

Historic Structure Report

The Lockhouses

Historical Data

Chesapeake and Ohio Canal National Historical Park

MD — DC — WV

By

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SUMMARY OF DOCUMENTARY INFORMATION

- Oct. 1, 1828—First specification and estimate of expense for lockhouses drawn up by Dr. John Martineau of Board of Engineers.
- Nov. 12, 1828—Resident Engineers ordered to survey ground land along the Potomac River to facilitate the purchase of land for the canal right-of-way. As part of survey, one acre to be acquired for each lockhouse. All lockhouses ordered to be on berm side of canal, fronting south.
- Dec. 11, 1828—First contracts let for the construction of lockhouses. Houses at Locks Nos. 6, 10, 11, 13, 16, 18, 20, 22, 24, 25, 26 and 27 placed under contract.
- Mar. 18, 1829—Contract let for house No. 5 at Lock No. 7.
- Aug. 1, 1829—House No. 5 completed; first lockhouse to be finished.
- Jan. 30, 1830—Building plans for houses at Locks Nos. 26–27 enlarged.
- Jul. 24, 1830—Sums of \$1,300 and \$1,000 authorized for enlarging houses at Great Falls and Rushville respectively.
- Aug. 7, 1830—Lockhouses between Little Falls and Seneca Falls assigned to lock tenders for occupancy.
- Oct. 2, 1830—Contract relet for lockhouse at Lock No. 23; changes made in specification for cellar and foundation.
- Mid-Nov. 1830—House at Lock No. 20 completed; Board receives offer for opening tavern there.
- Nov. 20, 1830—W. W. Fenlon confirmed as keeper of Locks Nos. 19–20; in addition to regular compensation, \$200 authorized for construction of new kitchen to house at Lock No. 20, \$500 for another service building and \$100 for other dependencies at Great Falls.
- Jun. 1831—Abert and Kearney examine canal and observe that Fenlon is keeping an excellent hotel; engineers also report that all lockhouses are good stone structures except for one good frame house.
- Jun. 10, 1831—Board authorizes plastering of exterior of Crommelin House; second story to be completed and porch to be erected in front of store, center of structure.
- Jun. 10, 1831—Improvements authorized for grounds and house at Lock No. 23; stable and other necessary outbuildings to be erected; house at Lock No. 20 named Crommelin House and house at Lock No. 23 named Rushville House.
- Jul. 16, 1831—President Mercer orders wing to be attached to house at Lock No. 23.
- Jul. 16, 1831—*Rules for the Collectors of Tolls on the Chesapeake and Ohio Canal and Distribution of the Chesapeake and Ohio Canal, for the purposes of navigation, inspection and repairs, into Lockkeepers Districts* adopted by Board.
- Apr. 28, 1832—Board orders “Venetian Blinds” to be added to Crommelin House.
- Sep. 1832—Crommelin House painted by firm of Spaulding and Irwin.

- Apr. 17, 1834—President Mercer reported to House Committee on Roads and Canals that 17 lockhouses had been constructed, two of which (Great Falls and Rushville) had been enlarged.
- Oct. 2, 1834—Contract let for temporary shanties to serve as lockhouses at Locks Nos. 28, 29, 34 and 37.
- Aug. 8, 1835—Contract let to Joseph Hollman to build lockhouse and flume at Lock No. 44 at own expense in return for 21-year lease to rent excess water passing through the lock flume for manufacturing purposes; similar agreement made with Mr. Crampton at Lock No. 32.
- Jan. 20, 1836—Board orders that a lockhouse be built near Locks Nos. 62–66; during construction of Tunnel, house to be used by supervisory engineer.
- Feb. 10, 1836—Improved and more detailed general specification for lockhouses adopted by Board; specification to be used for all lockhouses except those at Prathers Neck and Paw Paw Tunnel.
- Apr. 20, 1836—Board orders lots around lockhouses to be enclosed with post and rail fences; locust posts preferred.
- May 21, 1836—Bids for eleven lockhouses accepted; contracts for houses at Locks Nos. 28, 29 and 34 let to Michael Foley, for houses at Locks Nos. 37, 39, 40, 41, 42, 43 and Guard Lock no. 4 to John D. Grove, for house at Locks Nos. 35–36 to Jonah Hood.
- Apr. 24, 1837—House at Lock No. 30 to be repaired; Board orders lockhouse to be constructed at Lock No. 33.
- May 10, 1837—Board orders Commissioner Bender to accept proposals for lockhouses above Dam No. 6 at \$950 each.
- May 17, 1837—Board authorizes Commissioner Bender to accept proposals for enlarged lockhouses (30 x 22 feet) at Four Locks and at Lock No. 61.
- June 7, 1837—Thomas Carburg ordered to erect house “of the usual dimensions” at Tidelock B; Superintendent J. Y. Young authorized to have house built at Lock No. 16.
- July 24, 1837—Contracts let to Jessie Schofield for houses at Locks Nos. 46, 51 and 53; contract let to James A Foster for house at Lock No. 38 (dimensions to be 32 x 20 feet).
- June 25, 1838—House at Guard Lock No. 8 to be built on foundation constructed for another purpose.
- Apr. 17, 1839—Lockkeepers between Dams No. 5 and 6 named.
- May 11, 1839—Chief Engineer Fisk informs Board that contracts for houses at Locks Nos. 54, 61 and 63–66 had been abandoned; twelve proposed lockhouses above Dam No. 6 had never been put under contract.
- May 15, 1839—Contracts to complete house at Lock No. 51 and construct house at Lock No. 53 let to J. W. Beideman.
- Oct. 14, 1839—House at Lock No. 51 reportedly completed; however, contractor required to make changes to conform to contract.
- July 18, 1840—Houses at Locks Nos. 51 and 53 completed.

- July 17, 1840—Chief Engineer Fisk reports 15 lockhouses to be built above Dam No. 6; however, none have been commenced and none under contract.
- June 6, 1843—As economy measure, Canal Company determines to build lockhouses of log construction.
- Aug. 8, 1843—House at Lock No. 32 reportedly built too close to Baltimore and Ohio Railroad tracks; train damaged structure.
- June 13, 1845—House costing \$300 to be constructed at Lock No. 44.
- July 24, 1845—As economy measure, Board agrees to dispense with building lockhouses until after canal is completed to Cumberland.
- Mar. 11, 1847—Roof and weather boarding on house at Lock No. 24 to be repaired.
- Oct. 1847—House at Lock No. 6 damaged by flood; new house built the following year.
- June 5, 1848—Board prohibits use of liquor at lockhouses, except at Crommelin House and Rushville House.
- Aug. 1848—Board prohibits use of liquor at Crommelin House.
- July 31, 1848—Log structure to replace deteriorating lockhouse at Dam No. 6.
- Sep. 1849—Board orders hotels at Crommelin and Rushville Houses to close down as of January 1, 1850; henceforth to be used as lockhouses.
- Apr. 1, 1850—Last of lockhouses to be completed, submitted by Hunter, Harris & Co.; houses are located at Locks Nos. 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 70, 72, 73, 75 and Guard Lock No. 8.
- Summer 1851—Crommelin House repaired; “Ball Room” rented out for grocery store.
- April 1852—House at Lock No. 5 swept away by flood; new house built in fall at cost of \$600.
- May 7, 1853—Annual salaries of lockkeepers increased.
- June 1, 1858—“Ordinary” re-established at Crommelin House by Henry Busey.
- Feb. 5, 1861—Reports made that Lock No. 20 and Crommelin House damaged by construction of Washington Aqueduct.
- Sep. 24, 1863—Room in house at Lock No. 30 rented out as dry goods and grocery store.
- June 4, 1866—\$5,000 needed to repair and restore the lockhouses.
- Dec. 18, 1867—Lockhouse to be built at Lock No. 44.
- Jan. 22, 1868—Repairs completed on Crommelin House; recommendation to build new kitchen in basement.
- Dec. 1868—House at Lock No. 11 repaired and enlarged.
- Apr. 7, 1870—Contract let to Robert D. Grove to build new house at Lock No. 31.
- Apr. 4, 1873—President Gorman notified that roof and upper floor of house at Lock No. 24 had burned.
- Oct. 1879—Telephone line installed along canal; 43 stations set up in watch boxes and lock

houses.

1884—Log house built near Crommelin House to serve as lockkeepers residence.

June 1886—Extensive repairs to lockhouses reported.

May 30–June 1, 1889—Many lockhouses lost or damaged in major flood.

Mar. 1936—Many lockhouses lost or damaged in major flood; houses at Locks Nos. 33, 38, 40, 41, 44, 47, 53, Dam No. 6, 58, 59, 60, 61, 67, 68 and 75 badly damaged or swept away.

1938–1940—Lockhouses at Locks Nos. 5, 7, 10, 12, 16, 20 and 21 repaired or restored as part of National Park Service restoration project.

PREFACE

This report has been prepared to satisfy in part the research needs for the restoration and preservation of the lockhouses on the Chesapeake and Ohio Canal. Previous to this report, numerous studies have been made on various individual lockhouses. The purpose of this present study is to expand on these reports and broaden their scope by including all available documentary information on the lockhouses in one document. Since this historic structure report encompasses all of the lockhouses along the entire length of the waterway, an effort has been made to deal with their general specifications while pointing out significant variations in their design.

A number of persons have assisted in the preparation of this report. Thanks are due to Park Ranger Ellwood Windholt for assistance at the park headquarters; to Park Historian Jack Sanderson for writing the Administrative Data Section; to Maria Joy and Robert Kvasmaka of the National Archives who were especially helpful in suggestion and locating unpublished documents; and to Dr. Harry Pfang and Barry Mackintosh of Park Historic Preservation (WASO); Superintendent William R. Failor of C & O Canal NHP; Supervisory Historian John F. Luzader; Historical Architect Thomas N. Crellin; and Editor Linda Wedel for reading the manuscript and providing editorial assistance.

Harlan D. Unrau
April 22, 1975

INTRODUCTION

An important person in the day-to-day operations of the Chesapeake and Ohio Canal was the lock tender. It was his duty to open and close the lock gates and to lock the boats through. He could be called upon to render this service at any hour of the day or night, and as compensation he received his house, an acre of land for a garden, and \$150 a year. For each additional lock under his care, he received \$50 extra, but he was expected to provide his own assistants to tend them. Married men and large families were preferred for the job of lock tender as this meant more hands to do the work.

The construction of the lockhouses reflects the history of the construction of the canal and illustrates some of the difficulties that the Canal Company experienced in building the waterway. The lockhouses on the lower end of the canal, built during the earlier years, are of mostly solid brick or stone construction. As the financial condition of the Canal Company grew progressively worse, it was necessary to resort to a number of expedients in order to cut costs. As a result, the lockhouses toward the upper end of the canal were of cheaper wood and log construction.

The lockhouses were built on a simple rectangular plan like those on the Erie Canal. As in the case of the other canal structures, the company prepared detailed specifications for the construction of the lockhouses in 1829 and 1836. The buildings were to measure 30 by 18 feet with a cellar below and an attic above. The walls of the main story were to be 20 inches thick. The masonry and carpenter works were to be of the highest quality.

