
**GEOARCHEOLOGICAL INVESTIGATION OF
FRANKLIN PARK
NATIONAL MALL AND MEMORIAL PARKS
DISTRICT OF COLUMBIA**

FINAL TECHNICAL REPORT

CONTRACT NO. P12PC5000017, TASK ORDER 23

PREPARED FOR:



NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION
1100 Ohio Drive, SW
Washington, D.C. 20242

PREPARED BY:



THE LOUIS BERGER GROUP, INC.
1250 23rd Street NW, 4th Floor
Washington, D.C. 20037

March 2014

**GEOARCHEOLOGICAL INVESTIGATION OF
FRANKLIN PARK
NATIONAL MALL AND MEMORIAL PARKS
DISTRICT OF COLUMBIA**

FINAL TECHNICAL REPORT

CONTRACT NO. P12PC5000017, TASK ORDER 23

PREPARED FOR:

National Park Service
National Capital Region
Lands, Planning and Design
1100 Ohio Drive, SW
Washington, D.C. 20242

PREPARED BY:

Charles LeeDecker and Jason Shellenhamer
THE LOUIS BERGER GROUP, INC.
1250 23rd Street NW, 4th Floor
Washington, D.C. 20037

WITH:

Daniel P. Wagner
GeoSci Consultants, LLC
4410 Van Buren Street
University Park, Maryland 20782

March 2014

EXECUTIVE SUMMARY

The National Park Service (NPS), National Capital Region has sponsored a program of geoaerchological testing of Franklin Park in Washington, D.C. The NPS is proposing to revitalize Franklin Park in partnership with the District of Columbia Office of Planning (DCOP) and the District of Columbia Downtown Business Improvement District (BID), with the overall goal of enhancing the historical and urban qualities of the park while transforming it into an active, flexible, and sustainable park that is connected to its community. A master planning process is currently underway to develop conceptual alternatives for the rehabilitation of Franklin Park, and these alternatives will be evaluated in an Environmental Assessment under the National Environmental Policy Act (NEPA). The geoaerchological investigation is intended to inform both the master planning and NEPA compliance processes and to support the ongoing Section 106 consultation under the National Historic Preservation Act, as amended.

Franklin Park occupies an entire city block of 4.79 acres in downtown Washington, D.C. It is bordered by K Street on the north, 13th Street on the east, I Street on the south, and 14th Street on the west. The formally landscaped park slopes gradually down from north to south and from northeast to southwest and features a central fountain plaza and a monument to Commodore Barry. Rows of trees surround the park on all sides and are spaced throughout the park. Elliptical pathways form the park's circulation system and define a pattern of open areas that is symmetrical on an east-west axis. Many of the park's features are now in disrepair, and the level and quality of visitor experience is not what is desired at such a large and centrally located urban park.

The goals of this geoaerchological study were to assess the general condition of the landscape, focusing on identification of prehistoric or historic landscapes that might contain archeological resources. The study methods included archival research to understand the historical and physical development of the property, followed by subsurface investigation that was accomplished by a series of soil borings. All 11 borings revealed a deeply truncated landscape, indicative of deep grading that reached depths as great as 15 feet or more below the present ground surface. Given the park's history of formal landscaping, evidence of grading was expected, but none of the cores showed evidence of a landscape surface that would have been present during prehistoric, colonial, or antebellum times. Three borings in the southeast corner of the park had deeply buried sediments that would have formed at the bottom of a pond, which is consistent with early accounts of a small lake or pond at the corner of 13th and I Streets.

The soil boring results suggest that there is some possibility for preservation of archeological remains associated with nineteenth-century urban infrastructure, most importantly a spring-fed reservoir in the central area of the park that is presently known only from archival sources. Any surviving archeological remains of this reservoir would be expected below the plaza pavement and walkways where further exploration would require demolition of the existing landscaping. Further archeological investigation would best be deferred until such time as the landscape rehabilitation program is underway. Then, if the park rehabilitation program requires major grading in the area of the suspected reservoir, an archeological study could be completed during the construction phase of the project.

TABLE OF CONTENTS

<i>Section</i>	<i>Page</i>
EXECUTIVE SUMMARY.....	i
LIST OF FIGURES	iii
LIST OF TABLES	iii
INTRODUCTION	1
Scope and Location of Study.....	1
Study Goals and Methodology	1
Previous Investigations.....	4
ENVIRONMENTAL SETTING	6
HISTORIC CONTEXT	10
FIELD RESULTS	24
DISCUSSION AND MANAGEMENT RECOMMENDATIONS.....	27
REFERENCES CITED	28
APPENDIX A: GEOARCHEOLOGICAL ASSESSMENT REPORT	A-1
Daniel P. Wagner	
APPENDIX B: NADB FORM	B-1

LIST OF FIGURES

<i>Figure</i>		<i>Page</i>
1	Location of Franklin Park	2
2	Existing Conditions in Franklin Park.....	3
3	Topography in Franklin Park Vicinity.....	7
4	Detail of Robert King’s Map of the City of Washington, 1818	9
5	Subdivision of Square 249	13
6	Detail of Boschke Map of Washington, 1857.....	16
7	Emancipation Day Celebrations at Franklin Square in 1866.....	17
8	Detail of Baist’s 1903 Real Estate Atlas Showing Franklin Square (Reservation 9).....	19
9	Detail of Baist’s 1919 Real Estate Atlas Showing Franklin Square (Reservation 9).....	20
10	Franklin Square in 1886.....	21
11	Franklin Square in 1905.....	22
12	Location of Geoprobes.....	25

LIST OF TABLES

<i>Table</i>		<i>Page</i>
1	Chain of Title for Franklin Park	10
2	Key Dates in Development of Franklin Park	23
3	Summary of Geoarcheological Borings.....	26

INTRODUCTION

SCOPE AND LOCATION OF STUDY

The National Park Service (NPS) is planning to rehabilitate Franklin Park, located in downtown Washington, D.C. Located in the heart of the city's business district, Franklin Park occupies an entire city block that is bounded by K, I, 13th, and 14th Streets, NW (Figures 1 and 2). Managed by the NPS's National Mall and Memorial Parks (NAMA), the 4.79-acre park was originally laid out as Square 249 and intended for private development. The block, which was historically known as Fountain Square, was acquired for public use in 1832 because it contained a natural spring that would be used to supply water to the White House. It subsequently became known as Reservation 9. It is a contributing element of the L'Enfant Plan of the City of Washington (Leach and Barthold 1994), a historic property that embodies the urban design of the national capital.

In partnership with the District of Columbia Office of Planning (DCOP) and the District of Columbia Downtown Business Improvement District (BID), NPS plans to rehabilitate the property to enhance the historical and urban qualities of the park while transforming it into an active, flexible, and sustainable park that is connected to its community. For purposes of this investigation, the area of potential effects (APE) can be defined to encompass the entire square delineated by the curb lines along K, I, 13th, and 14th Streets. It is assumed that all ground-disturbing activities that could potentially impact archeological resources would be confined to this area.

A master planning process is currently underway to develop conceptual alternatives for the rehabilitation of Franklin Park, and these alternatives will be evaluated in an Environmental Assessment under the National Environmental Policy Act (NEPA). The geoarcheological investigation is intended to inform both the master planning and NEPA compliance processes and to support the ongoing Section 106 consultation under the National Historic Preservation Act, as amended.

STUDY GOALS AND METHODOLOGY

The goals of the geoarcheological study were to assess the general condition of the landscape, focusing on identification of prehistoric or historic landscapes that might contain archeological resources. These goals can be expressed as the following specific questions that were developed to guide the investigation.

- Does the APE contain areas of natural landscape associated with the pre-1791 layout of the District of Columbia?
- Does the APE contain any remnants of the landscape associated with the natural springs that existed in this area?
- What effect have the processes of historic land use and formal landscaping of Franklin Park had on landscapes that might contain archeological resources?

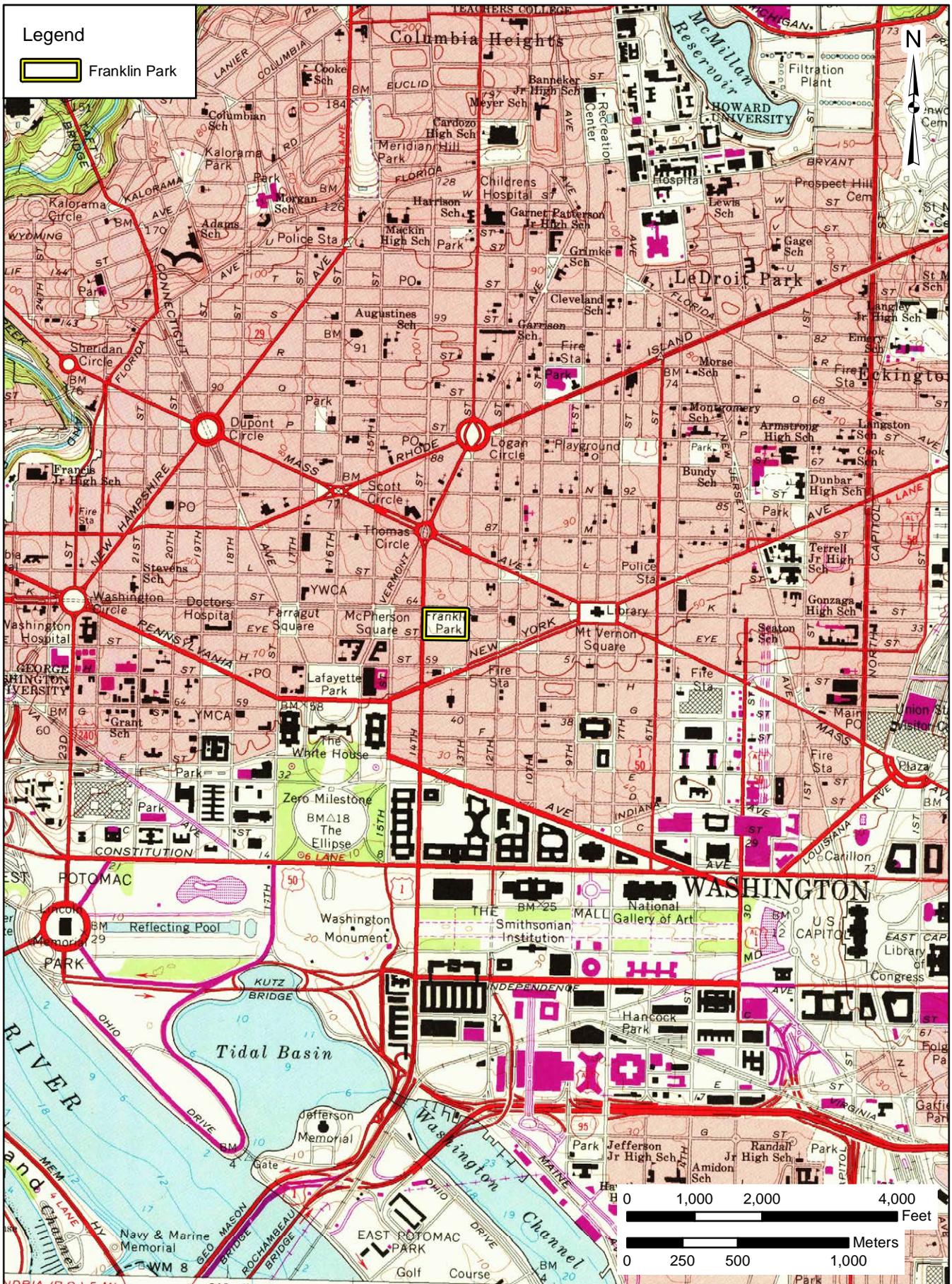


FIGURE 1: Location of Franklin Park

SOURCE: USGS 1965



FIGURE 2: Existing Conditions in Franklin Park

SOURCE: ESRI 2013

Given the suspected presence of fill deposits or displaced soils across the park, the field methodology used mechanical excavation techniques to systematically examine buried soils and possible landscape surfaces. The field investigation was completed with a direct-push geotechnical sampling machine, generically known as a Geoprobe. The Geoprobe recovered continuous soil columns in 5-foot increments with minimal damage to the landscape.

The test locations were distributed to broadly sample the study area. All test locations were plotted on a scaled base map and recorded using GPS equipment with sub-meter accuracy. In all cases the individual tests were advanced below depths where a natural landscape surface available during prehistoric times would have been intercepted. Avoidance of utility lines was also a major concern. Historical maps and surveys, including a modern property survey, were reviewed prior to selection of boring locations.

The soil core borings were provided to a professional geomorphologist for off-site analysis. The geomorphologist prepared detailed profile descriptions for each soil column in accordance with standard techniques and nomenclature for field description of soils. The geomorphological study was completed by Dr. Daniel Wagner of GeoSci Consultants, LLC. Results of that study are presented as Appendix A of this document. Under normal conditions a detailed soil profile description is compiled for each test in accordance with standard techniques and nomenclature for the field description of soils; however, till soils, because they are highly variable and reflect anthropogenic rather than natural processes, are not normally described at this level of detail. Detailed descriptions were made for all natural soils.

Fieldwork was completed on December 2, 2013.

