Room at the Hyattsville Branch of the Prince George's Public Library System, the Georgetown Branch and the Martin Luther King Library, of the District of Columbia Public Libraries, and the Library of Congress Prints and Photographs Division. Digital repositories of archeological site information were consulted, including the Maryland Historic Trust, the Virginia Department of Historic Resources Virginia Cultural Resource Information System (V-

CRIS), and an information request was submitted to District of Columbia City Archeologist Ruth Trocolli, who responded with identification of known sites within the study area, and also transmitted digital copies of the most pertinent cultural resource management reports.

These sources were utilized to compile a list of known historic sites and features, and assemble elements of a base map depicting locations for such features and their spatial associations. The first phase of this study also entailed field visits to these and other less well-documented historic resources known to NPS staff, particularly Matthew Virta, Cultural Resource Program Manager for the GWMP. Field visits were conducted on the Virginia side of the Potomac River on November 10, 2011, at which time Matthew Virta oriented Matthew Palus and Principal Investigator Paul A. Shackel to pertinent historic features in Arlington and Fairfax Counties including structure remnants, bridge abutments, as well as road traces and earthworks associated with Fort Marcy. In a subsequent visit made on January 13, 2013, Palus and Shackel located and photographed these historic resources. These photographs and field visits comprise the basis for evaluations of historic features included in this study. Another field visit at GWMP-administered lands along the Clara Barton Parkway was carried out on March 21, 2013, at which time Matthew Virta identified additional historic resources to be addressed in the study, many of which were associated with development made possible by the introduction of an electric railroad; the railroad facilitated excursions and utilization of the Potomac River and its islands below Great Falls for recreation. All historic features were photographed, and many were mapped by NPS staff for inclusion in the Geographic Information System (GIS) database for the GWMP.

The second phase of this study entailed a synthesis of historical literature and documentary research, in order to address a series of topics identified in the task agreement and that were pertinent to understanding the historical significance of extant historic sites or features. As such, this historic resources study:

- Places the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run area in a larger regional and national context, and also in the context of broad patterns of agricultural and urban development.
- Summarizes the findings of archeological studies and provides an overview of Native American occupation and utilization of the inner coastal plain in the Potomac River drainage.
- Addresses the seventeenth-century history of the study area and its significance to Native American societies and settlements, before and after colonization by Europeans.
- Creates a context for rural, agricultural land uses within the study area before the Civil War, and traces the shifting ownership and uses of land and other natural resources within the study area.
- Connects the aforementioned agricultural and industrial history with the historical practice of slavery, and the heritage of slavery as part of antebellum rural life; this imperative extends to the history of free African Americans within the study area, and the role played by African Americans in the dynamic context the Civil War.
- Compiles existing knowledge on activities in and adjacent to the study area during the Civil War, in particular the Union fortification of Chain Bridge and its role in the larger Defenses of Washington.

- Focuses attention on the skirting canals constructed at the Little Falls of the Potomac, where previous studies have developed substantive knowledge and historic context for the Patowmack Canal and the C&O Canal.
- Presents a historic context for post-Civil War land ownership and activities within the study area, including quarrying, power generation, and recreational uses of the Potomac Gorge.
- Describes efforts to preserve the Potomac Gorge, and the relationship between this effort and the Capper-Cramton Act of 1930. This act created the authority to acquire lands for construction of the GWMP, but is also seen as a measure to conserve the natural setting of the Potomac from Great Falls to Mount Vernon; also, placing GWMP construction within the context of post-World War II park-building program known as Mission 66.
- Compiles spatial data on known historic resources addressed in this study using Geographic Information Systems (GIS) applications, in order to enhance the use of this technology already established at GWMP.

These themes are the substance of the present study. Historic resources described herein fall under these themes; the contextual information contained in this study is organized to support the identification, interpretation, and evaluation of these resources.

IV. Organization of the Volume

This study is organized chronologically with pre-contact and post-contact Native American contexts addressed in two early chapters, followed by a chapter presenting an extended discussion of settlement, agricultural and industrial development, and infrastructure building in the study area beginning in the early colonial period through to the mid-nineteenth century. The fortification of the vicinity of Chain Bridge during the Civil War receives a chapter-length discussion, followed by a chapter treating a number of historical themes from the post-bellum period. Finally, the history of the construction of the GWMP and eventually became the Clara Barton Parkway is discussed, as are the rationales that underwrote these projects.

The significance of some historic resources addressed in this study extends across these imposed historical periods. For instance, Chain Bridge itself has been continually repaired and reconstructed over the nineteenth and twentieth centuries, beginning with the Little Falls Bridge constructed in this location in 1797. For clarity of organization, discussion of the sequence of bridges associated with Chain Bridge and a selection of photographs and illustrations are presented together in Chapter Three, rather than returning to Chain Bridge across a number of chapters to reflect on its condition before, during, and after the Civil War. The effort to plan and complete a Parkway was first to link DC and Mount Vernon in Virginia, then to include Great Falls. As this process transpired over a 70 to 80 year period and the acquisition of land to build the GWMP under the Capper-Cramton Act of 1930 was consequential to other uses of the Potomac Gorge during the twentieth century, the discussion of the establishment and construction of the parkway has been consolidated into one chapter.

Assessments are made of resources, supported by photographs that illustrate the condition of these resources at the time of the present study. Some assessments are more complete and developed than others, based on access and available information, the condition and relative significance of individual resources, and the availability of assessments published elsewhere.

The discussion of Fort Marcy and its adjacent roads and rifle trenches is the most detailed condition assessment in the study. Discussion of Native American contexts in this study is based on published and grey-literature reports; therefore, the details available vary.

CHAPTER 2

Native American Context for the Potomac Gorge and the Little Falls-Pimmit Run Area

I. Introduction

Human habitation of the upper Potomac River may extend to the end of the last Ice Age, many thousands of years before the arrival of Europeans in the Chesapeake drainage, though there are only a few finds that indicate such a presence. There is a very clear presence of Native Americans on the islands and banks of the Potomac River above and below the falls during the pre-ceramic Archaic Period, which began 10,000 years ago, and this vicinity has been important to the hunting and foraging economies and political organization of indigenous people until well after the establishment of English colonies in Virginia and Maryland. This chapter describes these cultural associations and the archeological evidence that supports them.

The Potomac River Basin is overshadowed to a degree by the volume of scholarship on other regions of Native American settlement within the Chesapeake region, particularly regarding the Algonquian-speaking people of Virginia and the Powhatan. This uneven focus probably reflects a set of political calculations of the first English settler-colonists who laid down the very foundations of received histories of indigenous people in the Chesapeake in the seventeenth century, to ally with the Powhatans, as well as reciprocal maneuvers from the Powhatan to contain English influence in the region (Gallivan 2007; Rice 2007). John Smith's 1607 explorations did not pass beyond Great Falls and he described no Native American settlements on or near Pimmit Run or the adjacent Palisades. And yet, archeological investigations stretching back to the late nineteenth century and the establishment of the Smithsonian Institution's Bureau of American Ethnology (BAE) show that Native Americans made use of the environs of the Potomac River below Little Falls, and may have occupied this area for 10,000 years or more (Cissna 1990:8; Humphrey and Chambers 1985; Mintz et al. 1993a:7-15).

There has been episodic research on Native American contexts adjacent to the GWMP near Pimmit Run and the Little Falls of the Potomac River, but no synthetic works exist offering integrated, explanatory models for the development of Native American societies in the middle range of the Potomac River Basin. There are two prominent regional archeological studies for the Chesapeake Region, and these contribute a great deal to our understanding of indigenous societies, particularly as they appeared to the first English colonists entering the region. The first of these studies regards the development of Algonquian culture in the lower Potomac Valley, and introduces archeological data from an area on the southern shore of the Potomac River, the Chicacoan locality between territories consolidated politically under the Powhatan to the south and the Conoy people to the north (Potter 1993). The second study addresses the breadth of the James River Valley as it descends from its headwaters to the Piedmont and Coastal Plain in Virginia (Gallivan 2003). This chapter provides an overview of the sequence of Native American cultures associated with the inner floodplain of the Potomac River, its islands, tributaries, and

adjacent areas of the Piedmont **(Figure 2.1**), reviews the history of archeological research pertinent to the current study area, and describes the archeological record for the Potomac River Gorge between Little Falls and Pimmit Run, noting Native American sites occurring within or adjacent to this segment of the GWMP.

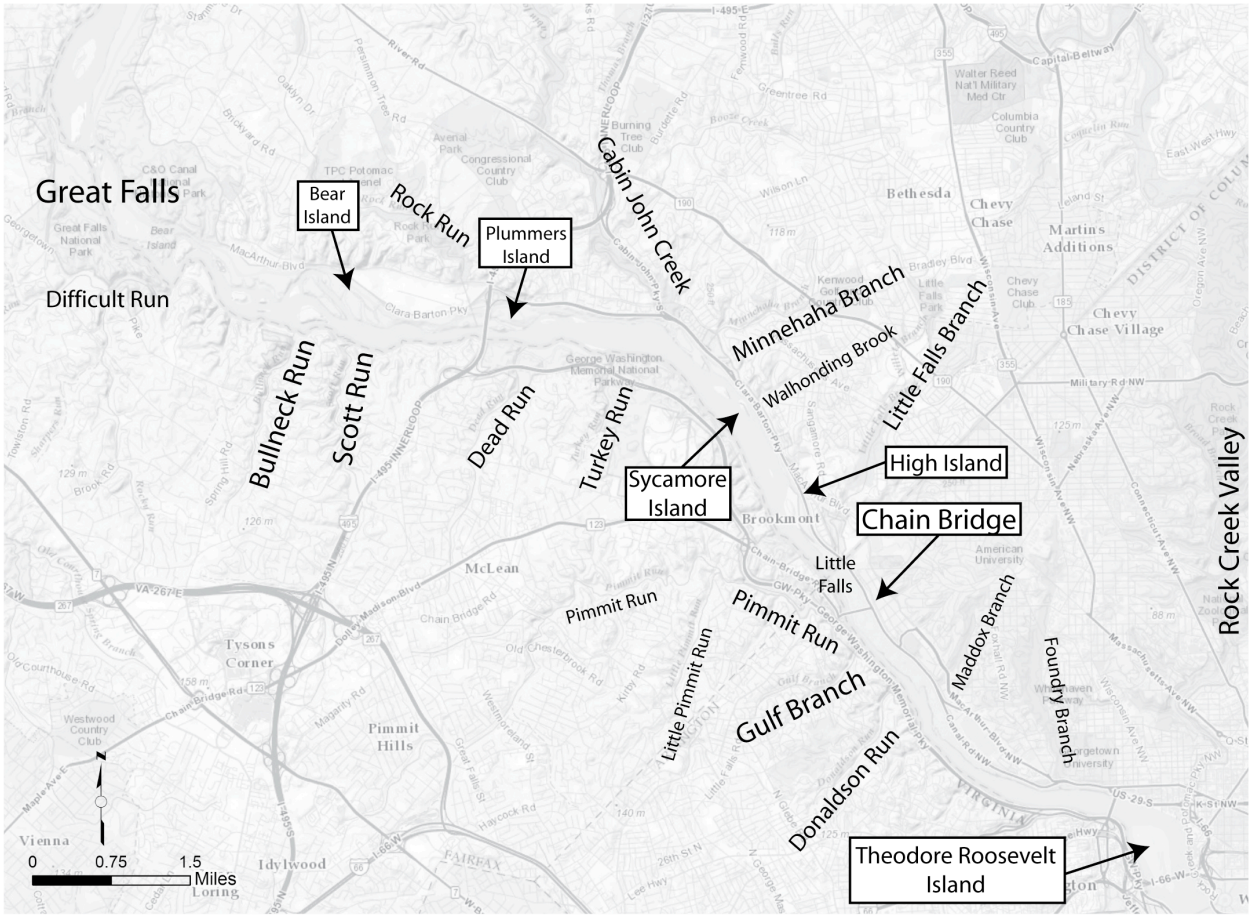


Figure 2.1. Overview Depicting Locations of Tributaries and Island of the Potomac River in the General Study Area.

The following overview is drawn from Dent's unsurpassed *Chesapeake Prehistory* (1995), portions of Barbara Little's *National Capital Area Archeological Overview and Survey Plan* (1995), Humphrey and Chambers' *Ancient Washington: American Indian Cultures of the Potomac Valley* (1985), and other sources as identified below.

II. Chronological Overview of Native American Archeological Contexts

Numerous schemes exist for organizing the Native American past of the Chesapeake Bay region into chronological periods. Barbara Little (1995:62; 1996:12) presents a series of distinct chronologies that have been proposed by scholars during the 1980s and 1990s, or are in use with state and county agencies. These differ slightly in the absolute date ranges, relevant diagnostic

markers, and terminology applied to describe each major chronological period. Furthermore, it can be expected that the cultural-historical sequence across different physiographic regions might differ, particularly as populations became more settled and territorial boundaries more fixed towards the end of the Archaic Period.

Richard Dent, Jr. (1995:9) proposes the following sequence of periods and subperiods in his regional synthesis *Chesapeake Prehistory*, and Little (1995:61-62) uses much the same sequence in her archeological overview of the National Capital Area. As noted by Little (1995:45), dating in the archeological literature is expressed in years before and after the Christian era (BC and AD), and before and after the current era (BCE and CE). This study will present absolute dates as years before present (BP), and following convention in historical archeology, protohistoric and historic periods will be discussed in years or centuries AD.

Table 2.1. Precontact Chronology for Native American Occupation in the Chesapeake Bay Watershed (Dent 1995: Table 1.1).

Period/Subperiod	Absolute Date Range (BP)
Paleoindian	ca. 11,000 - 10,000
Archaic	10,000 - 3,000
Early Archaic	10,000 - 8,000
Middle Archaic	8,000 - 5,000
Late Archaic	5,000 - 3,000
Woodland	3,000 – 343
Early Woodland	3,000 - 2,300
Middle Woodland	2,300 - 1,050
Late Woodland	1,050 – 343

Both Stephen Potter (1993:62-89) and Martin Gallivan (2003:59) use very similar schemes in discussing Native American contexts in the Lower Potomac and James River Valley systems, though they bracket the period from AD 1500 through early European contact as the Protohistoric and/or Contact Periods, terms that Little uses as well. Potter's sequence for the Woodland Period relies closely on published radiocarbon dates associated with pottery types diagnostic to each subperiod. While the calibration for radiocarbon assays continue to be refined (e.g. Fiedel 1999), Gallivan (2010) does not differ significantly from the above scheme in his review of recent literature, focused primarily on current research on the Woodland Period in the James River Valley in Virginia. Additionally, recent studies have extended the Native American presence in North America further into the past, so that the arrival of Paleoindian people in the Chesapeake watershed seems certain to be earlier than scholars only a decade ago would consider (Adovasio 2002; Dillehay 2009; Fiedel 1999, 2000; Stanford and Bradley 2012).

Paleoindian Period

The Paleoindian Period represents the earliest human presence in the Americas, and is associated with the initial entry into and colonization of the Chesapeake Bay watershed by small groups of

hunter-gatherers at the end of the Pleistocene, or the last Ice Age. David Anderson (1995; Anderson and Gilliam 2000) subdivides this period into the Lower, Middle, and Upper Paleoindian Periods while others designate these periods according to projectile point typologies (Little 1995:84). The Lower Paleoindian subperiod represents the initial colonization, which is completed by approximately 10,900 BP. During the Middle Paleoindian subperiod, 10,900 to 10,500 BP, regional populations are established and concentrations of population and indications of fixed migration routes begin to appear in the archeological record. During the Upper Paleoindian subperiod, regional populations of Paleoindians begin to adapt to local conditions, and habitual use of land for resource extraction translates into the establishment of territories with loosely-defined boundaries by approximately 10,000 BP to the extent that "population growth would have led, over time, to group fissioning, range restriction, and the adoption of new resources, the hallmarks of Middle and particularly the Late Paleoindian subperiods across the region" (Anderson 1995:11). In addition to new geographic environments, Palaeoindian people were also faced with a changing climate. Post-Pleistocene climate change was not as dramatic in the eastern United States as in the Great Plains and the West (Dent 1995:72-95; Little 1995:82-83), and subsistence strategies in the east were quite varied during the Pleistocene. Humphrey and Chambers (1985:10) write that "the subsistence economies of Eastern cultures form an unbroken continuum from the late Pleistocene to relatively recent times, but within this continuum there is enormous regional and seasonal differentiation." According to Dent, there is no unassailable evidence that Paleoindian people east of the Mississippi River hunted the largest prey animals of the late-Pleistocene, such as mastodons, as did their western contemporaries. That said, there is actually very little evidence of Paleoindian subsistence in the Chesapeake Bay Watershed (Dent 2007; Dent 1995:142).

In part, the paucity of evidence stems from the fact that much material that would constitute the broadest possible evidence for subsistence practices, beyond larger faunal materials, requires special sampling recovery techniques such as flotation. Most of the archeology of Paleoindian sites was conducted before these techniques were widely applied. However, excavations at the deeply buried site of Shawnee-Minisink in the upper Delaware Valley in northeastern Pennsylvania returned considerable data when careful recovery techniques were utilized during investigation of intact Paleoindian living surfaces and assemblages (Dent 2007; Humphrey and Chambers 1985:9; McNett 1986). This site might be considered analogous to Paleoindian occupations on the Inner Coastal Plain of the Chesapeake Bay Watershed. Sampling of three hearths at the Shawnee-Minisink Site yielded carbonized seeds and fish bone. Grass seeds and small terrestrial gastropods indicated late summer occupation of the site. The overall assemblage from Shawnee-Minisink indicates intensive exploitation of a broad range of resources rather than a reliance on hunting, and demonstrates the overall familiarity of Paleoindian people with a diverse resource base consisting of local plant and animal foods. Richard Dent (2007) associates this broad resource base with a low-risk subsistence strategy very different from earlier conceptions of Paleoindian lifeways as primarily big-game hunters.

Paleoindian material culture -- and more specifically their toolkits -- are non-specialized, widely standardized, and highly portable. Important focal points of Paleoindians people in the Chesapeake Bay Watershed were sources of preferred stone tool-making material (Humphrey and Chambers 1985:9). Dent and others describe the Paleoindian peoples in the Chesapeake region as connoisseurs of chert who showed a clear preference for the highest-quality lithic materials, as evidenced by a small number of finds located nearby to the current study area. In

general, the choice of materials for flintknapping is broader at more developed camps and activity areas in the Chesapeake area (including local, coarser quality quartz and quartzite), while fine-textured cryptocrystalline cherts are found away from sites, usually as isolated points (Dent 1995:139-141).

It is an open question regarding when the Coastal Plain of the Chesapeake Bay watershed was first occupied by Paleoindian people. From the nineteenth century until after World War II, Paleoindian lifeways in the Chesapeake Bay Watershed were interpreted based on surface finds of individual projectile points, which were then placed into chronologies developed in other parts of North America. This methodology, which applied a single chronology across the United States, led to the interpretation that populations the Clovis people of the Lower Paleoindian period expanded rapidly and that they spread quickly across America, sharing a single, adaptable tool kit and subsistence base. This interpretation has grown insupportable as Clovis no longer represent the earliest human habitation in the Americas, and there is archeological evidence of considerable diversity in the lifeways of Clovis people in different regions (Dent 1995:105).

One of the best-known pre-Clovis sites in eastern North America is the Meadowcroft Rock Shelter in southeastern Pennsylvania. Secure radiocarbon dates obtained by James Adovasio at Meadowcroft place the earliest occupation of that site at least 16,000 BP, and possibly as early as 19,600 BP (Adovasio et al. 1978, 1980, 1990). Humphrey and Chambers (1985:7) were sufficiently convinced by the pre-Clovis finds at Meadowcroft to suggest that the first human groups could have entered the Chesapeake region between 10,000 and 20,000 years ago. The site of Cactus Hill on the Nottoway River in southeastern Virginia has yielded radiocarbon dates of approximately 15,000 and 16,600 BP from charcoal recovered in the same contexts as prismatic blades of a quartzite material, somewhat deeper than Clovis-age chipped stone artifacts of chert also found at the site (Wagner and McAvoy 2004).

These securely dated sites introduce the possibility of very early occupations of the Chesapeake Bay watershed, though no pre-Clovis sites have been identified within the Potomac River Basin or adjacent areas. It is likely that the earliest sites associated with human occupation of the Chesapeake region are currently underwater: when sea levels rose at the end of the Pleistocene, forming the Chesapeake Bay, formerly occupied locations would have been inundated. Very few stratified Paleoindian sites have been identified in the Chesapeake Bay watershed. Dent (1995) describes sixteen Paleoindian sites with stratigraphy in the region, mostly clustered south of the James River. The Williamson Site is the most extensive of these, and was first reported by McCary in *American Antiquity* in 1951. The site yielded 175 fluted points and over 2,000 scrapers. The diverse tool assemblage from the site includes “fluted bifaces, cores, preforms, knives, drills, gouges, wedges, end-scrapers, side-scrapers, spoke-shaves, gravers, perforators, denticulates, beaks, hammerstones, and anvils” (Dent 1995:109). The Williamson Site occurs in an ecotone or physiographic transition at the western edge of the Virginia Coastal Plain on a tributary of the James River, close to a source of high-quality chert material (Dent 1995:107-109; Hill 1997; Humphrey and Chambers 1985:8; McCary 1951). Non-site finds of isolated Paleoindian points are also clustered in this area.

Dent (1995:108, 120-121) identifies a pattern in the distribution of Paleoindian sites and isolated finds on the western side of the Chesapeake Bay, whereby sites are distributed between the James River system in the south, and lands north of the Potomac River on the north, with no

stratified Paleoindian sites and a low number of isolated points occurring in between along the York, Rappahannock, and lower Potomac River drainages.

Three sites represent the northern cluster. The Higgins Site on the Inner Coastal Plain near the Patapsco River yielded no radiocarbon dates, but is believed to be a short-term Paleoindian camp for processing game (Dent 1995:115-116). The Pierpoint Site is located on the Potomac River just above the Fall Line at the confluence with Seneca Creek. The Pierpoint Site has yielded three fluted points and an assemblage of Paleoindian tools, but a formal report documenting investigations at the site has not been published. The Catoctin Creek Site, which was excavated by Dent, was originally investigated by the Potomac River Archaeological Survey (PRAS) during the early 1970s. The site was certainly used for chipped stone tool manufacture, and a number of exhausted tools were also recovered (Dent 1995:107-120). The Paw Paw Cove Site on Maryland's Eastern Shore comprises a fourth site in this northern cluster, but is excluded here by virtue of its distance from the immediate study area.

The District of Columbia is just south of the maximum reach of the glaciers that formed during the last Ice Age and Paleoindian sites cluster on or near the Fall Line. This zone offers diverse resources associated with the transition between two distinct physiographic provinces, and it channels human and animal movements by offering a place to cross over waterways such as the Potomac River (Humphrey and Chambers 1985:10). Humphrey and Chambers (1985:10) highlight connections between Paleoindian sites in the Potomac basin and possible north-south movements of Paleoindian populations, seeing a natural migration route linking the Middle Atlantic Piedmont with Ohio, Pennsylvania, Tennessee and Mississippi. Several Clovis-style fluted projectile points have been recovered from the Washington, DC., area, including three from along the Anacostia River and one from Northwest Washington, all collected during the nineteenth century (Humphrey and Chambers 1985:8).

Paleoindian migrations encompassed enormous territories spanning different physiographic areas and river drainages, and it might be said that the north-south divide in the distribution of Paleoindian sites in the Chesapeake reflects the scale of those territories. The clustering of sites and isolated finds associated with the Paleoindian Period north of the Potomac River, and south of the James River, with a considerable space in between where very few Paleoindian sites have been identified, could offer evidence for two distinct territories. Within those territories, Dent (1995:73-75) suggests that bands followed a seasonal migration with residential bases on the present-day inner Coastal Plain of the Chesapeake Bay Watershed during the cold months, and along the Ancestral Susquehanna River – the course that the river followed prior to the Post-Pleistocene inundation of the bay – during the warm months. Marine regression, the infilling of the Chesapeake Bay as a result of the warming climate after the end of the last Ice Age, has undoubtedly caused the inundation of a significant portion of the archeological record for the Paleoindian Period, as well as the Archaic Period that followed. Paleoindian sites on the inner margin of the Coastal Plain near the current study area represent only a portion of the pattern of seasonal migration, a subset of Paleoindian activities (Blanton 1996; Dent 1995:73-75; Little 1995:86).

Archaic Period

Where the Paleoindian Period represents a relatively brief span of time identified with initial settlement, the Archaic Period represents the gradual adaptation of established populations to local conditions and resources over approximately 7,000 years. During the Archaic Period, there is marked growth in population, expansion into areas that were unsettled or not used during the Paleoindian Period including those river systems lacking Paleoindian sites, and technological developments allowing the subsistence base to be broadened considerably. While population pressure was virtually absent between Paleoindian groups, during the Archaic Period territories are more and more constrained, and as a consequence, archeological sites show frequent reoccupation. The Archaic Period is also marked by the appearance of stone mortars, pestles, and grinding stones (Humphrey and Chambers 1985:11); food-processing technologies that signal the exploitation of nuts and seeds, and also ground-stone axes, mauls, and adzes used for felling trees and working wood. Pecked and drilled banner stones and notched or bifurcated projectile point styles mark the introduction of the atlatl, a greatly improved hunting weapon. The process of marine regression is completed by around 5,000 BP (Little 1995:86) creating the Chesapeake Bay, rivers, and associated landscapes and environments with which we are now familiar. James Tuck (1978:35) writes that the Atlantic Coastal Plain "seems to have been one of the most conducive to human utilization of any area of the northeast," and it must be equally true of the uniquely vast estuary of the Chesapeake Bay. Dent (1995) distills all of this into two processes, which progressed unevenly during the Archaic Period: adaptation to the Holocene climate and intensification and experimentation with the resulting subsistence base.

The Archaic Period is generally subdivided into Early, Middle, and Late subperiods. Tool assemblages from the Early Archaic resemble Paleoindian tool kits, with the addition of some ground stone implements for plant food processing. Hearths are more formal than those seen during the Paleoindian Period, and are sometimes found with impressions of basketry or netting in the basin-shaped lining. Fire-cracked rock appears on sites, indicative of stone-boiling, steaming and similar cooking techniques, all of which helped to make nutrition in foraged foods such as tubers more readily available. Carbonized nut fragments are sometimes recovered from hearths. Overall, the distribution of settlements resembles the pattern set by Paleoindians with residential camps in upland riverine environments and shorter-term occupation of floodplain and inland sites between river valleys. It is important to remember that some Early Archaic sites may have been inundated during the marine regression of that period, and are unavailable to researchers (Blanton 1996).

During the Middle Archaic Period, stemmed projectile points replace notched point styles though bifurcated points persist, and the first banner stones or atlatl weights appear in the archeological record. Fishing technology appears, represented by ground and incised stone net weights, and bone, wood and shell materials are incorporated into tool kits. Increasingly, seasonal fishing sites are located adjacent to areas where aquatic resources are available with upland camps occupied during fall and winter. Near the current study area, the Potomac Avenue Site, located below Chain Bridge between the Delacarlia Reservoir and Arizona Avenue, represents such an Archaic Period fishing site. This site was investigated by Charles McNett during the 1970s and interpreted as a small fishing camp for the seasonal harvesting of anadromous fish ascending the Potomac River to spawn. The Potomac Avenue Site was used sporadically from the Early

Archaic through the Middle Woodland Period (McNett 1972), and indicates the people living here periodically exploited the waters below the Potomac River Falls.

The proportion of local lithic materials found in Middle Archaic tool kits increases, and quartzite is heavily used, possibly indicating diminished access to quarrying sites in the Piedmont and Valley and Ridge physiographic zones further west, where better-quality lithic material was available. At the same time, marine regression again introduces some bias such that Middle Archaic components at upland sites are best represented in the archeological record due to the flooding of lower-lying sites. Upland settlement emphasizes interior wetlands, such as stream junctures, floodplains of smaller tributaries such as the flats adjacent to Pimmit Run, and similar locales. Oyster shells are present but there is no evidence of intensive exploitation of oysters during the Middle Archaic. The first evidence of structures is found at Middle Archaic sites in the southeastern United States and in the Midwest. People of the Middle Archaic begin to bury their dead in cemeteries; previously, Early Archaic burials were interred individually.

Late Archaic developments include increasing usage of storage features, seen in excavated pits and basins containing caches of tool blanks, projectile points, but not food. Near the end of the Archaic Period, approximately 500 years before the Woodland Period began, containers carved from steatite or soapstone appear in the archeological record. These are oblong, rounded, flat-bottomed vessels, sometimes having lug handles, and they are frequently found as fragments (Humphrey and Chambers 1985:15). Sites overall are more clearly developed and larger in size, though this has much to do with periodic reoccupation of the same locales and does not necessarily reflect larger settlements. Shell middens begin to appear in the Late Archaic Period as exploitation of aquatic resources intensifies, particularly of shallow-water mollusks. There is clear preference for settlement in river and stream valleys, where seasonal aggregation into larger multi-band groups occurs and prolonged periods of semi-sedentism develop. Some cultivation also takes place during the Late Archaic Period, and the beginnings of domestication of gourds and small eastern grains occurs without seriously interrupting seasonal migrations (Gremillion 1993, 1996). Burials with grave goods begin to appear as well.

Two overlapping projectile point traditions develop during the Late Archaic Period: a narrow blade tradition extending from 5,000 to 3,500 BP, and a broad blade tradition that extends from 4,200 BP until the end of the Archaic Period in 3,000 BP. Dent and others suggest that these two different projectile point styles and the sites where they are found represent distinct subsistence strategies. Narrow blade sites are associated with turkey and deer hunting and upland ecologies, and are found in Piedmont and Coastal Plain environments. Dena Dincauze (1971) suggests that the Late Archaic narrow blade tradition, which is widespread, was something that evolved or developed in place on the Atlantic Coastal Plain, including the coastal plain in the Chesapeake region, the outcome of continuous and stable habitation reaching back to the Middle Archaic Period and perhaps earlier (Dent 1995:200-202; Dincauze 1971).

These sites represent a continuation of earlier Archaic subsistence patterns, whereas broad blade sites are clearly focused on estuarine areas, concentrating on rivers and waterways. Broad blade sites are larger, and more numerous than narrow blade sites and show an emphasis on the exploitation of fish. Because Late Archaic broad blades occur somewhat earlier well south of the Chesapeake Bay Watershed, by approximately 4,500 BP, Dent (1995) considers Turnbaugh's (1975) hypothesis that the broad blades represent a migration into the Middle Atlantic and Northeast by specialized spear-fishers. Following this argument, the narrow blade tradition is

indigenous to the Chesapeake Bay Region and has continuity with earlier hunter-gatherer lifeways, whereas the broad blade tradition is an incursion that arrives preadapted to take advantage of the Bay's emerging estuarine resources. Ultimately, Dent (1995:147-215) divides the Archaic Period into two major subperiods, where most of the Archaic plays out as a continuation of developments that began with Paleoindian populations before 10,000 BP, and an entirely new practice that is introduced after 4,200 BP and characterized by an intensification in marine resource exploitation that corresponds with the introduction of broad blade projectile points.

Steatite, or soapstone, vessels are associated with the broad blade tradition (Tuck 1978:37), and the apparent continuity between manufacture of steatite vessels and the first experimental ceramics leads to the conclusion that the Woodland Period societies that followed are the inheritors of the broad blade tradition arriving in the Chesapeake Bay Region after 4,200 BP, rather than the indigenous, and perhaps more conservative narrow blade tradition. Steatite material is exposed along the geological faults occurring at the juncture of Piedmont and Coastal Plain physiographic zones. Areas where this soapstone was quarried were examined by William Henry Holmes in 1890-1891, leading him to conclude that the material was being rough-shaped at the quarry and then detached from the substrate (Holmes 1897). The quarry sites examined by Holmes have since been lost to development, according to Humphrey and Chambers (1985:15), who note that "whole and fragmentary steatite vessels, and sherds of steatite-tempered pottery were particularly abundant before the turn of the century along the Potomac flood plain below Chain Bridge," with the Marcey Creek Site being an especially good illustration of this apparent technological transition from soapstone vessel to manufacture of ceramics tempered with crushed soapstone, a tangible link between the end of the broad blade tradition of the Archaic Period and the beginning of the Woodland Period.

Woodland Period

Developments during the Woodland Period include the widespread adoption of pottery; increasing sedentism and the domestication of certain plants; the development of social inequality, political integration, and complexity, particularly during the Late Woodland Period; and a new mortuary tradition. Plants domesticated during the Woodland Period included native plants such as sunflower and small grains like pigweed, sumpflower, and goosefoot, and later the introduction of the tropical cultigens maize and squash. The new mortuary tradition was more elaborate than burial styles seen in earlier periods, but distinct from traditions of the Adena and Hopewell mound builders centered in Ohio and Illinois (Humphrey and Chambers 1985:17-18).

Agriculture in the Woodland Period is complicated by the fact that indigenous societies in the Chesapeake Bay Watershed never entirely break from the exploitation of and dependence upon seasonally available resources. Dent (1995:243) uses the term *promotion* rather than domestication to describe the relationship between Woodland people and eastern small grains, because throughout much of Eastern North America native plants are domesticated without altering the fundamentally seasonal hunting and gathering lifeways of Native Americans. The archeological record shows domestication *without* agriculture, year-round sedentism, or the demographic changes—namely increases in population—that make the transition to food production irreversible (Gremillion 1993). In the Chesapeake, hunting and gathering remains important for the subsistence of most groups, even after the introduction of maize agriculture, and cultivated foods may never have contributed more than half of the diet (Dent 1995:251-254).

Pottery spreads quickly throughout the Middle-Atlantic region after 3,000 BP, beginning with experimental wares formed from slabs of clay and resembling earlier steatite bowls. Marcey Creek Ware, an early ceramic type named for the Marcey Creek site in Arlington County, Virginia, are tempered with crushed steatite and generally resemble the soapstone vessels of the Late Archaic Period in form. They are diagnostic of the Early Woodland Period (Tuck 1978:37). These wares are restricted to the Piedmont and Outer Coastal Plain. In addition to this container storage, in-ground storage infrastructure appears on sites in the Piedmont. Periods of sedentism are extended, are not permanent.

A degree of technological homogenization takes place during the Middle Woodland Period, as Popes Creek and Mockley Pottery types become widespread (Snow 1978:61). Dent (1995:236) describes this as the Popes Creek-Mockley Ware "hegemony", suggesting the degree to which uniformity in pottery manufacture reflects wider cultural uniformity across the range of these wares.

Extensive shell middens develop during the Middle Woodland Period, some of them many meters deep with oyster and other shellfish. Settlements cluster at the Inner Coastal Plain ecotone, where overwintering sites are located. A clear territorial boundary between Native American groups develops along the Fall Line, and this territorial frontier persists throughout the rest of the Woodland Period. There is a clear effort to obtain non-local -- though not necessarily high quality -- stone for projectile points, indicating trade and exchange across the Fall Line.

Late Woodland Period sites are well developed, and some are occupied by sedentary or nearly sedentary populations. Town sites feature evidence of diverse activities, containing substantial dwellings, shell middens, refuse middens, and ample storage infrastructure in the form of stone-lined storage pits called cists, and above ground granaries and warehouses as described by early English colonists. Longhouse structures with internal partitions are present at Algonquian sites but house patterns and sizes are variable. Some town sites are fortified with stockades or palisades, sometimes double palisades (Dent 1995; Gallivan 2007).

The reorganization of town sites and the arrangements of households and storage is a key point in Martin Gallivan's (2007) analysis of the historical trajectory towards the establishment of chiefdoms on the James River during the Woodland Period. In his study, Gallivan describes a series of changes that took place from the beginning of the Middle Woodland Period until the arrival of English colonists, pertaining to sedentism and residential stability at town sites, the reorganization of Algonquian households, storage, and household production, and a shift in community size that marks the appearance of agricultural towns. One of the most important transitions Gallivan describes is a shift during the Late Woodland Period from hamlet-sized communities where food stores are held communally, to towns where households retain at least a portion of their surplus privately. This transition amounts to a reorganization of production that lends itself to the mobilization or leveraging of surpluses by elites. Trade accelerates in step with these changes in community organization, and access to exotic goods creates a further basis for elites to differentiate themselves (Gallivan 2007).

Gallivan's attention to settlement size harkens to an earlier and equally important study by Stephen Potter (1993), which provides an explanation for the development of inequality and cultural complexity among the Algonquian people of Virginia during the Late Woodland Period. Potter's survey of Native American sites in the Chicacoan Area of the lower Potomac River

shows an increase in settlement size until a clear hierarchy develops with sites that can be ranked according to size categories. Potter's survey identified 181 archeological sites, ranging from 10,000 years old to those from the nineteenth century within a sixty-five square kilometer (twenty-five square mile) area. He analyzed a sample of fifty-six sites dating after 1,750 BP, late in the Middle Woodland Period, and throughout the Late Woodland and early colonial periods. As a result, Potter was able to clearly identify aggregation of population into larger settlements coinciding with a dry climatic period that took place during the Late Woodland Period, and also with the adoption of maize agriculture in the Chicacoan area. These changes satisfy the preconditions for the rise of a chiefly elite (Potter 1993).

Christian Feest (1978b) describes the social organization of the Virginia Algonquian groups of the Late Woodland Period as based in social stratification rooted in wealth accumulation and hereditary status held by *werowances* or chiefs. Tribes consisting of one or more towns were led by chiefs inheriting their status matrilineally. Chiefs and their households and retinues were owed tribute, and tributary relations organized towns and tribes into ladder-like flows of goods, and thus labor. Tribute consisted of staples such as food and hides, but conditioned the exchange of prestige goods such as copper, wampum, or favorable chipped stone tool-making materials as well. Additionally, a chief's agricultural land was tilled and crops maintained through labor offered as tribute. This economy provided for the possibility of storage and redistribution of food and wealth in times of scarcity, reinforcing and legitimating the authority of chiefs and the tributary economy itself. Though resembling a monarchy according to Feest (1978b:260-261), there was also the possibility for social mobility and promotion of individuals to the status of chief through the acquisition of goods and badges of authority. Feest (1978b:261) is careful to note that descriptions of Algonquian social organization pertaining specifically to the Powhatan may not accurately reflect the traditions of neighboring groups, especially beyond the area of Powhatan political influence along the Coastal Plain between the James and Rappahannock River systems.

Regionally, there is nucleation of settlement during the Late Woodland Period, so that distinct polities occupy discrete territories with buffer areas in between. These polities included the Powhatan tribes on the Virginia Coastal Plain, the Monocan above the Fall Line on the Virginia Piedmont, and the Piscataway on the northern Western Shore of the Chesapeake, which also included the Conoy on the Potomac River who were buffered from the Susquehannock further north. Objects and human remains recovered archeologically show variations that are used to distinguish these groups from one another. Chickahominy and Townsend Wares are diagnostic to the Late Woodland Period. Townsend Ware is considered a derivative of Mockley Ware, and Townsend Ware is concentrated in the core Powhatan area by the end of the Woodland Period. Small triangular projectile points also predominate during the Late Woodland Period, indicative of the use of bow and arrow (Dent 1995:243-248).

Placement of bundled human remains in ossuary burials in the Chesapeake Bay Watershed begins approximately 500 BP, and continues to the last quarter of the seventeenth century. Ossuary burial appears to begin earlier on Maryland's Eastern Shore. Late Woodland Period ossuaries occur in certain settings in the Potomac River drainage. Ossuaries are known from the middle ranges of river basins, and lie in sheltered locations with open views of the water, often open water viewed towards the west. They typically occur near town sites rather than being far removed from settlements, and with few exceptions, they are associated with Algonquian-

speaking groups rather than Siouan-speaking or Iroquois groups (Curry 1999:68-73, Feest 1978a:245).

Early Colonial Period

The middle range of the Potomac River where it descends the falls lies outside of the area controlled by the thirty or more tribes united under Powhatan's paramountcy. Werowocomoco, the seat of the Powhatan paramount chiefdom,, was located on the York River, and the Powhatan world encompassed portions of the York, James, and Rappahannock River drainages (Humphrey and Chambers 1985:23). East of the Potomac River and the area of present-day Washington, DC, was the territory of the Conoy, a peer polity to the Powhatan tribes that was consolidated under the Piscataway (Humphrey and Chambers 1985:24).

Based on a composite of Smith's 1612 and John White's 1585/6 maps, Christian Feest (1978a:241) has identified two Native American settlements south of the confluence of the Anacostia and the Potomac Rivers. One is called "Nacotchtank", or sometimes Nacotchtanke, a palisaded chief's town depicted on Smith's map, and the other town is unlabeled. Smith described Nacotchtank as a small enclosure containing the household of a chief and associated religious structures, probably a temple that would also have served as a granary and storehouse. The town was estimated by Smith to have an overall population of 300 persons, including 80 warriors. This territory is identified with the Anacostank Tribe by Smith, a people believed to be confederates with the Conoy during the early colonial period (Humphrey and Chambers 1985:24).

Christian Feest (1978b:255) also compiles the historical maps of Smith and Don Pedro de Zúñiga, who published a map drawn by John Smith after it was intercepted by the Spanish in route to England in 1609, to show the locations of known towns and tribal territories associated with the Algonquian people of Virginia and their neighbors in 1610. The northernmost settlement on the west side of the Potomac River, a town labeled "Namoraughquend" on Smith's 1612 map (**Figure 2.2**), is located by Feest in the vicinity of Four Mile Run in Fairfax County. However, Smith locates this town more vaguely on the inside of a bend in the Potomac River west of the confluence with the Anacostia River. This may place the town of Namoraughquend adjacent to Roaches Run or another waterway obscured by development in Arlington County, near Analostan Island, today known as Theodore Roosevelt Island (Cheek et al. 1983:9). Smith's map indicates the limit on his explorations in the vicinity of Great Falls, though Netherton et al. (1978:2) instead interpret this to be the location of Little Falls, the furthest point that could be navigated by boat. No Native American settlements are identified on Smith's map between the falls of the Potomac River and the location of Namoraughquend further south although some (Netherton et al. 1978; Templeman 1959, both cited in Cheek et al. 1983) maintain that there were Native American settlements on other nearby waterways, including Pohick, Accotink, and Little Hunting Creeks. Feest (1978a:241) also locates a town named Queponca near Rock Creek on the eastern shore of the Potomac River opposite Analostan Island, occupied between 1678 and 1686.

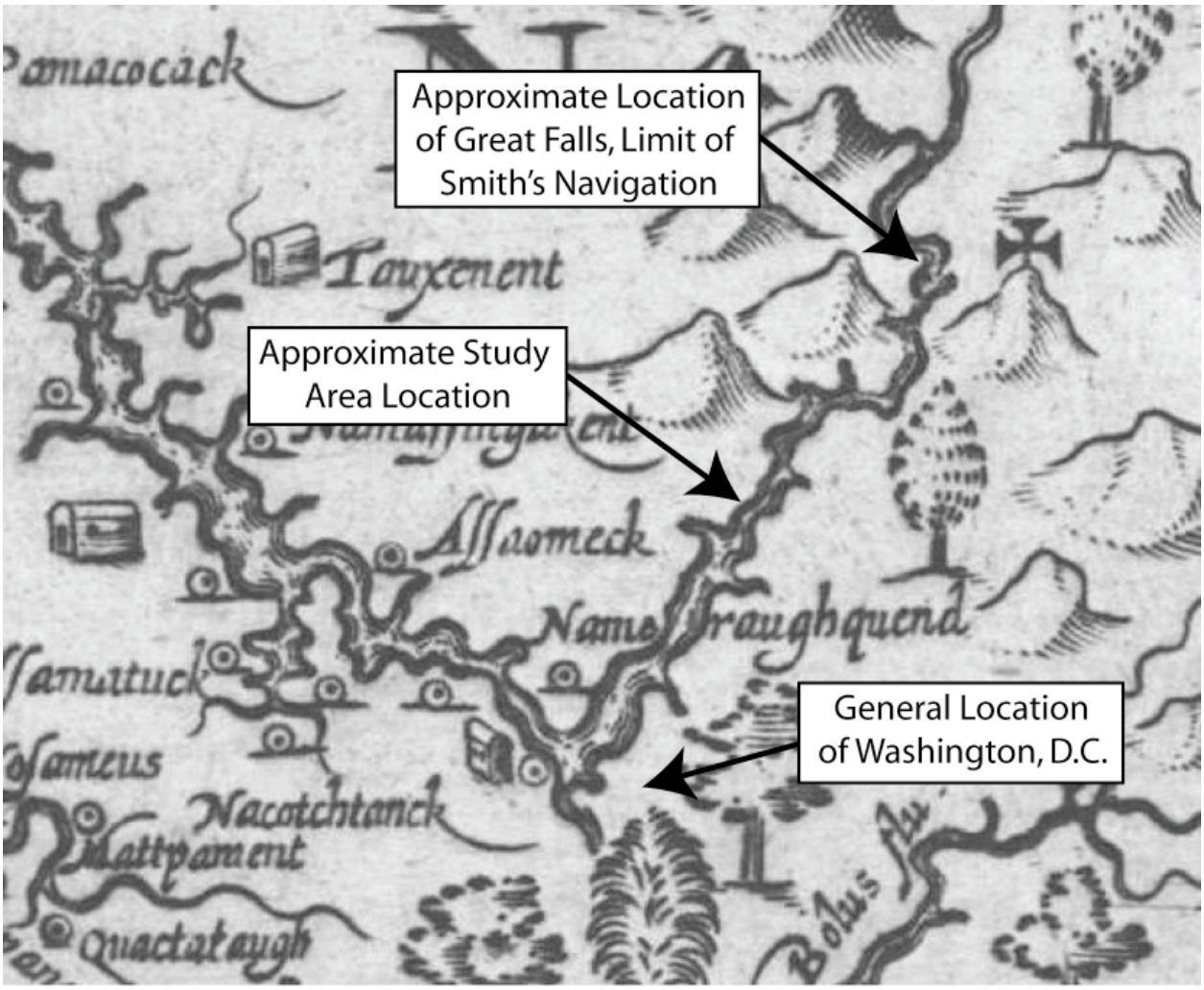


Figure 2.2. Detail of John Smith's 1612 Map of Virginia, Depicting Settlements at Nacotchtank and Nameraughquend on the Potomac River; Cross At Upper Right Indicates the Limit of Smith's Exploration, At or Above the Current Study Area (Image Source: National Park Service 2014).

The Early Colonial Period in Maryland. The colonial encounter in Maryland had a very different character from what the Jamestown settlers experienced at the beginning of the seventeenth century. Spanish explorers reached the mouth of the Potomac River where it enters into the Chesapeake estuary in 1588, searching for survivors from the Roanoke Colony according to Feest (1978b:254). While there is a history of interactions between the Spanish and Virginia Algonquian-speakers during the late sixteenth century, there is no evidence of Spanish contacts with indigenous people in the Potomac River Basin on the Inner Coastal Plain.

In Maryland, the business of the fur trade kept relations between the English and local Native Americans relatively peaceful, but there was also conflict. Henry Fleet traded on the Potomac River during the 1620s, and during one expedition in 1622 his party was attacked near the settlement of Nacotchtanke on the Anacostia River. Twenty Englishmen were killed, and Henry Spelman was beheaded, while Henry Fleet was taken prisoner. Fleet escaped and returned to

England five years later, only to organize financing to sail again to Maryland and trade for beaver pelts. He returned to the Potomac in 1631, setting up a trading post from his ship some distance downstream from Great Falls (two leagues or approximately six miles according to Humphrey and Chambers [1985:25]) only to be confounded by indigenous politics that worked to channel the trade in furs through proxies and middle-men among the Algonquian. Fleet described Nacotchtanke as a trading center where hundreds of Native Americans congregated. It was no doubt a political center as well, and seemed to Fleet to control the trade in beaver pelts from upriver on the Potomac (Humphrey and Chambers 1985:25). This parallels the circumstances of the English at Jamestown, where trade for English products such as copper items was usurped by the Powhatan, who attempted to monopolize contact with the English and channel copper and other items through their tributary network (Feest 1978b:255; Gallivan 2007).

It would seem that interactions between indigenous people occupying the vicinity of Little Falls and Pimmit Run, and English traders like Henry Fleet were carried out at some distance, with mediation from chiefly centers like Nacotchtanke. This would minimize direct contact between the English and indigenous people living near the falls, except where trading sites set the stage for interactions. Similarly, missionizing Jesuits had good relations with and baptized some of the Piscataway including the *Tayac*, or paramount chief, and two of his daughters (Humphrey and Chambers 1985:26). They did not, however, establish a presence among the Algonquian speaking people of the Inner Coastal Plain along the Potomac River. Jesuit missions in Maryland ended in 1645, and in 1673, the colony moved to resettle Native American groups allied with the English to a fortification near the Falls of the Potomac River, presumably within the area occupied today by Washington, DC. The Conoy, however, took up residence in Virginia, and then in the 1690s, began leaving, heading north, and ultimately into alliance with the Iroquois Confederacy (Feest 1978a:246; Humphrey and Chambers 1985:27-28).

The Conoy people who occupied the Coastal Plain along the middle range of the Potomac River are known ethnologically from study of mortuary sites, and there is a more distant ethnohistorical record that exists in the seventeenth-century writings of John Smith, as relayed by those including historian Phillip Barbour (1986) and Henry Fleet, and other chroniclers of the early colonial period. The *Archives of Maryland* is another valuable source that is mined by anthropologist Christian Feest (1978a) for his entry on the Nanticoke and related groups, including the Conoy, in the *Handbook of North American Indians*. The *Archives of Maryland* appears to be a source utilized by all ethnologists who preceded him during the first half of the twentieth century.

The Conoy were a group of allied Native American polities occupying both sides of the Potomac River, part of the larger political unit known as the Piscataway. The ethnohistorical record points to a recent arrival of the Conoy following the establishment of Nanticoke people on the Eastern Shore of Maryland. The relationship between Conoy, Nanticoke, and Delaware groups is, according to Feest (1978a:240), supported by linguistic evidence. The Accokeek Site south of Washington, DC, in Prince George's County was last occupied by the Conoy, and Feest (1978a:240) indicates continuity between Conoy contexts and earlier Woodland period materials from that site.

Paul Cissna's 1986 ethnohistory of indigenous people on the western shore of Maryland avoids the designation of Conoy except where he specifically refers to this chiefdom. Instead, he utilizes

the Piscataway designation as a catchall to describe the different Native American polities that occupied the Potomac and Patuxent River systems in Maryland immediately before and during the period of English colonization, where Feest (1978a) used the Conoy label to generally identify these same groups of Native Americans. Historiographically, the Piscataway of Maryland who left the colony in 1697 came to be identified as Conoy people by early twentieth-century ethnologists, perhaps because their emigration found them settled on Conoy Island in the Potomac River above the Falls, and later Conoy Town on the Suquehannah River during the first half of the eighteenth century (Cissna 1986:193). The designation of Conoy is how the various groups consolidated under the Piscataway during the colonial period are identified in the authoritative *Handbook of North American Indians* (Feest 1978a). Cissna's convention is observed in the following chapter, while the following utilizes both the Conoy and Piscataway designations according to the sources referenced.

While the Powhatan is the best-studied paramountcy in the Chesapeake, it is not clear how fitting an analogy the Powhatan provide for the Conoy or the Piscataway, in terms of their political and economic structure, integration, centralization, and sources of authority (Feest 1978a:240). Like other polities in the Chesapeake at the outset of European colonization, the Conoy were a tributary chiefdom composed of bands led by hereditary chiefs (*wizoes*), organized under a paramount chief (*Tayac,* according to Feest 1978a:245). It is difficult to reckon the size of this group from ethnohistorical data. In 1632, Henry Fleet estimated a total of 5,000 indigenous people living on both sides of the Potomac River, and from the distribution of settlements depicted on John Smith's 1608 map, we can suppose that these were divided equally on each side of the Potomac (Feest 1978a:242).

Subsistence among Algonquian-speaking people in the early colonial period included hunting and foraging as well as swidden, or slash-and-burn agriculture (Feest 1978a:244). The Algonquian subsistence model entailed hunting, fishing and gathering with a lesser reliance on cultivated foods, but agriculture certainly had its place in the seasonal round and contributed to yearly subsistence. Corn, beans, gourds, pumpkins and other crops were planted in spring between April and June. Summer months were spent foraging, hunting and fishing in small family-based bands, and harvest time comprised a distinct season in the yearly round. A time for paying tribute and redistribution of agricultural and other products, harvest season was also the most active political season for the Algonquian (Feest 1978b:258-259). A portion of this harvest was necessary for English subsistence from the beginning of their settlement and colonization, and a greater proportion was appropriated by the English following end of the Anglo-Powhatan conflicts in 1646 (Feest 1978b:259).

Later Native American history in the Chesapeake region is a narrative of racialization, displacement, and the dissolution of tribal identities through a loss of numbers, isolation, deculturation, and a series of economic and social policies that rendered traditional lifeways untenable. Generally, in Maryland recorded indigenous populations plummeted by 1700, and Algonquian groups abided trade and treaty with English colonists in the face of attacks from Iroquoian groups who entered the Chesapeake starting early in the Late Woodland period. The Maryland colony made treaties with Algonquian-speaking groups that ceded a great deal of authority, economic, and legal powers to the colonial government. The Conoy entered into or affirmed such treaties in 1666, 1670, 1692, and 1700 (Feest 1978a:242-243). Hostilities between Algonquian, Siouan and Iroquois groups subsided during the last quarter of the eighteenth

century as agreements and treaties were reached, and the English became the clearest threat to indigenous political enfranchisement and title to land (Feest 1978b:257-258).

