Chesapeake and Ohio Canal, Georgetown Section
Running east and west parallel to
M Street, N.W. and one block south of it
Washington (Georgetown)
District of Columbia

HABS No. DC-147
HABS
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PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA
Reduced Copies of Measured Drawings

Historic American Buildings Survey
Office of Archeology and Historic Preservation
National Park Service
801 19th Street, N.W.
Washington, D.C.

CHESAPEAKE & OHIO CANAL, GEORGETOWN

Location: Running through Georgetown, D.C., east and west, parallel to M Street and about 1 block south of it.

Present Owner: National Park Service, Washington, D.C.

Present Occupant: Not Applicable.

Present Use: Scenic and recreational.

Statement of Significance: A remarkable engineering achievement of the early 19th century that played an important role in the development of Georgetown commerce, and stimulated trade and settlement of the interior.

PART I. HISTORICAL INFORMATION

A. and B. History of the Canal:

The Chesapeake and Ohio Canal, which cuts through Georgetown between M Street and the Potomac River, is today an important asset: it provides an open space which with picturesque walks enhances the surrounding property; in some areas benches provide a pleasant park-like retreat; it is used for National Park Service barge trips; and here begins a popular walking trail to Great Falls, along the restored tow path. For many, it is also a reminder of the commercial activity of 18th and 19th century Georgetown, and of the engineering skill of the past century. But while we appreciate the Canal for these reasons, we must remember that it was built purely as a commercial venture, and although care was taken to do the work well and solidly, virtually no thought was given to scenic or aesthetic factors: the early Patowmack Company, for example, contemplated blasting out the Little Falls and the Great Falls of the Potomac which were to them simply impediments to travel.

There were many reasons for planning the improvement of the navigability of the Potomac river. Especially in the 18th century, when roads were completely inadequate for trade, the river was an important link with the interior of the vast tract of Virginia. It was also important simply as a highway independent of any commercial activity. In the 19th century the commercial aspect was greatly increased by enlarged markets for coal, lumber, fur, tobacco, and other commodities. Thus interest in making the Potomac more navigable first gave rise to the Patowmack Co. in the 18th century, which constructed locks and canals around major river obstructions, and finally, the far more reliable and successful Chesapeake and Ohio Canal Co. of the

19th century which obviated the unreliability of river travel, by constructing a canal parallel to the river, and drawing water from it. This is the canal that exists today, extending 184.5 miles from the tidal lock in Rock Creek at the eastern side of Georgetown, to Cumberland, Maryland. The first 22 miles of the canal are now restored and operable.

1747 The first formal interest in the Western part of Virginia and the Ohio River valley was manifested in 1747 when the Ohio Company was formed to colonize the Ohio River valley. The company was made up largely of Virginians, and Augustine Washington, George Washington's half-brother, was a major shareholder. Exploration, which utilized the Potomac River considerably, was begun in 1750 and in 1754, the year the French and Indian War began, they were building Fort Prince George at what is now Pittsburgh, Pennsylvania. This fort, captured and finished by the French, was renamed Fort Duquesne.

George Washington was actually one of the first to envision making the Potomac navigable all the way to Cumberland, Maryland. As an assistant on a survey expedition sent out in 1748 by Thomas Fairfax, 6th baron, (who owned large tracts of Western Virginia) Washington became familiar with the region, and in 1753 had been sent again (by Robert Dinwiddie, Governor of Virginia) into the Ohio valley to assert British claims against the French. His next excursion in 1754 to what is now Waterford, Pa., essentially began the French and Indian war.

Thus Washington had more knowledge of, and contact with
1754 the area than most men, and in 1754 dreamed of a link via the Potomac to the Ohio River (and the Mississippi) which would be a most important strategic and commercial link with the Eastern Shore.