PREVIOUS INVESTIGATIONS

A formal Archeological Overview and Assessment Study has not been completed for NAMA and its individual constituent parcels, so information on archeological resources in the APE must be extrapolated from previous studies in the surrounding area and other sources. Phebus's overview (1967) notes the existence of collections held by the U.S. National Museum (now the Smithsonian Institution) that were amassed during the late nineteenth century; some of these collections, from areas such as the Naval Observatory, Brightwood, Brookland, Kalorama Heights, and Meridian Hills, suggest some potential for prehistoric archeological resources in inland locations such as Franklin Park. The presence of a spring in Franklin Park may have presented an attraction for Native American populations.

Archeological work in the midtown area surrounding Franklin Park has generally emphasized the archeological resources of the historic period, based on the premise that urban development has largely obliterated the archeological expression of Native American occupation in this area. As such, most studies have included intensive archival research and a field methodology that relies heavily on mechanical trench excavation. Two of the major studies in the midtown area conform to this model: a program of combined Phase I and Phase II investigations of four parcels in the Shaw and 14th Street Urban Renewal Areas (Goodwin et al. 1990), and a similar program of Phase I and Phase II investigation for the new Convention Center (Glumac et al. 1996).

Goodwin's work for the Shaw and 14th Street Redevelopment Areas focused on multiple parcels that were distributed over Squares 399, 445, 2666, and 2849. Eight archeological sites were identified in this program, with individual site numbers assigned to architectural features such as row house foundations, a brick walkway, a concrete floor and a brick foundation wall. The investigators noted that deposits associated with these sites lacked sufficient integrity to merit inclusion in the National Register of Historic Places. One site (51NW95), located in Lot 821 of Square 399, was said to have sufficient integrity to provide new information on residential life, so additional evaluation of this site was recommended (Goodwin et al. 1990).

A more ambitious program was completed during the evaluation of alternatives for the new Convention Center that extended over Squares 400, 401, 402, 425, 426, and the western half of Square 424. At the time of that investigation, most of the area had been cleared and was in use as surface parking and vehicle impoundment lots. The field investigation included 12 trenches placed in rear yard areas that had historically remained open along with judgmentally placed test units and shovel tests. The archeological finds were again dominated by architectural features of associated nineteenth- and twentieth-century row house development, along with numerous utility trenches. Most of these resources were not considered significant, with the exception of one parcel on Square 426 where the finds included a large, domed cistern and a buried landscape (A-horizon) with deposits from the early nineteenth century (Glumac et al. 1996).

Aside from archeological studies, a Historic American Buildings Survey (HABS) study (Barthold 1993), a historic resource study (Olszewski 1970), and a Cultural Landscape Inventory (NPS 2011) completed by Kay Fanning provide a comprehensive history of the development of the formal landscaping of Franklin Park, which is invaluable for understanding the site's potential for archeological resources.

ENVIRONMENTAL SETTING

Franklin Park is situated within the Atlantic Coastal Plain physiographic province but close enough to the Piedmont that the landscape derives some characteristics from both provinces. The valley of Rock Creek marks the approximate boundary between the Coastal Plain and the Piedmont to the west. The Inner Coastal Plain is a rolling upland underlain by unconsolidated marine and riverine deposits of gravel, sand, silt, and clay that range in age from Cretaceous to Recent (Calver 1963). The thickness of these deposits in the District of Columbia ranges up to several hundred feet, but there are also some localized outcrops or exposures of metamorphic rock (Smith 1976). The adjacent Piedmont province in the District is characterized by higher elevations with deeper and narrow stream valleys cut into a broad undulating surface. The underlying rock includes various metamorphic types; in the northwest sector of District, the most common bedrock exposures are schist, gneiss, and granite.

In the District of Columbia area the Coastal Plain deposits thicken as one moves away from Rock Creek toward to the southeast, where the depth to bedrock is greater than 1,000 feet. Most of the original City of Washington is occupied by ancient terraces formed in Coastal Plain sediments, and these sediments fill channels in the underlying bedrock that were carved by the ancestral Potomac River. The contact between the Coastal Plain deposits and the underlying bedrock provided an abundant supply of water for the city during its formative years, both in the form of natural springs and abundant ground water that could be easily reached by wells (O'Connor 1989; Reed 1989).

The natural (and now largely obliterated) topography of the downtown area of the District was dominated by a series of recognizable terraces formed in the Coastal Plain sediments. L'Enfant's plan for the Federal City took advantage of the topography afforded by these remnant terraces, with two of the most elevated sites set aside for the Capitol and the President's House (i.e., the Executive Mansion or the White House). Jenkins's Hill became Capitol Hill, and Burnes Farm knoll was chosen as the site of the President's House. Overall topography of the downtown area can be seen in an 1880 map of street grades (Figure 3).

The local topography in Franklin Park has the highest elevation in the northeast corner of the block, sloping downward toward the south and west. Street grades from the late nineteenth century are shown in the inset (right); the most pronounced slope was along 13th Street, where the elevation dropped by more than 20 feet. The modern grades in Franklin Park seem to match fairly well with the late nineteenth-century topography; however, there seems to have been a change in the slope along I Street, which today is nearly level. In the late nineteenth century the corner of 13th and I streets was two feet lower than at 14th and I streets, whereas the present elevation along I Street between 13th and 14th streets is nearly level. This suggests the possible addition of fill in this area of the park, which corresponds to small "lake" described as the outlet for Franklin Springs in the nineteenth century.

Street Grade Elevations in 1880 [†]	
14 th & K Streets	62.4
13 th & K Street	76.2
13 th & I Street	54.3
14 th & I Street	56.5
[†] feet above mean sea level (from Greene 1880)	

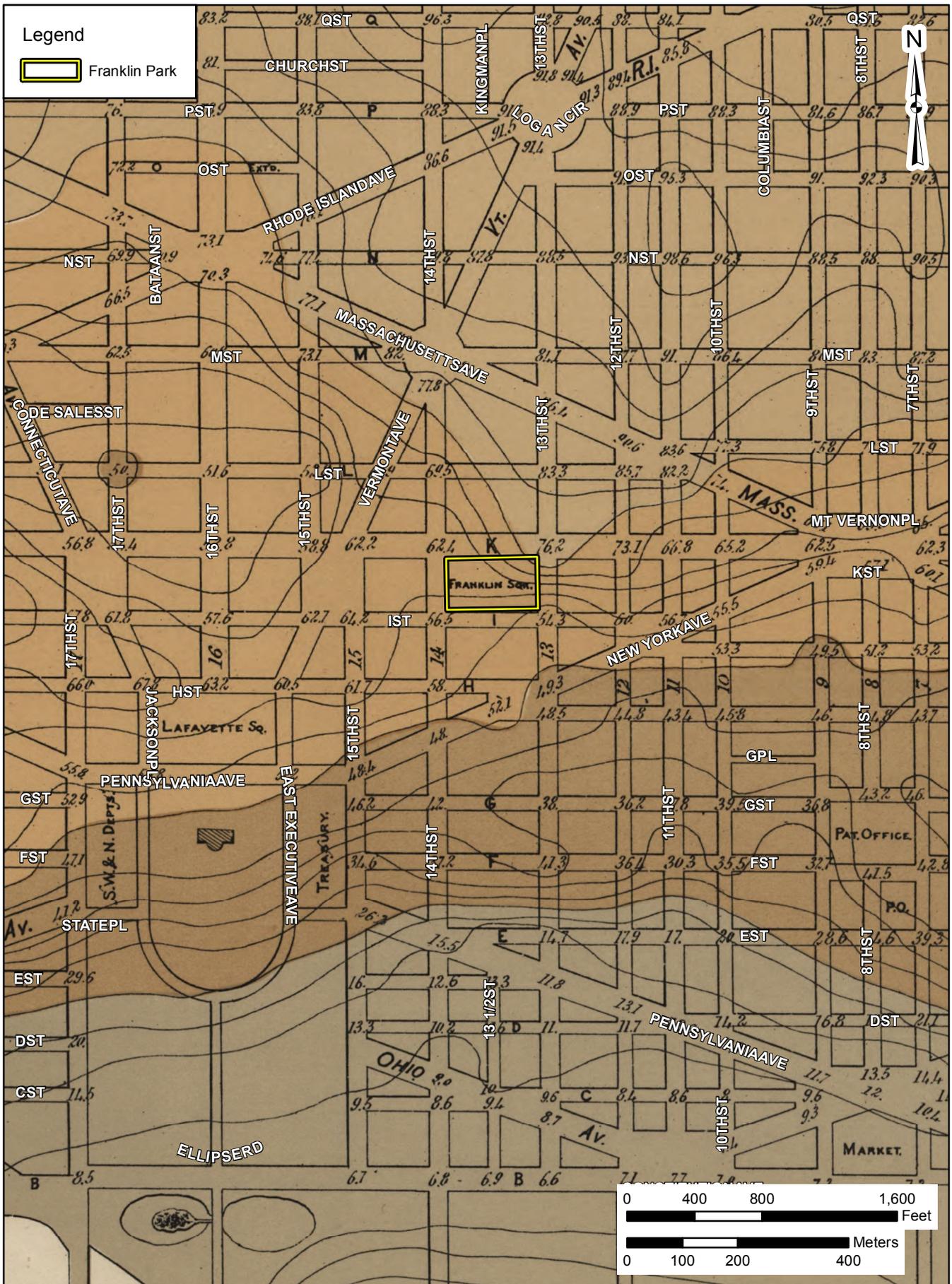


FIGURE 3: Topography in Franklin Park Vicinity

SOURCE: Greene 1880

The Franklin Park springs were one of the city's most important water sources in the early nineteenth century. Apparently three separate springheads were collectively known as Franklin Park spring. One originated in the central part of the Square 249, and two were located along 13th Street. The springs formed a small lake or marsh in the southeast corner of the square, and from there a small creek carried the springwater to Tiber Creek following a course that meandered to the east and south, as shown in the King map of 1818 (Figure 4). Tiber Creek, also known as Goose Creek, drained about half of the downtown area, emptying into a broad, shallow tidal estuary. The headwaters of Tiber Creek began more than 3 miles north of the Capitol; in the downtown area the creek meandered west toward the Potomac, roughly following the present course of Constitution Avenue (formerly B Street). It emptied into the Potomac River at 17th Street, at which point it was some 700 to 800 feet wide. The Franklin Spring branch entered Tiber Creek at a point between 9th and 10th streets. The stream channel was quite deep, as much as 14 feet at F Street. It was reportedly shallow enough to ford with a cart only at H Street, and it was bridged at the lower crossings at Pennsylvania Avenue and E and F streets. The flow was heavy enough that longboats laden with firewood could proceed upstream as far as E Street (Bryan 1914; Williams 1989).

