

III. Site History

Introduction

The overwhelming acclaim for the grand Beaux Arts-inspired design of the World's Columbian Exposition, held in Chicago in 1893, influenced professionals and the public alike in their appreciation for well-conceived and beautifully designed urban spaces. The success of the fair helped to inspire the "City Beautiful Movement." In 1900 Glenn Brown, Washington architect and national secretary of the American Institute of Architects, as well as others developed proposals and lobbied Congress for the creation of a grand design for the future development of Washington, D.C. At this time Landscape Architect Frederick Law Olmsted, Jr. suggested that the formal design of the historic L'Enfant Plan continued to be an appropriate way to demonstrate the greatness of the nation's capital and its setting.

...great public edifices must be strongly formal, whether they are perfectly symmetrical or not, and this formal quality ought to be recognized on the plan of their surroundings if the total effect is to be consistent. ...where the scale of the general scheme is large, there should be a corresponding simplicity.¹

Brown's efforts inspired the legislation establishing the Park Improvement Commission of the District of Columbia, or the Senate Park Commission, of 1901-1902. Architects Daniel Burnham and Charles McKim and Frederick Law Olmsted, Jr. were the three key professionals appointed to the commission. The acclaimed sculptor, Augustus St. Gaudens, joined later as the fourth member. Three of them, Burnham, McKim, and St. Gaudens, had held major roles in the creation of the 1893 fair. The commission soon came to be called the McMillan Commission, after its sponsor, Senator James McMillan. In the succeeding decades various aspects of the city plan developed by the commission were implemented. As the youngest and longest surviving member of the commission, Frederick Law Olmsted, Jr., became the unofficial guardian of the plan, contributing his expertise to various projects through his membership on the Commission of Fine Arts (1910-1918), the National Capital Park Commission (1924-1926), and the National Capital Parks and Planning Commission (1926-1932). The focus of this section of the report concerns the Lincoln Memorial, or the "western anchor" of the Mall and the centerpiece of the McMillan Commission Plan, its physical history, and the role of Olmsted and others in its development.²

The landscape of the Lincoln Memorial and the surrounding areas in West Potomac Park have a rich and varied history that is defined by six primary periods of growth and development. These include a period of early development between 1791 and 1914, when the tidal shoreline became the landform of the future park and the McMillan Commission planned for the design of the memorial, the reflecting pools, and the Watergate; a period of design development and construction, from 1914 through 1922, that culminated in the dedication of the Lincoln Memorial; a period characterized by the completion of the plans for the grounds surrounding the memorial between 1923 and 1933; and three subsequent periods, when the Lincoln Memorial and West Potomac Park came under the management of the National Park Service (NPS). Each of the NPS periods, which began

in 1933 and continue to the present, reflect the issues and concerns that have influenced changes in the landscape. The first NPS period occurred between 1933 and 1945, the second between 1945 and 1970, and the third between 1970 and 1996.

Early Development 1791-1914

Creation of a Park Site

Prior to the arrival of European settlers, the area that would one day become Washington, D.C., was bordered on the northwest by the Potomac River, where stands of sweet gum, oak, and hickory stood on the flat land. To the southeast where the Anacostia River flowed toward the Potomac, the shoreline was covered in marsh. Subsequently, much of the native forest cover was cleared for the cultivation. When Pierre L'Enfant laid out the new capital on the hills above the Potomac and Anacostia Rivers in 1792, some of these fields, exhausted from a tobacco-based agriculture, had been allowed by their owners to revert to woody growth.

The natural shoreline of the Potomac followed the eastern edge of what would become the Tidal Basin and the northern side of Maine Avenue. The mouth of Tiber Creek, “a slowly meandering stream,” which flowed from the north down Capitol Hill, stretched across the “flats,” near the intersection of present-day 17th Street and Constitution Avenue. At the time that L'Enfant submitted his proposal for the design of the capital city, David Burns had a farmstead and cultivated fields along the north shore of the Tiber, from the mouth to the base of Capitol Hill. Both sides of the Tiber were edged in marshland that was frequently covered by large flocks of waterfowl. Wild oats, reeds, and thickets of berry bushes and other shrubs grew in places along the marsh. On the southern shore of the creek, in the area that would eventually become West Potomac Park, Dr. William Thornton had planted an assortment of saplings and shrubs on about 18 acres to catch the river silt and to establish title to the land. L'Enfant's plan called for Tiber Creek to be widened and adapted into a canal system, designed to carry commerce through the new city.³

When the Washington City Canal was finally completed in 1815, the portion of its route following the old Tiber had the effect of creating a river “island” to the south. The canal, however, failed to develop into a viable waterway. By the 1870s, the neighborhoods along its banks were considered slums, with the canal serving as a fetid sewer opening into the Potomac, rather than a commercial thoroughfare. Among the civic improvement projects of the District's territorial government (1871-1874) were the installation of sewerlines. In 1872, one line was constructed along the canal between 7th and 17th Streets, where it emptied directly into the river. To complete the sewer project, the Board of Public Works filled in and covered over the Washington Canal, a project that was completed by 1873. The land between the canal and the Washington Monument, then under construction, was also made level. Once filled, the old canal route was paved and

named B Street. Only the former lockkeepers' stone house, located at the intersection of 17th and B Street, remained to mark the site of the defunct waterway.

Another feature of the civic improvements program that affected the Potomac River shoreline was the regrading of major streets and thoroughfares in the center of the city, which occurred mostly in 1871. Dirt from the cutting and filling of streets added to the debris and silt normally brought by rain and runoff to the river. By 1870 the Potomac had become so silted and shallow in places that the shipping channels were seriously threatened. At this time, the Congress authorized the Army Corps of Engineers to develop a permanent plan to keep the channels clear by dredging and disposing of dredged materials in such a way as to prevent renewed siltation. The scope of the project, begun in earnest in 1882, included constructing containment barriers (or bulkheads), terminating the Washington channels at the Long Bridge at 14th Street, providing sluicing basins on the west to keep the channel clean, depositing the dredged materials on a tidal "flat" that stretched southeast from Long Bridge to the confluence of the river channels, narrowing the Georgetown channel, and completely filling in the marsh land located between Easby's Point (near the present crossing of the Roosevelt Bridge) and 17th Street.

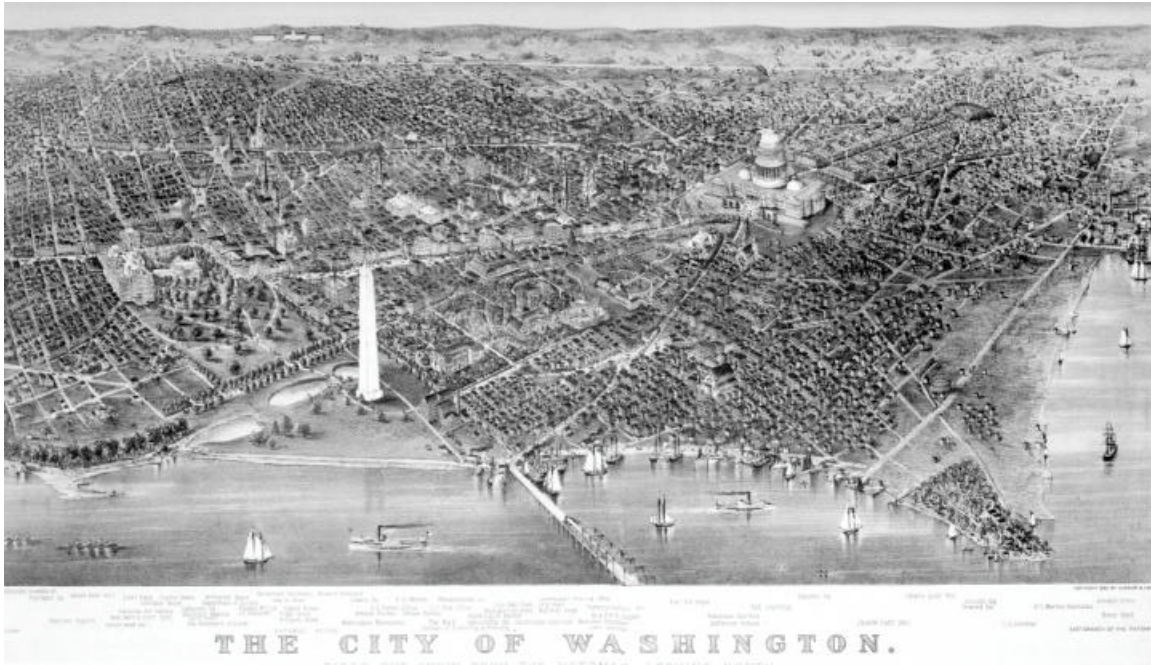


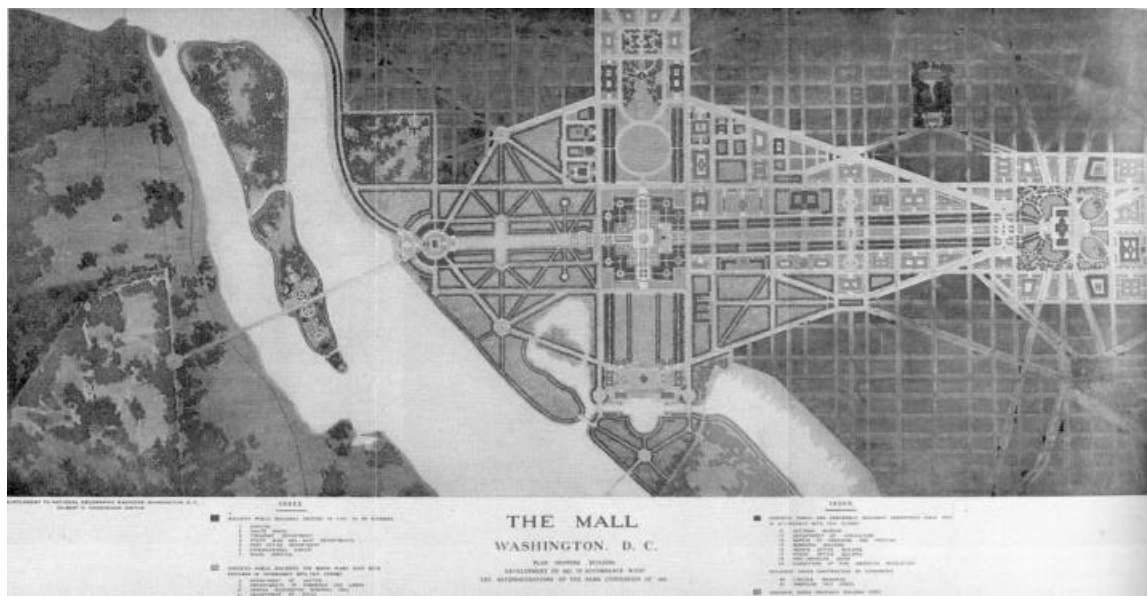
Figure 1 – The City of Washington. Birds-Eye View from the Potomac – looking north. (Drawn by Charles Parsons) Published by Currier & Ives, 1892. Courtesy of Library of Congress, Prints and Photographs.

In 1897 congressional legislation authorized the designation of the 621 acres of reclaimed marsh and "flats" and 118 acres of tidal reservoirs as a site for a public park. By 1901, 31 acres adjacent to the Washington Monument grounds had been filled and subsequently transferred to the Army Corps of Engineers' Office of Public Buildings and Grounds (OPBG) to be turned into the Potomac Park. Some of this filled area had been created from dredged materials, and some from private construction projects in the District.

Contractors who had obtained dumping permits were to deposit clean fill on the “flats.” At the time of the land transfer, the site, with its uneven topography, scattered shallow water collection pools, and “wild growth of willows, grasses, bushes and trees,” was far from parklike. As the reclamation project neared completion, the outline and shape of the proposed park closely reflected the natural and historic pattern of river siltation. By 1907 the area in Potomac Park that would become the site of both the Lincoln Memorial and the Reflecting Pool had been filled to a grade of 12 or 13 feet above sea level. Eventually a base height of 14 to 16 feet would be achieved.

The McMillan Commission Plan

The 1902 report of the McMillan Commission outlined with great thought and care a significant and highly symbolic use for Potomac Park. With the understanding that their recommendations would be based on the L’Enfant Plan, members studied old maps and surveys and examined first-hand the layout of historic sites in tidewater Virginia. In June 1901 the three key members and Charles Moore, commission secretary, traveled to Europe to investigate the cities and sites that would have influenced L’Enfant. Inspired by both the work of Andre LeNotre, particularly at Versailles, and by the example of Rome, where they noted the role of the fountain as the “proper ornament” for the heat of Washington, Burnham, McKim, and Olmsted returned shortly thereafter to formulate a plan for the monuments and parks of the nation’s capital.



Map 2 - Senate Park Commission, Plan of 1901-1902, General Plan of the Mall System, March 1915. Used by permission from the National Geographic Society.

With models, artistic renderings, drawings, photographs, and a text composed by Olmsted and Moore, the McMillan Commission Plan was presented to Congress in 1902. The primary focus of the plan was the placement of public buildings and the development of a public park system. In the monumental core and on the newly reclaimed land along the Potomac, the plan called for the formal treatment, advocated earlier by Olmsted, that followed a continuation of the east/west and north/south alignments established by L'Enfant. In plan view, the design for this area appeared to be kite-shaped. The western end of the extension of the Mall axis was designed mostly by McKim. He placed a series of plazas and fountains on axis to surround the Washington Monument and located the site for a memorial to Lincoln that would be complemented by a pair of basins, one essentially oval and another that had a long, cruciform shape. The reflecting basins, which would also contain several fountains, were set in lawn that was flanked by large groves of deciduous trees. The memorial, a classical structure, with its form and style selected by the commission, was to be constructed on a circular mound, or "rond point," to be placed west of the long basin.

The commission incorporated the long-planned monumental bridge linking Potomac Park and the Mall with Arlington Cemetery into the design. The commission placed it southwest of the memorial to Lincoln. The memorial was also designed to mark the beginning of a regional park system to be planned mostly by Olmsted. A ceremonial watergate united the bridge, the park system entrance, and the memorial, with the whole design of the western end making a gateway to the river and beyond. In general, Potomac Park was to be developed according to "the landscape of natural river bottoms - great open meadows, fringed by trees along the water side."⁴

Although the McMillan Commission Plan used the axes established in the L'Enfant design, the proposed placement of the Lincoln Memorial and the plan for trees along the river would, if allowed to mature, block the open views and vistas to the Potomac outlined in L'Enfant's work. Regardless of the irregularities in the McMillan design, the plan was generally well-received. Although prolonged and often heated, public debate occurred about the commission's proposal for a memorial suitable to commemorate Abraham Lincoln. In 1910 President Taft created the Commission of Fine Arts (CFA) to oversee and guide the implementation of the McMillan Commission's proposals. Daniel Burnham and Frederick Law Olmsted, Jr. were among the first to serve on the Commission of Fine Arts.

During the course of the debate over various aspects of the report, the Office of Public Buildings and Grounds (OPBG) worked to improve the appearance of West Potomac Park, the area of reclaimed land stretching from Easby's Point to 14th Street, SW. Although thousands of cubic yards of earth continued to be deposited in the park, the OPBG worked throughout 1906 and 1907 to complete the construction of a riverside drive, bridle paths, and footpaths. These extended along the shoreline from 17th Street, to the Tidal Basin, then turned northwest to the foot of 26th Street. The office consulted with Frederick Law Olmsted, Jr., about tree planting along a portion of the route. To supplement the existing willow trees, Olmsted recommended planting in grove-like groups "black and yellow birches" (*Betula lenta*, *Betula alleghaniensis*), "white and

laurel-leaved willow” (*Salix alba*, *Salix pentandra*), “Sycamore and American Elm” (*Platanus occidentalis*, *Ulmus americana*), and even pecan trees (*Carya illinoensis*). For straighter vistas, he advocated linden trees (*Tilia* sp.). However, the route appears to have been lined primarily with elm trees. In 1908 Congress also authorized the extension of B Street to the Potomac at 26th Street, which would eventually form the northern boundary of the park. Finally, during 1911 and 1912, the interior of West Potomac Park was drained and graded.⁵

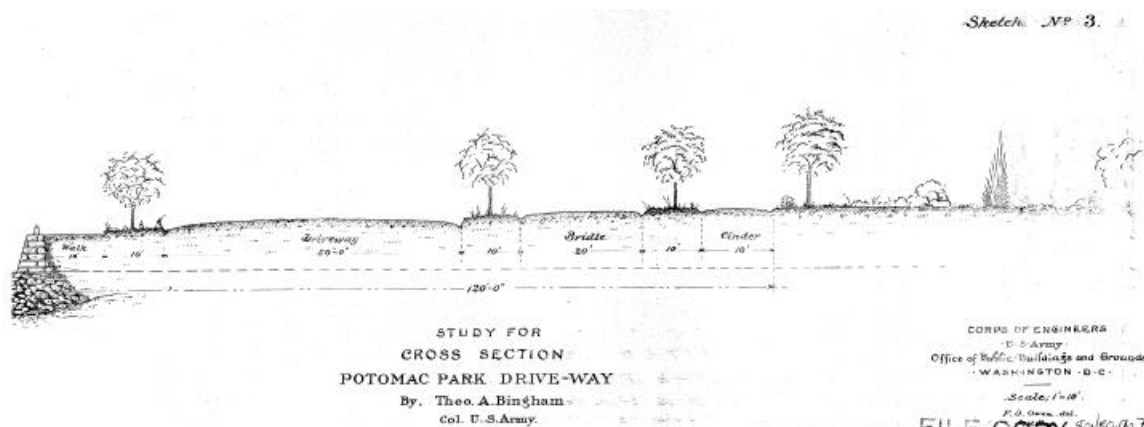


Figure 2 – Cross section of proposed Potomac Park speedway and trail system, c. 1907. NPS Map 801/801067.