1776 The American Revolution clearly put a stop to earlier plans, and so it was not until a few months after Washington resigned as Commander in Chief of the Continental Army in
1785 1785 that he could turn again to his pet project. He secured passage in the legislatures of Virginia and Maryland of acts to help organize a company that would undertake the work that was needed to make the Potomac navigable. With the appropriate authorization, stock was sold, and George Washington, not surprisingly, was elected president of the newly formed Patowmack Company. He was the zealous head of the enterprise until he resigned in 1789 to accept the presidency of the United States; but until then he devoted much of his time to supervising actual work on removal of obstructions in the river, and the various locks and canals that were to circumvent rapids that could not be blasted

out. In August, work was actually begun on clearing rocks and sand bars from the river and in deepening parts by the construction of dams along the shore.

1786 The following year, 1786, construction of locks on the Virginia side of the Potomac began, to pass around other obstructions. Those at Great Falls, for example, are still to be seen.

1800 Two significant references to the progress of the Potomac Company canal project at this time are to be found in the Diary of Mrs. William Thornton. On Sunday, January 5th, 1800 she records that her husband and several friends "were proposing to go to the great Falls, twelve miles from G. Town to see what state the works are in, & to know what is necessary to be done first as the Potomak Company obtained a loan from the State and they mean to proceed with the Canal Locks &c as fast as possible." (Records of the Columbia Historical Society, v. 10, p. 91) For Thursday, January 23rd, 1800: "After Dinner Mama & I went to George Town to a few stores, and then to see Mrs. Dorsey--Found there Mr. Nicholas King--engaged in Drawings & calculations respecting the Locks &c at the Great Falls afterwards Mr. Laird & Mr. J. Mason came in, they with Mr Dorsey are appointed by the Potomak Company as a Board to set in George Town to attend to their business." (CHS, v. 10, p. 98)

1802 Work on the locks, and clearing the river progressed slowly, partly due to labor shortages, and so it took 17 years to bring the work near completion. In 1802, five canals were completed: around Little Falls, on the Maryland side; around Great Falls on the Virginia side; around Seneca Falls, and two canals at Harpers Ferry. These varied in length from 50 yards to over 2 miles. Two types of craft used the waterway, log rafts ("gondolas") that were usually broken up at Georgetown, and pointed boats ("sharpers") that were poled back up. This then, was the precedent both for trade on the Potomac, and for man made improvements that reached their height in the Chesapeake and Ohio Canal.

That same year, Benjamin Henry Latrobe, the well known architect, completed a map entitled "Plans and sections of the proposed continuation of the Canal at the Little Falls of the Potomack" and this plotted a route of a canal of some extent, and parallel with the river. Although the path he took through Georgetown is more angular than the one constructed 30 years later, it indicates that even this early, a more reliable waterway was contemplated.

1821 The Potomac Company was not, however, a great success. As early as 1812 and 1816 attempts to charter a canal company were "fended off" by the Potomac Company. (Sanderlin: A Study of the History of the Potomac River Valley...., 1950, p. 53) "More than $500,000 was expended on this project;

yet the removal of obstructions to navigation was never successfully completed. It was found that the boating season was limited to periods of high water...which did not much exceed 2 months a year. The shippers complained that boats waiting for the river to rise were often delayed so that cargoes were not delivered on the date promised. Frequently, the boat and cargo were seriously damaged in the perilous passage down the river.... In 1821, a joint committee appointed by the Maryland and Virginia Legislatures to examine the affairs of the Potomac Company recommended that its charter be revoked." ("Chesapeake and Ohio Canal, Maryland", p. 5)

This committee report grew out of the Virginia Board of Public Works which was created in 1816 and was concerned with inland communication. It decided that actually, the Potomac Company had failed to fulfill its charter "to provide navigation for boats carrying 50 barrels of flour in the driest seasons" (Sanderlin, p. 54).

Thus in 1820 the Board sponsored two surveys of the valley, and in 1822 the report of the engineers recommended abandonment of the Potomac Company, and the building of a complete canal system.