STATEMENT OF HISTORICAL SIGNIFICANCE

The lockhouses on the Chesapeake and Ohio Canal are significant architectural resources, illustrative of the social, cultural and economic history of the waterway and the surrounding Potomac Valley. In these structures, lived the lock tenders who performed an important function in the day-to-day operations of the canal.

ADMINISTRATIVE DATA SECTION

Superintendent William R. Failor of C & O Canal NHP will supply data for this section. [Not available]

RECOMMENDATIONS

The records pertaining to the Chesapeake and Ohio Canal Company in the National Archives, the Library of Congress, the Maryland State Archives at Annapolis, and the Maryland State Historical Society at Baltimore, have been thoroughly investigated for this report. Therefore, it is the opinion of the author that no further historical research needs to be done on the architecture of the lockhouses.

However, it is recommended that the following studies be made:

1. An interpretive study of life along the C&O Canal which would include data on the lives

- of the lockkeepers and their families as well as the boatmen and their associates.
2. A series of archaeological digs around those lockhouses to be restored or stabilized to locate and extract various objects associated with the lockkeepers and their families. As many of the lockhouses have been rebuilt or otherwise modified, archaeological digs should also be made to determine the original dimensions and fabric of these lockhouses which are to be stabilized or restored.

CHAPTER I

The Construction of the Lockhouses, 1828–1833

Preparations for the construction of lockhouses along the line of the Chesapeake and Ohio Canal were begun during the fall of 1828. As early as September 19, the Board of Directors instructed Chief Engineer Benjamin Wright:

that suitable places be selected for the immediate construction of as many Lockkeepers houses along the lone of the Canal, as may facilitate the operation of the Corps of Engineers in executing and superintending the works already contracted for (Little Falls to Seneca Creek), or which may be hereafter contracted for.¹

Two weeks later on October 1, Dr. John Martineau, who earlier had been a close associate of Wright on the Erie Canal and had been brought down from New York by the Chief Engineer as a member of the Board of Engineers of the C & O Canal, transmitted a plan for the lockhouses to the directors. His plan was “with a small variation modeled after the houses erected on the Erie Canal.” In his opinion, “nothing more simple, commodious, economical and neat has presented itself to me.”

The specification for the lockhouses was as follows:

Specification of a Lockkeepers house the outlines of which are exhibited on the accompanying plan and the positions of the respective houses noted on the line of the canal.

Masonry

The building to be of stone and to be 30 x 18 feet over the walls, with a cellar under the kitchen part 6 feet in the clear, with a floor of earth, the walls to be 22 inches thick, and have a projection on the outside of 6 inches all round, and at least one course of stone high the cellar door to have stone steps, and a locust frame with grooves to receive the doors, which are to have substantial strap hinges and be fastened in the usual way with a padlock; there will be a window on each side consisting of a single sash each of 10 x 12 glass & 3 lights in width, each to shut in an oaken frame, the sash, to have hinges, to open upwards.

Principal Story

The floor to be 2 feet above the surface of ground; the walls to be 20 inches thick, and that part not over the cellar to have a footing of stone all around of 6 inches more, one course of stone high, the space between the ground and the bottom of floor to have 3 slits in each side, 9 x 4 inches, to be covered with perforated iron or copper plates, to exclude vermin, and admit air, under the end where there is no cellar: the height in the clear of the story to be 8 feet between floor & ceiling.

Attic Story

¹ *Proceedings of the President and Board of Directors*, A, p. 80.

The walls to be 18 inches thick and three feet high from the top of floor to the square: The peak of the roof to be 6 feet above side walls: The stone to be laid in clay mortar excepting 3 inches on the outside of the walls above ground and the inside of the cellar which 3 inches is to be good lime mortar and well pointed.

Chimney Stalk

To be begun as near the surface of the ground as a good foundation can be obtained, one side to be supported by the cross wall of cellar, the foundation to be of stone 8 x 4 feet to top of arch of oven where it will be 6 x 4 feet the stalk may be of brick or stone; if built of stone, the openings of the fireplaces, the insides of the flews, & the oven should be of brick; and the top above the roof should be hammered; or built of hard bricks, and good mortar: the kitchen flew to be 18 x 12 and that of the parlor 12 x 12 inches after they are plastered. The outside doors to have stone sills, and stone steps the window sills should be of stone, or locust painted and sanded. All the lintels of the doors & windows to be of stone.

Carpenter Work

Joists of first floor to be 3 x 9 inches: of 2d floor 3 x 8 inches. Floors, to be of 1¼ heart pine planed and tongued and grooved. Doors to be of 1¼ heart pine not to exceed 6 inches in width to be battened and fastened with wrought nails the outside doors, to have jamb casings of 2 inch heart pine, let into the sills and framed at the top the outside doors to have substantial strap hinges put on with screws, the front door to have a good stock lock, and the kitchen door an inside bolt, the parlor door to be furnished with a good 7 inch nob lock, all the rest of the doors to have thumb latches.

Windows Those in the principal story to have 10 x 12 glass, those in the upper story to have 8 x 10 glass: The casings to be 1 ¼ inch yellow pine plank.

A sash of 10 x 12 glass to be put over the front door to light the entry.

Roof

To have 10 pairs of rafters, 4 inches deep at top and 6 inches at lower end and three inches thick to be framed together at top and be secured by a brace at a point on the rafter that will afford a clear head way of 6 feet 4 inches in the attic story; the horizontal slope of foot of rafters to project 6 inches over the face of the wall & to have a plansier or casing, spiked to them, to extend to face of wall, the shingles to project 4 inches over that, making in all 10 inches of projection; the lower ends of rafters to be notched into a wall plate, and spiked to it; said wall plate to be 4 inches thick, and spiked to pieces of 3 x 4 scantling; built angling into top of wall, a rafter of 1 ½ inch plank to be built in the center of gables to project like the others: Sheeting, to be ¾ boards, laid close, the shingles to be cypress, of good quality 18 inches long, & to show 5½ inches to the weather & not less than 4 inches wide [here a word is missing due to torn ms. but it is probably “and”] 5/8 thick.

Carpenter work of inside

The inside doors to have plain jamb casings; the washboards and surface to be plain, only single beaded; the mantle pieces to have plain pilasters, and moldings to support the shelf: The spaces to the right & left of front entry to have stud partitions, the space between chimney stalk & back wall to have a two inch plank partition, the space between the fireplace and door of stairway to be stud partition the stair to be plain with a nosing. The partition separating the rooms in attic story, to be 1 ½ inch plank: The small closet to be finished in a plain manner.

Plastering

The ceilings, and stud partitions, to be lathed and those, as well as the walls to be finished with three coats of good lime mortar, made with glue and proper proportions of good clean sand.²

President Charles F. Mercer on November 12 ordered Resident Engineer Thomas F. Purcell to survey the ground between the canal and the river to facilitate the purchase of land for the canal right-of-way. As he carried out the surveying, Purcell was to use the following guidelines:

But from the center of the line to each side you will assume this to be throughout 62 ft. 10½ in. or 15 acres to the mile in length. . . Whenever a lockhouse is required you will add 1 Square Acre for it, exclusive of this quantity. No lock house will be allowed to break the even border of the tract of land received by the canal enclosure on the north side of the canal. . . On the opposite side of the Canal you will place all the Lockkeepers houses fronting the south.³

Ten days later, on the 22nd, Superintendent of Masonry Robert Leckie submitted further data to the Board to be included in the lockhouse specification. The following section was to be added:

Painting

The doors, windows and all the wood work inside, excepting the partition in the garret to have two coats of paint.

An iron crane to be put in the kitchen chimney and the hearths to be of bricks.⁴

On December 11, Wright submitted to the Board a “report of the number, and location of Lockkeepers houses, necessary for the accommodation of the Resident Engineers.” That same day, the directors accepted the first proposals of the construction of the lockhouses:

House No. 4

Thomas & Munroe

² Martineau to Board of Directors, Oct. 1, 1828, Ltrs. Recd., C & O Co. The drawings and the “positions of the respective houses noted on the line of the canal” that originally accompanied this specification could not be located. A copy of this specification may be seen in Appendix A. At the same time, an estimate of the expenses of a lockhouse was drawn up. A copy of this estimate may be seen in Appendix B.

³ Mercer to Purcell, Nov. 12, 1828, Ltrs. Recd., Resident Engineer of the 1st Residency of the 1st Division.

⁴ Leckie to Board of Directors, Nov. 22, 1828, Ltrs. Recd., C & O Co.

House No. 7	Henry Richards
House No. 8	M. Kavanaugh & Co.
House Nos. 9–12	J. W. Maynard
House No. 14	Wines, Bracket & Wines
House No. 16	Holdsworth & Isherwood
House Nos. 17–19	Thomas & Munroe ⁵

Water lime for the lockhouses, as well as the other masonry structures, was obtained from the Potomac Mills at Shepherdstown, Virginia. Stone of a suitable quality for hydraulic lime had been discovered there early in 1828, and a mill and kiln had been erected to grind and burn the lime. Subsequently canal officials found a better grade blue stone nearby and adopted it. On March 17, 1829, Leckie was ordered by the Board to contract with Boteler and Reynolds, the operators of the Potomac Mills, for the delivery of 50,000 bushels of water lime.⁶

During the spring of 1829, a contract was let for the construction of an additional lockhouse. On March 18, the Board received a proposal “from James O’Brien for building” Lockkeepers houses at \$725 each on which it was ordered, that \$700 each be offered to James O’Brien for erecting houses Nos. 5 and 6. Although the Canal Company records do not indicate whether O’Brien undertook the construction of House No. 6, they do show that he entered into a contract for the erection of House No. 5 for \$700 on March 28.⁷

Lockhouse No. 5 was finished by August 1, 1829, reportedly the first structure of its kind to be finished on the canal. O’Brien was paid \$720, which included a sum of \$20 for extra work on a ditch, yard and porch. After inspecting the lockhouse, Leckie informed the Board that the contractor was “excellent stone mason, and has made one of the best, if not the very best, jobs of stone work on the line.”⁸

As construction along the canal progressed during the spring of 1829, President Charles Mercer urged the resident engineers to watch closely the quality of the masonry work being performed. In mid-May, he instructed these men:

As the Locks, Lock houses, culverts and aqueducts are advancing, too much attention cannot be paid to the manner of constructing them prescribed to the contractor by their contracts with the company, or the instructions of the Engineer in Chief and of the Inspector of Masonry.⁹

Available records on further lockhouse construction during 1829 are quite meager. Apparently the contract for Lockhouse No. 9 was relinquished by J. W. Maynard and relet to McKennre & Thornhill during the summer.¹⁰ On November 25, Charles Shepard, a resident of Seneca, agreed to:

⁵ *Proceedings of the President and Board of Directors*, A, pp. 128–29. Canal Company records indicate that House No. 4 was located at Lock No. 6, House No. 7 at Lock No. 10, House No. 8 at Lock No. 11, House No. 9 at Lock No. 13, House No. 10 at Lock No. 16, House No. 11 at Lock No. 18, House No. 12 at Lock No. 20, House No. 14 at Lock No. 22, House No. 16 at Lock No. 24, House No. 17 at Lock No. 25, House No. 18 at Lock No. 26, and House No. 19 at Lock No. 27. *Ibid.*, B, pp. 155, 157–59.