By 1914 the McMillan Commission’s site for the memorial to Lincoln and the corresponding long basin stretched for nearly a mile westward from the Washington Monument. It encompassed almost 700 acres and had been landscaped with scattered trees and shrubs. It had also been improved by the addition of several tennis courts on the north and organized with a simple grid pattern of drives. A narrow section of B Street that was lined with small trees formed most of the northern boundary, while mature tree-lined 17th Street formed the eastern boundary. In May 1914 the Commission of Fine Arts approved the planting done by the OPBG in the area between B Street and the memorial site and in the area set aside for the basins. Any additional fill required to develop the site further would have to be obtained from adjacent building and construction projects occurring in the vicinity.

Early Design Concepts

The Lincoln Memorial Commission was established by Congress in 1911, and a competition for the design of the memorial was announced the same year. At this time the Commission of Fine Arts strongly recommended the West Potomac Park site proposed by the McMillan Commission.

For a long distance in every direction the surroundings are absolutely free for such treatment as would best enhance the effect of the memorial. The fact that there are now no features of interest or importance, that everything is yet to be done, means that no embarrassing obstacles would

*interfere with the development of a setting in extent and perfect design, without compromise and without discord.*⁶

*It is impossible to overestimate the importance of giving to a monument of the size and significance of the Lincoln Memorial complete and undisputed domination over a large area, together with a certain dignified isolation from competing structures, or even from minor features unrelated to it. Upon no other possible site in the city of Washington can this end be secured so completely as upon the Potomac Park site.*⁷

The design submitted by Henry Bacon, a protege of Charles McKim, was selected by the Lincoln Memorial Commission. Bacon's drawings closely followed the design proposals for the structure in the renderings submitted in the McMillan Commission's report. Shortly thereafter, Bacon was commissioned to be the project's architect. Bacon himself summarized best the appropriateness of the site in West Potomac Park in his statement on the overall design intent.

*...I believed that the site in Potomac Park was the best one for a monument to Abraham Lincoln, and since devoting my time for four months to a study of its possible development, I am certain of it. Terminating the axis which unites it with the Washington Monument and the Capitol, it has significance which that of no other site can equal, and any emulation or aspiration engendered by a Memorial there to Lincoln and his great qualities will be immeasurably stimulated by being associated with the like feelings already identified with the Capitol and the monument to George Washington. Containing the National legislative and judicial bodies we have at one end of the axis a beautiful building which is a monument to the United States Government. At the other end of the axis we have the possibility of a Memorial to the man who saved that Government and between the two is a monument to its founder. All three of these structures, stretching in one grand sweep from Capitol Hill to the Potomac River, will lend, one to the others, the associations and memories connected with each, and each will have its value increased by being on the one axis and having visual relation to the other.*⁸

Although mostly concerned with the architectural details, Bacon also paid attention to the layout and the arrangement of landscape features at the Lincoln site. Shortly after he was named project architect, he wrote to Frederick Law Olmsted, Jr. to request the specifications shown on the McMillan plan for the "avenue" between the trees west of the Washington Monument and along the proposed long basin, or canal. In 1912, Bacon also indicated his interest in the design of the landscape when he testified to the Lincoln Memorial Commission that he intended to use either elms or lindens in the planting plan. At that time, Commission members also suggested horse chestnut and pin oaks (*Aesculus hippocastanum*, *Quercus palustris*). This concern for the types of trees to be planted also anticipates the Commission of Fine Art's interest in the landscape setting for the memorial in deliberations between 1911 and 1932.

Throughout the design history of the Lincoln Memorial and West Potomac Park, various government organizations have had oversight in the areas of planning and design. In the early years of the development of the Lincoln Memorial, the Commission of Fine Arts had direct influence on all aspects of design in the memorial project. Layout, spatial relationships, planting, and site features were often conceived, shaped, and reviewed by the landscape architect member of the commission prior to approval by the full commission. Subsequently, other planning agencies and government agencies, such as the National Capital Parks and Planning Commission (NCPPC) and the National Park Service (NPS), also became responsible for the Lincoln Memorial and its grounds.⁹

As the first landscape architect on the CFA and the only surviving member of the McMillan Commission, Olmsted exercised a unique influence over the development of the Lincoln Memorial grounds, serving as arbiter of design decisions regarding all aspects of the treatment of the landscape.

...as the only present survivor of the designers (indeed as the one who next to McKim was most responsible for the treatment of the Mall plan) I should hate to occupy merely the position appropriate to a member of the Commission of Fine Arts as such, and to let some other fellow shape the plan to suit his own ideas, even though they might be just as good as mine. It is a case where I can perfectly well do my part in designing from the background without pay or official recognition, because I had my recognition as a member of the old Park Commission, and a continuance of what was originally unpaid work may very properly itself be unpaid. Indeed I would rather do it without personal compensation, because it would put the whole thing on a different plane if after McKim and the rest were dead I began to draw pay for work which we all undertook together as a matter of public spirit. But to sit on the side lines and let someone else overhaul the plan would be rather bitter.¹⁰

In June 1913 Henry Bacon and his staff prepared for Olmsted's review drawings of the layout for the memorial grounds and an adjacent river road. In his proposal, Bacon "endeavored to follow out the old Park Commission's plan."¹¹ He offered two schemes for the road, trying to avoid the necessity for a high retaining wall along the river. By August 1913, one of these schemes showed "the river roadway running under the proposed bridge to Arlington." Even though Bacon had refined his original designs according to Olmsted's suggestions, he continued to send his revisions to Olmsted for review. Olmsted had stipulated that the design should avoid the use of heavy retaining walls around the river edge, because walls would probably not be funded with the construction of the memorial. He also noted that the "wide roadway around the Memorial" should have its outer edge lower than its inner to prevent the appearance of a depression in the land. Bacon followed another of Olmsted's suggestions in his placement of the walks along the radial roads. Olmsted proposed that Bacon not border "the radial roadways immediately by sidewalks," but carry "the tree planting out to the line of the roadway itself" and put "the parallel walks behind the first row of trees."¹²

Development, Planting, and Dedication 1914-1922

Refinement of an Overall Landscape Plan

The groundbreaking ceremony for the Lincoln Memorial was held on February 12, 1914, Lincoln's birthdate. Construction of the foundations, which followed soon after, consisted of a "mass of concrete and steel," rising high above the ground to a height of a fair-sized building, all of which would be beneath the earth when the building was finished.¹³

After the pilgrim has grown accustomed to the notion that the foundations aren't really the superstructure, his attention is attracted by the apparent chaos which exists. Scaffolding, heavy timber, ropes scrapes of iron and odds and ends are everywhere. Workmen move around apparently without a definite plan. It is thus when a project is nearing completion.¹⁴

The laying of the cornerstone and construction of the superstructure began in February of the following year.

Throughout the various phases of the building's development, Bacon attempted to be involved with all aspects of the memorial's design, including landscape and setting. The concept for Bacon's plan for the reflecting pools came directly from the cruciform design



Figure 3 - Construction of approachway, Dec. 12, 1918. U.S. Navy photo. MRC 1-58.

shown on the McMillan Commission plan. The McMillan design was apparently Charles McKim's concept, which was inspired by the "long tree-lined stretches of water" found in the "formal landscapes at Versailles, Fontainebleu and Hampton Court." In the commission's design the pool's length was some 3,600 feet long and 320 feet wide. In 1911 Bacon described his concept for the pools:

To the east of the Memorial extending towards the Washington Monument is proposed a large lagoon which will introduce into the landscape an element of repose and beauty, and in its waters the reflection of the Memorial will add to its tranquility and retirement.

During the spring and summer of 1915, guidelines for tree planting and establishing grades in the pool area were developed in preliminary sketches by the OPBG at the urging of Colonel Harts, who was both officer-in-charge of the OPBG and secretary to the CFA. All this work was done under the personal supervision of Olmsted. At this time, Olmsted and Bacon reviewed the original McMillan Commission design of the two basins and Bacon's interpretation of it. In staking a layout of Bacon's proposed plan on the ground, Olmsted perceived a problem with the relatively shorter length and the broader width of the long cruciform-shaped pool indicated in Bacon's design, and proposed to the CFA that this pool be made longer and narrower. Although Bacon felt that the cross arms should be eliminated, his opinion did not completely sway Olmsted. Olmsted's rationale for elongating Bacon's design was based on his understanding of the historic pools, lagoons, canals, and basins visited by the commission during their 1901 European tour. Olmsted thought the proportions of the canal relative to the vista at Fontainebleu were the most appropriate example for the Lincoln Memorial reflecting pool. He also felt that the relationship between the terraced rows of trees and the canal at Nymphenburg in Munich were also worthy of consideration.¹⁵

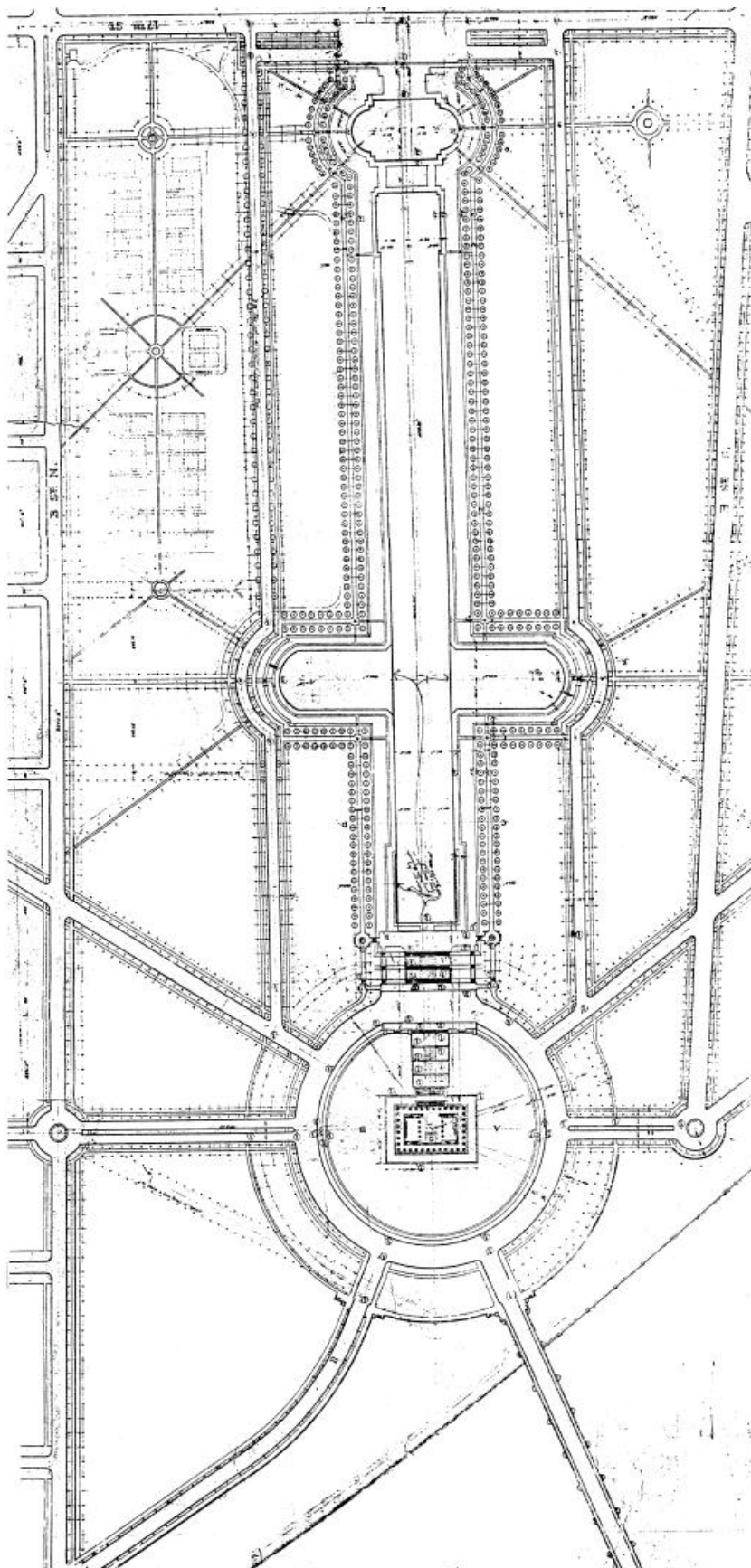
Olmsted had not only worked with Bacon on these issues, but also with Colonel Harts and J.G. Langdon, OPBG landscape architect and former employee of the Olmsted firm, to develop a plan with and without the cruciform for this area. Key to the plan for a broad corridor along the main axis was Olmsted's recommendation that the inner row of trees, which were located on each side of the basins, would be 320 feet apart, rather than the 300 feet shown in Bacon's plan. The 160-foot width of the basins would in turn occupy half of the distance between the trees. The spacing between the pairs of parallel rows of trees was set at 40 feet. Within these rows Olmsted specified the placement of individual trees in positions approximately 25 feet apart, with some adjustments given for the those planted along the curved portion of the smaller basin planned for the eastern end near 17th Street. Olmsted and the others recommended the previously established grade of 14 feet for the main axis and established a range of 14 to 16 feet for the grade on the cross arms. They selected a 280-foot width for this axis. The proposal did not provide for the excavation and installation of the cross arms portion of the pool, but it did provide for the trees outlining the cross arms to be planted to determine the spatial effect. Their plan also called for temporary drainage ditches to provide proper growing conditions for the young elm trees that would be planted there. Olmsted recommended "English elms," known then as *Ulmus campestris*.¹⁶

In accepting the recommendations of Olmsted, Harts, and Langdon, the CFA determined the need to hire a landscape architect to execute plans for the entire park area between the Lincoln Memorial and the Washington Monument. Olmsted suggested Landscape architect C.E. Howard of Syracuse, New York, and the commission authorized Colonel Harts to offer Howard this position. The announcement of Howard's contract described his job as assisting in the preparation of plans for the development of the circular area around the memorial, including the terraced levels, and a planting plan for both the circle and the reflecting pool axis.¹⁷

Olmsted continued to pursue finalization of the selection of "English elms" "for planting the formal vistas in connection with the Lincoln Memorial. . . ." He would not consider any other tree for use near the memorial. He strongly believed that the English elm would satisfy several design requirements with "its habits being exactly right for the purpose, and its foliage harmonizing with that of the American elm which is designed for use around the Washington Monument and to the eastward." With the assistance of the Olmsted firm, OPBG located the elms in England and ordered 500 of them from Dicksons nursery in Chester.¹⁸

During this period architect Henry Bacon worked on other aspects of the grounds surrounding the Lincoln Memorial. In July 1915 he prepared studies on the "cheek blocks, steps and flagging." In December Bacon demonstrated his continuing interest in the final design for the grounds by offering for the CFA's approval an alternative to Howard's plans for the eastern approach. After a discussion of the design issues that extended over the course of several meetings, the CFA instructed Howard to develop a "skilled general plan" incorporating elements of the designs submitted by both Howard and Bacon. Howard's drawings, slightly modified by Olmsted, were approved by the commission in the fall of 1916. Elements of the plan included widening north and south 23rd streets, limiting the roadways around the memorial to one rather than the two originally proposed, making the one circular roadway into a narrow route only 60 feet wide, and establishing a tree-filled perimeter consisting of five curving rows of deciduous tree with selected openings in the rows.¹⁹

In 1915 and 1916, as construction of the walls, colonnade, columns, and main cornice neared completion on the memorial itself, 398 of the English elms ordered from England were planted in four parallel rows flanking the vista between the Washington Monument and the Lincoln Memorial. The other 104 trees were planted south of the parallel rows. As part of the planting, drain tile for improving soil conditions was also laid in this area. In this same year Bacon completed the design for the raised terrace and the wall surrounding the memorial and for the approachway, or main walk, leading up to it. The fill used to create the terrace and form the visual base for the memorial was brought by temporary railway from the Interior Department construction site at 18th and F Streets, N.W., and placed around the foundations of the Lincoln Memorial. Once the area behind



Map 3 - 1916 C.E. Howard plan of "Potomac Park Improvements" from B Street N. to B Street S. and 17th Street to the Potomac River. NPS Map 801/80095.

the raised terrace wall had been filled, the top was sodded and a gravel walkway laid around all four sides of the terrace level. Bacon planned for these gravel and cobblestone walks to serve as drainage along top of the raised terrace.²⁰

Efforts to Complete the Park

When the superstructure of the memorial was completed in 1917, efforts were underway to complete the overall landscape setting for the Lincoln Memorial. A new bulkhead, or seawall, which followed the shoreline for approximately 3,000 feet, was constructed along the river between the Lincoln Memorial and the Highway Bridge at 14th Street. The design called for filling in the shallow shoreline of the Potomac behind the seawall to extend the shoreline west of the Lincoln Memorial. The proposed extension would create more room for the full effect of the “rond point,” or end point of the east/west axis, which consisted of the Lincoln Memorial, its base, the circular terrace and roadway. Grading of the radial roadway northeast of the Lincoln and of the circular road around the memorial was also initiated, as was the preparation of the soil for the lawn on the circular terrace. Much of this work was completed in 1919. However, the concrete gutters, sidewalks and curb were not completed until 1922.