1823 In response to this report, the Virginia assembly incorporated a Potomac Canal Company, but was not immediately joined by others interested in the project. In December, President James Monroe advised Congress to provide $30,000 for a complete survey and estimate of the cost. The following year estimate was received, but considered too high. Since the Erie Canal, which had been started by New York and Pennsylvania in 1817 with the identical aim of opening up interior trade, was a known success, two engineers ex-
1827 experienced in that work were engaged and in 1827 their report indicated that a canal from Washington to Cumberland, Maryland, could be constructed for about $4,500,000. Encouraged by this, subscription was begun in October, and
1828 in June of the following year the new Chesapeake and Ohio Canal Company was organized. On May 16, 1825, "at a general meeting of the stockholders of the Potomac Company, duly held at Semmes' Tavern, in Georgetown..." the former canal company had agreed to a Deed of Surrender giving the new Canal Company its former charter rights along the valley. ("Mr. Semmes, tavern keeper," is mentioned in Mrs. Thornton's diary for Saturday, February 15, 1800 (CHS v. 10, p. 107).)

The first president of the new company was Representative Charles F. Mercer. On July 4th (a day auspicious for such acts) construction was actually begun with the first spadeful turned by President John Quincy Adams, at Little Falls.

Ironically, on that same day, July 4th, 1828, the Baltimore and Ohio Railroad was begun, which was to run parallel with the Canal, and ultimately contribute to its failure.

1829 In order to meet the labor shortage that developed in the following year, many laborers were imported from England as indentured workers, and during that first year of work, the total force reached over 3100 men. The first annual report of the President and Directors of the company was printed that year, and optimism was high. Land for the canal which was to run through Georgetown was acquired in 1829 and 1830. A deed dated December 5, 1829 (D.C. Recorder of Deeds, Liber WB 33, folio 13) states that Tench Ringgold, Marshall of the District of Columbia was to convey to the Chesapeake & Ohio Canal "property of Margaret Anderson" part of which is now lot 851: "as much of this land as is needed to grantee for purposes of making a canal."

1830 By November of 1830, the first section of the canal was completed, and ran from Little Falls, above Georgetown,
1831 to Seneca, Maryland. The following year the section from Little Falls to Rock Creek, (i.e., through Georgetown) was completed. Richard Jackson, in his Chronicles of Georgetown (1878) records a mishap that occurred at this time:"During the excavation of the canal through the town...on the section between Market [33rd] and Frederick [34th] streets a sand blast was fired by a contractor, when large rocks were hurled through the air. One rock struck the dormer window in the house of Doctor Charles A. Beatty, on Water [K] Street, and smashed it to pieces; another rock, weighing one thousand and forty-five pounds struck a horse...producing instant death. The indignation was so great against the contractor that he fled the town." (p. 42).

The first map of this Georgetown section of the canal is the one published in 1830, before the Canal was actually complete, by William Bussard. This is part of the currently restored section of the canal.

Progress of the work on the canal in this Georgetown section is significant to note. In the Report of Col. John J. Abert and Col. James Kearney, of the United States Topographical Engineers, upon an Examination of the Chesapeake and Ohio Canal from Washington City to the "Point of Rocks" (Washington, Gales and Seaton, 1831) the work then accomplished is described. Water had not yet been let into this section of the canal, but the canal itself was virtually complete. Bridges were still being build. They examined the basin where Rock Creek enters the Potomac, and where a moll and tide lock were constructed. Lock No. 1 was a stone lock "faced with the Aquia Creek freestone, and has the appearance of a good piece of masonry" (p. 7). It measured 100 feet

long, 15 feet wide, with a lift of 8 feet, which was the standard for the canal. The pool following Lock No. 1, measuring 100 by 40 feet, was "inclosed by a stone wall, generally well constructed, but at places there appears to have been too many small stones admitted." (p. 7) The following Lock No. 2 was a little different. "Its sides are secured by dry stone walls. There is a drain from the streets of the town into this pool." (p. 7) Messrs. Abert and Kearney felt that the drain should have gone along side the pool and discharged into the basin, and not directly into the canal pool. This may be the same orifice photographed, north side, near the 29th Street Bridge. At the pool above Lock No. 3, they observed that its sides were "protected by a wall of dry masonry. There are stone steps on each side of these pools, conducting to the bottom...." (p. 7) These steps are no longer to be found. "The whole of the canal, which passes through the town, is to be revetted by a stone wall, the greater part of which is already built, and is a specimen of good work." (p. 8)