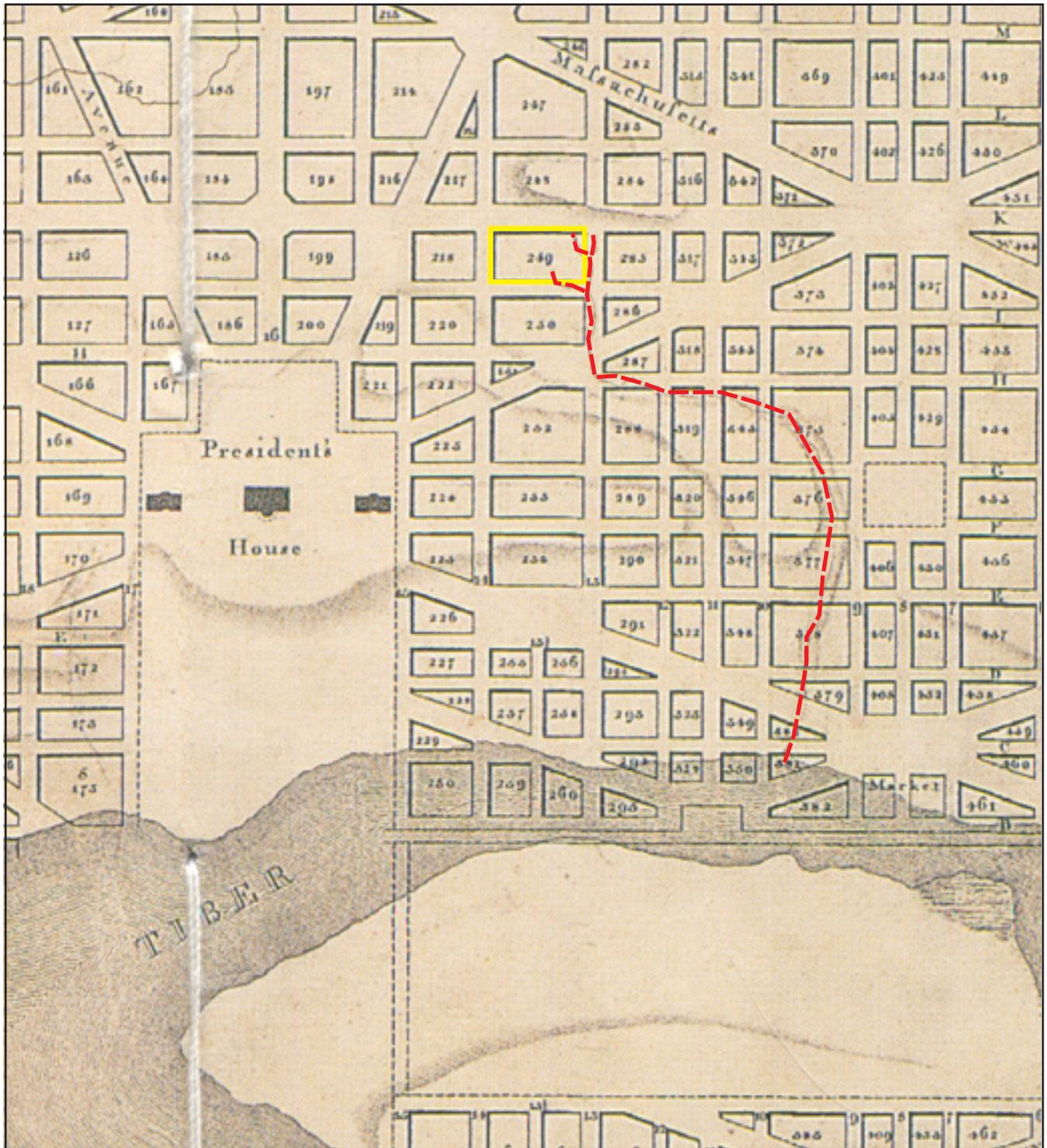


FIGURE 4: Detail of Robert King's Map of the City of Washington, 1818

SOURCE: King 1818

HISTORIC CONTEXT

Franklin Park, historically referred to as Franklin Square, was originally part of a 500-acre tract known as “Port Royall.” The tract was patented by John Peerce, Jr. on September 23, 1685, along with an additional 500-acre parcel north of Port Royall, which he named “Jamaica.” The surviving records concerning John Peerce, Jr. and his activities in Maryland are limited. John Peerce was likely born in England sometime between 1650 and 1655 and was brought to Calvert County, Maryland, by his father, John Peerce, Sr., sometime before 1660 (Doliente 1991). In 1676 John Peerce, Jr. married Sarah Sprigg, daughter of Thomas and Kathryn Sprigg, in Calvert County. The chain of title for the property is outlined in Table 1.

TABLE 1
CHAIN OF TITLE FOR FRANKLIN PARK

DATE	GRANTOR	GRANTEE	ACRES	LIBER/FOLIO	NOTES
Sept. 23, 1685	Proprietor of Maryland	John Peerce	500	NS 2/330*	Patented as Port Royall
Aug. 26, 1740	John Peerce, III	Edward Peerce William Peerce Thomas Peerce	500	Y/210**	Deed of gift to sons
May 6, 1791	Edward Peerce	Samuel Davidson	150	JJ2/391**	
Jan 5, 1792	Samuel Davidson	John Davidson	75	A/22***	MSA S512-1472
Mar. 17, 1797	Eleanor Davidson	Gust. Scott William Thornton Alexander White	4	DC Office of the Surveyor	Square 249

* Patent Record, Maryland State Archives

** Prince George’s County Land Records (PGLR)

*** Recorder of Deeds, Washington, D.C.

John Peerce, Jr. inherited all of his father’s real and personal estate following the death in 1679 of John Peerce, Sr.; the land included a 1,000-acre plantation on the Patapsco River in Baltimore County called “Pierce’s Enlargement” as well as a plantation on the Patuxent River in Calvert County (Maryland Prerogative Court 1679). It appears John Peerce, Jr. established his family home at his father’s former Patuxent River plantation, as he sold the Baltimore County Plantation in 1780 for 13,000 pounds of tobacco. From 1680 to 1687, John Peerce, Jr. was involved in several other land transactions, including the patenting of the previously mentioned 500-acre tracts “Port Royall” and “Jamaica” in Calvert County (present-day Washington, D.C.).

By 1699 John Peerce, Jr. had died, although the exact date and circumstances of his death are unknown since a will or probate of his estate did not survive (Doliente 1991). All of the land holdings of John Peerce, Jr. were given to his sole surviving heir, John Peerce III. These holdings included Port Royall, which in 1699 was located in the recently established Prince George’s County, Maryland. John Peerce III did not reside at Port Royall, instead choosing one of his father’s other holdings in Prince George’s County as his family home. John Peerce III married Mary Evans, the daughter of John and Elizabeth Evans, in 1701. The couple had at least four

children. In 1735 John Peerce III gave 50 acres of Port Royall to his daughter Ruth (PGLR 1735), and in 1740 the remaining 450 acres of the parcel were divided equally among his three sons: Edward, Thomas, and William (PGLR 1740). It is not clear which of the three sons received the 150-acre parcel that contained Franklin Park, as the next reference to the parcel in the Maryland land records occurred in 1786, when the tract was in the possession of Edward and James Peerce, two grandchildren of John Peerce III (PGLR 1786). The identity of Edward and James's father is not known. No other deeds or wills exist that indicate from whom the brothers received the land. Furthermore, genealogical research into the Peerce family was unable to determine whether Edward, Thomas, or William Peerce was the father of the James and Edward Peerce referenced in the 1786 deed.

In November 1786 Edward Peerce and James Peerce, grandsons of John Peerce III, filed a suit against their neighbor, David Burnes (PGLR 1786). By that time the Peerce brothers had assumed control of the entire 450-acre Port Royall tract. The Peerce brothers argued that David Burnes's tract, "Elinor," encroached on the southern border of their home farm. The case went to arbitration, and the court-appointed negotiators found in favor of Edward and James Peerce. The arbiters ordered the boundaries of the two tracts resurveyed and ordered David Burnes to pay 1,000 pounds current money to the Peerce brothers for legal fees. The 1791 land record makes no mention of Edward's brother James, suggesting that James might have sold his interest in the parcel to Edward. In 1791 Edward sold Port Royall to Samuel Davidson, a merchant residing in Georgetown (PGLR 1791). In return for 150 acres of the tract, Edward Peerce received 500 acres in Baltimore County as well as 1,000 pounds current money of the State of Maryland.

Other interesting details also appear in the deed between Edward Peerce and Samuel Davidson. The document indicated that the 150-acre "Port Royall tract" also contained the dwelling house of Edward Peerce as well as some tenements and outbuildings. The deed further stated that the 150 acres Davidson received from Peerce would not include a 24-square-foot family graveyard that was also located on the property. It is not known whether Edward Peerce's dwelling and family cemetery was located in present-day Franklin Park; however, given the presence of a natural spring in the park, it is possible that Peerce may have chosen the locale as an ideal place to build his home or one of his farm tenements. On the other hand, Edward Peerce's farm was a 150-acre tract, of which Franklin Park consists of less than 5 acres.

In 1791 Samuel Davidson became the first person outside of the Peerce family to own this 150-acre portion of Port Royall since it was originally surveyed in 1685. Samuel Davidson saw a financial opportunity when the federal government announced that the land east of Rock Creek would become the location of the capital city. Samuel, along with numerous other land speculators, quickly began buying up land within the proposed boundaries of the new capital city with the expectation they would soon be able to develop their properties for a substantial profit. In fact, nearly half of the proprietors who had agreed to deed their land in trust for the new Washington City were merchants and businessmen who lived across Rock Creek in or near Georgetown (McNeil 1991). In 1792 Davidson sold the eastern half of his 150-acre Port Royall tract to his brother, John Davidson. Today, Franklin Park is located within the 75-acre tract sold to John Davidson.

Like his brother Samuel, John Davidson was a successful merchant. Beginning in the early 1770s, John Davidson operated a lucrative import/export business out of Annapolis, Maryland, which included at least two vessels, the *Nancy* and the *Kitty & Nelly* (Brown 1965). At the same time Davidson also owned a dry goods operation specializing in clothing and linens. In the American Revolution John Davidson sided with the patriot cause. In January 1779 Davidson financed the construction of the *Buckskin Hero*, a Baltimore privateer, captained by Aquila Johns (Lincoln 1906). Davidson held a \$10,000 bond on the vessel along with his partner, Captain Johns. The *Buckskin Hero*'s maiden voyage occurred in March 1779, when she and 15 other merchant vessels were tasked with the delivery of tobacco and other goods to Bordeaux, France. During this convoy the *Buckskin Hero* served as escort. Over the course of the voyage, 10 of the American merchant ships were captured; however, the *Buckskin Hero* was also successful in capturing a British privateer with a crew of 60 men. The British sailors were paroled to Benjamin Franklin in the hopes they could be exchanged for American prisoners (Franklin 1779). The privateer only made one other voyage to Bordeaux in 1780. On her return voyage the *Buckskin Hero* was captured by the HM frigate *Iris* off the coast of Virginia. In her holds she carried a cargo of dry goods, clothing, liquor, and general merchandise. At least some of these goods were likely intended for sale in Annapolis by John Davidson.

Following the Revolution John Davidson continued to operate his Annapolis dry goods business. In addition to his success as a merchant, John Davidson found land speculation to be a profitable endeavor. Besides the 75-acre tract of Port Royall he purchased from his brother, Davidson held another 150 acres of land in Washington, D.C. He also held interest in numerous other vast tracts and city lots across Maryland. They included 354 acres of land outside Frederick, six city lots in Frederick, numerous town lots in Annapolis, a 2,000-acre tract in Allegany County, Maryland, and the 1,900-acre "Mountain Tract" outside Thurmont, Maryland, which he held in common with George Calvert.

John Davidson never saw his investment in Port Royall come to fruition. Although a deed of trust for Davidson's lands was initiated in 1793, the Washington City Commissioners did not complete the agreement until March 1797, 14 months after John Davidson had died. Under the final agreement with the city commissioners, John Davidson's widow, Eleanor, and their children received all the building lots on their 75-acre portion of Port Royall that were not taken for streets and public spaces. In addition, all the survey work required to create the streets and building lots was paid by the government.

Franklin Park, known as Square 249, was thus created from this agreement. The square that eventually became Franklin Park was originally divided into 30 city lots, which the heirs of John Davidson were free to sell or develop as they saw fit. As the lots were so close to the White House and other federal government buildings, Square 249, along with all of the adjoining Davidson-owned squares, held ample potential to make the heirs of John Davidson a great deal of money.

The 30-lot Square 249 had entrance alleys 15 feet wide from I and K streets that gave way to 30-foot alleyways running east-west along mid-block (Figure 5), a subdivision pattern that was seen in other nearby blocks. No houses had been built on Square 249 as of the enumeration of

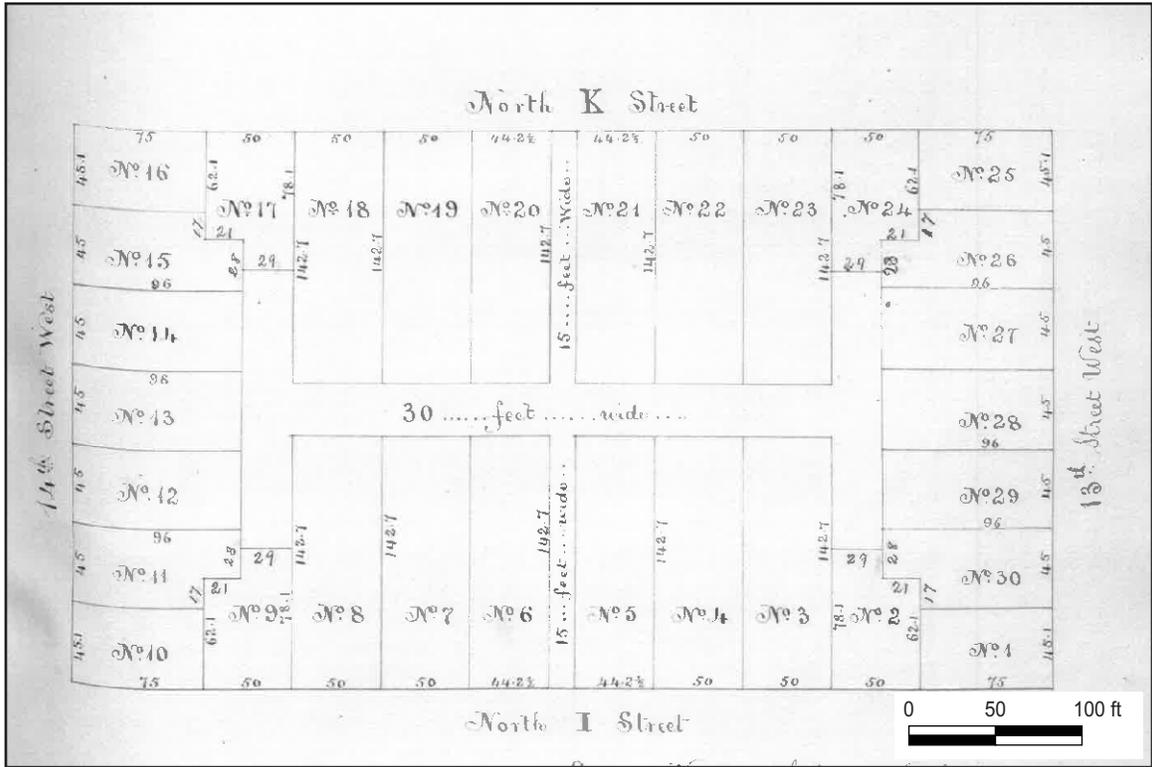


FIGURE 5: Subdivision of Square 249

SOURCE: District of Columbia Surveyor's Office 1797

November 1801¹ (American State Papers 1801). It appears that much of the block was purchased by speculators, as 20 of the 30 lots were owned by three individuals (*Washington Evening Star* 1906b).

