

South Waterside Drive Overpass
Southbound access ramp from Massachusetts Avenue
3.8 miles north of P Street, NW
Rock Creek Park
Washington
District of Columbia

HAER No. DC-16

HAER
DC,
WASH.,
573-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

SOUTH WATERSIDE DRIVE OVERPASS

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Location: Southbound access ramp from Massachusetts Avenue
3.8 miles north of P Street, Washington,
DC.

UTM: 18/321800/4309000
Quad: Washington West

Date of Construction: 1932-1933

Engineer: John Nagle
Office of Public Buildings and Public
Parks of the National Capital

Contractor: B.W. Reilly
The National Construction Company

Present Owner: Administered by:
Rock Creek Park
National Capital Region
National Park Service
Department of the Interior

Present Use: Access ramp from Massachusetts Avenue onto the
southbound lane of the Rock Creek and Potomac
Parkway

Significance: The South Waterside Drive Overpass is a typical
parkway structure of the 1930s. Its materials
and construction are typical of parkway bridges
in National Parks. The bridge features modest
decorative and design details, making it
visually attractive to the passing motorist.

Historian: Marcia M. Miller, 1988

After years of proposals, Rock Creek Park was created by an Act passed by Congress on September 27, 1890. Containing appropriations to purchase 1605.9 acres of land running along Rock Creek from the Maryland border to the Zoological Park to be preserved as a natural park, the act defined the purpose of the park as providing "for the preservation from injury or spoliation of all timber, animals, or curiosities within said park, and their retention in their natural condition as nearly as possible."¹ At the time, the United States government had designated only two other such areas as natural parks.² The Commissioners of the District of Columbia and Chief of Engineers of the United States Army jointly controlled the park (although at this time the military exercised more authority). Their duty was to lay out paths and roads for public use. After purchasing the land, however, Congress did not provide for any improvements to the park for the next seven years.

Since Congress did not appropriate money for work within the park, chain gangs (comprised of District prisoners) constructed the improvements to paths and roads. In 1898, Congress finally approved money to create a road running the length of the park. Beach Drive followed the natural course of the path along the creek.³ This became, and remains today, the main thoroughfare through the park.

The park remained under the Board of Control of Rock Creek Park until 1918. At this time it became part of the National Park system in the District of Columbia and the duties were transferred to the jurisdiction of the Office of Public Buildings and Grounds. The officer in charge of the park still reported to the Army Chief of Engineers. In 1925, the new Office of Public Buildings and Public Parks of the National Capital administered the Park after the Office of Public Buildings and Grounds was abolished. President Franklin Roosevelt abolished this office, along with the Rock Creek and Potomac Parkway Commission (established to complete a parkway along the lower end of the creek), in 1933. The Office of National Parks, Buildings, and Reservations in the Department of the Interior (a temporary name for the National Park Service) gained control of the park at this time. Rock Creek Park thus became one of the National Capital Parks.

The land south of the park, from the Zoological Park to the Potomac,

¹Mackintosh, Barry. Rock Creek Park An Administrative History. History Division, National Park Service, Department of the Interior, Washington, D.C., 1985, p. 17.

²*ibid.* Yellowstone and Sequoia National Parks were the first to be designated as such.

³Beach Drive is named in honor of Col. Lansing H. Beach, Army Corps of Engineers, U.S. Army who served as Secretary of the Board of Control of Rock Creek Park and later as the Bridge Commissioner for the District of Columbia. He is responsible for the early improvements to Rock Creek Park.

presented a vast dumping ground as far back as the late nineteenth century. Congress wanted to fill in the valley to rid the city of the sewage and to create easier access between Georgetown and Washington. Although many proponents lobbied for this plan, no action occurred during the next decade. In 1900, the Army Chief of Engineers submitted a report to Congress on "a suitable connection between the Potomac and the Zoological parks".⁴ His plan, however, focused on the Mall area and completely ignored the section of the creek valley below N Street. The 1902 McMillan Commission report recognized the need for some resolution to the conflict of filling in the valley versus leaving it open. The Commission strongly approved of the open valley plan for its economy, convenience, and beauty.⁵ The Washington Board of Trade also favored the open valley plan. The Georgetown Citizens' Association, however, wanted to fill in the valley for easier access to and from Washington. Thus, several bills submitted to Congress proposed that sections of the valley be filled in to build a road across the creek. Congress took no action on any of the bills. In 1908, a new study analyzed both treatments of the valley. The report called for some kind of parkway: "A park effect of one kind or another is unquestionably the essence of any possible treatment of Rock Creek between Massachusetts avenue and L street..."⁶ The report suggested four alternatives but favored the full open valley plan with a main drive along the creek. W. J. Douglas, the District Bridge Engineer, also supported this alternative. Still, no immediate action was taken.