Figure 4 – Grading operations around the memorial, April 17, 1921. MRC 1-60.

At the same time, the OPBG worked to improve other sections of West Potomac Park and to prepare the area for the completion of its development. In 1915 improved portions of the park benefitted from a flock of grazing sheep brought there to fertilize and to promote the establishment of the lawn. On the unimproved interior portions, sod was lifted to create beds for the planting of approximately 1,500 trees and 3,100 shrubs. Nurseries were also established. On both sides of 17th street, sidewalks were installed between existing rows of American elms (*Ulmus americana*), planted in 1907. When they started to excavate the pools, several of the 17th Street trees were removed along the east and west sides of the road to provide an opening for the visual extension of the east/west axis of the Mall into West Potomac Park. The relatively narrow opening limited the view zone to the width of the new Reflecting Pool. The old Washington Canal lock keeper's house, which extended into the southwest portion of the intersection of 17th Street and B Street, was relocated 49 feet to a new site west of the corner to improve traffic circulation.

Other changes in the park occurred between 1916 and 1918 as a result of World War I. To make a site for the construction of temporary government office buildings, the area between the proposed basins and B Street North was cleared of 23 tennis courts and all existing shrubs and trees, including some 5,000 young trees. By March 1918 two three-story structures had been constructed. These were occupied by the War Department and were intended for use for the duration of the war. Shortly thereafter, additional structures were put up in the same area. Collectively these were known as the Navy and Munitions Buildings. A parking lot for automobiles was laid out in the area between the buildings and the northern most row of elm trees. A post-and-wire fence enclosed the lot with a line of fast-growing poplars (probably *Populus nigra* 'Italica') providing some screening.²¹



Figure 5 - Finished grading of circular road and partial completion of radial roads, 1921. MRC 1-62.

Planting Plan for the Inner Circle - East Front

In 1919, with all structural work on the memorial nearing completion, the OPBG assigned responsibility for the development of a landscape plan for the circular terrace around the Lincoln structure to staff Landscape Architect Irving Payne. Bacon's original concept for the vegetation around the memorial was noteworthy for its lack of specifics. In 1911 Bacon had merely stated that

*It will be conspicuous from many points of view and by means of openings in the encircling foliage, will be seen in its entirety from six different monumental approaches. Its whole eastern and western facades will be exposed to view, the former towards the Washington Monument, and the latter towards the Potomac River and the hills of Arlington.*²²

Without specific direction, Payne attempted initially to design a treatment that complimented Bacon's concept. Payne eventually submitted nine planting plans for the circular terrace to the Commission of Fine Arts for consideration.

The OPBG first sought approval for Payne's design at a meeting of the Commission of Fine Arts, held at Cornish, New Hampshire on September 20, 1919. At this meeting, James Greenleaf, Olmsted's successor on the CFA, outlined his objections to Payne's plans. Greenleaf's statements were consistent with the character of his work on the landscape for large, country estates. A master of spatial composition, Greenleaf frequently employed "seemingly random spacing" to soften rectilinear plans in his estate designs. He introduced this approach to the Commission of Fine Arts and later to the Arlington Memorial Bridge project, where he would serve as consulting landscape architect. Greenleaf apparently felt that Bacon's original landscape design for the planting around the memorial, which was based on the McMillan Commission plan, and Payne's interpretation of Bacon's work, was inappropriate for the architectural character of the completed building.

According to Greenleaf, the circular terrace called for "... a strong rugged type of informal planting, with irregular rounded foliage masses, in general about the base of the retaining wall."²³

*[A]round the foundations and platform terrace there should be bold, strong outlines of evergreen, which do not spire up against the masonry, but form a big, broad outline... The planting should be begun right, in a small way, so that the real results, showing the grounds fully developed and the planting of trees, etc., well grown would show for not perhaps fifty years.*²⁴

Greenleaf noted that yews (*Taxus* sp.) can reach a width of 25 feet and a height of nearly 15 feet.



Figure 6 – Mature boxwood and yew shrubs on southeast side of Lincoln Memorial, August 1922. MRC 2-16.

Greenleaf's specific recommendations included using the six or more large yews of differing varieties and the large "box bushes" (*Buxus sempervirens*) indicated on Payne's plan. However, his views differed from Bacon's view and Payne's interpretation in several key areas. Greenleaf called for "rugged," seven-foot wide hedges flanking the sides of the steps. Mass planting shown by Payne should be "eliminated so that the edge of the Memorial at each end should be straight, but there should be some good background." A bushy vine growth planted along the retaining wall should be used to "break up the diversion of lines."

The 1919-20 planting plans submitted after the Cornish meeting reflected these and subsequent discussions. These plans showed the locations of masses of shrubs and were based in part on the availability of large scale plant material known to be growing on other federal reservations located throughout the city. The use of boxwood and English yews was approved for the area immediately adjacent to the retaining wall on the east, and at the southeast and northeast corners. Bacon continued to insert his ideas on various landscape treatments. One of his ideas entailed the addition of a large spreading vine covering the pink granite surface of the raised terrace wall. To illustrate this concept, Bacon added to the record a photograph of an English manor house overwhelmed with vines. At one time, Bacon objected to the use of boxwood in the planting design. He apparently changed his mind after reviewing Payne's installation of the planting plan at the site in July 1920. Bacon then expressed his preference for large box shrubs rather than the yews already planted on opposite sides of the entrance steps. The Commission

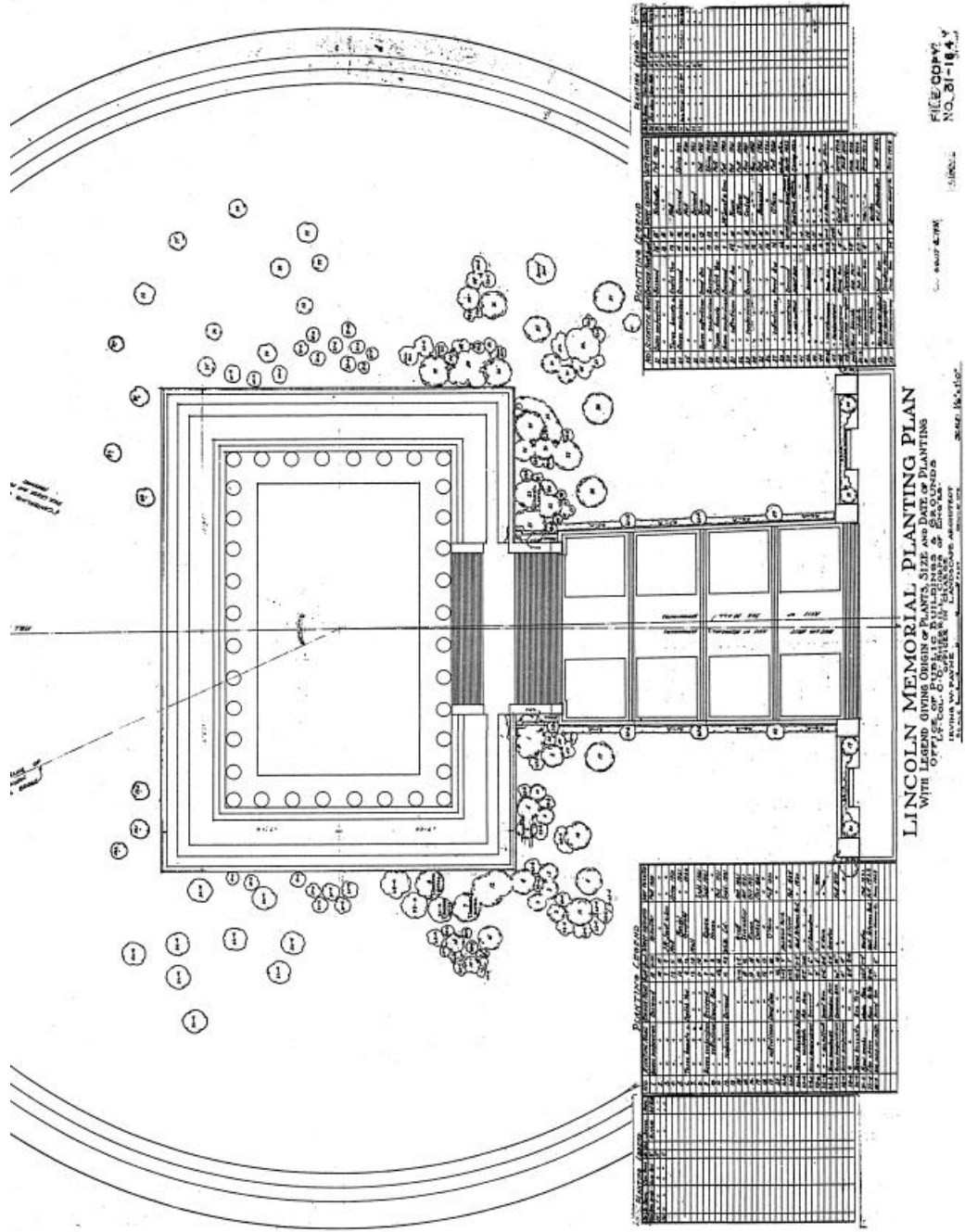
recommended that the two yews in question, being of thinner habit, be replaced by 12-15 foot high boxwood “to secure the desired effect of strength and solidarity (by a heavier leaved material).”²⁵

Throughout the process, Greenleaf and the CFA continued to further refine and exercise control over the planting plan. The Office of Public Buildings and Grounds started to prepare beds inside the inner circle of the memorial grounds in December 1919, with the intention of planting some 44 large specimens of boxwood and 6 holly (*Ilex opaca*) trees shown on the plans. In the spring of 1920, the commission specified that only mature, large-scale specimen shrubs should be selected for the Lincoln Memorial. However, by the end of the year, only 15 specimen boxwood shrubs and one yew had been installed on the eastern side. Not until the fall of 1922, after the memorial’s dedication, were “10 additional boxwood trees (known then as *Buxus sempervirens* ‘Arborescens’), 164 linear feet of boxwood hedge (consisting of dwarf boxwood, or *Buxus sempervirens* ‘Suffruticosa’) and 200 trailing vines planted.”²⁶ Also, at that time, ground on the south side of the memorial was filled in, brought up to grade, and then prepared for lawn. Subsequently, the CFA called for different treatments on the west side and at the southwest and northwest corners, recommending the use of pines, such as Swiss stone (*Pinus cembra*), Scotch (*Pinus sylvestris*), mountain and mugo pines (*Pinus mugo*), be used.

Concepts for the West Side

Although the OPBG landscape architect was also charged with developing planting plans for the west side of the memorial, the design concept that was finally approved was Greenleaf’s. Greenleaf advocated both coniferous and glossy-leaved evergreens planted in distinct groupings for the west side. One combination he suggested, which differed from the east side, was magnolia and pine planted together with the idea that the pine would be removed when the magnolia matured. He envisioned *Magnolia grandiflora*, with its year-round beauty and upright, broad-leaved character, providing a strong background for the rear of the memorial. Magnolia, however, was not so strong as to interfere with a good view of the memorial from Arlington, and would serve as a foil to the already approved plantings for the east side and corners. He felt magnolia to be especially effective in relation to the large scale vista from the proposed parkway “sweeping from the northwest” designed to link Rock Creek with Potomac Park and the Lincoln Memorial. The CFA approved of his suggestion, that “magnolia trees should be planted in the vicinity of the inner edge of the great circle,” which would eliminate the need for evergreen planting at the northwest and southwest corners of the retaining wall. The commission also adopted a 2 to 1 slope for the lower terrace level near the entry to the memorial at this time.

Irving Payne’s interpretation of these recommendations did not completely satisfy Greenleaf. Payne did incorporate “numerous openings through a grove of trees, which when observed from various positions on the “Great Terrace,” or from the road bounding the “Great Circle,” opened up everchanging vistas.” However, his schemes showed the



Map 4 - Irving Payne as-installed planting plan for first phase of the Lincoln Memorial foundation planting, 1920-1928. Courtesy of the National Archives.

trees and shrubs far away from the retaining wall in an arrangement that was too regular and geometric. Greenleaf continued to struggle to convey his ideas to Irving Payne. He envisioned plantings with numerous bays and indentations for informality with views of the Lincoln Memorial from the northwest and southwest preserved. At the same time, Greenleaf believed that certain vistas should be visible from the colonnade on both the north and south sides of the memorial.

Payne's drawings for the west side were finally approved by the commission in January 1920. In them, as Greenleaf had suggested, *Magnolia grandiflora* served as a backdrop to the structure. In addition, a large, wedge-shaped, open section separated plantings along the northwest and the southwest segments of the western retaining wall. Transition plants, uniting the vegetation on both the east and west sides, consisted of American and English hollies (*Ilex opaca* and *Ilex aquifolium*) and mugo pines. However, the design for the west side was put aside for several years until construction of the Arlington Memorial Bridge was near completion in 1931-1932. When the plan was finally implemented, James Greenleaf no longer served on the CFA, but was the consulting landscape architect for the Arlington Memorial Bridge Commission.²⁷

Efforts to Complete the Design

Between 1920 and 1921, the project of filling behind the new seawall west of the Lincoln continued, as did the grading for park grounds located outside of the circular roadway. In January 1921 two plans for the completion of the circular roadway were submitted. One called for a 9-inch crown, using no catch basins or curbing, while the second proposed an 11-inch crown without a curb. The CFA approved the concepts of both designs with the understanding that the slope differential between the inner and outer edges of the roadways were to be designed to keep the road from appearing sunken. Shortly thereafter, Congress appropriated funds for the construction of roads and walks around the Lincoln Memorial. The final design for the circular roadway called for a 60-foot bituminous macadam road, with curb and gutter and edged by a fifteen-foot sidewalk of "scrubbed concrete." Catch basins were designed, but apparently not installed at this time. Twenty-third Street, NW was designed with a grassy median down the center. The sidewalks paralleling this radial road were set back from the curb and constructed of "smooth concrete."²⁸ While these plans were being formulated, examination of the recently constructed masonry approaches and the terrace around the memorial revealed that these were settling at a faster rate than anticipated by the project's engineers. As a result, the original slab foundations were removed, and new foundations, built to bedrock, were installed in March 1921. The concrete sidewalks and curbs around the inner circle and on the east side of the outer circle to north and south 23rd Street were completed in the fall of 1922. The radial roadway in the southeast quadrant was also prepared for construction. This road would thereafter be named French Drive for Lincoln sculptor Daniel Chester French.

Both Bacon and Daniel Chester French complained that dirt and dust from the various grading operations around the memorial in 1921 had soiled the sculpture of Lincoln.