⁶ Walter S. Sanderlin, *The Great National Project*, Baltimore, 1946, pp. 66–67. Also see *Proceedings of the President and Board of Directors*, A, pp. 171, 181.

⁷ *Proceedings of the President and Board of Directors*, A, pp. 186–87. House No. 5 was located at Lock No. 7.

⁸ Purcell to Board of Directors, Aug. 1, 1829, Leckie to Board of Directors, Aug. 2, 1829, and O’Brien to Board of Directors, Aug. 5, 1829, Ltrs. Recd., C & O Co.

⁹ Mercer to Resident Engineers, May 16, 1829, Ltrs. Recd., Resident Engineer, 1st Residency, 1st Division.

¹⁰ *Proceedings of the President and Board of Directors*, A, p. 326.

Accept the offer of a contract to build the house No. 15 upon the conditions specified in your letter, though I think I have a tough bargain.¹¹

Early in December, the company records indicate that the contracts for Lockhouses Nos. 11–13 were relet to Swimley & Darlington at \$700 each.¹²

While the specification drawn up by Dr. John Martineau was used for the construction of the early lockhouses, exceptions were made because of local building conditions and the needs of the Canal Company. On January 30, 1830, Assistant Engineer Charles Ellet informed Chief Engineer Benjamin Wright:

Messrs. Monroe & Thomas have desired me to estimate the amount of extra work, which they have done to Lockhouses No. 18 & 19—variations in the plan which position rendered necessary.

House No. 18—57 perches of masonry; House No. 19—72 perches of masonry. In each, 75 square feet additional partition, of [two] inch plank. In each, 1 additional door, and 3 additional windows, of 4 panes each. The houses are finished in a style corresponding with the plan, except where alterations have been intentionally made.¹³

Certain architectural changes were authorized by the Board for two of the lockhouses in the summer of 1830. On July 24:

Authority was given to the President to enlarge the dimensions of Lockkeepers houses No. 12, on Section 18, and No. 15, on Section 34, provided the entire cost of the former shall not exceed \$1,300, and of the latter \$1,000. . .

Furthermore, the directors decided “to use the material, of which the companies shanties on Section 14 are constructed, to enclose the grounds attached to the several Lockkeepers houses, when they can be transported by water.”¹⁴

The first group of lockhouses between Little Falls and Seneca Falls were assigned for occupancy and use late in the summer of 1830. As early as July 7, a resolution was adopted by the Board:

That the President nominate, and the Board appoint, suitable keepers of the Locks about to be put into use; and that the compensation therefore shall, in no case, exceed \$150 for a single lock, \$200 where the same person keeps two locks, and \$250 where three locks are kept by one keeper, per annum; and that pay shall not commence until the water is admitted into the Canal at Seneca for use.¹⁵

One month later, on August 7, President Mercer nominated and the Board approved the follow-

¹¹ Shepherd to Ingle, Nov. 25, 1829, Ltrs. Recd., C & O Co.

¹² *Proceedings of the President and Board of Directors*, A, p. 411. Lockhouse No. 13 was located at Lock No. 21.

¹³ Ellet to Wright, Jan. 30, 1830, Ltrs. Recd., Resident Engineer, 5th Residency, 1st Division.

¹⁴ *Proceedings of the President and Board of Directors*, B, p. 148. This statement is the first reference to the enlargement of Lockhouse No. 12 located at Lock No. 20. Apparently, the lockhouse was the first unit of what ultimately came to be known as Crommelin House or Great Falls Tavern.

¹⁵ *Ibid*, B, p. 134–35.

ing persons to be lockkeepers:

Lock No. 5.—[Mr.] Whalen, Keeper; compensation of \$100 and use of Lockhouse No. 3, on Section No.1, together with the use of the Company's ground below Guard Gate No. 1 and the embankment, connecting it with the towpath of the new canal in its vicinity.

Lock No. 6—William Conner, Keeper; compensation of \$100 and use of Lockhouse No. 4, on Section No.1, together with the use of the Company's ground between, at, next above, and below Dam No. 1 as far down as the Guard gate [No. 1] and embankment aforesaid.

Lock No. 7—Robert Brooke, Keeper; compensation to be the use of the lands between the canal and the river and such Islands therein as had been purchased for the Company from George French, together with the use of Lockhouse No. 5, on Section No.4.

Lock No. 8—Solomon Drew, Keeper; compensation of \$100 and the use of the Lockhouse No. 6, on Section No. 7.

Locks Nos. 9 & 10—Thomas Burgess, Keeper; compensation of \$150 and the use of Lockhouse No. 7, on Section No. 8..

Lock No. 11—[Mr.] Edmonston, Keeper; compensation of \$100 and the use of Lockhouse No. 8, on Section No. 8.

Lock Nos. 12, 13 & 14—Charles L. Sears, Keeper; compensation of \$200 and the use of Lockhouse No. 9, on Section 9.

Lock Nos. 15 & 16—[No name given], Keeper; compensation of \$200 and the use of Lockhouse No. 10, on Section No. 17.

Lock Nos. 17 & 18—William Roberts, Keeper; compensation of \$200 and the use of Lockhouse No. 11, on Section No. 18

Locks Nos. 19 & 20—William Roberts, Keeper; compensation to be the use of Lockhouse No. 12, on Section No. 18, together with the use of the Company's ground between the Canal and the river that had been purchased from Maureen D. Soper and the Beall heirs.

Lock No. 21—[Mr.] Fuller, Keeper; compensation of \$50, the use of Lockhouse No. 13, with the use of the company's land bought from William Scott.

Lock No. 22—[Mr.] Wright, Keeper; compensation of \$100, the use of Lockhouse No. 14, on Section No. 29, with the use of the company's land lying between the canal and the river below Muddy Branch.

Lock No. 23 and Guard Lock No. 2—Lewis Sewell, Keeper; compensation to be the use of Lockhouse No. 15, on Section No. 34, together with the use of Long-Acre and of the

Company's ground between the Canal and the river, as far up the river as within 100 yards of Lock No. 24.¹⁶

However, it appears that at least several lockhouses assigned for occupancy were not fully completed for some time after the section of the canal between Little Falls and Seneca Falls was first opened for navigation in the fall of 1830. Although Charles Shepherd had been given the contract for Lockhouse No. 15 at Seneca Falls late in November 1829, little work was done on the structure for nearly a year. On September 20, 1830, the Board ordered Superintendent Daniel Van Slyke to cause a cellar or basement story to be dug whereon to erect the Lockkeepers house at Guard Gate No. 2.¹⁷ Two weeks later, on October 2, a contract was let to Obadiah Gordon:

To furnish all materials and construct the foundation and cellar walls for the Lockkeepers house at the Seneca Guard Lock, and to do the necessary excavation therefore at the following prices to wit—The walls at two dollars per perch of twenty-five cubic feet. The cellar walls to be laid in lime mortar, the foundation walls in like manner above the natural surface of the earth, the remainder of the foundation walls to be laid dry. The necessary excavation at such price as the Resident Engineer of the Residency on which it is situated shall certify to be just and reasonable. It is also understood that any change in the plan or mode of doing the work operating to the advantage or prejudice of the contractor to be referred for settlement to the Engineer aforesaid. It being now understood that the cellar is to extend under the smallest division or kitchen part of the house only. The work to be done in a good workmanlike manner . . . and to be fully finished on or before the twenty-fifth day of October instant.¹⁸

On September 13, Superintendent Van Slyke notified the Board that R. Warfield, a contractor who had taken over J. W. Maynard's original contract for the construction of Lockhouse No. 10, had fallen into debt to his creditors for \$230. Accordingly, the Board ordered Van Slyke to pay the bills.¹⁹ Three weeks later, on October 2, the Board advanced to Warfield the sum of \$200 to enable him to finish the structure.²⁰ When the lockhouse was finally completed in late December, Van Slyke informed the directors that with Warfield's consent he had hired additional hands to complete the work.²¹

Superintendent Van Slyke on October 9 reported to the Board that Swimley and Darlington "had failed to prosecute the work on Lockkeepers house No. 12 according to [their] agreement." The contract was then declared abandoned, and Van Slyke recommended that the completion of the structure be given to another party.²²

Within two weeks, a contract for the completion of Lockhouse No. 12 was given to A. Leslie.²³ By November 6, the structure at Great Falls was finished to the extent that the Board was receiving offers from persons interested in opening a tavern there. One such petition was W. W. Fenlon, who wrote to the directors as follows on November 6:

¹⁶ *Ibid.*, B, pp. 157–59.

¹⁷ *Ibid.*, B, p. 184.

¹⁸ Gordon to Van Slyke, Oct. 2, 1830, Ltrs. Recd., C & O Co.

¹⁹ *Proceedings of the President and Board of Directors*, B, p. 179.

²⁰ *Ibid.*, B, p. 192.

²¹ *Ibid.*, B, p. 248.

²² Van Slyke to Board of Directors, Oct. 9, 1830, Ltrs. Recd., C & O Co. Also see, *Proceedings of the President and Board of Directors*, B, p. 197.

²³ *Proceedings of the President and Board of Directors*, B, pp. 210, 249.

Your house at the Great Falls, if I could connect it with the Packet Boat [Fenlon's passenger boat, which plied the canal furnishing board to employees on the canal] it would make more Room and Board. The scent of the kitchen would not be smelled on the Boat. I could Dine [seat] one hundred in the house at a time, and on the Boat 40 is as many as can dine. If you will make the same arrangement with me as you propose to make with Mr. Roberts, I will keep your house in style. Mrs. Fenlon is better calculated for Land Lady than I am for Land Lord.²⁴

The Board on November 20 confirmed President Mercer's appointment of Fenlon "as keeper of Locks No. 19 & 20 in place of William Roberts, who declined acting with a general charge over Locks Nos. 15, 16 17 & 18."²⁵ For compensation, Fenlon was to be paid the regular amount "allowed for keeping the same [Locks Nos. 15–20] when the present keepers may be discharged." In addition, \$200 was to be expended from company funds for "the construction of a kitchen to Lockkeepers house No. 12; \$500 for an additional building and \$100 for other outhouses."²⁶ Thus, by this date, a total of \$2,100 had been allocated for the enlargement of the facilities at Lockhouse No. 12.

At the Board meeting on December 11, President Mercer reported that he had recently "contracted with W. W. Fenlon for the erection of sundry out-houses, as appendages to the Lockkeeper's house No. 12."²⁷

Although work continued on Lockhouse No. 12 during the spring and summer of 1831, the structure was nearly completed in early June. When Lieutenant Colonels John J. Albert and James Kearney of the U. S. Topographical Engineers examined the canal between Georgetown and Point of Rocks that month, they observed that:

At this lock [No. 20] we found an excellent hotel, kept by Mr. Fenlon. The house is built upon the ground of the company, and with the company's funds, and it is a necessary, and great accommodation to those who visit this interesting work.