In 1697, approximately 300 Conoy people – Cissna (1986:179-181) identifies them as members of the Piscataway people rather than the Conoy – left southern Maryland. They arrived first in the Bull Run Mountains of Virginia, and then two years later relocating to Harrison Island on the Maryland side of the Potomac River. In the first decade of the eighteenth century, the Conoy relocated to another island further north along the Potomac River, known today as Heater's Island in Frederick County. While at this location in 1704, an epidemic illness reduced their numbers. In the first half of the seventeenth century, the Conoy moved to settlements on the Susquehanna River, and by mid-century they were living with the Nanticoke at the mouth of the Juniata River in Pennsylvania, moving with them to New York during the 1750s and into Canada following the American Revolution. The Conoy retained a distinct identity from the Nanticoke even as they became one nation, joining with the Six Nations of the Iroquois. Another group of Conoy moved west with Nanticoke and Delaware groups, settling on the Maumee River in Ohio by 1792, and moving west through Indiana and Kansas and into Oklahoma by the time of the American Civil War (Feest 1978a:246).

Native Americans in Virginia were classified by state law as Negroes as early as 1705, and Virginia's Racial Integrity Law of 1924 would permit no designation other than "white" or "colored" to be recorded in birth records, enforcing a program of eugenics that persisted in Virginia until the 1970s (Wikipedia 2014). This was accompanied by struggle, resurgence, and revival of indigenous groups in Virginia and Maryland, particularly during the last quarter of the 20th century (Feest 1978b:262-268). Today the Pamunkey and Mattaponi tribes of Virginia retain associations with reservations of land secured by historical treaties during the mid-seventeenth century. An estimated 1,700 descendants of Algonquian-speaking people resided in Virginia at the time of the 1970 US Federal census (Feest 1978b:267). Today more than a dozen Native American tribal groups have received state recognition in Virginia, and in 2011, two tribes in Maryland received recognition from the state government as well. More Native American groups exist as 501(c)(3) nonprofit corporations or other such organizations in Virginia, Maryland, and Delaware.

Conoy remaining in Maryland lost their legal status as Native Americans and were racialized as free African Americans, and during the later nineteenth century were given the designation "Wesorts" differentiating them from people of African descent. The label is considered to be an extremely derogatory term (Cissna 1986:2). Still self-identifying as Native American, some of the 7,000 people of indigenous descent in Charles County, Prince George's County, and St. Mary's County, Maryland incoporated as the Piscataway Tribe in 1974 (Feest 1978a:247; Humphrey and Chambers 1985:29-30). The Piscataway-Conoy Tribe, officially incorporated as the Piscataway-Conoy Confederacy and Sub-tribes, Inc., and the Piscataway Indian Nation received state recognition from Maryland governor Martin O'Malley in 2011, after a decades-long struggle (State of Maryland Executive Order 01.01.2012.01 and 01.01.2012.02). Feest (1978a:247) indicates that other groups of descendents associated with the Conoy exist in Frederick County and elsewhere, generally along the Conoy's northern route.

III. Archeology in the Potomac River Basin During the Nineteenth and Twentieth Centuries

Archeology in the eastern United States has its roots in antiquarian collecting that took place during the seventeenth century, almost as soon as Europeans encountered indigenous societies. Archeology as a coherent tradition began to form during the second half of the nineteenth century, often as museum-based scholarship (Conn 1998; Hooper-Greenhill 1992; Humphrey and Chambers 1985:3; Stocking 1985). The Maryland Academy of Science and Literature was formed in Baltimore in 1844, and may have held collections of Chesapeake area artifacts (Dent 1995:30). In Washington, the Smithsonian Institution's Bureau of American Ethnology (BAE) was created in 1879, in the same year that the Anthropological Society of Washington formed, with Smithsonian ethnologist Otis T. Mason serving as vice president (Dent 1995:32).

Archeologist William Henry Holmes conducted surveys of the Potomac River drainage for the BAE in 1890 (Dent 1995:37; Holmes 1897; Humphrey and Chambers 1985:3; Manson 1948:223; Meltzer and Dunnell 1992). Holmes initially set upon the controversy raised at the end of the nineteenth century, over the possible existence of artifacts in North America that were comparable in form and antiquity to the oldest Paleolithic chipped stone tools found in Europe and other parts of the Old World, which we now know to be hundreds of thousands of years in age. In addition to visiting and debunking sites claimed to represent an American Paleolithic era, Holmes conducted systematic investigations into stone tool manufacturing, first at quarry sites on Piney Branch and Rock Creek, then at other regional prehistoric quarrying sites, including the areas adjacent to Great Falls, Little Falls and Pimmit Run. The results of his study were published by the BAE in a volume titled Stone Implements of the Potomac-Chesapeake Tidewater Province (Holmes 1897). Here he wrote:

> That portion of the Potomac between the head of tidewater and Great falls – about 10 miles of the most interesting and picturesque part of its course – possesses very considerable archaeological interest… The falls portion of the Potomac was evidently a great fishing resort for the aborigines, where at one time or another every available site was occupied for more or less permanent dwelling. …The most notable sites of the fishing villages are in the vicinity of Little falls. Some are on terraced bluffs overlooking the river on both sides, while others are on the floodplain, only a few feet above high tide or above the ordinary river current, being swept freely by every spring freshet (Holmes 1897:67).

This exploration of the Potomac River and other tributary waterways was directed at finding boulder fields that would have provided Native Americans with workable stone. Holmes' explorations of the Potomac River are described further in another of his works, a typological study of indigenous ceramic artifacts in the eastern United States (Holmes 1903), and his research in the Washington, DC area is also discussed by Humphrey and Chambers (1985), and Holmes's biographers David Meltzer and Robert Dunnell (1992). Gerard Fowke, also of the BAE, worked alongside Holmes to survey areas in the James River and Potomac River valleys (Dent 1995:41), as did William Dinwiddie and J. W. McGee (Humphrey and Chambers 1985:4).

A fallow period followed this *fin de siècle* enthusiasm for Chesapeake archeology, as the BAE shifted its focus to contexts in the western United States. Local anthropologists turned to ethnology of contemporary Native American communities that were struggling to maintain their traditions and cultural identities. James Mooney conducted salvage anthropology among the

Powhatan in Virginia, and Frank Speck did similar work with Nanticoke people in Delaware (Dent 1995:47; Gleach 2002). Avocational interest was strong enough for regional archeological societies to be established, including the Eastern States Archaeological Federation in 1934, the Archaeological Society of Virginia in 1941, and the Archeological Society of Maryland (ASM) in 1954. During the 1930s and 40s, Alice Ferguson's excavations at the Accokeek Creek Site, on the Maryland side of the Potomac River in Prince George's County, also helped bring the importance of archeological research on indigenous societies of the Chesapeake Bay Watershed back into focus (Dent 1995:43-50).

Avocational archeologists conducted additional surveys and some excavations in the Potomac River Basin during this period, above and below Great Falls. Richard Slattery and Hugh Stabler discovered the much-studied Winslow Site in Montgomery County in 1934. Slattery and Stabler also excavated on Selden Island in Montgomery County, on the west side of the Potomac River, beginning in 1938. There they noted Late Woodland Period artifacts on the surface, and uncovered a segment of a large wooden enclosure called a palisade (Slattery 1946; Slattery n.d.).

Selden Island had been investigated previously by J. Sipes starting in the 1920s, and is the location of a somewhat poorly documented group of burials that can be likened to an ossuary or ossuaries. The remains were disinterred by a number of persons during the first half of the twentieth century, some being excavated by members of the Southwest Chapter of the ASM in the mid-1950s. Over the years, the remains of at least seventy-five individuals were removed, many of them clearly bundle burials typical of Algonquian funerary traditions during the Late Woodland Period (Curry 1999:61-63, 69). Tragically the remains of these individuals are lost, a fact that reflects the frequent lack of institutional oversight in archeology during this period. The Hughes Site, located at Sycamore Landing across from Selden Island, was excavated by avocationals in 1937 and 1938, and approximately twenty-three individuals were uncovered from ossuary contexts (Curry 1999:64-67). Curry describes the burial features at Selden Island and the Hughes Site as proto-ossuaries that may have served as family ossuaries rather than community ossuaries as seen in other Late Woodland Period sites.

Closer to the current study area, Carl Manson first excavated the Marcey Creek Site in Arlington County near the Little Falls of the Potomac River during the 1940s, acknowledging the pioneering work of William Henry Holmes along the Potomac River at the head of the tidewater. Manson's summary report in *American Antiquity* shows a clear understanding of the importance of the Fall Line as a boundary of cultural areas, and the significance of Marcey Creek as a stratified site that marks the transition from the Late Archaic Period to the earliest pottery-making traditions in the Early Woodland Period (Manson 1948).

According to Dent (1995:61-63) three developments propelled a change in the practice of archeology in the Washington, DC area during the later twentieth century. Area colleges and universities, who had not employed academic anthropologists or archeologists after the end of World War II, began to establish anthropology departments. In addition, cultural resources management began to develop as an industry, with the establishment of state archeology offices during the early 1960s and the passage of the National Historic Preservation Act (NHPA) in 1966 (Davis, 2009) Finally, cultural-evolutionary approaches began to make inroads with the popularization of the New Archeology, which promoted regional surveys and development of hypotheses about cultural processes, where avocational research had been rooted in culture history, a more descriptive approach. The PRAS was created as an outcome of these

developments. The PRAS was a research consortium that included American University, Catholic University of America, and George Washington University. Charles McNett, William Gardner, and Robert Humphrey received grants from the National Science Foundation in 1969 and 1970 to analyze existing collections and conduct new excavations in the Potomac River Basin (Humphrey and Chambers 1985:5, 12), with the objective "to recast approximately 11,000 years of Potomac Valley prehistory in light of the new interest in prehistoric adaptation to the changing environment" (Dent 1995:63). McNett's unpublished synthesis of Potomac River Valley archeology (McNett 1974b), and several generations of students trained in environmental archeology answer this objective.

Catholic University graduate student Harvard Ayers excavated at Theodore Roosevelt Island in 1967, working with a crew of volunteers from the Archeological Society of Virginia. Ayers collaborated on an analysis of the finds with Charles McNett, and described occupations of Theodore Roosevelt Island associated with the late Early Woodland and early Middle Woodland Periods, from approximately 2,700 to 1,950 BP. Despite some questionable standards in Ayers's fieldwork and reporting (see Kidd, 2007:130-132; Fanning, 1999:Appendix A, page 116) the artifact identifications supporting this inference are probably sound. Based on the recovery of projectile points, grinding stones, and one soapstone net sinker, McNett and Ayers inferred that activity on the island focused on processing plant foods such as acorns and hickory nuts, fishing, and hunting of migratory waterfowl (McNett 1974a). McNett also worked at the Spring Branch Site in Arlington County in the summer of 1972, with support from American University. The resulting study is distinctive in its broad use of statistical analysis, for instance regarding the thickness of pottery, spatial distribution of artifacts, and the association of different classes of artifacts. McNett interpreted the site as a fishing camp for sturgeon, and possibly shad and herring (McNett 1975).

Following the passage of the NHPA in 1966, land within the GWMP and administered by the National Park Service was subjected to a series of cultural resources management projects that were each founded on these earlier efforts to understand the development of indigenous societies in the Potomac River Basin. Studies by Cheek, Friedlander and Warnock at Chain Bridge (1983), Comer and Katz at the interchange between the GWMP and Virginia Route 123 (2005), Bedell, Kraus, and Baynard at Pimmit Run (2008) and Cissna's broader historical and archeological study (1990) were tightly integrated into cultural resources management programs at GWMP. With the exception of Cissna's synthetic work these studies were completed in the face of potentially damaging construction projects, and they answer a need to evaluate those projects and assess the likely consequences of new construction on intact archeological deposits, without going far beyond that mandate. The results of these surveys and pertinent cultural resources management projects outside of the GWMP are discussed in the subsequent section of this chapter.

IV. Previous Cultural Resource Surveys at in the Chain Bridge/Pimmit Run/Little Falls Area

The following summarizes the results of previous surveys completed in the context of cultural resources management in the current study area, identifying known Native American archeological components. The earliest survey by Cheek, Friedlander, and Warnock (1983) examined a 1,150 foot strip of land following the proposed alignment of a water line on Glebe

Road, spanning Chain Bridge and extending from the western abutment of Chain Bridge across Pimmit Run. Cheek et al. (1983:10) describe the general pattern of prehistoric site location for the vicinity: concentrated on flat-topped knolls overlooking the Potomac River, with smaller sites occupying narrow valleys of associated tributary streams on the west side of the river. This is based in part on the presence of known sites, including the Little Falls Site (44AR1) on a knoll above Pimmit Run and adjacent to Little Falls and the Potomac River, 44AR4 on a knoll to the south of Chain Bridge and adjacent to the Potomac River, and 44AR11 located in Pimmit Run Valley north and west of the Chain Bridge abutment. These sites have yielded artifacts associated with Archaic, Early Woodland, and Late Woodland period cultures, according to personal communication from Scott Silsby (Cheek et al. 1983:10).

During the late nineteenth century, William Henry Holmes of the BAE identified pottery sherds in the flat, low-lying areas south of Pimmit Run on the Potomac River. These were identified as Late Archaic/Early Woodland transitional, steatite-tempered Marcey Creek wares, Potomac Creek Cord Marked pottery, and net-impressed sherds that could be Mockley or Pope's Creek Wares (Holmes 1889-1892:n.p., cited in Cheek et al. 1983:10). All of these finds indicate an intensive and more-or-less continuous use of Pimmit Run and the adjacent Potomac River shore since at least ca. 3,000 BP, probably as a fishing station. However, no intact archeological contexts in this area have been investigated. The survey by Cheek, Friedlander, and Warnock (1983), which included three soil borings up to twelve feet deep, and widely-dispersed shovel test pits, did not uncover additional artifacts. Though one soil boring did seem to locate a buried, weathered stratum indicative of undisturbed subsoil approximately five to six-and-a-half feet below the surface, no buried surfaces were identified *per se* (Cheek et al. 1983).

Paul Cissna (1990) completed a historical and archeological study for a segment of the GWMP extending 1.6 miles north beginning at Theodore Roosevelt Bridge, as part of a proposed physical expansion of the parkway that potentially threatened adjacent cultural and historic resources. Cissna's study addresses the wider environs of the GWMP, and includes descriptive data on sites adjacent to the parkway between Theodore Roosevelt Island and Chain Bridge, including sites on Pimmit Run. Numerous Native American archeological sites are present along the upper Potomac River below Little Falls.

Cissna (1990) includes much information obtained via personal communication from Scott Silsby, some of which details unique and important finds. This includes the location of the only fluted point, associated with the Paleoindian period, found near this portion of the Parkway. This find was made during excavation for construction of a swimming pool on private land in the Beachwood Hills area of Arlington, Virginia, approximately 1,000 feet from the GWMP. This isolated fluted point, reported to be in the possession of the Arlington County Historical Society, establishes a very early human presence on the upper Potomac River (Cissna 1990:14).

Silsby introduced Cissna to four prehistoric sites situated near Pimmit Run, Chain Bridge, and Chain Bridge Road in Arlington County. One of these, the Little Falls Site (44AR1), is also described by Cheek et al. (1983) based on conversations with Silsby. Silsby made surface collections at the site during the 1960s and 70s, recovering artifacts from the Early Archaic to the Late Woodland Periods, including soapstone vessel fragments corresponding to the Late Archaic to Early Woodland transition (Cissna 1990:16-17). Two sites occur adjacent to Pimmit Run, one called the Pimmit Run Site, and the other known as the Big Flat Site. The Pimmit Run Site is a short distance west of the Potomac River at an elevation of 200 feet AMSL. The Pimmit Run

Site contains artifacts associated with the Late Archaic through the Late Woodland Periods, including one ceramic ware associated with the Piedmont physiographic province called Albemarle, which is associated with the Middle Woodland Period (Little 1995:69).[1] The Big Flat Site is located in the flood plain for Pimmit Run. The site includes components from the Late Archaic to Early Woodland Period transition, as evidenced by fragments of worked soapstone, and also Late Archaic and Middle Woodland Period contexts. Cissna comments that hammerstones and cores may indicate that one of these components is associated with manufacture of chipped stone tools. A fourth site, called the County Line Site, straddles the boundary between Virginia's Arlington and Fairfax counties, adjacent to the Potomac River. Artifacts collected from the surface by Silsby indicate some possible overlap with the sequence of occupations at the Big Flat Site. The site has associations with the Late Archaic, the Late Archaic transition to the Early Woodland, and the Late Woodland Periods. Worked soapstone vessel fragments are present at the County Line Site, including some vessel fragments that mend (Cissna 1990:16-17).

Further to the south is the Spring Branch Site (44AR6), partly obliterated by construction of the Parkway. Cissna writes that the Spring Branch Site was discovered by Scott Silsby in 1961, and investigated by Charles McNett in 1972. McNett concluded that the site was occupied sporadically during the Early Archaic and Late Archaic Periods, and saw more intensive occupation during the Early and Middle Woodland Periods. Two other sites occur near Gulf Branch on lands administered by the NPS and Arlington County. Both multi-component sites, these are the Shad Site, associated with the Middle and Late Woodland Periods, and the Gulf Branch Site, with Archaic and Woodland Period contexts (Cissna 1990:15-16; McNett 1975).

Another site discussed by Cissna (1990) is the Donaldson Site (44AR3), described in 1972 by Helen Deppe (1972). The Donaldson Site occurs slightly more than one mile south of Little Falls, and only one third of a mile from the Marcey Creek Site. In 1988, Scott Silsby showed Paul Cissna two other prehistoric sites in the same area including a small rock shelter approximately twenty feet above the Potomac River, possibly associated with the Late Archaic and Middle Woodland Periods (Cissna 1990:14-15). There is disagreement over whether sand-tempered pottery from the Donaldson Site should be classified as Stoney Creek (described by Evans 1955), or Accokeek pottery, as Stoney Creek Ware occurs only in southeastern Virginia. A small proportion of steatite-tempered Marcey Creek-type ceramics are also present at the Donaldson Site, leading Deppe to suggest that the occupation of the Donaldson Site was later than Marcey Creek due to the paucity of these wares. This conclusion, and the association of the site with Late Archaic, Early and Late Woodland peoples, appears to be solid. Little can be said of the specific activities taking place at the Donaldson Site, beyond the generally-accepted models of Native American lifeways in each period (Cissna 1990:14-15).

Two additional cultural resource management projects have been carried out within the study area in recent years. In 2004, Elizabeth Comer working through Greenhorne & O'Mara, Inc.

[1] Note that a different pre-contact site sharing the same name was investigated by the Louis Berger Group, Inc. in 2007: Site 44FX3291, also called the Pimmit Run Site (Bedell, Kraus and Baynard 2008), was discovered by GWMP staff in 2007 during inspection of erosion along Pimmit Run adjacent to the Pimmit Run Bridge, in an entirely different location from the Pimmit Run Site discussed by Cissna (1990).

conducted an intensive shovel test pit survey in the vicinity of the Route 123 interchange along the GWMP (Comer and Katz 2005). Approximately 220 shovel tests excavated within a 28.5 acre area revealed one prehistoric site, identified as the Paw Paw Patch Site (44FX2946). Prehistoric artifacts were recovered from shovel tests on both sides of the GWMP. Without recovering ceramics or other temporally diagnostic artifacts, Comer speculated that the site was a short-term lithic processing site associated with the Archaic Period. It is certain that the site was disturbed during adjacent road construction, but a significant portion of the site appears to have intact stratigraphy (Comer and Katz 2005).

In 2007, the Louis Berger Group, Inc. (Bedell, Kraus and Baynard 2008) conducted an investigation at the Pimmit Run Site (44FX3291) in advance of a Federal Highway Administration project to stabilize the streambank of Pimmit Run. This site was discovered in 2007 by GWMP staff during inspection of severe erosion of Pimmit Run's banks. The investigation identified historic components associated with nineteenth-century activities, and produced descriptions of Civil War period road beds and other nineteenth-century features located nearby, but did not produce any evidence of pre-contact Native American activity.

Flooding on Pimmit Run in 2007 revealed the Pimmit Run Petroglyph, a Native American rock carving. This feature was discovered by Scott Silsby and moved to the Great Falls Park Virginia Visitor Center in order to protect it from damage or loss. It has since been incorporated into an interpretive exhibit at the Visitor Center highlighting pre-contact American Indian populations of the area. In his recent book on rock art in northeastern North America, Ed Lenik (2009:72-75) presents the only published account of the petroglyph. Lenik (2009:72) cites personal communication from Stephen Potter, as well as a photograph attributed to Scott Silsby, and indicates that the petroglyph, born by a slab of schist measuring 1.75 by 12.2 m (6 by 4 feet), was discovered lying on the edge of Pimmit Run but could have been moved from its original provenience by flood waters. There are no chronological associations for the Pimmit Run petroglyph. Nearby sites like those described by Cheek et al. (1985) and Cissna (1990) include components from the Archaic through the Late Woodland Periods.

The Pimmit Run petroglyph is formed of a series of round and ovoid cup marks and grooves with no apparent pattern, and which cover one surface of the slab. In one corner of the slab there is a pecked figure. It appears to have two legs that split into four, a tail, and an elongated head resembling that of a deer with long ears or non-branching antlers. These same elements are also legible as a bird, with the tail becoming a bird's head. None of the marks on the slab appear to overlap, providing no stratigraphic relationships between the different markings, and they may all be contemporaneous (Lenik 2009:74). Petroglyphs are also known from Great Falls, where a single fish petroglyph was discovered by Wayne Clarke and Peggy Leonard in 1978, and Difficult Run, where a panel discovered in the 1980s depicts three human figures holding spears and other implements overhead (Lenik 2009:70-78). The interpretation of these images is necessarily ambiguous, though Lenik proposes that the Pimmit Run Petroglyph is associated with shamanic practices of trance achieved through rhythmic tapping on the slab, and that the animal depicted represents a transcript of the shaman's vision, or a spiritual helper (Lenik 2009:74-75). This interpretation is difficult to assess. Feest (1978b:262) notes that for the Powhatan "pictographs carved on sticks or painted on hides told of past events" and figures of animals and humans are known from surviving beadwork, such as the artifact known as

Powhatan's Mantle. By analogy, this could provide another interpretation of these three petroglyphs.

V. Conclusions

Owing to the efforts of professional and avocational archeologists from the end of the nineteenth century to the present, the Chain Bridge/Pimmit Run/Little Falls area is rightly seen as a Native American cultural landscape, upon which historical and contemporary land uses are superimposed. The area is significant as a corridor linking the Coastal Plain and Piedmont physiographic provinces. As a fording area, the vicinity of the falls connected Virginia and Maryland allowing migration of humans and animals across the Potomac River. By the time of the arrival of English colonists, this area was an important link between Algonquian and Souian peoples, and Conoy living at the confluence of the Potomac and Anacostia Rivers may have grown wealthy by virtue of this connection with trading partners on the Piedmont.

Archeological research within and adjacent to the current study area provides evidence of Native American occupations that could never be known from available ethnohistorical sources. While the archeological record does not reflect continual habitation in the area below the falls, it strongly suggests periodic, repeated use of certain areas for manufacturing chipped stone tools and possibly quarrying tool material, exploiting seasonal fish runs on the Potomac River, and probably seasonal habitation during cooler months. These activities are carried out over many millennia, spanning the Early Archaic through the Late Woodland Periods. Counting on a single Paleoindian find from nearby, the human presence near Pimmit Run and the falls could extend even earlier.

The following chapter returns to the context of early exploration of the Chesapeake Bay by English colonists, and the interactions between the English of Virginia and Maryland and the indigenous groups that occupied the upper Potomac River drainage and the inner Coastal Plain adjacent to the falls of the Potomac River. English colonization was not the end of indigenous societies in the Chesapeake region, though it did greatly affect Native American lifeways. It was a period of diaspora, of conflict, resistance and accommodation, and saw the transformation of indigenous societies and their eventual resurgence during the twentieth century.

CHAPTER 3

Antebellum History of the Potomac Gorge

This chapter addresses the context of English settlement and land use in the vicinity of the Potomac Gorge during the later seventeenth, eighteenth, and early nineteenth centuries, and those enterprises that became important regional landmarks, such as ferries, mills, factories, and quarrying operations. The chapter first surveys the history of Anglo-Indian interactions during the early colonial period, the settlement of lands along the Potomac River and Pimmit Run in Virginia, and the comparable record for Montgomery County in Maryland. Transportation infrastructure and related transformations to the landscape are significant themes during this period, and the chapter closes with a discussion of efforts to improve the efficiency and capacity of transportation within the study area, in the context of bridging the Potomac River, building the Georgetown Pike, and bypassing the Little Falls to allow navigation into the Potomac Gorge. A plan of historic resources discussed in this chapter is presented in **Figure 3.1**, below.

I. Early Exploration, Settlement, and Land Use

Interactions Between Native Americans and English Colonists

Maryland and Virginia each have a different history of English interactions with indigenous people during the early colonial period. Maryland colonists encountered a number of Native American groups, including the Nacotchtanke who were probably settled closest to the present study area, and the Conoy, most of these being unified politically under the Piscataway Confederacy, providing organized defense against the Powhatan to the south and west, and the Susquehannock, Seneca, and Five Nations Iroquois to the north (Cissna 1986:1). Maryland's colonial government generally sought allies among the Piscataway and in some ways contributed to their security. Received histories of Maryland during the colonial period include some serious distortions that are only beginning to be overcome in scholarly research, public history, and popular discourse. For instance, in 1876, on the gala 100-year anniversary of the establishment of Montgomery County, one speaker offered the following narrative of the early colonization of this area of Maryland (published in Boyd 1968 (1879):2-17):

> …colonists of St. Mary's respected the rights of the aboriginal proprietors of the soil; and acquired their land by legitimate purchase. And it may be here remarked, that in all the subsequent history of Maryland, no war of aggression was ever waged by her people against the Indians. They dwelt in peace and amity together, until the latter either emigrated to the West, or lost by absorption their identity as a people… As was natural from such beginnings, the colony grew and prospered… They soon reached the home of the Piscataways, yet no war ensued; but that wild people induced by the gentle influences which surrounded them, embraced Christianity, and assumed the garb and customs of civilized life (Saffell 1877:12-13).

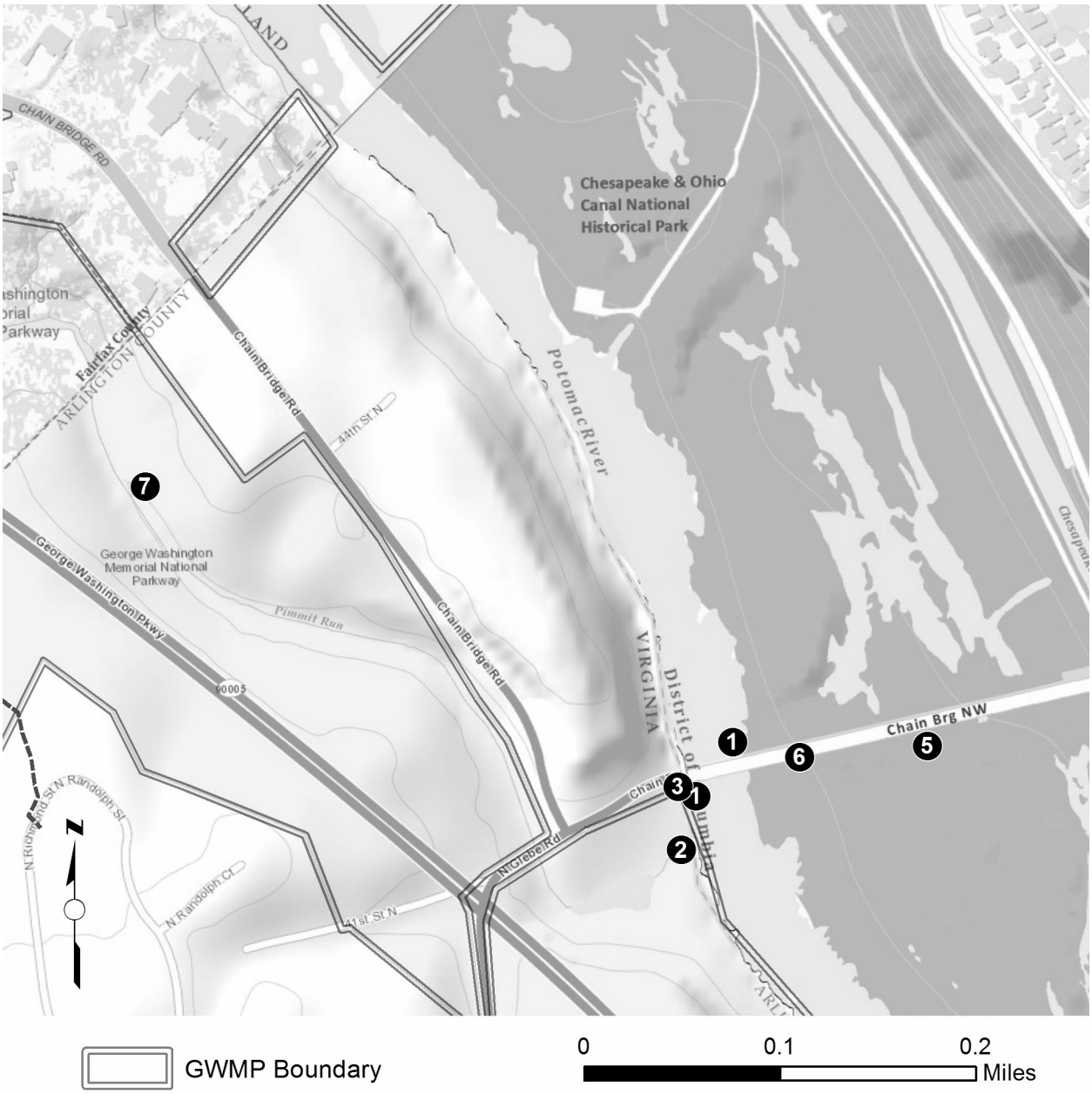


Figure 3.1. Plan of Antebellum Historic Resources Addressed in Chapter 3: 1) Iron Rings on Opposite Shores of the Potomac River; 2) Stone Foundation or Pier in Pimmit Run; 3) Western Abutment of Chain Bridge; 5) Field of Rubble and Debris from Chain Bridge Construction; 6) Historic Graffiti on Chain Bridge Pier; 7) Abandoned Segment of the Georgetown Pike. Numbers keyed to Table 1.1 (Map by Adrienne Allegretti).

Or the notion put in print by T. H. S. Boyd alongside the above, in his history of Montgomery County:

> The Piscataways and Anacostians, under the fostering care of the settlers, and the wise and beneficent teachings of the missionaries, were fast becoming civilized and adopting the habits of the whites. Their ideas of civilization seemed to centre in the possession of a hat (Boyd 1968 (1879):26).

These passages reflect the same attitudes that would allow Sween and Offutt as recently as 1999 to write that the land west of the Potomac River from Rock Creek to the Monocacy River was "inhabited only by wandering tribes of Indians and wild animals" (Sween and Offutt 1999:11), as though there were precious little difference between these two. "These Indians," they continue, "exhibiting their tribal characteristic of hospitality, were willing to sell their land for a few trinkets" (1999:12). This passage is clearly an unfortunate holdover from the older edition of the book (Sween 1984), but also from older narratives of European conquest that naturalized the colonization of the region by appealing to the supposed child-like nature of indigenous people, who could only benefit from their eventual domination, itself made to appear inevitable.

Beyond this, Cissna (1986) describes a distortion in the historical record created by Maryland's colonial government and the custom of engaging indigenous groups through English intermediaries, which reduced the visibility of indigenous people to the point that the Piscataway were said to have left Maryland by around 1700, when there is clear evidence to the contrary. Piscataway oral history and the findings of ethnologists such as James Mooney and Frank Speck during the early twentieth century, demonstrate that indigenous people maintained a continuous presence in Maryland until the present day.

> It is…evident that the Piscataway are but one of a number of Indian populations who experienced quite early continuous contact with English settlers, only to 'disappear' from the historical record and later 're-emerge,' often with a nontraditional name (Cissna 1986:5).

Cissna (1986) studied these transactions between indigenous people, English, and later American Marylanders, creating one of the best available historical accounts of Anglo-Piscataway interaction.

Cissna (1986) underscores the oft-touted civility that the Piscataway and associated Native American groups directed towards the English. He notes that Piscataway settlement in the Patuxent and Potomac River drainages reflected consolidation into fewer, larger settlements, for more effective defense and to create buffers between their communities and Native American groups who were enemies, such as the Susquehannock and the Powhatan. He writes, "The civility of the population compared to other groups most likely was representative of a desire to acquire a new ally of an uncertain strength and/or get a larger share of a trade network that was almost certainly already going" (Cissna 1986:110-111). Conversely, the conflicts between the English and the Powhatan during the first decades of English colonization in Virginia convinced the English of their need for allies among indigenous groups (Cissna 1986:120-121). While English colonists had initially been highly dependent on indigenous communities for food, knowledge, council, and access to trading opportunities, Piscataway and other Native American

groups increasingly valued European goods and naturalized these objects as elements of indigenous social competition, tribute, and exchange (Cissna 1986:117).

Prior to the establishment of the Maryland colony, alliances along the Potomac River were such that there was conflict between the Piscataway and the English, who had allied with the Patawomecke in 1622 to raid the settlement of Nacotchtanke, situated near the confluence of the Potomac and Anacostia Rivers. The Nacotchtanke retaliated by ambushing the 1623 expedition of Henry Spelman and killing Spelman and all but one Englishman. Henry Fleet was taken captive following the attack, and lived among the Nacotchtanke for five years before escaping. The linguistic knowledge and wider understanding that he gained allowed him to advance significantly as a fur trader in the region, and he helped to establish the beaver trade in Maryland during the early and mid-seventeenth century (Cissna 1986:121-122). Sir Francis Wyatt, acting as colonial governor of Virginia, established a policy soon after the outbreak of these conflicts, which forbade traders from using force to extract furs, food or other commodities from indigenous communities, initiating a period of relative peace along the Potomac River and its tributaries (Cissna 1986:123).

Henry Fleet established fur trading among indigenous communities along the Potomac River starting in 1631, visiting Nacotchtanke and settlements within the Piscataway Confederacy, and also journeying to the vicinity of the falls of the Potomac River to trade with the Iroquois, circumventing the Nacotchtankes who had enjoyed unique access to trade networks above the falls, and thus acted as middlemen. Fleet hired Native American agents and supplied them with English goods for trade (Cissna 1986:127-128). Not long after, the Nacotchtanke seem to have moved their town to another location, based on the absence of this settlement from the 1635 map made by Hawley and Lugar, though this is not definitive evidence (Cissna 1986:138).

Maryland was established as a colony in 1634, and diplomatic relations between the Marylanders and the Piscataway were introduced almost immediately. The colony was located some distance from the core area of Piscataway settlement, and therefore from their political and economic influence (Cissna 1986:132-133). Jesuit missionaries in Maryland worked to convert indigenous people, notably the Patuxent and Piscataway, to Christianity and English customs. Kittamaquundi, the *Tayac* of the Piscataway, was baptized a Catholic in 1640, along with his family and some non-family retinue. The daughter of the *Tayac* was sent to live in St. Mary's City in 1642, a form of the exchange of children that was elemental to diplomacy among Algonquian-speaking chiefdoms in the Chesapeake Bay Watershed, ensuring a generation of bilingual, bicultural interlocutors. Cissna (1986:140-142) is careful to differentiate religious conversion from acculturation, in contrast with earlier presentations of this narrative that fail to grasp this nuance.

Jesuit missionizing ended in the mid-seventeenth century, and during the 1640s Maryland solidified its alliance with the Piscataway with an act of the Assembly permitting the distribution of firearms to friendly indigenous people for the express purposes of protecting the frontier and maintaining good relations (making firearms available to the Piscataway may indicate as well the degree to which the English colonists were dependent upon their indigenous neighbors for game meat). The Assembly also identified the Susquehannock, Wicomesse, and Nanticoke as enemies via a 1642 declaration, and established peace with the Susquehannock in 1652 through the acquisition of some Susquehannock territory on the Patuxent River. Trade with Native Americans entering Maryland from Virginia was outlawed in the same year, to discourage

ungovernable scenarios of poaching on Maryland game and English livestock, and other conflicts (Cissna 1986:145, 149). The year 1666 saw formal peace treaties ratified between the Maryland Assembly and the Piscataway and Susquehannock peoples. The treaty with the Piscataway firmly subordinated them to the English, for instance by authorizing the colonial governor to appoint the *Tayac*. The treaty brought individual Piscataway under English law in the event of theft or murder, and set aside reservation lands, over which the colonial governor had a certain amount of authority. It also compelled the indigenous signatories to apprehend and return runaway servants and slaves (Cissna 1986:155-162).

Bacon's Rebellion, an uprising on the Virginia frontier that began in 1675 with indiscriminate killing of Native Americans, developed into widespread, brutal conflict between the Susquehannock and English settlers both in Virginia and Maryland, and between the Susquehannock, Five Nations Iroquois, and Piscataway (Cissna 1986:165-169). In this context the Piscataway moved to Zekiah Swamp in Charles County, Maryland, and were besieged at Fort Zekiah by their enemies in 1681. Peace was achieved in 1682 with the Treaty of Albany, which the Marylanders helped to negotiate. Meanwhile, the English population of Maryland grew dramatically in the last quarter of the seventeenth century, such that the English dramatically outnumbered the membership in allied indigenous groups (Cissna 1986:172).

At the end of the seventeenth century, records of the Maryland colony hint at a withdrawal of the Piscataway from English settlements and towards the Inner Coastal Plain and the Piedmont beyond. The reasons are recorded as continuing disagreements, animosity, and friction between Piscataway and English settlers. These hints were enough for early historians to establish the myth that Native Americans had vanished from Maryland by around 1700. While it is true that some 300 Piscataway emigrated to Virginia at this time, joining with the Seneca or possibly the Susquehannock and allying with the Iroquois, some clearly remained and comprise the root of contemporary, State-recognized Piscataway and Conoy peoples in Maryland (Cissna 1986:180-187; Feest 1978a:247; Humphrey and Chambers 1985:29-30).

A significant accomplishment of Cissna's research (1986) is that he demonstrates that the idea that all Native Americans left Maryland with their culture and identity intact after 1700 is untrue. He summarizes it this way:

> Piscataway responses to…contact were quite varied, a number of people opting to leave the colony in an attempt to maintain a lifestyle more similar to that which they had become adjusted. Others had "spun off" into the English community. It is quite evident that other individuals had intermarried with the English and were living lifestyles which may have been intermediate between the traditional English and traditional Piscataway systems. Still other Indians continued in the Maryland Colony as a less acculturated people (Cissna 1986:224).

Cissna explores the means by which the myth of the "vanishing Indian" has been sustained in narratives of Maryland's colonial history throughout much of the nineteenth and twentieth centuries. A key measure established by Maryland authorities was the appointment of English arbiters who lived near Native American settlements and could review complaints, establishing their validity, and advising on a course of action. The consequence of this policy was the silencing of indigenous voices in the records of the proceedings of the colony (Cissna 1986:182-183). Thereafter, the migrations of the Piscataway who left Maryland are clearly documented

because their movements were noteworthy and the subject of correspondence with colonial authorities and other Native America groups, while the affairs of those remaining in Maryland were considered much less so. Eventually those Native Americans remaining in Maryland and Virginia were no longer recognized as Native Americans (Cissna 1986:210).

A 1705 act passed in Virginia created the legal foundation for Native American ancestry to be overwritten by mixed parentage. The act reads "…it is hereby enacted and declared, That the child of an Indian and the child, grand child, or great grand child, of a negro shall be deemed, accounted, held and taken to be a mulatto" (Cissna 1986:204). This measure and subsequent legislation on race and miscegenation in Virginia also contributed to the "vanishing Indian" myth, as it offered a basis for considering Native Americans who remained in the region as inauthentic, inferior to the memory of their full-blooded ancestors. Similar acts establishing the legal status of mixed-race individuals were passed in Maryland in 1715 and 1717, and the term "mulatto" was legally applied with the very same meaning (Cissna 1986:205-206).

The county by county population census of Maryland completed in 1755 includes no racial category for native-born, indigenous people; Cissna (1986:208) supposes that the category of "free mulattos" would have included virtually all Native Americans still residing in the western shore of Maryland, precisely because the above-discussed legislation permitted few other means to identify Native American ancestry in the census. Seventy-eight "free mulattos" are recorded in Frederick County in 1755, which would have included lands in today's Montgomery County, established in 1776. By the same token, seventy-four persons categorized as mulattos were enslaved in Frederick County in that year (Wright 1921:84-85), lending ambivalence to this data vis-à-vis Cissna's supposition. It reasonable that the category of "free mulattos" includes people of Native American ancestry in this context, while not all mulattos were free and there is no basis to say whether some Native Americans could not have been enslaved.

Early Exploration and Settlement in Virginia

John Smith's initial exploration of the Potomac River on the Inner Coastal Plain took place in the summer of 1608; his party attained the furthest navigable reach, inferred by historian Charles O. Paullin and others to be the Little Falls of the Potomac: "The 16[th] of June we fell [in] with the river Patowomek… Having gone so high as we could with the bote [that is, to Little Falls] we met divers Salvages in Canowes, well loaded with the flesh of Beares, Deere, and other beasts, whereof we had part" (Paullin 1930:56, text in brackets inserted by Paullin). John Smith's 1612 map of Virginia indicates the limit of his explorations at a point within the mountainous area further north, seeming to indicate exploration overland beyond the falls of the Potomac River (see Figure 2.1 in the previous chapter). Other waterways on the map are similarly marked with a cross indicating the limit of Smith's travels that are, for instance, somewhat inland from a river's headwaters. Subsequent travels by Henry Fleet in 1623 resulted in a clear description of the conditions along the Potomac River below Little Falls, which is transcribed in Chapter One of this study. Papenfuse and Coale's (2003) atlas includes a series of maps starting in this earliest period of exploration, some based on first-hand experiences, some copied or created from other sources and accounts.

Northumberland County was established on Virginia's Northern Neck between the Rappahannock and the Potomac Rivers in 1648. The following year King Charles II granted the Northern Neck Proprietary to seven followers who remained loyal to him during his exile during

the English Commonwealth (Mitchell 1977:1). Between 1690 and 1786, original title to land in the Northern Neck Proprietary could be obtained through a grant from the proprietor. Through marriage between a relation of the Lord Culpepper and one of the Fairfax family, this land was secured by the Fairfaxes who became its proprietors (Paullin 1930:57).

> As the settlers spread out over the lower valley of the Potomac, the land speculators overran the upper valley. The date of their invasion of the territory above the mouth of Great Hunting Creek…was 1657-1658. During these two years they patented upwards of twenty-five thousand acres of the Virginia lands of the Anacostans [or Nacotchtanke], extending up the Potomac as far as the neighborhood of Little Falls. Their surveys of their future possessions were made in boats as they rowed up and down the Potomac… (Paullin 1930:58).

One of these speculators was Thomas Boswell, who patented 500 acres of land located roughly between present-day Key Bridge and Little Falls in 1658, obtained from his headright for bringing ten colonists to Virginia at a reward of fifty acres apiece. The twenty-seven patents that were granted in 1657 and 1658, including that of Boswell, did not remain secured to those individuals, and land on the Northern Neck were repatented later in the seventeenth century (Paullin 1930:59).

In his documentary history of Virginia during the seventeenth century, Billings (1975) reproduces a report of a disrupted uprising of enslaved Africans on the Northern Neck of Virginia in 1680. The report, presumably directed to the colonial governor, recommends a trial by an appointed commission including Richard Lee, grandfather of Thomas Lee who developed lands along Pimmit Run on the Potomac River, and two others:

> …three of his Majesties Councell Inhabitants in the Northern Neck to Sitt heare and try according to law the Negro Conspirators, and to proceed to Sentence of Condemnation and Execution, or to Such other punishments as according to Law they shall be found Guilty of, by such examples of Justice to deter other Negroes from plotting or Contriveing either the Death wrongs or Injuries of any of his Majesties Subjects (Billings 1975:160).

The report continues to suppose that future uprisings might also be averted by outlawing funerals held for enslaved Africans, and general restriction on movements and gatherings:

> …this Board having Considered that the great freedome and Liberty that has been by many Masters given to their Negro Slaves for Walking on broad on Saterdays and Sundays and permitting them to meete in great Numbers in making and holding of Funeralls for Dead Negroes gives them the Opportunityes…to consult and advise for the carrying on of their Evil and Wichked purposes and Contrivances, for prevention whereof for the future, It is by this Board thought fitt that a Proclamation doe forthwith Issue, requiring a Strickt observance of the Severall Laws of this Collony relating to Negroes, and to require and Comand all Masters of any families having any Negro Slaves, not to permit them to hold or make any Solemnity of Funeralls for any deceased Negroes (Billings 1975:160).

These accounts are indicative of the constrained manner in which enslaved Africans exercised their liberties during the early colonial period in Virginia, where gathering to bury their dead was also an opportunity to maintain important social connections and even organize resistance. They also describe how these activities—including the very effort to sustain community among enslaved Africans—were repressed, sometimes through the exercise of terror, as in the case above, where the ordained trial clearly follows after a conclusion that some number of conspirators must die.

English settlement along the upper Potomac River during the first half of the eighteenth century was relatively slow. Two early eighteenth-century maps of the upper Potomac River indicate likely European inhabitants. In ca. 1707, Franz Louis Michel created a map of the upper Potomac River, as part of an effort to locate veins of silver available for mining. Rice (2010) cites Tracey and Dern's *Pioneers of Old Monocacy* (Tracey and Dern 1987:7-9) for his description of this map. In ca. 1712, another map was created by Christoph von Graffenreid (Tracey and Dern 1987:11), which depicted a Conoy town near the present-day location of Point of Rocks, Maryland, and also names a series of habitations along the river including those of Colonel Thomas Addison at Henson Creek, and "Coll Bell," probably referring to Colonel Ninian Beall, at a location just above the mouth of Cabin John Creek in Maryland (Rice 2010:161). Von Graffenreid was guided in his 1711 exploration by a local surveyor named Martin Charetier, who may have been married to a Piscataway woman; Von Graffenreid wrote of a stay with Charetier where he was "lodged and treated after the Indian fashion"(Sween and Offutt 1999:18), but this account may be apocryphal. His larger purpose was to identify land for settlement by Swiss and German immigrants, following his earlier successes in settling these in Pennsylvania and North Carolina.

Paullin (1930:62) describes only a few hundred persons occupying the area between Great Hunting Creek and Little Falls in 1745. These include Thomas Lee, an early speculator and developer of lands above Great Hunting Creek (Paullin 1930:62). Thomas Lee is descended from Richard Lee, who arrived in Virginia as secretary to Sir Francis Wyatt, during his second appointment as Royal Governor of Virginia, from 1639-1641 (McGaughy 2004:6). When Wyatt was replaced as governor by Sir William Berkeley in 1642, Richard Lee came with a sufficiently positive recommendation that he was made Secretary of State (McGaughy 2004:5). He was granted a thousand acres of land on the York River, and took up the fur trade. Richard Lee grew quite wealthy, amassing over 10,000 acres of land in Virginia, a successful store trading English goods for furs and tobacco, three tobacco-growing plantations under his own management, and shares in a transoceanic ship. Richard Lee returned to England with his family and established a merchant store in London, while retaining a position of influence in the Virginia colony. The wealth and status of Richard Lee constitutes the foundation of the Lee family dynasty in Virginia (McGaughy 2004:7-13).

Thomas Lee, grandson of Richard Lee (Montague 1966) obtained a grant for 2,862 acres of land along the Potomac River in 1719, consisting of a large tract of 2,630 acres and a smaller one of 232 acres (Mitchell 1977:202).[2] This smaller tract was centered more or less on the present

[2] Eleanor Lee Templeman (1959:38) reports that Lee's acquisitions in 1719 amounted to 3,700 acres, but Beth Mitchell's (1977:202) figures, presented here, derive more directly from documentary sources and are considered authoritative.

location of Chain Bridge, and extended south to the far side of Gulf Branch and north to a point below Little Falls, encompassing the mouth of Pimmit Run and a portion of its valley. The larger tract from Lee's 1719 grant was situated in the location of present-day Langley, and included land along the Potomac River between Dead Run – not far downstream from today's American Legion Memorial Bridge – and Little Falls, encompassing Turkey Run and several other tributaries of the Potomac River. In 1729 Lee secured the land between these two parcels, and those 146 acres were adjacent to Little Falls and bounded on the south by Pimmit Run (Fairfax County 1990; Mitchell 1977:202).

Thomas Lee was made Resident Agent of the Northern Neck Proprietary by Lady Fairfax in 1711, holding power of attorney and administering her affairs for a period of five years. According to McGaughy (2004:14), Thomas Lee had discovered this location, characterized by two white cliffs, while conducting a survey of the Northern Neck along the Potomac River for the Fairfaxes. Because Lee was busy building Stratford Hall far south in Westmoreland County during this period, he hired Francis Awbrey to develop his lands below the Falls, and tasked him with building a landing, a ferry across the Potomac River, and an inn, all to be located at the mouth of Pimmit Run. The ferry was the earliest transportation route between Virginia and Maryland, and may have been operating as early as 1720 (Harrison 1964:148). It was made public in 1738 (Cheek et al. 1983:11). The colonial government of Virginia established four other ferries across the Potomac River in 1738, which must have coincided with the change in status for Awbrey's ferry at Pimmit Run (Cissna 1990:35-36). Awbrey died in 1741, within a year of the establishment of a tobacco inspection warehouse at the mouth of Pimmit Run (Cissna 1990:36; Netherton et al. 1978:24).

Paullin (1930:69) writes that Thomas Lee established a tobacco warehouse in 1738, presumed to be located among Lee's other enterprises at Pimmit Run. Other sources place the construction of this warehouse in 1742.

> The last warehouse to be initially authorized and built in Fairfax County was at the Little Falls of the Potomac River. It was built in 1742, the same year Fairfax County was officially established, on the land of Thomas Lee (Philip Ludwell Lee by 1760) where Pimmit Run enters the Potomac. The Little Falls also marked the head of Potomac navigation; ships could proceed no further upriver. Inspection warehouses were not authorized above the falls until after the Revolution (Mitchell 1987:93).

Tobacco inspection warehouses were established by the Virginia assembly starting in 1730 and provided a statutory requirement for exported tobacco to be unpacked, inspected, repacked, or burned if unfit for sale. Landowners frequently built and rented the warehouses to inspectors from the state, or warehouses were built at public expense. Planters had a choice of which warehouse to utilize. Planters deposited tobacco and received a receipt or "tobacco note" that was exchangeable as legal tender (Mitchell 1987:92).

Thomas Lee's son Philip Ludwell Lee proposed a town site, called Philee, at the mouth of Pimmit Run that would make full use of the commercial advantages of the head of navigation on the Potomac River, as Georgetown and Alexandria eventually did, but no town ever developed at Pimmit Run (Cheek et al. 1983:12). According to Paullin (1930:67-68) establishing a town at Little Falls was Thomas Lee's plan, but the plan saw greater success among a group of Scots

who established a settlement at the location of the Great Hunting Creek tobacco inspection warehouse. Thus, the Lees saw successful town sites established relatively close to the head of navigation on the Potomac River somewhat downstream at Alexandria in 1748, and Georgetown in 1751 (Paullin 1930:69). Mitchell's composite map of the Northern Neck landholdings for 1760 indicates that an ordinary or tavern is present at Lee's property on Pimmit Run, but does not list the ordinary or name the keeper in the accompanying text (Mitchell 1987).

Although Philee was established in 1772 by a Virginia statute, it was never built, beginning and ending its existence as a paper town:

> …whereas the honourable Philip Ludwell Lee, esquire hath laid off one hundred acres of land, adjoining to the warehouses at the falls of the Potowmack, in the county of Fairfax, into lots and streets for a town, which is called by the name of Philee: Be it further enacted… that the purchasers of the said lots, so soon as they shall have been built upon and saved the same…shall be entitled to, and have and enjoy all the rights…which the freeholders and inhabitants of other towns erected by act of assembly, in this colony do enjoy (Paullin 1930:70).