Square 249 gained importance as one of the city's major springs, and it became best known as the source of drinking water for the White House and the Treasury and State, War, and Navy buildings. Although Congress appropriated funds in 1819 to construct a network of pipes that would carry water to reservoirs near the Executive Mansion and Treasury Building, implementation of this scheme was delayed because the landowners did not accept the government's initial offer.

After the United States government purchased the square in 1829, a system of pipes was constructed to carry the spring water to the Executive Mansion and the Treasury Building. From Franklin Spring the pipes went south along 13th Street to G Street, then turned west. Citizens who owned property along the route of the pipe were allowed to tap the pipes for the purpose of obtaining water for their own residences (*Washington Evening Star* 1888). Within a few years a network of pipes was laid from Franklin Spring to the government buildings. It was typical of early water systems such as this to use bored wood logs or wood boxes as pipes; however, the earliest pipes from Franklin Spring were iron (Olszewski 1970).

As the city grew in the early nineteenth century, springs and wells were connected to an expanding network of pipes and reservoirs where hydrants or pumps served the needs of local neighborhoods. Residents who could afford to do so could dig their own wells or tap into the network of pipes that carried water from the major springs. The city's pump mender was then a position of some importance. Wells and springs continued to serve the city's needs through the mid-nineteenth century, and one reason for the longevity of this system was that digging privy pits had been outlawed by a city ordinance of May 13, 1805, effectively reducing groundwater pollution (Bryan 1914:562). By mid-century, however, the city's expanding population had strained the naturally available water supply, so the feasibility of a new municipal water supply system was completed under the direction of Montgomery Meigs of the Corps of Engineers. Meigs's study examined three sources, one that would use Rock Creek and two that would draw water from the Potomac River, using intakes at either Great Falls or Little Falls. Although it was the most expensive, the Great Falls option was chosen, and after some delays, work began in 1853. The first elements of the system came on line in 1859 (Bryan 1914; Somervell 1930).

The new Washington Aqueduct system was a major engineering feat, beginning with construction of a dam above Great Falls that would direct water through two 9-mile conduits, two reservoirs at Dalecarlia and Georgetown, and a network of cast iron pipes. From Georgetown the network entered the Washington via a bridge and Pennsylvania Avenue, then proceeded across the city, eventually feeding the fountain in Franklin Park. The new system needed frequent upgrades to keep pace with the growing demand for water consumption in the

¹ The Historic Resource Study (Olszewski 1970) and the Cultural Landscape Inventory (NPS 2011) both repeat a story of an unidentified Frenchman living on Square 249 in 1800, attributing this story to Rider's (1922) tour guide of Washington. Rider's book is not well sourced, so there is no known archival evidence of said Frenchman's having resided on Square 249. Nonetheless, one could easily imagine an aged, pensionless French soldier who, like Pierre L'Enfant, joined the cause of the American Revolution and lived out his years in the City of Washington, subsisting on public land.

late nineteenth century. Construction of new reservoir, known as the McMillan Park Reservoir, began in 1882 at the site of the springs located on the Smith farm, located at the head of North Capitol Street beyond Boundary Avenue. The three Smith Springs produced flows of 3, 4½, and 7 gallons per minute, ranking them among the most bountiful of the area's springs. The new reservoir at the Smith farm would later be connected to the Georgetown Reservoir by the City Water Tunnel, which was completed in 1902 (Somervell 1930).

Long after the arrival of the municipal water system, the city's many springs continued to be used as a source of drinking water. The purity of the drinking water supply was the subject of an ongoing debate, with many adhering to the view that natural spring water was more healthful than water piped from the Potomac. Fears of pollution came to a head in 1896, when it was suspected that Franklin Spring had become poisoned or contaminated. Chemical tests were conducted in 1896 and periodically thereafter, with the results pointing to contamination by animal matter. A "greenish, oily scum" that was reportedly seen on the water from Franklin Spring led to more tests, and the city's health department finally ordered all of the city's 62 public wells closed in 1907 (*Washington Evening Star* 1906a, 1906b, 1906c; *Washington Herald* 1911; Williams 1989).

The earliest landscape treatment of Square 249/Reservation 9 dates to 1851 and consisted of grading and erection of a fence, but on the eve of the Civil War it was probably nothing but an open meadow, as shown on Boschke's map of 1857 (Figure 6), whereas others in the area — Fayette Square, the Ellipse, and the Smithsonian Grounds east of 12th Street — had been improved.

By late 1860 Franklin Square had yet to be improved (NPS 2011). During the Civil War soldiers from the 12th New York Volunteers and the 27th New York Volunteers camped on Reservation 9. Dozens of wooden barracks were built to house the troops; soldiers were said to have damaged the "fine trees" along K Street by using them as hitching posts (Olszewski 1970). Landscaping of Franklin Park commenced shortly after the conclusion of the Civil War. By 1866 a lush Victorian garden landscape had been laid out by the public gardener although not immediately implemented.

On April 19 of the same year, African-American citizens of Washington, D.C., staged a huge celebration in Franklin Park in commemoration of the fourth anniversary of the abolition of slavery in the District of Columbia. The event was originally to be held three days earlier, but heavy rains on April 16 left the city's unpaved streets a muddy morass and the event was postponed. Approximately 5,000 people marched up Pennsylvania Avenue on April 19, past 10,000 cheering spectators, to Franklin Square for religious services and speeches by prominent politicians (*Harpers Weekly* 1866; *Washington Post* 1985) (Figure 7). Franklin Park continued to serve as a venue for the event until 1901, when dwindling participation finally ended the annual Emancipation Day celebration.

Formal landscaping was initiated shortly after the Civil War, and the park progressed through two major landscape design phases. The first design, realized in 1868-1872, featured a picturesque design with a curvilinear circulation system that centered on a fountain in the middle

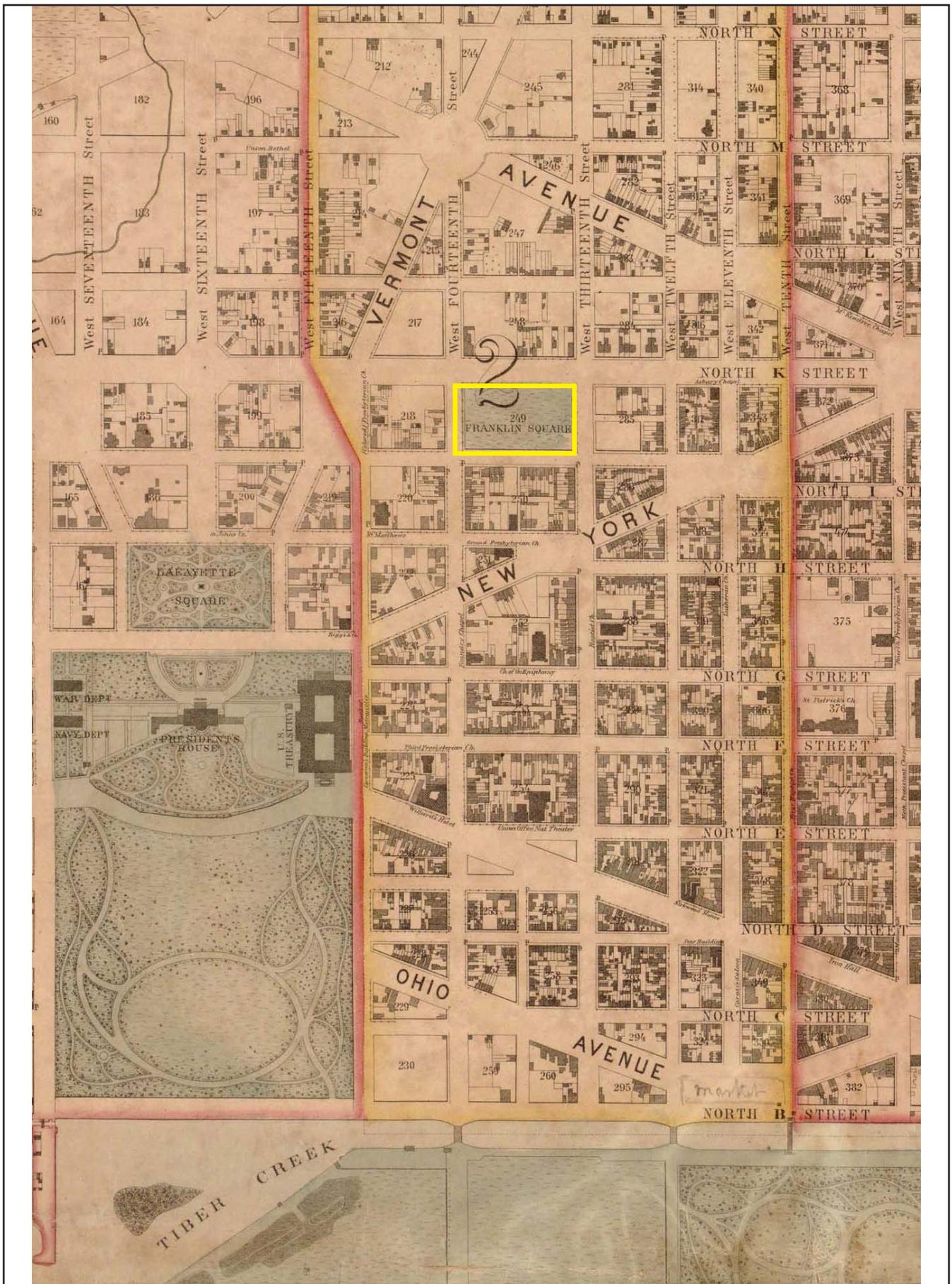


FIGURE 6: Detail of Boschke Map of Washington, 1857

SOURCE: Boschke 1857

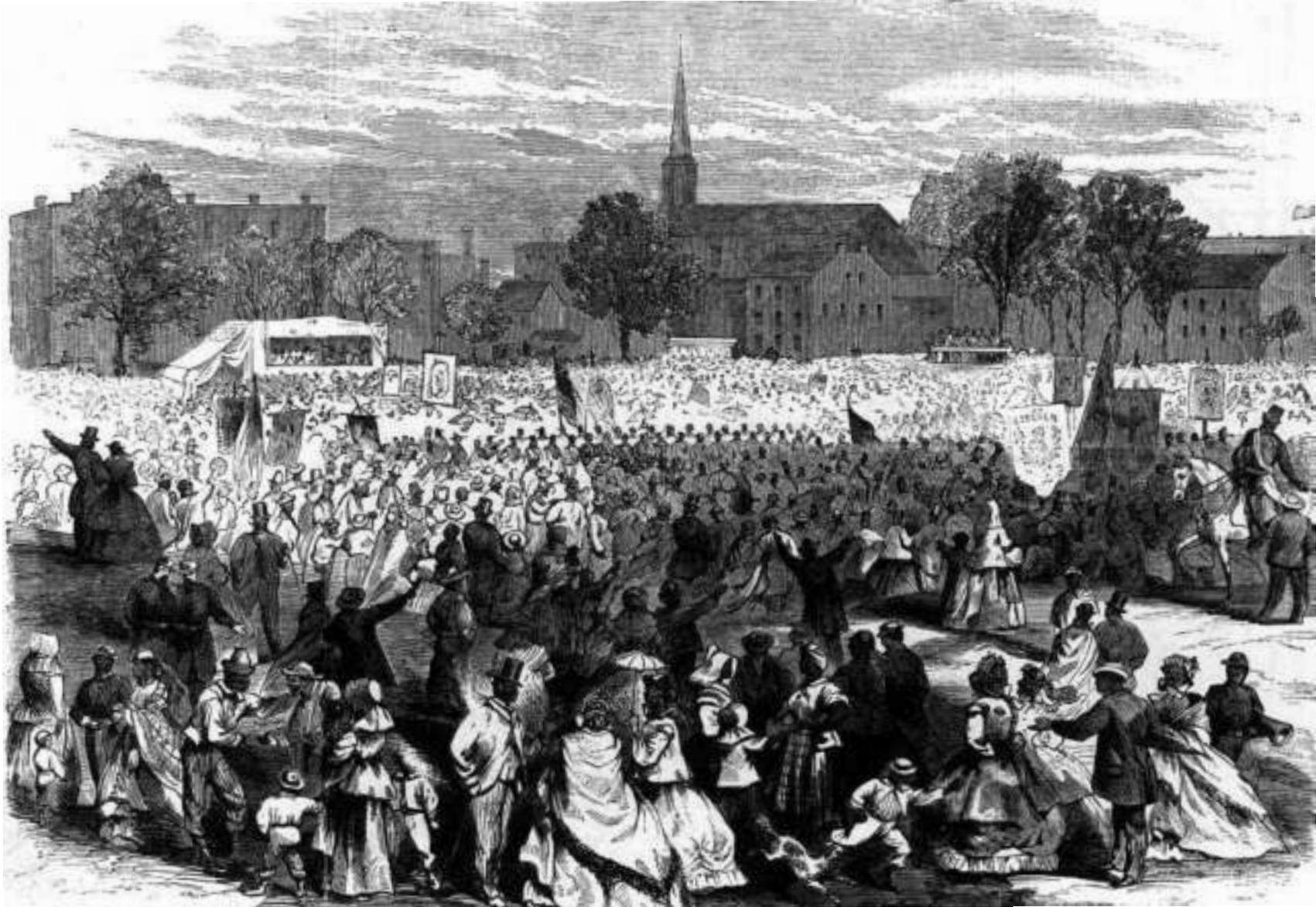


FIGURE 7: Emancipation Day Celebrations at Franklin Square in 1866

SOURCE: *Harper's Weekly*, May 12, 1866

of the square. This so-called Victorian design was inspired Andrew Jackson Downing and was similar to Downing's landscapes that had been implemented earlier for the Capitol, the White House, and the Smithsonian. The design for Franklin Square, as it was then known, featured an irregular serpentine system of pathways that converged on a fountain at the center of the square. The Baist atlases from 1903 through 1921 (Figures 8 and 9) illustrate the Victorian plan in the early twentieth century. Aside from the fountain, the only structure was a lodge, located west of the central fountain. On May 16, 1914, the bronze statue of Commodore John Barry was dedicated at the park. The erection of the Barry statue on the 14th Street side necessitated the removal of the old lodge, standing just west of the park's center (NPS 2011). The original lodge was relocated to East Potomac Park and a new lodge containing public restrooms was built on the east side of the park, along 13th Street. The new structure mirrored the location of the Barry Statue on 14th Street and was simply designed with a flat roof and stucco walls (NPS 2011).