Regardless, all grading, planting, and road improvements on the west side of the building were temporarily suspended pending funding by Congress for the development of the Arlington Memorial Bridge. Design of the bridge's eastern abutment and the layout for the riverside drive connecting Rock Creek Park and the route to the "Speedway" along the Potomac River was expected to include the landscape treatment for the west side of the Lincoln Memorial. In November 1921 Bacon acquiesced to limited illumination of the memorial by specifying that streetlights on the traffic circle should be the sole source of exterior lighting. He recommended the Potomac Park lamppost and globe. In July 1922 he provided sketches of a lamppost with a spherical globe and the designs for two small memorial fountains. He had designated on his plan for the west end of the pool that the fountains should be located near the concrete steps leading down from the circular roadway. His streetlight design was not selected for the circle and the fountains were never installed. However, the need for lighting the exterior of the Lincoln Memorial would not be revisited until 1926.

The Reflecting Pool

During 1919 and 1920 the CFA undertook the finalization of the design for the reflecting pools, including the grading and planting plans for the basins and the adjoining areas. The CFA advocated an initial shallow excavation, at a temporary level, mostly for ease of maintenance. Once the official depth was determined, a permanent treatment would be designed. These temporary measures may explain the ditch-like appearance of the pools seen in some of the early photographs of the area. Excavation for the pools began in November 1919, with the excavated earth removed for use on the creation of the circular terrace around the memorial. As with the filling of the raised terrace, a temporary and "small narrow gauge industrial railway" carried the fill dirt across the site from the pools to the inner circle. Elimination of the cross arms was discussed again, with the commission generally in favor of their removal from the design. Bacon continued to be against the cross arms, as well. Olmsted preferred to reserve judgement until after the long section of the larger pool had been installed.²⁹

Members did note that the unsightly temporary war buildings on the north side of the reflecting pool prevented any construction of the cross arms on that side. In fact, the increasing permanence of the temporaries seemed to be in direct conflict with the open design originally envisioned for the monumental core.

In a vista over two miles long, these three large structures [Capitol, Washington Monument and Lincoln Memorial] so placed that they will be forever free from proximity to the turmoil of ordinary affairs, and the discordant irregularity of adjacent secular buildings, will testify to the reverence and honor which attended their erection, and the impression of their dignity and stateliness on the mind of the beholder will be augmented by their surroundings, for which we have a free field for symmetrical and proper arrangement.³⁰

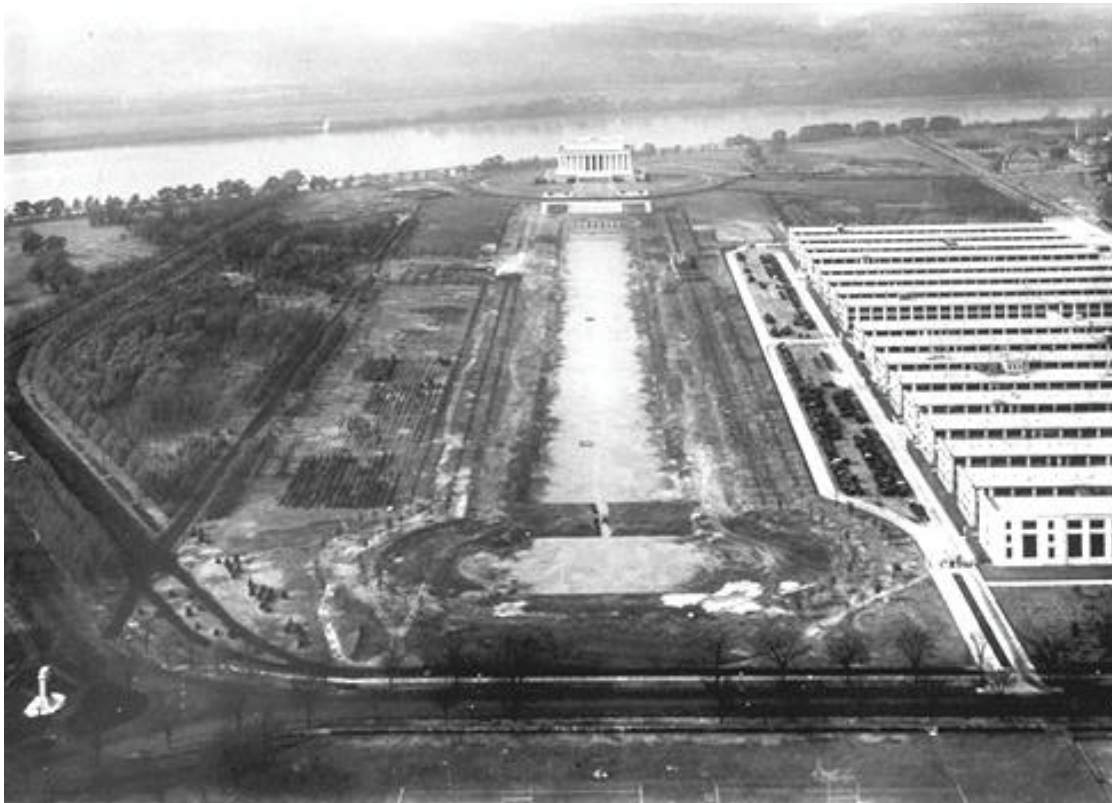


Figure 7 – View from Washington Monument showing ditch-like appearance of pools and temporary nursery on the south side of the pools, 1921. MRC 1-53

Olmsted's earlier opinions seem to have had the most enduring influence on the commission's decision to construct only the long section, to lengthen the basin, and to eliminate the squared-off, or jogged, portions of the pool's outline on the western end. The cross arms remained on the plan and were to be delineated, where possible, on the ground by the tree planting. In revisiting this issue, Greenleaf viewed the cross arms as a way to force the removal of the temporary buildings, although he acknowledged that the arms were out of scale with the design as it existed on the ground. In November 1920 the commission finally approved the extension of the western edge of the basin's coping. They extended the pool by an additional 20 ½ feet to a point located 55 feet east of the bottom steps leading up from the basin toward the memorial. The length of the long pool thus became 2,000 feet; the length of the transverse pool was 300 feet.

In June of 1921, the CFA determined the design of the coping and edge for the reflecting basin and the smaller basin sited immediately west of 17th street. The CFA approved a 3-foot wide coping that was 9 inches thick with a ¼ inch radius edge, as well as a pool depth of 2-3 feet. The coping was to be flush with any adjacent sidewalk and grass areas, so that contiguous materials would appear to be a continuation of each other. Later that year granite from Mt. Airy, North Carolina, was selected for the coping. Excavation, laying of conduit, and the foundation for the coping were all completed in 1921. Water supply and an extensive drainage system for the pool and the surrounding area were also incorporated into the completed design. Although D.C. public water supply served as the

main water source, additional quantities came from rainwater runoff directed to the pool from the memorial and its approaches. The coping foundations were supported by 20-foot piles standing on bedrock, with reinforced concrete beams supported by the piles. The stability from the piles and beams was used to mitigate the effects of any future settling on the coping. Through trial and error, contractors working with the OPBG developed a water-proof base consisting of an asphalt coated membrane, slate, and concrete tile. The dark color of the tile created the illusion of greater depth and a more profound reflection.

Although installation of fountains for the smaller pool was not undertaken at this time, the planned design for the fountains was to incorporate

*...a huge water display with two center jets sending water high into the air and 150 side jets around the edges with water issuing toward the center. An electrical display is planned which will illuminate the fountains at night.*³¹

However, neither pool was completed in time for the memorial's dedication in May 1922. The larger basin was filled with water for the first time the following December. Concrete walks around the pools were only partially completed by June of 1923 and were only fully installed by 1924. To complete the effect of the long, uncluttered vista, over 550 trees and shrubs were removed from the area south of the reflecting pool. Grading and seeding on both the north and south sides also took place at this time. Once the pools were complete, maintenance personnel planned to flood the surfaces when ice formed on the pools to create two skating rinks for the public's use.³²

Dedication of the Memorial

Although the grounds surrounding the Lincoln Memorial had not yet been fully developed by the time of the official dedication on May 30, 1922, many of the key elements were in place. The raised terrace, approachway, and reflecting pool steps had been constructed and subsequently secured to bedrock. Mature specimens of boxwood and yew had been planted in groupings along the east or front facade. These irregular masses of shrubs marked the inside corners at the raised terrace steps and wrapped the outside corners on the northeast and southeast. Four large box shrubs had been planted at the entrance to the approachway in the two walled beds surrounding the entry benches. Two additional boxwoods flanked the outside pedestals. However, the low box hedge proposed for the area behind each bench had yet to be planted. Small, no-yet mature elms lined the two paths that paralleled the reflecting pool and the transverse, or oval, pool on the eastern end. Openings on both the north and south side had been created in the rows of trees for the future cross arms section of the reflecting pool. Trees on the south marked that uncompleted segment, while on the north the presence of the parking lot for the temporary Navy and Munitions buildings prevented such a planting.³³ Neither pool held water. Fountains and walks along the pools had yet to be installed. The coping on the edge, however, did provide some hard surface for the some 50,000 people that had gathered to view the dedication from this area.



Figure 8 – Dedication festivities for the official opening of the Lincoln Memorial, May 30, 1922. MRC 1-30.



Figure 9 – Partially planted east side of Lincoln Memorial during the dedication ceremony, May 30, 1922. MRC 1-31.

At the dedication, invited guests were seated on the approachway levels, while other honored individuals were seated on chairs that had been set up on the top of the raised terrace. Here along the terrace wall, the organizers, the Lincoln Memorial Commission, had installed a temporary guardrail. From their vantage point, these guests could see that the arrangement of walks and drives around and emanating from the circular terrace was not yet complete. The circle drive had been paved and the sidewalk had been installed around the eastern segment of the inner edge as far as the 23rd Street radial. Twenty-third Street, N.W. and, the as-yet unnamed, Bacon Drive had also been paved and improved with sidewalks along each side. Much grading and seeding for lawn remained to be done as well. Completion of the radial roads and walks, the reflecting and transverse pools, the walks along the pools, and the installation of streetlights would occur shortly thereafter. Planting on the west side of the memorial and the development of the Watergate and the roads connecting the area to the proposed memorial bridge and the regional parkway system would not occur until the beginning of the next decade.³⁴

Completion of the Lincoln Memorial Grounds 1923-1933

Completion of Specific Projects - The Rainbow Pool

In May 1923, The American Institute of Architects (AIA) organized a tribute to Henry Bacon that was held at the Lincoln Memorial. The AIA honored Bacon with a dinner under a tent set up near the smaller basin. A triumphant procession along the full length of the pool, with Bacon riding on a ceremonial barge, followed the dinner. At the Lincoln steps, Chief Justice William Howard Taft, who had served as chair of the Lincoln Memorial Commission, decorated Bacon.

At the time of the tribute to Bacon, the fountains planned for the small, transverse pool had not been installed. The fountain for this pool was designated the “Rainbow Fountain” in October 1924, when during a trial run just before its dedication a rainbow formed above the fountain’s spray. Operating with 124 nozzles arranged in an elliptical pattern near the outer edge of the pool, and with two clusters of nine north and south of the center, the fountain made a “hazy vista” through which to view the Washington Monument and the Lincoln Memorial. Evidently provision was made at this time for the necessary electrical connections to install a colored light display in the future. In 1925, an inspection of the fountain by members of the Commission of Fine Arts resulted in the following observation and objection: too many spouts and the “playing” fountain obstructed the view of the Lincoln Memorial from 17th Street.³⁵ According to various sources, the fountain indeed was occasionally illuminated at night.³⁶



Figure 10 – Rainbow Pool fountain in all its glory as shown in National Geographic, April 1935, by Jacob Gayer. Used by permission from the National Geographic Society.

Throughout 1923 and 1924, landfill along the banks of the Potomac River continued to extend the area behind the new seawall to the west of the Lincoln Memorial.³⁷ By mid-1925, all significant changes in the landform at the Lincoln Memorial had been completed. Projects that had transformed the areas included the filling up and grading of the ground around the structure; the construction of the circular macadam drive and the radial roads coming off the circle; the excavation and finishing of the long reflecting pool with concrete walks along each edge; the installation of the transverse pool and fountain; and the grading of the areas adjacent to the long pool with the laying of parallel walks on either side.³⁸

During the period following the memorial's dedication, Daniel Chester French, Henry Bacon, the CFA, and the OPBG addressed the issues of both exterior and interior lighting.³⁹ In January 1926, 18 street light units were placed uniformly around the outside perimeter of the circle, opposite all four sides of the structure. The acorn-style lamp globe selected had been designed by General Electric for use in the District's streetlight system, as had a special incandescent lamp also developed by G.E.⁴⁰ In January 1927 the CFA approved an interior lighting installation that brought about a "quiet, subdued light at night," and that had been designed with the assistance of both Daniel Chester French and W. D'Arcy Ryan of G.E. for the Office of Public Buildings and Public Parks (OPBPP was the successor to the Office of Public Buildings and Grounds established in 1925). The project was contracted out to the firm of Biggs and Kirchner, who installed 24 floods for the illumination of the statue and additional 125 lights for general lighting purposes. Lighting the interior of the structure at night became critical by 1927, when visiting hours were periodically extended into the early evening. However, completion of the lighting

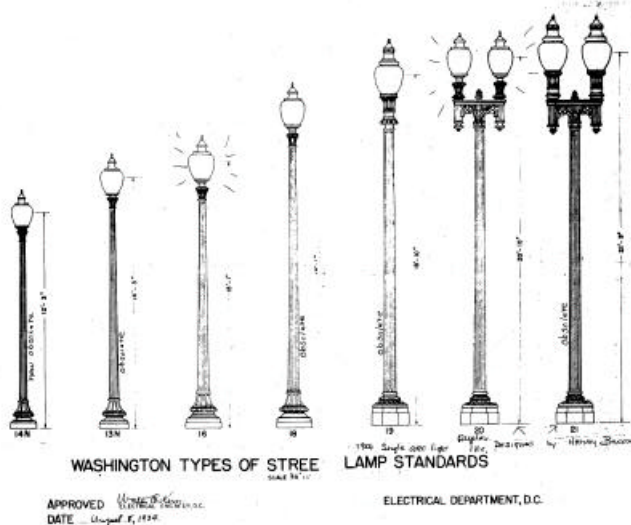


Figure 11 - D.C. street lamp standards as adopted in 1923.

installation did not occur until 1929. By April 1930 the Memorial was scheduled to stay open until 9:30 P.M. throughout the year.⁴¹

Another response to the increase in visitation was the 1927 construction of two “public comfort stations” under the raised terrace on the eastern front of the building. Two openings for entrances were cut through the raised terrace wall on both sides of

the steps leading up to the memorial. Spaces for the restrooms were created behind the wall and a pair of bronze doors were hung at each entrance. Access to the “stations” from the approachway came from the two sets of sidewalks coming off the main walk and passing through the foundation planting. Construction activity associated with this project may have adversely compacted the soil surface along the approachway. In subsequent years, compaction from other projects and special events in this area would adversely affect adjacent shrubs.⁴²



Figure 12 – Narrow passageway under boxwoods to “Men’s” restroom south of the main steps, May 1, 1927. MRC 2-11.