Finally, President Taft signed an Act on March 4, 1913 stating that a commission would be established to acquire the land on both sides of the creek to be made part of a parkway. This parkway was to be part of the link between the Maryland/D.C. line to the north and West Potomac Park to the south. Although both the Commission and the parkway were administratively linked with the Park, the parkway never became part of the boundaries. The National Park and Planning Commission, with C. Marshall Finnan in command of the project, administered both the park and the parkway. Once again, however, problems with design, money and land acquisition delayed any action for several more years.

Paving of the parkway began in the mid-1920s with the final section being completed in 1935, and was touted as ranking with the best parkways in the nation.⁷

As the section of the parkway below Massachusetts Avenue neared completion, it became necessary to build an access ramp from Massachusetts

⁴Mackintosh, p. 47-48.

⁵ibid., pp.85-86.

⁶ibid., p. 50.

⁷"New Parkway Here to Rank with Finest," The Washington Evening Star 17 April 1936.

Avenue to the southbound lane of the parkway. The best possible solution seemed to be an overpass crossing the north bound lane of the parkway and entering the southbound lane on the east side. Completed this way, landscape and architectural treatments would be simpler and the entire project more economical. The negative aspects, however, included a reverse curve in a very compact area with the overpass itself having a skew of thirty-seven degrees. Also, because of the set elevations and the clearance above the northbound lane, the main span of the structure would be too flat for its length (architecturally). The Engineers also needed to take into consideration that the south abutment would be aligned directly above a seven foot brick trunk sewer.⁸

Although the use of steel would have simplified many of these problems, the bridge engineers selected reinforced concrete with a stone facing in order to stay with the adopted policy of the parkway of making all structures simple and natural. Their design, however, differed from other planned bridges. They decided to use a concrete t-beam deck supported by two rigid cellular abutment structures carried to rock on circular cylinders. Buttress piers would be placed as additional support against the sliding ground.⁹ This offered stability in the wet hillside and new fill.

The central span is fifty-two feet from center to center with each end span equaling sixteen feet nine inches. The deck width of the structure is 36.2 feet. The facing is native granitic gneiss of variegated colors ranging from blue grey to reddish brown. The stones vary in location to avoid a clumped or spotty appearance. The placement of the stones followed the rules of the Westchester County Park Commission.¹⁰ The coping course of the parapet used brownish colored sandstone as it was impractical to quarry native stones of that size. Large voussior stones placed along the springline gave the appearance of an arch ring.

The overhanging end spans allowed for additional space underneath the structure. The Parkway officials decided to use this space as comfort stations for the park and a storage area for equipment. This proved more economical and aesthetically pleasing than building another structure nearby. Another architectural feature, a police lookout tower located on the west side of the south abutment, provided police with a clear view of traffic on both sides of the parkway.

The Office of Public Buildings and Parks of the National Capital designed the South Waterside Drive Overpass. John L. Nagle, designing

⁸Gillette, D.H. "Overpass Aids Traffic in Washington, D.C., Park," Engineering News-Record 1932, p. 38D.

⁹ibid., p. 381.