Stone bridges arched the canal where it cut across a street. These were complete at Green Street (29th), at Washington Street (30th), at Jefferson Street, and at Congress Street (31st) which last bridge had a 40' span. "All these bridges are very neat and substantial structures, faced with the freestone of Aquia Creek, well laid, with hammered faces." (p.8) All these bridges were replaced by iron ones in 1866-1867.

One does remain, however, the High Street (Wisconsin Avenue) Bridge. "The span of this is to be 54 feet. The abutments are partly completed, and the centering for the arch is erected, and as much of the work as is done, is certainly of a very substantial character." (p. 8)

1833 Despite these optimistic reports by its fifth year the Company was in financial difficulties: 62 miles of the canal had been completed, up to Harpers Ferry but the company was almost out of money. "There followed a long 17-year period of severe financial struggle before the canal finally reached Cumberland. The State of Maryland repeatedly responded to the company's plea for aid, and, by 1839, had invested more than $6,000,000 in the project." (Chesapeake and Ohio, Maryland", p. 7) Delay was also caused by a controversy with the Baltimore and Ohio Railroad about the right of way between Point of Rocks and Harpers Ferry. Work, however, proceeded steadily. The Aqueduct Bridge, crossing the Potomac and ultimately linking the Alexandria Canal with the Chesapeake and Ohio in Georgetown was finally begun; it too was to be one of the engineering feats of the time.

1835 In the Seventh Annual Report of the Company, a note of great optimism was struck. "Our success so far has forever put to flight the evil forbodings and doubts of sceptics who boldly pronounced the enterprise to be impracticable and visionary; and we have the consolation of knowing that there are no difficulties in advance so appalling as those we have triumphantly passed." (p. 5)

1836 The company as well as local Georgetown businessmen were well aware of the added advantage that the canal brought in the form of water-power. The canal, over 35 feet above the level of the Potomac at Lock No. 4, could provide a new source of power for milling, and thus could even further promote business in Georgetown. In 1829 Virginia had passed an act to emend the original act incorporating the Chesapeake and Ohio Canal: "The said President and Directors, acting in behalf of said company...may sell, let, or otherwise dispose of, any surplus water in any part of said canal, or of any feeder or reservoir thereof...if they shall be of opinion that no injury will result therefrom to the navigation of the canal." (House Doc. 143, p. 2) This amendment had to be agreed to by Congress, and Maryland. On 13 January 1836 a petition by a long list of distinguished merchants of Georgetown was submitted to Congress, who had not yet agreed to the change. Among the signers were the following: A. Reintzell, M. Adler, Francis Dodge Jr., John Marbury, Francis Dodge (Sr.), W. C. Corcoran, and Thomas Corcoran. This source of new power was to be a great stimulus.

1837 By 1837, the canal was completed 107 miles above Georgetown;
1839 by 1839, to within 50 miles of Cumberland, Maryland. William Elliot, in his guide to Washington of 1837, tells us that "the embankments are acquiring, by time, greater solidity, and the president [of the Canal Company] thinks they warrent the belief, that no further interruptions will take place, in consequence of breaches in the banks. The inner slope of the tow-path has been covered with broken stone to a considerable extent, and it is proposed to continue this mode throughout the entire route. The dredging machine in Georgetown basin, has had great effect removing the deposits of sand and gravel." (p. 278) Contributing to the expense, he notes that the Board of Directors of the canal company "complain of the heavy damages they have been obliged to pay for land, through which the canal was located." (p. 279)