The two engineers also reported that "all the lockkeepers houses are good stone structures, with one exception, and this is a good frame house."²⁸ Further work on Lockhouse No. 12 was undertaken in June 1831. On June 10, the directors resolved:

That the President of the Company be authorized to contract for plastering with a composition of sand, common lime if necessary, and the Shepherdstown cement, in suitable proportions, the exterior of the Lockkeeper's house at Crommelin, and that he be empowered to incur such additional expense on the same as may be required to finish the part of the edifice above the lower story and erect a porch in front of the stone center of the house.

²⁴ Fenlon to Board of Directors, Nov. 6, 1830, Ltrs. Recd., C & O Co.

²⁵ *Proceedings of the President and Board of Directors*, B, pp. 224–25.

²⁶ *Ibid*, B, p. 238.

²⁷ *Ibid*, B, pp. 244–45.

²⁸ *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 "Point of Rocks"*, Washington, 1831, reprinted in U.S., Congress, House, Committee on Roads and Canal, *Chesapeake and Ohio Canal*, H. Report 414 to accompany H. R. 94, 23rd Congress, 1st Session, 1834, pp. 96, 102. Their report does not specify the location of the "good frame house" nor are available records of further help in pinpointing its exact location.

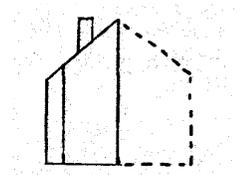
This authorization provided for considerable enlargement of Lockhouse No. 12. It also supports the belief that the original structure at Great falls was one of the typical stone lockhouses.²⁹

During the summer of 1831, improvements were made to the grounds and lockhouse at Lock No. 23. On June 10, the Board authorized President Mercer:

to commute such part of the annual pay of the Lockkeeper and Register at Rushville, into a fixed capital, as shall suffice, to build a stable and such necessary or useful outhouses, near the same, as may be deemed by him expedient; provided, that the whole sum to be expended thereon shall not exceed three hundred dollars and the commutation be at the rate of eight per cent per annum.³⁰

The following month President Mercer inspected the section of the canal then in operation between Georgetown and Seneca Falls. Following his examination of the waterway, he wrote on July 16 concerning the house at Lock No. 23:

I wish some good carpenter to be engaged, unless Mr. Mathias can immediately attend to it, to construct an addition to the house to be alike in exterior to the wing now attached to it and to be placed alongside of that wing as follows:



The dotted lines denote the addition I want made, which must admit under it a passageway to the cellar and run up beyond the side chimney to cover its foundation. . . The present exterior covering will serve when lathed and plastered for the partition between the old and new additions and the windows of this partition, two of which may be turned into openings for doors, may be used in the new work and also any materials which can be spared from Crommelin.³¹

As trade increased upon the waterway, it became apparent that a code of regulations was needed “for the government of lockkeepers, boatmen, packet owners and others having business on the Canal.” Earlier on November 20, 1830, the directors had ordered that the lockkeepers be assigned tools to enable them to repair and preserve the waterway:

That each Lockkeeper be supplied with such tools as may be necessary for the preservation and repair of that portion of the Canal under his care: that receipts be taken from the

²⁹ *Proceedings of the President and Board of Directors*, B, p. 384. On the same date, the Board resolved that “the grounds belonging to the Company and the buildings erected thereon, at or near the Great Falls of the Potomac be hereafter named “Crommelin” in honor of “the Messrs. Crommelin of Amsterdam, for the facilities afforded by their loan to the cities of the District of Columbia, for the payment of one million and a half of the stock subscribed to the construction of the canal.” *Ibid.*, B, pp. 382–83.

³⁰ *Ibid.*, B, p. 384. At the same meeting, the directors agreed that the grounds and edifices of the Company at or near the Guard and Lift Lock at the Dam at the head of Seneca Falls, be hereafter named in all orders and proceedings of this Board “Rushville” in honor of Richard Rush who had negotiated the \$1.5 million payment of the stock subscribed to the construction of the canal.

³¹ Mercer to Lockland, July 16, 1831, Ltrs. Sent, C & O Co.

Lockkeepers for the tools delivered to them, to be filed with the Clerk of the Company; and that the Superintendent make monthly report to the Board of the condition of all such tools and of the condition of the Lockkeeper's houses and other property of the Company under his inspection: And it was further Ordered, That an inventory be made of all tools, etc. now belonging to the Company, from which to supply the Lockkeepers as far as practicable.³²

President Mercer on July 16, 1831, submitted and the Board approved “Rules for the Collectors of Tolls on the Chesapeake and Ohio Canal” and “Distribution of the Chesapeake and Ohio Canal, for the purposes of navigation, inspection, and repairs, into Lockkeepers Districts.” These regulations (copies of which may be seen in Appendices C and D) provided a job description for the lockkeepers as well as a line of superintendence over them in the execution of their duties.³³

Canal Company records make no further reference to the lockhouses on the canal until the spring of 1832. On April 28, President Mercer “was authorized to contract for Venetian Blinds for the House at Crommelin [Great Falls].”³⁴ These blinds were probably the common slatted outside blinds which were common in the era of the 1830's and 1840's and were often referred to by this misnomer.

In mid-August 1832, Lockhouse No. 13 (at Lock No. 21) was “completed according to contract by H. B. Richards.”³⁵ During the month of September, Lockhouse No. 12 (at Great Falls) was painted by the firm of Spalding and Irwin, thereby indicating that the enlarged structure was apparently finished.³⁶

In a report submitted to the House of Representatives on April 17, 1834, President Mercer noted that the construction of the canal between Georgetown and Harpers Ferry included “seventeen houses for lockkeepers, two of which are enlarged [Great Falls and Rushville], to serve, also, as places of rest and accommodation for passengers.” On the stretch of canal then under construction between Point of Rocks and Shepherdstown, the canal company intended to build nine lockhouses. However, only \$200 worth of work had been done on these structures.³⁷

³² *Proceedings of the President and Board of Directors*, B, pp. 225, 314

³³ *Ibid.*, B, pp. 419–28.

³⁴ *Ibid.*, C, p. 128.

³⁵ *Ibid.*, C, pp. 205–06, 218.

³⁶ *Ibid.*, C, pp. 222, 224. Available Canal Company records do not indicate the color of the paint used.

³⁷ U. S. Congress, House, Committee on Roads and Canals, *Chesapeake and Ohio Canal*, H, Report 414 to accompany H. R. 94, 23rd Cong., 1st Session, 1834, pp. 15, 166. Included in this report was a list of the construction costs of the lockhouses as of March 31, 1834. A copy of the list may be seen in Appendix D.

CHAPTER II

The Construction of the Lockhouses, 1834–1850

By 1834, the financial position of the Canal Company had deteriorated badly. In an effort to cut the cost of constructing the waterway, it was decided to erect temporary buildings in place of lockhouses at some of the locks. The contract for constructing four such structures at Locks Nos. 28, 29, 34 and 37 was let to Isaac Williams on October 2, 1834:

Articles of Agreement between Isaac Williams of the first part, and Charles B. Fisk, Superintendent upon the Chesapeake and Ohio Canal, of the second part.

Said Williams agrees to build for the Chesapeake and Ohio Canal Company—four buildings, viz. one at Lock No. 28, one at Lock No. 29, one at Lock No. 34 and the fourth at Lock No. 37 upon the said Canal for sixty dollars each, payment to be made upon the completion of all four of said buildings. Each of said buildings shall be twelve feet by 15 feet—their height shall be eight feet above the floor to the commencement of the roof—and the roof shall rise seven feet more. There shall be four windows in each building of four lights each. There shall be a cupboard & closet in each building and two doors. The windows & doors to be placed according to the directions of said Fisk. There shall be a floor to the lower story of the building and also another floor eight feet above the first mentioned one. There shall also be plain steps leading to the garret. No chimney will be required but said Williams shall fix up a stove, which will be furnished by the Canal Company.

The buildings shall be made as tight as they can be made with plank, without plastering. They shall all be finished within one month from [this] date—and shall be built in the order desired by said Fisk.³⁸

At the annual meeting of the stockholders in June 1835, President George C. Washington reported that 110 miles of the canal were open to navigation between Georgetown and Dam No. 5. The 353-foot elevation from tidewater to the dam was overcome by 44 lift locks. With the exception of some of the upper locks where temporary buildings were being used, “comfortable stone houses” had been erected for the lockkeepers.³⁹

When the Maryland legislature passed an act authorizing a \$2,000,000 loan for the construction of the canal, the Board immediately laid plans for placing more of the line under contract. On August 5, Clerk John P. Ingle sent letters to each of the division superintendents asking them to report on the number of lockhouses still needed on the waterway. In their reports, they were to specify what provisions had been made to acquire suitable ground for the proposed lockhouses and where enclosures were still needed around existing houses.⁴⁰

At the meeting of the Board on September 2, Superintendents W. S. Elgin and G. W. Rodgers submitted reports listing the lockhouses still needed on their divisions. Accordingly, the Board referred the reports to C. C. Starbuck to determine, with the assistance of the superintendents, the “proper sites for the houses, having reference to the construction of flumes, and the use of water power.” Furthermore, the directors ordered Clerk Ingle to “advertise for proposals for

³⁸ Articles of Agreement with Isaac Williams, Oct. 2, 1834, Ltrs. Recd. Chief Engineer. Apparently Williams was not the only contractor to build temporary structures to serve as lockhouses for on Apr. 27, 1835, final estimates were passed by the Board and ordered to be paid to Josephus Beall *for those temporary lockhouse*.

³⁹ *Seventh Annual Report*, (1835), C & O Co., p. 4.

⁴⁰ Ingle to Elgin, Aug. 5, 1835, Ltrs. Sent, C & O Co.

building the houses, and for fencing in the grounds attached thereto.”⁴¹

The following day Clerk Ingle notified Engineer Starbuck of the Board’s action. As the Board was anxious to have permanent dwellings for the lockkeepers constructed as soon as possible, it was imperative that Starbucks commence this project immediately.⁴²

During the summer of 1835, the Board also let contracts for several lockhouses under special agreements. A contract was let to Joseph Hollman to build a lockhouse and flume at his own expense at Lock No. 44 in return for a 21-year lease to rent the excess water passing through the lock flume for manufacturing purposes. Under the arrangement, he was to pay \$150 for the use of the water which was to be subject to “such regulations as shall be necessary to preserve the navigation” of the canal. A similar agreement was made with a Mr. Crampton at Lock No. 32.⁴³

In early January 1836, the Board directed that fences be put around the lots not already enclosed.⁴⁴

Upon the recommendation of Chief Engineer Charles B. Fisk on January 20, 1836, the Board ordered that “a Lockkeepers House be constructed near the location of Locks Nos. 62, 3, 4, 5 and 6, which house shall when erected shall be used, so long as may be necessary, by the Engineer having charge of the Tunnel at the Paw Paw Bends.”⁴⁵

The Board took two significant actions relative to the construction of the lockhouses at their meeting on February 10. An improved specification for lockhouses was presented by Fisk and adopted by the directors. The new specification was to be used for all the lockhouses about to be let to contractors “except for those required at Prathers Neck and the Tunnel, which shall be of the dimensions of 30 feet by 22 feet, and modified in their arrangement accordingly.” The new specification read as follows:

SPECIFICATION

For a Lockkeepers house (30 by 18 feet)

To be erected on the line of the Chesapeake and Ohio Canal.