Additional Trees and Shrubs

Throughout this period, the OPBG continued to strategically place trees and shrubs, especially on the circular terrace immediately surrounding the memorial. One of these shrubs, a large, specimen boxwood, had been moved from the grounds of the Corcoran estate and former residence of Daniel Webster, to the Lincoln Memorial site in 1922, and planted in Webster’s memory.⁴³ In 1924, hardy vines were planted to grow on the raised terrace wall. These were soon visible on the wall at the base of the west facade, where few shrubs had been installed since the dedication ceremony. More boxwood shrubs and “hedge plants” (*Buxus sempervirens* ‘Suffruticosa’) were planted between 1924 and 1926 along the approachway and around the memorial in unspecified locations.⁴⁴

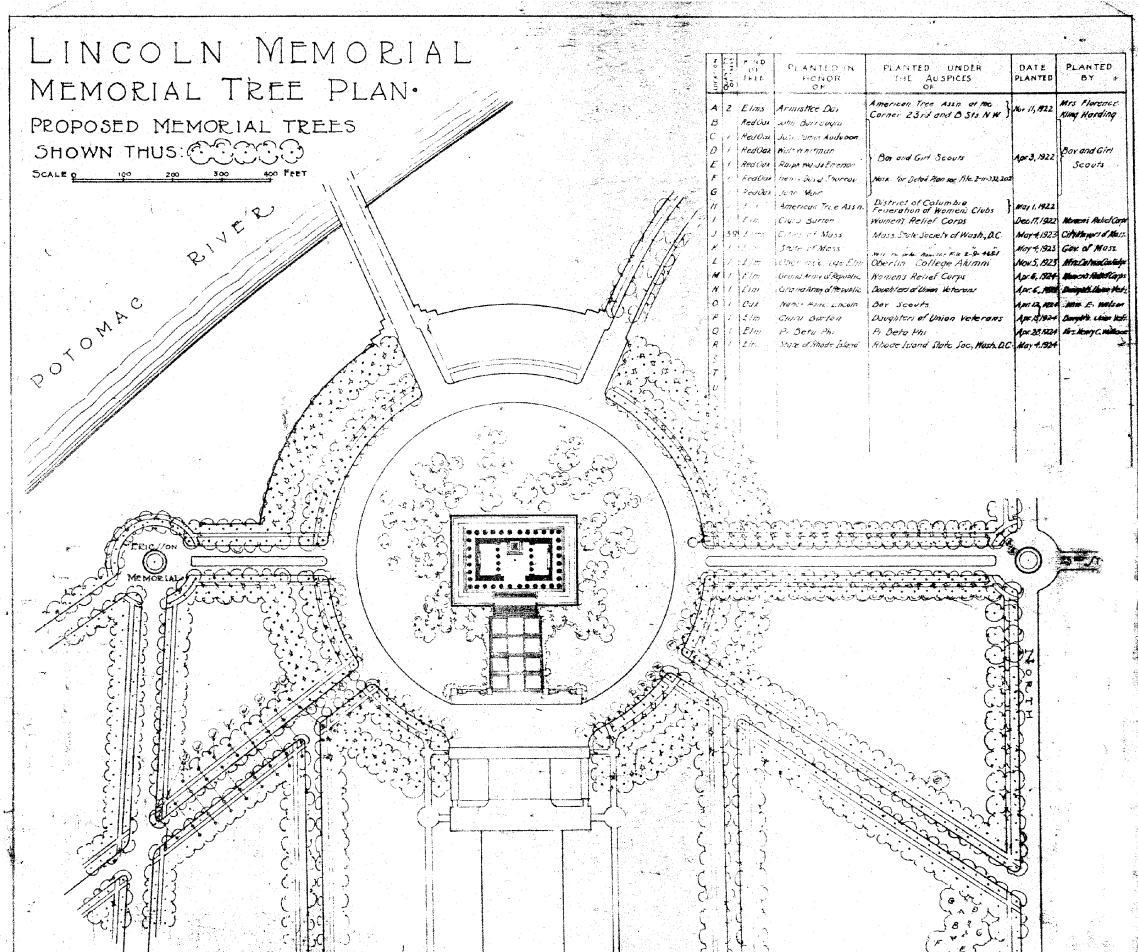
In addition to OPBG's work on the grounds, they worked with various civic groups and organizations to plant memorial trees in West Potomac Park. On May 23, 1923, the lieutenant governor of Massachusetts and the mayors of 39 cities in the commonwealth planted 40 American elm trees along French Drive, creating the "Massachusetts Avenue of Memorial Trees."⁴⁵ Mrs. Coolidge and the president of Oberlin College planted the first individual memorial tree on the Lincoln grounds on November 5, 1923. Elsewhere in the park, Rhode Islanders planted the Liberty Tree to commemorate the 148th anniversary of that state's independence from Great Britain. The American Forestry Association gave two elms, one for the Army and one for the Navy, to begin an international avenue. The Boy Scouts of the District of Columbia planted a white oak nearby to honor Nancy Hanks, Lincoln's mother. Additional locations around the Lincoln Circle and along the radial roads were designated for memorial trees to be planted by the relatives of former servicemen. These trees would have no commemorative marker, save a small identification tag. One group of children planted a red oak near Bacon Drive and B Street, N.W. to honor John Burroughs and to complete a grouping of dedicated trees, serving as a "hall of fame" to John Muir, Henry Thoreau, Walt Whitman and John James Audubon. Not all requests for living memorials were granted. One, for example,



Figure 13– View of newly planted elms along radial roads and Reflecting Pool area, 1927. MRC 1-54.

concerned a proposal to plant a white birch in the area as a memorial tree. Because the planting plans for both the east and west facades of the Lincoln called for a variety of evergreen plants, the CFA refused to approve such a radical change in concept. The CFA reaffirmed that

*The success of the planting already in place calls for the completion of the scheme, the essence of which is the honor to the memory of Abraham Lincoln and not a shrine for votive offerings.*⁴⁶



Map 5 - One of the many memorial tree plans for the Lincoln Memorial circle and radial roads area, 1924. NPS Map 801/80081.

Between 1927 and 1928, the Horticulture Division of the OPBPP worked to complete the approved planting plan for the north, east, and south sides and focused on several other issues affecting the area around the memorial. Fifteen large magnolia trees were transplanted from the memorial grounds to another location in West Potomac Park. In turn, seven large, tree-type boxwood were planted at the memorial. During this period, the division noted in the annual reports that the elm leaf beetle and the caterpillar caused “usual damage” to the public reservations in the city. Although West Potomac Park was not specifically cited for pests, the large number of elm trees growing on the grounds

around the memorial and along the Reflecting Pool may have been treated for these problems. By 1928, the box-leaf miner was also cited as a pest for extermination. Whether the boxwood shrubs around the Lincoln Memorial were affected by box-leaf miner has yet to be determined.⁴⁷

Park Developments

In 1924 the CFA approved the location for the development of a secondary focal point, south of the Lincoln Memorial. This point had been on the 23rd Street axis designated on the McMillan Commission Plan. The site, which overlooked the river directly south of the “Great Circle,” was set aside for a memorial to John Ericsson, Swedish-born inventor of the screw propeller and designer of the U.S. Navy’s famous ironclad warship, the *Monitor*. The monument was designed to be set in a small traffic circle, prominently located at the southern end of 23rd Street. While preliminary site preparation took place in 1924, realization of the project was delayed for several years. The dedication, using a plaster casting to mark the place for the future statue, was held on May 1926, but sculptor James Earle Fraser’s work was not completed until July 1927. As with the west side of the Lincoln Memorial, final treatment of the grounds around the Ericsson Memorial was scheduled for completion at the same time as the construction of the Arlington Memorial Bridge approaches, which occurred in 1932.⁴⁸

Other developments occurred in West Potomac Park that had less immediate impact on the grounds around the Lincoln Memorial but would eventually become significant issues for this part of the park. The impact of the shift from passive recreation to more active sports on adjacent park land was one of the concerns voiced when the second of two golf courses in West Potomac Park opened in 1924. The first nine-hole course had been laid out in an adjacent area just northwest of the Lincoln Memorial in 1923; the second was located in the far southeast area of West Potomac Park. Both were operated under a concession arrangement.⁴⁹ The improvement of adjacent streets to thoroughfares, which brought about increases in automobile traffic and the need for parking, was another concern. When B Street North was realigned, extended from Capitol Hill to the river, widened, improved, and renamed Constitution Avenue during September of 1931, such a through-route was inadvertently created. Requests to allow automobile parking at the Lincoln were brought before the Commission of Fine Arts in both 1931 and 1934. The CFA did not grant these requests, and although the public adhered to the existing parking restrictions, parking was prohibited on the west side of the circle in 1934. However, a taxi stand was permitted.⁵⁰

Management of the Reflecting Pool

In the Reflecting Pool area, the double rows of elms had developed such full crowns that they appeared to require pruning and reshaping. Further investigation revealed that while the canopy was full, the root development of the individual trees was very poor. The roots were so underdeveloped that the trees were not secure in the ground. Several years passed before the elms' condition stabilized. Of the 250 elms planted in 1916, prior to the excavation of the reflecting basins, most exhibited such poor root development by 1929 that they were top-heavy and prone to falling over in high winds. Because the elms had been planted in moist, soggy conditions with inadequate drainage, replacement of these specimens would eventually be required. With the subsequent improvement of the groundwater level, the replacements evidently survived.⁵¹



View taken on the South side of the Reflecting Pool.
 4. Tree #2. A 10" tree being pulled by a single man from its normal vertical position. All of the swaying is from the ground. File No. 19.4-40B



View taken on the South side of the Reflecting Pool.
 5. Tree #2. Same as picture no. 4, only tree is being pushed from its vertical position. File No. 19.4-40B

Figure 14 & Figure 15 – Series of images document the condition of “English” elms along the Reflecting Pool north and south walk, 1928-1929. MRC 2-37 & 2-38.



Figure 16 – Skating on the Reflecting Pool, February 3, 1935. MRC 3-22.



Figure 17 – Swimming in the main Reflecting Pool soon after its completion, 1926. MRC 3-23.

Recreational use of the Reflecting Pool began around 1926. The pool was used for swimming, ice skating, model sailboat races, flycasting contests, and as the setting for such large-scale events as the George Washington Bicentennial Festival of Youth held on May 14, 1932.⁵²

In 1929 both reflecting basins required repair. Because they had been constructed on “hydraulic fill” and had settled unequally, the smaller pool needed a new reinforced concrete bottom. The larger pool needed routine sealing maintenance. Rose Brothers completed these repairs in the fall of 1929. There may have also been problems with vegetation growing in the pools.⁵³



Figure 18 – Repair work to the Rainbow Pool, July 15, 1929. MRC 3-17.

Design for the Watergate

In March 1928, longstanding concerns over the merits of the ceremonial Watergate entrance to West Potomac Park were raised at a specially scheduled meeting of the CFA. The McMillan Commission had originally conceived of the steps as part of the formal treatment for the shoreline west of the Lincoln Memorial. Vehicular traffic traveling through West Potomac Park along the riverside drive had increased to such a level that severe congestion would result if the circular roadway and the roads connecting the proposed memorial bridge and parkway were to intersect near the steps as planned. This traffic issue was of particular concern to the “Washington” [National Capital] Park and Planning Commission. The controversy centered around how to balance the ever-increasing numbers of automobiles passing through the park and the vision of the McMillan Commission. One solution proposed to construct an underpass drive below the bridge abutment to alleviate the anticipated traffic congestion. However, opponents feared that the adoption of such a proposal would both compromise the original concept for the Watergate steps and undermine the design for the memorial bridge. The debate further underscored the ways in which the McMillan Commission Plan had been altered over time. Final grade levels around the Lincoln Memorial and the bridge and the enclosed architectural form of the memorial differed from the original concept. These changes, in turn, drove further departures from the plan. The CFA’s final recommendations on the traffic problems included adjusting the width of the Watergate steps; moving the steps back further from the water’s edge; providing an underpass for a road under the bridge and the parkway approach; and considering the road as a driveway integral to “the architectural scheme rather than as a roadway in the true sense.”⁵⁴

New Plans for the Mall

At the time of the debate over the conceptual design for the Watergate, Frederick Law Olmsted, Jr. was a member of the National Capital Parks and Planning Commission

(NCPPC). The NCPPC had been authorized in 1928 to be responsible for all comprehensive planning and project planning for the city. Olmsted, with his vast experience on other municipal and regional projects, his work on the McMillan Commission, and his service on the CFA, formulated the objectives for the commission at the outset. In his role, Olmsted personally oversaw the planning for parkways, parks, and neighborhood playgrounds. One of the first efforts of the commission was the development of comprehensive plans for the city that included recommendations for the Mall, which were based on both the L'Enfant and McMillan plans. Although the 1928-29 NCPPC plans for the Mall mostly focused on the expanse between the Capitol and the Washington Monument, key elements of their concept for the area between the Washington Monument and the Lincoln Memorial underscore the essential elements of the landscape around the memorial.

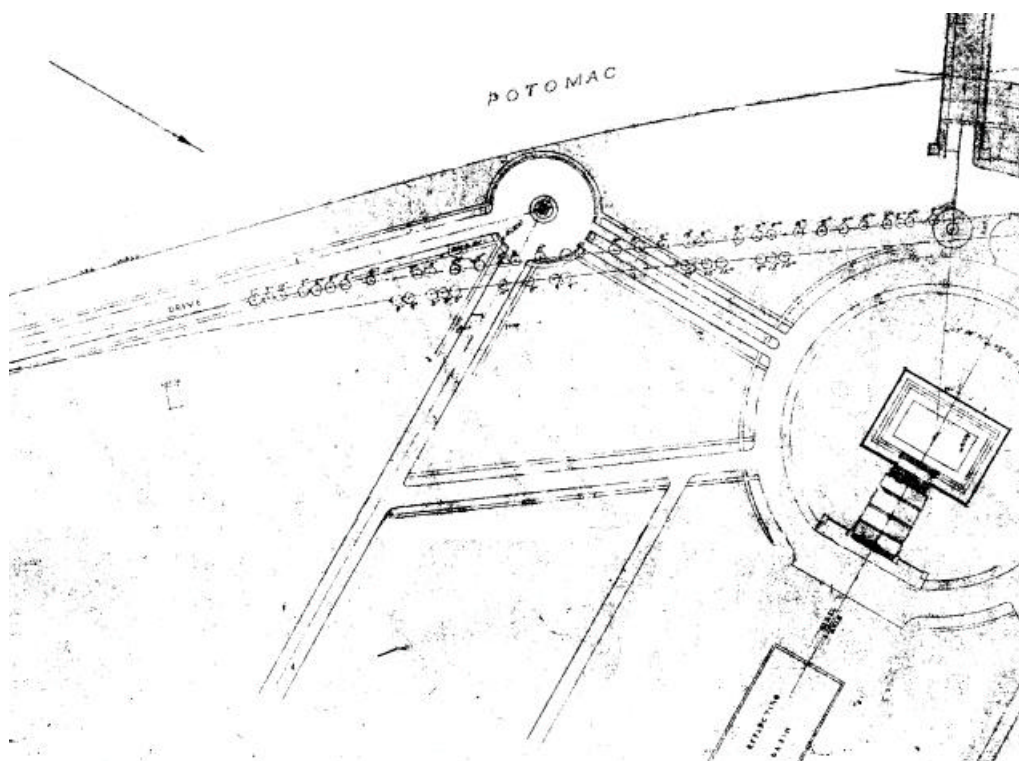
These plans reaffirm the simplicity of formal geometric patterns of circulation and vegetation along the Reflecting and Rainbow Pools, around the circular roadway, and along the radial roads. Delineation of the geometry established by the McMillan Commission was reinforced in the NCPPC design through the regular planting of trees and through the shape of the pools and the corridor of open spaces on both the north and south sides. Perhaps because of Olmsted's continuing influence on the landscape treatment, the cross arms of the original reflecting pool design remained as an outline of trees on the ground plain, more a horticultural feature than a water feature. In the more distant spaces, informal, wooded plantings of deciduous trees filled the triangles and rectangles created by the arrangement of the roads and drives. In reality, the complete "tapis vert" of the design could not be implemented fully until the Navy and Munitions Buildings and the adjacent parking lot north of the Reflecting Pool were removed.⁵⁵

Planting Plans - West Side and the Watergate

In 1928 Irving Payne oversaw the installation of plantings for the west side of the Lincoln Memorial according to the plan approved by the CFA several years earlier. However, because of the construction of the Arlington Memorial Bridge abutment, Payne had made changes "in the character of the planting and treatment. . . ." Payne's installation included a special treatment for the central area on the west side of the memorial, "with a scattering of trees and shrubs on the north and south sides." CFA landscape architect member Ferruccio Vitale overrode Payne's work by recommending a simpler design for the north, south, and west corners, consisting mostly of boxwood, which was to extend no more than 30 feet from the base of the memorial. Vitale also envisioned the circle of lawn to be free of trees and shrubs. In addition, he called for removing the vines growing on the raised terrace wall that had been planted a few years earlier. To save the masonry from damage by climbing vines, Vitale suggested climbing euonymus (similar to *Euonymus fortunei* var. *radicans* 'Vegetus') as a replacement.

By the end of the decade, James Greenleaf, former CFA member and consulting landscape architect for Arlington Memorial Bridge Commission, and the OPBPP had developed preliminary planting plans and contour and grading studies for the area at the

eastern end of the Arlington Memorial Bridge. This site development encompassed the bridge plaza on the District side; the riverside drive connection with the still uncompleted Rock Creek and Potomac Parkway; the north approach roads from B Street [Constitution Avenue] to the bridge underpass; the Ericsson Memorial site; and the south underpass approach road to the bridge. Several collections of existing trees had to be relocated to implement these designs. Six Japanese flowering cherry trees were transplanted from the riverside parkway at the Arlington Memorial Bridge to Meridian Hill Park, near the center of the city. Six Scotch and American Elms growing near the route proposed for a road that linked the Ericsson Memorial with a West Potomac Park polo field were also removed in anticipation of the completion of that memorial, although pavement, curbs, and gutters were not installed around it until the summer of 1932. Another 16 cherry trees and 20 mature Scotch and American Elms were removed from the vicinity of the bridge and riverside drive. Ten of these same elms may have been transplanted to the southern end of Rock Creek and Potomac Parkway only a short time after the opening of the K Street to West Potomac Park section of the parkway in April 1932.⁵⁶



Map 6 - Plan to relocate elms located along abandoned section of Riverside Drive, rev. 1929. NPS Map 801/80129.