In the immediate post-Civil war years responsibility for the city's public grounds fell on the Office of Public Buildings and Grounds (OPB&G), under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Annual reports to Congress provide details of the frequent repairs and improvements to Franklin Park during that period. Of note are the reports from 1886 and 1905, the first of which (Figure 10) shows the utility lines (drainage, gas, and water). Of particular interest is the location of the spring in the center of the square, some 40 to 50 feet north of the fountain, and a reservoir about 15 to 20 feet south of the spring. A second reservoir is shown along 13th Street, and an eel trap is shown on the water pipe south of the reservoir. The 1905 map (Figure 11) focuses on the plantings but also shows the location of the central spring and nearby reservoir. Although the spring had dried up by then and the park had been landscaped, remnants of the spring remained visible for some years. A detailed description of the spring was given in a newspaper report of 1911:

Concealed in an old cistern, vaulted over and covered with grass save where two traps protrude from the lawn, is a spring in Franklin Square that once supplied the White House with water. Thirty feet north of the fountain is the first of these entrances, which are ten feet apart, and hewn out of solid rock, with heavy iron lids, great strap hinges, and ponderous, rusting locks [*Washington Herald* 1911].

The park's second design phase followed a 1936 plan developed under the National Capital Planning Commission that features a more formal symmetrical design with cross-axes and diagonal walks that converged on the central fountain. Throughout the period of formal landscaping there have been numerous episodes of planting replacement along with upgrades or repairs to the circulation, lighting, and utility systems. New structures that were added include the Barry statue, erected in 1914, and a lodge with restrooms, located along 13th Street. The lodge was removed in 1974 (NPS 2011).

Table 2 provides a summary of key events in the park's physical history.

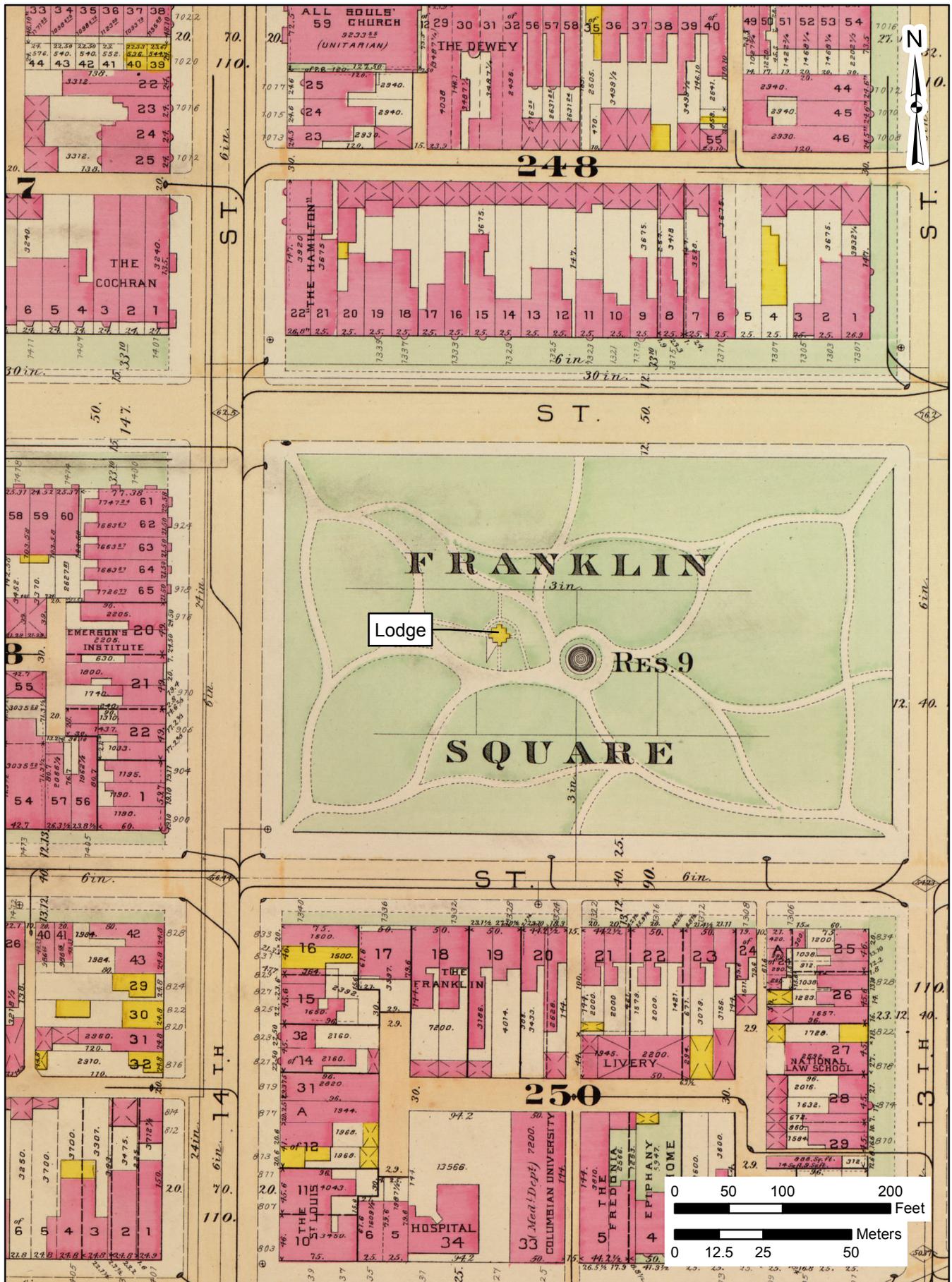


FIGURE 8: Detail of Baist's 1903 Real Estate Atlas
 Showing Franklin Square (Reservation 9)

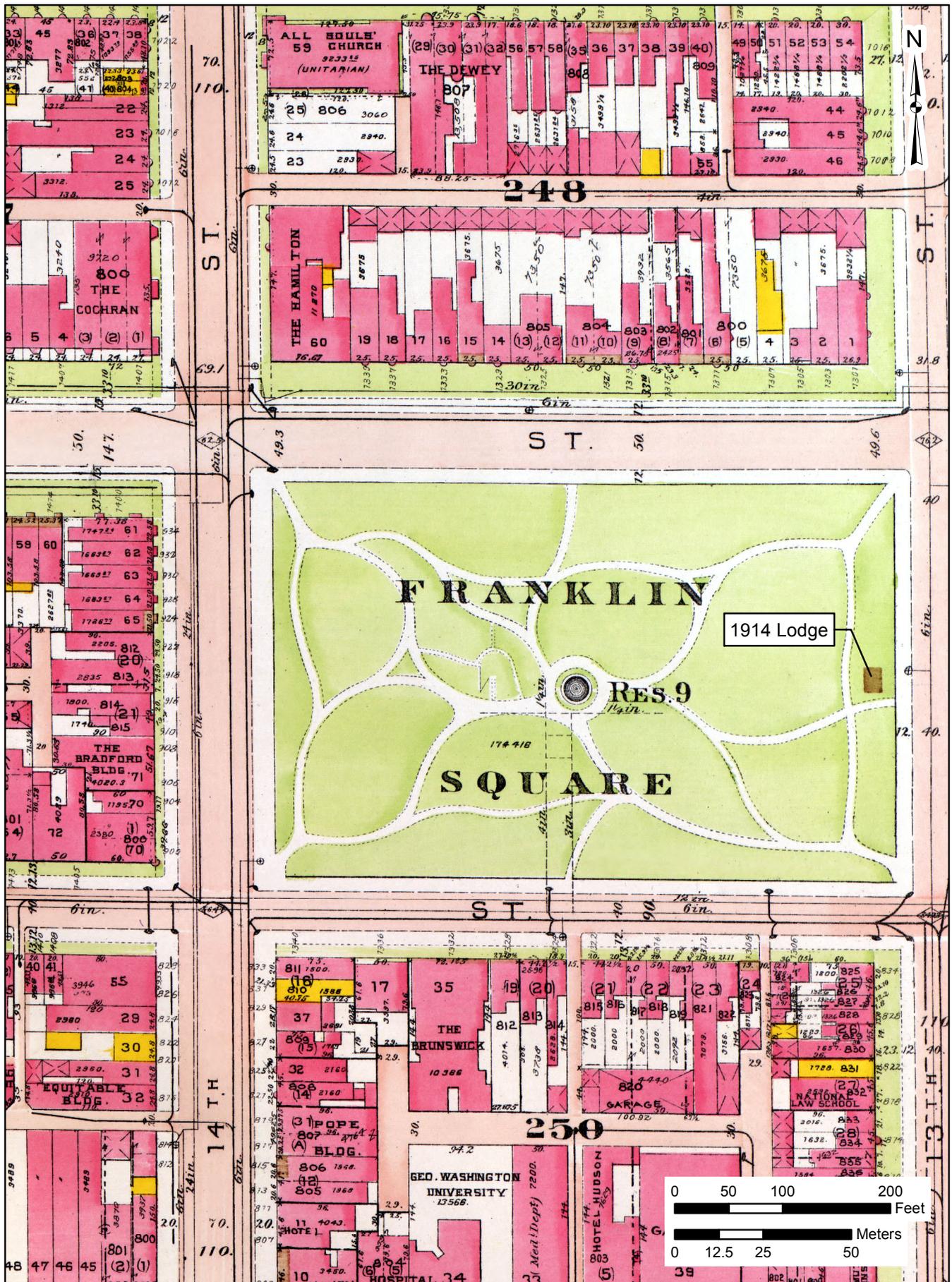


FIGURE 9: Detail of Baist's 1919 Real Estate Atlas
 Showing Franklin Square (Reservation 9) 20