Paullin (1930:71) writes that none of the Lee family ever resided on their lands at the falls of the Potomac River. Thomas Lee's 1749 will divided his lands between three of his sons, with Philip Ludwell Lee receiving all land from the 1719 and 1729 land grants, containing nearly 3,000 acres. After his death, Philip Ludwell Lee's heirs continued to operate the tobacco warehouse at Pimmit Run until the land was incorporated into the District of Columbia in 1790 (Paullin 1930:70). Philip Ludwell Lee's estate was divided in 1775 by an order of the court. The combined area of the 146 acres adjacent to Little Falls and the 232 acres on Pimmit Run were split between two Lee relations who had married Philip Ludwell's daughters. Henry Lee received most of the 232 acre parcel at Pimmit Run, and Ludwell Lee received the 146 acres plus 25 acres of the 232 acre parcel. In 1789, Ludwell Lee sold his portion, totaling 171 acres described as "beginning at the little falls warehouse landing…," referencing the Little Falls warehouse established in 1742, to Henry Lee and on the same date, Henry Lee and his wife transferred this land to Alexandria attorney and banker Philip Richard Fendall. The Lees also sold off seven fishing stands on the Potomac River in the vicinity of Pimmit Run, reflecting earlier uses of the river by Native Americans for taking fish from seasonal runs, perhaps even from the same locations that Lee's plantation exploited. Fendall established a number of new enterprises consisting of "a granary, grist mill, distillery, brewery, cooper's shop, blacksmith shop, and workmens cottages" at Pimmit Run (Cissna 1990:38-39). The mill was operated by one Lewis Hipkins, in partnership with Fendall, until Hipkins's death in 1794 from hydrophobia, a symptom of rabies; Hipkins was bitten by an apparently rabid dog in early June of 1794, and passed away before the end of the month (Mitchell 1977:203; Templeman 1959:50:178). George Washington spent the night at the home of Lewis Hipkins, near the tobacco warehouse, during a 1785 inspection of the Patowmack Canal (High 2001). In 1744, Fendall offered for lease a vaguely described area of quarries at Pimmit Run containing large amounts of material for buildings and foundation stone. This was the first documented quarrying activity on the Virginia shore of the Potomac River (Cissna 1990:38-39).

The mill property on Pimmit Run was described in an 1803 mortgage as containing "a good merchant mill, brewery, distillery, and sundry other improvements" (Templeman 1959:50), describing a broad commercial enterprise. Philip Richard Fendall died in 1805, and his property

at Pimmit Run was sold to a Francis Green of Medford, Massachusetts, the first in a series of absentee owners (Mintz et al. 1993b:12). A portion of these interests were acquired by Joseph Dean in 1806 – Hipkins' interest in the property may have been acquired by Dean some time later – and Dean conveyed the same land to Edgar Patterson in 1815, described as "Beginning on the south side of the Potomac River on the lower side of Pimmit Run, at the junction of river and run, *up the river to the bolt at the landing below the abutment of the bridge*" (Clark 1930:110, emphasis added), referring to a pair of iron rings set in bedrock on the western shore of the Potomac River under Chain Bridge. Templeman (1959:50) writes that a number of mills were operated at this site through the 1890s, the penultimate one burned down during the Civil War, and the last was rebuilt upon those ruins.

Patterson Mills were located on the Virginia side of the Potomac River at Chain Bridge, and they are depicted clearly in a drawing of the Chain Bridge and its environs created in April 1817 by diarist and artist Captain J. R. Watson, an officer of the British Royal Navy who toured the Middle Atlantic and Northeastern United States on an extended leave of absence in 1816 and 1817 (Foster 1997:230-231, Plate 82)(**Figure 3.2**).

The foundations of the woolen mill are visible in a number of Civil War-era photographs, contributing picturesque ruins to scenes of the bridge **(Figures 3.3** and **3.4**). An excellent description of the mill survives as an advertisement for the sale of this complex in 1821:

To Manufacturers

Paper Mill, Flour Mill, Wool Factory, Stone Quarries and Land for Sale.

The Flour Mill

Is a large three story stone building, having three run of burrs, with all the necessary machinery to manufacture flour. It is situated at the Little Falls Bridge, on the tide water of the Potomac in the District of Columbia, and only 3 miles from Washington and Georgetown. The turnpike road leading from these places to Leesburg and the Western Country passes by the door. The river at this place is from forty to sixty feet deep. This is considered the most profitable milling establishment in this part of the country there being no necessity to keep a team a plenty of wheat from being brought to the door from Loudon county and the upper part of Virginia. Three hands can load 300 barrels of flour on board a scow, bring it to town have it inspected, and put into store in one day, and, being so near market, all the offal can be disposed of without expense and at retail prices.

The Wool Factory

Adjoins the flour mill. It is a two story stone building. 110 ft in length, containing carding machines, billes and jennies, 12 broad and a number of narrow looms, and all other necessary machinery for manufacturing blankets and cloth. A stone fulling mill, with 2 pairs of stocks, a stone dye house, and stone beach house are attached to the factory. This establishment, including the flour mill cost me about $40,000. I will not sell it for a much less sum. The stone quarries on this tract have yielded me a rent of $1500 a year, and I was offered a rent of $1500 per year

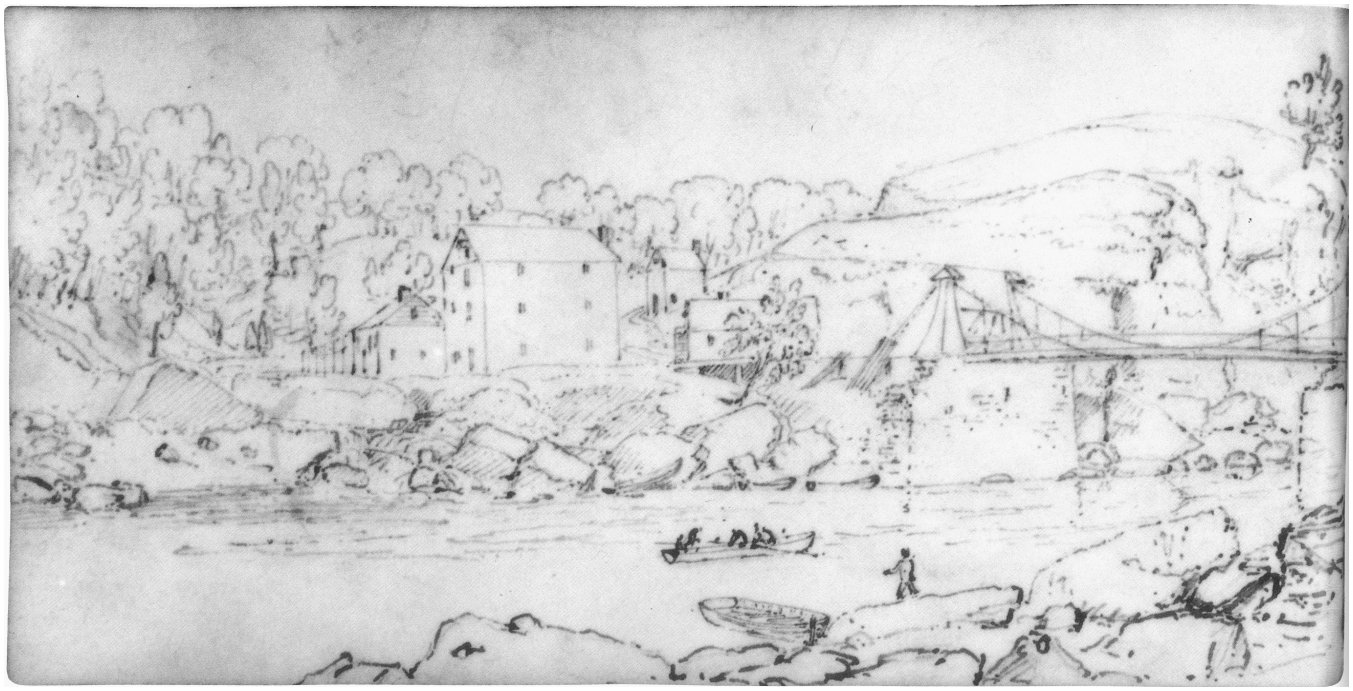


Figure 3.2. Drawing by J. R. Watson titled *Bridge at the Lower Falls of the Potomac 21st April 1817*, View Northwest Depicting the Configuration of Chain Bridge and Extent of Patterson Mills on Pimmit Run (Foster 1997:230-231) (this and opposite page).

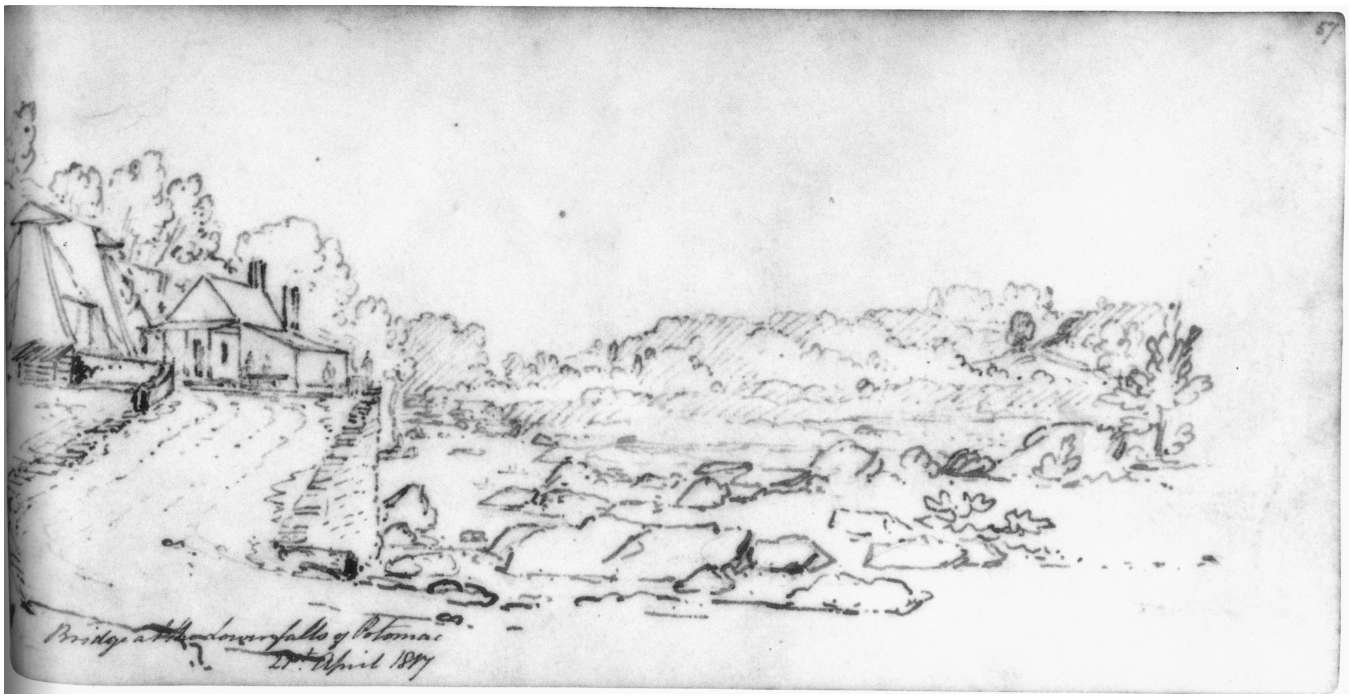

57.
Bridge at the lower falls of Potomac
April 1807



Figure 3.3. One Frame of a Stereographic View of Chain Bridge Created Between 1861 and 1869, Centered on a Ruined Mill in the Location of Pimmit Run. Library of Congress Prints and Photographic Division. Accessed at http://hdl.loc.gov/loc.pnp/cwpb.01456.



Figure 3.4. One Frame of a Stereographic View of Chain Bridge Created Between 1861 and 1869, Depicting a Ruined Mill on the Downstream Side of the Bridge in the Location of Pimmit Run. Library of Congress Prints and Photographic Division, Washington, DC Accessed at http://hdl.loc.gov/loc.pnp/cwpb.01457.

> for the flour mill before I erected the wool factory. There is also on this tract a valuable unimproved mill seat. The fall is 27 feet on tide water (Clark 1930:109-110).

The advertisement is signed by Edgar Patterson. Patterson advertised in *The Washington Federalist* in 1802 as a merchant in Georgetown dealing in groceries and liquor. The blankets from Patterson's woolen mill were apparently of high-quality, and wore well (Clark 1930:111).

Perhaps a more exceptional historical association is the role of Patterson's mill in safeguarding federal papers during the War of 1812; Patterson's unoccupied Grist Mill was used to hide the archived papers of the early US government, including the Declaration of Independence, congressional records, and correspondence of George Washington. These documents were transported by horsecart in plain linen bags by horsecart, by State Department auditor Stephen Pleasonton on August 23, 1814, the day before the British attack on Washington, and concealed in the grist mill at Pimmit Run. Shortly thereafter they were moved to Leesburg, owing to Pleasonton's concerns that the proximity of the Patterson mills to Foxhall's gun foundry and munitions factory a short distance downriver would result in the State Department papers being discovered and destroyed by the British. Barges from the Washington Navy Yard were also moved to the area of Chain Bridge and Pimmit Run, in hopes of preventing the destruction of the vessels and their cargoes (Artemel 1978:179, Clark 1930:111, Eschelman 2011:60-62).

Historic Features Associated with The Lee Family at Pimmit Run

Two extant features are visible at the mouth of Pimmit Run, which seem to be associated with the enterprises of the Lee family and subsequent holders of this land during the eighteenth and nineteenth centuries. The first is a number of iron rings set into the bedrock on either shore of the Potomac River at the narrows underneath Chain Bridge (see **Figure 3.2** left half). The second is a small piece of architecture consisting of mortared stone in the flow of Pimmit Run that likely corresponds to one of the water-powered mills operated by the Lees on Pimmit Run, and by other parties during the nineteenth century (see **Figure 3.2** right half).

Iron Rings on Opposite Shores of the Potomac

Iron rings are set in bedrock underneath Chain Bridge (**Figure 3.2** left half). Those on the western shore each consist of a single piece of round iron stock forged into a loop, while on the eastern shore the ring and pin fixing it to the bedrock are forged individually, the ring being welded closed. –

The inference that these are associated with Thomas Lee's ferry service established on his behalf by Francis Awbrey in approximately 1720 is somewhat speculative as there is no clear means to establish the age of these features save perhaps for a compositional analysis of the iron material itself. These features are depicted in **Figures 3.5**, which shows two forged iron rings set in bedrock and an additional ring bolt at the edge of the river on the Virginia shore, and **Figures 3.6** and **3.7**, showing one corresponding ring bolt on the District of Columbia side of the Potomac River. Antiquity is suggested by grooves worn into the bedrock around the ring on the western shore of the Potomac River where it has been periodically turned and agitated by high water. The ring on the District side of the river was photographed on January 13, 2013, and was submerged when the site was revisited in March 2013. Bolts at this location on the Virginia shore are mentioned in the 1815 deed conveying land on Pimmit Run to Edgar Patterson. They appear in plans for the GWMP and were used during surveys of land ownership to fix parcel descriptions to a landmark.[3] While it is probable that this refers to these features, it is not a certainty.

[3] Untitled survey showing land acquisition south of Chain Bridge, Document No. 850-80530 on file at Turkey Run Headquarters of the GWMP, McLean, Virginia.



Figure 3.5. View North Showing Two Iron Rings and Ring Bolt set in Bedrock on the Western Shore of the Potomac River near the Chain Bridge Abutment, GWMP, Arlington County, Virginia. Photograph By Matthew Palus, December 2012.



Figure 3.6. View West Showing Iron Ring set in Bedrock on the Eastern Shore of the Potomac River, with the Virginia Abutment of Chain Bridge in Background, C&O Canal National Historical Park, District of Columbia. Photograph By Matthew Palus, January 2013.



Figure 3.7. Detail of Iron Ring on the Eastern Shore of the Potomac Facing West, Showing Groove Worn in the Stone Surface, C&O Canal National Historical Park, District of Columbia. Photograph By Matthew Palus, January 2013.

If this interpretation is correct, these iron rings were used to anchor Francis Awbrey's ferry across the Potomac River. Installed as early as 1720, the ferry remained in operation until either Awbrey's son Richard moved it downstream to the vicinity of Analostan Island in 1748, or until the first bridge across the Potomac River, the Little Falls Bridge, was constructed in 1797. These two contesting ideas about the duration of Awbrey's ferry at Pimmit Run appear equally valid with supporters on both sides. In 1738 a ferry was established on Francis Awbrey's land near the location of present-day Rosslyn, Virginia. Moving the ferry operation from Pimmit Run to the vicinity of Analostan Island – today's Theodore Roosevelt Island – would have situated these two ferries near one another. Even if Awbrey's operation at Pimmit Run was discontinued in 1748, it is possible that another individual could have continued to run a ferry here using permanent improvements left at the site, namely these very anchor rings (Cissna 1990:37). The dissimilarity of the rings on the western and eastern shores may be taken as evidence for periodic improvement or rebuilding of the ferry equipment during the eighteenth century, or may argue that the rings featuring different styles of construction have unrelated historical associations. Some may simply have served to fix watercraft to the shore in this location, on either shore of the Potomac.

An alternative interpretation is that these iron rings are associated with one of the several nineteenth and twentieth century bridges that have crossed the Potomac River at this location. Three chain bridges were constructed here between 1808 and 1840, and featured spans suspended from massive chains running over towering piers high above them, as discussed later in this chapter. It seems as though these chains would have been anchored to each abutment rather than reaching down below the bridge deck to be anchored in bedrock at the river's edge, and indeed this is what is depicted in a watercolor of the bridge painted by Augustus Köllner in 1839 (**Figure 3.8**). A number of other bridges constructed across the Potomac River in this location, before and after the three chain bridges, were built with wood or iron trusses, and did not entail suspended bridge decks that would necessitate chains or cables. This being the case, the iron rings and pins on either shore of the Potomac River could have anchored temporary structures used to construct the numerous bridges that have stood in this location, if they do not seem to have anchored the iron chains supporting Chain Bridge itself. These fixed points may also have been used across different periods of construction and maintenance of the bridge.

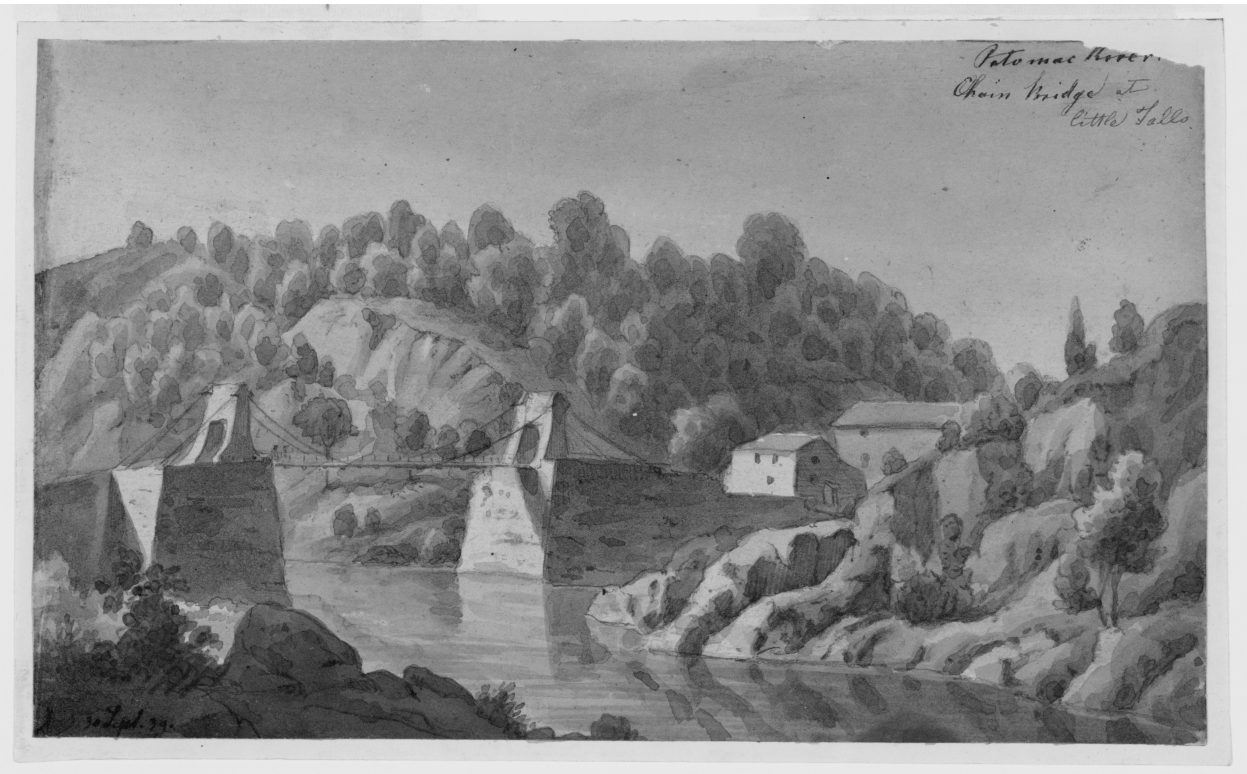


Figure 3.8. "Potomac River, Chain Bridge at Little Falls," by Augustus Köllner, 1839. Library of Congress, Prints and Photographs Online Catalog, http://hdl.loc.gov/loc.pnp/ppmsca.22793.

Stone Foundation or Pier in Pimmit Run

One other feature likely associated with the enterprises of Lee and others at the mouth of Pimmit Run is a mortared stone structure that appears to be a portion of a foundation (**Figure 3.9** and **3.10**). This stone structure is situated in the flow of Pimmit Run, and therefore probably represents one of the only traces of early water-powered industry in this locale. It is difficult to determine which historical period this structure represents, and therefore whose milling operation it should be associated with. The stones incorporated into the structure are relatively small when compared to the material making up the existing piers of Chain Bridge, and an architectural historian may conclude something from examination of the mortar used in construction. It probably represents a pier that would have supported a mill (see, for example, **Figure 3.2**, right half, **Figures 3.3** and **3.4**). While the core of Patterson Mills stood along the Georgetown Pike at the western abutment of the Little Falls Bridge, or Chain Bridge, it is possible that this stone structure is associated with what was certainly the Mills' extensive infrastructure between the down-river side of Chain Bridge and the mouth of Pimmit Run.



Figure 3.9. View of Partial Stone Foundation, Facing Southeast, with the Potomac River in the Background, GWMP, Arlington County, Virginia. Photograph by Matthew Palus, December 2012.



Figure 3.10. View of Partial Stone Foundation, Facing Northeast, GWMP, Arlington County, Virginia. Photograph by Matthew Palus, December 2012.

This historic feature seems especially vulnerable to damage or displacement by floodwaters in Pimmit Run. While it appears to be *in situ*, doubtless other matching stone structures once stood nearby, leaving only this one to represent a mill that has for the most part been eradicated. At the same time, it is not clear what steps might be taken to conserve this feature. Periodic flash flooding in Pimmit Run is connected with nearby suburban developments that deliver stormwater to this drainage in much greater volumes than were historically known. As this process advances, the stone foundation in Pimmit Run will become increasingly vulnerable.

Early Settlement in Maryland

The Maryland colony was established in 1634, and the area below the falls of the Potomac River came under the authority of county governments much later. Prince George's County was established in 1695 and contained all lands within present-day Alleghany, Frederick, Montgomery, and Washington Counties. Frederick County was established in 1748, and Montgomery County and Washington County were created from subdivision of Frederick County by the Maryland Convention in 1776, with the Potomac River forming the western boundary of Montgomery County and the southeastern boundary formed by a line extending

from the mouth of Rock Creek on the Potomac River to the Patuxent River. Montgomery County was further separated into hundreds, with the area of Delacarlia Reservoir designated as Lower Potomac Hundred (Cissna 1990:30; Mintz et al. 1993a, 1993b; Sween 1984:29-31). The District of Columbia was established in 1791, changing the jurisdiction over this portion of southern Montgomery County (Hiebert and MacMaster 1976:ix-xi). Following the Civil War, Georgetown's jurisdiction and governance also changed as it was merged with the Federal District, its self-governance abolished (Mitchell 1986:viii, 25-27).

The area along the Potomac River constituted a buffer zone between Native American groups in Virginia and Maryland, a fact that made it risky for English colonists to settle here. Harrison (1964:59) and Mitchell (1977:5) both suggest survey of land for patent from watercraft with minimal investment as required for seating and planting to secure patent to the land, as does Paullin in the passage quoted above. Often these requirements were satisfied by an indentured servant who was settled on the patent to clear and cultivate an acre of land (in Cissna 1990:32). Towards the end of the seventeenth century Maryland's government formed a corps of rangers. In Maryland these were first organized as authorities meant to organize responses to conflict with indigenous people, and then as a permanent standing force in 1694, through an act of the assembly that permitted brief periods of conscription to patrol the borderlands of the colony from the falls of the Potomac River to the Susquehanna River, between April 10 and October 15 each year (Offutt 1995:2-3; Riggs 1946/1947:259; Sween and Offutt 1999:13). Saffell's 1876 monologue on the colonization of Montgomery County, Maryland quoted earlier in this chapter indicates that the Maryland Rangers were organized to protect against aggression from tribes outside of those allies counted among the Piscataway and their confederates (Saffell 1877:13, 20). A fortification was constructed at the mouth of Rock Creek in 1683 that provided a base of operation for the rangers (Hiebert and MacMaster 1976:6). Poole indicates that the rangers had a stronghold that was located near Little Falls, but may be referring to the same fortification (Torrey and Green 2008:22, citing Poole 1969) Ninian Beall and Richard Brightwell, two early settlers and landowners along the Potomac River, served prominently among Maryland's rangers (Sween and Offutt 1999:15).

> Realizing occasional disturbances might grow into greater dangers a thorough system of ranging was inaugurated by Ninian Beall, so that on August 10, 1678, Lieutenant Beall, now for the first time styled Captain, was ordered to protect the plantations about the head of the Patuxent River, but to resort to no violence unless provoked (Magruder 1937:18).

It is also worth noting that historical geographer Herman Friis refers to the Rangers as "early surveyors" and "land hunters" (Friis 1968:9) who mapped and platted areas inland, moving upriver from established settlements in Maryland and Virginia during the seventeenth century. Thus, ranging was for discovery and recordation of productive tobacco lands as much as it was for patrol and defense of the frontiers of the colonies. Ninian Beall is known to have been a surveyor as well as a soldier, and gained experience laying out towns and ports in Calvert County (Magruder 1937:24). Hiebart and MacMaster (1976:1976) refer to the Maryland Rangers as a volunteer cavalry. During the last part of the seventeenth century Virginia had also organized the "Rangers of Pottomack," who patrolled the tributaries of the Potomac River from horseback, visiting English and Native American settlements as an arm of the colonial government (Haynie 1959:108-109; Metcalf 1982:20-21).

Ninian Beall was transported to Maryland as an indenture to Quaker Richard Hall, of Calvert County, following the defeat of the Scottish Army by the forces of Oliver Cromwell at the Battle of Dunbar in 1650. At the expiration of his indenture, Beall received 50 acres and over his lifetime parlayed this into a vast landholding of over 25,000 acres (Magruder 1937:26). He served in the Rangers between 1668 and 1704, during which time he helped to maintain order in the Maryland colony during the Revolution of 1689 and the succession of King William over James II. He became a colonel, and at the end of the seventeenth century he was made commander-in-chief for the Maryland Rangers and Provincial Forces, in recognition of his experience with political conditions among Native American groups including the Nanticoke and Piscataway, glossed at the time as "Indian affairs" (Magruder 1937:22). His success and service were recognized by the Assembly with a gift of three African slaves and an act of gratitude reading:

> Colonel Beall has been found very serviceable to this province upon all Incursions and Disturbances of Neighboring Indians…it is therefore thought fitt in Point of Gratitude, for such his good service done and towards his Support and Relief now in his old age to make him an allowance of out of the Public Revenue of this Province (Magruder 1937:23).

Under the authority of this act, Beall procured for himself three slaves, a man named John, and two women named Sarah and Elizabeth (Magruder 1937; Sween and Offutt 1999:15-17). He remained active in ongoing diplomacy with the Piscataway during the early eighteenth century, serving as an intermediary between the Piscataway and the colonial government, following the pattern of Anglo-Piscataway relations in Maryland established during the 17th century (Cissna 1986). In 1703, Beall acquired a patent on 795 acres that contained much of the area of present-day Georgetown. This property was left to his son George Beall upon his death in 1717 (Sween and Offutt 1999:17).

Actual settlers in the area of Montgomery County were few before 1715, and early land grants were concentrated on the Patuxent River, Sligo Creek, North West Branch, Rock Creek, and Watts Branch, following the sequence described by early historian T. H. S. Boyd:

> …the first settlements, commencing in 1688, in Montgomery County, were along the banks of Rock Creek, extending up both banks of the stream as far as Rockville. Thence they sought the Patuxent, and continued to spread along the banks of this fertile stream as far as Snell's Bridge. Then the country lying west of Rock Creek, towards the Potomac, and north and east of Rockville, seems to have attracted the attention of the settlers. Next came the flat red lands along the Potomac, in the vicinity of Darnestown and Poolesville… (Boyd 1968 (1879):43).

Patents to land in the vicinity of Washington, DC begin in 1688. Colonel Henry Dulaney acquired two patents in 1688 and 1689, the first being known as Girl's Portion, extending for three and three-eighths miles east from Rock Creek, and the second named Leeke Forest, containing 710 acres on the west side of Rock Creek (Boyd, 1968 (1879):30). Boyd disagrees here with Hiebert and MacMaster (1976:9), who associated the 1888 Girl's Portion patent with Henry Darnall. An adjacent 3,697-acre grant called Dan belonging to Thomas Brooke was surveyed in 1694 extending one and a half miles west from Rock Creek and north for two and seven-eighths of a mile from Dulaney's Leeke Forest tract. "Addition to Dan" was a patent

situated north Dan, surveyed for Philip Lee in 1717, and containing 576 acres that were later traversed by the Georgetown Pike (Boyd 1968 (1879):35). South of Dulaney's Leeke Forest was a 1699 patent of 700 acres called Clean Drinking, belonging to John Coats (Boyd 1968 (1879):29-31). West of Clean Drinking and south of Leeke Forest was a 772-acre patent called Clagett's Purchase, surveyed for Thomas Fletchall in 1715 (Boyd 1968 (1879):32).

Two early patents fronted on the Potomac River in the current study area. Brightwell's Hunting Quarter was a 1695 land patent containing 1,086 acres, which stretched for four miles along the Potomac River (Boyd 1968 (1879):30). Friendship was patented to Thomas Addison and James Stoddard in 1711, and contained 3,124 acres between the Potomac River and Rock Creek (Boyd 1968 (1879):32). Magruder and Beall's Honesty was granted to Daniel Magruder and Charles Beall in 1726, and contained 1,726 acres extending southwest from the Leeke Forest patent of Henry Dulaney to the Potomac River (Boyd 1968 (1879):44).

Above Great Falls, Dung Hill was surveyed for Walter Evans in 1715. It contained 536 acres on the Potomac at the mouth of Watts' Branch (Boyd 1968 [1879]:33). Also above the Great Falls were Thompson's Hop Yard, a 100-acre patent surveyed for John Thompson in 1715, and Goose Pond, a 100-acre patent on the Potomac River surveyed for John Chittam in 1726 (Boyd 1968 (1879):35, 44). Concord, containing 1,106 acres granted to Daniel Dulaney in 1721, extended along the Potomac River beginning one mile above Brightwell's Hunting Quarter, adjacent to lands in today's Loudon County, Virginia (Boyd 1968 (1879):45).

Many thousands of acres beyond the frontier of English settlement were patented in this manner before 1700, most often speculatively, and by established tobacco merchants who had already earned fortunes from tobacco culture in Maryland (Hiebert and MacMaster 1976:9). Smaller farms subdivided from these large land patents were often sold or leased, frequently encompassing less than 200 acres (Sween and Offutt 1999-19). What made these patents attractive was the possibility of bringing new lands under cultivation, as areas of eastern and southern Maryland were increasingly depleted by tobacco monoculture. It was not until the early twentieth century that these depleted soils had been recovered through the use of fertilizers and other soil amendments. By the 1920s Montgomery County was deemed to be one of the heaviest producers of corn and wheat in the entire state of Maryland, and also a considerable producer of eggs and dairy products, predominantly for the markets in Washington, DC and Baltimore (Martin 1928:54). This status marks the county's recovery from conditions of soil depletion that predominated in the mid-19th century.

Land Use and Economic Development in Montgomery County

From initial colonization until the middle of the nineteenth century, exhaustion of agricultural land was answered simply by opening up new farmlands, something in the character of swidden or slash-and-burn agriculture, which was practiced by Native American societies in Maryland and Virginia before and during the early colonial period. In this fashion, established, well-financed tobacco farmers from southern Maryland were able to pioneer Montgomery County's piedmont, then part of Prince George's County, in the mid-eighteenth century, after nearly 100 years of tobacco cultivation exhausted the previously productive Coastal Plain. This exhaustion of the soils in Montgomery County is reflected in declining population between 1790 and 1840, as farmers moved to more fertile soils elsewhere Boyd (1968[1879]:107).Guano fertilizer from Peru was introduced in Montgomery County in 1845 by the Society of Friends, who also

experimented with techniques such as crop rotation, deep plowing, and improvements in farm machinery. The success of these techniques prompted a rejuvenation of the county's soils and broader economy, and the region's population rebounded (Boyd 1968 [1879]:108-109; McGuckian 2001:38).

Construction of both the Chesapeake & Ohio (C&O) Canal and the Baltimore & Ohio (B&O) Railroad launched in earnest in 1828, promising more efficient connection between farmlands in upper Mongomery County and export markets. The section of the canal in Montgomery County opened in 1833, and by that time the B&O Railroad had connected Baltimore with Frederick and nearly reached the Potomac River at Point of Rocks, where it would send track down a right of way paralleling the canal into Georgetown. Central areas of Montgomery County were sufficiently isolated from both the railroad and the canal that it continued to rely upon roads. The Washington Turnpike Company was chartered by the Maryland Assembly in 1805, and by the 1820s the Rockville Pike was completed as a twenty-foot-wide roadway with stone foundations filled with gravel and finally crushed stone for its driving surface. Despite this durable macadam construction, heavy mercantile traffic degraded the road rapidly, and the economy of central Montgomery County suffered from what was ultimately an inadequate linkage to regional markets (McGuckian 2001:29-30).

The softening of tobacco markets in the mid-eighteenth century led Maryland to pass the Tobacco Inspection Act in 1747, with inspection warehouses being established on major waterways and operating similar to the tobacco inspection warehouses created in Virginia, as at Lee's holdings on Pimmit Run (Mintz et al. 1993b:18) At the same time, overproduction of tobacco prompted farmers to plant wheat, corn, and other staple products which in turn encouraged an increased construction of water-powered mills for rendering these products into flour or mash for distilling spirits (Cissna 1990:37). During the first half of the nineteenth century agriculture in the heaviest tobacco-growing regions of Montgomery County began to suffer from soil depletion, resulting in economic depression and slow growth. This degradation of soils was alleviated somewhat by the introduction of imported fertilizers and a method for applying them systematically to improve production, introduced by Quakers in the county (Sween and Offutt 1999:43-44).

The agricultural transition from tobacco to staple crop production encouraged construction of mills for grinding grains such as wheat and corn into grist and flour. On the Maryland side of the Potomac River at Little Falls was a mill called the Canal Mills. Owner Leonidas H. Johns published an item in the *Intelligencer* on December 12, 1821, announcing that he had set into operation a grinding mill he had just erected there. He described his mill as being within a few yards of the locks of the Potomac River, which would have referred to locks of the Patowmack Canal. The Patowmack Canal was the precursor, built by George Washington, to the already mentioned C&O Canal (details to follow). Yet another mill in this vicinity is suggested by a conveyance recorded on March 16, 1805, which transfers in trust as security three tracts, from Leonard Holliday Johns to Joseph E. Rowles. The first tract was called Mill Seat on which is Port Mills was situated, likely near the site of the Canal Mills and obliterated by the path of the canal constructed in the first decades of the nineteenth century (Clark 1930:105-106). A structure that formerly stood at the northwest corner of the junction of Little Falls Branch and the C&O Canal is identified as a powder mill on the Geddes and Roberts Map of 1827; Barnard's map of

the Civil War defenses in this area identifies Little Falls Branch as Powder Mill Branch (Franklin and Gregory 1980:23).

In addition to the various mills built along the Potomac River, rock quarries were also important economic pursuits (Abbott 1990). As mentioned, Fendall and Hipkins operated a quarry as part of their investments at Pimmit Run. Fendall's quarry was operating by 1744 and is the earliest recorded effort to quarry building stone in the study area (Cissna 1990:38-39). Quarrying on the Potomac Palisades was taken up by Gilbert Vanderwerken, who bought land in three locations, including former Lee property at Pimmit Run in 1851, as well as quarries at Gulf Branch and another below Spout Run (Virta 2008:2-3). Evidence of quarrying can be seen on both shores of the Potomac River, and historical references indicate that quarrying took place at a number of different locales. The Geddes and Roberts survey of 1827 depicts a quarry just north of Chain Bridge on the Maryland side of the river (Geddes and Roberts 1827), and it is still apparent that significant quarrying and earth-moving has taken place in this vicinity (Franklin and Gregory 1980:21, Map 5-6). High Island, located near the Brookmont community in Montgomery County, was quarried during the first half of the nineteenth century, and was formerly connected to Maryland by a bridge (Franklin and Gregory 1980:20). Additional information on quarrying in and around the project area is presented in Chapter Five.

Establishment of Georgetown and commercial connections across the Potomac River

The Maryland Legislature approved the establishment of Georgetown in 1751 at a sixty-acre site purchased by George Gordon and George Beall, a descendent of Ninian Beall. The establishment of Georgetown here coincided with the naming of Gordon's 1745 tobacco inspection warehouse here as one of the state's official tobacco inspection stations under Maryland's Tobacco Inspection Act of 1747 (Sween 1984:21). The site was a nucleus for the rolling roads by which hogsheads of tobacco were transported overland for export overseas (Middleton 1984:111-114), and it was adjacent to the River Road, a major commercial artery connecting the City of Washington with a series of plantations on the Potomac River and its tributaries in what would become Montgomery County, and western Maryland (Lesko et al. 1991:1-2). Georgetown was soon comparable in size and competitive with the ports at Bladensburg, Maryland, and Alexandria, Virginia. Georgetown received its charter from the State of Maryland in 1789, establishing it as an incorporated town (Crowell et al. 1987:11; Lesko 1991:2-3; Mitchell 1986:vii).

Like Alexandria, the port at Georgetown also has associations with the eighteenth-century importation of enslaved Africans into the region. In *Black Georgetown Remembered,* Lesko, Babb, and Gibbs (1991:2) note that slave dealer John Beattie established himself in Georgetown by 1760, in an uphill area that today is on the 3200 block of O Street, at the eastern end of the current project area. Beattie auctioned enslaved Africans on the west side of Wisconsin Avenue, then called High Street, and also at the Montgomery Tavern a little further south on Wisconsin Avenue (Federal Writers Project 1937:714-719; 732). Two cottages located on the 3400 block of Volta Place, north of P Street in Georgetown, are believed to have once been slave quarters. The second US federal census of population in 1800 included 1,449 enslaved and 277 free African Americans in Georgetown and its surrounding hinterland, out of a total population of 5,120 persons (Lesko et al. 1991:3). By 1830, the population of free African Americans in Georgetown totaled over 1,200 individuals (Lesko et al. 1991:10).

In 1790, Georgetown became part of the ten square-mile area designated for the Federal District, outside of the planned city designated Washington County (Crowell et al. 1987:11). Though Georgetown remained an economic power into the nineteenth century, its identity as an independent town was gradually eroded. An 1803 Act of Congress eliminated the right of its citizens to vote in national elections, and representatives in Congress for residents in Alexandria and Georgetown in 1803. Georgetown residents repeatedly attempted to retrocede to Maryland without success, as the City of Alexandria and surrounding Alexandria County – today known as Arlington County – later retroceded to Virginia in 1846 (Mitchell 1986:vii-viii).

The Significance of Slavery and Freedom in Fairfax County

The experience of slavery is not read from demographic data, but information in periodic censuses and assessments can give a sense of the proportions of the institution in Fairfax County. In the mid-eighteenth century, twenty-eight percent of Fairfax County's population was classified as "black" (Cissna 1990:37; Pargas 2006:337). Donald Sweig's research on the population of free people of color in antebellum Alexandria, Loudon and Fairfax Counties provides valuable insights into general demographic trends, and the most concise presentation of this data is a research report prepared for Fairfax County (Sweig 1983), which draws on his earlier graduate research (Sweig 1975, 1982). Sweig tabularizes available census data to describe the growth among free African Americans in these three counties, and he offers inferences regarding their place in the labor structure and the wider political economy of the region. He also compiles basic data on the number of enslaved people enumerated in Fairfax County, to characterize the institution of slavery within the present study area in these basic terms (**Table 3.1**).

Table 3.1. White, Enslaved, and Free African American Population in Fairfax County Reported by the U.S. Census, 1800-1850 (Sweig 1975:Appendix C).

Census Year	White Population	Enslaved Population	Free African American Population
1800	7,035	6,078	204 Free Persons[1]
1810	6,626	5,942	543 Free Persons[1]
1820	6,275	4,637	507 Free Persons[1]
1830	4,765	3,970	311
1840	5,469	3,453	448
1850	7,432	3,250	547

[1] This category in the 1800 and 1810 census represents "all other persons, except Indians not taxed" and so includes free African Americans as well as foreigners (Sweig 1975:Appendix A).

Sweig's central concerns are with the place of free African Americans in the labor system and larger political economy of Northern Virginia (Sweig 1975), and the potential for African American culture to develop and be conveyed historically through slaves families, something contingent upon the integrity of family structure for African Americans existing within the system of slavery and in spite of the practice of separating families during slave sales (Sweig 1982). In these studies, Sweig offered preliminary conclusions based principally on census data and historical sources pertaining to the importation of slaves and sales within and without of Alexandria, Fairfax and Loudon Counties. Sweig (1982:xiv) proposed that stability in slave

population was adequate to allow for coherent family structures, and thus a coherent cultural tradition that survived during the later eighteenth and early nineteenth centuries, despite the threat of fragmentation from dispersal of families during sale. Following on these themes, Pargas (2006) examined the consequences of agricultural work to child rearing and family time, and the internal family economies of the enslaved which drew Sweig's attention in his earlier studies. While there is no clear trend or pattern in the population figures for free African Americans in Fairfax County between 1800 and 1850, the persistence of free African Americans is clear and Sweig (1975) suggested that these persons were integral rather than peripheral to the economy of Northern Virginia.

Beth Mitchell's text and map *Beginning at a White Oak* (Mitchell 1977) allows us to tally those African Americans who were enslaved at plantations situated on Pimmit Run in Fairfax County in 1760. As discussed above, lands on the Potomac River surrounding Pimmit Run were owned by Philip Ludwell Lee, including a large holding north of Pimmit Run, and virtually all waterfront along the bend in the Potomac River in this location. Lee owned 3,008 acres here, had no tenants on the land, and owned twenty slaves (Mitchell 1987:16, Table 1).

A number of other smaller landholdings line Pimmit Run, and most of them also depended on slave labor. Moving from east to west along Pimmit Run, Beth Mitchell (1986, 1987) presents the following figures for 1760, with the names of tenants indicated with italics:

- Robert "King" Carter – "land owned by the Frying Pan Company, which had been formed in 1731 by Robert "King" Carter and members of his family (Mitchell 1977:7-8). The Carters own 9,276 ac and ten slaves in Fairfax County (1977:Table 1, pp. 11), including land on Pimmit Run.
- John Turberville owned 2,800 acres, had no tenants, and possessed sixteen slaves.
- Henry Watson owned 288 acres, had no tenants, and owned no slaves (Mitchell 1977:Table 1, 22).
- Charles Broadwater owned 1,700 acres, leased 200 acres, and owned twenty-two slaves (1977:Table 1, 10).
- Thomas Asbury owned 110 acres and three slaves.
- Blanchflower Duncan owned 319 acres and no slaves.
- *Thomas Darne* owned 70 acres and leased 200 acres, and possessed no slaves.
- *Owen Williams* owned 288 acres, leased another one hundred acres, and owned six slaves.
- *John Cockerill* leased 200 acres and owned six slaves.
- William Wright owned 71 acres and possessed two slaves.
- *Thomas Wren* leased 400 acres and owned six slaves.
- Benjamin Sebastian owned 200 acres on Pimmit Run and one lot in Alexandria, and owned four slaves.
- William Gunnell owned 800 acres, and four slaves.
- *Gerrard Trammel* leased 200 acres, and owned one slave.
- John Trammel owned 449 acres, and seven slaves (Mitchell 1987).

This survey of slave owning along Pimmit Run ends where this waterway crosses the road between the Old Courthouse and Falls Church adjacent to the properties of Gerrard and John Trammel (Mitchell 1977:86). In total, this population consisted of up to seventy-seven enslaved persons including men, women and children, residing in quarters or dwelling in the homes and

compounds of their owners. This population would have witnessed a transition away from cultivation of the cash crop tobacco, towards more diverse agricultural production of food that occupied enslaved labor more consistently throughout the year. In the last quarter of the eighteenth century and certainly by the beginning of the nineteenth century,

> The tobacco calendar, which defined time in the world of northern Virginia slave families, was altered significantly as a variety of winter and summer crops were introduced with different cycles and different methods of cultivation, keeping field hands busy throughout most of the year with continually alternating tasks" (Pargas 2006:341).

Apart from these changes in crops and scheduling, many of the traditions of tobacco cultivation persisted, such as the organization of labor into gangs (Pargas 2006:343-344). In at least some instances, work gangs were constituted from within single families, allowing family members to support one another and perhaps also provide supervision to children where Fairfax County's typically small slaveholdings precluded idling enslaved people to provide childcare (Pargas 2006:346). While the vast majority of enslaved people worked in agriculture – 86 percent of the enslaved population of Fairfax County did agricultural work at the time of the 1840 census (Pargas 2006:354), we can also suppose that the milling operation of Philip Ludwell Lee at the mouth of Pimmit Run was sustained at least in part by slave labor.

Slavery and Freedom in Montgomery County

The earliest federal census in 1790 indicates that approximately 5,800 enslaved people were residing in Montgomery County as of that year. Slaveholdings were generally small; among the 919 slave owners present in the county, more than half owned five or fewer slaves, and 200 slave owners possessed but a single slave. The largest slaveholdings in the county numbered between thirty and fifty-four persons, with twelve slave owners having thirty or more slaves. Over 1,100 households in the county held no slaves (US Bureau of the Census 1907). The population of enslaved people in Montgomery County peaked in 1810, when the federal census recorded over 7,500 enslaved, and the number of enslaved in the county trended downwards between 1810 and 1860 (**Table 3.2**).

Table 3.2. Slave Population in Montgomery County Reported by the U.S. Census, 1790-1860 (Wright 1921:86-87, Table II and Table III).

Census Year	Enslaved Population	White Population
1790	6,030	11,679
1800	6,288	8,508
1810	7,572	9,731
1820	6,396	9,082
1830	6,447	12,103
1840	5,377	8,766
1850	5,114	9,435
1860	5,421	11,349

There is a historical record of propertied, free African Americans in Montgomery County that extends from the mid-eighteenth century. An account of Frederick County's population from 1755, when Frederick County still included lands later incorporated into Montgomery and Washington Counties, indicates a total African American population of 1,933 persons, including 157 free people of color. The white population of Frederick County in 1755 consisted of slightly over 12,000 persons, including a small number of male and female indentured or hired servants (n= 384) and convicts (n= 136), some of each who were children under fifteen years of age (Wright 1921:84-85). Wright's (1921) study *The Free Negro in Maryland, 1634-1860* includes data on periodic property assessments showing the value of property among free African Americans in Montgomery County between 1793 and 1860 (**Table 3.3**).

Table 3.3. Assessment Records for Free African American Landowners in Montgomery County, 1793-1860 (Wright, 1921:184, Table 1

Year	Number of property holders counted	Combined value of property, in U.S. Dollars contemporary with the census year and adjusted to 1860 values (following Sopko 2000; Williamson 2014)
1793	7	$349.33 (1860$: $294)
1832-33	22	$1,773 (1860$: $1,760)
1841-42	31	$5,371 (1860$:$5,480)
1852-53	43	$9,999 (1860$: $10,800)
1860	51	$17,142

Hynson (1998) discusses an act of the Maryland General Assembly passed in 1831, called "An Act Relating to the People of Color in this State." This act was intended "to achieve the removal of free African Americans from the state of Maryland in their entirety" through colonization. It required that the sheriff in each county perform a census, producing a list of free African Americans for each county, indicating their name and age. Hynson's (1998) transcription of the list includes over 1,100 persons enumerated as free African Americans in Montgomery County in 1832, without identifying any political subdivisions within the county. Table 3.3, above, would indicate that very few of these were landowners, but certainly a number of them had acquired property, in addition to securing their own continuing freedom where that freedom was easily – sometimes forcibly – contested.

In 1860 Montgomery County was home to 1,552 free and 5,421 enslaved African Americans, from a county population of 18,322 persons (Brackett 1889:265). Though nearly one-third of the county was enslaved, most slaveholdings were small. Free African Americans constituted eight percent of rural Montgomery County's population in 1860 (McGuckian 2001:35-36). African American property in 1860 was valued at $17,141 among fifty-one property owners (average value: $336), compared with over $5.5 million dollars in property that was held by 11,349 whites in the county (average value: $482). Of those fifty-one propertied African Americans, seven owned property assessed for $500 or more; two owned property assessed for more than $1,000, and one had more than $2,000 in property in the county (Wright 1921:185-186).

A number of slave narratives were recorded by African Americans who resided in Maryland during the period of the Federal Writers' Project, and had lived as slaves either in Maryland or elsewhere (Federal Writers' Project 1936-1938). These are difficult to summarize. Some narratives describe little in the way of severe mistreatment on Maryland plantations, while others include frank accounts of atrocities committed against enslaved persons. Individual slaveholdings were typically small in Maryland, and recollections indicate food and housing that was arguably adequate and sometimes improved by gardening, hunting, and also technique in the kitchen that improved the palatability of substandard provisions. These conditions, which should not be taken to mean that slavery in this instance was any milder than slavery in other parts of the nation, may reflect Maryland's status as a border state with both pro- and anti-slavery advocates. Though the central and southern counties, including Montgomery County, were heavily invested in the institution of slavery and economically dependent upon slave labor, the political pressure rendered by proximity to slave-free states produced distinctive expressions of slaveholding in practice. The clearest element in the diversity of slave narratives recorded in Maryland is the ways in which slaves were treated as property, whether being bought and sold, housed and cared for as chattel, or pursued as runaways.

Flight from Slavery and Self-Emancipation.

Several narratives discuss the experience of being a fugitive. One former slave from Charles County spoke of an owner who raised specially-trained bloodhounds for tracking fugitives and sold them to slave owners throughout the southeastern United States (Federal Writers' Project 1936-1938:22-23). Torrey and Green include the following narrative in their history of the Brookmont neighborhood, regarding a North Carolina man named James Curry escaping from slavery along the C&O Canal:

> I…fell back along the Potomac river, and traveled on the tow-path of the canal from Friday night until Sunday morning, when I lay down and slept a little, and then, having no place to hide for the day I determined to go on until I could find a place of safety. I soon saw a man riding towards me on horseback… When he met me, he stopped his horse, leaned forward, and looked at me, and then, without speaking, rode on again. I still fully believe it was at first his intention to question me. I soon entered a colored person's house on the side of the canal, where they treated me very kindly. I traveled on through Williamsport and Hagerstown, in Maryland, and, on the 19th day of July, about two hours before day, I crossed the line into Pennsylvania (Torrey and Green 2008:33-34).

Curry's flight along the Canal is all the more daring because slave-owning was prominent among some landowners near Brookmont. For instance the Loughbroughs, a wealthy family that held an estate on River Road near Tenleytown from the early nineteenth century, used slaves to run their mill on Little Falls Branch; one of the Loughbrough's sons joined the Confederate Army, as did many in Montgomery County (Clark 1930:93; Torrey and Green 2008:33-40). The story of Curry's flight from slavery reveals the importance of the C&O Canal as a route of the Underground Railroad, which certainly ties the Potomac River below the falls into the historic struggle against slavery that is both regionally and nationally significant.

Thus, in addition to fueling economic growth, the developing transportation networks were also used by those fleeing slavery, Major transportation routes across the Potomac River from

Georgetown and through Montgomery County were material to the success of the Underground Railroad. The Potomac River, Chain Bridge, the towpath of the C&O Canal, Rock Creek, and Rockville Pike were all traveled by self-emancipated people moving north towards freedom (Mitchell 1986:8). Among these was Ann Maria Weems, who famously fled from Rockville slave trader Charles M. Price in 1855, and escaped to Philadelphia dressed as a coachman (McGuckian 2001:37). Not all of these travelers were successful, and the jail in Rockville held many captured fugitives, including a group of forty enslaved persons who had fled Charles County and were apprehended on the road to Frederick in 1845 (McGuckian 2001:37).

Emancipation came to all enslaved people in Washington, DC through a congressional act of April 1862 and the District of Columbia became an important destination for slaves affecting self-emancipation by flight. Compensated emancipation under this policy brought thousands of federal dollars to Union slaveowners completing manumission, until all slaves in Maryland were freed under a new state constitution adopted in November 1864 (McGuckian 2001:55-56). The Maryland Bureau of Refugees, Freedmen, and Abandoned Lands (the Freedmen's Bureau) was established in September 1865 under the authority of the Freedmen's Bureau Bill, to assist formerly enslaved people during Reconstruction. Such assistance extended from basic provisioning and security to legal representation, locating displaced relatives, education, and economic advancement (McGuckian 2001:56).