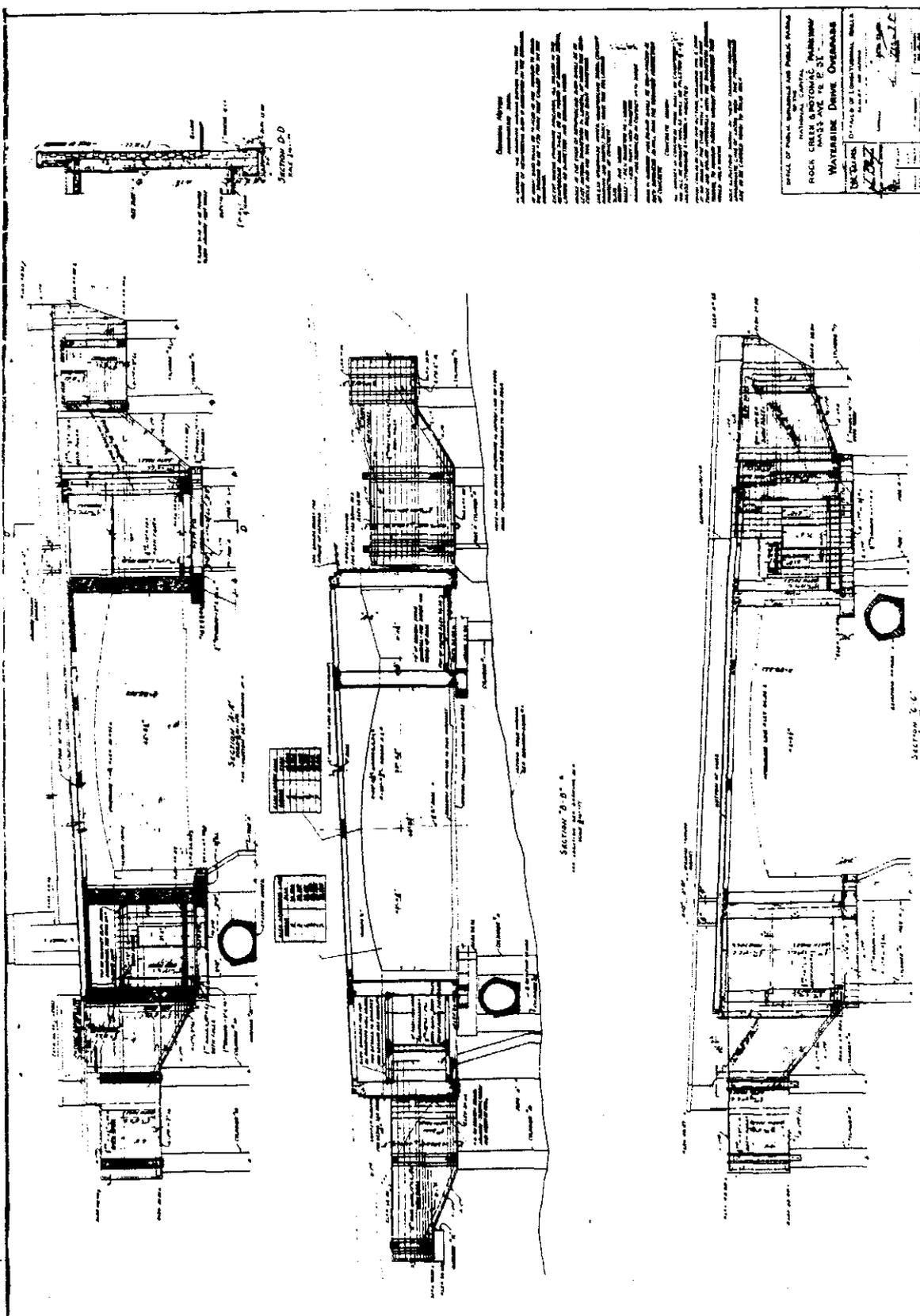
¹⁰Gilmore D. Clark was the head of this Commission that constructed the first parkway in the United States.

engineer for the newly completed Arlington Memorial Bridge, supervised the detailing. The National Construction Company of D.C., with B.W. Reilly in charge, contracted to complete the work. The cost of the bridge was \$40,430.

The South Waterside Drive Overpass is significant in its association with the other bridges built during the construction of the Rock Creek and Potomac Parkway. It is similar to all parkway bridges of the 1930s, it was built to blend in with the parkway scheme rather than stand as an entity in itself. The bridge is built of concrete and faced with mica schist (with sandstone capstones on the parapet), believed to be the most suitable construction design for parkway bridges. The South Waterside Drive Overpass, however, has significant architectural features added to the basic structure. The comfort stations, storage rooms, and police lookout tower are both practical and aesthetically impressive additions. Thus, the designing engineers overcame difficult engineering problems to construct a structure both useful to the park and visually interesting.