SOURCE: Baist 1919

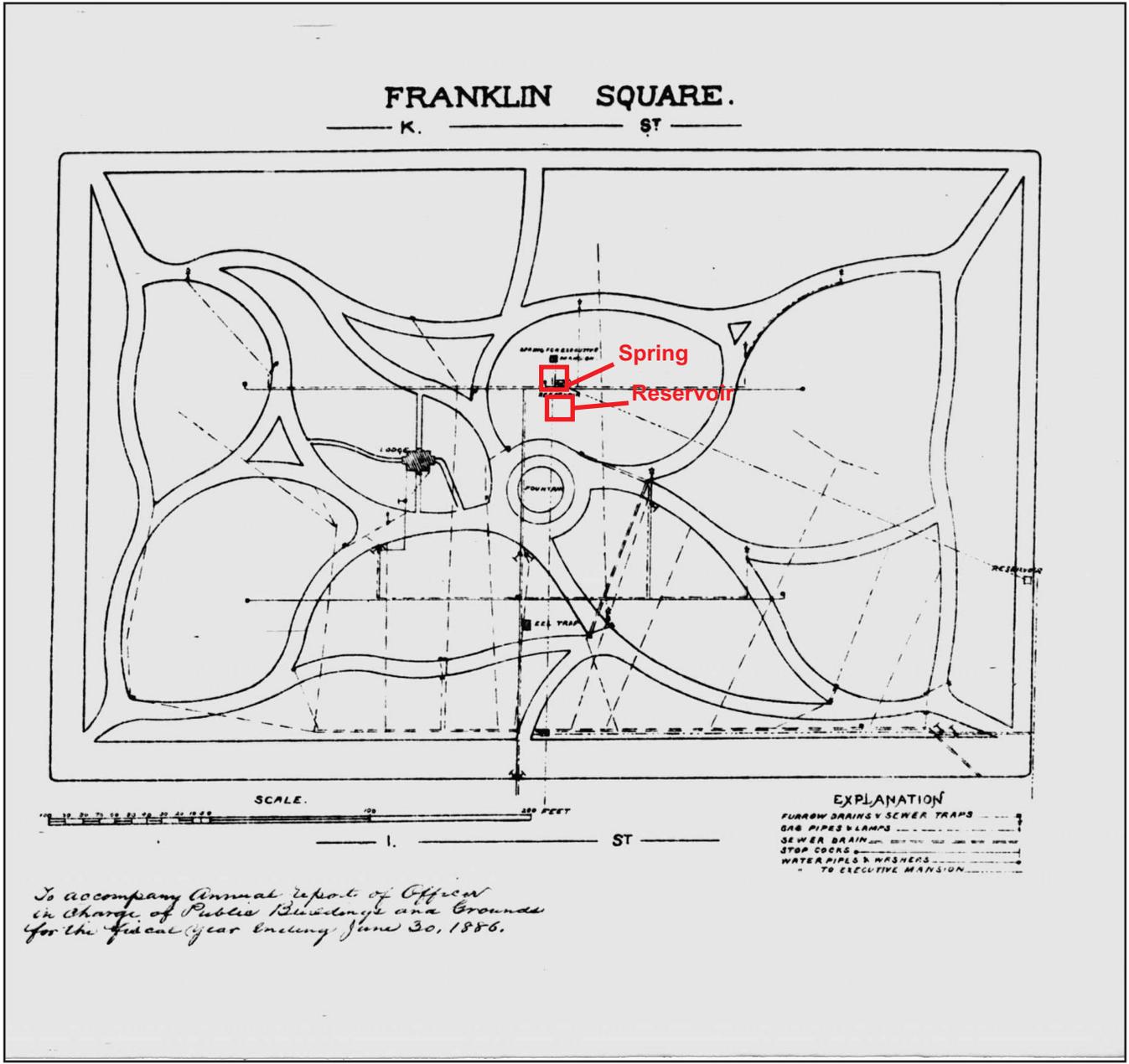


FIGURE 10: Franklin Square in 1886

SOURCE: Wilson 1886

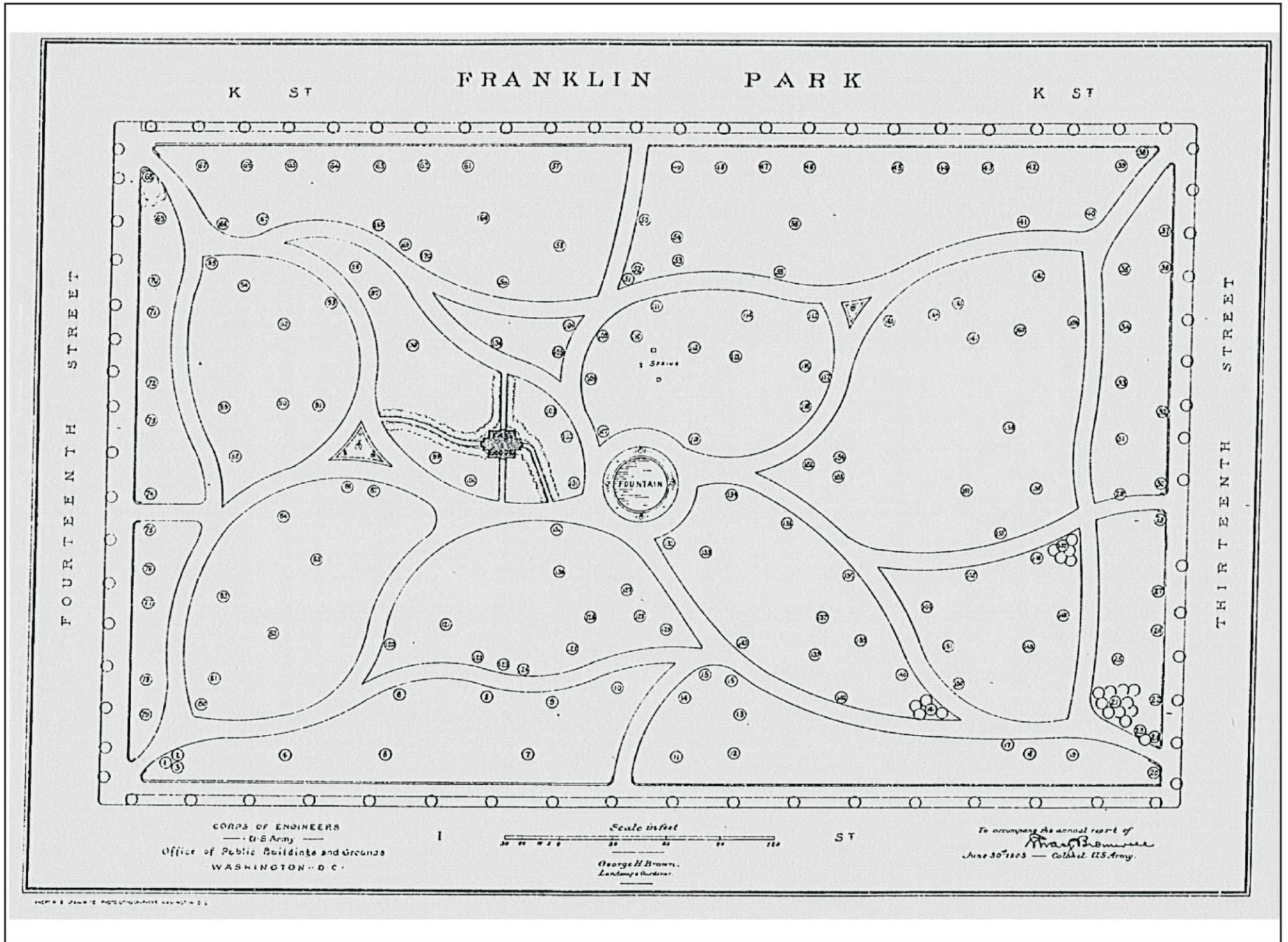


FIGURE 11: Franklin Square in 1905

SOURCE: Bromwell 1905

TABLE 2

KEY DATES IN DEVELOPMENT OF FRANKLIN PARK

DATE	EVENT
1685	Port Royal tract patented by John Peerce
1791	Pierre L'Enfant develops design for City of Washington
1793	City Commissioners acquire ownership of Square 249 from the heirs of John Davidson
1819	Congressional authorization for water from the spring be supplied to the White House
1822/1832?	Iron water pipes extended from spring in "Fountain Square" to President's House (White House)
1828	Congress appropriated \$8,000 for purchase of Fountain Square, which became known as Reservation 9
1851	First landscaping implemented for Fountain Square, involving grading and fencing
1862-1865	Military encampment occupied by troops from the 27 th and 12 th New York Volunteers
1868-1872	Construction of first major landscape under jurisdiction of USACE; design featured a picturesque, curving plan ("Victorian Plan") for walkways (inspired by A.J. Downing's plan for Lafayette Square), construction of public restrooms, and a small watchman's lodge
1872-73	Repair of water supply to White House; replacement of drainage system and sewer traps
1873	Fountain and gas lamps installed; replacement of watchman's lodge; additional grading
1876	Replacement of sewer
1878	Construction of 5-foot-wide asphalt walk across the park
1879	Replacement of walkway paving
1897	Replacement of gas lamps by electric lamps; water supply to White House discontinued after "poisoning" scare of the Spanish-American War
1914	Erection of Commodore John Barry Memorial
1922	Replacement of gas lamps by electric lamps
1928	Narrow (9.55 feet wide) strip of land along 13 th Street transferred to D.C. government to allow widening of 13 th Street
1936	Major rehabilitation/reconstruction campaign completed by NPS; replacement of trees, shrubs, and other plant material; grading; walk construction; construction of flagstone court and pool; installation of drainage, water supply, and lighting
1946	Installation of new Y-shaped walkways
1952	Defeat of proposal to create a four-story underground parking garage/bomb shelter
1974	Rehabilitation of park under Bicentennial Downtown Parks program; resurfacing of walks, replacement and repair of benches; installation of new irrigation system; removal of lodge
1990-1992	Rehabilitation program by NPS in partnership with Franklin Square Association

FIELD RESULTS

The field investigation was completed on November 27, 2013. Using a Geoprobe, 11 soil core borings were excavated to sample the APE (Figure 12). Most of the probes were laid out to broadly sample the entire park to obtain general information about the degree to which the natural landscape had been modified by formal landscaping. The probes were placed with the goal of avoiding the use of heavy machinery within the canopy lines of the more mature trees. Borings 3 and 4 were specifically placed in the area directly north of the fountain to intercept the cistern or reservoir reported in the 1911 *Washington Herald*. Three closely spaced borings were placed in the southeast corner of the park to sample the area that had been described historically as a small lake or pond that was fed by the natural springs that gave this area its name.

Modern and historical utility maps were reviewed prior to establishing the testing pattern, and a formal utility markout was requested. Of primary concern was the avoidance of the numerous irrigation lines throughout the grounds and the many now inactive utility lines, including gas lines that fed the historical lamps and the original water distribution system from the springs.

The borings were advanced to depths ranging from 10 to 15 feet below ground surface (bgs). In all cases this was sufficient to extend well below the elevation at which a natural landscape surface would have been present, given favorable preservation conditions. The geoarcheological analysis of the borings is included as Appendix A, and Table 3 presents a summary of the results.

The testing demonstrated that disturbed soils were present through the park, which is to be expected given the site's history of formal landscaping. Although the disturbed soils were classified as mixed earthen fills, it is unlikely that major amounts of new material were introduced to the site, with the possible exception of the southeast corner of the park. The modern contours and elevations of the site seem generally to correspond to those of the late nineteenth century, after the construction of the park's first formal landscape. Overall, the cores indicate deeply truncated soil columns that would reflect deep grading. In some cases disturbed soils extended the full depth of the boring, to 10 or 15 feet. Grading to these depths extended far below the level of a landscape surface that would have supported Native American, colonial, or ante-bellum occupation of the park. Cores in the south and southwest areas of the park showed relatively shallow fills at depths of 5.5 feet bgs (Boring 10) and 4.7 feet bgs (Boring 11).

Although the cores revealed virtually no evidence of survival of a natural landscape surface, a few of the cores were notable for other information. Boring 5, located in the northeast area of the park, the most elevated position of the landscape, showed a possible intermediate surface at 1.4 feet below ground surface (bgs), possibly representing a remnant of the late nineteenth-century Victorian plan landscape. Borings 3 and 4 were placed to intercept the reservoir mentioned in the *Washington Herald*, and both yielded deep earthen fills but no conclusive evidence of a reservoir; in this case more convincing evidence of a former reservoir would consist of a distinctive fill deposit with cultural material such as brick. It should be noted that the sampling locations in this area were constrained by the existing pavement and steps from the plaza. The three borings (7, 8, and 9) in the southeast corner all returned dark grayish brown sediments at



FIGURE 12: Location of Geoprobes

SOURCE: ESRI 2013

depths ranging from 8.4 to 12.1 feet bgs, and these sediments are interpreted as pond sediments, consistent with the description of a spring-fed lake or pond at the corner of 13th and I streets.

TABLE 3
SUMMARY OF GEOARCHEOLOGICAL BORINGS

BORING NO.	TOP ELEVATION (feet amsl)	DEPTH OF PROBE (feet bgs)	REMARKS
1	65.5	10	General location, northwest area of park; earthen fills over possible truncated soil at 9.5 feet bgs
2	64.5	15	General location, north-central area; earthen fills over possible truncated soil at 14 feet bgs
3	65.75	15	Paved walkway; possible reservoir location; earthen fills throughout entire core
4	62	15	Paved plaza; possible reservoir location; earthen fills throughout entire core
5	74	10	General location, northeast area of park; earthen fills throughout entire core; possible temporary surface at 1.4 feet bgs
6	67	15	General location, eastern area of park; earthen fills throughout entire core
7	57	15	Southeast corner; location of lake or pond; pond sediments at 12.1 feet bgs
8	57	15	Southeast corner; location of lake or pond; pond sediments at 11.1 feet bgs
9	57	10	Southeast corner; location of lake or pond; pond sediments at 8.4 feet bgs
10	59	15	General location, south-central area of park; earthen fills over possible truncated soil at 5.5 feet bgs
11	61	10	General location, southwest area of park; earthen fills over possible truncated soil at 4.7 feet bgs

DISCUSSION AND MANAGEMENT RECOMMENDATIONS

DISCUSSION OF RESULTS

The survey results are discussed with regard to the research questions that guided this study.

- Does the APE contain areas of natural landscape associated with the pre-1791 layout of the District of Columbia?

As a whole the borings revealed a deeply truncated landscape, indicative of deep grading that reached depths as great as 15 feet or more bgs. Given the history of formal landscaping in Franklin Park, evidence of grading was expected, but none of the cores showed evidence of a landscape surface that would have been present during prehistoric, colonial, or antebellum times. No A-horizon soils were found in any of the cores.

- Does the APE contain any remnants of the landscape associated with the natural springs that existed in this area?

Three borings in the southeast corner of the park had deeply buried sediments (dark grayish brown heavy silt loam) that would have formed at the bottom of a pond, which is consistent with early accounts of a small lake or pond at the corner of 13th and I streets.