Construction of the Arlington Memorial Bridge and its intersection with the Lincoln Memorial axis and the Watergate was almost completed in May 1932. At that time the OPBPP worked to install trees and shrubs around the Watergate and on the west side of the Lincoln Memorial. Gilmore Clarke, a landscape architect appointed to replace Vitale on the CFA, was initially alarmed by Payne's installation of Greenleaf's planting design for the west side of the Lincoln. Clarke had a strong background in large-scale landscape projects, especially from his award-winning work on the Westchester County Parkway.

Payne's "overdone" work drew additional criticism from other professionals concerned with the Arlington Memorial Bridge and the Lincoln Memorial. In the case of the Watergate and the bridge and parkway connections, the problems lay in the interpretation of the plan and not with the plan itself. However, the plant selection and choice of certain types of trees and shrubs at the Lincoln were the cause of significant disagreement between Clarke and Greenleaf. While both Clark and Greenleaf found Payne's work "on the ground" lacking in aesthetic sensitivity, the two could not agree on the philosophical basis for the overall planting design.

Clarke considered the implementation of the design for the west side of the memorial to be "coming up higher than it should . . . extending above the base of the columns." In addition, he found the selection of trees and shrubs for the west side "not in harmony" with those that had been planted on the east side. In particular, Clarke took exception to the choice of *Magnolia grandiflora*, the tree so strongly advocated by Greenleaf a decade earlier. Clarke found its "coarse foliage texture" . . . "too large in contrast with the delicate texture of the boxwood foliage heretofore used as the principal plant material." On the other hand, Greenleaf felt that because of the range of vistas on the west side, the plantings at the rear of the Lincoln should be of a broader scale than those on the front. He also felt that the rear, unlike the front, should not appear as a tight bedding group, and that it would be inappropriate to carry a similar planting scheme around all four sides of the memorial. Greenleaf cited the hardiness of the magnolia and suggested American holly as a companion plant. He further praised the character of the tree by noting

The splendid rounded masses of rich green foliage that this Magnolia ultimately develops can be a fine foil to the white marble columns of the Memorial building. In fact, I would like to return fifty years later and see irregular massing exclusively of Magnolia grandiflora contrasting with the mellowed marble of this perfect architecture, the box and yew becoming relatively unimportant but nevertheless enriching the effect in places against the granite wall of the platform.⁵⁷

The issue was never clearly resolved in 1932, and Clarke and Greenleaf continued to hold to their respective opinions. Since the revised planting plan had been originally approved by the CFA in the fall of 1931, prior to Clarke's term on the CFA, the installation of trees and shrubs on the west side of the Lincoln Memorial proceeded according to Greenleaf's design scheme.

Field inspection and tagging of this choice ornamental evergreen material for planting the Lincoln Memorial terrace, including the Watergate and wing walls, was made before transplanting, necessitating trips aggregating over 5,000 miles through the States of Virginia, West Virginia, Maryland and Pennsylvania. Further, careful inspection was made of all plant materials at the planting site to determine the quality, size, character, orientation, and final location of each plant to secure the most pleasing planting composition possible.⁵⁸



Figure 19 - Aerial view of installation of trees and shrubs on west side of Lincoln Memorial and beds flanking the Watergate steps, 1932. MRC 1-66.

In the end, the plant material used for the west side of the Lincoln Memorial, Watergate, and wing walls included several different types of glossy-leaved and coniferous evergreen trees and shrubs. Selected for the Lincoln Memorial were large specimens of southern magnolia, American holly, “treebox,” dwarf boxwood, common boxwood, Japanese yew (*Taxus cuspidata*) and mugo pines. Similar plants were used at the Watergate and wing walls, with the exception of the southern magnolia, which were replaced by white pines (*Pinus strobus*).

In conjunction with the Arlington Memorial Bridge construction and planting plans, several contracts for the removal and the installation of trees on the west side of the Lincoln were given to different nurseries in 1932. One company removed elm trees on and around the bridge plaza and transplanted them. Another furnished and planted ornamental evergreens in the same area. The third company moved elms to the approaches at the plaza. James Greenleaf had prepared the plans to accommodate this activity. According to his specifications, 193 large American elms and 15 white pines were moved into the area bounded by Constitution Avenue, “B Street, south,” 23rd Street, and the Potomac River. The elms were transplanted from their location between 23rd Street and Constitution Avenue, northeast of the Lincoln Circle and placed on each side of Constitution Avenue between the Potomac River and Henry Bacon Drive, south of Constitution Avenue between 16th and 17th Streets, along the circular road west of the

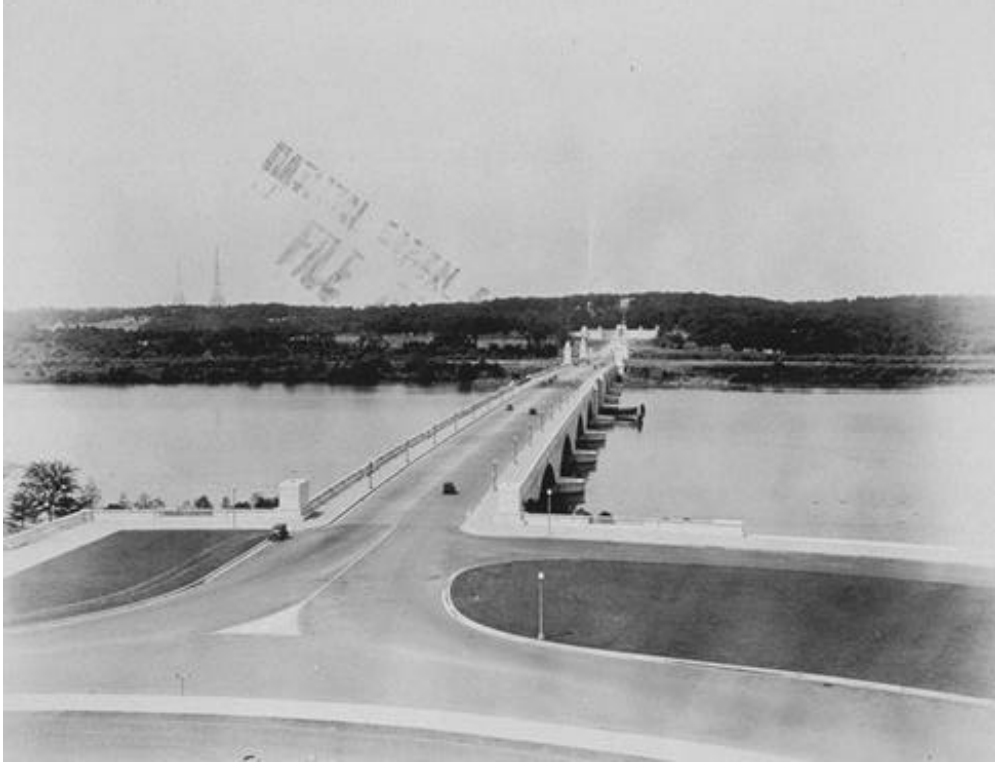


Figure 20 – Completion of Watergate plaza, sidewalks and bridge, June 9, 1933. MRC 1-75.

Lincoln Memorial and adjacent to the north and south wing walls of the Watergate plaza, and on each side of 23rd Street, S.W. The white pines were removed from their locations near the intersection of 26th Street and Constitution Avenue to new sites on the slopes adjacent to the north and south wing walls.

With the completion of the landscape treatment around the memorial in 1932, an irrigation system for the inner circle was installed. Other “improvements” included the addition of temporary, free-standing handrails on the raised terrace and stylobate steps, which were set-up as needed in alignment with the entrance to the memorial chamber. Although the Watergate area, including the bridge plaza, wing walls, and the descent of forty steps, was also completed by 1932, several features on the District side of the bridge were not finished until later. Schemes for the storage rooms under the Rock Creek approach were not approved by the CFA until October 1933, only to have the approvals rescinded the following month. Approvals for the design of the statues for the eastern end of the bridge and the parkway approach were not issued until 1935, and even then their granite bases remained unadorned by any sculpture for some 19 years.

Figure 21 - Temporary wooden steps to memorial chamber, Lincoln Birthday celebration, February 12, 1946. MRC 1-125.



Management by the National Park Service 1933-1945

New Stewardship Role for the National Park Service

In August 1933 the responsibility for the care and maintenance of monuments in the nation's capital was transferred from the War Department's Office of Public Buildings and Public Parks (OPBPP) to the National Park Service. This change meant that the OPBPP would no longer be directly involved in the stewardship of the Lincoln Memorial, the Reflecting Pool, and the Watergate area. Rather, a new division of the park service, known as National Capital Parks, was responsible for the management of all the reservations belonging to the federal government, including Rock Creek Park, East and West Potomac Park, and the George Washington Memorial Parkway. After the change, the Commission of Fine Arts commended the park service for its attention to the appearance of the capital's parks. They noted the service's efforts in growing "turf, elimination of scraggly shrubs, use of decorative low planting and the care of worthwhile trees" particularly in the smaller parks of the "old city." At this time, the park service submitted designs for two styles of park benches, a concrete and an iron version, both of which the CFA approved.⁵⁹

The park service also worked to revive significant plantings at the Lincoln Memorial. In March 1936, under the direction of the park, Public Works Administration workers replaced selected yew and boxwood shrubs, as well as portions of the dwarf boxwood hedges lining the approach at the Lincoln Memorial, with similar mature plants. They also supplemented existing boxwood specimens in the beds flanking the entrance to the approachway. Poor soil conditions and poor drainage combined with problems brought on by a combination of drought, winter cold, pests, and sun-scald had necessitated a rehabilitation of the boxwood. At this time drainage trenches were installed on both sides of the approachway to improve the conditions for both the newly planted hedges and



Figure 22 - Unloading replacement boxwoods off of flatbed truck, March 1936. MRC 2-50.



Figure 23 - Laying sod on flood levee to stabilize the earthen berm, August 4, 1936. MRC 2-127.

beds. Drainage trenches installed along each of the rows of the Reflecting Pool elms in 1935-36, also helped to improve the growing conditions for these trees.⁶⁰

On March 19, 1936, the Potomac River flooded to record high levels in Washington. As the waters rose, work crews constructed a temporary levee along the south side of the *Navy and Munitions Buildings* to hold back the flood. A permanent dike or flood control berm that was only 2½ feet high at its western end near the Lincoln Memorial was constructed shortly after the temporary one was removed during the winter of 1938. It lay

parallel to the east/west axis, “at approximately one-half the distance between the Reflecting Pool and Constitution Avenue.”⁶¹

Cultural Events and Social Significance

As the frequency of summertime band performances declined at the D.C. War Memorial, the National Capital Parks began to introduce music on the west side of the Lincoln Memorial. Here in the amphitheater created by the Watergate steps, temporary chairs, booths, and kiosks were set up for the public’s enjoyment of outdoor musical performances at the river’s edge. Over time a series of increasingly elaborate orchestra concert shells were constructed on barges anchored near the base of the Watergate steps. Although the first program of concerts was held during the summer of 1935,



Figure 24 - Concert barge tethered at the base of the Watergate steps, in preparation for a concert, July 12, 1939. MRC 1-3.

documentation suggests that a formal orchestral barge was not in place before 1937. A more stylized architectural shell was created in 1939, and the third, an elaborate covered stage set off by flagpoles and planter boxes, was developed during 1947-1948. The steps provided most of the seating, with additional chairs arranged for the audience on the strip of lawn along the river, on platforms that spanned the road surface of the drive located between the steps and the lawn, and at the top of the steps. During concerts the underpass was closed to traffic, which was probably directed away from the river road to the Lincoln Circle. The summer series of concerts included performances by military bands, opera companies, and by the Watergate Symphony Orchestra “and the world’s great

artists,” organized under the auspices of the National Symphony. The theater and related services were managed and operated by a concessionaire, Government Services, Incorporated. A former storage facility located underneath the Rock Creek and Potomac Parkway approach (Parkway Drive) housed public restrooms for the area. Performances were discontinued in 1973. The barge was hauled away at that time, although the piers, which had provided anchorage for the floating stage, remained in the river until 1984.

The most significant cultural event that occurred at the Lincoln Memorial during the early years of NPS management was the Marian Anderson Easter Sunday concert on April 6, 1939. While this concert was ostensibly cultural, its significance is derived from the larger social and political impact on the nation as a whole. Because the Daughters of the American Revolution (DAR) had prohibited this noted African-American contralto from performing at the DAR’s Constitution Hall, Secretary of the Interior Harold Ickes offered the steps of the Lincoln Memorial as an alternative concert location. Some 50,000 people positioned themselves on the approachway and at the Reflecting Pool steps to hear Anderson sing. Her performance was also broadcast live over national radio. The success of the concert marked the first nationally significant use of the memorial, the main steps, the approachway, the Reflecting Pool steps, and the circle as both a stage and a theater since the memorial’s dedication in 1922 and the AIA’s ceremonial dinner for Henry Bacon in 1923. While the selection of the site and the design of the Lincoln had been originally “conceived as a symbol of national consensus, linking North and South on holy, national ground,” with the Anderson concert, the memorial became the “stronghold of racial justice.”⁶² From 1939 the memorial became the setting from which to stage other significant events associated with both civil rights and freedom of speech.

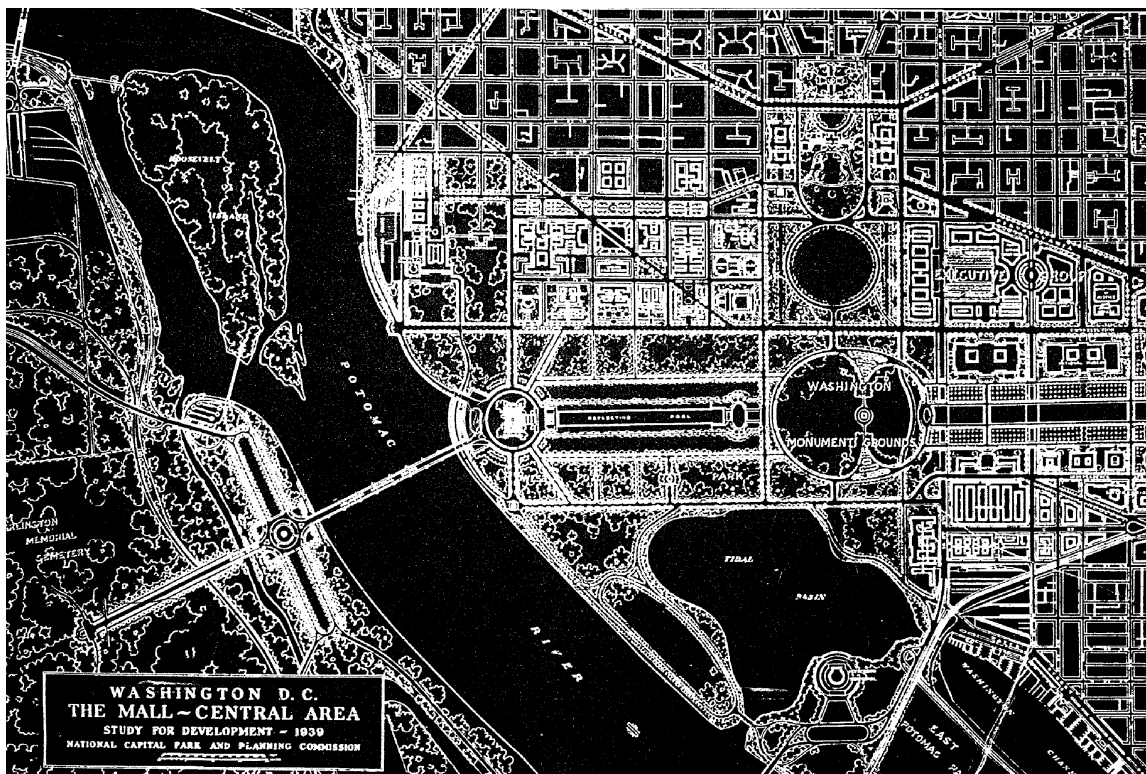
Effects of Park Planning

Construction of the last segment of Rock Creek and Potomac Parkway was completed in 1936. Over the years landscape architects such as Olmsted, Langdon, and Greenleaf had participated in the development of the final design. Although originally intended to link Rock Creek Park with West Potomac Park by means of a scenic, recreational drive, increasingly high volumes of commuter automobile traffic caused parkway administrators to institute one-way only routes during morning and evening rush hours in 1937. Because of the public perception that the parkway serves as an express route to downtown Washington, these one-way restrictions have remained in effect on the parkway to the present day. Since 1937 commuting traffic has had a profound effect on the circulation around the Lincoln Memorial. Park land near the memorial has been sacrificed to make road improvements to control traffic. The resulting changes to the overall landscape have detracted from the setting.