MASONRY—The building to be of brick or stone, at the option of the contractor.

CELLAR—There will be a cellar under the whole house, six feet in the clear, with a floor of earth. The cellar walls will be of stone, 22 inches thick, and shall project 2 inches outside of and around the building. The foundation course of these cellar walls shall project 6 inches outside of the 22 inches. The level of the foundation walls shall be at least one foot below the cellar floor. The cellar door shall have some steps, and a locust frame, with substantial strap hinges, and fastened in the usual way with a padlock. There will be two windows in the cellar, one on each side of the house, consisting each of a single six light sash of 8 by 10 glass, shutting in a locust frame, the sash having hinges to open upwards. From the cellar there shall be a good and sufficient drain, protected by an iron grate.

CHIMNEY—The chimney shall be in the middle of the building; its foundation shall be on level with the cellar walls, and may be either brick or stone; no wood shall be used to support the

⁴¹ *Proceedings of the President and Board of Directors*, D, pp. 393–94. A thorough search of the C & O Canal Company records failed to turn up these reports by the division superintendents.

⁴² Ingle to Starbuck, Sep. 3, 1835, Ltrs. Sent, C & O Co.

⁴³ *Ibid.*, Aug. 8, 1835, Ltrs. Sent, C & O Co.

⁴⁴ Ingle to Walter, Jan. 20, 1836, Ltrs. Sent, C & O Co.

⁴⁵ *Proceedings of the President and Board of Directors*, E, p. 9

chimney, unless at such distance below the hearths, as shall, in the opinion of the Engineer, be safe from fire. Above the floor of the principal story the chimney shall be of brick.

PRINCIPAL STORY—The principal story will be eight feet in the clear between the floor and ceiling, and its walls will be 14 ¼ inches if of brick and 20 inches if of stone. The walls of the attic story, lengthwise of the building, will be the same thickness as the principal story. The end walls of the attic will only be 9 inches if of brick and 12 inches if of stone. From the top of the chamber floor to the square will be 3 ½ feet. The peak of the roof will be six feet above the side walls. In the clear, between the floor and ceiling of the attic, will be six feet three inches.

ROOMS—There will be two rooms in each story. The washboards and surface will be plain. To each of the two lower rooms, there shall be an outer door; there shall also be a door leading from one to the other of these rooms. There shall be a door for the stairs leading from one story to the other; and also between the two upper rooms.

DOORS—The doors (five in number, exclusive of the cellar door) shall all be plain paneled, each having a Pennsylvania or German lock, with iron handles. The outside doors will have locust sills and locust lintels; they will have jamb casings of two-inch heart pine let into the sills, and framed at top; they shall also have substantial strap hinges, put on with screws.

WINDOWS—In the lower story there will be five windows of twelve lights, 10 by 12. In the upper story there will be four windows of nine lights each, 10 by 12, glass. The casings will be of 1 ¼ inch yellow pine plank. The sills and lintels will be of locust.

PLASTERING—The whole interior of the building above the cellar shall be plastered, except the partition separating the two rooms in the attic story, which will be of 1 ½ inch plank. The plaster shall be finished in the most durable manner, with two coats.

STAIRS AND CLOSETS—The stairs will be plain, and of such rise, and tread, and width, as the Engineer may direct. The closets, two in number, one in each of the lower two rooms, will be finished in a plain manner, with battened doors.

FIREPLACES—There will be two fireplaces, one in each of the lower rooms; each having a mantelpiece, with two pilasters; an iron crane shall be put in the kitchen fireplace.

JOISTS—The joists of the first floor shall be three by twelve inches; of the second, three by ten inches; sixteen inches apart, from center to center, of good yellow pine.

FLOORS—The floors are to be 1 ¼ inch heart pine, planed, and tongued and grooved.

ROOF—The roof will have sixteen pairs of rafters, five inches deep at the top, and eight inches deep at the lower end, and three inches thick, framed together at top, and secured by a collar seam at the point that shall give the required height of six feet three inches in the clear in the upper story. The method of securing the foot of the rafters shall be in the most substantial manner, by means of wad plates properly connected with the top of the brick work, of not less than four inches in thickness and nine inches in width. The projection over the wall, and the finish at the foot of the rafters, shall be such as to present a workmanship appearance. The sheathings will be of three-fourth inch board, laid close; the shingles of the best quality of cypress, eighteen inches long, showing 5 ½ inches to weather, and not less than four inches wide and five-eighths thick.

PAINTING—All of the woodwork outside shall have three coats, and the inside two coats of the best English white lead oil paint, well put on.

MATERIALS & C. The quality of the brick and of the stone work of the whole building shall be such as the Engineer shall approve of; and the bond, also, of the brick and stone work shall be such as he shall direct.

The whole of the masonry, from the foundation up, shall be laid in good and approved lime mortar, except 1½ feet in height at the top of the stone masonry, which shall be laid in mortar made of the best water cement.

PLAN—A plan shall be furnished by the Engineer to the contractor, showing the exact position of doors, windows, closets, etc.

PROPOSAL

I propose to build a house according to the foregoing specification, near to Lock No. 45 & 46 on the line of the Chesapeake and Ohio Canal, in a good and substantial manner, and to furnish all materials proper therefore, for the gross sum of: \$950

For any additional masonry required in consequence of founding the walls lower than is described in the specification, or for other reasons, per perch of twenty-five cubic feet: \$2.00

For the excavation of the house and the cellar drain, per cubic yard: \$0.25

The masonry of the cellar drain will be paid for at the estimate of an Engineer, but the above prices include the leveling off of the cellar floor, and the leveling up around the building to the original surface of the ground.

Whatever tolls may be paid to the Canal Company for the transportation of materials, will, upon completion of the house, be added to the final account of the contractor, and refunded to him.

Signed this day, 183____.⁴⁶

The Board also took steps to encourage contractors to submit bids for the construction of the lockhouses. The directors ordered “that all tolls which may be paid by contractors on materials transported on the Canal for Lockkeepers Houses, and also for fences to enclose the same, shall be repaid to the contractors on the completion of their contracts.”⁴⁷

Chief Engineer Fisk on March 30, 1836, informed the Board that Thornton C. Bradley had offered to build the two large lockhouses at Prathers Neck and at the Paw Paw Tunnel for \$1,275 each. Upon Fisk’s recommendation, the Board agreed to offer Bradley both contracts for \$1,200 each. If the contractor declined this offer, the directors would offer him \$1,275 for the large house at the Tunnel, as it would soon be needed. The Board also ordered that contracts could be made for the smaller lockhouses “at a price not exceeding \$950 each.”⁴⁸

The Board on April 20 ordered the divisional superintendents on the canal “to enclose the lots around the several Lockkeepers Houses with good post and rail fences, where the lands have been acquired by the Company. The directors expressed their preference that locust posts be used “when they can be procured at moderate prices.”⁴⁹

After reviewing a number of proposals for lockhouses, the Board on May 21 accepted bids

⁴⁶ *Specification for a Lockkeeper’s House*, Feb. 10, 1836, Drawings and Other Records Concerning Construction, C & O Co.. A copy of this specification may also be seen in Appendix F. Also see *Proceedings of the President and Board of Directors*, E, p. 18.

⁴⁷ *Proceedings of the President and Board of Directors*, E, p. 18.

⁴⁸ *Ibid.*, E, p. 36. Also see Fisk to Board of Directors, Mar. 30, 1836, Ltrs. Recd., C & O Co. and Fisk to Bradley, Apr. 1, 1836, Ltrs. Recd., Chief Engineer.

⁴⁹ *Proceedings of the President and Board of Directors*, E, p. 47. Also see, Ingle to Elgin, Apr. 22, 1836, Ltrs. Sent, C & O Co.

for eleven permanent structures. Contracts for lockhouses at Locks Nos. 28, 29 and 34 were let to Michael Foley, provided that one house be finished by the fall. John D. Grove was awarded contracts for houses at Locks Nos. 37, 39, 40, 41, 42, 43 and Guard Lock No. 4 at \$950 each, with “the condition that they shall all be enclosed and the floors laid during the present year.” The proposal of Jonah Hood to construct a house at Locks Nos. 35–36 was also accepted.⁵⁰

During the late summer of 1836, one other lockhouse was commenced. On August 24, the Board accepted the proposal to build a house at Lock No. 32. Apparently, there was some question as to the specification for the construction of the house since the Board determined that it was practicable to build the structure “upon the site originally chosen for that purpose, provided that either the form or the dimensions of the House be changed.”⁵¹

Initial steps were also taken to construct a lockhouse at Tidelock B on the Washington City Canal (now located at the corner of 17th Street and Constitution Avenue). On August 31, the Board directed Thomas Carbery to acquire ground for this lockhouse and to present a proposal for erecting it to the Board. Later on December 7, Superintendent J. Y. Young was ordered to have suitable stone quarried and transported to the site for lockhouses at Tidelock B and Lock No. 1.⁵²

On February 3, 1837, the Board resolved that the keeper of Lock No. 44 should reside at the lock. Accordingly, the directors ordered Joseph Hollman to build such a structure in compliance with the agreement that he had signed with the company on August 8, 1835.⁵³

Superintendent Elgin on April 24 reported to the Board that it was “necessary to repair the house bought for the keeper of Lock No. 30.” He also recommended “the expediency of building a house for the keeper of Lock No. 33.” The Board approved both suggestions and ordered him to prepare proposals for the construction of the lockhouse at Lock No. 33.⁵⁴

The Board on May 10 ordered Commissioner George Bender:

to accept proposals for the construction of Lockkeeper’s houses required on that portion of the line of the Canal now under contract [Dam No. 6 to Cumberland], at prices not exceeding nine hundred and fifty dollars each, two dollars per perch for extra masonry, and twenty-five cents per cubic yard for excavation of foundations etc.⁵⁵

One week later, on May 17, the directors authorized Commissioner Bender:

to accept proposals at prices not exceeding one thousand two hundred and fifty dollars each, for the two houses to be built, the one at Lock No. 47, 48, 49 and 50, and the other at Lock No. 61; the houses to be of the dimensions adopted on the 10th of February 1836.⁵⁶

At the Board meeting on June 7, it was announced that Thomas Carbery had obtained some ground from the Corporation of Washington for a lockhouse at Tidelock B. Accordingly, Car-

⁵⁰ *Proceedings of the President and Board of Directors*, E, p. 63. Also see, Ingle to Elgin, Ingle to Rodgers and Ingle to Grove, May 2, 1836 Ltrs. Sent, C & O Co.

⁵¹ *Proceedings of the President and Board of Directors*, E, p. 131. Also see, Ingle to Hood, Sep. 1, 1836, Ltrs. Sent, C & O Co.

⁵² *Proceedings of the President and Board of Directors*, E, pp. 133, 179. Also see, Ingle to Carbery, Sep. 2, 1836, and Ingle to Young, Dec. 10, 1836, Ltrs. Sent, C & O Co.

⁵³ Ingle to Hollman, Feb. 3, 1837, Ltrs. Sent, C & O Co.