- What effect have the processes of historical land use and formal landscaping of Franklin Park had on landscapes that might contain archeological resources?

Deep grading throughout the park would have removed or severely disturbed any archeological resources associated with Native American occupation of the site or any remains of a Civil War encampment. Archeological features associated with incorporation of the Franklin Springs into the city's formal infrastructure may have survived, including remnants of a large reservoir in the center of the park and some nineteenth-century water pipes.

MANAGEMENT RECOMMENDATIONS

In the context of compliance with Section 106 and the ongoing NEPA analysis and master planning, the results of this geoarcheological investigation suggest that there may be some possibility for preservation of archeological remains associated with nineteenth-century urban infrastructure, but there is little likelihood for the preservation of possible Native American or Civil War-era archeological resources.

Of greatest interest is the reservoir in the central area of the park that is known at this point only from archival sources. If any archeological remains of the reservoir have survived, they would be expected below the extant plaza pavement and walkways. Exploration of this area would require a larger aperture, which would then involve demolition of the existing landscaping. Any further archeological study would best be deferred until such time as the landscape rehabilitation program is underway and appropriate measures can be implemented to protect public safety. If the park rehabilitation program requires major grading in the area of the suspected reservoir, an archeological study could be completed during the construction phase of the project.

REFERENCES CITED

American State Papers, Miscellaneous

- 1801 An Enumeration of the Houses in the City of Washington, Made November 1801. American State Papers, Miscellaneous, Volume 1, pp. 256-257.

Baist, G.W.

- 1903 *Baist's Real Estate Atlas of Surveys of Washington, D.C.* Volume I, Plate 22. G.W. Baist, Philadelphia. On file, Geography and Map Division, Library of Congress, Washington, D.C.
- 1909 *Baist's Real Estate Atlas of Surveys of Washington, D.C.* Volume I, Plate 22. G.W. Baist, Philadelphia. On file, Geography and Map Division, Library of Congress, Washington, D.C.
- 1919 *Baist's Real Estate Atlas of Surveys of Washington, District of Columbia.* Volume I, Plate 22. G.W. Baist, Philadelphia. On file, Geography and Map Division, Library of Congress, Washington, D.C.
- 1921 *Baist's Real Estate Atlas of Surveys of Washington, District of Columbia.* Volume I, Plate 22. G.W. Baist, Philadelphia. On file, Geography and Map Division, Library of Congress, Washington, D.C.

Barthold, Elizabeth

- 1993 *Franklin Square (Reservation No. 9).* Historic American Buildings Survey Documentation. Historic American Buildings Survey, National Park Service, Washington, D.C.

Boschke, A.

- 1857 *Map of Washington City, District of Columbia.* A. Boschke. On file, Geography and Map Division, Library of Congress, Washington, D.C.

Bromwell, Chas. S.

- 1905 Improvement and Care of Public Buildings and Grounds in the District of Columbia. In *Annual Reports of the War Department for the Fiscal Year Ended June 30, 1905.* 59th Congress, 1st Session, House of Representatives, Doc. 2. Government Printing Office, Washington, D.C..

Brown, Vaughan W.

- 1965 *Shipping in the Port of Annapolis, 1748-1775.* United States Naval Institute, Annapolis, Maryland.

Bryan, W.B.

- 1914 *A History of the National Capital, from its Foundation Through the Period of the Adoption of the Organic Act.* Two volumes. MacMillan, New York.

Calver, James R.

- 1963 *Geologic Maps of Virginia*. Department of Conservation and Economic Development, Virginia Division of Mineral Resources, Charlottesville.

District of Columbia Office of the Surveyor

- 1797 Plat of Survey Square 249. On file, Surveyors Services, District of Columbia Department of Consumer and Regulatory Affairs, Washington, D.C.

Doliente, Sharon

- 1991 *Maryland and Virginia Colonials: Genealogies of Some Colonial Families*. Genealogical Publishing Company, Baltimore.

Environmental Systems Research Institute, Inc. [ESRI]

- 2013 World Imagery data layer. High-resolution imagery for the United States. ESRI GIS and Mapping Software, Redlands, California. GIS Basemap imagery accessed January 2014 via ArcMap 10.1 (http://goto.arcgisonline.com/maps/World_Imagery).

Franklin, Benjamin

- 1779 Letter to John Bondfield, March 27, 1779. The Papers of Benjamin Franklin, sponsored by the American Philosophical Society and Yale University. Available online at <http://franklinpapers.org/franklin/>.

Glumac, Petar, Julie Abell, Carter Shields, Madeleine Pappas, and Sulah Lee

- 1996 *Phase I and Phase II Archaeological Investigations at Mt. Vernon Square (51NW121) for the Washington Convention Center*. Prepared by Parsons Engineering Science, Inc., Fairfax, Virginia.

Goodwin, R. Christopher, Suzanne L. Saunders, and Michelle T. Moran

- 1990 *Phase I and II Archeological Investigations in the Shaw and Fourteenth Street Urban Renewal Areas, Washington, D.C.* Prepared for the District of Columbia Department of Housing and Community Development by R. Christopher Goodwin & Associates, Inc., Frederick, Maryland.

Greene, F.V.

- 1880 City of Washington Statistical Maps. No. 2: Street Grades, To Accompany the Annual Report of the Commissioners of the District of Columbia. On file, Geography and Map Division, Library of Congress, Washington, D.C.

Harpers Weekly

- 1866 The Negro Celebration in Washington. May 12.

King, R't [Robert]

- 1818 *A Map of the City of Washington in the District of Columbia*. W. Cooper, Washington. On file, Geography and Map Division, Library of Congress, Washington, D.C.

Leach, Sara Amy, and Elizabeth Barthold

- 1994 *L'Enfant Plan of the City of Washington, District of Columbia*. National Register of Historic Places Registration Form, U.S. Department of the Interior, National Park Service, Washington, D.C.

L'Enfant, Pierre Charles

- 1791 Dotted Line Map of Washington, D.C., 1791, before August 19. On file, Geography and Map Division, Library of Congress, Washington, D.C.

Lincoln, Charles Henry

- 1906 *Naval Records of the American Revolution, 1775-1788*. Government Printing Office, Washington, D.C. Available online at <http://ia700409.us.archive.org/32/items/navalrecordsrev00congrich/navalrecordsrev00congrich.pdf>.

McNeil, Priscilla W.

- 1991 Rock Creek Hundred: Land Conveyed for the Federal City. *Washington History* 3(1):34-51.

Maryland Prerogative Court

- 1679 Will of John Peerce, Sr. On file, Maryland State Archives, Annapolis.

Maryland State Archives

- 1685 Jamaica, Certificate. Liber NS 2, folio 310. On file, Maryland State Archives, Annapolis.
- 1685 Port Royall, Certificate. Liber NS 2, folio 330. On file, Maryland State Archives, Annapolis.

National Park Service [NPS]

- 2011 *Cultural Landscapes Inventory: Franklin Park, National Mall & Memorial Parks, L'Enfant Plan Reservations*. National Park Service, National Mall & Memorial Parks, Washington, D.C.

O'Connor, James V.

- 1989a The District of Columbia. In *Geology, Hydrology, and History of the Washington, D.C. Area*, edited by John E. Moore and Julia A. Jackson, pp. 3-8. American Geological Institute, Alexandria, Virginia.

Office of Public Buildings and Grounds [OPB&G]

- 1930 *The Mall. Map Showing Existing Conditions as per Survey of 1917, Revised July 19 and October 2, 1930*. Office of Public Buildings and Grounds, Washington, D.C.

Olszewski, George J.

- 1970 *Franklin Park, Washington, D.C.* Office of History and Historic Architecture, Eastern Service Center, U.S. Department of the Interior, National Park Service, Washington, D.C.

Phebus, George E., Jr.

- 1967 *A Quantitative Survey of the District of Columbia, Delaware, Maryland and Virginia Archaeological Collections in the United States National Museum*. On file, Processing Laboratory, Museum of Man, United States National Museum, Washington, D.C.

Prince George's County Land Records [PGLR]

- 1735 Liber L, Folio 255. On file, Maryland State Archives, Annapolis.
- 1740 Liber Y, Folio 210. On file, Maryland State Archives, Annapolis.
- 1786 Liber HH, Folio 214-218. On file, Maryland State Archives, Annapolis.

- 1791 Liber JJ, Folio 391. On file, Maryland State Archives, Annapolis.
- Recorder of Deeds
- 1792 Land records. Recorder of Deeds, Washington, D.C.
- Reed, John C.
- 1989 The Geology Beneath Washington, D.C. – The Foundations of a Nation’s Capital. In *Geology, Hydrology and History of the Washington, D.C. Area*, edited by John E. Moore and Julia A. Jackson, pp. 27-50. American Geological Institute, Alexandria, Virginia.
- Smith, Horace
- 1976 *Soil Survey of District of Columbia*. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.
- Somervell, Brehon
- 1930 Washington Water Supply. In *Washington Past and Present: A History*, edited by J. C. Proctor, pp. 612-616. Lewis Historical Publishing Company, New York.
- United States Geological Survey [USGS]
- 1965 *Washington West, DC. 7.5-Minute Series Topographic Quadrangle*. Photorevised 1980. United States Geological Survey, Reston, Virginia.
- Washington Evening Star*
- 1888 In the Heart of Washington: Streams Which Trickled Though the Streets Half a Century Ago. May 5.
- 1906a Pleading for Spring: Water from Franklin Spring Declared to be Pure. February 5.
- 1906b Old Franklin Spring: Regret That it Should be Condemned as Impure. February 18.
- 1906c Franklin Park Water: Use at White House Discontinued Two Years Ago. February 20.
- Washington Herald*
- 1911 Franklin Park Spring Once Fed White House: Poison Scare of Spanish War Days Caused its Abandonment and It Has Been Pronounced Unfit for Use. July 23.
- Washington Post*
- 1985 Brief Life, Bitter End for Parade. April 11.
- Williams, Garnett P.
- 1989 Washington, D.C.’s Vanishing Springs and Waterways. In *Geology, Hydrology, and History of the Washington, D.C. Area*, edited by John E. Moore and Julia A. Jackson, pp. 76-94. American Geological Institute, Alexandria, Virginia.
- Wilson, John M.
- 1886 Improvement and Care of Public Buildings and Grounds in the District of Columbia. In *Report of the Secretary of War Being Part of The Message and Documents Communicated to the Two Houses of Congress at the Beginning of the Second Session of the Forty-Ninth Congress, Volume II, Part 3*. 49th Congress, House of Representatives, Ex. Doc. 1, Part 2. Government Printing Office, Washington, D.C.

APPENDIX A

GEOARCHEOLOGICAL ASSESSMENT REPORT

Geo-Sci Consultants LLC

4410 Van Buren Street, University Park, Maryland 20782

tel: 301 277 3731

fax: 301 277 2147

**GEOARCHAEOLOGICAL INTERPRETATIONS
OF SOIL CORE BORINGS AT SELECTED LOCATIONS
IN FRANKLIN PARK
WASHINGTON, D.C.**

Submitted to
The Louis Berger Group, Inc.

By
Daniel P. Wagner, Ph.D.
Pedologist

December 19, 2013

Introduction and Methods

The following is a discussion of observations and interpretations regarding the nature of soil materials examined at selected locations within Franklin Park in Washington, D.C. Investigations were directed toward the characterization of deposit types as well as the identification of any original land surfaces or other intact natural soils that might once have been available for occupation and are now potentially preserved in buried contexts beneath introduced fill materials. The main goal of this investigation was therefore to assess evidence of past human activities that may have occurred within the park area.

Investigation efforts entailed 11 mechanical Geoprobe borings distributed throughout the park area. Several of these were also intended to verify the possible locations of a former pond and reservoir structures. Cores were made to depths of 10 to 15 ft in attempts to intercept natural strata. In most instances the depths were insufficient to accomplish this. Examined soil materials were described in accordance with standard pedological techniques and nomenclature for the field characterization of soil, and the compiled descriptions are attached at the end of the report.

Geomorphic Setting

As with almost all of Washington, D.C. east of Rock Creek, the study location is situated within the Coastal Plain Physiographic Province. Geologically, this province is characterized by unconsolidated sediments that can range widely both in composition as well as age. Sediments as old as Lower Cretaceous are predominant throughout the broader region, and form the bulk of the deeper substrata in the vicinity of the project area. These ancient sediments are often capped by younger deposits of Quaternary age. Many Quaternary sediments were derived by fluvial processes and tend to have mixed compositions characterized by sandy and gravelly strata interbedded with layers of loamy, silty or even clayey sediments. Additionally, across gently sloping interfluvial positions relatively thin (<3 ft) surficial deposits of eolian silt or sand are also often present. Lower Cretaceous strata underlying the various Quaternary deposits can also be of mixed composition, but the most common textures are usually quite fine, typically clustering in the clay loam, silty clay loam, and clay classes.

Independent of the deposit types, all of the regional upland landscapes are very old, and most of the original site soils would have had very prolonged histories of weathering usually greatly predating even the earliest human presence in the region. This has important implications for both prehistoric and early historic cultural resources since, as would be the case for all landscapes of such antiquity, any cultural materials should occur only at or near the level of original surfaces. Hence, in most instances integrity of the original surfaces is of paramount importance, and disturbances or destruction of surfaces also translate to comparable impacts on archaeological deposits.