II. Regional Transportation: Roads, Bridges, and Canal Construction During the Eighteenth and Early Nineteenth Centuries.

Native American Pathways and Early Roads

Several Native American pathways were used by early settlers on the Northern Neck in Virginia and today's Montgomery County, and became fixed among the rolling roads of the early colonies. Rolling roads are named for the conveyance of hogsheads of tobacco, by attaching axles and a handle to these large barrels and rolling them to their destination, where the barrel itself rolls along the ground like a single large wheel attached to a team of draft animals, or in some instances men (Crowl 2002:21; McGuckian 2001:10; Middleton 1984:113).

In Maryland, Native American footpaths included the Monocacy Path, a north-south route that extended from the Susquehanna River Valley into Montgomery County, more or less in the alignment of Maryland Route 28, the Darnestown Road; River Road, which connected low-lying lands along the Potomac River; and the Sinequa Trail, held to be aligned with Rockville Pike and extending south from Frederick, to follow Rock Creek to its junction with the Potomac River (McGuckian 2001:4).

Crowell, et al. (1987:10) mention several rolling roads on the Maryland side of the Potomac River, including the River Road extending from Edward's Ferry to Georgetown, and Falls Road leading from Georgetown to the Falls, referring to the calmer, navigable waters below Little Falls. Today's Old Georgetown Road, which parallels Rockville Pike west of the complicated interchange with Interstate 270 and the Capital Beltway, has had several names since it was established ca. 1740, including the Great Road, Rock Creek Road, and the Rolling Road. Linking Georgetown with Frederick further north, it was traversed by Edward Braddock's army as it

headed north to battle French forces at Fort Duquesne in 1755 (McGuckian 2001:1, 3). It is depicted on Griffith's map of Montgomery County published in 1796.

Heather Crowl's (2002) history of roads in Fairfax County acknowledges an association between Native American pathways and the earliest roads established by English settlers on the Northern Neck, without strongly affirming the association or designating any specific alignments as having been established by indigenous people:

> The earliest roads in Fairfax County were created by Native Americans prior to the arrival of European settlers, and continuing into the contact [or early colonial] period. The locations of most of the original Indian roads or trails are not known, but the roads likely followed the edges of rivers and the tops of long ridges. Early court records from Virginia occasionally mention "Indian paths." For example, a Virginia land grant dated 1720 described the property as "…five thousand acres, Beginning upon the west side of the third creek above Christanna Fort, where an Indian Path crosses the said creek…" (Crowl 2002:13).

Lawmakers in seventeenth-century Virginia established the authority and responsibility for creating and maintaining roads in 1632, 1657, and 1666, principally delegating the clearing of roads to county courts, particularly those roads linking political and social institutions – the court houses and churches – and those roads allowing movement from county to county and access to wharves for shipping. Crowl also notes that these laws were largely ignored in the sparsely-populated Northern Neck, where early settlement occurred along navigable waterways that themselves provided for efficient transportation and communication, by boat (Crowl 2002:14-21). Establishment of official tobacco inspection warehouses in Virginia after 1730 and in Maryland after 1747, which created a bottleneck on tobacco cured and ready for export, was a significant factor in the development of early roads, as plantations were no longer free to ship tobacco directly from their wharves (Crowl 2002:20-21).

As port cities such as Alexandria and Georgetown, and market towns further inland became significant commercial centers, networks of roads developed to connect these together into regional transportation systems. Merchants developed commercial networks of their own, forging economic links between food producers and shipping centers with access to international markets. These enterprises promoted connections across the Potomac River, first with ferries, then with permanent bridges like those established at Pimmit Run.

Bridging the Potomac River: Falls Bridge and Chain Bridge

According to Myer, the present location of Chain Bridge has been home to eight different bridges "representing almost every local bridge disaster and period" (Myer 1974:3). The 1791 L'Enfant Plan for the Federal District incorporated a bridge over the Potomac River in the vicinity of Georgetown, at the location of the islands known as the Three Sisters. Responding to this imperative, a number of merchants in Georgetown organized the George-Town Bridge Company in 1794, and by 1795 a bridge over the Potomac River was under construction at the mouth of Pimmit Run, which was called the Falls Bridge, more or less in the present-day location of Chain Bridge. The Maryland Assembly authorized the George-Town Bridge Company to build a road spanning the distance between the Falls Bridge and Georgetown. The Falls Bridge and roadway connecting it to Georgetown were completed in 1797, and promoted

trade between Georgetown and Leesburg, in competition with merchants in Alexandria (Beauchamp 2012:9; Myer 1974:v, 1).

This first bridge may have replaced the ferry service across this narrows that had been established by Francis Awbrey for Thomas Lee in ca. 1720. The bridge was operated with tolls: three cents for pedestrians, eight cents for a rider on horseback, twenty-five cents for a vehicle with two wheels, and fifty cents for a vehicle with four. The 1797 bridge collapsed in 1804, and a second wooden bridge was constructed, only to collapse into high water six months later. A third structure was the chain suspension bridge built in 1808 for which contemporary Chain Bridge is named (Myer 1974:3).

In 1809, James Finley published a nine-page description of the construction of a chain bridge (Finley 1970 (1809)). Finley constructed the first chain bridge in Fayette and Westmoreland Counties in Pennsylvania, over Jacob's Creek. That bridge had two piers and a span of seventy-five feet. Finley secured a patent for his chain bridge structure in 1808. At the time of his writing, five chain bridges were in existence, including a 306 footspan with three piers at the Falls of the Schuylkill River, a 130 foot span at Cumberland, Maryland, and the Chain Bridge crossing the Potomac River with approximately the same dimensions as the Cumberland chain bridge (Finley 1970 (1809)).

According to Finley's description, the Potomac Chain Bridge was supported by two continuous chains forged from one and one-quarter inch iron bar stock, spanning one hundred and thirty feet and having a distance between them of fifteen feet. Finley calculated that the chains for the bridge required five tons of iron, and were of sufficient strength to support 540 tons of weight, including the bridge deck and traffic. He also includes calculations for the materials and cost of building the chains, specifications on the shape and bar stock dimensions for each chain link, and methods of construction for the piers and decking. The chains themselves were anchored to each side of the Potomac River in this fashion:

> In regard to the anchoring or fastening of the end chains, there is much diversity of opinion. Many are highly pleased with the idea of fastening to a rock when the situation will admit – some by letting the end of the chain into the rock with a steeple or bolt to fix it to – and others by letting bolts into the rock with the head projecting out for a large piece of iron to rest against – To this large piece of (perhaps cast) iron, the chain is fastened… It is settled beyond all controversy, that wrapping with pitch and canvas will preserve iron time out of mind, even in sea water, and that good painting is as effectual in an open situation (Finley 1970 (1809):7-8).

Finley boasted, "may I not with some degree of exultation ask, who ever thought of the skeleton of a bridge so light and so strong, so permanent, so easily erected, and repaired or renewed in such parts as may require it?!!" (Finley 1970 (1809):8), stating that his chain bridges were erected more quickly, and used far less iron material than contemporary iron bridges in England, which he described as "monstrous masses of iron" (Finley 1970 (1809):8).

In spite of Finley's engineering prowess and pride, the 1808 chain bridge survived for only two years, and two subsequent bridges of similar design were swept away or damaged in 1815 and 1840. In 1833 the Federal Government purchased the bridge, and it maintained ownership until

1856. During earlier periods corporations were chartered under the authority of the State of Maryland to build and maintain the Chain Bridge, and these corporations were permitted to collect tolls. After 1833, the bridge was free from tolls. An 1839 illustration of the bridge shows a masonry structure suspending chains as in Finley's patented design (**Figure 3.8**). A sixth bridge was constructed at this location in the 1850s, a series of eight wooden trusses supported by stone piers, which had pointed faces in the upstream direction for breaking ice floes and flat faces towards the southern downstream direction. This iteration of the bridge was present during the Civil War and fortified by Union forces, and the piers of the current Chain Bridge are the same stone piers constructed for this 1850s bridge (**Figures 3.11** and **3.12**). In 1856 Congress gave the corporation of Georgetown jurisdiction over traffic on Chain Bridge, upon the condition that the bridge remained free from tolls. Under this new authority, In 1865 and 1866, Georgetown allocated money to grade and repair roadways leading to Chain Bridge, including Little Falls Road (today's MacArthur Boulevard), and New Cut Road (today's Reservoir Road), which had deteriorated under heavy use from Union forces during the Civil War (Mitchell 1986:3).

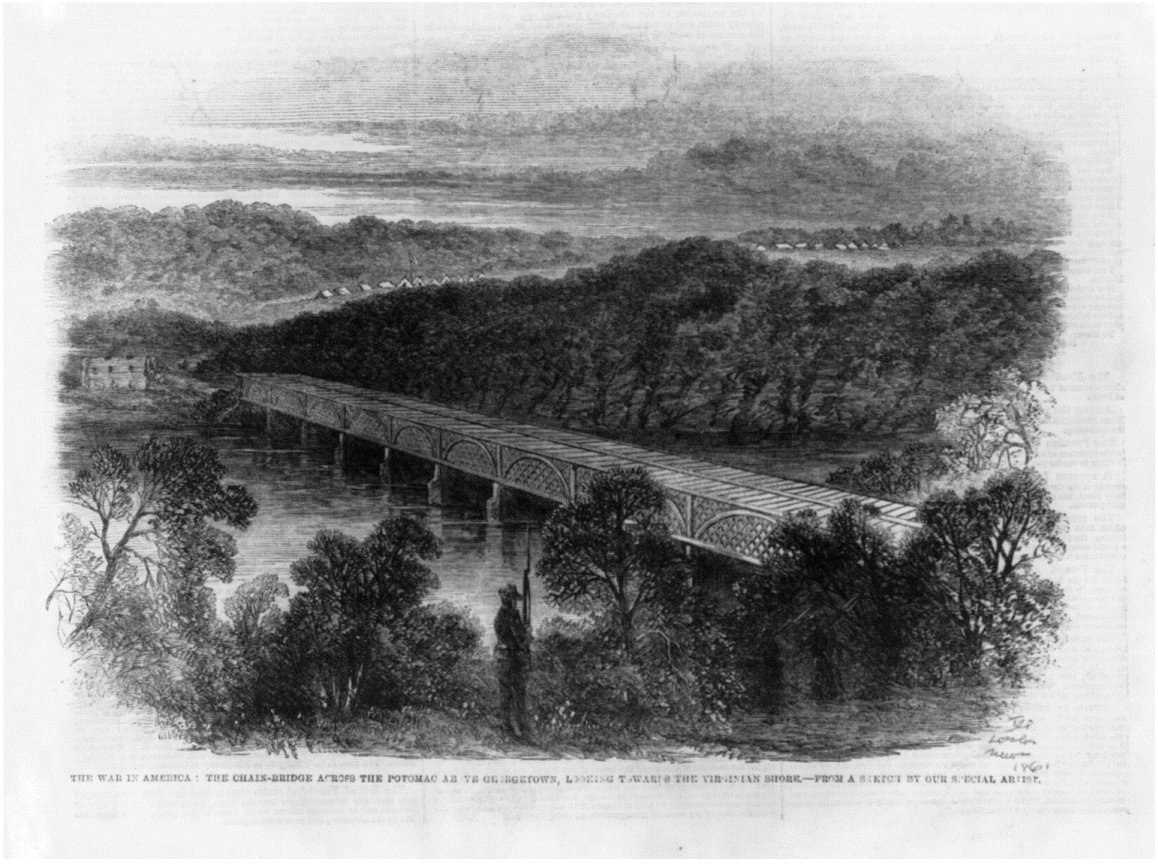


Figure 3.11. "The War in America: The Chain-Bridge Across the Potomac Above Georgetown, Looking Towards the Virginia Shore – From a Sketch By Our Special Artist," *The Illustrated London News*, 1861. Library of Congress Prints and Photographs Division. Accessed: http://hdl.loc.gov/loc.pnp/cph.3b20674.



Figure 3.12. "Washington, DC Chain Bridge Over the Potomac; Chesapeake and Ohio Canal in Foreground," William Morris Smith, 1865. Library of Congress Prints and Photographs Division. Accessed: http://hdl.loc.gov/loc.pnp/cwpb.04112.

A cattle market and tavern were located at the intersection of Little Falls Road and New Cut Road (now Macarthur Boulevard and Reservoir Road, respectively). Drovers Rest was a major stockyard adjacent to today's MacArthur Boulevard near the Georgetown Reservoir. Mary Mitchell (1968:43) notes that during the spring, summer and fall months, Drovers Rest had a weekly turnover of five to seven hundred head of cattle, sheep, and veal, all arriving for markets in the District of Columbia from Virginia, having been driven across Chain Bridge every Saturday. Use of Drovers Rest as a cattle yard was interrupted in 1861 when the space was seized to bivouac Union volunteers, but Virginia livestock were again driven to Georgetown for slaughter a year after the end of the Civil War.

The deck and trusses of the sixth bridge were ruined by high water in 1870, and the seventh Little Falls Bridge was constructed by Army Engineers in 1874. This light iron structure was described in an 1880 guide to Washington:

> The present wrought iron truss bridge was ordered by Congress in 1872, built by Clarke, Reeves and Company, Phoenixville, Pennsylvania, was erected and

> opened in 1874. It is 1,350 feet long, 20 feet wide, 26 feet high, and has eight spans, from 160 feet to 170 feet each. The floor beams are 15 inch rolled iron; planking, 2 inches North Carolina Pine; stands over 20 feet over the main channel and cost $100,000. The bridge rests on old stone piers, raised 18 inches, and is free (from Randolph Keim's 1880 *Washington and Its Environs*, quoted in Myer 1974:5).

Early in the twentieth century, this iron structure (**Figures 3.13** and **3.14**) became weakened such that severe weight and speed limits were imposed in 1927. The bridge was closed to all but pedestrian traffic one month later, until repairs could be made at the Virginia abutment. Then, flooding in 1936 damaged the bridge so severely that the District of Columbia Commissioners closed it to all traffic (Myer 1974:3-5).



Figure 3.13. View of Chain Bridge from Virginia during a flood, photographed by Theodor Horydczak after ca. 1920. Library of Congress Prints and Photographs Division, Theodor Horydczak Collection. Accessed http://hdl.loc.gov/loc.pnp/thc.5a36877

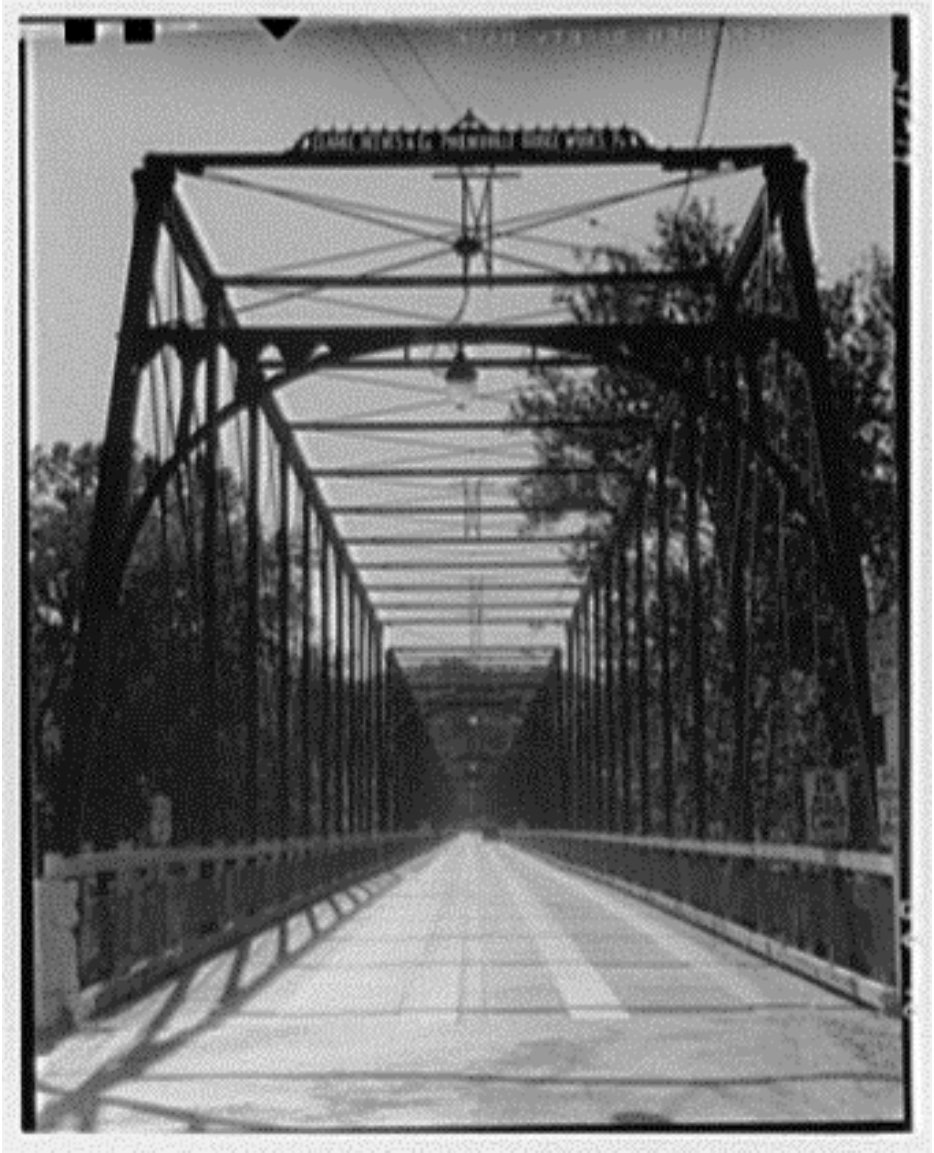


Figure 3.14. View Down the Length of Chain Bridge, photographed by Theodor Horydczak after ca. 1920. Library of Congress Prints and Photographs Division, Theodor Horydczak Collection. Accessed http://hdl.loc.gov/loc.pnp/thc.5a35896.

The current Chain Bridge, built with continuous steel girders and simple in design, was constructed in 1939 for approximately $393,000, using the piers that had been constructed in 1850 and survived the 1870 flood (**Figure 3.15**). The Washington Commission of Fine Arts approved this design, as it was anticipated that the bridge would be surrounded by park land in the future – as it is today – and the Commission therefore desired that the new structure match the character of the adjacent Memorial and Key Bridges, which have a relatively flat profile and minimal visual impact. The existing bridge is 1,341 feet and two inches in length, 30 feet wide with 5-foot wide sidewalks. The bridge deck rests 45 feet above the river (Myer 1974:5).



Figure 3.15. Contemporary Pier of Chain Bridge on the East Side of the Potomac Showing 1850s Construction, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.

The current Chain Bridge crosses land administered by the C&O Canal National Historical Park. This area is periodically inundated during periods of high water, and it is strewn with remnants of earlier bridge structures, including large pieces of masonry associated with pre-1850 bridge piers, much of which bears iron rings or wedged pins inserted into the stone (**Figures 3.16** and **3.17**). Also prevalent are cast iron lamp posts, which occur at intervals on the south side of the current bridge and may have provided illumination for traffic earlier in the history of the current bridge, or possibly a previous iteration of the bridge (**Figures 3.18** and **3.19**). These lamp posts are similar to Millet post-Washington globe lights used by the NPS and other federal government agencies. It is possible that these were dumped here (*pers. comm.* Matthew Virta 2015). Finally there is modern and historic graffiti, the earliest of which is dated 1889 (**Figures 3.20 - 3.22**). Some of these features occur in hazardous areas, particularly those closer to the Potomac River.



Figure 3.16. Iron Ring Set in Trimmed Construction Stone from Rubble Field Underneath Chain Bridge, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.



Figure 3.17. Detail of Wedged Iron Pin Set in Trimmed Construction Stone Associated with Bridge Construction, from Rubble Field Underneath Chain Bridge, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, January 2013.



Figure 3.18. Cast Iron Lamp Post Occurring Within the Rubble Field Underneath Chain Bridge, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.



Figure 3.19. Detail of Base of Cast Iron Lamp Post Occurring Within the Rubble Field Underneath Chain Bridge, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.

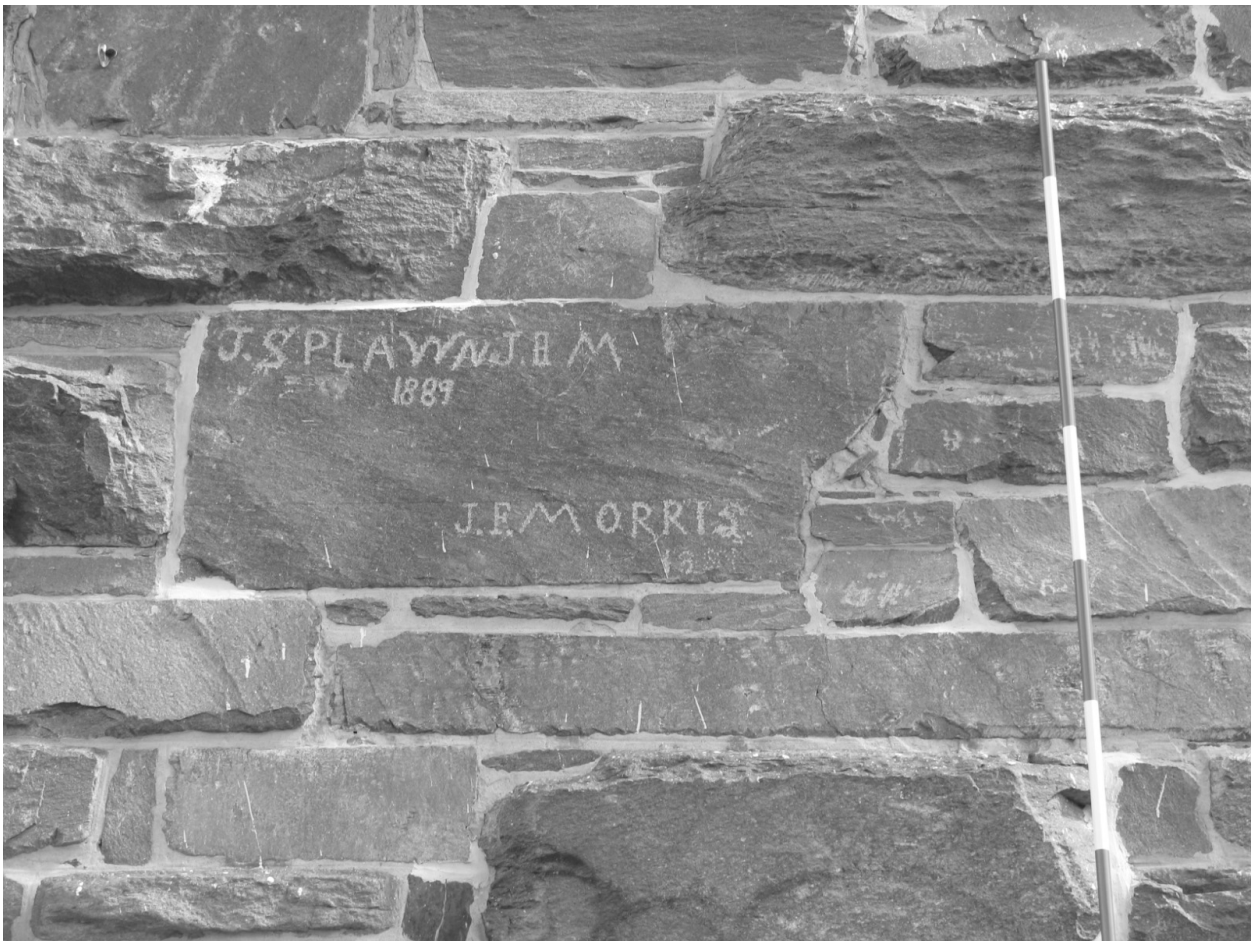


Figure 3.20. Historic Graffiti on Chain Bridge Pier Dated 1889, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.



Figure 3.21. Historic Graffiti on Chain Bridge Pier Dated 1938 and 1941 or 1991, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.



Figure 3.22. Graffiti on Trimmed Stone in Rubble Field Underneath Chain Bridge, C&O Canal National Historical Park, Washington, DC. Photograph By Matthew Palus, March 2013.

The western abutment of Chain Bridge also reflects its periodic rebuilding according to different designs over some portion of the nineteenth and early twentieth centuries. The current abutment for the bridge in Arlington County, Virginia (**Figure 3.1**, Resource No. 3) is itself composed from at least three different periods of construction, with a poured concrete abutment that seems to enclose an earlier masonry structure built from mortared stone, with an even earlier, dry-laid masonry structure on the southern side of the abutment proper (**Figures 3.23** and **3.24**). The dry masonry abutment depicted in **Figure 3.23** may be contemporaneous with the large dry-laid abutment visible from the eastern side of the Potomac River, depicted in **Figures 3.24** and **3.25**. The area south of the current Chain Bridge abutment in Virginia is strewn with rubble stone, again representing periodic adaptation or rebuilding of the Virginia-side abutment.



Figure 3.23. Elevation View of Current Chain Bridge Western Abutment Showing Three Phases of Construction, Arlington County, Virginia. Photograph By Matthew Palus, December 2012.



Figure 3.24. View Facing West Showing Western Abutment of Chain Bridge, With Remnant of an Earlier Abutment to the Left of the Current Abutment for the Bridge. Photograph By Matthew Palus, March 2013.



Figure 3.25. Elevation View of the Western Abutment of Chain Bridge Facing North, Showing an Earlier Abutment for Chain Bridge Alongside Current Bridge Abutment. Photograph By Matthew Palus, December 2012.

Finally, on the south side of the Virginia abutment of Chain Bridge, a substantial shrine has been constructed from adjacent stone rubble and adhered with cement (**Figure 3.26**). This shrine appears to be active, and contains a white ceramic cherub with a rosary, a laminated card bearing an image of the Madonna, and plastic flowers. There is an inscription on the ceramic cherub, the legible portion reading "IN MEMORY OF… [name illegible] … 12-02 [dates illegible]… LOVE, PAPA-MAMA [H]ERMANOS Y FAMILIA". Several votive candles rest atop the shrine. The shrine, arranged according to Latin American tradition, would seem to memorialize the death of a child. The current at this location in the Potomac River and Pimmit Run is extraordinarily dangerous, and GWMP staff believe this shrine to be associated with the tragic drowning of a three-year old boy in 2010; a *Washington Post* story indicates that the boy, who is not named, fell into Pimmit Run during a family outing near the location of this shrine (Weil, 2010).



Figure 3.26. View of Shrine at Chain Bridge Abutment, Facing North. Photograph By Matthew Palus, December 2012.

The Georgetown Pike

The road heading west from Chain Bridge is known historically as the Georgetown Pike (for a discussion of earlier roads here, see the section above, "Native American Pathways and Early Roads"). Tanya Beauchamp (2012) prepared a history of the Georgetown Pike in support of a nomination of this property to the National Register of Historic Places under Criterion A (association with important events) and Criterion C (embodying a type, period or method of construction, or representing the works of a master). This historic roadway is also known as the Georgetown & Leesburg Turnpike Road, and by other designations; officially the name Georgetown Pike is only applied by the Virginia Department of Transportation to Route 193 in Fairfax County. The 14.4-mile long, historic roadway extends for a short distance from the Virginia abutment of Chain Bridge to the border of Arlington and Fairfax Counties, and then continues northwest for 14 miles to intersect with the Leesburg Turnpike. Historically it connected Georgetown markets with agricultural producers and manufacturers in Leesburg and northern Virginia (Beauchamp 2012:4-8).

The Georgetown & Leesburg Turnpike Company was incorporated under an act of Congress in 1813, and the Falls Bridge Turnpike Company was incorporated by the Virginia Assembly in the same year. Though authorized separately, these two corporations shared administrators, contractors, and construction equipment, and otherwise pooled their resources in order to complete the road and open it to toll-paying traffic (Beauchamp 2012:8). The road was constructed between 1813 and 1827, "in conformance with the most advanced engineering expertise and construction resources of the early nineteenth century" (Beauchamp 2012:4). The road incorporates retaining walls, culverts, and bridges. Two of these structures, a massive stone retaining wall located on Pimmit Run in Arlington County, and a stone and brick bridge over Bull Neck Run, survive from the original period of construction. John Templeman, who had constructed the original Chain Bridge over the Potomac in 1808, was superintendent of construction for the road in 1817 and 1818, during which time he constructed another chain bridge over Difficult Run, upstream from the Potomac River Chain Bridge (Beauchamp 2012:4).

The roadway of the Georgetown Pike was constructed from closely fitted foundation blocks of stone that were filled over with crushed stone, over which was applied a sand or clay driving surface, depending on available materials. Unpaved rights-of-way to either side of the Georgetown Pike, known as "summer roads," were designated for travelers on foot or on horseback, and are still visible in some areas. The road persisted virtually unimproved from its early nineteenth-century construction and with minimal maintenance until after World War I, when it was first paved with asphalt and opened to automobile traffic in 1923. It was turned over to the Commonwealth of Virginia by private owners and made a public road in 1934 (Beauchamp 2012).

A number of features associated with the Georgetown Pike and adjacent to the current study area were included as contributing elements in Beauchamp's National Register nomination. These include: 1) a stone retaining wall that extends from the bed of Pimmit Run to approximately two feet above the present road surface where Chain Bridge Road intersects with the George Washington Memorial Parkway; 2) the "sightline, elevation, boundary and directional continuity" (Beauchamp 2012:5) at the interchange between the Georgetown Pike with the GWMP, which survive as intact components of the original early nineteenth-century design, and; 3) a second, massive stone retaining wall at Pimmit Run, which is part of the original construction.

The last of these falls within the current study area, and consists of a substantial stone retaining wall on the east side of Pimmit Run, not much higher in elevation than Pimmit Run itself, representing an abandoned segment of the Georgetown Pike as identified by Beauchamp in her National Register nomination. This section of the Georgetown Pike is depicted in Barnard's 1871 topographic map showing fortifications and active roadways adjacent to Forts Marcy and Ethan Allen. This retaining wall is mentioned specifically in the National Register of Historic Places registration form for the Georgetown Pike (Beauchamp 2012:4-6). It is visible from the Potomac Heritage Trail where it runs close to Pimmit Run, just north of the contemporary bridge over Pimmit Run on North Glebe Road (**Figure 3.27**).



Figure 3.27. View of Stone Retaining Wall Associated with an Abandoned Segment of the Georgetown Pike, east of Pimmit Run near Chain Bridge. View Facing Northeast. Photograph By Matthew Palus, December 2012.

Transportation on an Industrial Scale: Canal Construction at the Falls of the Potomac

This section of the study focuses on the Little Falls bypass canal, also called the Little Falls Skirting Canal, to the exclusion of the wider history of canal construction along the Potomac River. This is due to reasons of overlap in jurisdiction, as the C&O Canal is a separate unit of the National Park system, as well as the breadth of existing studies that treat the canal and its history. Readers are referred to the following works for more information: Robert Kapsch's essay "The Potomac Canal: A Construction History" published in *Canal History and Technology Proceedings* (2002); Kapsch's *The Potomac Canal: George Washington and the Waterway West* (2007); William Barse and Ingrid Weubber's *Archeological Overview and Assessment, C & O Canal National Historical Park* (2002); Fiedel, Bedell and LeeDecker's *Cohongorooto: The Potomac Above the Falls, Archeological Identification and Evaluation Study of C&O Canal National Historical Park,* Volume II (2005); Mike High's *The C&O Canal Companion* (1997); and Perry Wheelock's *Farming Along the Chesapeake and Ohio Canal, 1828-1971: A Study of Agricultural Sites in the C&O Canal National Historical Park* (2007).

Canal construction as a mode of industrial shipping and transportation began in France with the seventeenth-century Languedoc Canal, and such canals were first implemented in England in 1760 to bring coal over a relatively short distance into the city of Manchester. In North America, a number of routes west across the Appalachian Mountains were considered in the later part of the eighteenth century, often connecting to western gateways at Pittsburgh, Pennsylvania. Such routes included the Pennsylvania Main Line Canal, linked to Philadelphia and Baltimore through a series of canals and the Susquehanna River, and the Patowmack Canal, by which Pittsburgh could be reached via a road from the canal terminus at Cumberland, Maryland. The Santee Canal in South Carolina was completed in 1800, and the Erie Canal linking cities between Buffalo and Albany, New York, now a National Heritage Corridor overseen by the NPS, was completed in 1825 (Kapsch 2007:23-25).

George Washington's designs on opening up the Potomac River falls to navigation began in 1754, when he completed a reconnaissance of the river between present-day Cumberland, and Great Falls. This journey was mere weeks after Washington's defeat and surrender at Fort Necessity, which brought Washington's attention to the need for establishing a line of supply to the contested Ohio Territories (Kapsch 2007:10-11).

Beginning in 1763, Scottish merchant John Semple accumulated an enormous landholding immediately below Great Falls, encompassing ten thousand acres on the Potomac River in Virginia and Maryland, north of the current study area. Semple established a furnace for smelting iron on the Virginia side of the Potomac River, known as Keep Triste Furnace. This enterprise created a strong imperative for establishing a navigable way along the river to transport the iron pigs that his furnace produced. Semple was thus a proponent of early plans to develop canal navigation (Kapsch 2007:12). Another early proponent of canal construction was Semple's business partner John Ballendine, who constructed a dam and sawmill at Seneca Falls, approximately seven miles upriver from Great Falls. For the better part of his life, Washington corresponded with Semple and Ballendine over the issue of making the series of falls between Georgetown and the upper Potomac River navigable (Kapsch 2007:14-15).

Following the end of the Revolutionary War, Washington was able to resume his campaign to establish navigation beyond the falls of the Potomac River, and the Potomac Company was incorporated in 1785, with Washington elected as the company's first president. He resigned his position in 1789 when he became the President of the United States (Kapsch 2007:17). George Washington championed the Potomac River route strongly, as the water route promised much greater shipping capacity and far less expense than overland roads could permit, perhaps by a factor of ten to one (Kapsch 2007:21-23). Transportation from the Ohio River Valley would allow raw materials such as timber, iron, and also agricultural foods and other commodities to be carried to the Atlantic coast for export. In addition to carrying goods from the American interior to port, canals and waterways also improved the local economy. For instance, John Semple's iron foundry at Keep Triste shipped iron pigs seven miles upriver to Frederick Forge on Antietam Creek, while he was himself partner in an ironworks on the Occoquan River south of Alexandria, which was virtually inaccessible from Semple's landholdings above the falls (Kapsch 2007:26).

Semple made two attempts to organize navigation on the Potomac River, in 1762 and again in 1769. Both of these proposals left out canal construction at Great Falls and Little Falls, and addressed only the falls occurring above these, for instance with dams and locks at Seneca Falls

and others further upriver. Great Falls and Little Falls, which posed much greater obstacles to river navigation, were bypassed in Semple's proposals by a road extending to a point above the falls from Georgetown and Alexandria (Kapsch 2007:27-29). Semple shared his plans with John Ballendine, and copies of both of Semple's proposals are found in the papers of George Washington, according to Kapsch (2007:27, 29). Maryland's first governor Thomas Johnson also developed a plan for improving navigation on the Potomac River, proposed in 1770. Johnson's plan included a route for a bypass canal around Great Falls that was realized towards the end of the eighteenth century, and lock gates that were implemented with the Patowmack Canal and later the C&O Canal (Kapsch 2007:30). Johnson was allied with Washington and between them they rallied private investors and legislative authority in Maryland and Virginia (Kapsch 2007:32, 42).

Some of this support was thrown behind John Ballendine, who travelled to England and Europe in 1773 to study canal and lock construction. He developed a plan of his own for improving Potomac River navigation, and attempted unsuccessfully to raise funds for the project among the English. He did, however, return to America with several English engineers experienced in canal construction. This added credibility allowed Ballendine to garner more attention for his project (Kapsch 2007:32). Ballendine proposed a three-mile bypass canal with four locks to ascend the 36-foot drop in elevation at Little Falls, with a dam to divert water from the Potomac River into the canal above Little Falls. This plan was later realized closely by the Potomac Company. Above Little Falls, Ballendine proposed improvements in the channel and pathways constructed for towing vessels against the current up to another bypass canal at Great Falls (2007:33). These locks and canals would permit vastly larger watercraft than the existing boats that could navigate the Potomac River using in-river channels and sluices (Kapsch, 2002:134). The costs of construction, which were substantial, would be recuperated from tolls charged to use the new route (Kapsch 2007:40).

Ballendine began acquiring land for construction of his Little Falls bypass canal as early as 1770, and when he advertised for investors in 1774 he claimed to have begun construction of this canal (Kapsch 2007:40-41, 307). Ballendine also announced a plan in 1774 to hire fifty enslaved people to build the canal, but Kapsch (2007:41) doubts that slave labor contributed to Ballendine's project, supposing instead that the expert labor he secured in Europe composed the labor force.

A significant question regards whether or not any trace of Ballendine's canal project survives as part of the extant C&O Canal, which retraced portions of the Patowmack Canal. Working for the Louis Berger Group, Fiedel et al. (2005) completed a three-volume archeological identification and evaluation study of the C&O National Historical Park as part of the NPS Systemwide Archeological Inventory Program. The Berger Group's survey, conducted between 2003 and 2005, covered approximately 5,700 acres over a 59-mile segment of the park, via a combination of low and moderate-intensity field investigations including walkover reconnaissance, surface collection, shovel testing and stratigraphic excavation, as well as interviews, archival and cartographic research, and geoarcheological testing.

Relative to the project area for the current study, this survey addressed the complicated and somewhat poorly documented history of the Little Falls Skirting Canal, located today adjacent to Fletchers Boathouse south of Chain Bridge on the Maryland side of the Potomac River (Fiedel et al. 2005:48-50). They contested the association of this extant canal structure and John

Ballendine, held to have constructed the first skirting canal during the early 1770s. Fiedel et al. (2005) note that while Ballendine had support from George Washington, Charles Carroll, and other influential Virginians and Marylanders, the effort was likely interrupted by the Revolutionary War. Ballendine's 1781 will, for instance, makes no mention of a canal among his property. Contrary to the National Register nomination for the C&O Canal, Fiedel et al. (2005:50, citing Sparacio and Sparacio 1986; and Hahn 1997:22) propose that George Washington's Potomack Company, organized in 1785, was responsible for the first skirting canal around Little Falls, completed by 1802.

Ballendine's bypass canal around Little Falls was probably never completed. Kapsch (2007:41) notes that Washington referred to the location of Ballendine's canal while scouting the alignment of the Patowmack Canal in this vicinity in 1785, and described Ballendine's canal as unfinished. Kapsch indicates other evidence that Ballendine had only partially constructed his Little Falls bypass canal, and perhaps the strongest support comes from the act establishing the Potomac Company providing reimbursement to Ballendine, though the act was passed after Ballendine's death in 1781 (2007:41). Washington's plans for Potomac River navigation after the Revolutionary War responded to a different economy in the region, with new commodities coming to the fore. Timber and grain replaced pig iron and furs as the major exports from Georgetown and Alexandria (Kapsch 2007:46)

III. Conclusion

The Potomac Gorge below the falls has associations with seventeenth-century European exploration, and eighteenth- and nineteenth-century settlement and development in adjacent areas of Virginia, Maryland and Washington, DC. Four major historical trends define this period. First, English colonists secured land on the Inner Coastal Plain and Piedmont for settlement through incremental displacements of, and periodic conflict with, Native American societies that occupied this region. Enslaved Africans and African Americans figure prominently in the English settlement of these lands and the histories that follow. Circa 1750, after the establishment of plantations on Virginia's Northern Neck and above the Fall Line in Maryland, there is a shift in agricultural practices from an emphasis on tobacco monoculture to a more diverse production of staples, especially wheat and corn, and livestock. This shift promoted a third major trend, which was the establishment of a series of water-powered mills and the use of the labor of enslaved people. Quarries became increasingly valuable as construction accelerated, and roads and canals were required to connect these with warehouses, mills, and markets in ports such as Georgetown and Alexandria. Thus a fourth important theme during this period is development of transportation infrastructure. That infrastructure was severely taxed in the transformative period of the Civil War, the subject of the following chapter.

CHAPTER 4

The Defenses of Washington and The Fortification of Chain Bridge During the Civil War

Because of its strategic importance as a Potomac River crossing, the vicinity of Chain Bridge was fortified by the Union army during the Civil War with a series of earthworks, gun placements, rifle trenches, military roads and related features, on both sides of the Potomac River (**Figure 4.1**). Fort Marcy and its adjacent earthworks, rifle trenches and military roads (**Figure 4.1,** Resource Nos. 8-9) are among the best preserved of these fortifications today, but extant features include stone abutments for a military bridge crossing Pimmit Run connecting Forts Marcy and Ethan Allen in Virginia with (**Figure 4.1**, Resource No. 10) Batteries Vermont and Martin Scott in the heights on the Maryland side of the Potomac River. Another gun placement, called Chain Bridge Battery, was located at the eastern abutment of Chain Bridge in an area that has been heavily transformed by road construction, leaving no trace of this once-crucial installation. Fort Marcy is a NPS site administered by the GWMP; it was not within the initial boundary for the GWMP, but in 1958 the National Capital Planning Commission approved a boundary expansion, and the NPS acquired the property containing Fort Marcy one year later. Fairfax County matched the federal funds designated for the acquisition, and Fort Marcy was opened to the public in 1963.

Reed Hansen's *Civil War to Civil Concern: A History of Fort Marcy, Virginia* (1973) is comprehensive, well-referenced, and covers the period from the establishment of Fort Marcy in 1861 through the 19th and early 20th century disposition of the property, until the fort was acquired by the federal government for the National Parks. Hansen notes that the idea to create commemorative parks or drives from the circle forts first developed in 1901; a plan to create a highway connecting the defenses was superseded however by the conception of the capital beltway, which reveals how little progress the "Fort Drive" made during the first half of the 20th century (Hansen 1973:67-68). During this period Fort Marcy and its associated features were "benevolently neglected" under private ownership (Hansen 1973:68), overgrown but not disturbed. The heirs of Gilbert Vanderwerken sold the property containing Fort Marcy's earthworks in 1953, the property having remained in the Vanderwerken family since 1850, and only after did a movement to preserve and restore Fort Marcy develop. Fort Marcy was ultimately preserved through land acquisition and construction planning for the George Washington Parkway, and the expansion of land acquisitions to include a larger 15-acre tract containing Fort Marcy, which was accomplished without controversy in 1958 (Macintosh 1996:187-188). Hansen (1973:72-73) ties this movement to the Civil War Centennial, but also to plans to widen Chain Bridge Road that threatened Fort Marcy. In addition, nearby Fort Ethan Allen had been destroyed during construction of an Arlington County public school (Hansen 1973:75), enlivening the campaign to preserve Fort Marcy. In 1963, one Alexandria resident named Mrs. R. F. S. Starr, who sat on the Advisory Board of the National Capital Region Planning Council, stood before bulldozers to prevent them from removing a portion of Fort

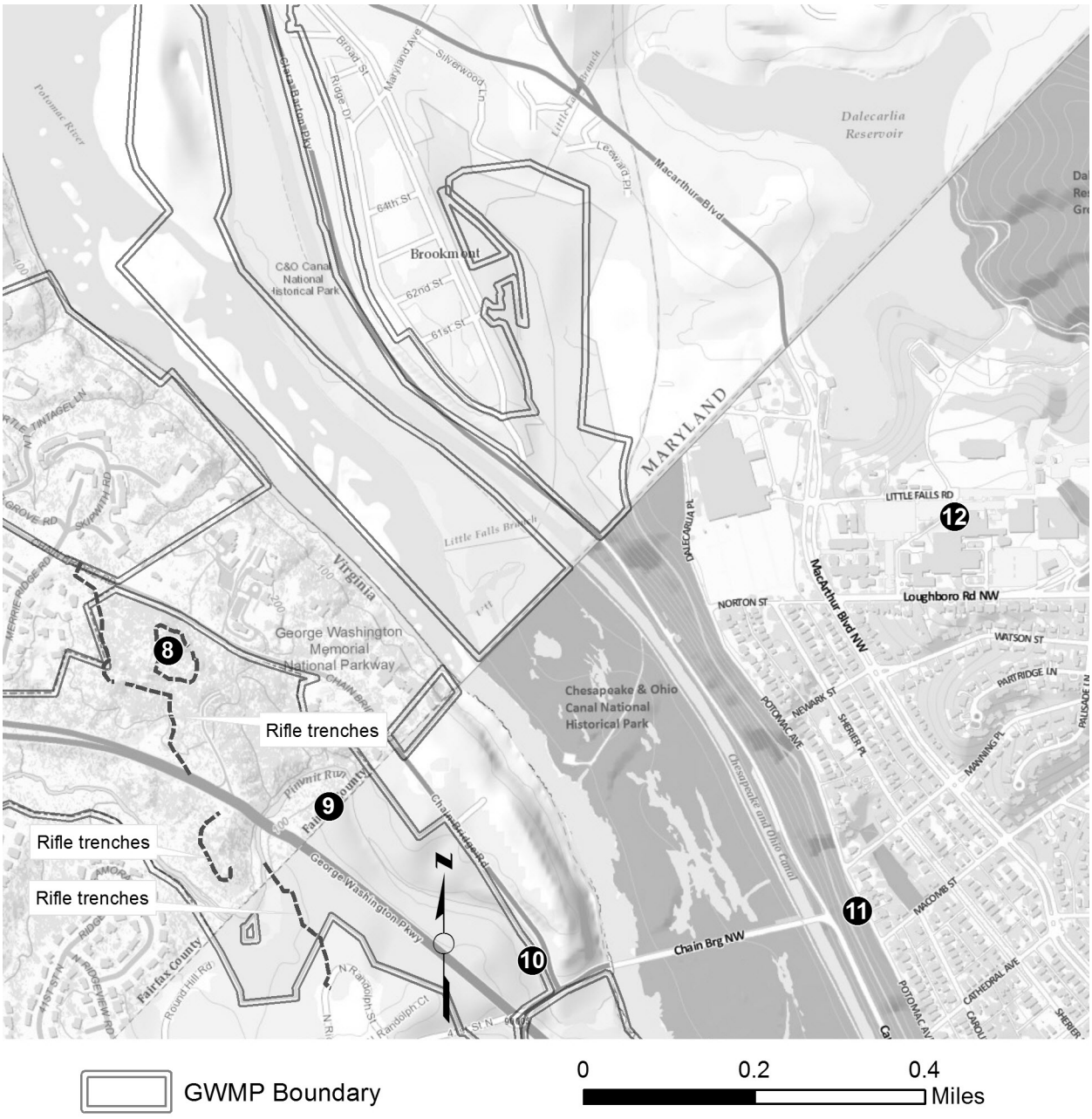


Figure 4.1. Plan of Historic Resources Associated with Civil War Activities Within the Study Area: 8) Fort Marcy Complex; 9) Historic Roads Associated with Fort Marcy; 10) Stone Bridge Abutments on Pimmit Run; 11) Battery Martin Scott; 12) Battery Vermont.

Marcy's earthworks as fill for a Virginia State Highway Department project (1973:76). Eleanor Lee Templeman also campaigned for the fort to be acquired and preserved. Hansen described a conservative restoration effort during the 1960s after Fort Marcy was acquired for the National Park Service, including brush clearing, waste removal, and placement of equipment and appropriate historic markers. The disused fortifications were well-enough preserved that Fort Marcy communicates its historical significance with no dramatic reconstruction of the earthworks themselves (1973:79-88).

I. Fort Marcy, Chain Bridge and the Civil War Defenses of Washington

Fort Marcy is a component of the immense ring of 164 forts and batteries known as the Defenses of Washington, a formidable defense system largely constructed following the Union defeat at the First Battle of Manassas in 1861 to protect the Federal capital from Confederate shelling or invasion during the Civil War. The defenses encompassed a perimeter of thirty-seven miles in circumference around Washington. While at the start of the war, the city of Washington was "entirely unfortified" (Barnard 1871:6), a late 1862 survey, described the city's defenses of fifty-three forts and twenty-two gun batteries, including Fort Marcy and the batteries protecting Chain Bridge. By September 1864 the defenses had been increased to sixty forts and ninety-three batteries enclosing the cities of Washington, Georgetown and Alexandria (Floyd 2004a). It was necessary that these defenses provide security from Confederates attacking with field and siege artillery capable of landing shells from positions three to four miles away (1871:6).

Forts Marcy and Ethan Allen were built to protect the bridgehead or *tete-de-point* at Chain Bridge, maintaining lines of supply and communication and ensuring the possibility of retreat for Union Forces in northern Virginia (Hansen 1973:18). Fort Marcy served as the major element in the defense of Chain Bridge, but the bridge was actually defended by a network of fortified positions on both sides of the Potomac River (Barnard 1871:124). Defensive positions on the Virginia side of Chain Bridge were fortified hastily but effectively soon after the Battle of First Manassas, a punishing defeat for Union forces that promised no quick resolution to what the US federal government considered a rebellion. Initial construction on Fort Marcy was completed in September and October of 1861, on land that was owned by Unionist Gilbert Vanderwerken, an entrepreneur who established a horse-drawn omnibus line in Washington, as discussed in Chapter 5. The fort was named for Brigadier General Randolph Barnes Marcy, who was George McClellan's Chief of Staff as well as his father-in-law (Hansen 1973:11). Additional improvements on Forts Marcy and Ethan Allen were made in 1862, including the completion of a network of rifle trenches and gun batteries external to the two enclosed redoubts. Fort Marcy was decommissioned at the end of the Civil War, and the land was returned to the Vanderwerken family under whose ownership it remained until the mid-twentieth century (Hansen 1973:71). Although the fort was dismantled, much of the structure's remaining earthwork walls, rifle trenches, and other features survive intact and are still visible (**Figure 4.1**, Resource No. 8). Fort Marcy and the associated roads, trenches and earthworks have not been subjected to extensive restoration as have some other elements in the Defenses of Washington. The earthworks and other features at Fort Marcy are among the best preserved of the circle forts and thus have not needed extensive restoration; the site is managed as a natural forest environment as an intentional preservation measure for the earthworks.

McClure (1961:14) reprints a 1:1,000 scale map sheet from Brevet Major General John Gross Barnard's report on the Defenses of Washington (Barnard 1871), which depicts the fortifications of Fort Marcy and Fort Ethan Allen, Batteries Martin Scott and Vermont, and the Chain Bridge Battery on the Maryland Side of the Potomac River, as well as the networks of rifle trenches and roads extending from Chain Bridge and the Georgetown-Leesburg Turnpike in Virginia (**Figure 4.2**). Some of these roads extending to the fortifications seem certain to have been constructed in order to build and provision these installations. Many of these features are extant and clearly visible, beyond the forts themselves.

II. History of Fort Marcy, 1861-1865

This overview of the history of Fort Marcy during the Civil War is largely drawn from Hansen's well-researched *Civil War to Civil Concern: A History of Fort Marcy, Virginia* (1973), Dale Floyd's historic resources study on the Civil War Defenses of Washington (Floyd 2004a), keyword searches of Barnard's *A Report on the Defenses of Washington to the Chief of Engineers, U.S. Army* (1871) and *The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, Series I-III originally published between 1880 and 1900, and accessed online through the Cornell University Library (http://ebooks.library.cornell.edu/m/moawar/waro.html; also Oliver 1997). Stanley McClure's *The Defenses of Washington, 1861-1865* (1961) reprints maps of the defenses originally published in Barnard's 1871 report. Studies by Hansen (1973) on Fort Marcy, and by Franke (1938) on Fort Ethan Allen both draw heavily from Barnard's 1871 report, paraphrasing it through long passages and at times doing little to supplement it. Dale Floyd's excellent historic resources study on the Defenses of Washington relies on details published in these earlier works, while contributing much original research towards the study of these defenses overall, particularly themes that were neglected in earlier studies, such as the composition and organization of the labor force that build the defenses, the use of "contrabands" in the construction and maintenance of the forts, the role of civilians at these installations, and the post-bellum history of the different forts.

The need to defend the city of Washington from attack was perceived almost immediately at the beginning of the Civil War. Construction of what eventually became the Defenses of Washington, a line of fortifications that encircled the city from the surrounding heights, with overlapping fields of fire and roads for communication and supply, was ordered by Major General George B. McClellan in 1861 (Floyd 2004a:Chapter 4; McClure 1961:1; Netherton, et al. 1978:327). Priority was given to the heights north of Alexandria and in northern Virginia, and Potomac River crossings from Virginia into Washington and Maryland. John Gross Barnard was appointed as Chief Engineer overseeing construction of these fortifications (Hansen 1973:1-3), and Barnard's (1871) report following the end of the Civil War is a key primary source for understanding these defenses.