⁵⁴ *Proceedings of the President and Board of Directors*, E, p. 245. Also see, Ingle to Elgin, Apr. 24, 1837, Ltrs. Sent, C & O Co.

⁵⁵ *Proceedings of the President and Board of Directors*, E, p. 256.

⁵⁶ *Ibid.*, E, p. 259.

bery was authorized to erect a house “of the usual dimensions.” The directors also ordered Superintendent Young to build a lockhouse at Lock No. 16 “either by contract or by the employment of hands by the day.”⁵⁷

Clerk Ingle on June 10, 1837, informed Jessie Schofield, a contractor who had inquired about the lockhouses above Dam No. 6, that the lockhouse at Lock No. 61 was “to be of the same dimensions as that at Prathers Neck, viz: 20 by 32 feet.” In addition, three lockhouses, 18 by 30 feet in size, were to be built at Locks Nos. 45–56, 51 and 53.⁵⁸

The Board on July 24 accepted an offer from James A. Foster to erect a lockhouse at Lock No. 38 for \$950. The house was to be 20 x 32 feet and was to be similar to the lockhouse at Lock No. 33 which Foster was building.⁵⁹

There is evidence that Jesse Schofield abandoned his contract for the lockhouse at Lock No. 51 before he had done much work on the structure. On May 31, 1838, Principal Assistant Engineer Ellwood Morris informed Fisk that it was “important that we should have the cellar walls of the lockhouse at Lock No. 51 built now.” Unless these walls were put in, he felt that he could not “put in the puddling there in proper measure.” When the work was done, he desired to have a plan “as to the manner & thickness in which they are to be built.” Recently, the foundation at Guard Lock No. 5 had been changed after it was dug, but he had never received a plan of the modifications that had been made.⁶⁰

The Canal Company decided to construct a lockhouse at Guard Lock No. 8 in Cumberland upon a foundation that had been built originally for another purpose. Thus, Mr. Lorecki on June 25 was ordered to draw a plan and elevation for a structure that would conform to the dimensions of the foundation.⁶¹

Morris on July 3 submitted to Fisk a plan and sketch for a single-story structure to serve as his office on the Tunnel Residency. Although this building was not designed to serve as a lockhouse, the material used and the proposed method of construction are indicative of the type of work that was executed on the lockhouses on this stretch of the canal. The plan for the office was as follows:

To be built of logs, well chinked & daubed; to be 22 ft. x 16 ft. outside & to have two porches.

The room to have a double floor of 1¼ in. plank & to be ceiled overhead with 1 in. plank planed, tongued & grooved & nailed to proper joists.

The whole including the porches to be shingled in with good white oak shingles.

The windows to be hung like folding doors & to open inwards.

The doors to be battered doors & both to have good heavy locks; the doors will be of 1¼ in. or 2 in. plank & well pained together.

The chimney to be of stone laid in clay mortar. The whole building to stand on posts of

⁵⁷ *Ibid.*, E, p. 272. The lockhouse at Tidelock B was finished by October 25; on that date John Hilton was appointed as lockkeeper at an annual salary of \$50.

⁵⁸ Ingle to Schofield, June 10, 1837, Ltrs. Sent, C & O Co. On July 24, the Board confirmed contracts made by Commissioner Bender with Schofield for Locks Nos. 46, 51 and 53, thereby indicating that he did not take the contracts at Four Locks and Lock No. 56.

⁵⁹ *Proceedings of the President and Board of Directors*, E, p. 295. Also see Ingle to Elgin, July 24, 1837, Ltrs. Sent, C & O Co.. Later, on November 1, Foster abandoned his contract for the house at Lock No. 38 but assigned his contract to James H. Elgin.

⁶⁰ Morris to Fisk, May 31, 1838, Ltrs. Sent, Morris.

⁶¹ Fisk to Gore, June 25, 1838, Ltrs. Sent, Chief Engineer. Also see Gore to Fisk, June 30, 1838, Ltrs. Recd., Chief Engineer.

round timber barked, braced together & of such height as to place the top of the office floor 5 ft. above ground.

The whole exterior of the building, posts, braces, etc. except the roof & the entire inside of the office room to be well whitewashed with two coats of good quick lime wash. (The under side of the office & porch floors, the inside of the porch roof etc. are included in the parts to be whitewashed.)

The porch to have a sufficient number of uprights or pillars & the entire structure to be completed in a workmanlike manner & in conformity to this sketch.⁶²

The Board continuously had difficulty in getting Joseph Hollman to commence construction of the house at Lock No. 44. On July 7, 1837, Hollman had informed the directors that his bricks and shingles were ready for the lockhouse. However, he requested permission to delay construction until his lumber was prepared. The following year on July 26, 1838, the Board ordered Hollman to commence construction or the water would be shut off from his mill which had been in operation for several months.⁶³

The canal between Dams Nos. 5 and 6 was watered in mid-April 1839. Accordingly, President George C. Washington on April 17 nominated the following persons to be lockkeepers on this stretch of the waterway:

Philip Trammel	Locks Nos. 46 and 54
Daniel Brewer	Locks Nos. 47–50
Henry Rowland	Locks Nos. 51–52
Hugh Conner	Lock No 53
James Neal	Guard Lock No. 6

The naming of these lock tenders is evidence that either a permanent or temporary lockhouse had been constructed for their living quarters.⁶⁴

Chief Engineer Fisk on May 11 sent two letters to the Board informing the directors on the status of the lockhouses between Dam No. 6 and Cumberland. Contracts for lockhouses at Lock No. 54 (for Locks Nos. 54–55) and Lock No. 61 and one for Lock Nos. 63–66 had been declared abandoned or had been advised for abandonment. Twelve proposed lockhouses had never been placed under contract. These lockhouses were to be located at the following locks: Nos. 56, 57, 58, 59, 60, 62, 67, 68, one for Nos. 69–71, 72, one for Nos. 73–75 and Guard Lock No. 8.⁶⁵

Four days later, on May 15, J. W. Beideman signed a contract to complete the lockhouse at Lock No. 51 and commence construction of a house at Lock No. 53. The cellar for the house at Lock No. 51 was partially built. According to the contract, he was to be paid \$925 for the house at Lock No. 51 and \$1,000 for the one at Lock No. 53. For additional masonry, he was to be paid \$2 per perch and for additional excavation 25¢ per cubic yard.⁶⁶

The General Committee of the stockholders made an extensive survey of the canal between Dam No. 5 and Cumberland during the summer of 1839. In its report of August 5, the stockhold-

⁶² Morris to Fisk, July 3, 1838, Ltrs. Sent, Morris. A copy of the accompanying sketch may be seen in Appendix G.

⁶³ Hollman to Ingle, July 7, 1837, Ltrs. Recd., C & O Co. Also see, Ingle to Hollman, July 26, 1838, Ltrs. Sent, C & O Co.

⁶⁴ *Proceedings of the President and Board of Directors*, F, pp. 38–39.

⁶⁵ Fisk to Board of Directors (2 ltrs), May 11, 1839 Ltrs. Sent, Chief Engineer.

⁶⁶ Ingle to Beideman, May 15, 1839, Ltrs. Sent, C & O Co. Also see, Fisk to Board of Directors, Aug. 3 and Dec. 20, 1838, Ltrs. Sent, Chief Engineer.

ers were informed that on the 27½-mile stretch of the canal between Dam Nos. 5 and 6, two lockhouses had been built and three others had not been completed. Above Dam No. 6, 13 lockhouses were planned, but 12 had never been placed under contract and one had been abandoned and not relet.⁶⁷

In mid-October 1839, J. W. Beideman reported to the Board that the lockhouse at Lock No. 51 was completed. However, Principal Assistant Engineer John A. Byers examined the structure and reported that “the floors are in rather an unfinished state, and that the painting and white-washing is roughly and imperfectly done.” Embankments were not properly put around the walls, and there were no steps or stairs leading to the back door of the “principal story” of the house.⁶⁸

Joseph Hollman, who had recently been named as Superintendent of the Fourth Division, notified Fisk on July 18, 1840, that the lockhouses at Locks Nos. 51 and 53 were both finished. The masonry, plastering and roofing were well done, but the woodwork had “opened some, owing to the timber not being well seasoned.” Three coats of paint had been put on the outside and two coats on the inside. A small porch had been built at the back of each of the houses for which the contract did not provide.⁶⁹

Chief Engineer Fisk informed the stockholders on July 17, 1840, that 15 lockhouses were to be built on the “50-mile section” between Dam No. 6 and Cumberland. None of these houses had been commenced and none were under contract.⁷⁰

On April 16, 1842, the Board again inquired of Joseph Hollman why he had not commenced construction of the lockhouse at Lock No. 44. Seven months later, on November 24, the directors sent Hollman an urgent letter requiring him “without further delay to proceed to the erection of a suitable house” at Lock No. 44. The house was to be built of bricks or stone in compliance with his 1835 contract.⁷¹

The stockholders were informed on June 6, 1843, that the Board intended to save \$120,000 by taking certain economy steps on the last fifty miles to Cumberland. Locks Nos. 59–71 were to be constructed on the composite plan, brick was to be used in the arches of the culverts and log buildings were to serve as lockhouses.⁷²

Superintendent Elgin on August 8, 1843, informed Chief Engineer Fisk that the house at Lock No. 32 had been constructed too close to the tracks of the Baltimore and Ohio Railroad. Recently, several cars had struck the northeast corner of the lockhouse and caused considerable cracks in the structure. As the foundation of the house had been built at the time the railroad was graded, he felt that the Board should ask the railroad to move its tracks.⁷³

Superintendent John G. Stone of the Third Division on June 13, 1845, recommended Christian Myers to serve as lockkeeper for Lock No. 44. As there was no lockhouse at this location, Stone urged that one be built before Myers began his job. Accordingly, the Superintendent suggested that “a house to answer the purpose be built for about \$300.” This extremely low figure indicates that the house would not be built according to the general specification for the lockhouses.⁷⁴

⁶⁷ *Report of the General Committee of the Stockholders of the Chesapeake and Ohio Canal Company*, Washington, 1839, pp. 21–23.

⁶⁸ Byers to Fisk, Oct. 14, 1839, Ltrs. Recd., Chief Engineer.

⁶⁹ Hollman to Fisk, July 18, 1840, Ltrs. Recd., Chief Engineer.

⁷⁰ *Thirteenth Annual Report* (1841), C & O Co. p. 59.

⁷¹ Turner to Hollman, April 16 and Nov. 24, 1842, Ltrs. Sent, C & O Co.

⁷² *Fourteenth Annual Report*, (1842), C & O Co. pp. 27–28, 52–53.

⁷³ Elgin to Fisk, Aug. 8, 1843, Ltrs. Recd., Chief Engineer.

⁷⁴ Stone to Fisk, June 13, 1845, Ltrs. Recd., Chief Engineer.