The National Capital Parks and Planning Commission updated their plans for the development of the Mall in 1937, 1939, and 1941. These plans reflect several changes that had taken place at the western end. The three proposals eliminated the cross arms from their treatment for the Reflecting Pool, showed the completion of the expansion of Constitution Avenue, and the addition of the Ericsson and the D.C. War Memorials. The

effect of the new flood control berm on the double rows of elms and the design for the planned open space next to the north side of the Reflecting Pool are not depicted, probably because a parking lot for the World War I temporary buildings still occupied this area, even though it was not marked on the NCPPC plans. While the berm served to help screen the parking from the pool area at this time, it eventually would become a topographical barrier, separating spaces that were designed to be together.

Elements of these plans that remain consistent with earlier NCPPC plans and the McMillan Plan for the Lincoln Memorial are the overall spatial organization, the vehicular and pedestrian circulation, and the longstanding arrangement of vegetation around the memorial structure along the outer edge of the circular roadway and along the pool. The three plans, however, outline new treatment for the Washington Monument grounds and the Tidal Basin that had a long-term impact on the Lincoln Memorial landscape. The 1939 and the 1941 plans, conceived by Gilmore Clarke, indicate the site of the Jefferson Memorial, which was then under construction. All three delineate proposals for the extension of Independence Avenue west from 14th Street along the route of B Street, S.W. Only the 1941 plan includes the design of an access ramp near the Watergate to connect the Independence Avenue extension with Arlington Memorial Bridge and Rock Creek and Potomac Parkway.⁶³



Map 7 -Development plans for the later part of the 1930s no longer depicted the Reflecting Pool "cross arms," 1939. NPS Map microfilm 35-52F/1.

War and Changes in Land Use

The proposal for the extension of Independence Avenue from 14th Street to 23rd Street, S.W. was presented to the Commission of Fine Arts in November 1941. Concerns over the effect that a through route, designed primarily for connecting the new War Department Building (the Pentagon) in Virginia with the two major river crossings, at 14th Street and at Memorial Bridge, would have on the adjacent park land was a key issue in efforts to win approval for the change. The approved route, developed by mid-1942, created a system of one-way routes, rather than a single, two-way road that would make “. . . driving safer and pleasanter.” This design also incorporated sections of existing park roads and portions of a circumferential road system designed by Frederick Law Olmsted Jr. in 1931 for the Washington Monument grounds. (The Olmsted design was never fully implemented.)⁶⁴ Automobiles using the old riverside drive still had to negotiate the small traffic circle at the Ericsson Memorial. However, sometime in 1943 the route was altered around this smaller monument to accommodate higher volumes of cars that developed when a separate eastbound lane was completed. This lane passed over the Tidal Basin on a newly constructed bridge, which was subsequently named Kutz Bridge in 1954 to honor D.C. Commissioner Engineer Charles Kutz. As part of the extension project, which was completed in August 1943, the entrances and exits to the Rock Creek and Potomac Parkway and Arlington Memorial Bridge were realigned to a partial cloverleaf pattern.



Figure 25 - New configuration of road system, with the addition of Independence Avenue and the on and off ramps from Lincoln Circle, January 27, 1960. MRC 1-108.



Figure 26 - Temporary elevated pedestrian bridges over the Reflecting Pool, June 1944. MRC 3-29.

The area around the Reflecting Pool was adapted in other ways to meet the expansion of the federal government during World War II. During 1942 temporary office and dormitory buildings were constructed for the use of government employees brought to the city to work on the war effort. Some of these quickly-built “tempos” were located on the western side of the Washington Monument grounds, on the main axis between 17th Street and the monument. Others were constructed in the area south of the reflecting pools. A chain-link fence, running along the most southern line of elm trees, separated these structures from the Reflecting Pool area. Two additional structures were constructed perpendicular to the older cluster of World I temporary buildings in the space formerly occupied by the parking lot on the north side of the flood control embankment. Finally two covered, elevated pedestrian bridges were erected in 1942 across the east/west axis to link the WWI structures with the newer WWII temporary buildings to the south. One spanned the Reflecting Pool close to the 19th street alignment, and the second crossed over the small plaza between the Reflecting Pool and the Rainbow Pool. A third bridge crossing 17th Street, just south of Constitution Avenue, linked the “tempos” on the Washington Monument grounds with the east side of the WWI structures. The cluster of “temporaries” located at the base of the Washington Monument grounds was expanded in 1943, when three wings were added to one of those buildings. With the influx of additional government workers to offices located in park areas, all-day parking was allowed in lots adjacent to the “temporaries” and along park roads in the monumental core. Over time, other changes to the Lincoln Memorial were proposed but were not approved. One was for the installation of light posts adjacent to the Reflecting Pool for

the purpose of practicing fly fishing techniques in the evening. Another was for the installation of permanent handrails on the raised terrace and stylobate steps leading to the memorial and for increased illumination of the steps.

Tourism and Traffic 1945-1970

Revival and Completion of Pre-War Plans

Near the end of World War II, the National Park Service, the Commission of Fine Arts and the National Capital Parks and Planning Commission prepared to return West Potomac Park to the conditions shown on the pre-war plans. The CFA urged

that the area along the south side of Constitution Avenue, now occupied by buildings, be planned as a naturalistic park area, within the rigid borders of the straight avenues, roads, and walks, with broad expanses of lawn with trees in mass, in groups, and singly, composed in a manner appropriate for passive recreation and in keeping with the immediate environment of two of the greatest memorials ever erected, the Washington Monument and the Lincoln Memorial. This is no place for active, noisy recreation: the area belongs to the people of the United States and it should not be dedicated for the use by Government employees and other residents of Washington as baseball and football fields.⁶⁵

Notwithstanding the commission's recommendations, the temporary buildings and the accompanying parking lots and fencing remained on both sides of the Reflecting Pool and at the base of the Washington Monument for many more years, prohibiting the development of these areas for "passive" recreation. However, the bridges crossing over the pools were removed during the immediate post-war period.

Four statuary groups of allegorical equestrian groupings were installed at the eastern end of the Arlington Memorial Bridge and at the approach to Rock Creek and Potomac Parkway in June 1951. Two of them, the *Arts of War* representing "Valor and Sacrifice," were designed by Leo Friedlander; the other two, the *Arts of Peace* shown as "Music and Harvest" and "Aspiration and Literature," were designed by James Earle Fraser. With the installation of these figures the plans for the bridge and the parkway approach were finally completed. However, several elements from the original bridge design were altered before and just after these last pieces were set in place. Not only had the road connections been realigned in the 1940s to meet the Independence Avenue extension, but by 1952, the original granite block pavers on the bridge was replaced with "asphaltic concrete."⁶⁶ Such changes improved the flow and speed of traffic but also undermined the formal, ceremonial character of the bridge and its symbolic relationship to the Lincoln Memorial.



Figure 27 - Installation of "Sacrifice" statue on north side of entrance to Arlington Memorial Bridge, June 1951. MRC 1-76.

Repairs and Incremental Changes

The National Capital Parks worked to improve the appearance of the landscape around the Lincoln Memorial wherever possible. Some of the boxwood shrubs located adjacent to the retaining wall and the main approachway were thin and scraggly in appearance. In the spring of 1944, Irving Payne, the former OPBG landscape architect who had worked on previous memorial projects, recommended that the park service modify the original plan by changing the arrangement of evergreens. In June, a partial installation of yew (*Taxus cuspidata* 'Nana') replaced the dwarf boxwood hedge located on the south side of the approachway. By the summer of 1945, 348 yews had been planted on both sides of the approachway. The beds of dwarf boxwood flanking the entrance to the approachway and facing the circular sidewalk were rehabilitated with additional and replacement boxwood shrubs. A select number of larger boxwood shrubs on the front side of the raised terrace wall were also treated under this "program to rehabilitate" the Lincoln grounds. Among the 12 boxwoods brought in for the project was a large American boxwood, approximately 200 years old, that had been found growing in a South Carolina cottonfield near the ruins of a former colonial residence. Park plans designated this specimen for the lawn area just south of the approachway. National Capital Parks completed the rehabilitation in 1947.



Figure 28 - The rough form of the new yews planted on the south side of the approachway, changed the character of the approachway hedge, May 3, 1944. MRC 2-96.

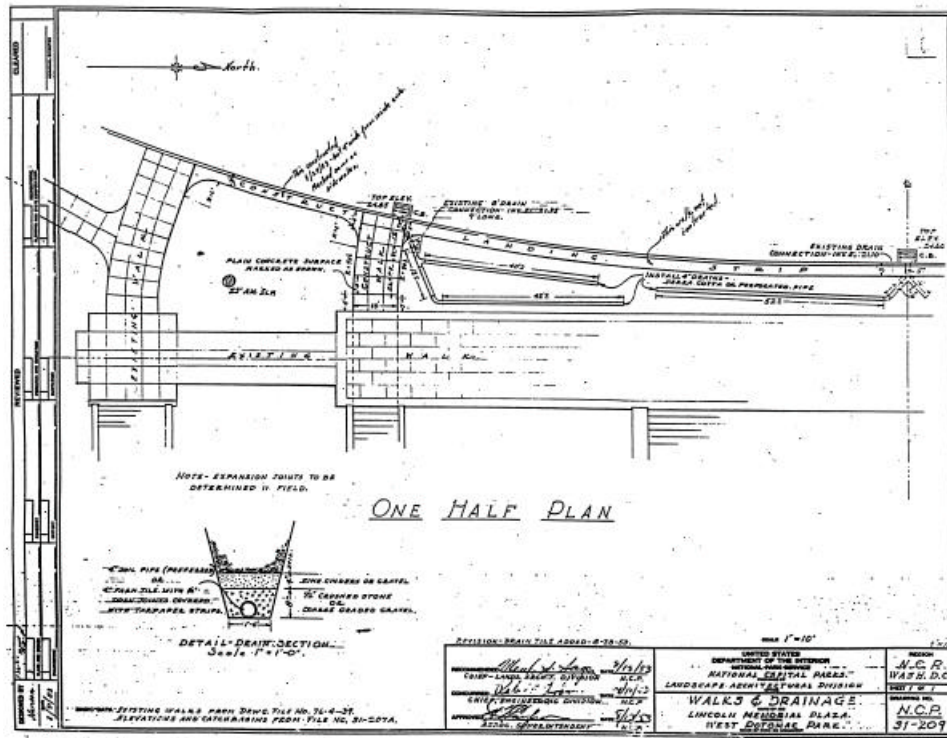


Figure 29 - Original character of approachway hedge illustrated by the rounded form of the boxwood, May 3, 1944. MRC 2-97.

Although control of horticultural pests had been a problem in West Potomac Park prior to the National Park Service stewardship, the first case of Dutch elm disease was not found until May 1947, in an area south of the Lincoln Memorial. Poor turf and pest “troubles” were among the longstanding concerns in the maintenance of the grounds around the city’s “most popular structure.” The yearly budget for caring for the approximately 300,000 dollars worth of trees and shrubs at the Lincoln Memorial grounds amounted to \$5,000 annually. Yet the site was plagued with “every trouble . . . in the country.” George Harding, chief of horticulture and planting for National Capital Parks confirmed that:

*The turf is filled with all sorts of stuff, from river muck to sand. It's the worst trouble spot we've got in town.*⁶⁷

As part of a 1953 repaving of the circular roadway, National Capital Parks eliminated the rectangular edge of the circle’s outer curb at the Reflecting Pool steps in favor of creating a continuous curb edge. Since the 1922 dedication, the rectangular section had been gradually adapted into an area for parking. The presence of parked automobiles, in addition to taxicab stands and the three bus stops allocated to the city’s private bus companies, marred the area between the memorial and the pool and hindered pedestrians crossing from one to the other. Two triangular planting beds, shaped by the outline of the new and old curbs and new sidewalk connections, flanked the landing at the top of the steps. The beds, which were planted in boxwood, replaced most of the parking area and completed the changes made at this time.⁶⁸



Map 8 - Construction plans showing new layout of shrub beds at top of Reflecting Pool steps, 1953. NPS Map 31-209.

Visitation, New Uses and Incremental Change

Visitation at the Lincoln Memorial increased from over 1.5 visitors in 1948 to 2 million in 1959. At the same time increased levels of automobile traffic, from both visitors and commuters, continued to be a major concern of not only the National Park Service but also the District's Department of Highways and Traffic. In 1950, for example, bridle trails were closed within Potomac Park because of the incompatibility of horseback riding and large numbers of automobiles.

During the 1945-1970 period, the memorial steps and the approachway were increasingly used for public ceremonies and functions. By this time, the Lincoln Memorial and the surrounding grounds had developed into a significant setting for high-profile public events that ranged from prayer pilgrimages during the early years of the Civil Rights movement, to the destination for the 1963 March on Washington, which is best remembered for the famous "I Have A Dream" speech delivered from the memorial's steps by Martin Luther King Jr., the Resurrection City camp site for the Poor People's campaign in 1968, and a rallying point for the anti-Vietnam War movement. Events staged there ranged from the serious, such as the 1963 memorial service for President John F. Kennedy, to the celebratory, such as the Smithsonian Folklife Festivals held in 1975 and 1976. In addition, interior and exterior views of the Lincoln Memorial were frequently used by cinema production companies shooting films in Washington, D.C.⁶⁹



Figure 30 - Thousands of participants at the Lincoln Memorial grounds for the March on Washington, August 28, 1963. MRC 1-46.



Figure 31 - Lighting effect on west colonnade of Lincoln Memorial, June 7, 1966. MRC 3-44.

Throughout the late 1960s and early 1970s, The Commission of Fine Arts reviewed the effectiveness of the original interior and exterior lighting at the memorial. New exterior lighting around the perimeter of the building was in place by the time of the Nixon Inaugural in January 1969. The incandescent spotlamps used to light the main steps were installed on both sides of the approachway in large rectangular box units. Their installation necessitated the removal of selected yew and box shrubs from the front facade planting. Two sets of lamps mounted on poles were also placed in the vegetation to cast light on the north and south sides of the building. Two other pole units were installed among the trees and shrubs on the west side. No evidence of alterations to the planting are documented for these pole installations. Floodlights located on the top of the marble column capital, around the base of the structure itself, directed light toward the colonnade of the memorial.⁷⁰

National Park Service “Mission 66” improvements at the Lincoln centered on the addition of a “Tourist Information Kiosk.” In 1965 the kiosk was constructed on the south side of the Reflecting Pool steps, several yards northeast of the intersection of French Drive and the Lincoln Circle. By 1968, soil compaction caused by pedestrian activity around the kiosk and adjacent refreshment trailer prompted the development of a new paving plan for this area. Although designed to prevent any further damage to the elms growing there, the character of the design in the proposal marks a significant departure from the original simple and balanced geometric layout of the landscape. Some years later a slightly different version of the plan was in fact implemented.

As other visitor issues arose, the National Capital Parks apparently evaluated them on an individual basis. In the early 1960s the Interior Department and the National Park Service responded to citizen requests for artificial ice-making capabilities at the Reflecting Pool by establishing a task force to investigate extending the use of the pool throughout the cold weather months for ice skating. Proposals were developed, but these plans were never realized. Eventually skating on the pools was prohibited all together. In 1964 the park installed permanent bronze handrails on the outside of both the raised terrace steps and the steps ascending the stylobate. The use of a temporary wood handrails appears to have ceased once the bronze versions were in place.⁷¹

Concern for pedestrian safety at the Reflecting Pool and at the entrance to the approachway were addressed in August 1972, when the eastern portion of the roadway around the Lincoln was closed to automobile traffic in the area between Bacon and French Drives. The road closing, which required the rerouting of traffic onto adjacent streets and onto Rock Creek and Potomac Parkway, was done on a seasonal basis for several years. The change became permanent in 1976 as part of the planning for the Bicentennial celebration. At that time, planners created a two-way traffic segment on the west side of the circle between Memorial Bridge and Bacon Drive.