The defenses were linked conceptually by Barnard with the well-studied Lines of Torres Vedras, built to protect the city of Lisbon in Portugal during the Napoleonic Wars in the early nineteenth century (Barnard 1871:90; Floyd 2004a:IV-57-60). In one report, Barnard referenced the Lines

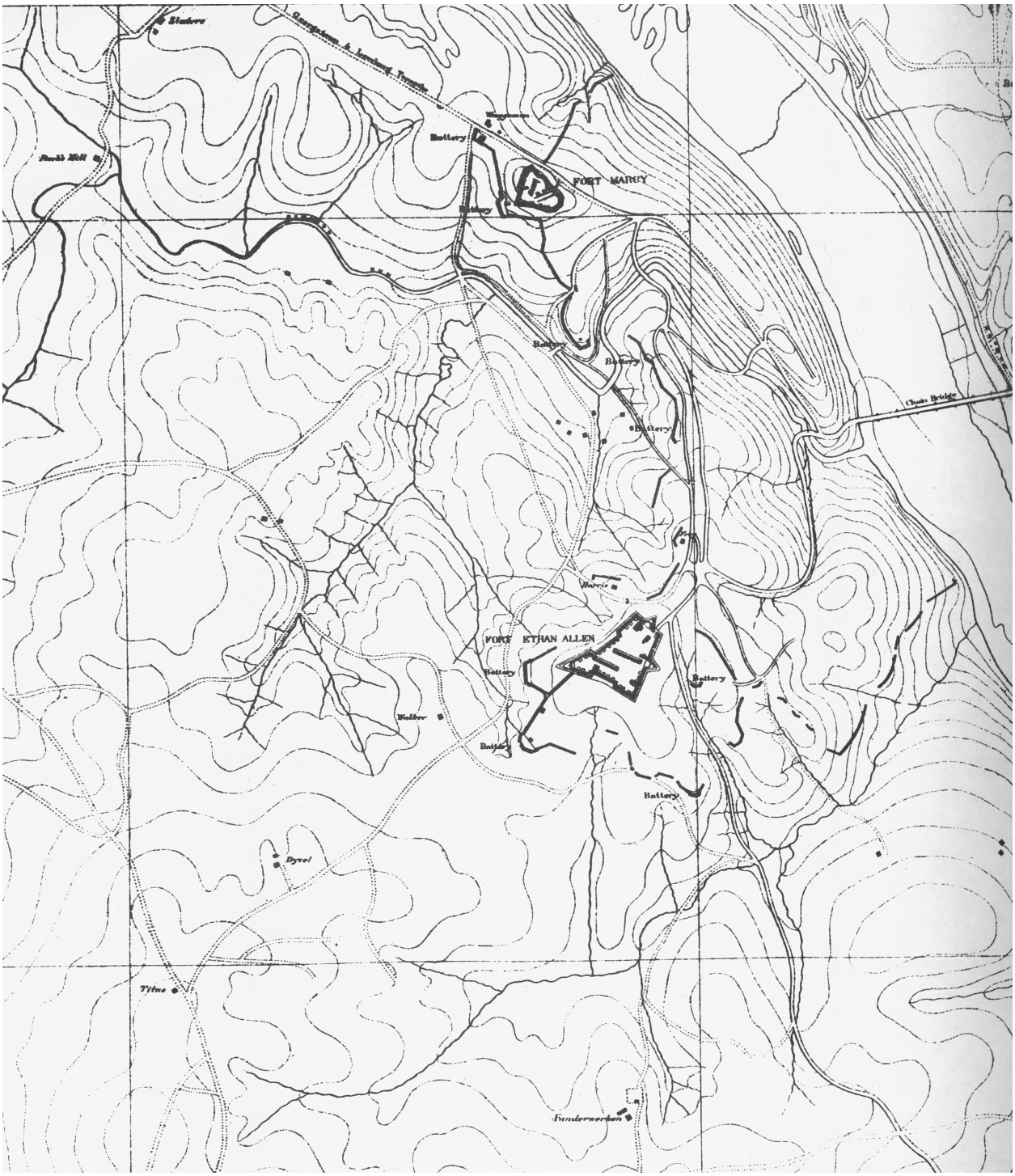


Figure 4.2. Detail of Topographic Map Included in Barnard's 1871 Report, Depicting Virginia Fortifications Around Chain Bridge During the Civil War, including Fort Marcy, Fort Ethan Allen, Roads, and Rifle Trenches.

of Torres Vedras as the "theory of the defenses"[4] (Oliver 1997: Official Record, Series I, Vol XI/1 [S#12], 108). Barnard's 1871 report also discussed the famous Siege of Sebastopol, which took place during the Crimean War in 1854 and 1855. The effort to construct the Defenses of Washington and potentially repel a siege against the city was guided more concretely by D. H. Mahan's *A Treatise on Field Fortification*, published in 1848, though Floyd (2004a:IV-57) downplays the importance of Mahan's text, instead suggesting that field experience and not published treatises conveyed the skills necessary for the Union engineers to plan the fortifications making up the Defenses of Washington.

Chain Bridge was secured by Union soldiers in the month following the attack on Fort Sumter in South Carolina. *The New York Herald* on May 25, 1861, reported that on the 24th of May, Union soldiers moved to occupy Virginia, with the following detail regarding the Chain Bridge area: "The troops quartered at Georgetown, the Sixty-ninth, Fifth, Eighth, and Twenty-eighth New York regiments, proceeded across what is known as the chain bridge, above the mouth of the Potomac Aqueduct, under the command of General McDowell. They took possession of the heights in that direction" (Floyd 2004a:IV-4). Some defenses were arranged in the heights on the Maryland side of the Potomac River in order to protect the bridge. After the First Battle of Manassas, General McClellan was given command of the troops in Washington, and he retained Barnard as Chief Engineer. McClellan's appraisal towards the end of July 1861 was that, with the exception of some very simple defenses of Chain Bridge, "not a single defensive work had been commenced on the Maryland side. There was nothing to prevent the enemy from shelling the city from heights within easy range, which could be occupied by a hostile column almost without resistance" (quoted in Floyd 2004a:IV-8-9).

In a report dated January 26, 1863, John G. Barnard wrote of this period that

> On the return of the army from the campaign of Bull Run the policy of surrounding Washington by a complete system of defensive works was no longer doubtful. Major General McClellan, on his assumption of the command of the Army of the Potomac, was prompt to recognize the necessity of further fortifications… During the subsequent months [following September] of the autumn and winter the engineers, assisted by large details of troops and also by large gangs of hired laborers, were busily engaged in completing the system, which, as you will observe, now extended from a point below Hunting Creek, near Alexandria, to the Chain Bridge, thence from the Potomac to the Eastern Branch near Bladensburg, and thence along the heights south of the Eastern

[4] Letter to Adjutant General Lorenzo Thomas, from Brig. Gen. John G. Barnard, U.S. Army, Chief Engineer of Operations, Washington, January 26, 1863. Official Record, Series I, Volume XI/1 [S#12] The Peninsular Campaign, Virginia, March 17-September 2, 1862, No. 2. Reports of Brig. Gen. John G. Barnard, U.S. Army, Chief Engineer of operations from May 23, 1861, to August 15, 1862. pp. 108.

> Branch to a point nearly opposite Alexandria, making a total development of 33 miles[5] (Oliver 1997: Official Record, Series I, Vol XI/1 [S#12], 106-107).

Chain Bridge and the Georgetown-Leesburg Turnpike had particular strategic importance providing a route of communication with Union troops in Northern Virginia (Hansen 1973:8). Barnard wrote that "the possession of the Chain Bridge communication with the opposite shore of the Potomac, incidentally important in a defensive point of view, was essential to the operations of our forces in Virginia and to the prestige of our arms" (Barnard 1871:45). This last point refers to the imperative to defend the city of Washington from actual Confederate invasion and occupation, described elsewhere by Barnard as "one of the chief embarrassments of the government in the prosecution of the war" (Barnard 1871:5-6).

For this reason Chain Bridge was fortified initially with haphazard barricades, and later with batteries in the Palisades on the Maryland side of the Potomac River. The first of these was Battery Martin Scott (**Figure 4.1**, Resource No. 11), followed by Battery Vermont (**Figure 4.1**, Resource No. 12) on somewhat higher ground to the north (Barnard 1871:14; Hansen 1973:8):

> At an early date defensive measures had been taken at the Chain Bridge, consisting of a barricade immediately over the first pier from the Virginia side, with a movable staircase, by which the defenders could retreat over the flat below, leaving the bridge open to the fire of two mountain howitzers, placed immediately at its Maryland end, and of a battery on the bluff above ("Martin Scott") of one 8-inch sea-coaster howitzer and two 32-pounders. As even this last battery was commanded by heights on the Virginia side, it was deemed proper to erect another ("Vermont") at a higher point, which should command the Virginia heights, and at the same time sweep the approaches of the enemy along the Maryland shore of the Potomac (Barnard 1871:14; also quoted at length in Floyd 2004a:IV-11).

Barnard also describes the condition of the defenses arranged at Chain Bridge before any fortifications were in place on the Virginia side of the bridge, in greater detail in another section of his 1871 report:

> The "Chain Bridge" owed its name to a former suspension structure, long since carried away by floods. It had been replaced by a fine timber trussed bridge of over four hundred yards in length, resting on masonry abutments and seven masonry piers. At ordinary stages the river, rapid and unfordable, flowed beneath the single span next to the Virginia shore; the rest of the bed being dry and strewn with fragments of rock of large size. At high stages the whole width spanned was swept over by a furious flood. This was the sole existing bridge between Washington and Harper's Ferry at the breaking out of the war… To hold this debouche for our own purposes and to defend the bridge against the passage of an

[5] Letter to Adjutant General Lorenzo Thomas, from Brig. Gen. John G. Barnard, U.S. Army, Chief Engineer of Operations, Washington, January 26, 1863. Official Record, Series I, Volume XI/1 [S#12] The Peninsular Campaign, Virginia, March 17-September 2, 1862, No. 2. Reports of Brig. Gen. John G. Barnard, U.S. Army, Chief Engineer of operations from May 23, 1861, to August 15, 1862. pp. 106-107.

> enemy formed distinct but connected problems… For the immediate defense Battery Martin Scott and another for mountain howitzers at the very extremity (Maryland side) swept the roadway. A musket-proof loop-holed barrier was thrown across the bridge over the pier next to the Virginia shore, and means of escape to the river bed below were provided for the defenders if over-powered, so that the track might be laid open with artillery fire. The floor planks of the span between the barrier and the shore were loosened and a portion of them taken up every night. There was a permanent guard, consisting of an officer and about sixty men, at the Virginia end of the bridge. A sergeant and a few men had charge of the guns at the other end. The engineering arrangements for the defense were sufficient, but there never was proper discipline and regulation established as to the duties of the guard, nor were the precautions against fire here or elsewhere such as they should have been (Barnard 1871:80-81; see **Figure 4.3**).

Of the fortification of the Virginia side of Chain Bridge, Barnard writes "It was only delayed until our force was sufficient to authorize its accomplishment" (1871:14).

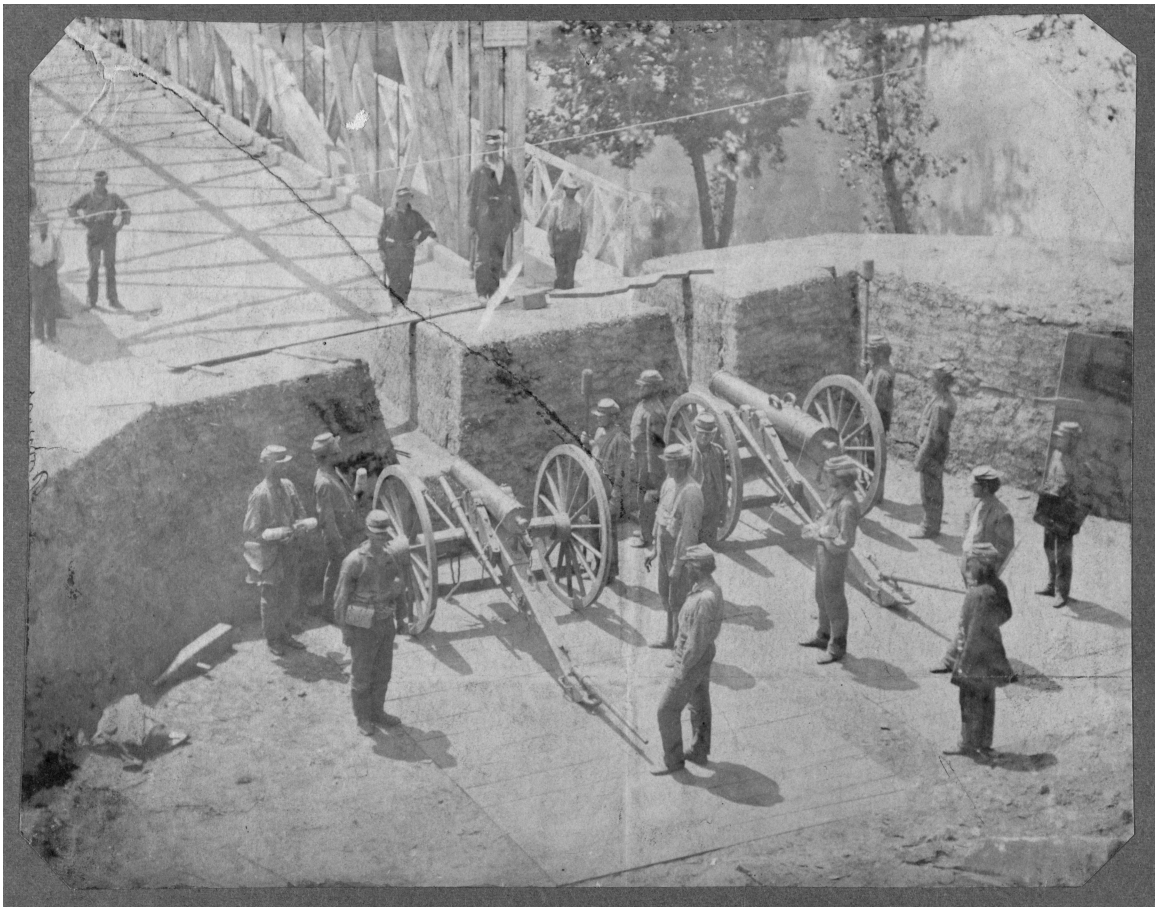


Figure 4.3. View of Chain Bridge Battery on the Maryland Side of Chain Bridge Titled "Battery at Chain Bridge, Washington, DC 1862", from the Library of Congress Prints and Photographs Division.

Noting that relatively little is known about Battery Martin Scott, Cooling and Owen (1988:128) write that while it was designed for extensive armaments, Barnard lists only two six-pounder James rifled cannon at this position in his 1871 report (Cooling and Owen 1988:128). Three guns are depicted in an engraving published in *Harper's Weekly* in 1861. They continue, "this work functioned in coordination with the temporary field gun position for two 12-pdr. mountain howitzers, located at the District side of the Chain Bridge. Battery Martin Scott stood fifty feet above and two hundred feet behind the bridge itself" (Cooling and Owen 1988:128). They credit its construction to Vermont and Maine units, and also mention an inspection report that indicates a complement of 28 men at the battery drawn from the 4th and 9th New York Heavy Artillery (Cooling and Owen 1988:128). Cooling and Owen also reproduce engravings that show the view from Battery Martin Scott, which was published in Harpers Weekly on August 24, 1861, and an engineers drawing that depicts both Battery Chain Bridge and Battery Martin Scott.

Gilbert Vanderwerken owned the land on which the Union built Fort Marcy and Fort Ethan Allen, and many of the nearby batteries, trenches, and cleared fields of fire. After many years as a manufacturer of stagecoaches, omnibus and steam railroad cars, and owner of various stage coach and omnibus transportation companies in New York, New Jersey and Mexico, poor health brought Vanderwerken to Washington, DC in 1850. Not completely disabled, Vanderwerken organized an omnibus transportation company running from the DC's Navy Yard to Georgetown and from the wharves up Seventh and Fourteenth Streets (Floyd 2004a:III-4; Hansen 1973:13-14; King 1972:3). To pull the omnibuses, he required numerous thoroughbred horses, and he purchased over 13,000 acres of land in Virginia's Arlington and Fairfax counties on which to graze and feed them. Vanderwerken cleared some of the land and planted corn, wheat, and hay and established a 1,300 acre estate he called "Falls Grove" that included a house on a knoll and a large barn (Floyd 2004a:4; Netherton et al. 1978:251-252).

Consultation of census records does not show that Vanderwerken was a slaveowner,[6] so the labor for his farm and stables may have come from paid workers. Much of this movable property was seized by Confederates at the onset of the Civil War, and the family lost all of their horses as well as their wagons and available feed (Hansen 1973:14-15; Templeman 1959:128). After the completion of Forts Marcy and Ethan Allen, Vanderwerken gave the use of his mansion and carpenter shop to the Union Army in exchange for protection of the property. The mansion was used for a field hospital, and the carpenter shop became brigade headquarters and possibly a garrison for cavalry. Barnard notes that "in front of the Chain Bridge there are two small cavalry pickets, on the Leesburg turnpike and at Vanderwerken's, about a mile from Fort Ethan Allen" (Barnard 1871:126). Vanderwerken remained at his estate, operating a store selling to Union soldiers and entertaining officers. Templeman (1959:128) notes that Vanderwerken's family remained in Georgetown during the Union occupation of Falls Grove (Hansen 1973:15-16).

[6] Vanderwerken's household was enumerated in Georgetown during the 1860 federal census of population, and includes no enslaved persons nor any identified as having African ancestry; in 1860 his household is also enumerated in Alexandria and has the same composition, though the race of individuals in the Vanderwerken household is was not recorded (Ancestry.com, 2009a). At the time of the 1850 census, his household in Essex, New Jersey included no enslaved persons either (Ancestry.com, 2009b).

A brigade under Brigadier General William F. Smith crossed Chain Bridge and encamped in Pimmit Run's ravine on the night of September 24, 1861. Major D. P. Woodbury, who was later promoted to the rank of General, selected the site for Fort Marcy on a high ridge between the steeply-sloped bank of the Potomac River and Pimmit Run, directly adjacent to the Georgetown-Leesburg Turnpike (Barnard 1871:45; Franke 1938:2). Construction of the fort began at this favorable site, known as Prospect Hill, on the following day, September 25.[7] Barnard reported that the initial fortifications at Fort Marcy and Fort Ethan Allen, as well as rifle trenches "by which the ravines and irregularities of this very broken ground could be better seen" were completed within "a very few weeks," and remained in that condition until the end of the summer in 1862 (Barnard 1871:46). The work was undertaken by the Fifth Regiment Wisconsin Infantry, the Second and Third Vermont Infantry, and the Sixth Maine Volunteers (Hansen 1973:9-10). Initially named Fort Baldy Smith for the Brigadier General, the installation was renamed Fort Marcy by general order, after Brigadier General Randolph Barnes Marcy, of Massachusetts (1973:11).

Initial construction at Fort Marcy was completed in October 1861 (the process for laying out and constructing earthen fortifications is described in detail in Floyd 2004a:IV-17-20). In September 1862, the fortifications were renovated and improved following inundations of rain during the spring and summer months, with the addition of bomb-proofs specially designed to take advantage of the change in elevation whereby Fort Marcy sloped down towards its rear, as well as new guns, and rebuilding and improvement of magazines and embrasures. Barnard's 1871 report includes a plan of Fort Marcy with section drawings (**Figure 4.4**). The line of rifle trenches reaching beyond these fortifications were also completed during this phase of construction, so that Forts Marcy and Ethan Allen were set within a rough arc of trenches that extended nearly to the banks of the Potomac River above and below Chain Bridge, many of which are still extant, particularly those adjacent to Fort Marcy (Barnard 1871:46; Hansen 1973:17-20).

Fort Marcy has a lunette-shaped redoubt with a perimeter of 338 feet, while nearby Fort Ethan Allen had a perimeter of 768 feet after it was completed (Barnard 1871:47). The batteries at Fort Marcy were initially equipped with seventeen field guns, consisting of three twenty-pounder, and three ten-pounder Parrott guns in embrasures; three twenty-four-pounder, two twelve-pounder, and six thirty-pounder Parrott guns in barbettes. In addition the fort was armed with one ten-inch mortar and two twenty-four-pounder Coehorn-type portable mortars, all capable of lobbing explosive shells outside of the fort walls (Hansen 1973:20). This description of the artillery present at Fort Marcy is corroborated by the journal of Major U. Doubleday of the Fourth New

[7] This date for the beginning of construction of Fort Marcy is established by Barnard in his 1871 report, and it is repeated in works by Franke (1938), Hansen (1973), and by interpretive materials published by the NPS. Barnard's date stands in part because his report is both reputable and widely available. However some less well-known unit histories and other documents might establish the start of construction at Fort Marcy earlier in August or September 1861. Notes on this research are on file at the Turkey Run Headquarters of the GWMP. None of these sources conclusively overturns the date reported by Barnard.

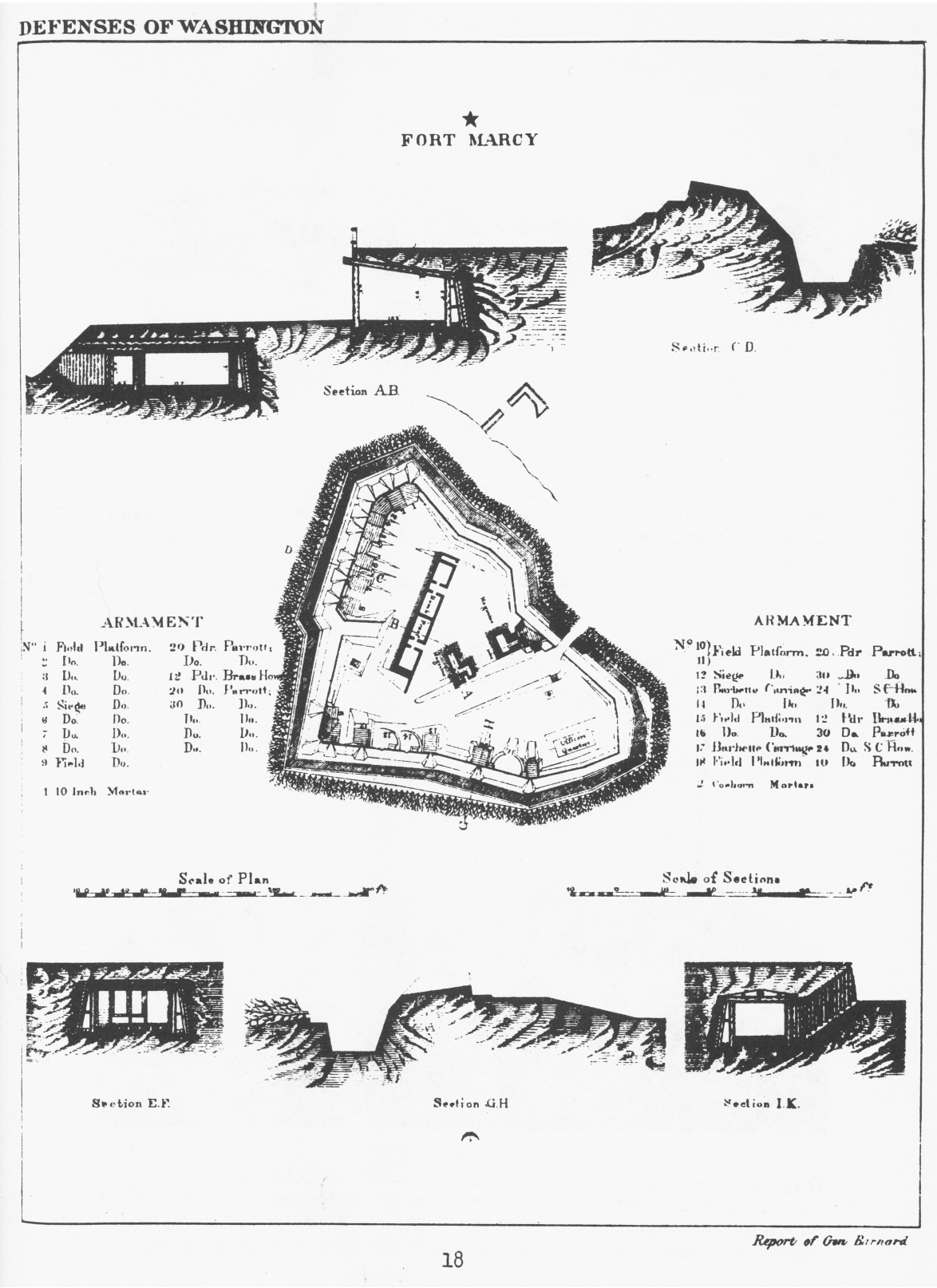


Figure 4.4. Plan and Sections of Fort Marcy, from Barnard 1871, reprinted in McClure 1961 pp. 18.

York Artillery .[8] The fort was supplied with enough subsistence for twenty days, and was possessed of a well measuring nine feet in diameter and thirty-five feet in depth, with a lining of brick and stone. Later this well was excavated down to a depth of ninety feet (Hansen 1973:19).

Additional defensive works were constructed adjacent to the fort. The Leesburg Turnpike was gated with a palisade crossing the roadway where it passes Fort Marcy. Rifle trenches extended from the fort, and eight batteries were constructed along these lines with fields of fire on Pimmit Run and other low-lying areas that could provide cover from the fort. These batteries were not armed, but mobile artillery could be positioned should the need arise (Hansen 1973:19-21). Construction of roads was necessary to connect defensive positions with existing county roads. These were made to be adequate for movement of guns and army trains, and took advantage of terrain that provided cover against Confederate observation and attack. Barnard (1871) notes that one of the first such roads to be completed was "for the purpose of connecting the isolated works at the Chain Bridge with the right of the Arlington lines at Fort DeKalb… This road, about three miles in length…was completed by details of troops…in two or three days" (Barnard 1871:77). Approximately thirty-two miles of military roads were constructed to support the Defenses of Washington, and for Barnard these provided more lasting benefits following the end of the war than the fortifications they connected, "providing, as they did, the means of rapidly moving troops or guns, unobserved by the enemy to reinforce any part of the line that might be attacked, their importance as adding to the strength of the defensive system can scarcely be over-estimated" (Barnard 1871:78).

The 1862 improvements to Fort Marcy were completed by the 152nd New York Volunteers as well as five hundred African Americans known as contrabands (Hansen 1973:20). The term contraband was applied with some discomfort by the Union army to describe the enslaved people who fled towards freedom behind Union lines, or became associated with the Union army itself; without directly confronting their status as chattel, escaped slaves would not be returned to former owners disloyal to the Union, hence the designation of these persons as contraband property, or simply contrabands. While Hansen (1973:43-45) does not indicate where these African American laborers were drawn from, he does mention African American prayer meetings taking place in proximity to the fort, possibly indicating that a community of contrabands, however transient, grew up around these fortifications. This community may have survived beyond the Civil War; Templeman (1959:112) describes a post-emancipation African American community and possibly an associated cemetery that existed on the east side of Pimmit Run, not far from Chain Bridge.

Contraband labor was still employed at maintaining Fort Marcy late in the summer of 1864 (Hansen 1973:52-53). On the organization of labor to construct the defenses, Barnard wrote in December 1862:

> With no other assistance from engineer officers than that of a single officer (valuable, indeed–that of Lieut. Col. B. S. Alexander), it has been necessary to employ a large number of civil assistants, superintendents, and overseers, to supervise the works and troops and laborers employed. This, together with the hire of laborers, the purchase of lumber and other materials, has required a large

[8] (pp. 21, dated November 15, 1862), digital images on file at the Turkey Run Headquarters of the George Washington Memorial Parkway.

> cash expenditure (ORA, I, 21 (serial. 31), 902-16, referenced in Floyd 2004a, Appendix C).

Barnard addressed this matter again in his 1871 report: "In the autumn of 1861, after the line had become permanently established, details of troops were almost entirely withdrawn… and a large force of hired laborers and mechanics was placed upon the work. As it was not then supposed that it would continue for a long time, the organization of labor was of a transient and imperfect character" (Barnard 1871:82). He also described the ancillary infrastructure necessary to support the construction, entailing all manner of supporting structures, and tents for actually quartering the laborers and others involved in the effort to build the defenses.

Floyd (2004a:IV-22-23; IV-26-28) notes that contrabands were paid $0.40 plus a day's ration of food for each day of their labor. Late in 1863, increased wages were recommended for all workers employed at maintaining the Defenses of Washington, suggesting $1.00 per day plus a day's ration for contrabands to work as laborers on the fortifications, compared with suggested increases to $1.25 for white laborers and $2.00 to $3.00 daily for blacksmiths, carpenters, masons, and foremen.

The term "contraband" came into common usage following Union General Benjamin Butler's refusal to return three fugitive slaves to the Confederacy, instead confiscating them as property or contraband of war. Congress resolved on July 9, 1861 that the Union Army was not responsible to return fugitive slaves, and the Confiscation Act was passed on August 6, 1861, allowing the Union army to confiscate any slaves employed by the Confederates. On March 13, 1862 Congress also passed an act forbidding officers in the Union Army from returning fugitive slaves to their masters (Berlin, et al. 1998:3-6; Cornish 1966:29; Floyd 2004a:IV-25; Glatthaar 1990:4-5; Westwood 1992:3-4, 48, 59; Williams 1969 (1888):68-74).

Floyd (2004a:IV-26-30) presents crucial information regarding the use of contrabands in constructing and maintaining defensive positions like those at Chain Bridge, and the discussion of labor at the fortifications may be the definitive contribution of Floyd's study to existing scholarship on the Defenses of Washington. Much of this draws from primary documents, and probably reflects differing opinions and experiences of the period. Shortages of skilled and unskilled labor due to enlistment, and later conscription (see Floyd 2004a:IV-36-42), created a need for former slaves to work on the fortifications. Freedmen's Villages, Contraband Camps, or shanty villages grew up where contraband labor was heavily exploited, and elsewhere government housing was provided to contrabands, but Floyd indicates little consistency in how contrabands were used, paid, clothed, and treated while employed by Union engineers. Floyd maintains that "The greatest amount of labor on the fortifications was performed by troops stationed in the Defenses of Washington and the Department of Washington, including infantry, artillery and cavalry," continuing, "Although most of the fortification work was not done by contrabands, they were used when available" (Floyd 2004a:IV-29). This is not to downplay the contributions made by contrabands to the success of the defense of Washington, which are undeniable (Floyd 2004a:30), and certainly the second phase of construction at Fort Marcy including a tremendous amount of road-building and entrenchment, required the labor of formerly enslaved people. Anecdotal evidence gleaned from unit histories by Hansen (1973) suggests that contrabands were a presence in the vicinity of Fort Marcy possibly until the fort was dismantled.

Whether occupying enlisted men, wage laborers or freedmen, fatigue detail – labor at maintaining the largely earthen fortifications – was a brutally tiring, and aptly-named assignment (Floyd 2004a:IV-30-31). By the end of the war, convalescents, conscripts, stragglers, deserters, and civilian and Confederate prisoners were all used as labor on fortifications in the Defenses of Washington (Floyd 2004a:IV-43-48). The elements of the forts subject to erosion required shoring up, and the faces of the redoubts were sodded to hold down the soils (Floyd 2004a:VI-17). Roads and trenches required maintenance. Roads in particular received considerable punishment from the movement of troops and supply trains, but Barnard commented that the roads constructed as part of the defensive works would outlast the fortifications themselves in terms of their usefulness (1871:77-78). The areas surrounding the forts required clearing, and the forests nearest Fort Marcy and Fort Ethan Allen were brought down by skilled tree-fallers from Maine (Floyd 2004a:IV-31, quoting a member of the Fortieth Regiment New York Volunteers). One story that ran in the *Washington Star* in 1913, describes the preparations on the Virginia side of Chain Bridge and their consequences on the landscape:

> This part of the country is picking up now, but during the war and for a long time after living was hard. In the first place, the inhabitants were often treated as though working in the service of the Confederacy, and it is true that the sympathies of many of the people in the Chain Bridge neighborhood were with the South. The timber was cleared off, and the fields could not be well tilled. There were Confederate foraging parties, and the Federals also did some foraging. The timber was cut down because the guns in the forts and various batteries needed a clear field of fire, and because woodland might afford cover for attack (Franke 1938:4).

A member of the Thirty-Third New York State Volunteer Regiment claimed that 10,000 soldiers wielding 1,800 axes were employed to cut the dense pine forest surrounding Forts Marcy and Ethan Allen. This timber was incorporated into the fortifications, made into *abatis*, a barrier of trees piled around the walls of the fort with their jagged tops pointing out to repel assaults (Figure 4.4, above). Smaller branches were woven into gabions, barrel-shaped wicker containers filled with earth or stone and used in construction to reinforce the fortifications (Floyd 2004a:IV-32).

A commission appointed by Secretary of War Edwin M. Stanton in October 1862 completed an assessment of the Defenses of Washington and delivered a series of recommendations for their improvement. They called for very little additional work to defend Chain Bridge and its adjacent heights, as quoted by Barnard:

> 'The two works at the Chain Bridge, viz, Forts Marcy and Ethan Allen, form no part of the defenses of Washington, strictly speaking, but are of the utmost importance as the *tête-de-pont* to the Chain Bridge, over which it is indispensable to secure a debouche. The position is strong and well occupied. The lines of rifle-trenches, which connect the works with each other and with the banks of the river, afford, with the auxiliary batteries, full view and defense of the numerous ravines, and give all the artificial strength which the position needs. The heights from which the works can be commanded, and the approaches to them, are under the fire of heavy guns of Batteries Cameron, Parrott, Kemble, Vermont, and of Forts Alexander and Franklin' (Barnard 1871:24).

As noted in the above passage, the immediate defenses at Chain Bridge were supported by nearby fortified positions at Forts Alexander, Franklin, and Ripley, later renamed Redoubts Davis, Kirby, and Cross and unified under the designation Fort Sumner. These also had the function of protecting the receiving reservoir for the city of Washington, as did Battery Alexander (Barnard 1871:24). The commission noted that these forward positions were highly vulnerable to shelling by Confederates. The commission also recommended additional defensive works at the head of the Chain Bridge, consisting of two to three small works or block-houses (Barnard 1871:24). Both Barnard (1871:81) and Hansen (1973:19) note that these improvements were never made, probably because the clearest threat of attack in the days leading up to the August 1862 Battle of Second Manassas passed before such additional works could be implemented.

Late in 1861, the following units were garrisoned in the vicinity of Chain Bridge: Batteries A, B, G, and H of the 1st Light Artillery, 43rd Pennsylvania Volunteers, the 2nd and 3rd Vermont, 5th Wisconsin, 6th Maine, and 33rd New York. The 3rd Regiment Pennsylvania Cavalry was garrisoned at Fort Marcy during the winter of 1861-1862 (Hansen 1973:25-26). Troops assigned to Fort Marcy were garrisoned at a camp nearby, depicted in **Figure 4.5**. In 1862, artillery officers assumed command of the Defenses of Washington, ceding it to the infantry in 1864 as artillery moved south with campaigns on Petersburg and Richmond. Control over the fortifications was again returned to artillery commanders at the end of the Civil War.

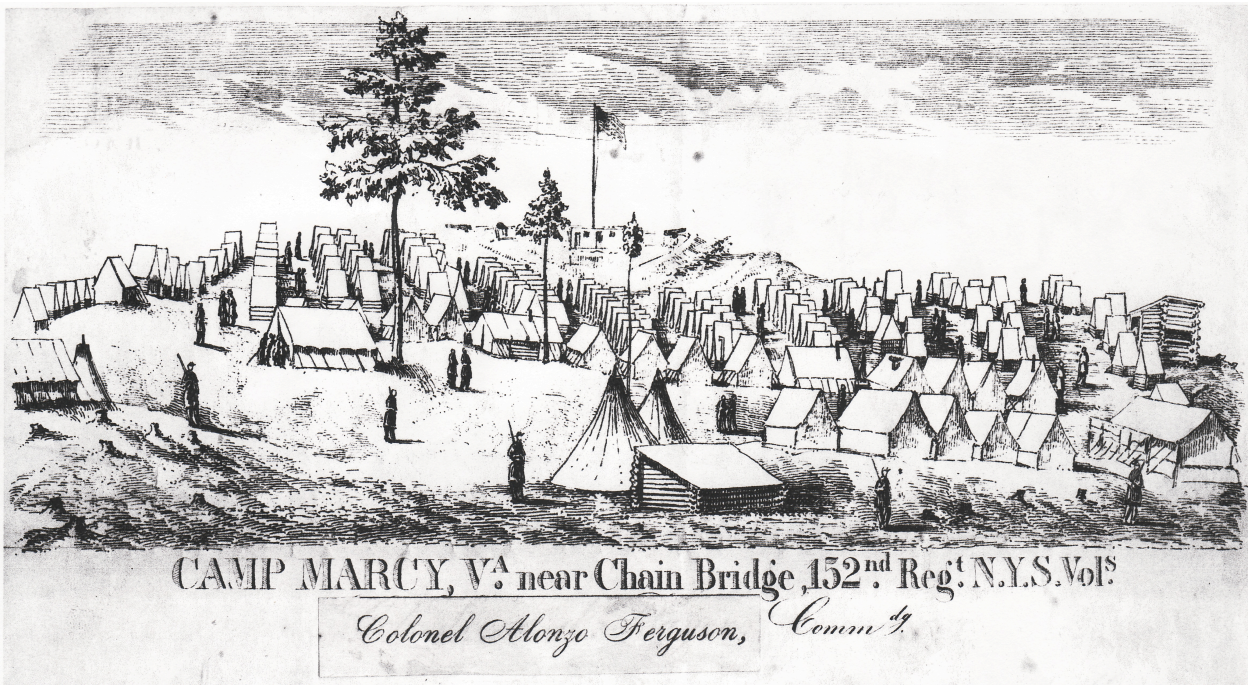


Figure 4.5. Lithograph Depicting Encampment of the 152nd New York Volunteers at Fort Marcy.

In August of 1862, as the Battle of Second Manassas began and General Lee gathered a large fighting force at Manassas Junction, preparations to meet this threat were made at Chain Bridge and particularly Fort Marcy (Hansen 1973:31-32). At that time, the 130th Pennsylvania Volunteer Infantry was at Fort Marcy and the surrounding works. A platoon from the 4th New York Heavy Artillery took control of Fort Marcy's guns and prepared a defense; Hansen indicates that this unit was Fort Marcy's principal occupant, with units remaining at the fort from summer 1862 through the spring of 1864 when direct threats from Confederate attack upon Washington waned. Lee's advance on April 29, 1862 heightened concern for Fort Marcy's preparedness to protect Chain Bridge and hold off an attack, and orders were issued for Chain Bridge to be destroyed if the defenses should be overrun (Hansen 1973:32-33, 38). An assessment of the defenses conducted at that time recorded the presence of over 4,000 soldiers throughout the defenses at Chain Bridge, representing the Fourth New York Heavy Artillery, 130th and 127th Pennsylvania Volunteers, 120th New York Volunteers, the Fourteenth Connecticut and Fourteenth Massachusetts, though the last were relocated to Arlington (Hansen 1973:34). Of Fort Marcy's garrison, Miller writes:

> An interesting incident in the history is that the body of troops which afterwards became famous as the "Iron Brigade" was originated at this fort in the summer of 1861 and was composed of the 19th Indiana, the 2nd, 6th and 7th Wisconsin Regiments. The 24th Michigan was added to the brigade soon after the battle of South Mountain. These regulars remained together until the close of the war… The 79th New York Highlanders, the 141st Pennsylvania and the Iron Brigade also helped complete the work in the fall of 1862. A force of about 500 contrabands were also employed and the 152nd New York worked on the entrenchments, which incidentally are still in a very good state of preservation (Miller 1976:24-25).

General McClellan wrote that a force of 10,000 should be allocated to the defense of Forts Marcy and Ethan Allen, but the Battle of Second Manassas was finished before more troops could be allocated to the area of Chain Bridge. Fort Marcy remained at alert through 1864, but saw no engagements more significant than skirmishes at the pickets (1973:35-37). Jubal Early's raid on Washington during the summer of 1864 marked the end of direct threats towards the capital and its defenses (Floyd 2004b:I-2).

In the spring of 1864, most of the seasoned troops garrisoned at the Chain Bridge defenses were sent into sieges of the southern campaigns, notably the siege of Petersburg, and the Defenses of Washington were manned by far less experienced personnel. Units from the 3rd Pennsylvania Artillery replaced the 4th New York at Fort Marcy, and the 4th New York Heavy Artillery also moved out of Fort Ethan Allen, which had been their regimental headquarters since September 1862. Post returns indicate that three other units, from the 147th Ohio Volunteer Infantry, the 74th Pennsylvania Volunteers, and 1st New York Artillery, were also present in Fort Marcy by the summer of 1864. Battery H of the 1st Pennsylvania Light Artillery, 43rd Pennsylvania Volunteers was one of the last units to occupy Fort Marcy (Hansen 1973:48, 53). Improvements to the fortifications continued to be made, in part as an element in the disciplining of garrisoned troops, and continued even after the threat of Confederate attack had ended. For instance work to maintain the *abatis* at Fort Marcy continued late into August in 1864. Civilians, contrabands, prisoners of war and wounded soldiers contributed to this work (Hansen 1973:52-53). These

efforts were no mere busy-work, as it was yet to be determined whether the established Defenses of Washington might be maintained and remain active on a permanent basis.

III. The Decommissioning of Fort Marcy

The majority of the Defenses of Washington were decommissioned in May of 1865, following a flurry of correspondence among the parties responsible for overseeing these works. In a letter dated May 1, 1865, Chief Engineer of Defenses Lieutenant-Colonel B. S. Alexander wrote to Chief of Engineers Brigadier General R. Delafield requesting clarification:

> Sir: I have the honor to acknowledge the receipt of the circular of the Department of the 29th ultimo, in reference to suspending operations on field fortifications and to collecting and preserving engineer property. As I suppose the time has now arrived when the policy of the Government in reference to the fortifications of this city should be settled, I take advantage of the occasion of this acknowledgement to ask for more detailed instructions than are contained in the general circular of the Department. I have always supposed that it will be the policy of the Government, even after the termination of the rebellion, to maintain the more important works of defense around this city. It seems to me after our experience during this rebellion that a wise foresight will not permit us to allow the seat of government to become again entirely defenseless. Besides this there will probably be a considerable body of troops hereafter stationed in or around this city, at least for some years to come, and, if so, the present forts will be the best place at which to post them. At present we have seventy-four inclosed forts and armed batteries around this city… This is a war establishment, entirely too large and expensive to be maintained in time of peace. Many of these forts and batteries must be abandoned, and if it is decided to maintain some of them the question arises how many and which forts shall so be maintained?[9] (Oliver 1997: Official Record, Series I, Vol. XLVI/3 [S#97], 1063-1064)

Alexander expressed this most succinctly at the end of this letter: "The question presented for consideration is one of policy. Does the Government wish any of the works now constituting the Defenses of Washington to be maintained? If so, is it desirable that the number of these works should be reduced to a minimum?" (Oliver 1997: 1064-1065). Reigning opinion within the Engineering Department was forwarded by Delafield to Secretary of War Stanton under endorsement from Ulysses S. Grant on May 10, 1865:

> The defenses of Washington at this time consist of seventy-four inclosed forts and armed batteries…The necessity for this extensive system of temporary works no

[9] Letter to Brigadier General R. Delafield, Chief of Engineers, from B. S. Alexander, Lieutenant Colonel, Aide-de-Camp, and Chief Engineer of Defenses. Headquarters Chief Engineer of Defenses, Washington, May 1, 1865. Official Record, Series I, Volume XLVI/3 [S#97], Union Correspondence, Orders, and Returns Relating to Operations in Northern and Southeastern Virginia, West Virginia, Maryland, And Pennsylvania, From March 16, 1865, to June 30, 1865, pp. 1063-1065.

> longer exists, and I recommend that fifty-one of these forts and inclosed batteries be at once dismantled, the artillery and stores of all kinds withdrawn, and deposited either in the remaining twenty-three forts or at the arsenals, stores, and depots under charge of the different military departments of the army. After disarming, dismantling, and withdrawing the stores, a guard should remain to protect the property from fire and injury, *and measures taken to restore the grounds to the rightful owners. To this end it is advisable, as far as practicable, to liquidate claims on the Government for the uses and changes made to the property by conveying to the owners the right and title to the buildings and fixtures, of timber on the bomb-proofs, magazines, and stockades of the several works*; which if unacceptable to the claimants in full satisfaction for the use of the ground, changes, alterations, and removal of fences, woods, trees, and all others made by the authorities of the United States, the same shall be removed and materials in part sold in such a manner as shall be found most advantageous to the public interest, and the residue stored as may be useful for military service elsewhere.[10] (Oliver 1997: Official Record, Series I, Vol XLVI/3 [S#97] pp. 1099, emphasis added)

The letter indicates twenty-three existing forts recommended for continued operation; Fort Marcy is excluded from this number, but the larger Fort Ethan Allen was among those forts ordered to be retained. In the same letter Delafield recommends the establishment of large garrisons in a number of southern cities for the protection of newly-freed African Americans, twenty garrisons of 5,000 men each (Oliver 1997:1100).

Acting under recommendations such as these, the War Department issued Special Order No. 315 on June 19, 1865, calling for retention of a limited number of fortifications that excluded Fort Marcy:

> Upon the recommendation of the chief engineer, dated May 6, 1865, approved by the lieutenant-general, the major-general commanding the Department of Washington will at once give orders for the dismantling of the field-works, &c., constructed for the defenses of Washington, with the following exceptions: [list of 22 forts including Fort Ethan Allen]… The ground occupied by the defenses to be abandoned will be restored to their proprietors of loyal character, endeavors being first made to liquidate all claims for occupation and damage of every kind by transferring to them all the right and title to the buildings and fixtures of timber on the bombproofs, magazines, and stockades erected thereon. In the event that such arrangement is not made to liquidate the claims in full the buildings will be torn down and material transported to and used for construction of permanent defenses

[10] Letter to Hon. E. M. Stanton, Secretary of War, Washington, DC from Richard Delafield, Brigadier-General and Chief of Engineers (with endorsements, including one from Ulysses S. Grant May 10, 1865). Engineer Department, Washington, DC, May 6, 1865. Official Record, Series I, Volume XLVI/3 [S#97] pp. 1099-1101. Union Correspondence, Orders, and Returns Relating to Operations in Northern and Southeastern Virginia, West Virginia, Maryland, And Pennsylvania, From March 16, 1865, To June 30, 1865.

> elsewhere, or sold, as may be found most advantageous.[11] (Oliver 1997: Official Record, Series I, Vol. XLVI/3 [S#97], pp. 1286)

At the time that Fort Marcy was ordered to be abandoned and the land restored to its rightful owner, the fort and its grounds contained twenty-one buildings, all of which were ceded to Gilbert Vanderwerken as a condition of his releasing the United States Government from any liability for their use of the land from 1861 to 1865. While it is likely that these structures were scavenged for valuable construction material, Fort Marcy itself was not reoccupied and the site became overgrown (Hansen 1973:56, 63).

Description and Assessment of Extant Historic Features Associated with Fort Marcy

Miller writes that Fort Marcy (**Figure 4.1**, Resource No. 8) is "a relatively undisturbed fort" (1976:24), noting: "about 150 feet of rifle pits exist close to the Potomac Northeast of Fort Marcy …. Also, the entire rifle pit and batteries in front of Marcy exist with the exception of where the Washington Memorial Hwy cuts it" (Miller 1976:24-25). Miller's book on the defense also includes photographs of the condition of Fort Ethan Allen not long before it was obliterated.

Miller's assessment of Fort Marcy is generally correct. It is perhaps one of the most well-preserved fortifications in the Defenses of Washington, and compares well with those fortifications that have been partially or extensively reconstructed. The following photographs illustrate the condition of different elements associated with the fortifications. These consist of: 1) The roughly triangular-shaped redoubt (**Figure 4.1**, Resource No. 8) containing magazines, bomb-proofs, gun platforms and placements, a well, and officers' quarters, as illustrated in Barnard's diagram of the Fort pictured in **Figure 4.2** above; 2) A number of rifle trenches that connected a series of external batteries around the central redoubt of Fort Marcy, and ultimately formed a semi-circle around the Virginia abutment of Chain Bridge when viewed alongside the works comprising the former Fort Ethan Allen; 3) A network of roads that once climbed from the bottom of the ravine of Pimmit Run up to Forts Marcy and Ethan Allen (**Figure 4.1**, Resource No. 9), some of which were very likely constructed to enable movement of troops, arms and supplies into these fortifications; 4) Bridge abutments at Pimmit Run (**Figure 4.1**, Resource No. 10) associated with a bridge which may have been constructed at the time that these fortifications were arranged, and seems certain to have carried Union forces towards the Heights in Northern Virginia. Each of these elements is treated below.

The Redoubt of Fort Marcy

The central feature of Fort Marcy is its large earthen-walled redoubt, situated on a hill above the ravine for Pimmit Run (**Figure 4.1**, Resource No. 8). The historical entrance to the fort was located on the eastern, downhill side of the fort. The fort's ramparts are otherwise complete, save

[11] Special Orders No. 315, delivered by order of the Secretary of War, E. D. Townsend, Assistant Adjutant-General. War Department, Adjt. General's Office, Washington, June 19, 1865. Official Record, Series I, Volume XLVI/3 [S#97], Union Correspondence, Orders, and Returns Relating to Operations in Northern and Southeastern Virginia, West Virginia, Maryland, And Pennsylvania, From March 16, 1865, To June 30, 1865, pp. 1286.

where a modern footpath carries visitors inside the fort from the parking area accessible from the GWMP on Fort Marcy's south side. The trenching below the ramparts on the exterior of the fort remains visible in many areas (**Figure 4.6**), as do the individual gun placements or barbettes that would have occurred all along the ramparts on the interior of the fort; they appear as raised, multi-sided mounds along the interior perimeter of the fort. Traces of the interior structures, including the subterranean bomb-proofs, magazines, and above-ground officers' quarters are visible as changes in topography and ground conditions such as slumping. The presence of archeological evidence for these structures is a virtual certainty (**Figures 4.7** and **4.8**). A small segment of stone curbing and adjacent stone pavement is visible in the northern interior of the fort, and corresponds to pavements indicated in Barnard's (1871) plan of Fort Marcy.



Figure 4.6. North-Facing View of Fort Marcy's Redoubt, Seen from Outside of the Southern Rampart, with Trench in Foreground. Photograph By Matthew Palus, December 2012.



Figure 4.7. View of the Interior of Fort Marcy's Redoubt, Facing South Across Former Locations of Bomb-Proofs and Magazines, Towards Former Location of Officer's Quarters; East-Facing Entrance to Fort Marcy is at Left of Frame. Photograph By Matthew Palus, December 2012.



Figure 4.8. Remnant of Curbing and Stone Paving in the North End of Fort Marcy's Redoubt, Facing North. Photograph By Matthew Palus, December 2012.

Stone-Lined Well Inside Fort Marcy

A well lined with brick and stone and measuring nine feet in diameter and ninety feet deep is mentioned by Hansen (1973:19), and such a structure is depicted in Barnard's (1871) plan of the fort, just south of the entrance on the eastern side. This well has been capped with a rectangular concrete pad that is visible on the ground surface (**Figure 4.9**). The sealed condition of the well prevents further assessment of its condition and potential to contain important archeological deposits associated with the occupation and abandonment of Fort Marcy.



Figure 4.9. Concrete Pad Inside the Redoubt of Fort Marcy's, Believed to Cover the Fort's Stone-lined Well. Photograph By Matthew Palus, December 2012.

Rifle Trenches

Many of Fort Marcy's rifle trenches are intact and clearly visible on the ground surface (**Figure 4.10**). These extend from the redoubt towards the former location of Fort Ethan Allen to the south, down the slope towards Pimmit Run to the northwest, and towards an external battery located on the Georgetown Pike to the northwest. These trenches have been impacted by the construction of the GWMP south of the fort, which abbreviated one trench at some distance from the redoubt, and by the widening of the Georgetown Pike, known today as Chain Bridge Road (Virginia Route 123). These features are susceptible to erosion, and the earthwork management strategy employed at the site allows vegetation to grow on the earthworks, in part order to help control erosion. The rifle trench extending south from Fort Marcy terminates at a drainage ditch filled with rip-rap stone on the north side of the GWMP. Residential construction along the present alignment of Chain Bridge Road truncates the rifle trench extending northwest from Fort Marcy (**Figure 4.11**). In one location near a battery to the south of Fort Marcy, minor ground disturbances are present adjacent to the rifle trench; nearby, a sewer line utility runs to the south of the GWMP to the gun battery at the end of the rifle trench.



Figure 4.10. View Down A Rifle Trench Extending South From Fort Marcy Towards the GWMP, Facing North. Photograph By Matthew Palus, December 2012.



Figure 4.11. The Northwestern Rifle Trench Where it Terminates Near Chain Bridge Road, Facing Northwest. Photograph By Matthew Palus, December 2012.

Exterior Battery and Embrasure

Three gun batteries were built around the outside of Fort Marcy: one on the northwest end, where a rifle trench terminates at the backyard of a private residence at Chain Bridge Road and the Georgetown Pike; one on the south side of the GWMP where an extended rifle trench ends above Pimmit Run (well south of the fort); and one in the west center end, described as follows. These rifle trenches and batteries around Fort Marcy created a *de facto* larger fortification that allowed Union forces to bring artillery pieces forward from the firing positions in Fort Marcy's original redoubt. This is exemplified by the external battery located nearest the southwestern corner of the redoubt, which resembles a high, flat-topped earthen mound. This battery swept a road running south past Fort Marcy from the Georgetown Pike, and the ravine of Pimmit Run where it extended west of Fort Marcy, towards the location of a structure that Barnard identified as a powder mill (1871). Just west of this battery, the rifle trench has a raised parapet that is pierced with embrasures in two places, so that the artillery of the adjacent battery can fire through it (**Figure 4.12 - 4.14**). This combination of battery, rifle trench, and embrasures best conveys the kind of improvements to the initial fortifications at Fort Marcy that were made by



Figure 4.12. View of Exterior Battery or Barbette at the Southwest Corner of Fort Marcy's Redoubt, Facing East. Photograph By Matthew Palus, December 2012.