As a further economy measure, the Board on July 24, 1845, resolved:

That with the view of saving of time and money in the completion of the Chesapeake and Ohio Canal to Cumberland, this Board will adopt the suggestion of the Chief Engineer by substituting composite locks for Locks of cut-masonry—where stone suitable for cutting cannot be readily obtained. And that the Lockkeepers houses and weigh lock, and the arching of the tunnel be dispensed with, when it may be until the water shall be introduced upon the entire line of the canal.⁷⁵

Superintendent John Lambie of the First Division on March 11, 1847, reported to Fisk that the house at Lock No. 24 needed repairs. Nearly one-half of the roof of the whole house was leaking, and most of the weather boarding on the back of the structure was off. If the house was not repaired soon, Lambie felt that the structure would soon “rot down.”⁷⁶

The periodic floods along the canal caused considerable damage to the lockhouses, and in some instances new structures were built. Lambie on March 13, 1848, notified the directors that the house at Lock No. 6 had been greatly injured by the previous October freshet. Accordingly, he recommended that “it would be cheaper to build a new lockhouse on the berm side of the canal, than to repair the old lockhouse.” The Board thereupon endorsed his proposal and ordered that a new lockhouse “be built on the berm side of the canal at as cheap a rate as practicable.”⁷⁷

During the period of the canal’s operation, Crommelin House at Great Falls and the house at Rushville served intermittently as a hotel or tavern and lockhouse, and sometimes as both. On June 5, 1848 the Board ordered:

That the sale, barter or disposal of intoxicating liquors at any of the Lockhouses on the line of the Canal be expressly prohibited, (excepting at the tavern stands at Rushville & Crommelin) and that the several Superintendents be directed to enforce this order.⁷⁸

In August, the directors ruled that the lockkeepers at Great Falls could not sell intoxicating beverages at Crommelin House, and this ruling continued in effect until after the Civil War.⁷⁹ In September 1849, the Board adopted the policy:

That after the expiration of the current year for which they were respectively rented, the building commonly known as the Crommelin House, and the building commonly known as Rushville House be no longer be rented, but the same shall be used and considered as Lockhouses, the former for the occupation of the Lockkeeper of Locks Nos. 19 and 20 and the later of Lock No. 23.⁸⁰

While the canal was being completed to Cumberland, some of the lockhouses already built began to deteriorate. One of these was the house at Dam No. 6. Superintendent Stone on July 1, 1848, informed Fisk that the lockhouse at Dam No. 6 was in bad condition. As Hunter, Harris and Co.,

⁷⁵ *Proceedings of the President and Board of Directors*, G, p. 285.

⁷⁶ Lambie to Fisk, Mar. 11, 1847, Ltrs. Recd., Chief Engineer.

⁷⁷ *Proceedings of the President and Board of Directors*, H, p. 155. Also see, Ringgold to Lambie, Mar. 13, 1848, Ltrs. Sent, C & O Co.

⁷⁸ *Proceedings of the President and Board of Directors*, H, p. 179.

⁷⁹ *Ibid.*, H, pp. 196, 322, 443, 458–59.

⁸⁰ *Ibid.*, H, pp. 296–97. The lockkeepers were to be paid \$100 per year in view of the superior accommodations.

the contracting firm that was finishing the canal to Cumberland, did not want to repair it, Stone recommended that a shanty be put up for the lockkeeper.⁸¹

In response to a request by Fisk to submit a plan and estimate for a “good and substantial log building” at Dam No. 6, Stone submitted a partial plan on July 31. The log structure was to be 16 feet by 28 feet. As the logs for the house “would not cost over \$35,” the house could be put up “at less than half what the present lockhouse cost.” There would be two rooms on both the first and second floors. It would not be necessary to plaster the house since “it can be made very comfortable without.” One fireplace would be needed in one of the lower rooms, but stoves could be used for heating the other rooms.⁸²

The stockholders on June 4, 1849, were informed that only \$250 worth of work had been done on the lockhouses on the “50-mile section” between Dam No. 6 and Cumberland. To complete all of the proposed houses, \$10,800 worth of work still needed to be done.⁸³

During the last year of construction on the line of the canal between Dam No. 6 and Cumberland, Hunter, Harris and Co. subcontracted for the building of a number of lockhouses. As of April 1, 1850, the following sums were still needed to complete these structures:

Lockhouse at Lock No. 56	\$21
Lockhouse at Lock No. 57	\$510
Lockhouse at Lock No. 58	\$552
Lockhouse at Lock No. 59	\$552
Lockhouse at Lock No. 60	\$552
Lockhouse at Lock No. 61	\$42
Lockhouse at Lock No. 62	\$552
Lockhouse at Lock No. 66	\$552
Lockhouse at Lock No. 67	\$425
Lockhouse at Lock No. 68	\$42
Lockhouse at Lock No. 70	\$510
Lockhouse at Lock No. 72	\$85
Lockhouse at Lock No. 73	\$42
Lockhouse at Lock No. 75	\$42
Lockhouse at Guard Lock No. 8	\$64 ⁸⁴

As there was a shortage of good building stone in the upper Potomac Valley and the Canal Company was attempting to economize on its construction operations, most of these lockhouses were frame or log structures constructed on stone foundations. Documentary evidence and on-site inspections of the lockhouse sites seems to indicate that no single specification or plan was used in their construction. Rather it appears that the subcontractor built the lockhouses according to a variety of plans.

⁸¹ Stone to Fisk, July 1, 1848, Ltrs. Recd., Chief Engineer.

⁸² Stone to Fisk, July 21, 1848, Ltrs. Recd., Chief Engineer. Also see, Fisk to Stone, July 17, 1848, Ltrs. Sent, Chief Engineer.

⁸³ *Twenty-First Annual Report* (1849), C & O Co., p. 25.

⁸⁴ Statement of Balances, Apr. 1, 1850, Ltrs. Recd., Chief Engineer

CHAPTER III

The Maintenance and Operation of the Lockhouses, 1850–1963

When the entire canal was formally opened to navigation on October 10, 1850, not all of the lockhouses were completed. On July 20, 1851, Overton G. Lowe, the Superintendent of the Cumberland Division, notified Fisk that the house at Lock No. 57 was still unfinished. “If ½ of the house was fitted up,” he felt that “it would enable the [lockkeeper’s] family to get out of that miserable place where they are now living.”⁸⁵

During the summer of 1851, the Board took steps to repair Crommelin House at Great Falls. Accordingly, the Board on June 24 resolved:

That the General Superintendent be authorized to rent out the room at the Crommelin House, usually known as the Ball Room, on such terms as he may deem it expedient, with the privilege to the tenant of keeping a grocery store in said building, but that no spirituous or intoxicating liquors shall be sold therein; and that the rent arising therefrom, be applied to the repair of the building.⁸⁶

Superintendent John Lambie of the Georgetown Division on October 1, 1852, notified the Board that the house at Lock No. 5 “had been carried away by the freshet of April last.” The Board approved his recommendation that a new lockhouse be built “not to exceed in cost \$600.”⁸⁷

On May 7, 1853, the Board ordered that the lockkeepers be paid according to the following annual salary, starting June 1:

Locks Nos. 1–4	\$600
Lock No. 5	\$300
Lock No. 6	\$200
Lock No. 7	\$200
Lock No. 8	\$200
Locks Nos. 9–10	\$300
Lock No. 11	\$200
Locks Nos. 12–14	\$325
Lock No. 15	\$200
Lock No. 16	\$200
Locks Nos. 17–18	\$300
Locks Nos. 19–20	\$300
Lock No. 21	\$200
Lock No. 22	\$200
Lock No. 23	\$250
Lock No. 24	\$200
Lock No. 25	\$250
Lock No. 26	\$200
Lock No. 27	\$200

⁸⁵ Lowe to Fisk, July 20, 1851, Ltrs. Recd., Chief Engineer.

⁸⁶ *Proceedings of the President and Board of Directors*, H, pp. 458–59. Also see, Ringgold to Lambie, July 1, 1851, Ltrs. Sent, C & O Co.

⁸⁷ *Proceedings of the President and Board of Directors*, H, pp. 555–56.

Lock No. 28	\$200
Lock No. 29	\$225
Lock No. 30	\$200
Lock No. 31	\$200
Lock No. 32	\$225
Lock No. 33	\$200
Lock No. 34	\$200
Locks Nos. 35–36	\$325
Lock No. 37	\$200
Lock No. 38	\$250
Lock No. 39	\$200
Lock No. 40	\$200
Guard Lock No. 4	\$200
Locks Nos. 41–42	\$300
Lock No. 43	\$200
Lock No. 44	\$200
Guard Lock No. 5	\$200
Locks Nos. 45–46	\$300
Locks Nos. 47–50	\$400
Locks Nos. 51–52	\$300
Lock No. 53	\$200
Locks Nos. 54–55 and Guard Lock No. 6	\$300
Lock No. 56	\$200
Lock No. 57	\$200
Lock No. 58	\$200
Lock No. 59	\$200
Lock No. 60	\$200
Lock No. 61	\$200
Lock No. 62	\$200
Locks Nos. 63 1/3–66	\$400
Lock No. 67	\$200
Lock No. 68	\$200
Locks Nos. 69–71	\$400
Lock No. 72	\$200
Locks Nos. 73–74	\$275
Lock No. 75	\$200
Guard Lock No. 8	\$250 ⁸⁸

In the spring of 1858, a number of local residents in the Great Falls area sent a memorial to the Board, asking that an “ordinary” be re-established at Crommelin House to accommodate visitors. Henry Busey, the lockkeeper of Locks Nos. 19–20, who was residing in Crommelin House, was also desirous of obtaining permission from the Board to open an “ordinary.” Accordingly, the

⁸⁸ Iron to Lambie, May 7, 1853, Ltrs. Sent, C & O Co.

directors approved Busey's request, and a hotel was opened at Crommelin House that summer.⁸⁹

The Board on December 11, 1860, was informed that Lock No. 20 and Crommelin House had been damaged during the construction of the Washington Aqueduct. The directors appointed a committee of men to examine the site and estimate the amount of damage sustained by these structures. On February 5, 1861, the committee reported to the Board:

that in their judgment, said Lock can be repaired for \$1,800, that the house at the Great Falls was in a very dilapidated condition owing to the injuries sustained from the U. States construction of the aqueduct, and that they should put the building in as good condition as it was before the injuries sustained, or pay to the Company \$1,200 to be expended in repairs of the same.⁹⁰

On September 24, 1863, Mortimer Osborn requested permission from the Board "to occupy a room in the lockhouse at Berlin [Lock No. 30] as a dry goods and grocery store." After considering the request, the Board granted Osborn permission providing:

that no intoxicating liquors be sold on the premises, that said privilege be granted for one year at a rate of \$150 per ann[um] payable monthly to the Lockkeeper . . . and that said Osborn be permitted to remove his counter & shelves when he shall vacate the premises.⁹¹

The stockholders on June 4, 1866, were informed that:

Many of the lockkeeper's houses need considerable repairing, and nearly all of these buildings, more or less, restoration to a condition of necessary comfort. The expenditure of perhaps, five thousand dollars for this purpose, would accomplish all that is pressingly needed.⁹²

On December 18, 1867, the Board determined to build "a suitable house" for the tender of Lock No. 44. While available documentation does not indicate what had happened to the lockhouse, it is possible that the structure was damaged or destroyed when Williamsport was the scene of fighting between McClellan's Army and the Confederates in September 1862. During this time, the pivot bridge at Lock No. 44 was burned and attempts were made to destroy Aqueduct No. 5, and it is likely that the lockhouse may also have sustained damage.⁹³

Superintendent Isaac R. Maus of the Georgetown Division on January 22, 1868, reported to the Board that the carpenter work at Crommelin House was done except for the east portico. As the occupants had no place to cook except in the room that was used as a parlor, he recommended that a new kitchen be put in the basement.⁹⁴

At the meeting in early December 1868, the directors ordered Superintendent Maus to make certain repairs on the canal. Among the structures to receive attention was the house at Lock No.