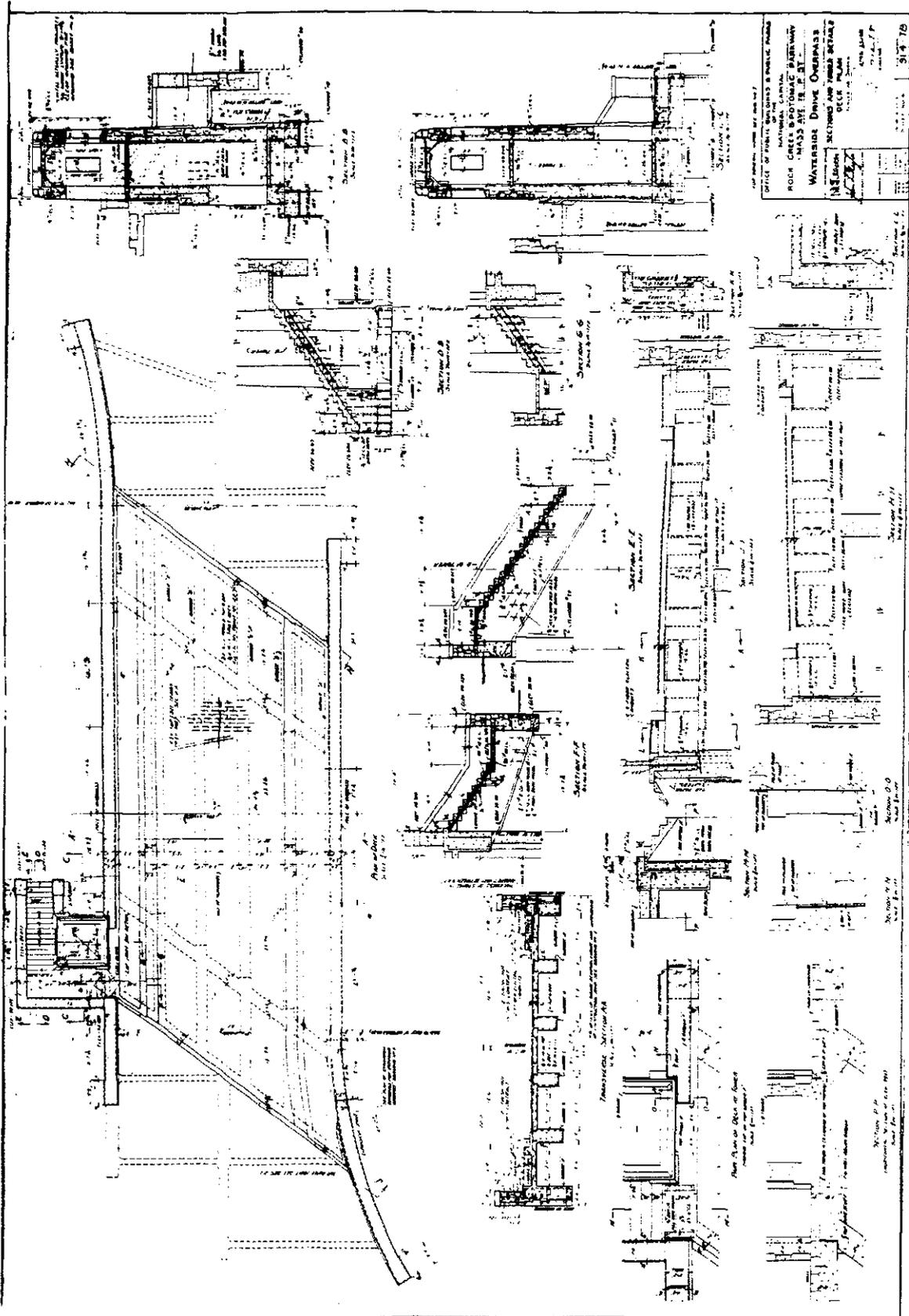
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"Detail of Longitudinal Walls"--Drawing Files, National Capital Region, NPS