Figure 4.13. View West of Embrasures Associated with the Rifle Trench and the Exterior Battery near Fort Marcy's Southwest Corner, Showing Two Piercings for the Adjacent Battery to Fire Through. Photograph By Matthew Palus, December 2012.



Figure 4.14. Detail of Parapet Showing Embrasure Opening, Facing West. Photograph By Matthew Palus, December 2012.

engineers in subsequent episodes of construction, and is one of the best-preserved works on the exterior of Fort Marcy's redoubt.

Road Traces Adjacent to Fort Marcy

A number of road traces can be identified on the hillsides surrounding Fort Marcy (**Figure 4.1**, Resource No. 9), most of which are depicted in Barnard's (1871) topographic map of the defenses at Chain Bridge. These linear depressions are sometimes difficult to differentiate from adjacent rifle trenches, which frequently extend alongside them. In places however, road traces are very clear and easy to identify. The road traces are tightly associated with the fortification of Chain Bridge, as depicted in an 1862 lithograph published in *Frank Leslie's Illustrated Weekly* titled "The New Military Road"; this image and the depictions of existing historic resources are discussed in greater detail below.

These roads intersect with the historic alignment of the Georgetown Pike, which extended along the eastern side of Pimmit Run following a ridge that descends from the location occupied by Fort Marcy. A substantial stone retaining wall marks an abandoned section of the Georgetown

Pike on the east side of Pimmit Run, only slightly higher in elevation than Pimmit Run itself, and this historic segment of the Georgetown Pike is mentioned as a contributing element in the National Register of Historic Places registration form for the pike (Beauchamp, 2012:4-6; see Chapter Three). This retaining wall is visible from the Potomac Heritage Trail where it runs close to Pimmit Run, just north of the contemporary bridge over Pimmit Run on North Glebe Road. On the west side of Pimmit Run in this location there is another stone retaining wall that is relatively low to the ground. This retaining wall (**Figure 4.15**) is not in the location of any road depicted in Barnard's 1871 topographic map, and may have been constructed to improve the Potomac Heritage Trail and prevent erosion. It may also be associated with a historic vehicular drive formerly occurring in this location.



Figure 4.15. View of Stone Retaining Wall Aligned with the Potomac Heritage Trail Associated with a Possible Road Trace on the West Side of Pimmit Run, Facing West. Photograph By Matthew Palus, December 2012.

South of a bend in Pimmit Run, on the hillside opposite from Fort Marcy, there is a road trace that climbs in elevation towards Fort Ethan Allen from the bottom of the ravine of Pimmit Run (**Figure 4.16 and 4.17**). This road is very well-defined, with a flat, graded roadbed. It extends



Figure 4.16. View South Showing Width of Road Trace As it Climbs from the Ravine of Pimmit Run, Facing South. Photograph By Matthew Palus, December 2012.



Figure 4.17. View Showing Profile of Road Trace Where it Climbs From the Ravine for Pimmit Run, Facing West. Photograph By Matthew Palus, December 2012.

south towards an intersection, and then two roads run parallel in a southerly direction, and a rifle trench extends along the west side of the roadways, connecting two external batteries associated with Fort Marcy.

Former Pimmit Run Bridge Abutment

A short distance north from where North Glebe Road (Virginia Route 120) crosses Pimmit Run, west of the intersection with Chain Bridge Road (Virginia Route 123) and in clear view of the current bridge, stands a massive stone structure corresponding to the western abutment for an earlier bridge over Pimmit Run (**Figure 4.1**, Resource No. 10). There is also a graded roadbed leading up to this abutment from the west, though the road surface is entirely overgrown, as is most of the abutment. The neatly-faced stone on the eastern end of the abutment is plainly visible (**Figures 4.18 - 4.20**).



Figure 4.18. View of Abandoned Pimmit Run Bridge Abutment, Facing South. Photograph By Matthew Palus, December 2012.



Figure 4.19. View of Abandoned Pimmit Run Bridge Abutment, Facing Southwest. Photograph By Matthew Palus, December 2012.



Figure 4.20. View of Abandoned Pimmit Run Bridge Abutment Showing Contiguous Road Grade, Facing Northwest. Photograph By Matthew Palus, December 2012.

The most likely interpretation of this abutment is provided by a photograph of a small wood and stone bridge over Pimmit Run that was published in Eleanor Lee Templeman's *Arlington Heritage: Vignettes of a Virginia County* (1959:129). The photograph (**Figure 4.21**) depicts a bridge with stone abutments, two rectangular piers constructed from logs that have been notched and stacked log-cabin style, with a surface that has been constructed from smaller-diameter logs oriented across the width of the bridge. Wooden guardrails are present on both sides of the bridge. The photograph is from a stereographic view created between 1861 and 1869, and the bridge in the photograph is identical to one illustrated in *Frank Leslie's Illustrated Newspaper* (**Figure 4.22 - 4.23**) accompanying a story about the Union Army's taking of the heights in Virginia (*Frank Leslie's Illustrated Newspaper* 1862). A bridge over Pimmit Run, presumably the one in the photograph, collapsed in approximately 1920 while a truck transporting stone from nearby quarries was crossing it. The county completed a new bridge in 1923, in the current location of the Pimmit Run crossing of North Glebe Road.



Figure 4.21. "Washington, District of Columbia. Small Bridge Near Chain Bridge." Library of Congress Prints and Photographs Division. Accessed http://hdl.loc.gov/loc.pnp/cwpb.01459.

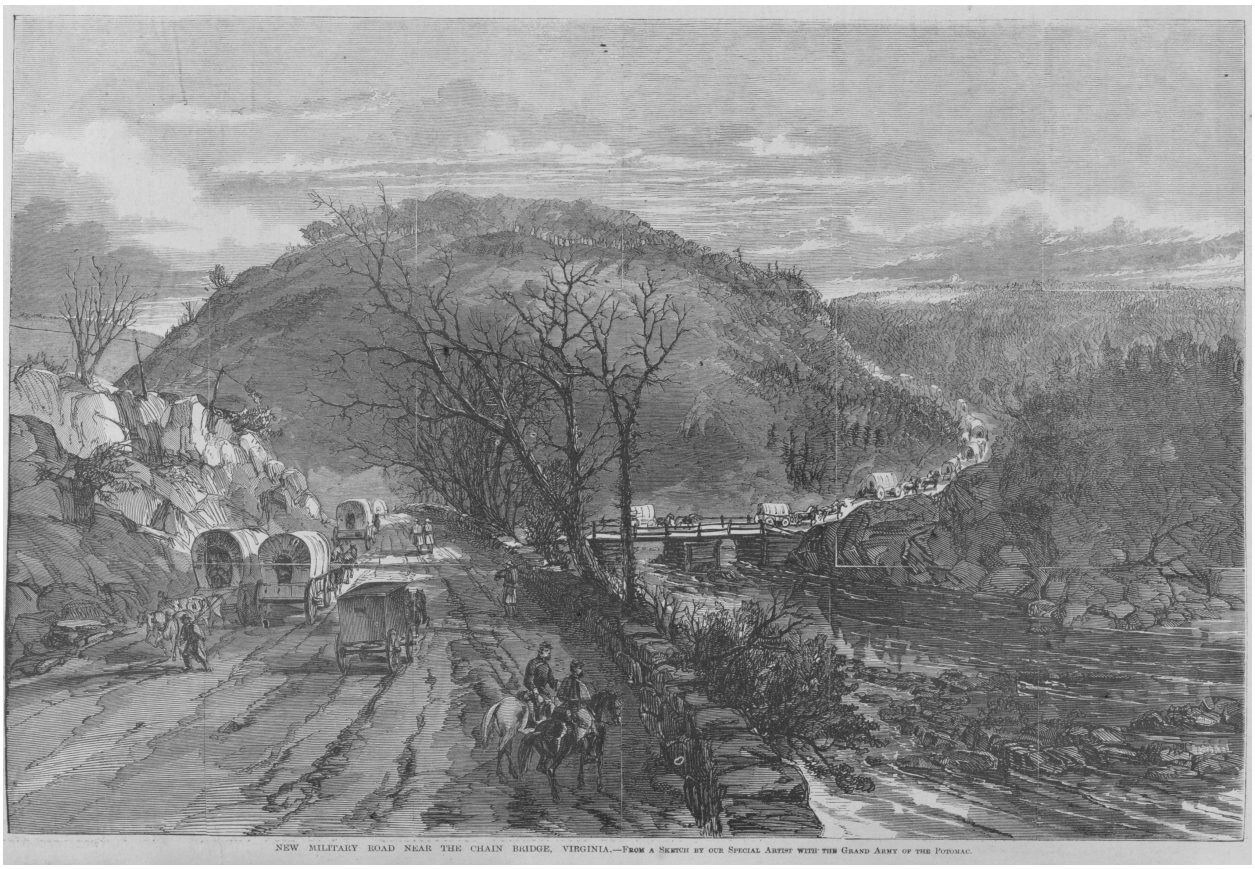


Figure 4.22. Lithograph from *Frank Leslie's Illustrated Newspaper*, January 1862 Depicting Union Troops Marching East, with Pimmit Run Bridge in Background (Source: Library of Congress Prints and Photographs Division, Accessed http://www.loc.gov/pictures/item/2013650188/).

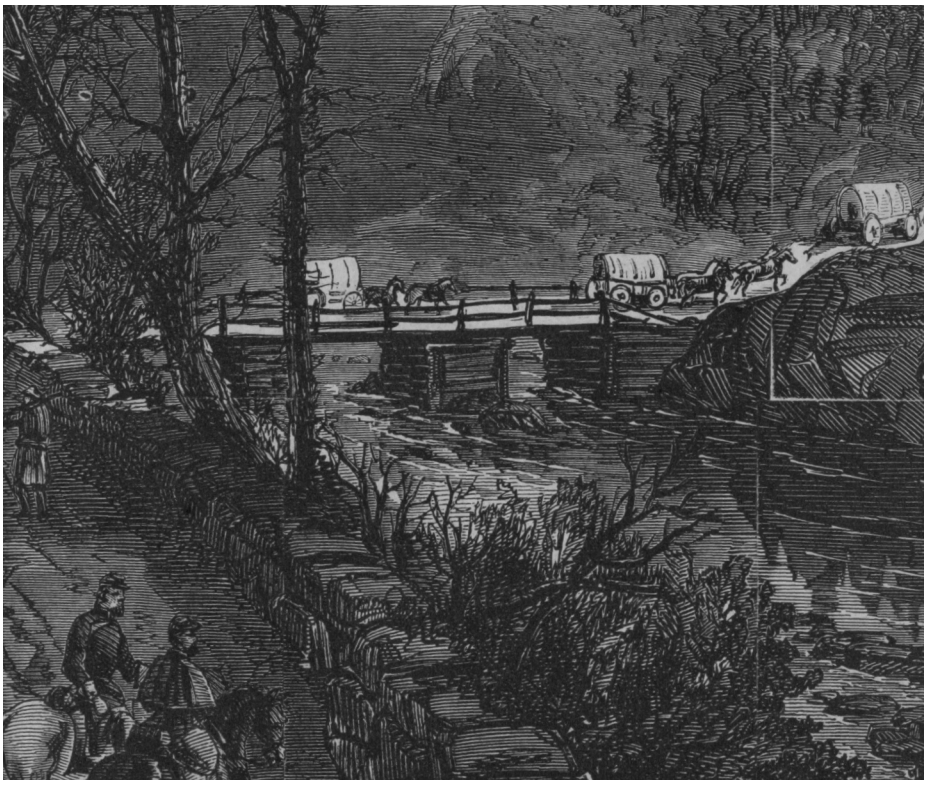


Figure 4.23. Detail of Lithograph from Frank Leslie's Illustrated Newspaper, January 1862 Showing Bridge Over Pimmit Run Associated With Military Road (Source: Library of Congress Prints and Photographs Division, Accessed http://www.loc.gov/pictures/item/2013650188/).

The photograph of the bridge from the Civil War-era stereograph is taken from downstream, yielding the same view as **Figure 4.20** above, which depicts on abutment of the bridge. While it is difficult to judge the scale of the historic photograph, the abutment for the bridge over Pimmit Run at the time of the Civil War appears to be smaller than the stone abutment extant in this location today. The stonework visible in the historic photograph is somewhat different from the stonework present in this structure, particularly two very large stones utilized in construction near the top of the abutment, which do not appear in the extant abutment in **Figure 4.20**. This is attributable to periodic repairs to the bridge, which would have been necessary over its approximately 50 years of service.

Condition of Defenses at Chain Bridge

Battery Martin Scott

The location of Battery Martin Scott (**Figure 4.1**, Resource No. 11) is identified in Barnard's topographic maps of the Defenses of Washington (**Figure 4.2** above) as being directly in line with Chain Bridge in the heights on the Maryland side of the Potomac River. This location lies within the residential area west of MacArthur Boulevard in the Palisades neighborhood of

Washington, DC. Here Potomac Avenue extends along the top of the slope that descends towards the former alignment of the B&O Railroad, and the alignment of Canal Road and Clara Barton Parkway. Cooling and Owen (2009:141) remark that traces of the earthworks for Battery Martin Scott are visible, but none were noted during the current study. A park-like strip of land west of Potomac Avenue is kept cleared of trees, and the surface of the ground undulates, but it is not clear whether this marks remnants of Battery Martin Scott or the results of earth-moving during grading of adjacent roads and development of this neighborhood (**Figure 4.24**).



Figure 4.24. Contemporary View of the Former Location of Battery Martin Scott, Above the Eastern Abutment of Chain Bridge (Berm at Right of Photograph Extends North and South Along Potomac Avenue). Photograph By Matthew Palus, March 2013.

David Miller's *The Defenses of Washington During the Civil War* (1976) describes his attempts to locate many of the fortifications that made up the Defenses of Washington. He created overlays of Barnard's (1871) detail plates depicting the organization of the defenses showing major roadways, and tied the location of many defenses to contemporary street addresses, sometimes with indications of their state of preservation. Miller locates Battery Martin Scott in the same location that the current study proposes, and his book includes a view from this position

on the heights looking straight down the alignment of Chain Bridge towards Virginia (Miller 1976:30).

Chain Bridge Battery

The Chain Bridge Battery was placed at a similar elevation to the deck of Chain Bridge, immediately east of the bridge abutment on the Maryland side of the Potomac River (**Figure 4.3**). Nothing remains of this battery, which would have been located within what is now the intersection of Chain Bridge Road, The Clara Barton Parkway, and Canal Road.

IV. Civil War Resources Associated with Fort Sumner on the Maryland Side of the Potomac River

Three resources associated with the Civil War are located adjacent to the right-of-way for Clara Barton Parkway in Montgomery County, Maryland and are partially under the jurisdiction of the NPS, National Capitol Region. These include portions of Battery Alexander, and two road alignments that appear to correspond with Civil War-era military roads connecting the defensive works around Fort Sumner into regional transportation networks.

Battery Alexander

Battery Alexander is the name of a fortified position associated with Fort Sumner, positioned in the heights north of the Potomac River, to cover and contribute to the defense of the Washington Aqueduct. It is located on a promontory above a steep southwest-facing slope over the C&O Canal and the Potomac River, at the southern end of a bluff that descends gradually from the former location of Fort Sumner. Battery Alexander was named for Captain Barton S. Alexander, Corps of Engineers, who provided supervision to the construction of Fort Sumner (Miller 1976:31). Battery Alexander is not the same structure as Fort Alexander, which was eventually merged into Fort Sumner and stands apart from that grouping of redoubts. Three fortifications were joined into a large defensive position called Fort Sumner early in 1863; Fort Alexander became Redoubt Davis, Fort Franklin became Redoubt Kirby, and Fort Ripley became Redoubt Cross. All occur at similar elevations between ca. 322 and 337 feet AMSL (Barnard 1871:148). As summarized by Cooling and Owen (2009:144): "Fort Sumner was an exceedingly strong fort with significant concentration of troops encamped nearby. As finally consolidated, the works of Fort Sumner and Battery Alexander encompassed 843 perimeter yards, one of the large complexes in the defenses." Battery Alexander is actually some distance south from Fort Sumner's core, and it occurs at a lower elevation, at ca. 240 feet AMSL, while on the Virginia side Fort Marcy occurs at ca. 275 feet and Fort Ethan Allen, ca. 285 feet AMSL. Meanwhile Battery Martin Scott, on the Maryland end of Chain Bridge has a reported elevation of slightly more than 132 feet AMSL.

These elevations are crucial to understanding how these forts operated together with fields of fire that overlapped vertically as well as laterally, some providing cover to others that were more directly responsible for defending the Potomac River crossing at Chain Bridge. Fort Sumner held a crucial position within the wider defenses, as it protected the Washington Aqueduct and thus the water supply for the city. Fort Sumner and its batteries also covered ground from which the defenses around Chain Bridge in Virginia were vulnerable to Confederate artillery. At the same time, Fort Sumner had no view of Conduit Road passing directly below it, and so Battery

Alexander was constructed to guard this road. The defenses at Fort Sumner were among those retained after the end of the Civil War by order of Brigadier General Richard Delafield on May 6, 1865. Fort Sumner survived the reductions and divestments of the defenses in 1865 and 1866, which were carried out partly through compensatory gestures towards landowners – who were able to reclaim property containing fortifications and associated structures and materials – and also through public auction (Cooling 1975:231-232, 236). Fort Sumner was partially leveled by 1902, and the last of its works were demolished by bulldozer in May of 1956, part of the development of the Fort Sumner subdivision in Bethesda ("Fort Sumner" 2006; Cooling and Owen 2009:144; Miller 1976:31). A historic marker for Fort Sumner is located along Sagamore Road at Westpath Way, (Cooling and Owen 2009:144; Pratts 2007). The land containing Battery Alexander is partly owned by the NPS, though there is no signage and no right-of-way to access the site; the balance of the land is owned privately.

At the outbreak of the Civil War this portion of the Defenses of Washington, comprising the western end of the line north of the Potomac River, followed third in priority behind the paramount necessity of securing the heights in Arlington County and defending against an attack on Washington from across the southern shore of the Potomac River, and second, securing the roads in Maryland leading into Washington from the north. In his 1871 report on the defenses, Barnard wrote this narrative of the creation of these defenses:

> It was deemed indispensable not only that…[Chain Bridge] should be within our lines, but so far within as to be protected from artillery fire from hostile batteries. It was imperative to protect the "receiving reservoir" of the Washington Aqueduct, upon which the city depended for most of its supply of water… It was deemed necessary to give the position…considerable strength, and the site being unfavorable to the rapid creation of a strong position by a single large work, three smaller ones were erected, which, a year later, were united into one, called Fort Sumner (Barnard 1871:13).

Floyd indicates that Fort Sumner was constructed on land owned by Albert Lodge (Floyd 2004b:Appendix B). Floyd does not comment on the landowners where Battery Alexander or the batteries associated with the immediate defense of Chain Bridge were constructed**.**

Barnard's December 1862 report to Secretary of War Edwin Stanton on the condition and recommended improvements of the defenses, undertaken by a commission of engineers and other military officers under Special Order No. 312 issued by the War Department on October 25, 1862, describes the purpose and state of the works north of the Potomac River that would later become Fort Sumner. Forts Alexander, Franklin, and Ripley were part of that series of defensive positions that covered the heights from which the fortifications for Chain Bridge, including Fort Marcy and Fort Ethan Allen, could be assailed by artillery. Of equal importance was the role of these fortifications in protecting the Washington Aqueduct. The functioning of these works is further illustrated by this passage, written by Barnard to Assistant Adjutant General Colonel Kelton on October 6, 1862, that

> If the enemy attack Washington, it will be with a large force and numerous artillery. He will concentrate upon the point of attack a large number of pieces … to prevent as much as possible– the concentration of the enemy's artillery, I am placing in secure positions, such as Fort Ellsworth and Fort Alexander, in the

> heights near Battery Cameron (already constructed and armed with rifled 42-pounders, for the same purpose), 100- pounder Parrott guns, to sweep the ground where such concentrations are most likely and dangerous. (ORA, I, 19, Part 2 (serial 28), 391-93, in Floyd 2004a, Appendix E)

Of Forts Alexander, Franklin, and Ripley, Barnard wrote in December of 1862:

> This group of small works occupies a commanding, but advanced, position. The occupation is indispensible to the security of the Chain Bridge, and protection of the receiving reservoir. The fires from these works add, at the same time, greatly to the strength of the works and position in advance of the Chain Bridge. The Commission recommend, first, the union of the three works into (essentially) one, by connecting parapets; second, the removal of three 24-pounders now useless, from Fort Ripley, and placing them in battery behind the connecting exterior parapets; third, the building of merlons, to protect all the barbette guns bearing toward the heights mentioned; fourth, the construction of traverses on the southwest faces of Fort Alexander; fifth, the providing of platforms behind the external parapets for at least a dozen field guns to bear upon the heights; sixth, the introduction of another 100-pounder into Fort Alexander or Fort Franklin. (Part of the matters here recommended are in course of execution.) (also in Barnard 1871:24-25; ORA, I, 21 (serial. 31), 902-16, referenced in Floyd 2004a, Appendix C)

On May 30, 1863, General Barnard recommended the name of Fort Sumner, after the late Major General E. V. Sumner who died in March of 1863, to designate the enlarged earthen fortification that joined earlier Forts Alexander, Franklin, and Ripley (ORA, I, 29, Part 2 (serial 49), 154, referenced in Floyd 2004a, Appendix C). The uniting of these adjacent fortifications was completed by July 1863, when Barnard reported as much to Assistant Adjutant-General J. C. Kelton, and Battery Alexander was likely constructed during this period of improvements as well, and made operational if not fully completed (ORA, I, 27, Part 3 (serial 45), 596-597, cited in Floyd 2004a, Appendix D).

Of this work, Barnard wrote in 1871:

> The report of the Commission [appointed in October 1862] points out the importance of the position and the necessity of giving it greater strength. This was subsequently done by uniting the redoubts by lines, with parapet and ditch, having the usual profiles. The gorge of the enclosure, thus formed, was of stockade work, at the reentrant angle of which a strong bomb-proof guard-house was built to afford, through loop-holes, flanking fires. The interior of the inclosure formed a basin on the outer rims of which were the redoubts and connecting parapet; to the rear the hollow extended, as a ravine, down to the river, thus affording perfect shelter against the enemy's direct or curved artillery fire, to a very large body of troops. The artillery of the redoubts underwent the modifications elsewhere described, to give it security and efficiency, and the fire from the position was powerfully increased by the addition of guns, in embrasures, along the connecting parapets.

> Toward the river the ground descends very steeply, the important road leading along the margin, at a very much lower level, being scarcely seen from the work. A powerful battery (Alexander) was constructed at the extremity of a spur projecting towards the river, by means of which the road, for a distance of several miles, is brought under artillery fire. (Barnard 1871:48-49)

Brigadier-General and Inspector of Artillery A. P. Howe gave the works at Fort Sumner a favorable assessment during his comprehensive inspection of the defenses reported in May of 1864. He describes this installation thusly:

> *Fort Sumner, Col. Daniel Chaplin commanding.*–Garrison, six companies First Maine Heavy Artillery–1 colonel, 30 commissioned officers, 1 ordnance-sergeant, 868 men. Armament, six 6-pounder field guns, four 12- pounder field guns, eight 30-pounder barbette, three 8-inch siege howitzers, two Coehorn mortars, one 10-inch mortar, six 4 1/2-inch rifled, two 100-pounder Parrotts. Magazines, two; only one of which is dry and in good condition. Ammunition, not a full supply; serviceable. Implements, full set and serviceable. Drill in artillery, fair. Drill in infantry, fair. Discipline, fair. Garrison is sufficient. (ORA, I, 26, Part 2 (Serial 68), 883-97, quoted in Floyd 2004b:Appendix E)

While Howe did not provide any details about Battery Alexander itself, it can be assumed that the battery is included in this description, and that some portion of this materiel was positioned there. Cooling and Owen (2009:144) take their description of Fort Sumner in *Mr. Lincoln's Forts* from the same sources, and similarly do not differentiate those armaments for Battery Alexander from those throughout the defensive works at Fort Sumner.

On July 29, 1864, in the wake of Jubal Early's raid on Washington, Major General Christopher C. Auger wrote to Major General and Chief of Staff H. W. Halleck, regarding his instructions that Auger consult with a number of individuals on what additional armaments were advisable for the Defenses of Washington. In other words, what went right, and what went wrong with the defenses in light of the course of Early's raid. Auger introduced his reply by stating

> …the armament of these works was settled by a board of officers convened for that purpose by orders from the Secretary of War, dated November 9, 1863. The works have been arranged in accordance with the report of this board, and to make any material changes in the armament would require changes in the platforms or embrasures, involving considerable work, and be likely to produce confusion in the ammunition, besides introducing to the garrisons pieces with whose ranges they would be unacquainted.[12]

[12] Letter, Major General C. C. Auger, to Major General H. W. Halleck, Washington, DC July 29, 1864. The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. Series 1, Vol. 37 (Part II: Correspondence, Orders, and Returns Relating Specially to Operations in Northern Virginia, West Virginia, Maryland, and Pennsylvania, July 1 to August 2, 1864): 492-493. Government Printing Office 1891.

Auger allowed that the addition of some guns in the batteries associated with the forts, following the notion that while the theory of defense of the forts rested on field pieces being moved to batteries in the event of an attack, it might be best to have guns on hand or even prepositioned in the batteries: "…it may be well to inquire whether some of the more important batteries on the line of defense ought not to be armed at once, or field pieces, with ammunition, placed in the forts ready to arm them, and hold the enemy in check, for some days, at least, in order to give time to re-enforce the garrison of the city." [13] To this end, Auger reported the recommendation that Fort Sumner receive some additional armaments, to wit: *"Fort Sumner.*–To have additional field pieces; two to be placed on the line of the conduit to hold the bank between Fort Sumner and the river; two in Battery Benson, on Powder Mill Branch, and two in Fort Sumner, or Battery Alexander, as may be required."[14] Barnard's 1871 "Table of Armament of Works North of the Potomac" (reproduced in Miller 1976:45) grouped armaments at Fort Sumner and Battery Alexander, making it difficult to describe the potency and character of Battery Alexander on its own, beyond what is already presented in this chapter.

A military road was constructed to connect the works of Fort Sumner with Fort Reno to the east early in the fall of 1862, and another road of five and a half miles was constructed in September 1862 to connect Fort Sumner with Fort Stevens on the east side of Rock Creek (Barnard 1871:77). Alexander complained bitterly to Barnard about the condition of roads provided for the defenses in November 1862:

> …we ought not, with the experience of last winter before us, to allow ourselves to be caught in the same condition again. It is an easy matter to say that the roads were horrible; that they were nearly impassable; that the expense of supplying the troops was enormously increased in consequence; that the number of wagons engaged in this business was double what it would have been with good roads; that the wagons were broken down and worn out; that mules and horses were disabled in great numbers; and that the troops were sometimes without provisions & the animals without forage. But all this would not convey any adequate conception of the terrible condition of these roads. (quoted in Floyd 2004a:Chapter 6, see Footnote 29)

The solution that Alexander proposed was to allocate men from Fort Alexander to maintain the road heading east towards Fort Massachusetts, including by filling rutted areas, raising sunken portions of the road, and maintaining adequate drainage. A special order was issued that implemented Alexander's advice almost verbatim, with forts designated to provide work details for road maintenance, but pertaining only to the major east-west military road from the head of the reservoir for the City of Washington to Rock Creek. All of the roads allowing access to major transportation arteries, and connecting the defenses with their batteries and with one another, required the same sort of maintenance throughout the occupation of these fortifications (Floyd 2004a:Chapter 6).

[13] Ibid., pp. 493.

[14] Ibid., pp. 493.

Road Traces Associated with Fort Sumner and Battery Alexander

Two abandoned road traces can be located on the ground, which seem to be associated with the defensive works at Fort Sumner and Battery Alexander. One of these was visited during the present study, but both are included in the GIS database for GWMP. The more accessible of these two road traces is located on the east side of Little Falls Branch, largely eroded out of the bank and obscured by vegetation. The remnant of a road with stone shoring is visible from the area adjacent to the Little Falls Branch Bridge of Clara Barton Parkway, but obscured in photographs due to extensive overgrowth of vegetation, even in winter.

CHAPTER 5

The Potomac Gorge Below the Falls During the Nineteenth and Twentieth Centuries.

I. Introduction

In his earlier study, Cissna (1990) concluded that distinct activity areas developed during the nineteenth century along the Virginia Shore of the Potomac River below the falls, which determined the character of these areas during subsequent periods. The Chain Bridge/Pimmit Run area falls "by the historical wayside" (Cissna 1990:42), playing a minimal role in subsequent histories of the region; Theodore Roosevelt Island reverts to a naturalistic setting, and figures strongly in recreational uses of the Potomac River in the later nineteenth and early twentieth centuries. Rosslyn became a major urban center during the twentieth century, and points further south are the scenes of large-scale developments including Washington National Airport, the Pentagon, and Crystal City (Cissna 1990:42). In contrast, the Maryland shore of the Potomac River was quite active during the later nineteenth and early twentieth centuries in large part due to investments in transportation infrastructure geared towards bringing recreational visitors, athletes, and workers into the rugged area of the Potomac River below the falls. The sequence of developments in transportation, most keenly the electric commuter railway that extended along the Potomac River connecting developments at Brookmont, Glen Echo and Cabin John, gives structure to this chapter. The locations of historic resources addressed in this chapter are depicted in **Figure 5.1**, below.

Arlington County, Virginia experienced growth in the early twentieth century that far outstripped comparatively rural Montgomery and Fairfax Counties. This was due to suburbanization fueled by the establishment of transportation infrastructures—horse-drawn and electric railways—which made suburban living practical. Arlington's population leapt from approximately 10,200 persons in 1910, to 16,000 persons in 1920, to 26,600 in 1930, and more than doubling in the next decade to with 57,000 residents in 1940 (Cissna 1990:57-58).

An electric railroad comparable to the one extending from Georgetown to Cabin John developed in Arlington and Fairfax Counties, but this Virginia railway did not enter the Potomac Gorge below the falls, and as such it did not promote the same degree of development on the Virginia side. The Great Falls and Old Dominion Electric Railway moved a trolley from Cherrydale and McLean, Virginia to Great Falls (Templeman 1959:160). The Washington, Arlington, and Falls Church Railway Company was established in 1891, introducing electric railway service to Arlington's surroundings, and soon after a connection was established joining the Washington, Arlington and Falls Church line with the Washington, Alexandria, Mount Vernon Electric Railway, which had been completed in 1892 (Netherton, et al. 1978:477-478). Electric rail cars were replaced in Virginia between 1936 and 1940 by hybrid vehicles that could shift their trolley wheels to drive on rubber tires on surface streets, like busses. Gradually the rights of way for the electric trolley lines were acquired by Arlington and Fairfax Counties for highway construction, and the electric trolley lines were eliminated by ca. 1940 (Cissna 1990:53; Templeman 1959:160).

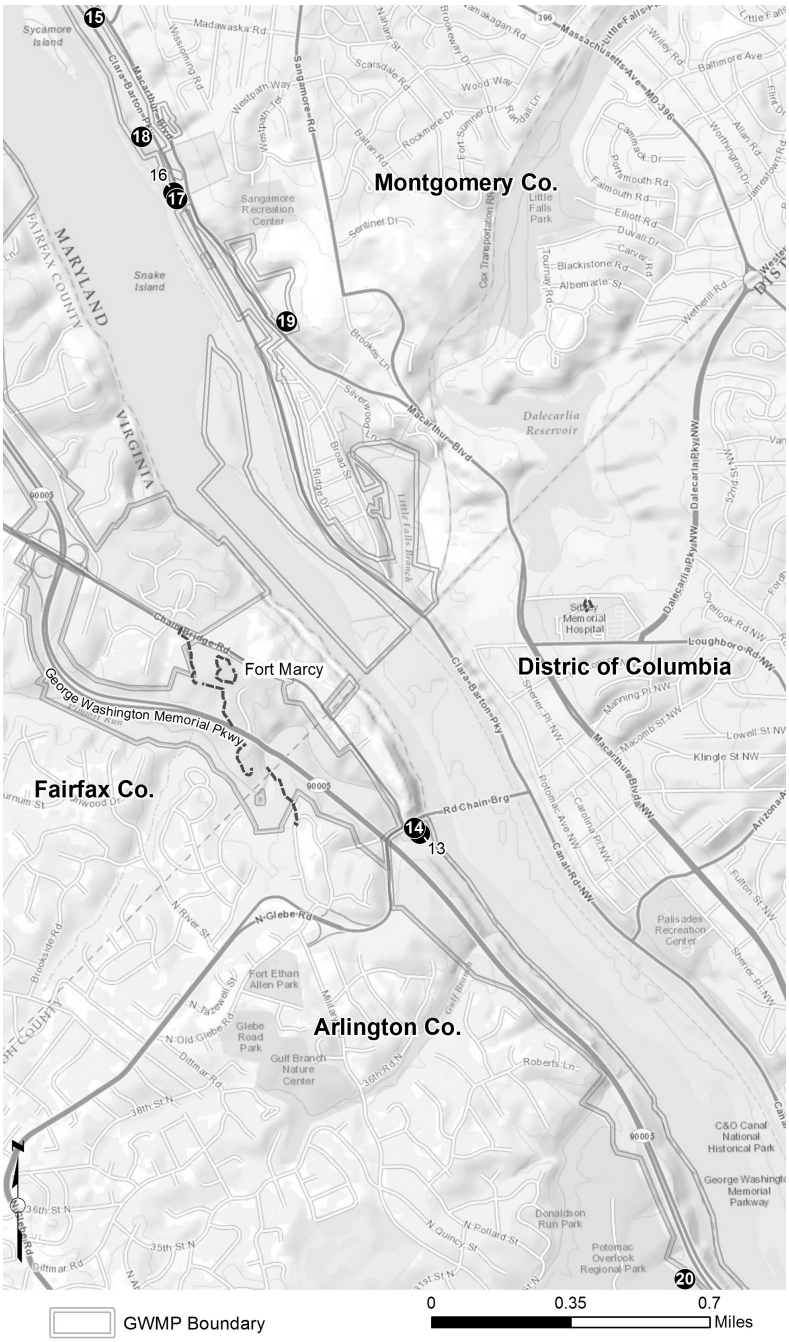


Figure 5.1. Plan of Historic Resources Associated with the Nineteenth and Early Twentieth Centuries within the Study Area: 13) Columbia Light & Power Plant Ruin on Pimmit Run; 14) Concrete Stairs from Pimmit Run to North Glebe Road; 15) Washington and Great Falls Electric Railway Trestle at Walhonding Brook; 16) Concrete Retaining Wall on Clara Barton Parkway; 17) Stone Retaining Wall on Clara Barton Parkway; 18) Camp of Eli and Maude Howell Smith; 19) Commuter Stairway to the Former Army Map Service Facility; 20) Little Italy Community.

Pimmit Run and the Virginia Palisades During the Later Nineteenth and Twentieth Centuries

During the Civil War the Vanderwerken family vacated their home at Falls Grove, and allowed Union forces to use the main dwelling and outbuildings. The home itself was used as a hospital, and General Hancock used a two-story carpenter's shop for his headquarters (Templeman 1959:126). The Vanderwerkens returned to Falls Grove after the war, and interacted frequently with the soldiers maintaining Forts Marcy and Ethan Allen for four years following the end of the war (i.e. until 1869) (1959:128).

A hotel and resort was established in the Potomac Palisades in Virginia, "on the crag above Chain Bridge on Civil War earthworks which were outposts of nearby Fort Marcy and Fort Ethan Allen" (Templeman 1959:112). This description vaguely renders the location of High View Hotel, established during the early 1880s. The High View was closed down during a campaign initiated in Arlington in the first decade of the twentieth century to eliminate gambling. The hotel was abandoned and later burned. Subsequently, the land became the property of William N. Doak, Secretary of Labor under the administration of Herbert Hoover. A nearby residential area on upper Military Road, known as Rural Retreat Park, was developed by one of Doak's nephews, reflecting the accumulation of prestige in a Palisades address (Templeman 1959:112).

Contrast comes from hints in Templeman's (1959) *Arlington Heritage* that an African American community and possibly a cemetery existed on Pimmit Run, though her account is somewhat vague:

> The early road to Pimmit Run Bridge [presumably the bridge associated with the abutment discussed in the previous chapter] led… down the west flank of the hill through the side of a little valley. This area became quite isolated after the Civil War when the route was abandoned in favor of the newer route down Chain Bridge Hill [describing a newer Pimmit Run Bridge aligned with the course of Chain Bridge]. This is where the gypsies used to camp… On the east side of the little valley there are traces of an early colored [sic] settlement and a cemetery. (Templeman 1959:112)

She continues, "this previously hidden valley will soon be viewed by many people for the first time, as the new segment of the Parkway traverses it" (Templeman 1959:112). Templeman's text establishes the possibility of a post-emancipation settlement of African Americans and an associated cemetery on the east side of Pimmit Run, not far from Chain Bridge. Topography alone might identify its location.

While a "Burnt Mill" – probably Hill's Paper Mill, belonging to a neighbor of the Vanderwerkens in Georgetown – is depicted at the mouth of Pimmit Run on an 1864 map, no such structure is shown on Hopkins' 1878 *Atlas of Fifteen Miles Around Washington, DC* (Hopkins 1878; Templeman 1959:126). A store belonging to a man named Edward Woody is depicted on the upriver side of Chain Bridge on the Virginia shore in the 1879 Hopkins map. Woody occupied this land continuously for 41 years, and had a residence here, which was bequeathed to his daughter-in-law in his will, which was filed in 1917 (Virginia, 1922:677). Sanborn fire insurance maps from 1936 depict a number of structures in the vicinity of Chain Bridge and Pimmit Run, including a filling station on the north side of the Chain Bridge

abutment and six structures labeled "summer cottages" on the south side of North Glebe Road, in the stretch of land bounded by the Potomac River on the east, the mouth of Pimmit Run to the south, and road to Chain Bridge the north. One additional structure is located north of the filling station, along today's Chain Bridge Road, then called Great Falls Road. The subsequent map, updated to 1959, shows the alignment of the GWMP that has been constructed between editions. The filling station remains, as does the structure behind it to the north. The cottages on Pimmit Run are no longer present (**Figures 5.2 - 5.3**).

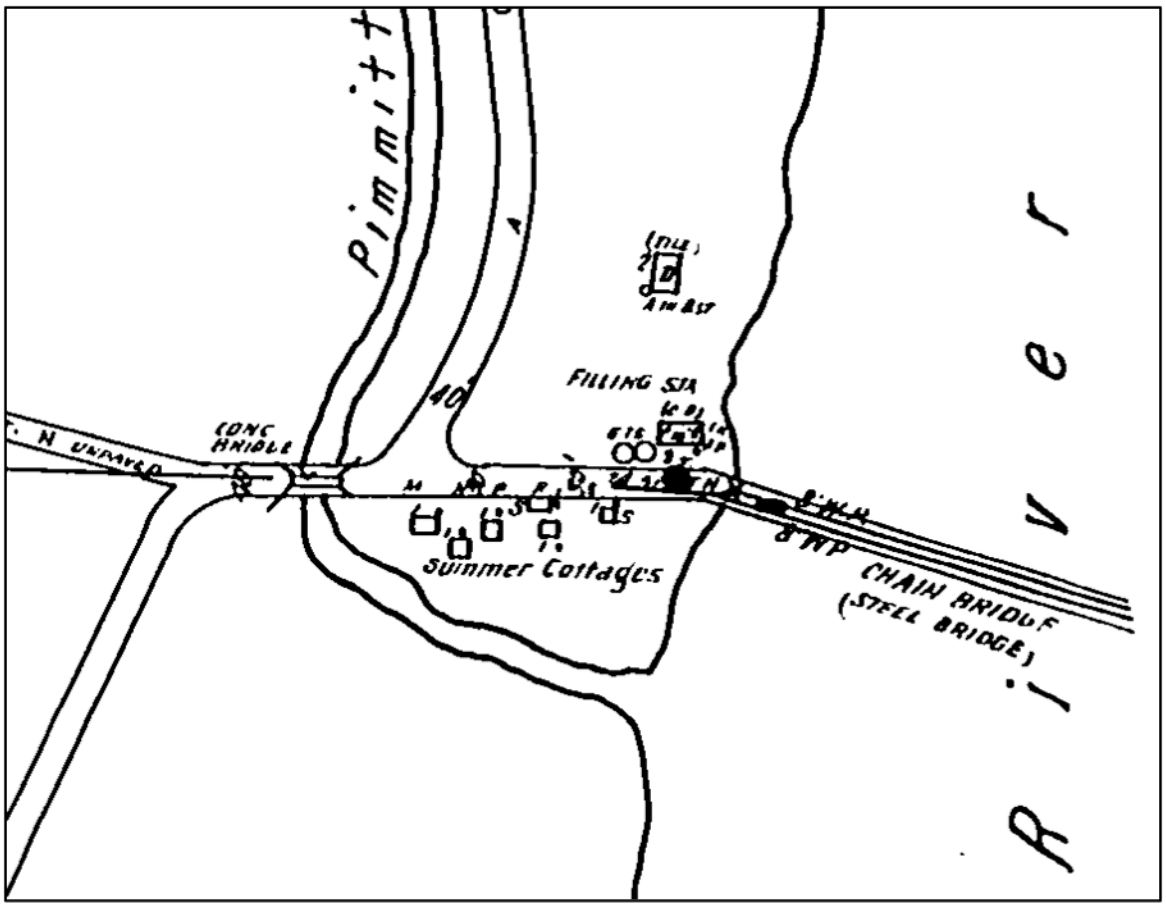


Figure 5.2. Detail of 1936 Sanborn Insurance Map Showing Structures at Chain Bridge and Pimmit Run (Sanborn Fire Insurance Company 1936:Sheet 60).

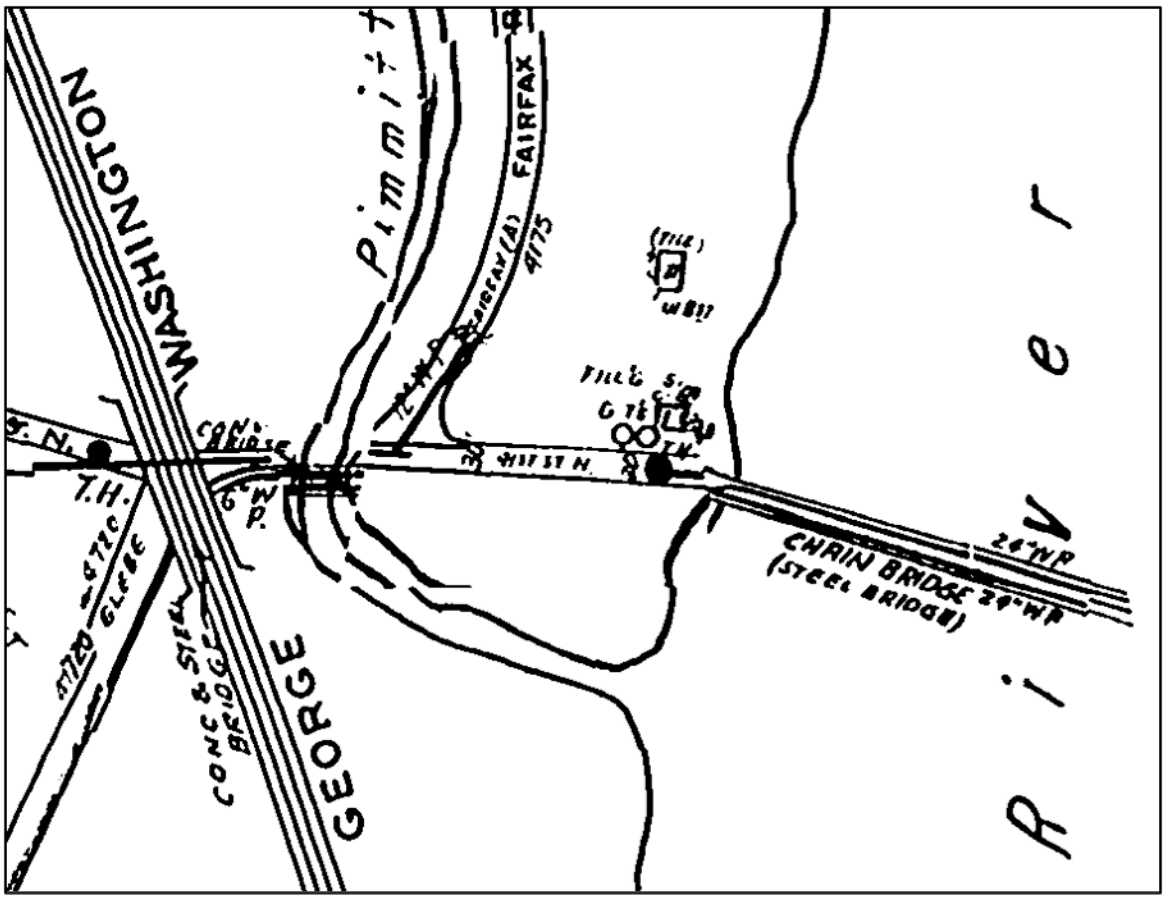


Figure 5.3. Detail of 1959 Sanborn Insurance Map Showing Structures at Chain Bridge and Pimmit Run (Sanborn Fire Insurance Company 1959:Sheet 60)

Two historic features situated on Pimmit Run are associated with developments during the post-bellum era. These include the ruin of a small hydroelectric power plant situated partially in the flow of Pimmit Run (**Figure 5.1**, Resource No. 13), and a series of concrete steps that ascend from the area below the Virginia abutment of Chain Bridge (**Figure 5.1**, Resource No. 14).

Remains of the Columbia Light and Power Hydroelectric Plant on Pimmit Run

In addition to direct water power for eighteenth and nineteenth century milling operations, Pimmit Run was used for hydroelectric power generation during the twentieth century and a portion of the dam associated with that plant still remains (**Figure 5.1**, Resource No. 13**; Figures 5.4 – 5.6**). This plant, which occurs in the stream of Pimmit Run south of Chain Bridge Road and the Pimmit Run Bridge, does not appear on Sanborn maps from 1936 or 1959, even as an abandoned structure. A historic marker referring to the plant indicates that it was operated by the



Figure 5.4. Downstream Side of the Columbia Light and Power Plant Ruin, Showing Two Discharge Outlets, Facing Northwest. Photograph By Matthew Palus, December 2012.



Figure 5.5. View of Columbia Light and Power Plant Ruin, Facing Southwest. Photograph By Matthew Palus, December 2012.



Figure 5.6. View of Columbia Light and Power Plant Ruin, Facing North with Glebe Road Overpass in the Background. Photograph By Matthew Palus, December 2012.

Columbia Light and Power Company after 1890, and provided power to Chain Bridge and Canal Road, presumably for electric lighting.[15]

The ruins of the plant show construction from a combination of poured concrete and mortared stone. The ruin appears to be the extant portion of a dam that formerly extended across some portion of Pimmit Run. The center section of poured concrete is constructed on bedrock, and has two rectangular chambers formed from concrete that may have held machinery, or simply served to discharge wastewater from the hydroelectric generator(s). To either side are short remnants of the dam itself. These structures are constructed from roughly-shaped mortared stone, and also appear to rest on bedrock. Though abbreviated, the dam still holds some water behind it. The contrasting methods and materials of construction hold the suggestion that the small electric plant may incorporate elements of an earlier structure, such as a water-powered mill or mill dam from 19th century industry on Pimmit Run.

[15] Historic Marker erected by Arlington County, Virginia, "The Mouth of Pimmit Run" located north of North Glebe Road on the Potomac Heritage Trail, visited November 10, 2011.

Despite some deterioration of the concrete portions of this ruin, it is in good condition and appears to be stable. It is situated inside the final bend in Pimmit Run before it joins the Potomac River, and water only strikes the ruin during flooding. A buildup of wood and other debris has accumulated on the upstream side of the ruin, but this does not seem adequate to harm the structure.

Concrete Stairs from Pimmit Run to North Glebe Road

On the south side of North Glebe Road a short distance from the Virginia abutment of Chain Bridge, a set of irregular concrete stairs (**Figure 5.1**, Resource No. 14) descends over the field of rubble allowing access to the flats at the mouth of Pimmit Run (**Figure 5.7**). These stairs are presumed to be associated with the series of structures depicted on the side of North Glebe Road directly above the stairs, which were present in 1936 and demolished before 1959. The stairs provided access to the Potomac Riverside and Pimmit Run primarily for adjacent residents, though casual visitors may also have enjoyed the relative safety in traversing the rubble of Chain Bridge's earlier iterations, as visitors do today.

The stairs were constructed in a vernacular, improvised style from concrete that appears to be without metal reinforcement. They are not especially vulnerable to degradation and seem to merit no special maintenance, though the continuing utilization of the stairs to traverse the hazardous rubble field adjacent to Pimmit Run may indicate the need to prevent the stairs themselves from becoming unsafe.

Montgomery County in the Post-Emancipation Era

Passenger railroad service first came to Montgomery County in 1873, hailing the beginnings of suburbanization. The Metropolitan Railroad Company began raising money for the rail line through Montgomery County in 1853, and in 1865 the Maryland Assembly granted a charter to the B&O Railroad to establish the Metropolitan Branch. Several years were required for the railroad to acquire necessary lands, often by condemnation for which the railroad paid Montgomery County landowners millions of dollars (McGuckian 2001:65-66).

The railroad provided tremendous advantages to farmers in the central part of Montgomery County. The Metropolitan Line became important for bringing in fertilizers – lime, bone, and phosphates – and for moving agricultural products to market, an alternative to shipping agricultural products overland that had not hitherto existed (Boyd 1968 (1879):110; McGuckian 2001:67-68).

The Civil Service Act of 1883 followed two decades of expansion in the federal bureaucracy in Washington, DC, and it established the basis for civil service careers for federal employees, creating "a stable, middle-class work force that needed housing in and near the nation's capital" (McGuckian 2001:69). Economic expansion in the region during the 1880s encouraged the development of thriving railroad suburbs, such as Takoma Park, Kensington, and others. This building boom in Montgomery County peaked in 1890 and ended by ca. 1900 (McGuckian 2001:69-71, 102).



Figure 5.7. View of Concrete Stairs from Pimmit Run to North Glebe Road, Facing Northwest. Photograph By Matthew Palus, December 2012.

Suburban growth created new spaces for housing segregation to be expressed and enforced, and legal or voluntary covenants against selling or leasing to African Americans thrived until after the passage of the Fair Housing Act in 1968 (McGuckian 2001:79, 101). Bethesda grew to be racially exclusive early in the twentieth century, and Chevy Chase was entirely white by 1920 as demonstrated by the federal census of that year, while African Americans remained in Cabin John, Glen Echo, and unincorporated areas around Bethesda and Rockville (Offutt 1995:314). A small community of African Americans "that supplied many of the cooks, waiters, and other workers at these now long-forgotten roadhouses" in Brookmont, Glen Echo and Cabin John resided on the north side of Conduit Road – today's MacArthur Boulevard – near the former site of Fort Sumner (Offutt 1995:109).

In 1910, the total population of Montgomery County was 32,089 persons, up from a population of 30,451 reported in the 1900 census. The county in 1910 contained 2,442 farms, 2,042 of which were operated by white native-born Marylanders, with 349 farms operated by African American or non-white farmers, and 51 operated by foreign-born persons identified as white (Fox 1911:Table 1). Of those, farms operated by owners included 1,527 operated by whites, 277

operated by non-whites including African Americans, and 37 operated by foreign-born farmers. The balance would have been operated under some sort of tenancy agreement, and share-tenancy predominated across all racial categories, across the state. Principle crops in 1910 included, in order of production, corn, oats, wheat, barley, buckwheat, rye, potatoes, sweet potatoes and yams, tobacco, hay and forage (Fox 1911:Table 2).

Throughout the state, 3,950 farms were owned by African Americans in 1910, compared with over 29,000 farms owned by farmers identified as white. Another 2,335 farms were operated by African Americans under tenancy, the majority of those, 1,685 farms, operating under share-tenancy agreements, where a portion of each harvest was turned over to the landowner (Fox 1911:Table 2).

Agriculture remained a central concern in Montgomery and Fairfax Counties during the first half of the twentieth century, while the land along the Potomac River below the falls represented a departure from this pattern. Here was located a series of developments aimed at indulging the desires of city-dwellers for outdoor recreation, excursioning, and sight-seeing in one of the most spectacular locales along the entire length of the Potomac River.

II. From Recreation to Suburbanization: The Attraction of Great Falls and the Potomac Gorge.

Recreation along the Potomac River was facilitated by the electric railroad, but there is also an earlier history of recreation and excursions on the river. In fact, many destinations on the Maryland side of the Potomac River were established before the first electric railway to this area was completed. The towpath for the C&O Canal made the gorge available to excursionists from Washington, DC and MacArthur Boulevard, initially designated Conduit Road, was constructed atop the brick-lined tunnel bringing water into the District of Columbia starting in 1857, under the direction of Montgomery Meigs of the War Department (Sween and Offutt 1999:46).