Results and Conclusions

Based on the 11 examined soil borings, the entire area of Franklin Park has suffered varying degrees of disturbance. Most of the park can be considered highly disturbed with original natural soils so deeply truncated that if any natural strata are present at all they are only lower substrata that would have been at depths many feet below original surface levels. Even in the relatively limited area where shallower truncations have occurred the depths of soil loss have still been sufficient to have accomplished destruction of any cultural materials that may once have been present.

In the most severely disturbed locations fill materials or other modern deposits extended to the full depths of observation. In Borings 3 through 6 earthen fills with compositions consistent with local Coastal Plain origins ranged to depths of either 10 or 15 ft, which based on more intact soils encountered elsewhere in the park would likely have corresponded to levels as much as 6 ft or more below original surfaces. Hence, very deep grading is indicated for these boring locations. Deep grading also occurred at the locations of Borings 1 and 2 where earthen fills may again possibly comprise the entirety of core retrievals. However, the lowest levels in these borings (below respective depths of 9.5 and 14.0 ft) did not display the obvious mixing typical of introduced fill. These lower materials may therefore consist either of comparatively clean fill, or they might also be natural substrata. In either case both depths are again indicative of deep soil truncations to depths far below any former potential cultural levels.

The several borings believed to correspond to former reservoir (Borings 3 and 4) and pond (Borings 7 through 9) locations met with mixed results. Both impoundments presumably were produced by artificial excavations, and as with the previously discussed results for Borings 3 and 4, the pond borings also revealed very deep soil truncations. For the reservoir borings there were no indications of sediments amassed beneath confined waters, and mostly brownish earthen fills extended to the full 15-ft depth of examination. Sediments consistent with a former pond were, however, identified in Borings 7 through 9. At depths varying from 8.4 ft in Boring 9 to respective depths of 11.1 and 12.1 ft in Borings 8 and 7, mostly brownish earthen fills were underlain by silty sediments with dark colors (2.5Y 4/2 and 10YR 4/2) suggestive of accumulation in a still, anoxic environment such as that at the bottom of a pond. It is possible that the varying depths to these probable pond sediments are attributable to a contoured pond bottom with the shallowest perhaps corresponding to a location nearer the pond edge.

At only two locations (Borings 10 and 11) were soil truncations relatively modest. As with elsewhere in the park, surficial fills cover these locations; but at respective thicknesses of only 5.5 and 5.7 ft these fills form the thinnest mantles encountered. Since the fills are underlain by natural soil horizons consistent with regional soils dating to the Pleistocene, the comparative thinness of the fills is probably attributable to a lesser degree of soil truncation prior to emplacement of fill throughout the park. Some truncation has, however, also affected the original soils at these locations, and although most of the subsoil is still present, the original surface as well as uppermost subsoil horizons have been destroyed at both locations. Given the Pleistocene antiquity that

limits the cultural zone to near-surface levels, estimated truncations on the order of 1 to 2 ft would also have destroyed any cultural deposits once present.

Descriptions of Core Borings

Depth (ft)	Pedologic Horizon (if present)	Characteristics
Boring 1 (surface elevation: c. 65.5 ft amsl)		
0 - 10.0		Mixed earthen fill, mostly brownish; possible deep substrata of strong brown (7.5R 4/6) sandy loam below 9.5 ft
Comments: Soil deeply truncated		
Boring 2 (surface elevation: c. 64.5 ft amsl)		
0 - 15.0		Mixed earthen and gravelly fill, mostly brownish; possible deep substrata of light yellowish brown (10YR 6/4) gravelly sandy loam below 14 ft
Comments: Soil deeply truncated		
Boring 3 (surface elevation: c. 65.75 ft amsl)		
0 - 15.0		Mixed earthen fill, mostly brownish
Comments: Soil deeply truncated		
Boring 4 (surface elevation: c. 62 ft amsl)		
0 - 15.0		Mixed earthen fill, mostly brownish
Comments: Soil deeply truncated		
Boring 5 (surface elevation: c. 74 ft amsl)		
0 - 10.0		Mixed earthen fill; possible temporary surface at 1.4 ft
Comments: Soil deeply truncated		
Boring 6 (surface elevation: c. 67 ft amsl)		
0 - 15.0		Mixed earthen fill, mostly brownish
Comments: Soil deeply truncated		
Boring 7 (surface elevation: c. 57 ft amsl)		
0 - 12.1		Mixed earthen fill, mostly brownish
12.1 - 15.0		Dark grayish brown (2.5Y 4/2) heavy silt loam; probable pond sediments
Comments: Soil deeply truncated		

Boring 8 (surface elevation: c. 57 ft amsl)

0 - 9.4		Mixed earthen fill with brick rubble
9.4 - 11.1		Mixed earthen fill, mostly brownish
11.1 - 15.0		Dark grayish brown (2.5Y 4/2) heavy silt loam; probable pond sediments

Comments: Soil deeply truncated

Boring 9 (surface elevation: c. 57 ft amsl)

0 - 8.4		Mixed earthen fill, mostly brownish
8.4 - 10.0		Dark grayish brown (10YR 4/2) silt loam and loam; probable pond sediments

Comments: Soil deeply truncated

Boring 10 (surface elevation: c. 59 ft amsl)

0 - 5.5		Mixed earthen fill, mostly brownish
5.5 - 6.4	Bt	Strong brown (7.5YR 4/6) heavy loam; many, medium distinct mottles of light brownish gray
6.4 - 7.8	Btg	Light brownish gray (10YR 6/2) heavy loam; common, medium distinct mottles of strong brown (7.5YR 4/6)
7.8 - 9.4	BCg	Light gray (2.5Y 6/1) loam; common, medium distinct mottles of dark yellowish brown (10YR 4/6)
9.4 - 12.5	2Cg	Light brownish gray (10YR 6/2) loam; common, medium distinct mottles of dark yellowish brown (10YR 4/6)
12.5 - 15.0	4C	Strong brown (7.5YR 5/6) loam

Comments: Soil truncated ~1-2 ft

Boring 11 (surface elevation: c. 61 ft amsl)

0 - 4.7		Mixed earthen fill, mostly brownish
4.7 - 5.2	BE	Dark yellowish brown (10YR 4/4) silt loam
5.2 - 7.4	Bt	Dark yellowish brown (10YR 4/6) heavy loam to silt loam; common, medium distinct mottles of light brownish gray (10YR 6/2)
7.4 - 9.4	BC	Dark yellowish brown (10YR 4/6) fine sandy loam; common, medium distinct mottles of light brownish gray (10YR 6/2)
9.4 - 10.0	2C	Strong brown (7.5YR 4/6) silty clay loam; common, medium distinct mottles of light brownish gray (10YR 6/2)

Comments: Soil truncated ~1 ft

APPENDIX B

NADB FORM

NADB – REPORTS CITATION FORM

Complete items 3 and 5-14. The State Historic Preservation Office will record information for items 1 through 4.

1. DOCUMENT NO. _____
2. SOURCE _____ AND SHPO – ID _____
3. FILED AT _____

4. UTM COORDINATES

Zone _____	Easting _____	Northing _____
Zone _____	Easting _____	Northing _____
Zone _____	Easting _____	Northing _____
Zone _____	Easting _____	Northing _____
Zone _____	Easting _____	Northing _____
Zone _____	Easting _____	Northing _____

Continuation, see 14.

5. AUTHORS _____ Charles LeeDecker and Daniel Wagner _____

6. YEAR ____ 2014 _____

Year published.

7. TITLE ____ Geoarcheological Investigation of Franklin Park, National Mall and Memorial Parks, District of Columbia _____

7. PUBLICATION TYPE (circle one)

- 1. Monograph or Book
- 2. Chapter in a Book or Report Series
- 3. Journal Article
- 4. Report Series
- 5. Dissertation or Thesis
- 6. Paper presented at a Meeting
- 7. Unpublished or Limited Distribution Report
- 8. Other

9. INFORMATION ABOUT PUBLISHER/PUBLICATION

Follow the American Antiquity style guide for the type of publication circled.

The Louis Berger Group, Inc., Washington, DC

10. STATE/COUNTY (Referenced by report. Enter as many states, counties, or towns, as necessary. Enter all, if appropriate. Only enter Town if the resources considered are within the town boundaries.)

STATE 1 _____ COUNTY _____ TOWN Washington, DC

STATE 2 _____ COUNTY _____ TOWN _____

STATE 3 _____ COUNTY _____ TOWN _____

Continuation, see 14.

11. WORKTYPE (circle all code numbers that are appropriate)

- 0 General Management Plan/Environmental Document
- 1 Cultural Resources Research Plan
- 2 Statement for Management
- 3 Outline of Planning Requirements
- 4 Cultural Resources Preservation Guide
- 5 Development Concept Plan
- 6 New Area Study/Reconnaissance Study
- 7 Boundary Study
- 8 Interpretive Prospectus
- 9 Special Planning/Management Study
- 10 Historical Study
- 11 Primary Document – Original
- 12 Primary Document – Translation
- 13 Advertisement
- 14 Popular Culture/History Document
- 15 Journal/Periodical
- 20 Historical Resource Study
- 21 Historical Base Map
- 22 Historical Handbook Text

- 23 Park Administrative History
- 24 Special History Study
- 30 Archeological General Considerations
- 31 Archeological Overview and Assessment
- 32 Archeological Identification Study (Phase I)
- 33 Archeological Evaluation Study (Phase II)
- 34 Archeological Data Recovery (Phase III)
- 35 Archeological Collections and Non-Field Studies
- 36 Socio-Cultural Anthropology Study
- 37 Social Impact Statement
- 38 Ethnohistory Study
- 39 Special Archeology/Anthropology Study
- 40 Field Reconnaissance, Sampling
- 41 Field Reconnaissance, Intensive
- 42 Paleo-environmental Research
- 43 Archeometrics
- 44 Archeoastronomical Study
- 46 Remote Sensing
- 47 Archeozoological Study
- 48 Archeobotanical Study
- 49 Bioarcheological Study
- 50 Historic Buildings Report-Beginning February 1956
- 51 Historic Buildings Report After February 1957-Part I
- 52 Historic Buildings Report-Part II
- 54 Historic Buildings Report-After March 1960-Part III
- 56 HSR-Administrative Data-After December 1971
- 57 HSR-Historical Data
- 58 HSR-Archeological Data
- 59 HSR-Architectural Data
- 61 Historic Structures Preservation Guide-After December 1971
- 62 Historic Structures Report-After October 1980
- 63 Cultural Landscape Report (Historic Grounds Report)
- 64 Ruins Stabilization and Maintenance Report
- 70 Scope of Collection Statement
- 71 Historic Furnishings Report-After October 1980
- 72 Collection Condition Survey
- 73 Collection Storage Plan
- 82 Collection Management Plan (Collection Preservation Guide)
- 83 Special Curatorial Study
- 84 Archeological Field Work, Indeterminant
- 85 Archeological Survey, Indeterminant
- 86 Field Reconnaissance, Minimal
- 87 Underwater Survey
- 88 Resource/Site Based Work, Indeterminant
- 89 Minimal/Informal Site Visitation
- 90 Oral History

- 91 Subsurface Activity, Indeterminant
- 92 Testing/Limited Excavation
- 93 Major Excavation
- 94 Underwater Resource/Site Based Work
- 95 Artifact/Collection Based Study/Report
- 96 Literature Synthesis/Review/Research Design
- 97 Intensive Determination of Surface Characteristics
- 98 Environmental Research
- 99 Geomorphological Study
- 100 Geological Study
- 101 Paleontological Study
- 102 Population Reconstruction
- 103 Rock Art Study
- 104 Architectural Photography
- 105 Architecture Site Plan
- 106 Architectural Floor Plan
- 107 HABS Drawing
- 108 Physical Anthropology Study
- 109 Boat Survey
- 110 Other (Furnish a Keyword in Keyword Category 1 to identify the nature of this study.)

12. KEYWORDS and KEYWORD CATEGORIES

- 0 Types of Resources (or “no resources”)
- 1 Generic Terms/Research Questions/Specialized Studies
- 2 Archeological Taxonomic Names
- 3 Defined Artifact Types/Material Classes
- 4 Geographic Names or Locations
- 5 Time
- 6 Project Name/Project Area
- 7 Other keywords

Enter as many keywords (with the appropriate keyword category number) as you think will help a person (1) who is trying to understand what the report contains or (2) who is searching the database for specific information. Whenever appropriate, record the number of acres studied in a document.

Franklin Park	[4]		[]		[]
Franklin Spring	[4]		[]		[]
Geoarcheology	[1]		[]		[]
	[]		[]		[]
	[]		[]		[]
	[]		[]		[]
	[]		[]		[]

Continuation, see 14.

13. FEDERAL AGENCY National Park Service

14. CONTINUATION/COMMENTS (include item no.) _____

FORM COMPLETED BY

Name Charles LeeDecker Date December 2013

Address The Louis Berger Group, Inc.
1250 23rd, Street, NW
4th Floor

City Washington State DC

Zip 20037

Telephone Number 202-331-7775



THE Louis Berger Group, INC.