1850 The last stretch of the canal to Cumberland, was not opened until October 10th, 1850. Here the canal stopped. The cost of the difficult enterprise had been far more than expected. In Randoph Keim's guidebook to Washington in 1880,

he asserts that it was completed "at a cost of $13,000,000 of which Maryland subscribed $5,000,000 [sic], the United States $1,000,000, Washington, $1,000,000, and Georgetown, Alexandria, and Virginia, each $250,000." (p. 214) The enumerated constructions are also impressive: "The execution of the enterprise was a work of great difficulty. There are 75 locks of 100 feet in length, 15 feet in width, and averaging 8 ft. lift; 11 aqueducts [sic!] crossing the Monocacy river, consisting of seven arches of 54 ft. span; also 190 culverts of various dimensions, some sufficiently spacious to admit of the passage of wagons. The canal is fed by... [7] dams across the Potomac, varying from 500 to 800 ft. in length, and from 4 to 20 ft. elevation.... The tunnel through the "Pawpaw Ridge" is 3,118 ft. in length and 24 ft. in diameter." (p. 214)

The Chief engineers for this undertaking were Charles B. Fisk, who had also assisted Major William Turnbull, builder of the Aqueduct Bridge at Georgetown, with the Georgetown abutment design, and Benjamin Wright.

Even going no farther than Cumberland, trade grew, and large
1871 quantities of coal in particular came down in canal boats. In 1871 "the peak year, about 850,000 tons were carried on the Chesapeake and Ohio. In some years of this period the canal company made a considerable operating profit, which was quickly applied to the payment of back interest on its tremendous debt.... More than 500 boats were in operation." ("Chesapeake & Ohio, Maryland," p. 7)

1876 It was during these prosperous years, from about 1850 to 1889, that one of the most ingenious of the canal constructions was completed. This was the "Outlet Incline", a device rather like a dry dock on wheels, that received laden canal boats on a wooden trough, let out the water, and then eased the trough (and boat) down the bank, a 40 foot drop, at a 30° slope into the Potomac. The machine, largest of its kind in the world, was completed on July 10, 1876, with William R. Hutton as engineer. Situated one mile above Georgetown, it served until 1889 when a disastrous flood destroyed it, as well as much of the canal wall which separated the Potomac from the canal channel. Like the Aqueduct Bridge, which had been completed in 1843, it received much attention in publications throughout the United States and abroad.

1889 Due to a decline in cargo caused by the competition of the Baltimore and Ohio Railroad, increased road coverage, and the opening and development of other eastern ports, the Canal, especially after the flood of 1889, began its decline. Constant repairs necessitated by the canal dike being washed

out and other expenses of upkeep were increasingly difficult to meet, and when a flood in 1924 again devastated the canal, it ceased operation for good. Its fate for many years was in doubt until October 1938, when the Department of the Interior bought the 184.5 mile length, from Georgetown to Cumberland for $2,000,000. A press release of August 12, 1938 announced this intention and added: "With the canal company property come all the records still existing of the original Patowmack Co.... Many of the records are in Washington's handwriting and bear his signature." From the beginning preservation of the canal was clear: "the 22 miles between Georgetown and Seneca are to be restored by the National Park Service...to its former physical state as a historic site." Some of the responsibilities of the old canal remained however: water had to be maintained in the Georgetown section because of the mills there with leases from the Canal Company. Extensive restoration work on this lower section was done in 1938 and 1939, with barge trips beginning in 1938 on the new scenic and recreational canal.

1924

1938

Above Georgetown, some work in repairing flood damage, restoring the tow path and embankments, and even reconstruction work on Lock #15 was done by the Civilian Conservation Corps in 1940. Since then it has been maintained and restored by the National Parks Service, and is increasingly enjoyed as a recreational and scenic asset.

Date of Erection: Georgetown section, 1831.

Architects: Charles B. Fisk and Benjamin Wright (entire canal).

Original plans, construction, etc: None known, but the original papers of the Chesapeake and Ohio Canal Co., now in the National Archives, may have some.

Important old views: A large number of early prints and photographs are to be found at the National Park Service (both Hains Point and Rosslyn); Fine Arts Commission, Washington; Great Falls Museum; Georgetown Public Library; D.C. Public Library; Library of Congress; and in private collections.