The development of transportation networks spurred development in the area, beginning with recreational properties. The magnificent Cabin John Bridge Hotel opened in 1870 and grew to 40 rooms and two banquet halls with capacity for 100 seated diners apiece. Developer Edward Baltzley acquired more than 500 acres in the vicinity of Cabin John Creek by 1888, and the Edward and Edwin Baltzley's 60-acre Chautauqua at Glen Echo opened in 1891 and included an amphitheater with capacity for 8,000 persons. The Chautauqua was sold to the Capital Transit Company in 1911, and the streetcar line installed the amusement park that came to be synonymous with Glen Echo (Clark 2008; Sween and Offutt 1999:93-98).

Recreational Uses of the Potomac Gorge

Flooding of the Potomac River and its tributaries periodically strained development along it, especially those located on its islands and riverbanks. A severe flood of the Potomac River in November 1877 caused extensive damage to the C&O Canal and halted shipping on the canal until repairs could be made the following year. An even greater flood took place in early summer 1889, and the Potomac River reached 43.3 feet above flood stage at Chain Bridge. Every structure between the C&O Canal and the Potomac River between Great Falls and Chain Bridge was swept away. A flood of like severity took place in 1936, reaching slightly greater high-water marks at Little Falls and Georgetown (Cissna 1990:51-52, 58, citing Unrau 1976).

Recreation on the Potomac River took place in defiance of such disasters. A ferry across the river had existed at Analostan, now Theodore Roosevelt, Island since the mid-eighteenth century, first under the management of Francis Awbrey (who developed Thomas Lee's landholdings at Pimmit Run) and then under the ownership of George Mason, who acquired the rights in 1748. With Mason's possession of the island and adjacent lands on the Virginia shore, Analostan Island came to be known as Masons Island. The Mason family lost the island to foreclosure in 1833. An attempt was made to establish a dancehall and resort on the island in the decade before the Civil War (Cissna 1990:45-46), and after the Union occupation the island was owned in turns by the Columbia Athletic Association, the Analostan Boat Club, and the Washington Gas Light Company (Templeman 1959:66). In 1931, the Roosevelt Memorial Association purchased Analostan Island and gifted it to the federal government for use as a wilderness preserve and the name of the island was changed to Theodore Roosevelt Island (Netherton 1980:1, 79, cited in Cissna 1990:58). Thereafter a number of structures associated with John Mason's occupation of the island were removed, along with any non-native vegetation (Cissna 1990:58). Citing Nan Netherton's research, Cissna (1990:19) comments that the National Park Service directed workers from the Civilian Conservation Corps to conduct archeological testing of the residential compound associated with John Mason, in the same context in which these structures were largely dismantled.

Sycamore Island near Glen Echo, Maryland was created through construction of a rubble dam at Brookmont in 1780, raising water levels and cutting off the island from the Maryland shore of the Potomac River (2008:45). The Sycamore Island Canoe Club was established here in 1885 (Sycamore Island Canoe Club n.d.). Liquor was permitted on the island between 1885 and 1914, and the Canoe Club hosted a bar and gambling until 1891. Earlier floods had impacted the club, but the 1936 flood washed away the clubhouse, and inundated the island with water ten feet above its highest point (Torrey and Green 2008:45-46).

Cycling grew in popularity at the end of the nineteenth century, offering a form of affordable, democratized recreation for Whites and African Americans alike (Mullins 2013). Conduit Road was a favorite route for cycling, and became a site for bicycle races, accessed via the canal road. Roadhouses catering to bicyclists opened, including Wheelmen's Rest at the entrance to the Brookmont community, rumored to have served African American cyclists exclusively (Torrey and Green 2008:49-50, 52-53).

In the spring of 1896, the International Athletic Park was established at the current site of Dalecarlia Water Treatment Plant. The International Athletic Park's summer bicycle camp entailed ten days of bicycling and tent living at an encampment along the Potomac River:

> The camp will take place… a little above the Chain Bridge, and this side of Cabin John by a mile or two. The field selected by the promoters is that portion of the riverbank, which adjoins the International Athletic Park, and the site is one of the prettiest of all the picturesque locations along the Upper Potomac… The camp, being on the line of the Great Falls electric railway will be easily accessible to the visitors who do not ride, and great throngs of interested spectators may be expected to attend each day. It is also but a few hundred feet from the great cycling boulevard, the Conduit road (Torrey and Green 2008:52-53, quoting the Washington Post, July 5, 1896).

The Rock Spring Club in Maryland was another important destination, located on the east side of Conduit Road one mile from the DC border (Torrey and Green 2008:54). The prohibition of alcohol in Montgomery County excepted private clubs under the State of Maryland's "Option Law," and many establishments along Conduit Road became "clubs" so they could continue to sell alcohol and feature gambling (Torrey and Green 2008:51).

Glen Echo

Glen Echo is a NPS site that was acquired by the federal government in 1970 as part of a broader effort to prevent overdevelopment of the Potomac River gorge and palisades. Glen Echo was listed on the National Register of Historic Places in 1984, with contributing structures dating between 1891 and 1947. Glen Echo is significant as the meeting site for a Chautauqua assembly during the early 1890s, and more prominently as the location of an amusement park or "trolley park" between 1899 and 1968. The town of Glen Echo and grew after the Chautauqua failed, with a number of cottages being built during the 1890s and 1900s. The Baltzleys completed a sewer system at the Chautauqua site hoping to make the development more attractive, and working with partners in Washington they chartered the West Washington and Great Falls Electric Railroad Company to encourage growth in the area. Glen Echo Park, which grew at the Chautauqua campus, was owned by Washington railways during the park's heyday from 1911 to 1955, including the Washington Railway and Electric Company, which descended from the Washington and Great Falls Electric Railroad Company, and the Capital Transit Company (Clark 2008; Unrau 1986:ix-x).

Glen Echo was the location of one of the earliest suburban subdivisions of land in Montgomery County. Edward Baltzey and his wife Laura purchased 516 acres of land in 1888, calling it Glen Echo on the Potomac. Their land reached from Cabin John Creek to today's Walhonding Road along the portion of the Potomac River overlooking Sycamore Island. The Baltzeys were among those who invoked the image of the rural country along the Rhine River to describe the beauty and healthfulness of the Potomac gorge, as in a brochure published in 1891 titled *Glen-Echo-on-the-Potomac: The Washington Rhine* (cited in Unrau 1986:2).

Unrau (1986) notes that the Baltzeys purchased the land for Glen Echo from the once-slaveowner William Reading, who himself first purchased land in the area in 1852. His former home, the Reading House – later called Oakdale Villa by hotelier Jacob J. Decker – is located on Wellesley Circle south of MacArthur Boulevard in Glen Echo, and both Unrau (1986) and the Maryland Historic Trust (1976) mention an extant associated structure on the same property built from rubble stone, which is popularly held to have been a slave quarter for Reading's farm (Trust 1976; Unrau 1986:2). The presumed slave quarter was renovated during the 1940s by a realtor from Brookmont named Nettie Mae Burgess, who also owned the Reading House after 1946. Burgess rented the former slave quarter to renowned naturalist Roger Tory Peterson between 1947 and 1955 (Trust 1976).

Railway Connections Between the District of Columbia and Montgomery County, Maryland

Railroad construction promoted change and intensification of development in Montgomery County, which came to resemble more of a proper suburb for Washington, DC. The Maryland shore of the Potomac River was not subject to this intense development, and remained rural in character (Crowell, et al. 1987:25). The Metropolitan Southern Branch and the contiguous

Georgetown Branch of the B&O Railroad were constructed between 1889 and 1892. Four corporations built the rail line, including the Metropolitan Southern Railway, the Washington and Western Maryland Railway, and the B&O Railway, which replaced the Georgetown Barge, Dock, Elevator and Railway Company in construction of the portion of this rail line on the Georgetown waterfront (Crowell et al. 1987:24-25). This rail line extended from Silver Spring, through Bethesda, and descended along Little Falls Branch to follow the Potomac River west of Delacarlia Reservoir; it crossed the Cabin John street railway line on a steel girder bridge, and the C&O Canal on a three-span curved steel bridge (Crowell et al. 1987:25), both of which are still extant.

Service on the Washington and Great Falls Electric Railway began in August 1894, moving excursionists between Georgetown and Cabin John. Mitchell (1986:108) writes that such interurban railways, along with automobiles and telephones, virtually erased the boundaries of the District of Columbia and unified Washington and Georgetown with their hinterland and suburbs. Construction of this particular line presented some difficulties due to the terrain, which were answered by engineers with elevated trestles and bridges that allowed the electric railroad to cross existing waterways and roads (Mitchell 1986:107). This electric rail line, ruins of which still exist, extended above the palisades adjacent to the project area, and then followed the alignment of the C&O Canal, before entering vistas of the Cabin John Bridge (carrying MacArthur Boulevard/old Conduit Road) and the Union Arch (carrying the Washington Aqueduct). Just prior to the Union Arch, the remains of a rail turnaround are preserved in the woods. The Union Arch, still-extant, featured the widest clear span in the world at that time that it was constructed. The Washington and Great Falls Electric Railway never reached Great Falls as initially proposed, the last segment between Cabin John and the falls remaining unbuilt (1986:108).

Early Streetcars in Washington, DC and its Suburbs

Street railways for public transportation in Washington, DC began service in 1862 (Kukulski and Gallagher 2009:4), but precursors to the street rail lines in Washington and Georgetown extend to the very beginning of the nineteenth century. The following text provides historic context for street railway development in Washington, DC, which formed the basis for later commuter rail lines that extended out to the sights, suburbs, and later the federal workplaces along the Maryland side of the Potomac Gorge.

In 1800, a brief-lived coach service was introduced running from the intersection of Wisconsin Avenue and M Street (then known as High Street and Bridge Street), across Rock Creek and down Pennsylvania Avenue towards the present-day location of the US Capitol. In 1830 Gilbert Vanderwerken, a central figure in early mass transit in Washington and a significant landowner in Arlington and Fairfax Counties after 1851, established a line of horse-drawn omnibuses that ran between Georgetown and the Navy Yard. Fort Marcy, discussed in Chapter 4, was constructed on land owned by Vanderwerken in Virginia, where he pastured draft horses that were part of his omnibus operation. Vanderwerken was an omnibus and railroad car builder in Newark, New Jersey, and he moved to Washington by 1850 to take personal control of his omnibus line (King 1972:3).

A number of competing omnibus lines arose, but by 1860 all of these were unified under the ownership of Vanderwerken (Kukulski and Gallagher 2009:4). Then, amidst the Civil War

encampment of Union forces in and around Washington, Vanderwerken and his family left their home at Falls Grove to Union occupation and relocated to Georgetown for the duration of the war, as discussed in the previous chapter. During this period, Vanderwerken and two of his business partners obtained approval from Congress to build the first street railways in the Federal District. Their charter called for three lines to be constructed. The first extended near the intersection of Bridge and High Streets (M Street and Wisconsin Avenue) in Georgetown, ran east on M Street to Pennsylvania Avenue, and to the foot of Capitol Hill, and then to the Navy Yard via the northwest quadrant of the Capitol grounds. A second line ran from Boundary Avenue (Florida Avenue) to the Potomac River at Seventeenth Street West, and a third extended from Boundary Avenue South to the intersection of Fourteenth Street and New York Avenue, and then connecting with the Georgetown-Navy Yard line at Fifteenth Street and New York Avenue. Their charter stipulated that the rail gauge would match the existing gauge used by the B&O Railroad (King 1972:3). Henry D. Cooke of Georgetown, who later became the first territorial governor of the Federal District under President Grant, was named as president of the new railroad company (King 1972:4).

Vanderwerken's stables at 3222 M Street were purchased by the Washington and Georgetown (W&G) Railroad. Groundbreaking for the new rail line took place in June 1862, and service was initiated in November of that year (King 1972:4). The smooth-running rail lines were considerably more comfortable than omnibuses drawn over the existing, irregular street pavements, where pavement even existed before the establishment of the Board of Public Works in 1871. The Washington and Georgetown Railroad Company had eighty-six cars running throughout their system by 1863 (Kohler 2001:6).

Horse-drawn street railways were the rule until a period of experimentation with other sources of locomotive power towards the end of the nineteenth century. Practical electric railway operation was developed in Richmond, Virginia early in 1888 (King 1972:16). This success was duplicated in Washington in the same year. Congress legislated against further use of horse power in the Federal District in 1890, threatening companies that failed to substitute a new power source for horse-drawn rail lines with forfeiture of their corporate charters. Congress further legislatively prescribed that cars utilize an underground cable system in 1894 (King 1972:25, 32).

The prohibition on overhead wires established in 1893 prompted experimentation with batteries, compressed air, and underground traction cables similar to those still in use in some parts of San Francisco (Kukulski and Gallagher 2009:5-7). The W&G was one of the first two operators to install traction cable cars and converted their entire system to cable operation early in the 1890s (King 1972:19). The Pennsylvania Avenue line of the W&G commenced cable operation in August 1892 (Kohler 2001:7). The powerhouse for the entire line was located at Fourteenth Street and E Street NW, with cables extending in two directions, one towards Georgetown and across the M Street Bridge to the vicinity of Wisconsin Avenue and Thirty-sixth Street, and another towards the Navy Yard (King 1972:19). The Columbia Railway Company installed their underground cable system in 1895, the last such cable system to be constructed in the United States.

A pioneering electric-powered railway, the Georgetown-Tenallytown Railroad, was chartered in 1888. This line was powered by a coal-fired electric plant at the southwest corner of Calvert Street and Wisconsin Avenue, and provided service between Georgetown, running from K Street at the waterfront, up the length of Wisconsin Avenue, to Tenally Circle. Service was initiated in

1890, and included both passenger cars and freight cars for shipping coal to Tenallytown (Mitchell 1986:86-87; King 1972:39). This route cut across the Georgetown-Connecticut Avenue line extending along O and P Streets. Another early electrified suburban line was the Washington and Great Falls Electric Railroad Company, incorporated under act of Congress July 1892, and largely serving excursionists (King 1972: 48).

A series of consolidations that took place during the 1880s and 1890s led to the formation of the Capital Traction Company in 1895. This company absorbed the Washington and Georgetown Railroad Company, and acquired numerous other transit companies in the District of Columbia during the later nineteenth and early twentieth centuries (Kohler 2001:7-8). In 1897, a disastrous fire at the cable house providing locomotive power to all cable-driven railways in the Capital Traction system ended cable-powered street railways throughout the District of Columbia. Rather than rebuilding the cable house, Capital Traction electrified their system. Because overhead wires were prohibited in the District of Columbia south of Florida Avenue (then known as Boundary Street) following an act of Congress in 1893 (Kohler 2001:7-8), Capital Traction electrified its system by installing power lines within the conduit that formerly held traction cables, as is the case with the extant street railway alignments on O and P Streets in Georgetown. All lines within the Capital Traction system were electrified by 1898 (Kohler 2001:8).

The Washington and Great Falls Electric Railway and the Glen Echo Line

The Glen Echo Railroad Company was chartered in Maryland on December 12, 1889, and began to operate a route from Wisconsin Avenue and Willard Avenue towards of Glen Echo and Cabin John to the west, in June of 1891. This line was part of a regional boom in electric railway lines that began in 1888 with the first electric railway operating in Washington (King 1972:17, 42). The Glen Echo Railroad followed a route aligned with the Washington Aqueduct to Glen Echo and Cabin John, and this required that construction of the line be supervised by US Army Engineers, which slowed construction and prevented service on this line from reaching Glen Echo until April of 1896, and Cabin John one month later (1972:42). In that year, the company changed its name to the Washington and Glen Echo Railroad Company. Soon after, service on the Glen Echo Railroad was superseded by the Washington and Great Falls Electric Railway. The Glen Echo Railroad was absorbed by the West Washington and Great Falls Railroad Company in the fall of 1900, and while the railroad alignment reaching Cabin John remained in use, remaining equipment of the Glen Echo Railroad was transferred to serve the Georgetown and Tenallytown line (1972:43-44).

The entire electric street railway system for the District of Columbia was operated with electric power reached through underground conduits, with a “plow” on the motor that ran under the roadway to reach electric leads underground. The Washington and Great Falls line reaching Glen Echo was the exception to this, and its “American” style open cars were electrified by trolley poles (King 1972:32).

The Washington and Great Falls Electric Railway Company was incorporated through an Act of Congress on July 29, 1892. The act enabled a line extending from the north end of the Aqueduct Bridge over Canal Road, where it would be raised on an iron elevated structure, to Cabin John Bridge, Maryland. Its alignment would run on the bluff to the north of the Canal Road; an act passed by the Congress in August 23, 1894 revised the route so that it began at the top of the bluff at Thirty-sixth Street and Prospect, eliminating the need for construction of the iron trestle.

The charter for the railway was further revised when the State of Maryland asserted its authority over railway construction beyond the District line, and so the West Washington and Great Falls Railway Company was chartered under the laws of Maryland in November of 1895. The two railway companies were allowed to merge less than one year later, with the Maryland company conveying its assets to the corporation initially chartered by Congress (King 1972:48).

The railway was completed to the District line by late September 1895, and a contract with the Georgetown and Tenallytown Railroad Company provided the Washington and Great Falls line with electric power. The line was initially constructed as a single track along the center of the right-of-way rather than along one side of it, with periodic sidings or turnouts allowing for two-way traffic. In 1899 a second track was laid as far as Glen Echo, and seven wooden trestles were replaced with steel structures. The earlier Glen Echo Railroad ended its operation in the autumn of 1900, save for a portion near Cabin John, which became part of the Washington and Great Falls line. Though Great Falls was the named objective of the railway companies chartered in the Federal District and Maryland, initially neither of these railways extended to Great Falls (King 1972:48-49).

King describes the Washington and Great Falls line as

> …one of the more scenic trolley rides in the country. After leaving 38th and Prospect [in Georgetown] and passing over the first trestle, the road entered private right-of-way high on a bluff overlooking the Potomac River. There were a number of high trestles, very few road crossings, and lots of heavy wooded countryside interrupted by delightful and impressive views of the Potomac River Valley (King 1972:48).

Entertainments included a Chautauqua and later an amusement park at Glen Echo, another amusement park at Cabin John, and an athletic club with a bicycle racetrack between Georgetown and the District line (King 1972:48, 51). King writes that

> Glen Echo, typical of many amusement parks, offered an escape from the heat of the city in addition to the usual exciting rides. The Park gave away its traction company background to the careful observer. All the electrically operated rides were operated by obsolete street car controllers, and in some cases tickets were "rung up" on a rather familiar fare register. A fitting end to all the wonderment seemed to e a ride in one of the open cars usually found in quantity at the gate when it was time to go home. The cars literally flew through the wooded right of way on the bluff overlooking the Potomac, depositing the rider back in the city—cool, tired, and ready for bed (King 1972:119).

The Washington and Great Falls line is significant for its consolidation of a number of smaller rail lines and electric power companies, including the Potomac Electric Power Company, which was initially acquired along with a number of other concerns by the Washington Traction and Electric Company of Virginia. This was part of a wave of consolidations of rail lines and power companies with small service areas that began in the region during the 1890s. In January of 1902 the board of the Washington and Great Falls Electric Railway Company voted to change the name of the company to the Washington Railway and Electric Company, signifying the company's broader regional interests (King 1972:47-52).

In May 1912, a charter was granted by the State of Maryland for the Washington and Great Falls Railway and Power Company. This was a separate line in a different alignment from the Washington and Great Falls Electric Railway Company, chartered in 1892 and changed to the Washington Railway and Electric Company in 1902. The Washington and Great Falls Railway and Power Company's line connected Bethesda with Great Falls, and went into operation in July of 1913, consisting of a single track approximately ten miles long, connecting with the Rockville Line of what was originally the Georgetown and Tenallytown Railroad at Wisconsin Avenue in Bethesda. Just as importantly, this line served the Congressional Country Club west of Bethesda (King 1972:94-96). The Washington and Great Falls Railway and Power Company railway line was abandoned in 1921 (King 1972:119).

Historic Resources Associated with the Washington and Great Falls Electric Railway

Washington and Great Falls Electric Railway Trestle at Walhonding Brook

Unlike the former B&O Railroad, which has had its trackway removed in preparing the Capital Crescent Trail, the Washington and Great Falls Electric Railway line lies abandoned but significantly undisturbed, running for a distance east of the right-of-way for Clara Barton Parkway, sometimes between the alignments of Clara Barton Parkway and MacArthur Boulevard. Likely the most striking remnants of the former electric railroad are a series of extant trestles that span small ravines associated with tributaries of the Potomac River. Such trestles traverse the Minnehaha Branch northwest of Glen Echo Park, the Braeburn Branch west of Wellsley Circle, and Walhonding Brook (Wikipedia 2013a). The trestles have been blogged about,[16] and are plainly visible from adjacent roadways. They no doubt attract attention from commuters and fondness from area residents. The nearest trestle to the study area spans the stream valley of Walhonding Brook, near Sycamore Island and the Glen Echo Heights neighborhood (**Figure 5.1**, Resource No. 15; **Figure 5.8** and **5.9**). The trestle corresponds to the route that was constructed at the end of the nineteenth century and discontinued in ca. 1960 when public transportation in the Metro Washington, DC area transitioned to busing.

Retaining Walls

Two retaining walls are present along the western edge of the right-of-way for the Clara Barton Parkway, where exceptionally steep cliffs drop away to the shore of the Potomac River below. The northernmost of these (**Figure 5.1**, Resource No. 16; **Figures 5.10 - 5.12**) shows two distinct phases of poured concrete construction, the earlier one incorporating shaped stones that may be reused street paving stones. Close examination of the southern end of the retaining wall, which is suspended at the top of a perfectly shear cliff face, shows that iron or steel rods are set in the concrete, probably to reinforce the concrete material, and more importantly to pin the retaining wall and help it adhere to the face of the cliff. It is possible that the later phase of construction corresponds with construction of the Clara Barton Parkway, and reinforced then-extant retaining wall construction associated with the electric railroad. Alternately, both phases of construction

[16] See "Surbexing DC: Abandoned Washington and Great Falls Electric Railroad" (http://www.urbanghostsmedia.com/2010/05/surbexing-dc-abandoned-washington-and-great-falls-electric-railroad/) and the catchier-named "DCinruins: Washington and Great Falls Electric Railway" (http://dcinruins.wordpress.com/railroad/).



Figure 5.8. Electric Railroad Trestle Spanning Walhonding Brook at the Intersection of MacArthur Boulevard and Walhonding Road, Viewed from the Pedestrian Overpass at Glen Echo Heights, Facing Northeast. Photograph By Matthew Palus, March 2013.



Figure 5.9. View Down the Underside of the Electric Railroad Trestle Spanning Walhonding Brook at the Intersection of MacArthur Boulevard and Walhonding Road, Facing Northwest. Photograph By Matthew Palus, March 2013.



Figure 5.10. View of Concrete Retaining Wall Associated with the Former Washington and Great Falls Electric Railway Line, Facing Southeast. Photograph By Matthew Palus, March 2013.



Figure 5.11. View of Concrete Retaining Wall Associated with the Former Washington and Great Falls Electric Railway Line, Facing North. Photograph By Matthew Palus, March 2013.



Figure 5.12. Detail of Concrete Retaining Wall, Showing Detail of Construction with Poured Concrete, Stone, and Iron or Steel Reinforcing Rods, Facing North. Photograph By Matthew Palus, March 2013.

could be associated with the operation of the electric railroad during its life of more than sixty years.

A second, massive retaining wall is located a short distance south of the one described above, which seems to be constructed from dry-laid, natural stone (**Figure 5.1**, Resource No. 17; **Figure 5.13**). These two retaining walls help to substantiate the conclusion that the Clara Barton Parkway extends through the former right-of-way of the Washington and Great Falls Electric Railway in this location.



Figure 5.13. View of Stone Retaining Wall Associated with the Former Washington and Great Falls Electric Railway Line, Facing North. Photograph By Matthew Palus, March 2013.

Camp of Eli and Maude Howell Smith

On the west side of the Clara Barton Parkway between Glen Echo and Brookmont in Montgomery County there is a cluster of concrete structures that represent footers for cabins and other buildings, which were once part of a camp along the Potomac River (**Figure 5.1**, Resource No. 18). The Smith's camp may well be the one described by Torrey and Green in their 2008 history of Brookmont:

> Washingtonians trying to escape the summer heat used the trolley to reach small summer cabins, or 'camps,' along the river. The cabins, simple structures with no electricity or running water, were built on the hillsides overlooking the river or along the C&O Canal… By early in the twentieth century, a number of cabins were built on a cinder path called Potomac Drive, at the bottom of the Brookmont ridge. Potomac Drive was located where the Clara Barton Parkway runs today… Trolley stops along the ridge above served the cabins on the hillsides and along the river, and by the end of the century the area had come to be known as Brookmont (Torrey and Green 2008:48-49).

Smith's camp was among the land acquisitions necessary to build the GWMP, now the Clara Barton Parkway, which were made under the authority of the Capper-Cramton Act of 1930, and which are discussed more thoroughly in the following chapter. Two documents associate this parcel with Eli and Maude Howell Smith, with the following text included in a January 29, 1941 land transfer order from then-Acting Superintendent of the National Capital Parks, F. F. Gillen:

> These properties are improved by 12 frame cottages; were acquired from Eli Smith and Maude Howell Smith at a total cost of $34,530 (one half of which was paid by the United States of America and the other one-half from funds contributed by the Maryland National Capital Park and Planning Commission); which contain 412,696 square feet, or 9.4743 acres; and will be known hereafter as a portion of the George Washington Memorial Parkway, U.S. Reservation No. 404 (Md.)… The grantors reserved to themselves an estate… 160' x 200', as designated on plat of survey, improved by a one-story, five-room frame cottage and garage, for five years, commencing on the date of recording this deed January 23, 1941…[17]

The drawing depicted in **Figure 5.14** is on the reverse of this letter, patterned by hand to indicate lands previously acquired, the ca. 9.5 acres acquired from the Smiths, the area reserved containing the Smith's home and other structures, and the locations of eleven additional structures as described in the transfer order (**Figures 5.15 - 5.18**).

While this area can be glossed as a cluster of concrete foundations, the types of structures present on the ca. 9.5 acre parcel are probably more varied, and also likely represent some diversity in the types of structures and periods of construction constituting the camp. For instance, some structures rested on piers while others had more substantial foundations including porches and steps. The above figures are a small sample of the structural and other evidence spread over the area occupied by the camp. One feature located nearby to the structures depicted in the above figures is a wooden utility pole, which likely conveyed electric power from the alignment of the electric railroad. The railroad would have sustained this camp in a more profound sense however, bringing vacationers here as it brought them to destinations all along the Potomac River below the falls.

[17] Land Transfer Order No. 956, F. F. Gillen, Acting Superintendent, Department of the Interior, National Park Service, National Capital Parks, January 29, 1941. On file, GWMP Turkey Run Headquarters, McLean, Virginia.

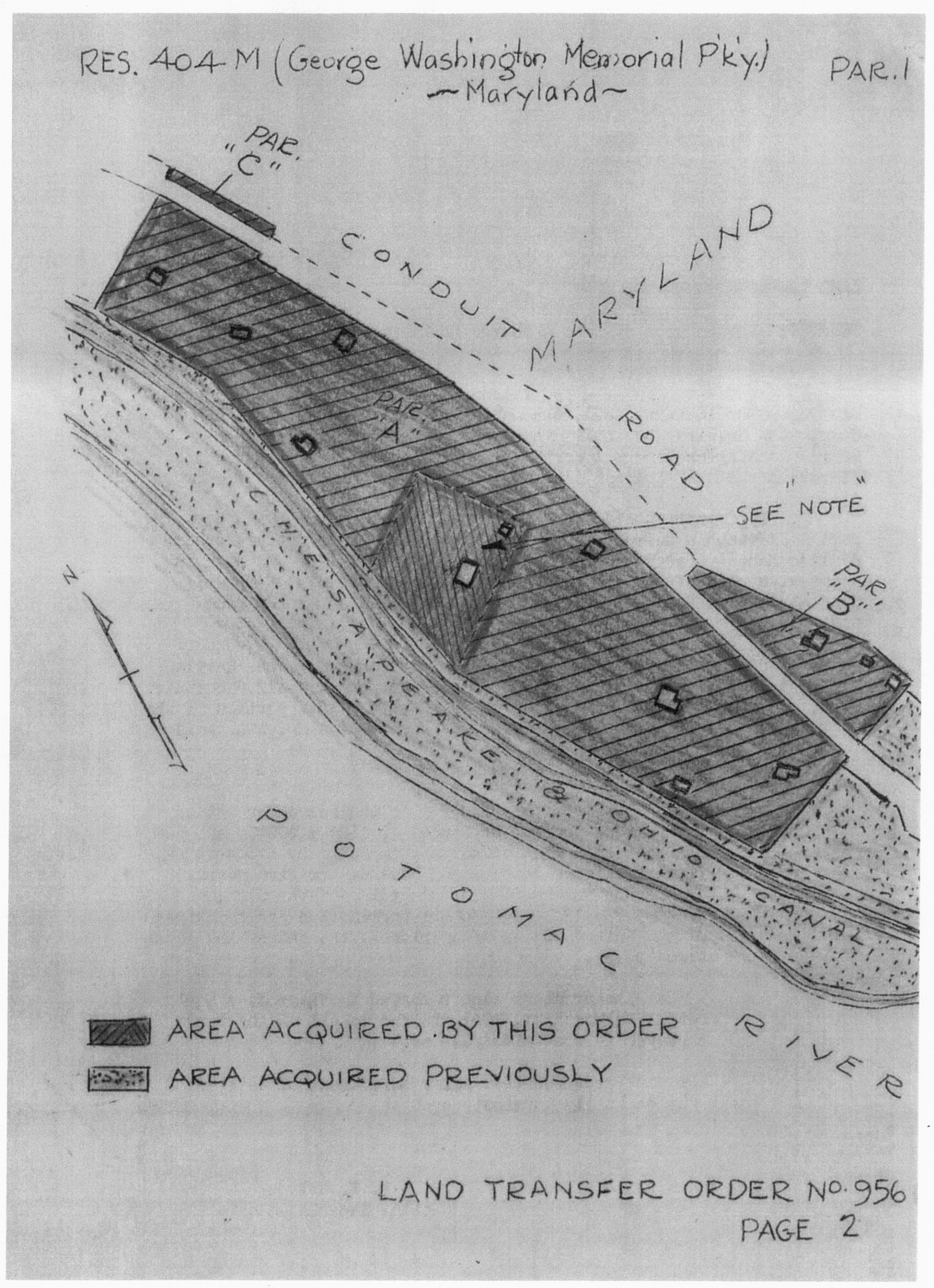


Figure 5.14. Survey Accompanying Land Transfer Order No. 956, January 23, 1941, Showing a Cluster of Structures Along the Washington and Great Falls Electric Railway Line West of Conduit Road. On file, GWMP Turkey Run Headquarters.



Figure 5.15. Cluster of Concrete Features Associated with a Former Cabin at the Camp, with a Poured Concrete Trough or Reservoir, Facing Southeast. Photograph By Matthew Palus, March 2013.



Figure 5.16. Concrete and Brick Pad Marking the Location of a Former Cabin Associated with the Camp, Facing Northeast. Photograph By Matthew Palus, March 2013.



Figure 5.17. Concrete and Brick Pier Associated with a Former Cabin at the Camp, Facing East. Photograph By Matthew Palus, March 2013.



Figure 5.18. Concrete and Brick Pier Associated with a Former Cabin at the Camp, Facing East. Photograph By Matthew Palus, March 2013.

Commuter Stairway to the Former Army Map Service Facility

The Army Map Service, established in 1917, was relocated to a facility in Brookmont in 1947 (Sween and Offutt 1999:129). A concrete stairway with a tubular steel railing, overhead electric lighting, and occasional culverts (**Figure 5.1**, Resource No. 19) allowed defense employees to commute to work at the facility on the Washington and Great Falls Electric Railway Line, climbing a considerable number of stairs to reach the facility from a stop Brookmont. As constructed, the stairway was uninterrupted except by periodic landings. The stairs originate to the east of the GWMP in Brookmont along the former rail right-of-way (now Broad Street) and climb up to MacArthur Boulevard. Commuters had to cross MacArthur Boulevard to rejoin stairs on the other side that continued up to the former Map Service (**Figure 5.19 - 5.23**).



Figure 5.19. Commuter Stairway Situated East of Clara Barton Parkway, Extending Uphill Towards the Former Army Map Service Facility in Brookmont, Facing Northeast. Photograph By Matthew Palus, March 2013.



Figure 5.20. Mortared Stone Culvert Associated with the Commuter Stairway at the Former Army Map Service Facility in Brookmont, Facing Northwest. Photograph By Matthew Palus, March 2013.



Figure 5.21. Commuter Stairway Ascending from the Former Washington and Great Falls Electric Railway Line in Brookmont, to the West Side of Clara Barton Parkway, Facing Southwest. Photograph By Matthew Palus, March 2013.



Figure 5.22. Electric Light Associated with the Commuter Stairway near Brookmont, Facing East. Photograph By Matthew Palus, March 2013.



Figure 5.23. Former Railway Alignment in the Brookmont Neighborhood, Montgomery County, Maryland, Facing South. Photograph By Matthew Palus, March 2013.

III. Quarrying on the Potomac and the Little Italy Community in Arlington County, Virginia

Commercial quarrying began along the stretch of riverfront below the Potomac Falls during the late eighteenth century. As mentioned in Chapter Three, a quarry was located in the area of Pimmit Run and Chain Bridge, where Philip Richard Fendall and Lewis Hipkins purchased 207 acres from the Lee family in 1789. Fendall ran an advertisement in 1796 claiming that four quarries were in operation "containing immense amounts of building and foundation stones" (Abbott 1990:31, cited in Virta 2008). These quarries remained in operation into the twentieth century, and "consumed the riverfront from Spout Run to Chain Bridge" (Cissna 1990:53). On the Maryland side of the Potomac River, the remains of Little Falls Quarry at the confluence of Little Falls Branch and the Potomac River are visible approximately 400 yards downstream from Brookmont's spiral pedestrian bridge over Clara Barton Parkway (Torrey and Green 2008:51).

Washington, Georgetown, and other nearby cities were hungry for stone, and expanded quarrying was promoted by the investment of a group from Washington, including William Corcoran, who purchased an immense swath of land along the Virginia shore of the Potomac River in 1833. This was parceled into forty-three quarry lots in 1835, strung along the river

between the Three Sisters Islands and Pimmit Run. The lots were conveyed by Corcoran to William Easby in 1845, and then sold off by Easby's heirs in 1890. The quarries were later operated by the Potomac Stone Company, which acquired all forty-three lots in 1890 (Cissna 1990:52), the Columbia Sand and Gravel Company, and lastly the Smoot Sand and Gravel Company between 1931 and 1939, at which time the quarries were closed. It was Smoot Sand and Gravel landholdings that were acquired to build the GWMP below Spout Run (Abbott 1990:33-34; Templeman 1959:142-143; Virta 2008:2). The sand and gravel companies that owned these lands rented fishing stations, granting access rights to the Potomac River at specific locations, harkening back to Philip Ludwell Lee's sale of fishing stations on his property between Little Falls and Pimmit Run in 1789 (Cissna 1990:55-56).

Quarrying on the Potomac Palisades was taken up by Gilbert Vanderwerken, who bought land in three locations, including former Lee property at Pimmit Run in 1851, as well as quarries at Gulf Branch and another below Spout Run (Virta 2008:2-3). The quarry developed by Vanderwerken below Spout Run became the site of an informal workers' settlement, known most recently as Little Italy. "The excellent bluestone was loaded on barges and towed down the river to Washington… The Italian quarry workers lived in shacks they built along Marcey Creek canyon of the palisades… They supplemented the local laborers from Chesterbrook and Halls Hill" (Templeman 1959:126). Little Italy and the associated quarry were located in the vicinity of Potomac Overlook Park in Arlington, Virginia which is administered by the Northern Virginia Regional Park Authority (NVRPA), and is bounded on its east side by the GWMP. Marcey Creek is the first waterway south of Donaldson Run, which has a clear flow to the Potomac River.

Little Italy was once home to approximately twenty-four quarrymen of Italian and Sicilian origin. Templeman (1959) writes that another one hundred African Americans worked alongside the Italians, some coming seasonally from Westmoreland County, Virginia. The Italian quarry workers named in Templeman's book seem to have arrived in the United States after the turn of the twentieth century (also see Virta 2008). It seems possible that the place name Little Italy may be a twentieth-century development and that the community at the quarry had a different designation and ethnic makeup during its operation in the second half of the nineteenth century. Its association with free African American labor may be just as significant as its association with Italian immigrant workers, who have been more prominently featured in historical accounts of the community. The base of knowledge regarding Little Italy seems to stem from Eleanor Lee Templeman's account in *Arlington Heritage* (1959:142-143). Nan and Ross Netherton (1987:179) seem merely to duplicate this information. Cissna (1990:59) contributes additional information from his examination of Sanborn Fire Insurance Maps, and other historic maps, as well as his on-site surface investigations.

Another very important source of information about the Little Italy community comes from an oral history interview with three persons who had lived at Little Italy during the mid-twentieth century, recorded by Matthew Virta and Brandon Beis in 2007 with support from the National Capital Region Ethnography program. Two of the interviewees had been born in Little Italy during the 1930s, when the quarry industry along the Potomac River was nearing its end. This alone is an interesting note in the history of Little Italy, as it is portrayed in other histories as a workers' camp (Virta 2008).

After the quarries were closed in 1939, most of the workers relocated, except for a number who for one reason or another were not prepared to leave. Templeman writes,

> …those who had families or were too old to seek employment elsewhere sought to eke out their existence for the remaining years of their lives in the homes they had been permitted to build on company-owned land. The Smoot company allowed them to remain, but as a control over the land, established a system of token leases at ten cents per month. However, no collections have been recorded since 1949 (Templeman 1959:142).

Three elderly men remained in the Little Italy community when the National Park Service acquired lands along the Potomac River owned by the Smoot Sand and Gravel Company in March of 1956 (Templeman 1959:142). Templeman includes their likenesses in her book, *Arlington Heritage* (1959:143). Citing correspondence between the NPS and one of the quarry workers named Phillip Matoli or Natoli, Barry Mackintosh's (1996:62) administrative history of the GWMP corroborates the fact that the remaining residents at Little Italy were evicted in the course of the highway's construction during this period.

Templeman describes Little Italy as it was during the first half of the twentieth century. During the period when the quarry was active, the seasonally crowded community was the scene of interpersonal violence, and sudden, horrific injury from accidents in the quarry. Dynamite was used in conjunction with steam-powered drills to break slabs of stone from the cliff face (Abbott 1990:33-34, cited in Virta 2008:3; Jeffery 1995), and rockslides resulted in crushed or severed limbs, and death. The camp where quarry workers were housed – Templeman calls it a "colony" (1959:142) – was lawless, and police arrived only to witness the consequences of fights or shootings, and sometimes to assign guilt. Cissna's examination of historic Sanborn insurance maps yields a picture of the community, or perhaps only its nucleus:

> A cluster of six structures (seven on an earlier Sanborn map…) was located approximately 625 feet upriver from where Spring Branch feeds into the Potomac. A rough measurement suggests these buildings were about 20 by 20 feet. The formed a basically circular complex extending some 140 feet relative North/South by about 200 feet relative East/West (along the river) (Cissna 1990:59).

The oral history collected by Virta and Beis in 2007 described the houses as

> …not much, basically a simple four room shack made out of materials that were easily attainable and affordable, usually cheap lumber, tar paper, and corrugated tin. Windows were more often than not covered with chicken wire, though some had glass. There as no electricity or running water, kerosene lamps provided light and springs supplied water. Heat was provided by a wood stove (paraphrased in Virta 2008:4).

After the quarry was closed, the quarrymen who remained in the colony raised food from gardens, fished in the Potomac River, and acquired other things they needed with a meager pension, actually payments from Social Security and county food security programs. Two of the last residents of Little Italy grew and sold fresh flowers from a cart that they hauled out of the canyon with ropes and pulleys. Both of these men, brothers named Conduci, had been disabled in

industrial accidents or simply from laboring in the quarry (Templeman 1959:142). Cissna (1990:59) corroborates the existence of this cable system, noting that the cables were still present during the second half of the twentieth century, and that there were few or no viable roads in and out of the community; a Sanborn insurance map for Arlington County published in 1936 shows no roads reaching the cluster of dwellings at Little Italy (Cissna 1990:103). The flower bulbs of the Conducis were among those possessions that the men salvaged when they were evicted in 1956-1957, distributing the plants among their friends and customers. The last residents of Little Italy found new housing, with help from the son of Michele Dimeglio, a quarry worker and resident in the community who passed away in 1951, and had been known as an informal mayor for the town (1959:143).

Cissna notes that "the area below Donaldson Run bears considerable evidence of this community—from several apparent house site foundations to an assorted array of quarry-related structures and machinery" (Cissna 1990:55) (see **Figures 5.24 - 5.27**). Cissna recommended that an extensive investigation of the surface features at the Little Italy community be thoroughly documented, that archeological survey precede any plans to disturb the site, and that quarry machinery plainly visible along the Potomac Heritage Trail and elsewhere be preserved *in situ* (Cissna 1990:63). These recommendations are reasonable. Additional consideration should go to the later nineteenth-century associations of the quarry, during which time the identities and cultural or ethnic affiliations of the quarry workers appear to be unknown. It is clear from the oral history discussed above that Little Italy was home to families and children by the 1930s, but it is important to establish whether the community had this same character in earlier periods. Finally, Little Italy has important associations with free African American labor during the twentieth century and possibly throughout the entirety of its history. This aspect of the heritage of quarrying along the Potomac requires further attention, as the notion that quarrying this area was the domain of skilled Italian immigrants is firmly set in available historical narratives.



Figure 5.24. A Riveted Iron Tank On Concrete Piers Associated With Quarrying In The Vicinity Of The Little Italy Community In Arlington County. Photographed By Matthew Virta, Cultural Resources Program Manager For The GWMP In October 2002.



Figure 5.25. A Partially-Submerged Piece of Machinery within the Potomac River in the Vicinity of Donaldson Run, Associated with Quarrying in the Vicinity of Little Italy. Photographed by Matthew Virta in October 2002.



Figure 5.26. A Concrete Vault, Possibly for Storage of Explosives Associated with Quarrying Activities on the Potomac River Below Donaldson Run (Cissna 1990:55), in Arlington County, Virginia. Photographed by Matthew Virta in December 2002.



Figure 5.27. A Large Riveted Iron Tank Associated with Quarrying Activities on the Potomac River Below Donaldson Run, in Arlington County, Virginia. Photographed by Matthew Virta in December 2002.

CHAPTER 6

George Washington Memorial Parkway and The National Capital Parkway System

I. Introduction

This chapter discusses the decades-long project to establish and build the GWMP, the dissent that existed all along the way, and the partiality of the success of this project, particularly in Prince George's County where the parkway did not materialize at all, despite a plan to extend the GWMP to Fort Washington south of the District of Columbia. The context for all of this is a set of sweeping decisions made by area planning authorities at the federal, state, and municipal levels, as well as some conservation and preservation advocacy groups, regarding the scope and scale of suburban development, and thus suburban roadways serving the entire metropolitan region.

This chapter draws heavily on Barry Mackintosh's (1996) unpublished draft administrative history of the GWMP, and exceeds it in detail with discussion of the planning document known as the McMillan Plan, prepared by the Senate Committee on the District of Columbia in 1902 and containing a set of recommendations on park and parkway development in and around the Federal District; the Capper-Cramton Act, which appropriated funds to create the GWMP; and several historical features associated with the construction of the GWMP and the Clara Barton Parkway during the second and third quarter of the twentieth century.

Mission 66 was a NPS program designed to address problems that arose between the period of intensive investment in the national parks that resulted from depression-era make work programs, and the years following American involvement in World War II, a period that saw very little investment in established parks. Mission 66 constituted a ten-year effort to improve visitor facilities, again largely at established parks, in order to managed the inevitable impacts of ever greater visitation in the post-war years. Mission 66 thus created an imperative and a funding base for widespread improvements in the national parks, generally conceived as renovations and manifested in the concrete and glass of the modernist architectural style (Allaback 2000). The Jefferson National Expansion Memorial, also known as the St. Louis Arch, is one exceptional example of the projects supported by Mission 66, but the program is also associated with much more prosaic and modest facilities, including roads and trails, residences, and maintenance and administrative facilities. Park infrastructure developed in the context of Mission 66 defined a distinctive architectural style that provides a certain unity to the parks.

Construction on the GWMP, including both Maryland and Virginia Lanes, overlaps with the period of Mission 66 and also features modernist-style construction that mates well with the aesthetic of Mission 66, the spiral pedestrian ramps and bridges at Brookmont and Sycamore Island being especially good examples. Mission 66 was invoked specifically to argue for parkway funding, and so certainly played a significant role in the continued development of the GWMP. Then-NPS Director Conrad Wirth considered the GWMP a high-priority project for Mission 66, and his support for land acquisition for unbuilt portions of the parkway in

Montgomery County, Maryland, and in Virginia had profound effects on automobile transportation in the Washington, DC metropolitan area. Completion of the parkway lanes in Montgomery County, now designated Clara Barton Parkway, likely prevented the construction of a similar parkway in Rock Creek, or directly through developed areas of Washington (Mackintosh 1996:60-61).

The McMillan Plan

The McMillan plan provided a rationale for expansion of the parks system within the district, by presenting the parks as a solution to the especially hot and humid summer climate. As a guiding principle, within the Federal District and in adjacent natural areas, the plan called for

> …the maintenance of shade, the preservation of many hilltops where breezes may be caught, the preservation of many of the deep, shady valleys in which the cooler air appears to settle on summer afternoons, and the liberal use of fresh running water all about the city and its parks, whether in the form of springs and brooks or of fountains and basins (US Congress 1902:76).

Under this plan, parkway construction is directed both towards linking park areas, and also for the beautification of lands adjacent to waterways, for instance along Rock Creek, and also on the wharf and waterfront of the Potomac River south of the National Mall, or the left bank of the Potomac River. As stated in the plan:

> For the most part these areas are in their natural state, with hills and valleys, plateaus and ravines, as yet untouched by the pick and shovel… Whatever of natural beauty is to be preserved and whatever park spaces are still to be acquired must be provided for during the next few years or it will be forever too late… What remains to be done is to select and acquire those areas which are best fitted for connections between existing parks; to provide for the preservation and improvement of certain spots of exceptional beauty, like the chain of abandoned forts encircling the District; to bring into use for pleasure purposes the wild and picturesque banks of the Potomac… (US Congress 1902:75)

A later chapter in the McMillan Plan includes a proposal for a fort drive that would connect a relatively small number of the Defenses of Washington into one or several circuits; the proposal mentions Forts Stevens, Totten, Slemmer, Bunker Hill, and Thayer from the northern circle forts, and Forts Mahan, Chaplin, Sedgwick, Du Pont, Davis, Baker, Stanton, Greble, and Battery Ricketts from the southern of the circle forts. No mention of Fort Marcy or the defenses in northern Virginia appears in the report. This section also discusses the area west of Rock Creek, the park-like grounds of the receiving reservoir for the Washington Aqueduct, and the banks of the Potomac River.

> At the receiving reservoir grounds is reached the gorge of the Potomac and the popular Conduit road, which provides the only way, except by trolley cars, to see the gorge from above. As its construction was a mere incident to the installation of the water supply, the location of the Conduit road was not fixed with regard to aesthetic effect… We believe that permanent provision should be made for the ends that are filled in a temporary and partial manner by the Conduit road and that this provision should take the form of what might be called a cliff drive along the

> Potomac, including in the holdings, in order to prevent objectionable occupancy, all the unoccupied steep land from the top of bluff down to the river (US Congress 1902:193).

The report continues with a more detailed description, and establishes the imperative to build a parkway along the Potomac River, accompanied by a description of how the transportation corridor would be arranged in section:

> At the upper or landward edge would run a street for traffic and for house frontage, next below would run the trolley line, altered in places from its present location, and then, in the best position to present the changing panorama of the river, would come the pleasure drive and the promenade, fitted to the steep and irregular hillside by well-adjusted slope and wall. Still farther down comes the picturesque canal and its bordering roadway, and in places there might be call for a road close down by the river's edge. …always the effect would be picturesque and always the plunging views from the upper lines would be fine. Merely to provide for a street at the top of the slope is not enough, for, although the land is for the most part too steep to have much commercial value, yet here and there ugly and offensive buildings are likely to creep in…unless the slope is all acquired with a view to a consistent treatment (US Congress 1902:193-195).

The report stipulates that this drive should be extended beyond the border of the Federal District, and continue until it reached Great Falls, "quite as well worth preservation for their grandeur and natural beauty as the greater passages of scenery in the national parks of the West… Without interfering with future utilization of water power, the surroundings of the Great Falls on both sides of the river should, in our opinion, be converted into a national park, to be connected with the city by a continuous river drive" (US Congress 1902:96).

The report briefly recommends that "no buildings should be allowed between the drives and the river, and no change should come to pass in the character of the canal that will tend to transform its primitive character and quaint beauty" (US Congress 1902:96). The boulder-strewn field between the C&O Canal and the Potomac River was "in keeping with the uncultivated hilltops of the Virginia Palisades, and would best be left without formal treatment" (US Congress 1902:95-97).

The differentiation between cultivated and uncultivated landscapes in the preceding quotation shows the commissioners' grasp of the Natural Style school of landscape design, and the hierarchy in which wilds or wildernesses, cultivated places, and finally formal designed landscapes are ranked as increasingly groomed and domesticated spaces (Bunce 1994; Marx 1964). The report frequently describes places within the Federal District and adjacent to it as being ugly, but what is ugliness in this context? In one sense, this term is used to describe low-lying areas, malarial flats, sinks and swamps that provide breeding grounds for mosquitoes that were seen as vectors of poor health. In a more truly aesthetic sense, the term is applied to places, vistas, and landscapes that violate the principles of landscape design that commission member and progressive conservationist Frederick Law Olmstead, Jr. helped to institute. Under these principles adjacency of formal landscapes and unimproved or wilderness areas was forbidden; instead a transition was necessary, a third type of landscape classifiable as pastoral or cultivated land, such as an orchard or a meadow, was used to provide mediation.

The parkways proposed in the McMillan Plan demarcate spaces that would fall between and provide necessary transitions from wildernesses to the formal landscapes of the National Mall and Capitol grounds; thus for instance the parkway proposed for Rock Creek would transform the steep, overgrown slopes of Rock Creek's valley into a flat, open, pastoral setting, which the parkway would traverse. Similarly the parkway along the Potomac River would permanently institute a pastoral landscape of canal, trolley, and driveways meandering with the Potomac River and linking the natural preserve at Great Falls with the Federal District. This view may address an irony that is frequently raised, that the GWMP was constructed as a conservation measure in the largely natural setting of the Potomac Gorge, yet disturbed that setting with frequent grading, occasional retaining walls, and in some sections along the Clara Barton Parkway, cantilevered roadways. In this reading of the McMillan Plan, one can suggest that the GWMP was not intended to constitute the Potomac Gorge as a wilderness, by design did not promote the impression of wilderness at all, but rather provided the necessary pastoral transition between areas designated as formal and wilderness landscapes, one watered by fountains and basins, the other watered by the Great Falls of the Potomac. These considerations are more difficult to apply to the GWMP lanes in Virginia, which are less pastoral and more naturalistic in their setting, and also function differently from the lanes in Montgomery County, which more clearly express Olmstead's intent to connect the fountains of Washington with the falls of the Potomac River.

Lastly, Chapter Six of the McMillan Plan also discusses the Mount Vernon Road in Virginia, recommending construction of the road not simply for its association with the home of George Washington but for the recreational value of the series of views of the Potomac River valley that would be obtained from the drive (US Congress 1902:121). The plan did not discuss the extension of this road beyond the Memorial Bridge; as such the McMillan Plan actually favored parkway construction on the Maryland side of the Potomac Gorge and neglected Virginia's palisades.

The Capper-Cramton Act of 1930

The Capper-Cramton Act of 1930 is the enabling legislation establishing the GWMP and creating the authority to acquire necessary lands in Maryland and Virginia for its construction. The act also authorizes expenditures to administer and maintain these lands. It was passed by the seventy-first congress on May 29, 1930. The majority of the appropriation in the Capper-Cramton Act is designated

> For the George Washington Memorial Parkway, to include the shores of the Potomac, and adjacent lands, from Mount Vernon to a point above Great Falls on the Virginia side, except within the city of Alexandria, and from Fort Washington to a similar point above the Great Falls on the Maryland side except within the District of Columbia, and including the protection and preservation of the natural scenery of the Gorge and the Great Falls of the Potomac, the preservation of the historic Patowmack Canal, and the acquisition of that portion of the Chesapeake and Ohio Canal below Point of Rocks… *Provided,* That the acquisition of the land in the Potomac River Valley for park purposes shall not debar or limit, or abridge its use for such works as Congress may in the future authorize for the improvement and the extension of navigation, including the connecting of the

> upper Potomac River with the Ohio River, or for flood control or irrigation or drainage, and for the development of hydroelectric power (US Congress 1930).