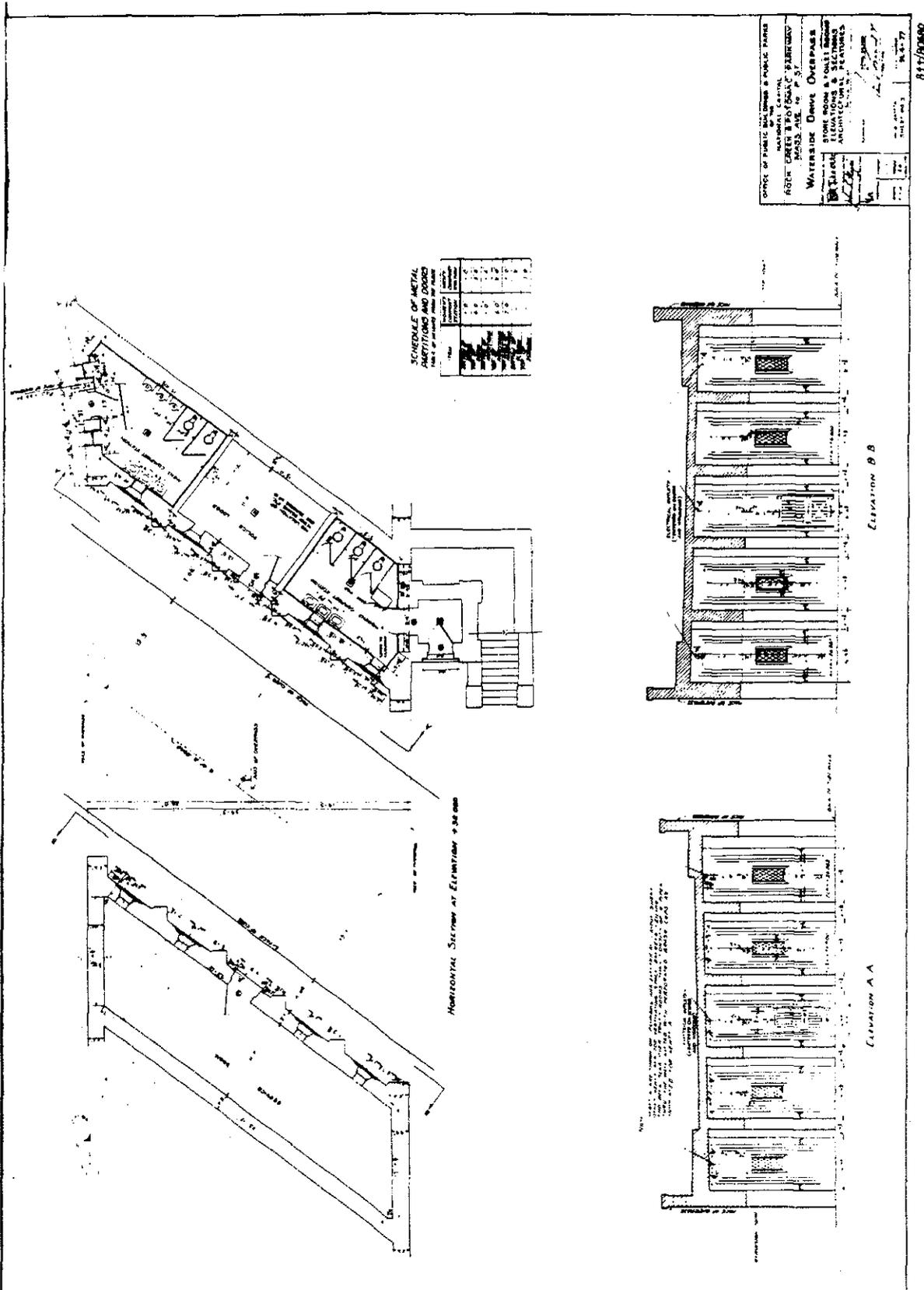
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"Section and Tower Details"--Drawing Files, National Capital Region, NPS



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"Store Rooms & Toilet Rooms..."--Drawing Files, National Capital Region, NPS



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