C. Sources of Information:

* = publications referred to in text.

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PART II. ARCHITECTURAL INFORMATION

A. General Statement:

As a great 19th century engineering feat, with historical significance and scenic qualities, the Chesapeake and Ohio Canal is one of the most important structures on the Georgetown waterfront. As stated in a report of 1831, "the whole canal, which passes through the town, revetted by a stone wall...is a specimen of good work."

The 8/10 mile stretch of canal from the Potomac River to the Aqueduct Bridge was a center of trade and commercial activity which contributed greatly to Georgetown's becoming an active commercial center in the District of Columbia in the 19th century. This

contribution was not limited to transportation; the canal also furnished water power for various industries along its path, enabling the area to grow. Structures of the past century line the embankments. Usually functional in design, these commercial and residential buildings are good examples of early waterfront construction.

Today the canal has again found a new way to contribute, through recreation. The National Park Service purchased the canal in 1938, and since then it has been maintained and restored, to be used for hicycling, walking, and boating. The satisfying evidences of good workmanship are apparent everywhere: in the batter (sloping) walls, the lock gates, the hardware, the remaining stone bridge, and the Aqueduct. From this purely commercial venture, there remains a "good piece" of structural work, a fine environmental relationship, and an evocation of life of a past era.

B. and C. Description:

The canal is built of stone hewn from local quarries, mainly brown and gray sandstone and limestone, set with hydraulic mortar, or in dry walls. Coursed range, rough rubble, and coursed rubble, battered (sloping) masonry is used in connection with dry walls. The dry walls, mainly lining the canal walls, are to prevent washing of the side berms, the earth embankments which contain the water trough. Though much reinforcement and replacement has occured, the canal remains structurally sound.

At the mouth of Rock Creek are located the tidewater lock (A) and the Potomac weir (B). The lock has fallen into disrepair with crumbling walls and missing gates. The walls are coursed range ashlar masonry. The movable gates have been replaced by three open fixed gates of 12" x 12" wooden members. This closed off the Potomac, as did the weir (B) across the mouth of Rock Creek. Evidence of the substantial construction of this weir is still to be seen in remnants on the west side; in the creek, however, only rotting posts and planks are evident. Coursed ashlar bulkheads flank the creek and are in good condition.

Continuing up Rock Creek it is apparent that fill has been added on both sides (C). Twentieth century bridges occur from the mouth northward to lock #1 (G): a concrete bridge (D) passes over above the tidewater basin, and the concrete and steel bridges of K Street and the Whitehurst Freeway pass over the creek above this at E.

At the entrance to the Chesapeake and Ohio Canal channel (F), fill has narrowed the basin which was originally there. On the northern side of the mouth a heavy post and plank revetment protrudes partially into the basin mouth. Also on the northern

side the towpath begins, and continues on that side to the 34th Street footbridge.

After the entrance basin the canal begins its 35 foot climb in Georgetown with Lock #1 (G). Like all the following Georgetown locks, the battered walls are of coursed range ashlar, grouted with hydraulic cement. Though structurally stable, concrete and brick infilling has been added. Originally all locks were uniformly designed to be 100 feet long, 15 feet deep and 14' - 8" wide with rounded wing walls.

The lock gates are of heavy timber. A typical gate is 8 feet high by 9 1/2 feet wide, made of a heavy wooden frame which turns on a pivot post about one foot square. The gate is pivoted by a 23 foot long lever beam in a horizontal arc. The pivot posts, resting in rounded stone openings, are secured by three inch wide metal straps let into the stone copings and fastened with square bolts. The gates are frames of 12" x 12" heavy timber with thick diagonal sheathing on the up stream side. Two butterfly sluice valves occupy two of the three bottom bays. These are operated by metal rods which extend vertically to the top and are there squared. Operation of these was by spanners (long handled wrench-like devices.)