The law also directed the expansion of Rock Creek Park into Maryland, the extension of Anacostia Park into tributary valleys, and the extension of the GWMP park lands into the valley for Cabin John Creek. The proviso on future development for generation of hydroelectric power was won on behalf of the Potomac River Corporation, precursor to the Potomac Electric Power Company, which had proposed to dam the Potomac River at a location near Chain Bridge and flood the gorge to Great Falls. This proposal was rejected by the Army Corps of Engineers in 1929, with prompting from the allies of the Capper-Cramton Act, including Representative Louis C. Cramton of Michigan (Mackintosh 1996:21-22;(Somervell 1929).

The act stipulates that a toll-free bridge be constructed at Great Falls, and also required a fifty-percent contribution from state or municipal governments in Maryland and Virginia toward the cost for land acquisition for the parkway. It further stipulated that federal money expended for the Maryland portion of the GWMP had to come from the Federal-Aid Highway Program. These last requirements caused considerable delays in establishing the Maryland lanes of the GWMP, and resulted in the failure to construct the segment of the parkway in Prince George's County originating at Fort Washington, according to Mackintosh (Mackintosh 1996:44-45).

II. Historic Overview of the Construction of the GWMP

The idea of establishing a road for pilgrimages to Mount Vernon began during the late 1880s, and was realized first in the formation of Virginia's Mount Vernon Avenue Association, which conceptualized the road that would extend from Arlington National Cemetery, through Alexandria, and terminate at Mount Vernon, and then by the Congress, which appropriated $10,000 to fund a survey of alternative routes for the proposed road. No further action was taken on these plans until the formation in 1901 of a committee of the US Senate called the Senate Park Commission, also known as the McMillan Commission after its chairman, Michigan Senator James McMillan. The purpose of the McMillan Commission was to explore alternatives for improving the parks system around Washington, DC. Renowned landscape architect Frederick Law Olmstead, Jr. sat on the commission and generated support for the Mount Vernon road, and also for a drive along the Potomac River between Washington, DC and Great Falls (Mackintosh 1996:7-8). The 1902 report of the commission read, "without interfering with the future utilization of the water power, the surroundings of the Great Falls on both sides of the river should, in our opinion, be converted into a national park, to be connected with the city by a continuous river drive…" (US Congress 1902:95, quoted in Mackintosh 1996:9). This plan, which came to be known as the McMillan Plan, provided for a scenic parkway that would run on the north side of the Potomac River, with adjacent bluffs acquired as public lands to prevent their development (Mackintosh 1996:9).

The McMillan Plan was extraordinarily important in that it provided a master plan for the landscape of the National Mall, which was implemented incrementally over the decades following its completion. Yet the plan was never adopted formally as the plan for parks development in the Federal District, and no action was taken on the recommendations for Potomac River drives to Mount Vernon and Great Falls (Mackintosh 1996:10-11).

Planning for the Arlington Memorial Bridge early in the 1920s renewed interest in the proposal for a Mount Vernon road, and the US Bureau of Public Roads created another survey of possible routes in 1922. Testimony for a bill proposing construction of the road was heard in 1924, but again Congress took no action. Another bill was enacted in December of 1924 that reintroduced the Mount Vernon road, this time framing it as part of the wider celebration of the two-hundredth anniversary of George Washington's birth. The Mount Vernon road became more tangible through continued hearings on the matter in Congress, the construction of Arlington Memorial Bridge beginning in 1926, and most significantly, the creation of the National Capital Park and Planning Commission (NCPPC) in April 1926. Parkway development was explicitly part of the mission of the NCPPC. Additionally, Frederick Law Olmstead, Jr. was on the NCPPC from 1926 to 1932, and he ensured that the plan for parkway development along the Potomac River was part of the active business of the commission. Parkway conceptualization and development was central to the work of the NCPPC, as it had been for the McMillan Commission twenty-five years earlier (Mackintosh 1996:10-12).

A bill authorizing construction of the Mount Vernon Highway passed the Senate in 1928, but faced opposition in the House on the basis that the proposed route was too expensive, and realized disproportionate benefits for a narrow, local constituency in Virginia. A counter-proposal came from Michigan Representative Louis C. Cramton, who desired park development on both shores of the Potomac River and at Great Falls, in addition to the Mount Vernon route (Mackintosh 1996:12-13). Over this contestation, the House passed the authorization bill as Public Law 70-493, signed into law by President Coolidge on May 23, 1928. The law directed construction and maintenance of a memorial highway between Arlington Memorial Bridge's south abutment and Mount Vernon, and the proper name for the project became the Mount Vernon Memorial Highway (1996:14). Construction of the road began early in 1930, and the portion of the road extending south from Alexandria was opened to traffic in October 1931, with a dedication held on November 15th of the following year (1996:17-18).

In 1930 Congress passed the Capper-Crampton Act, thus authorizing the extension of the parkway above Washington, DC to Great Falls. Importantly, this resolved the very real question of using the falls of the Potomac River for generation of hydroelectric power. While the Army Corps of Engineers had recommended construction of a high dam in the vicinity of Chain Bridge that would flood the Potomac Gorge clear to Great Falls—a proposal pushed for by proponents of waterpower in the face of growing support for parkway—the creation of the NCPPC weighted decisions against uses of the Potomac Gorge that were incongruous with park development. For instance, the NCPPC blocked the application of the Potomac River Corporation – precursor to the Potomac Electric Power Company – to dam the Potomac River at Chain Bridge, which was accomplished in part through the support of parkway ally Representative Cramton (Mackintosh 1996:21-22).

Late in December of 1928, Cramton introduced a bill that included authorization for the creation of the GWMP, with parkways on both sides of the Potomac River. Cramton's plan incorporated the Mount Vernon Memorial Highway, which had not yet begun construction, and provided for the cost of land acquisition for the entire parkway to be funded in equal portions by the federal government and the states of Maryland and Virginia (Mackintosh 1996:24-25). The Army Corps of Engineers and the Potomac River Corporation lobbied vociferously against Cramton's bill and won amendments that allowed Congress to retain the authority to permit a variety of uses of the

Potomac River including hydroelectric power development (Mackintosh 1996:26). Further amendments were offered by Senator Arthur Capper of Kansas, pertaining to a bridge at Great Falls, its location, and whether it was appropriate for a public road to direct traffic across a potentially private toll bridge. The law was signed into law on May 29, 1930, and came to be known as the Capper-Cramton Act (1996:28-29).

The Mount Vernon Memorial Highway constructed from 1928 to 1932 was the first portion of the GWMP to be completed. It incorporated limited access from adjacent roadways, which allowed the novelty of greater volumes of automobile traffic in this pre-Eisenhower era of roadbuilding. Beyond the completion of the Mount Vernon Memorial Highway, the larger parkway project progressed very slowly, with gradual acquisition of land under the authority of the Capper-Cramton Act. Priority was placed on the section between the Arlington Memorial Bridge and the area north of Key Bridge in Rosslyn, because it was contiguous with the Memorial Highway and threatened with development that would be incongruous with the natural setting of the gorge (Mackintosh 1996:33-35). It was during this period that a shift in jurisdiction occurred. In June 1933, the Office of Public Buildings and Public Parks of the National Capital was abolished through an executive order of President Franklin D. Roosevelt and the administrative responsibility for the National Capital Parks and the GWMP was transferred to the NPS (Mackintosh 1996:32).

The Bureau of Public Roads surveyed for the parkway between Memorial Bridge and Great Falls early in 1934, and the decision was reached that the highway should consist of two separate, two-lane roadways (1996:36-37). The Public Works Administration allotted funds for construction of the parkway from the grant received by the NPS for roads and trails as part of the Depression-era Emergency Appropriations Act of 1935 (1996:36). The March 1936 flood of the Potomac Valley did not seriously impact construction of the parkway (Mackintosh 1996:38), though it did scour from many of the low-lying islands recreational developments dating back to the later 19th century. For instance the Sycamore Island Canoe Club was entirely washed away after having survived – albeit meagerly – a series of earlier floods (Torrey and Green 2008:45). The first segment of the GWMP between Columbia Island and Key Bridge at Rosslyn was opened to traffic in January 1939. No additional budget for extension of the GWMP north of this point in Virginia, or for any construction on the Maryland side of the Potomac River became available until construction on the Pentagon early in World War II provided a rationale for additional roadways linking Washington and Virginia (1996:41).

Acquisition of land for parkway construction north of Spout Run to the Virginia side of Chain Bridge was negotiated with the Smoot Sand & Gravel Company in 1942, but the purchase fell through. The Spout Run Parkway and a short segment of road between Key Bridge and Spout Run were completed by 1950. This area along the Potomac River near the Three Sisters Islands, well south of Chain Bridge adjacent to Washington DC, had been quarried historically and conditions for building were not ideal; it was necessary to create slopes along the palisades to prevent falling rock. This intensive grading and scaling created opponents out of some allies, who had not anticipated such dramatic changes to the natural setting throughout the length of the parkway's construction, as it progressed towards Great Falls (Mackintosh 1996:42-43). Despite this criticism, the NCPPC assembled adequate funds to acquire the remaining waterfront in Arlington County necessary to build the parkway by 1950, including that owned by Smoot Sand & Gravel, using shares contributed by Arlington County and the State of Virginia. (1996:44).

Construction on the GWMP in Fairfax County moved forward only with difficulty. There seemed to be much less enthusiasm for the parkway, and the circumstances in Montgomery and Prince George's Counties in Maryland were much the same. Matching funds from state and county governments were not forthcoming. Some properties were acquired on for the Maryland side of the parkway during the 1930s, with substantive support from donations made by private parties, for instance to acquire Hermit Island and Sherwin Island (Mackintosh 1996:44-45).

Another important acquisition was the almost 185-mile entirety of the C&O Canal and its right-of-way, acquired in 1938 by the NCPPC from the B&O Railroad (Mackintosh 1996:46). The NPS set the Civilian Conservation Corps (CCC) to work to restore the canal below Seneca Creek and improve its grounds for recreation; CCC workers were housed in two camps at Carderock between 1938 and 1942. These events moved the Maryland General Assembly at last to outlay some funds for land acquisition in Montgomery County for the GWMP. A bond for $150,000 was issued by the State of Maryland in 1939, and another $200,000 was budgeted in 1940, but this was not enough to initiate construction (1996:46-47). Eventually the requirement in the Capper-Cramton Act for the State of Maryland to share evenly in the cost of GWMP construction in Montgomery County was eliminated by an act of Congress in 1946 (Public Law 79-699, discussed in Mackintosh 1996:49-50). Despite this, no substantive progress was made on the GWMP lanes on the Maryland side until the mid-1950s.

To prevent encroachment of the GWMP onto the parklands associated with the C&O Canal, a landscape architect with the National Capital Parks named Donald L. Kline recommended that the right-of-way for the Glen Echo trolley line be used for one lane of the highway on the Maryland side (Mackintosh 1996:48), and existing lanes of Clara Barton Parkway are laid over the alignment of the former trolley line in some areas. In 1947 the Army Corps of Engineers transferred lands associated with the Washington Aqueduct at Great Falls, and the then-proposed pumping station at Little Falls Dam to the NPS (Mackintosh 1996:51-52).

Progress in the years following the Korean War came incrementally; Congress approved $100,000 for Fairfax County in 1953, allowing the National Capital Planning Commission (NCPC) – a new title for the NCPPC that was established in 1952 – to acquire land between the Fairfax-Arlington County Line and Chain Bridge Road (Mackintosh 1996:58-59). Each year thereafter, small appropriations were made by Congress for land purchases in Fairfax and Montgomery Counties. The Federal-Aid Highway Act, passed in 1954, created a structure for programming parkway construction between 1955 and 1957. Mission 66, a ten-year program to acquire new land for parks also created an imperative to advance construction of the GWMP, as did regional highway planning towards the interstate highway system including the Capital Beltway, the construction of a CIA headquarters in Langley, Virginia, and the proposal of the future Dulles International Airport in Chantilly, Virginia. During planning for what is known today as Interstate 270 in Maryland, a route through Rock Creek was proposed to bring the highway into Washington, since this would result in fewer displacements of existing homes and businesses. The GWMP lanes in Montgomery County were forwarded as an alternative, and Congress signaled its agreement by appropriating $183,000 for the fiscal year of 1956, which allowed NCPC to begin grading work on the GWMP lanes between the DC-Maryland border and Cabin John (Mackintosh 1996:60-61).

A true windfall for the parkway came with the selection of the site in Langley, Virginia for construction of CIA headquarters. The GWMP lanes in Fairfax County would serve this new

facility, and under this rationale the CIA transferred $8.5 million to fund parkway construction in 1957 and 1958. Of this, $500,000 was for land acquisition, the balance for actual construction. Congress also appropriated an additional $438,000 under authority of the Capper-Cramton Act for NCPC to purchase necessary lands in Fairfax County to extend the GWMP to the projected route of the Capital Beltway (also see Korr 2007/2008; Mackintosh 1996:62). Grading work on the Virginia parkway extension began in October 1956. Mackintosh writes that the members of the Little Italy community above Spout Run, discussed in an earlier chapter, were considered squatters and were evicted from the site in December 1956 (Mackintosh 1996:62).[18] The Virginia lanes between Spout Run and the CIA headquarters were completed in 1959, and this same period saw construction of bridges at a number of stream valleys including Pimmit Run. The remaining portion of the GWMP in Fairfax County was opened to traffic in 1962, the same year in which Dulles International Airport was dedicated (Mackintosh 1996:63).

In this same period, the land containing Fort Marcy was acquired by the NPS. The Northern Virginia Regional Planning and Economic Development Commission suggested that the GWMP boundary should be amended to include the site of the fort. Fairfax County agreed to share the cost of acquiring the land. The NCPC approved the expansion of the GWMP boundary in April 1958, and the site of Fort Marcy was acquired in 1959 (Mackintosh 1996:187-188).

A stretch of the palisades in Fairfax County north of Chain Bridge is privately owned, and the GWMP alignment shifts away from the Potomac River riverfront. As Mackintosh (1996) notes, this left a portion of the Potomac Gorge vulnerable to future development with the potential to detract from the naturalistic setting that the GWMP and related efforts were intended to conserve. This very possibility was realized in 1962 when the 47-acre tract called Merrywood was purchased by developers and rezoned to permit construction of a number of tall apartment buildings that would overlook the Potomac River. Then Secretary of the Interior Stuart Udall had a residence in this vicinity, and was not pleased by this prospect; none of those allied in the effort to build the GWMP were. Udall refused Fairfax County's application to construct a sewer line across GWMP land that was necessary to develop the Merrywood property. This brought the NPS into conflict with the Fairfax County executive, and tensions were great enough that the US Park Police increased surveillance and patrolling in the vicinity against the surreptitious, unpermitted construction of the sewer line (Mackintosh 1996:184-185).

A more long-term solution came with a declaration of taking for scenic easements on the Merryfield Tract. The owners, Wyatt and Nancy Dickerson were awarded payment of $744,500 in 1964, and were limited to construction of 46 or fewer units. Their master plan for the development was approved in 1967. Subsequently, during the later 1960s and early 1970s, easements were donated by a number of other private property owners in the area bounded by Chain Bridge to the south, the Potomac River on the east, and the GWMP on the west (Mackintosh 1996:186).

In Montgomery County, existing suburban development and the corridor for the C&O Canal imposed considerable constraints on GWMP plans. The first sizable appropriation for grading between the District boundary line and Cabin John was approved by the House in 1955, and

[18] Mackintosh references communication between Harry T. Thompson and Philip Natoli et al., from December 6, 1956, included in File 1460/GWMP, Va., National Capital Parks Records, Washington National Records Center, Suitland, MD. Presumably this is the letter of eviction.

amounted to $655,000. Conservationists protested the idea of building a four-lane divided highway in this area and lobbied against it, fearing impacts to the C&O Canal and the naturalistic environment of the Potomac Gorge. MacArthur Boulevard (known historically as Conduit Road) and also the right-of-way for the Glen Echo trolley line, operated by the DC Transit Company until the route was converted to bus operation in 1960 (Kohler 2001:337), were both proposed as alternatives to the NCPC assembling land for an entirely new roadway. MacArthur Boulevard's association with the Washington Aqueduct eliminated it from plans for the Maryland lanes of the GWMP (Mackintosh 1996:67-68).

A single, two-lane roadway for eastbound traffic was graded from the future Beltway interchange to Little Falls Branch approximately at the District boundary, the work being completed between December 1957 and July 1959. As this work progressed, the NPS negotiated with legislators and the owner of the DC Transit Company to acquire DC Transit's right-of-way in a narrow corridor between the C&O Canal and MacArthur Boulevard, between Brookmont and Glen Echo (Mackintosh 1996:72). Mackintosh (1996:73) notes that the owner of DC Transit was never convinced to sell, and thus the GWMP remained a single roadway with two-way traffic, save for a segment of divided lanes where the parkway passes Brookmont.

Land for the Potomac Palisades Parkway was acquired for the National Capital Parks during the 1920s, and by 1930 was treated as part of the GWMP project. The Potomac Palisades Parkway project was known by this distinct title because the Capper-Cramton Act did not create any authority for the acquisition of land inside the District of Columbia for the GMWP (Mackintosh 1996:78). This road was never constructed, and Canal Road serves to carry traffic from the southern terminus of Clara Barton Parkway south into Washington, DC. Mackintosh (1996:78) explains that the opposition of the NCPC towards bringing the road known today as Interstate 270 down the Maryland side of the Potomac River soured the relationship between the NPS and the DC Highway Department. Ever after, the DC Highway Department rebuffed the notion that the GWMP would continue south of Chain Bridge in the alignment of Canal Road.

Intensive negotiations between the NPS, the Army Corps of Engineers, and the DC government during the early 1960s permitted the completion of the current drive that includes Cabin John Parkway, the Maryland lanes of the GWMP that were renamed the Clara Barton Parkway, and the accommodation of GWMP traffic on Canal Road. The Maryland segment of the GWMP between the Capitol Beltway and Glen Echo was opened to traffic in January of 1965. The segment between Glen Echo and a point one-quarter mile inside the boundary of the District of Columbia was paved during the summer of 1965, and a short, graded, unpaved section was left between the terminus of the GWMP and the Chain Bridge/Canal Road intersection. This unpaved quarter mile was used by the DC Highway Department to apply pressure in the comprehensive planning of transportation in the vicinity, while drivers commonly traversed the unpaved section to enter Canal Road from the GWMP. In 1970 the DC Highway Department yielded: the NPS paved the gap connecting GWMP with Canal Road and a signal was installed at the junction of Canal Road and Chain Bridge. At this point, one-way traffic patterns were introduced on the Maryland lanes of the GWMP. No further road construction associated with GWMP took place on the Maryland side of the Potomac River after this point, excepting later rehabilitation projects (Mackintosh 1996:81-83).

Driver confusion in the face of two separate parkways bearing the same name prompted a number of proposals, including redesignation of all Maryland lanes of the GWMP as: 1)

Palisades Parkway; 2) Martha Washington Memorial Parkway; or 3) Clara Barton Parkway, after the Red Cross leader whose former home in Glen Echo was close to the parkway. The parkway was renamed Clara Barton Parkway by act of Congress on November 28, 1989 (Mackintosh 1996:85-86).

III. Historic Features Associated with the Construction of the GWMP and Clara Barton Parkway

Several historic resources are associated with the construction of the Clara Barton Parkway, and the locations of these resources are depicted in **Figure 6.1**, below. One potential historic feature associated with the construction of the parkway is located in an area along the Clara Barton Parkway near Chain Bridge, which appears to have been graded in advance of construction for a second, separate set of lanes that were planned but never realized (**Figure 6.1**, Resource No. 21).

Plans for grading, paving and drainage work between Chain Bridge and Great Falls, submitted to the NPS by the Bureau of Public Roads in 1964, clearly depict two separate road alignments in the area immediately west of the border between the District of Columba and Montgomery County (Bureau of Public Roads 1964). These alignments are labeled "Road A" and "Road B." Road B is typically drawn in greater detail with width, curbing, culverts and drains, and grading details, and corresponds approximately with the roadway that was actually constructed. Road A, sometimes labeled "Road A (Future)" is demarcated with a simple, dashed centerline to the northeast of Road B, or sometimes as a centerline with dashed lines to indicate the width of this roadway, and would occur today between the former alignment of the B&O Railroad and Clara Barton Parkway.

At the Little Falls Pumping Station, near Lock Six on the C&O Canal, the proposed alignment of Road A is shown to cross into the right-of-way for the DC Transit line serving Brookmont and Glen Echo. Road A then follows approximately in the DC Transit right-of-way for a distance, shifting away where proposed access roads connect both sets of lanes with MacArthur Boulevard, near Oberlin Avenue in Glen Echo (Bureau of Public Roads 1964). The NPS did not own this right-of-way until 2004, and consequently what was planned as a four-lane parkway divided by a median was built as a single, two-lane road, Road B depicted on these plans (**Figures 6.2** and **6.3**).

At Little Falls Branch the bridge for Clara Barton Parkway is paralleled by a smaller concrete bridge that serves a 36-inch sanitary sewer, which was already in place at the time the parkway was constructed (**Figure 6.4**). On the southern side of this sewer bridge, there is a concrete box with one manhole, built up several feet higher than the box underneath it (**Figure 6.1**, Resource No. 22; **Figure 6.5**). This box is identified on construction plans of the Little Falls Branch Bridge as an "overflow structure" (Bureau of Public Roads 1961). It is difficult to believe that the sewer vault currently in place exists in its final, intended configuration. If part of the Potomac Interceptor sewer system – as it appears to be – then its planning and installation would have been contemporaneous with that of the parkway. These sewer-related structures occur between the proposed alignments of Roads A and B, and would have been situated within the graded median between the two roadways. The exposed height of the manhole and the associated vault on the east side of Clara Barton Parkway probably indicates that they were engineered to meet the finished grade of the parkway in its originally-intended configuration, having separated northbound and southbound lanes of traffic.

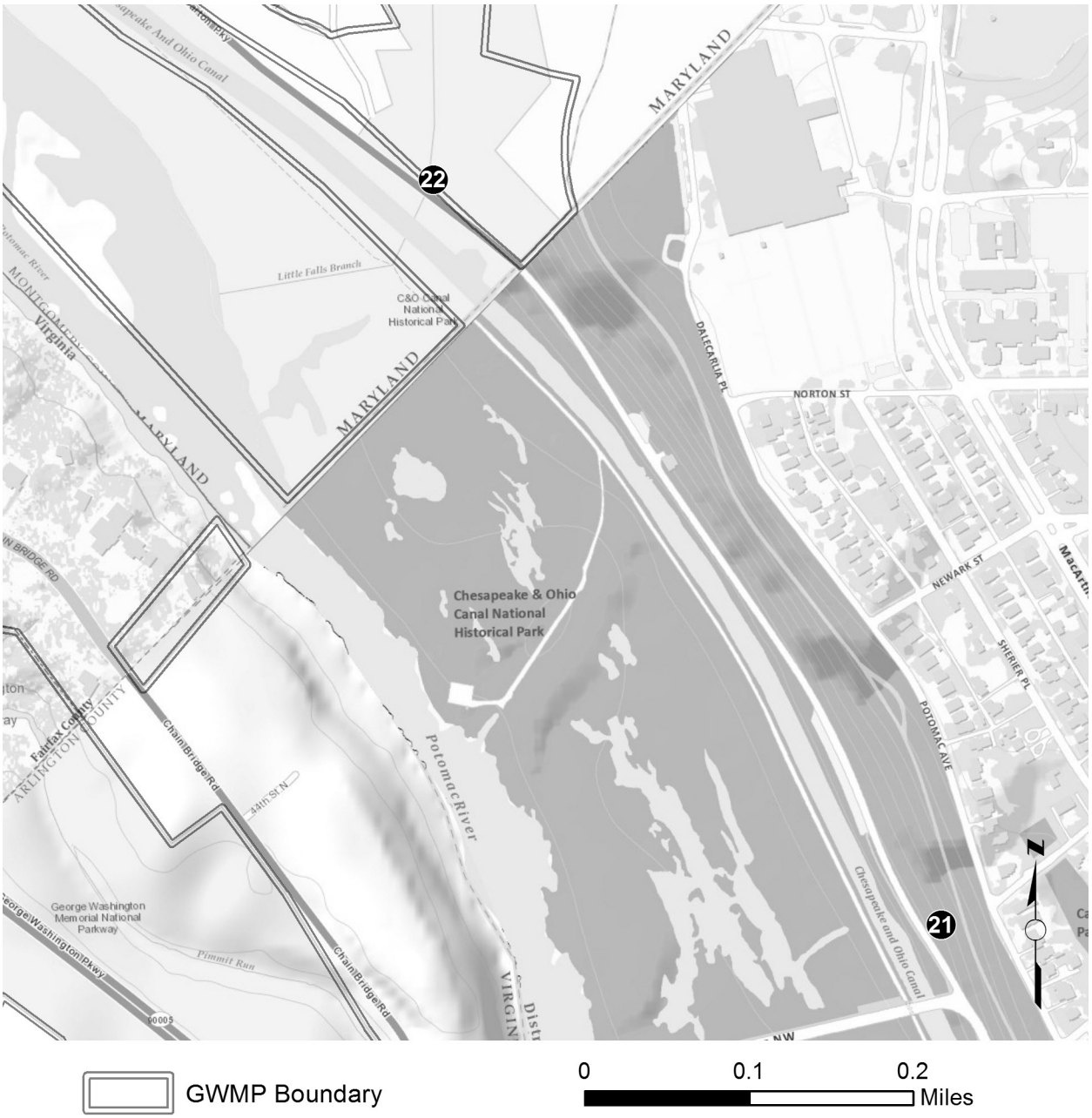


Figure 6.1. Plan of Historic Resources Associated with Construction of the Clara Barton Parkway: 21) Graded Area East of Clara Barton Parkway at Chain Bridge; 22) Elevated Sewer Manhole at Little Falls Branch.

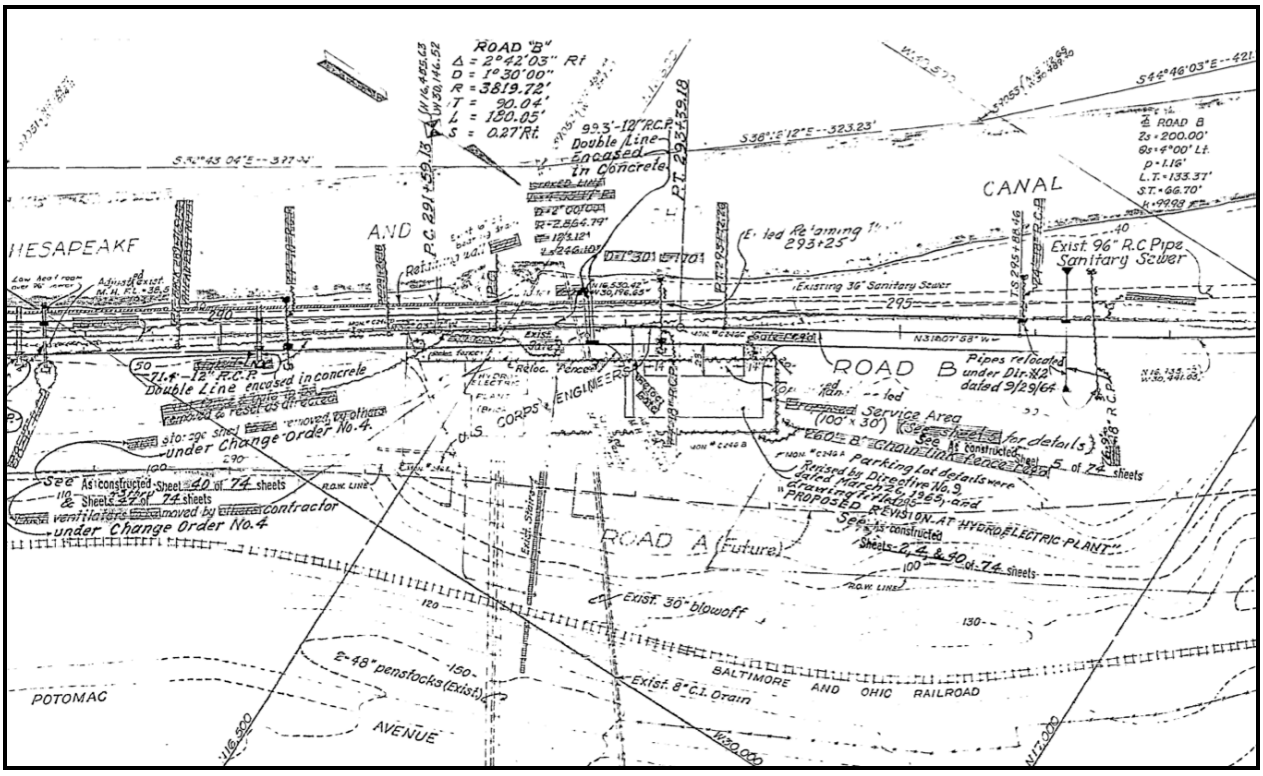


Figure 6.2. Detail of 1964 Engineering Plan for the GWMP, Depicting Separate Lanes for "Road A" and "Road B" (Bureau of Public Roads 1964).



Figure 6.3. View of Level Area East of Clara Barton Parkway, Potentially Graded for Planned Parkway Construction. Photograph By Matthew Palus, March 2013.



Figure 6.4. View of Concrete Bridge Faced with Stone at Little Falls Branch, for Sewer Line Aligned with the Clara Barton Parkway, Facing North. Photograph By Matthew Palus, March 2013.



Figure 6.5. View of Concrete Structure Associated with Sewer Line at Little Falls Branch, Showing Elevated Manhole, Facing South. Photograph By Matthew Palus, March 2013.

CHAPTER 7

Summary and Conclusion

The Center for Heritage Resource Studies at the University of Maryland College Park has completed this historic resources study of the lower portion of the Potomac Gorge on behalf of the GWMP, focusing on the area between Little Falls and the environs of Pimmit Run, Chain Bridge, and Fort Marcy associated with the Civil War defenses of Washington, DC The study encompasses resources on both sides of the Potomac, from ancient Native American contexts through to the completion of the parkway lanes on the eastern side of the Potomac, designated as Clara Barton Parkway during the 1980s. The resulting synthesis provides a historical database for interpretation of resources along the Potomac below Little Falls.

This study was conceived as a synthesis of available scholarship, and the geographical boundary for the historic resources study is somewhat fluid. The focus is the area defined by the segment of the Potomac River and adjacent lands that fall between Little Falls and Chain Bridge. Pimmit Run enters the Potomac River just south of Chain Bridge, and Fort Marcy, a remarkable network of earthen fortifications associated with the Civil War Defenses of Washington, lies atop a bluff above Pimmit Run and the Virginia abutment of Chain Bridge. This set of landmarks – a crossroads of sorts – lies at the core of the study area. The GWMP embraces a wider regional approach to the study, promoting the relevance of histories associated with the broader landscape of the Potomac to our account of historic resources within this tight little locality. Hence, the sites and features addressed in this historic resources study extend over several miles along both shores of the Potomac, from Sycamore Island and the stream valley associated with Walhonding Brook to the north, to the former location of the Little Italy community in the stream valley for Donaldson Run in Arlington County to the south.

This study area contains prehistoric Native American sites associated with the Archaic, and Early, Middle and Late Woodland periods, with what appear to be low-intensity occupation of residential and fishing sites along the shores and islands of the Potomac. The Chain Bridge-Pimmit Run-Little Falls area is rightly seen as a Native American cultural landscape, upon which historical and contemporary land uses are superimposed. The area is significant as a corridor linking the Coastal Plain and Piedmont physiographic provinces. As a fording area, the vicinity of the falls connected Virginia and Maryland allowing migration of humans and animals across the Potomac River. By the time of the arrival of English colonists, this area was an important link between Algonquian and Souian peoples, and Conoy living at the confluence of the Potomac and Anacostia Rivers may have grown wealthy by virtue of this connection with trading partners on the Piedmont.

Archeological research within and adjacent to the current study area provides evidence of Native American occupations that could never be known from available ethnohistorical sources. While the archeological record does not reflect continual habitation in the area below the falls, it strongly suggests periodic, repeated use of certain areas for manufacturing chipped stone tools and possibly quarrying tool material, exploiting seasonal fish runs on the Potomac River, and

probably seasonal habitation during cooler months. These activities were carried out over many millennia, spanning the Early Archaic through the Late Woodland Periods. Counting on a single Paleoindian find from nearby, the human presence near Pimmit Run and the falls could extend even earlier.

Also present are historic resources associated with 18th, 19th and 20th-century contexts, and with wider associations residing in the landscape as opposed to discrete historical features located here. While transportation characterizes much contemporary usage of the lands administered by the GWMP, the park is more fully understood as a means to bring about environmental conservation and preserve natural and historical areas along the Potomac River. The present study provides context for interpretation and evaluation of extant historic resources within an area defined by the vicinity of Fort Marcy, Chain Bridge, Little Falls, and Pimmit Run; these latter two natural features and the Palisades on both sides of the Potomac River provide approximate boundaries on the area addressed in this study. While the study focuses on this geographic area, the scope of the study is necessarily expanded to encompass other areas providing a regional context for these historic resources.

I. Recommendations

Recommendations offered here fall into three areas. First, we discuss the themes under which resources identified in this study may be eligible for inclusion on the National Register of Historic Places (NRHP). Second, we address the potential for public interpretation of these resources, and highlight those resources where interpretation to the public can be realized most effectively. Third, potential avenues for future research are identified. The current conditions for all resources discussed in this chapter are depicted in photographs included throughout the study. Illustrative figures are included in this chapter for some historic resources, but readers are referred to earlier portions of the study for representative photographs.

Nomination of the Potomac Gorge to the National Register of Historic Places

This effort was conceived as the opening of a wider project, to nominate a significant portion of the landscape of the Potomac Gorge to the National Register of Historic Places. The resources described in this historic resources study fall within a smaller area, which extends beyond the immediate vicinity of Fort Marcy, Chain Bridge, Little Falls and Pimmit Run, but does not by any means describe the entirety of the cultural landscape of the Potomac Gorge, or the landscape associated with roadways administered by the GWMP.

Under the current task agreement (Task Agreement No: P11AT31053), all National Register themes pertinent to the resources in the study area are to be investigated, and resulting data is to be provided to the NPS for an eventual National Register nomination of a greater area than that address in this study. The following themes are identified as having relevance to the extant cultural resources within the study area:

Agriculture (Agricultural Development)
Archeology: Precontact and Historic
Commerce
Community Planning and Development (Urban Development)
Conservation (Environmental Conservation and Preservation; Historic Preservation History)

Engineering (Power Generation; Bridge Design)
Entertainment/Recreation
Ethnic Heritage: Black (Free African Americans/UGRR; Slavery)
Ethnic Heritage: European
Ethnic Heritage: Latin American
Exploration and Settlement
Industry (Mills; Quarrying)
Landscape Architecture
Maritime History
Military
Transportation

A National Register nomination for a district that encompasses *a selection* of the resources described in this study has been prepared; this nomination is for a National Register district of approximately 128 acres in Washington, DC and Fairfax and Arlington Counties in Virginia, identified as the Chain Bridge Historic District. As required by the task agreement, this nomination is modular in that it can be expanded in any direction as the National Register nomination for the Potomac Gorge is developed.

What follows is a summary and discussion of the National Register themes pertinent to each of the historic resources addressed by this study:

Resource 1: Iron Rings Associated with Potomac Ferry Operation (Commerce, Engineering, Maritime History, Transportation). These features are interpreted as elements of the transportation infrastructure supporting the eighteenth-century Lee/Awbrey enterprise at the mouth of Pimmit Run. As such they are linked with four National Register themes, representing traces of the ferry system engineered at the site, but also being associated with the regional market economy and the maritimes that were its basis.

Resource 2: Stone Foundation or Pier at Mouth of Pimmit Run (Industry, Engineering, Commerce). If identified correctly, this stone structure remains from a water-powered mill associated with the complex of buildings erected on Pimmit Run under Thomas Lee's ownership during the eighteenth century; the extent of water-powered industry on Pimmit Run was extensive, as depicted in a drawing made by J. R. Watson in 1817, and Resource 2 appears to be a remnant of one of the structures illustrated by Watson (**Figure 7.1**). This small structural trace is significant for the role it played in the early commercial and economic development in the region, and this resource links Pimmit Run with historical water-powered industries that persist in this location across three centuries (see Resource 13, below).

Resource 3: Western Abutment of Chain Bridge (Engineering, Transportation). Clear evidence for the sequence of bridge abutments visible today at the current western abutment of Chain Bridge communicates the frequent reconstruction of this bridge, and thus its importance to the regional economy and its role in the interurban and interstate transportation network starting in the early nineteenth century.

Resource 4: Shrine on South Face of Western Abutment of Chain Bridge (Ethnic Heritage: Latin American). The only such shrine occurring within the current study area, this feature is apparently linked with the recent and tragic drowning death of a child in the Potomac River at

Pimmit Run. The inscription on the shrine provides a linkage with the utilization of the Potomac River by Latin Americans and the continuing importance of river access, despite the regrettable circumstances surrounding this feature.



Figure 7.1. Detail of J. R. Watson's *Bridge at the Lower Falls of Potomac 21st. April 1817*, Depicting Water-Powered Industry Near the Mouth of Pimmit Run as Viewed from the Opposite Shore of the Potomac River (Foster 1997:230).

Resource 5: Field of Rubble from Chain Bridge Construction (Engineering, Bridge Design). Construction material from one or more iterations of Chain Bridge seem to be associated with stone piers supporting one of the bridges constructed in this location prior to 1850. The stone piers supporting the current bridge were constructed for a bridge erected in the middle of the nineteenth century. Three earlier chain suspension bridges were constructed between 1808 and 1840, corresponding to the third, fourth and fifth bridges erected in this location. The variety of drilled and shaped rubble stone, iron pins, and other traces of bridge construction may represent debris from the demolition of earlier bridges ruined or damaged by flooding, debris from construction of the current bridge piers, or a combination of these (**Figure 7.2 - 7.3**). This resource is durable and retains sufficient integrity to communicate its significance; moreover it harbors data pertinent to understanding the historical sequence of bridges at this site.



Figure 7.2. Large Stone Block Underneath Chain Bridge Associated with Earlier Bridge Construction, Chesapeake & Ohio Canal Historical Park, Washington, DC. View Facing West. Photograph by Matthew Palus, January 13, 2013.



Figure 7.3. View of Rubble Field Underneath Chain Bridge, Chesapeake & Ohio Canal Historical Park, Washington, DC, Facing South. Photograph by Matthew Palus, March 21, 2013.

Resource 6: Historic Graffiti on Chain Bridge Pier (Entertainment/Recreation, Engineering, Bridge Design). Historic graffiti noted on the westernmost piers of Chain Bridge, and also on rubble stone underneath it, date to the later nineteenth century and the first half of the twentieth century. Such graffiti attests to the extended history of recreation on the eastern shore of the Potomac River. To a lesser degree these can be linked with the engineering theme, as they communicate the antiquity of the existing bridge piers, which is otherwise incongruous with the modern design and appearance of the bridge.

Resource 7: Abandoned Segment of the Georgetown Pike (Transportation, Military, Landscape Architecture). The Georgetown Pike has clear associations with regional and interstate transportation via its connection with Chain Bridge, and it is listed on the NRHP under this theme. To the extent that it retains integrity of design, it also is constructed in relationship to the landscapes that it traverses, with lines of sight and viewsheds, constituting an architecture even though it is not clear that the landscape adjacent to the Georgetown Pike has not been extensively transformed, or planted. Also, the Georgetown Pike was integral for the movement of Union

troops into northern Virginia and provisioning Forts Marcy and Ethan Allen; the military roads associated with Fort Marcy extend from the Georgetown Pike.

Resources 8 and 9: Fort Marcy Complex and Associated Historic Roads (Military, Historic Archeology, Conservation/Historic Preservation History). The extensive complex of earthworks, rifle trenches, and military roads constructed as part of the Civil War Defenses of Washington retains great integrity (**Figure 7.4**), and there are most assuredly archeological deposits representing Civil War contexts associated with the fortifications, though these have not been inventoried. Additionally, the twentieth-century campaign to prevent the destruction of Fort Marcy and promote its acquisition by the NPS make these resources relevant under the theme of conservation, for their association with the history of heritage preservation.



Figure 7.4. View of Substantially Intact Earthworks at Fort Marcy, the Redoubt and Defensive Ditch on the South Side of the Fort, View facing North. Photograph by Matthew Palus, December 6, 2012.

Resource 10: Stone Bridge Abutments on Pimmit Run (Transportation, Military). These abutments are significant for their relationship to Civil War activity in northern Virginia, as part of the build-out of the Defenses of Washington. If correctly identified this bridge was

constructed in the same context that the fortifications protecting Chain Bridge were erected. The bridge was used for the military road connecting Forts Marcy and Ethan Allen, and later became part of the northern Virginia transportation network.

Resources 11 and 12: Locations of Battery Martin Scott and Battery Vermont (Military). These locations are significant for their associations with the Civil War Defenses of Washington, specifically the fortification of Chain Bridge against Confederate attack. These resources have less integrity than extant remains of Fort Marcy; there is no visible trace of Battery Martin Scott, though the site retains some integrity of setting and feeling in that the views of Chain Bridge and the C&O Canal are unobstructed, and modern highway construction and other developments are not intrusive. Both Battery Martin Scott and Battery Vermont may have intact archeological contexts associated with them as well.

Resource 13: Columbia Light and Power Plant Ruin on Pimmit Run (Engineering, Power Generation). This extant, highly durable stone and concrete structure represents small-scale hydroelectric power generation – a historical continuation of eighteenth and nineteenth century water-powered industry on Pimmit Run – and contrasts with proposals from the mid-twentieth century to dam the Potomac River for municipal- or regional-scale hydroelectric power generation. The remains of the plant have good integrity and readily communicate their significance, though no dam associated with the plant survives intact.

Resource 14: Concrete Stairs Ascending from Pimmit Run to North Glebe Road (Entertainment/Recreation). This stairway is likely associated with a series of small cabin-type structures that appear on the 1936 Sanborn map, adjacent to Glebe Road. It provides for access to the Potomac River near Pimmit Run, and reflects the development of recreational uses of the river in Virginia, Maryland and Washington, DC.

Resource 15: Washington and Great Falls Electric Railway Trestle at Walhonding Brook (Transportation, Engineering, Bridge Construction, Community Planning and Development). The impressive trestle spanning Walhonding Brook is one of several remnants of the historic Washington and Great Falls Electric Railway, which in 1900 absorbed earlier electric railways established at the end of the nineteenth century. The railway was integral to the establishment of the commuter suburb at Brookmont, and the success of Glen Echo, supporting the significance of this resource under the theme of Community Planning and Development.

Resources 16 and 17: Concrete Retaining Walls on Clara Barton Parkway (Transportation). Two concrete retaining walls occur along the length of Clara Barton Parkway within the current study area. These appear not to be associated with the construction of the parkway in the third quarter of the twentieth century, but rather mark the imposition of the parkway within a transportation corridor established earlier. The relationship between these two retaining walls and other traces of the former Washington and Great Falls Electric Railway suggest that the retaining walls are associated with the commuter railways established at the end of the nineteenth century and absorbed into the Washington and Great Falls line in 1900.

Resource 18: Camp of Eli and Maude Howell Smith (Recreation/Entertainment, Historic Archeology). There is clear evidence on the surface of a complex of buildings, each indicated by concrete footers or in places, piers constructed from brick and concrete. Other concrete structures, such as troughs or water catchments, pavements, and at least one utility pole also

mark the location of Eli and Maude Howell Smith's camp for recreational excursions along the Potomac River. The complex of buildings has great potential to contain associated archeological contexts, and though no standing structures remain the site has considerable integrity and appears undisturbed.

Resource 19: Commuter Stairway to the Former Army Map Service Facility (Transportation, Community Planning and Development). Employees with the Army Map Service commuting on the Washington and Great Falls Electric Railway utilized these stairs to reach their place of employment. They are significant under the themes of Transportation, for their association with the commuter electric rail line and its promotion of Montgomery County, Maryland's suburbanization during the mid-twentieth century.

Resource 20: Location of Former Little Italy Community (Industry, Quarrying, Ethnic Heritage, European, Historic Archeology). This resource is most clearly associated with twentieth-century quarry operation and the persistence of the community at Little Italy following the closure of this quarry. But, the history and heritage of quarrying here is much broader, both geographically – quarries for construction stone occurred all along the Virginia shore of the Potomac River in this location, and on both shores of the Potomac River within the gorge adjacent to Little Falls – and historically, in that Little Italy was only the final in a sequence of quarry worker communities. In earlier contexts African Americans were employed in this industry, as were other European ethnicities. There is a documented archeological component associated with the quarry operation at Little Italy, and it may represent such earlier contexts as well as the Little Italy community itself.

Resources 21 and 22: Graded Area East of Clara Barton Parkway at Chain Bridge, and Elevated Manhole at Little Falls Branch (Transportation, Landscape Architecture). These features are significant as possible traces of the planned, but never completed segments of the National Register-listed Clara Barton Parkway secondary roadway.

Potential for Public Interpretation of Key Historic Resources

Certain resources identified in this study represent opportunities to enhance public interpretation along the GWMP. Not all resources addressed in the study are equally available for public interpretation, either because they cannot be accessed safely in light of proximity to vehicular traffic or hazardous terrain elements, such as cliffs, ravines, or fast-moving water, or because they do not communicate their historical significance clearly due to inadequate integrity. Some resources are vulnerable to being harmed by collectors digging for historic or Native American artifacts, and for this very reason the locations of known archeological sites are entirely excluded from this study. However a number of resources are both accessible and engaging, and merit consideration for future interpretation. The resources associated with Fort Marcy are by and large excluded from this discussion, as an interpretive program has already been established at the fort, and expansion of that program may or may not rank above the interpretation of historic sites and resources without any signage or interpretation whatsoever.

Established trails providing pedestrian access to the Pimmit Run Valley near the Virginia abutment of Chain Bridge yield an excellent opportunity to interpret Civil War-period military roads and related infrastructure to the public. The massive stone bridge abutment on Pimmit Run

is visible from pedestrian sidewalks on North Glebe Road where it crosses over Pimmit Run, though somewhat obscured by vegetation (**Figure 7.5**), and also from the Potomac Heritage Trail where it crosses under North Glebe Road and the GWMP. The Potomac Heritage Trail also passes within sight of a surviving segment of the Georgetown Pike where it runs along the east bank of Pimmit Run opposite the trail, and the trail also intersects with military roadways that climb towards Fort Marcy. These roadways access portions of the fortifications that cover a wide area and are difficult to monitor. If these areas are opened to more public use, interpretive signage should be installed to educate the public on the importance of this resource and preservation. Information on the Archaeological Resources Protection Act and the penalties for its violation should also be included.



Figure 7.5. View of Southern Abutment of Former Pimmit Run Bridge from Glebe Road Bridge Spanning Pimmit Run, Facing Southwest. Photograph by Matthew Palus, November 10, 2011.

The area south of the Virginia abutment of Chain Bridge has somewhat improved access owing to the concrete stairway surviving from earlier in the twentieth century, and there is reasonable if somewhat hazardous access to the Potomac River shore. The clearest asset in this location is the patchy architecture of the Chain Bridge abutment, which clearly manifests the complicated

history of the bridge during the nineteenth century, and the repeated loss or damage to the bridge incurred in periodic floods of the Potomac River. These resources could comprise the basis for a very compelling interpretation of the history of Chain Bridge. However it may not be desirable to draw visitorship into this location, owing to specific hazards. Debris stone from earlier bridge construction resembles a scree slope extending down from the roadside of Chain Bridge Road/North Glebe Road, and is extremely treacherous. Falling hazards abound, with massive, loose stones; flood-bourn debris is also present, including logs and tree trunks. Finally the Potomac River and Pimmit Run are themselves significant sources of danger, with the Potomac's deep, strong currents and the liability for Pimmit Run to flood unexpectedly. These circumstances may discourage public interpretation at the site, or mandate improvements in access to the site as a condition of interpreting the history of Chain Bridge.

For the same reason, none of the resources identified underneath Chain Bridge on the eastern side of the Potomac River are good candidates for public interpretation. This area is difficult to reach, and the current in the narrows of the Potomac River underneath the bridge is extremely hazardous. Signage under the eastern abutment of Chain Bridge actively discourages accessing the Potomac River or scrambling on the rocks under the bridge. Introducing public interpretation would run counter to that program.

The significance of the commuter stairway associated with the former Army Mapping Service is subtle, but the stairs offer a pleasant climb, and exercise (**Figure 7.6**). As heritage they are not the strongest asset described in this study, but interpretive signage would improve visitors' experience of the stairs with little risk to visitors or any historic resources.

The camp of Eli and Maude Howell Smith is reached by walking some distance along the shoulder of the Clara Barton Parkway. While the site is compelling as a surviving example of the recreational usage the Potomac River during the early twentieth century, and the relatedness of railway transportation to excursions along the river for bicycling, boating, and other pastimes, the difficulty in accessing the site argues strongly against interpretation of the site without providing for safe access from the Clara Barton Parkway. Additionally, it seems likely that there are intact archeological resources associated with the former camp, further arguing against raising up the profile of the site with interpretative programming.

Lastly, the site of the former Little Italy community is accessible via the Potomac Heritage Corridor, with relic structures and machinery occurring within clear sight of the trail. This access, and the availability of research materials such as oral history interviews, and photographs, make this site an excellent candidate for public interpretation. The site would have the same vulnerability as any archeological site, but interpretation of the machinery rather than the habitations associated with Little Italy may draw attention from the most sensitive archeological contexts.

Recommendations for Future Research

There are a number of avenues for further documentary and archeological research on historic resources and wider historical contexts presented in this study. No one theme or resource addressed in the study is exhausted under this cover, nor is the possible within the context of such a wide-ranging study. The historical significance contained by the study area, as demonstrated in this text, will support numerous, more tightly-focused research programs on

different aspects of the Precontact Native American history in the lower Potomac Gorge, and eighteenth, nineteenth, twentieth century contexts associated with this locale.



Figure 7.6. Commuter Stairway Descending from Former Army Map Service Facility Towards Clara Barton Parkway, Facing Southwest. Photograph by Matthew Palus, March 21, 2013.

One clear priority is assessing the archeological potential of a selection from the resources within the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run area. Archeological inventory and assessment is beyond the scope of this study, yet several resources have such clear potential to contain archeological features and deposits that may be eligible for inclusion on the National Register under Criterion D (Information Potential), and contribute to a historic district encompassing portions of the Potomac Gorge.

Eli and Maude Howell Smith's camp on the Clara Barton Parkway, associated with early twentieth century recreational uses of the Potomac River, contains a large number of structural remains visible on the surface. It has a correspondingly high potential to contain extant archeological deposits associated with this historic context. While proximity to the Potomac River may have resulted in the dearth of refuse deposited in contexts where it can be sampled as archeological data – the occupants may have disposed of refuse in the river rather than

depositing it in contexts such as middens, privies or trash pits within or adjacent to the complex – the relative compactness and boundedness of the site make it available to archeological survey.

The construction debris and rubble underneath Chain Bridge, potentially associated with bridge construction during the first half of the nineteenth century, represents a dramatic opportunity for an archeological and historic architectural investigation into bridge construction over this approximately fifty-year period. The rubble stone material can be sourced, and may prove to have been quarried very close by. The area may conceal more diverse material culture evidence for construction of the previous bridges, which are not strongly documented. Furthermore it is possible that workers contributing to bridge construction may have occupied this foreboding landscape, and many generations have certainly accessed the Potomac River in the shade or shadow of this bridge. Subsequent flooding could have removed some material culture, but a great deal of stone and iron clearly remains at the site, potentially revealing early nineteenth century crafts of masonry, ironworking, and building, and the broader engineering of past bridges.

Archeological identification survey of the site of the Little Italy community would define the boundaries of the quarrying site, and perhaps identify the internal organization of the site into work and residential areas. Generations of workers with different ethnic and racial identities have labored at this site, and at present our knowledge is limited to the most recent and final community of workers to occupy this site. Historic archeological research therefore has the potential to expand our understanding of this site, and of the quarrying industry on the Potomac River more generally.

Archeological identification survey would also be very valuable in the vicinity along Pimmit Run where Thomas Lee established his interests on the Potomac River, including a tobacco warehouse, ordinary, and water-powered mills. This locale is associated with one of the earliest developments of the lower Potomac Gorge by English colonists during the early eighteenth century, and precious little trace of these enterprises remains. Additional evidence for the structure now represented only by Resource 2, the stone pier occurring within Pimmit Run, can confirm the association between this feature and Lee's colonial-period milling operation at this site, or later water-powered industries (**Figure 7.1**, above). The location of other structures and the overall organization of Lee's complex is unknown, and the presence or absence of archeological deposits associated with this occupation are similarly an open question.

The cultural resources present within the study area hold historical significance and retain integrity sufficient to justify nomination to the National Register of Historic Places as a district of associated resources, unified by the cultural landscape of the Potomac Gorge, and the Potomac River crossing at Chain Bridge. This study describes these resources and their historical associations in detail, and concludes with this recommendation supporting the submission of a National Register nomination for the resources within the Fort Marcy, Chain Bridge, Little Falls, Pimmit Run area. Further opportunities for public interpretation and research are also identified in anticipation that the scholarly potential and heritage values of the area are far from exhausted.

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