Another change in circulation occurred in 1973, when the park management decided to remove the L-shaped sidewalks located along the top of the Watergate wing walls. A set of curving walkways replaced the originals. These were a continuation of the sidewalks on the bridge and the parkway approach (Parkway Drive) that followed the outer curb edge of the western portion of the Lincoln Circle and led down to Ohio Drive and the shoreline.⁷²

Plans for New Site Developments

In 1960 the park service sponsored a plan developed by landscape architects and engineering consultants to alleviate traffic around the Lincoln Circle by connecting existing road systems to the planned Inner Loop of the Interstate Highway System. This plan incorporated the construction of a tunnel under the western edge of the circular roadway that would connect the proposed Theodore Roosevelt Bridge approach on the northwest with Independence Avenue on the southeast. The proposal also called for a complete redevelopment of the grounds around the memorial and the surrounding area, including the Reflecting Pool, the radial roads and the Watergate. This landscape design proposed by Umberto Innocenti and Richard Webel marks the first overall plan for the Lincoln Memorial grounds since 1916. Although their design was never implemented, the Innocenti/Webel plan demonstrates the level of change considered possible at the Lincoln in the 1960s. To alleviate the impact of parking and automobile circulation, Innocenti/Webel's plan eliminated the circular roadway, French Drive and a section of Bacon Drive, while redirecting vehicles to a new route around the west side of the memorial and along the full length of the Reflecting Pool. To accommodate these elements of the design, they also proposed several alterations in pedestrian circulation, spatial organization, and vegetation. More significantly, however, they chose not to alter

certain elements from the original design. These elements included the organization of the overall design along the east/west axis; the double rows of elms along the Reflecting Pool; the shape and form of both pools; the memorial approachway; and the masses of shrubs planted around the memorial structure.⁷³

Shortly after the 1960 proposal, Skidmore Owings and Merrill (SOM) created a Mall master plan for the National Park Service that incorporated the underpass concept. Although the landscape treatment for the Lincoln Memorial area featured in the SOM plan differed from the Innocenti/Webel design, and showed changes in the design of the Rainbow Pool and in the trees growing north and south of the elm walks, the similarities between the two proposals underscore, again, significant aspects of the original design that were deemed inappropriate for change. Among these are the linear arrangement along the east/west axis, the double rows of elms flanking the Reflecting Pool and the masses of shrubs around the memorial structure.⁷⁴

Acceptance of the underpass concept was influenced by the continuous public debate occurring throughout the 1960s and into the 1970s over the merits of freeways in the inner city. After prolonged deliberation the tunnel plan was eventually rejected, even though the Theodore Roosevelt Bridge and the west leg of the inner loop freeway, designed to connect with the tunnel, were under construction throughout the early 1960s. With the construction of the bridge approach and freeway segment near the western terminus of Constitution Avenue, changing the grade and adding several access roads were necessary in the area just north of the Watergate. The Theodore Roosevelt Bridge was dedicated in 1964; the west leg opened in 1966.

Throughout the 1966 to 1976 period, SOM worked with the park service and other agencies to refine their initial proposal. By the time of the 1976 Bicentennial, SOM's proposed treatment for the area around the Lincoln Memorial had developed into a design that featured much of the original layout and geometric arrangement along the Reflecting Pool, the circle and radial roads. Two areas that contrasted with the longstanding formality lay on the north and south sides of the Reflecting Pool, where SOM developed a more naturalistic landscape plan. The tunnel was no longer part of the overall design.

Conceptual planning for the improvement of the Mall may have influenced decisions that had a positive effect on the landscape surrounding the Lincoln Memorial. One improvement was the removal of the temporary WWII buildings from both the south side of the Reflecting Pool and the west side of the Washington Monument grounds during August of 1964. With this action, an unimpeded view between the Lincoln Memorial and the Washington Monument and the large open area south of the pool was restored. However, removal of WWI temporary buildings located on the north side of the flood control embankment did not occur until the summer of 1970.

Another visual improvement was initiated at about the same time as the demolition of the World War II structures. The National Capital Parks beautification program of 1964-1968 designated certain sites and federal reservations throughout the city for the planting of bulbs, annuals, and other flowers in beds, planters, and on slopes. While aquatic plants

had been floating on the Reflecting Pool for several years, the park added other seasonal color to planters on the Watergate plaza, a circular bed at the west end of Constitution Avenue, and on the hillside adjacent to the Rock Creek and Potomac Parkway approach. While the water lilies and other plants were removed from the pools in 1968, the planters, beds, and hillside were still maintained.⁷⁵



Figure 32 – Water lilies in Rainbow Pool, August 17, 1944. MRC 2-119.

Response to Contemporary Issues Through New Design and Preservation 1970-1996

Bicentennial Changes

In preparation for the Bicentennial celebration, several areas within the larger landscape of the Lincoln Memorial were altered. Although considered improvements or enhancements at the time, the changes that occurred around the west end of the Reflecting Pool and on the southeast side of the circle, between the Reflecting Pool and French Drive, deviated considerably from the original symmetry and balanced design for the memorial grounds. Most of these changes occurred in the rearrangement of pedestrian circulation and the selection of site details and materials. On the southeast segment, granite block pavers, ground cover, post-and-chain fencing, concrete, and concrete curbing were used together to create individual tree beds and a plaza-like area around the

two hexagon-shaped kiosks and a refreshment trailer, which had been set up there by 1973. While this treatment around the elms and along French Drive was done to accommodate higher levels of visitation and to protect the trees in this area, the overall effect detracted from the longstanding simplicity of design on the site as a whole. A more sympathetic installation of paving was added to the area between the base of the Reflecting Pool steps and the pool at about the same time. Here, cobblestone, granite, and concrete panels replaced relatively narrow walks of flagstone pavers, which had been added shortly after the completion of the pools. Although the design for the panels was based on an interpretation of the original treatment for the main approachway, the selection of materials and pattern of the new installation was not in keeping with the original design intent for this end of the Reflecting Pool. The two elm walks paralleling the pools were also repaved as part of this project with a bituminous paving, rather than concrete, the historic surface.⁷⁶

The most significant change to occur within the circle at the Lincoln Memorial since the installation of exterior lighting in 1969 was the construction of handicap accessible ramps and elevators. The ramps followed a modified L-shaped course along the outer edge of the wall behind the planting beds adjacent to the approachway and along the hedges lining the entry walks leading up to the memorial. Construction of the ramps, the low retaining walls behind the north/south sections of the ramps, and the elevators necessitated the removal of boxwoods and yews from both sides of the front facade planting. Construction may also have affected the condition of shrubs growing in adjacent areas. Soil compaction and other forms of disturbance appear to have caused damage to specimens other than those growing in the direct path of the ramps. One other aspect of the project was the construction of more than 100 curb cuts to accommodate



Figure 33 - View of north side of Lincoln Memorial, 1992. NPS DSC photo.

wheelchairs at the intersection of roadways and walks around the Mall and other park areas in the monumental core. These additions were completed in 1976. As part of the ramp construction, the park replanted several yews and boxwood on the east side. At this time two sets of six yews were planted in a semicircle to screen the exterior light boxes. The park also removed the two hedges of yews (*Taxus x media* 'Densiformis') flanking the approachway and subsequently planted new yews according to the same arrangement.⁷⁷

In 1977 park management replaced plantings near the approachway and on the opposite side of the Lincoln Circle with inkberry, or *Ilex glabra*. Shrubs in the pair of rectangular beds flanking the beginning of the approach to the memorial and in the two triangular beds marking the descent to the Reflecting Pool and had been damaged by exposure to intense sun and increased pedestrian traffic at these points. The *Buxus sempervirens* 'Suffruticosa' originally designated for these areas were unable to rejuvenate at a fast enough rate once they were damaged. Before the 1977 planting, park staff had replaced, at least one other time, the boxwood shrubs growing in the beds on both sides of the entrance to the approachway with Japanese holly, or *Ilex crenata*. As part of this planting effort, "boxwood, holly and yew, replacement and filler planting," were placed mostly on the north, south, and west sides of the memorial, "as directed by the [park] landscape architect." The American hollies and yews included in this planting were mature specimens. The two large hollies now growing on the east front were probably from this planting. Another plant type added to the landscape design was *Liriope variegata*, which was placed in the triangular beds at the top of the Reflecting Pool steps.⁷⁸

Other changes brought about by the Bicentennial occurred in areas adjacent to the Lincoln Memorial. These ranged from the installation of a floating dock near the Ericsson Memorial for the operation of commercial boat cruises on the Potomac, to the Folklife Festival, held in 1975 and 1976, on the open ground just south of the Reflecting Pool, to full-scale redesign of the former site of the World War I temporary buildings on the north side of the pool. Named Constitution Gardens, this naturalistic garden, reminiscent of 19th century public parks, was dedicated May 27, 1976.

The Development of Preservation Plans

In 1976 it was determined that the large population of midges and spiders congregating at the Lincoln Memorial at night was responsible for the soiling of the white marble exterior surfaces of the building. Attracted from their natural habitat along the Potomac shoreline to the Lincoln by the bright night lights, the midges attracted spiders. Large numbers of birds, in turn, were attracted to the spiders. As a result, the birds established nesting areas in the upper recesses of the structure. Cleaning debris and residue left by these pests with high pressure water proved to be damaging to the memorial itself. Park management tried various treatments to reverse this deterioration, but to no avail.⁷⁹

The plaza between the traffic circle and the Reflecting Pool required several repairs in 1977. The park service noted that the joints in the stone sidewalk needed repointing.

Moreover, exposed aggregate in the south walk was deteriorating, showing evidence of cracking, spalling, and missing stones. The north walk and center panel had vegetation growing between the joints. Similar problems affected the memorial approachway, where the cobblestone panels were cracked and missing stones. Some of these conditions persisted for several years. In 1983 NPS employees noted that exterior drains around the building were inadequate, and unable to prevent seepage into lower chambers. In addition, the aggregate walks were crumbling.

Although swimming or wading in the pools had been prohibited for many years, during warm weather, large-scale gatherings on weekends, holidays, and other occasions prompted spontaneous wading. By 1978 periodic cleaning was required once or twice per year. It would take approximately three weeks per cleaning, as on average, 10 to 15 large truckloads of debris would need to be removed from the pools. In addition to the build-up of debris, the bottom was no longer watertight and the intake and drainage of surplus water required improvements. The reflecting pool underwent "reconstruction" in 1981. Upon completion of the project, the park service introduced a "self-sustaining ecological system," consisting of selected aquatic plants combined with natural bacterial action designed to consume algae and maintain the appearance of the pools.⁸⁰

In 1984, the National Capital Region proposed to rectify site problems in the area between the Lincoln Memorial and the Arlington Memorial Bridge. The large wooden piles formerly used to secure the Watergate concert barge were to be removed, as was the access road at the top of the steps, which had been used to service the concerts. However, the granite curb, marking the river side of the access road was to be left in place. The same proposal called for a "handicap access ramp," similar to the existing aggregate walk, at "the juncture of the walks connecting the Lincoln Approach, Bridge and Watergate steps."⁸¹

Since the Bicentennial, ongoing preservation of the vegetation at the Lincoln has centered on the American elms lining the radial roads and the circular road and on the Dutch elms growing along both sides of the Reflecting Pool. Although the arrangement of the original planting had not always been maintained, efforts at sustaining a healthy collection of trees have been substantial. These efforts include following a prescribed balance in the selection of elm varieties and the cultivation of replacement elms at the National Park Service's nursery on Daingerfield Island near National Airport.⁸²

Other vegetation preservation has been directed toward the lawn areas around the memorial structure and along the Reflecting Pool. The 1993 Presidential Inaugural festivities necessitated the reseeding of grassy areas in late January. Because only rye seed, rather than the preferred fescue, could germinate at that time of year, sections were cordoned off with temporary fencing for a more rapid reestablishment of the lawn. The longstanding use of temporary or snow-type fencing to restrict pedestrian access to the lawn during the off-season is now prevalent throughout the year as different grassy areas are allowed to rejuvenate.

Beginning in 1988 the Denver Service Center of the National Park Service, in collaboration with National Capital Parks-Central and the National Capital Regional Office, conducted studies about the need for the preservation of the Lincoln Memorial. As a result of their initial examinations, the raised terrace and the approachway were identified as two significant landscape features that required preservation. The restoration of the raised terrace, including the coping along the top of the retaining wall, began in the fall of 1993, and that of the approachway began in the fall of 1995.

In 1993, the National Park Service, in cooperation with the District of Columbia, the Federal Highway Administration, and the Architect of the Capitol, agreed on unified design guidelines for the vicinity of the National Mall streetscape. This area encompassed President's Park on the north, the Potomac River and the Southwest Freeway on the west and south, and Second Street on the east, including the Capitol grounds. The *Streetscape Manual* outlined consistent treatments for roadways, walkways, vegetation and site furniture. For the Lincoln Memorial grounds, Constitution and Independence avenues were defined as "major park roads," French and Bacon drive were defined as "park roads and drives", and the Reflecting Pool area and eastern portion of the Lincoln Circle were termed "special pedestrian ways." Based on this classification system, the manual provided standard details for each area. In 1991 17th Street, between Constitution and Independence Avenue, was the first NPS road project to implement the Streetscape Manual standards. Since the guidelines were developed, the NPS has used them for all their road projects in West Potomac Park and the Mall.

New Memorials, New Commemorative Landscapes

After the Bicentennial several new memorials were proposed for sites adjacent to the Lincoln Memorial. Unlike the Ericsson Memorial, the locations of some of these did not follow the geometric patterns established by the McMillan Commission plan, and later reiterated by the NCPPC plans, for the development of secondary sites in West Potomac Park. Two had little impact on the memorial grounds. The first, a separate memorial to the Signers of the Declaration of Independence, was located on a 1-acre island in the middle of the Constitution Gardens lake. It was completed in 1982. The second consisted of adding the names of Alaska and Hawaii to the other states already commemorated on the Lincoln Memorial. Although a bill introduced in the U.S. Senate in 1973 sought to include the names of Alaska and Hawaii on the attic frieze, where the other states were recognized, after lengthy debate a different proposal was eventually adapted. In 1985 the names of the two new states were engraved on a rectangular-shaped plaque that was installed on the center of the approachway, aligned with axis of the Washington Monument.⁸³

Two larger memorials developed during this decade have had significant impact on the Lincoln Memorial grounds. The first of these was a memorial to Vietnam War veterans, designed by Maya Lin, which was located in the western portion of Constitution Gardens adjacent to the northeast segment of the circular road. The Vietnam Veterans Memorial was dedicated in 1982. Two years later, a flag pole and statuary group, designed by

sculptor Frederick Hart, was added to Lin's understated, yet dramatic, geometric work. An overhead tree canopy and understory trees planted next to the sidewalk along the outer edge of the circular roadway screen this memorial from the Lincoln Memorial. However, they also affect the formal character of the planting of the American elms around the circle. Near the northeast section of the circle, a curved arrangement of paths leading from Constitution Gardens and the Vietnam Veterans Memorial intersects with the more linear walks on the north side of the Reflecting Pool steps. This arrangement has changed the formal character of the pedestrian circulation.

With the successful completion of the Vietnam Veterans Memorial, the area at the west end of the Constitution Gardens became strongly associated with veterans. Soon thereafter, veterans organizations requested permission to set up concession tents near Constitution Avenue, where they sold merchandise expressing veterans' points of view on pertinent issues. In 1983 the tents were moved to the top of the steps on the north side of the Reflecting Pool, where they have remained.

The second major memorial, dedicated to Korean War veterans, was authorized in 1988 and constructed on the south of the pool in 1995. The design of this memorial incorporated many of the same geometric elements as the Vietnam Veterans Memorial but adapted them to achieve a different overall effect. Like the Vietnam Veterans Memorial, the Korean War Veterans Memorial is adjacent to a section of the circular roadway around the Lincoln Memorial. Informal paths also intersect with the straight walks found on the south side of the Reflecting Pool. An overhead tree canopy and understory trees, planted to create a screen, are immediately adjacent to the sidewalk along the outer edge of the circle, as well. Both the walks and the trees at the western end of the Korean War Veterans Memorial fundamentally transform the formality originally planned for this area of the circle.

The kiosks and refreshment trailer that had been on the south side of the Reflecting Pool steps since the late 1960s and early 1970s were removed and relocated or replaced in 1995 as part of the Korean War Veterans Memorial's development. A "Tourmobile" kiosk, a souvenir kiosk, and a new, enlarged refreshment trailer now occupy sites on the west side of French Drive. A new information kiosk has been installed at the edge of the recently planted understory trees between the Reflecting Pool and French Drive. The old nonhistoric treatment of clustered structures, extended pavement, individual beds around the elms, and post-and-chain fencing has been continued in this designated area for visitor services.