Following Lock #1 is a typical pool with dry wall revetments, H. Here barges could wait to enter the locks, or let others pass. Next the reinforced concrete 29th Street bridge (with steel railings) crosses Lock #2 (I). On the northern wall of the 147' x 48' pool (J) which follows is a unique culvert (probably the one protested in 1831) formed by carved semi-circular stone pieces held together by the compression of the stone revetment above. Unfortunately, it has been filled with concrete. The asphalted towpath is nine feet wide here. It varies in width and covering throughout; though usually unpaved, asphalt, cobblestone, concrete, gravel, and brick appear. The width of the towpath varies from six to twelve feet.

The 30th Street bridge, similar to that at 29th Street, traverses Lock #3 (K), with the National Park Service barge embankment park to the northwest creating a pleasant expanse. The dry walled pool (M) is also lined by the shaded brick paved park.

The Thomas Jefferson Street Bridge, similar to the ones at 29th and 30th Streets crosses Lock #4 (O), which is followed by a pool (P). The atmosphere of the past is recreated by the cobblestone towpath with its abutting residences on the north side. The brick residences (Towpath Row) with flat and segmental brick arches are usually crowned with corbeled brick courses and metal gutters. One of the larger ground floor windows of the Row supposedly was once used to serve meals through to the canal workers. A projecting second floor of the Towpath Apartments overhangs the

towpath near 31st Street.

The canal travels under the steel 31st Street Bridge. A picturesque walk extends from here westward with a ten foot graveled towpath arched by a row of trees. To the north, projecting planks at about 14 feet extend from a building crowning the northern towpath revetment. The door, just above, was probably for loading merchandise on and off the barges. (Q)

The Wisconsin Avenue stone segmental arched bridge (R) with a span of over 50 feet, covers the path and canal under a stone intrados with rusticated voussiors and keystones. The ringstones and copings reflect the fine workmanship of past days, as do the spandrels of coursed range. Jutting slightly from the revetments on either sides of the canal are stone ashlar buttresses. The canal berms are retained here by rubble dry walls.

An eight foot towpath continues on the north side (S) beside a sloping dry wall adjoining the buttress; now it is a dry wall, though it probably had hydraulic cement which was too thick and therefore deteriorated. Across the canal the dry walls have steel rod reinforcement. Here also natural rock outcroppings have been incorporated into the wall above which a tree protrudes adding extra stress to the revetment. Two warehouses built close to the canal on either side enclose this area. Two metal connecting bridges between them span the canal. Though poorly maintained, both buildings exhibit interesting fenestrations. The northern revetment (see HABS DC-144) is skintled (various irregular protruding scabble faced stones) with bluish-grey stone in random courses. About 3/5 the way up the wall is a projecting stone course above which is a row of broken off planks near the top. This is probably the remains of large loading platform.

At Potomac Street (T), a steel trussed foot bridge with wooden plank flooring spans the canal. Three culverts open to the south, at least one of which feeds the millrace to Bomford Mill (now , at U. Wilkins-Rogers Milling Co., see HABS DC-143). At 33rd (V) and 34th (W) Streets, steel trussed bridges with concrete and wooden flooring cross the canal. The towpath revetment from Potomac Street westward remains dry wall rubble except a new strip of small wet wall squared stone masonry finished in August 1967 on the east side of the north end of the 34th Street footbridge. The canal retaining wall is of two types: old dry walls and new small stone wet walls (which are steeply battered). In this area on the south side was the turning basin which has since been filled. After crossing over the 34th Street footbridge to the south side the towpath continues westward passing under two modern concrete bridges: the Key Bridge and the Whitehurst Freeway Bridge (X). After reaching the Potomac Aqueduct Bridge (Y), the canal maintains its course westward.

D. Site:

Retaining walls and buildings flank the canal most of this distance. The various types of walks, walls, and vegetation which border the canal are numerous; there is, however, a uniformity to the whole area. At the western end, the lush foliage of the Maryland countryside begins as the Chesapeake and Ohio Canal moves toward Cumberland.

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