⁸⁹ Hening to Board of Directors, Mar. 1, 1858, and Browning to Dorsey, June 1, 1858, Ltrs. Recd., C & O Co. Also see, *Proceedings of the President and Board of Directors*, K, p. 29.

⁹⁰ *Proceedings of the President and Board of Directors*, K, pp. 234, 240.

⁹¹ *Ibid.*, K, p. 351.

⁹² *Thirty-Eighth Annual Report* (1866), C & O Co., p. 9.

⁹³ *Proceedings of the President and Board of Directors*, L, p. 60. Also see, Edwin C. Bearss, *1862 Brings Hard Times to the Chesapeake and Ohio Canal*, West Virginia History, XXX, Jan. 1969, pp. 451–52.

⁹⁴ Maus to Board of Directors, Jan. 22, 1868, Ltrs. Recd., C & O Co.

11. The repairs were “to consist of putting one story on the house and building a kitchen for the same, all to be done in a workmanlike manner.”⁹⁵

President Alfred Spates on June 7, 1869, informed the Canal Company stockholders that:

During the past ten years little or nothing had been done towards repairing and improving lockhouses, bridges, culverts, aqueducts, locks, lock-gates and waste weirs of the Company; many of them had become entirely unfit for use and were becoming worthless, rendering it absolutely essential to the requirements of the Company to have them repaired. This the Board have done, and, although at heavy cost, they now present a comfortable and substantial condition, and the fact may now be confidently stated that the condition of the canal in all its departments is such as to justify a largely decreased expenditure during the current year, unless overtaken by unforeseen and unexpected disaster.”⁹⁶

On April 7, 1870, a contract was let to Robert W. Grove to build a lockhouse at Lock No. 31. According to the contract, the specification for the structure was as follows:

The building will conform to the drawings. [Drawings are not extant.] It will be 30 feet long, 17 feet 4 inches wide, one and a half stories high, with back building 10' 9" by 13' 6", one story high with cellar under back building only. To be located on the site of the present lockhouse or thereabouts—the precise location to be marked off by the Engineer or General Superintendent of the Canal Company. The present building will be taken down or removed by the contractor and the materials will become his property on the completion of the new one. The cellar will be excavated to a depth of 6 ft. 6 inches below the underside of joist of main floor, trenches for footings of cellar wall 6 inches lower—Trenches for other walls to go 1 ft. 6 inches below the surface of the ground. They will be made smooth and level in the bottom and of the proper widths. The earth removed to be deposited within fifty feet as the Engineer or Superintendent directs. Foundations and cellar walls of rubble masonry of good sound well shaped stone properly laid and bonded, to a fair face, the openings neatly made.

Bricks to be of good quality not more than one fourth salmon, well laid to fair face, true and plumb, wooden blocks to be built in where required.

Mortar for stone work to contain 1 barrel of cement to 2 barrels of lime—all properly proportioned as to sand and as the Engineer or Superintendent may approve. Flues & breasts as to plan, the former 14 inches square nearly parged throughout carefully laid. Lumber to be of good quality, seasoned and in every respect suitable for the purpose for which it is intended. Floors of $\frac{3}{4}$ yellow pine boards; tongued & grooved & secret nailed to 2 x 10 joists spaced 2 feet between centers, bearing at least 6 inches on the walls, with a row of cross bracing, in each wide floor, proper trimmers around flues etc. Partition of 2½ x 4 studding spaced 2 feet between center carried by double joist. Roof as plan, rafters 3 x 8 spaced 2 feet—collar beams 2 x 6, notched in and spiked—Rafters to rest on a 3 x 8 plate. The ends to project 1 ft. and be boxed in. This at eaves and gables to be lathed with strong roofing laths (3" x 1¼ ") shingled with No. 1 cypress shingles, showing 6 inches.

⁹⁵ Fawcett to Maus, Dec. 9, 1868, Ltrs. Sent, C & O Co.

⁹⁶ *Forty-First Annual Report* (1869), C & O Co., pp. 4–5.

Doors—The two outside doors & 3 inside doors on first floor to be 1 3/8 inch thick, 4 panel square worked—Front door to have raised panel on one side & transom light. Oak sills to outside doors—good lintels over all openings all to be properly hung. There will also be three light batten doors to pantry and room upstairs—all except pantry to be 2' 10" x 6' 10". Windows 11 in number, all 12 light 8 x 10 glass, sash 1¼ inch thick in solid frames 1 3/8 inch. Lower windows to have solid panel shutter, stair way as plan, 2nd flight enclosed with “pine” boards tongued and grooved, a platform as plan at front and back door, step ladder properly made to cellar, and a cellar door, double & hinged, plain skirtings 6 inches wide 4/4 thick to all rooms and passages—put in over plastering, 1¼ inch inside window sills. Doors & window frame to come even with line of plastering, ceilings & partitions to be lathed in three coats, brick walls in two coats with white finish. All wood work usually painted to receive three coats plain colors in oil, all necessary window and door fastenings and iron mougery & fittings and of good quality, to be furnished & put in. On completion to be cleared up & delivered in good order & complete. All to be done in good & workmanlike manner of proper material, subject to the inspection & approval of the Engineer or General Superintendent of said Canal, who shall decide all questions relative to this contract.⁹⁷

Chief Engineer William R. Hutton on August 12, 1870, presented to the Board the final estimate on the house at Lock No.31. In addition to the sum of \$1,695 as provided in the contract, Grove was paid \$10 for extra masonry and \$15 for two extra windows and one outside door.⁹⁸

Superintendent D. T. Lakin on August 4, 1873, notified President A. P. Gorman that the “Roof & upper floor of [the] lockhouse at Seneca burned yesterday morning.” While no documentation could be found relative to the repairs, it can be presumed that the house was rebuilt.⁹⁹

There are few references to the lockhouses in the Canal Company records during its last years of operation. On March 31, 1874, Howard A. Garrett, who was operating a hotel in Crommelin House, requested that a carpenter be sent to repair the structure.¹⁰⁰ As the Washington City Canal was no longer in use, the lockhouse at Tidelock B was leased on August 15, 1876, to Samuel Opdylse “with the usual conditions and restrictions at an annual rent of \$50 per year.”¹⁰¹

In the late 1870's the Canal Company installed a telephone line along the waterway. Completed and in operation by October 1879, the line had 43 stations so located as to be within easy reach of any point on the canal. It was at that time the longest single circuit in existence.¹⁰²

J. Frank Morrison, telephone Engineer, reported to President Gorman on November 1, 1879, on the installation and operation of the telephone system. According to his report, the telephones were “set up in the watch boxes and Lockkeepers houses and connected to the outside line wire by No. four gauge insulated wire.” Where the wires passed through the walls of these buildings, hard rubber tubing was inserted through which they were passed “to insure perfect insulation.” All of the wires and instruments were “protected by lightning arrestors connected to heavy cop-

⁹⁷ *Specifications of materials & workmanship required in the Construction of a Lockkeepers house at Lock No. 31 of the Chesapeake and Ohio Canal*, Apr. 7, 1870, Drawings and Other Records Concerning Construction, C & O Co. A copy of this contract and specification may be seen in Appendix H. It is the only extant contract and specification for a lockhouse in the C & O Canal Company records at the National Archives.

⁹⁸ *Proceedings of the President and Board of Directors*, L, pp. 319, 347, 354. Also see, Hutton to Grove, Aug. 12, 1870, Ltrs. Sent, C & O Co.

⁹⁹ Larkin to Gorman, Apr. 4, 1873, Ltrs. Recd., C & O Co.

¹⁰⁰ Garrett to Gorman, Mar. 31, 1874, Ltrs. Recd., C & O Co.

¹⁰¹ *Proceedings of the President and Board of Directors*, M, p. 271.

¹⁰² Morrison to Gorman, Nov. 1, 1879, in *Proceedings of the President and Board of Directors*, N, pp. 94–97.

per plates” which were “buried in the damp earth at a proper depth to insure perfect ground connection.”¹⁰³

The stockholders were informed in June 1886 that considerable work had been done on the lockhouses during the previous year. Many roofs, porches and windows had been repaired.¹⁰⁴

Between May 30 and June 1, 1889, a titanic flood swept down the Potomac, the crest of which was higher than any ever before recorded in the history of the valley. The torrent swept away many lockhouses, storehouses and sheds, and many masonry structures were heavily damaged. Among the lockhouses between Georgetown and Seneca that were affected by the flood were the following:

House at Lock No. 5	\$75.00 damage
House at Lock No. 7	Swept Away
House at Lock No. 8	Swept Away
House at Lock No. 14	Swept Away
House at Lock No. 15	\$100.00 damage
House at Lock No. 16	Swept Away
House at Lock No. 17	\$100.00 damage
House at Lock No. 21	\$250.00 damage ¹⁰⁵

The flood in 1889 left the canal a wreck and forced the Canal Company to go into receivership with the Baltimore and Ohio Railroad emerging as the majority owner of the Canal Company bonds. Under the railroad, trustees were appointed and the canal entered its last period of operation. In 1924, after the railroad had captured almost all of its carrying trade, the Chesapeake and Ohio Canal ceased to operate. While documentary data dealing with maintenance and reconstruction problems in the C & O Company records for the period 1850–89 is sketchy, there is virtually no information dealing with these subjects for the years 1889–1924.

One item of interest was found in the correspondence of the trustees during that period. The document contained two formulas for whitewash that were apparently used on the lockhouses in the early 1900’s. The two formulas were as follows:

The following formula for whitewashing has been found by experience to answer on wood, brick, and stone, nearly as well as oil paint, and is much cheaper:

Slake half a bushel of unslaked lime with boiling water, keeping it covered during the process. Strain it and add a peck of salt, dissolved in warm water; three pounds of ground rice put in boiling water and boiled to a thin paste; half a pound of powdered Spanish whiting, and a pound of clear glue dissolved in warm water; mix these well together, and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible, with painter’s or whitewash brushes.

The following formula for mixing whitewash, when properly made and put on, gives a white that does not easily wash or rub off, viz: To ten parts of best freshly slaked lime add one part of best hydraulic cement; mix well with salt wa-

¹⁰³ *Ibid.* For a copy of Morrison’s entire report, see Appendix I.

¹⁰⁴ *Fifty-Eighth Annual Report* (1886), C & O Co., p. 23.

¹⁰⁵ Special Report to the President and Directors, June 13, 1889, to the 61st Annual Meeting, in Circuit Court for Washington County (MD), *George S. Brown, et. Al. vs. the Chesapeake and Ohio Canal Company* (Equity No. 4191), pp. 6–9.

ter and apply quite thin.¹⁰⁶

A minor flood swept down the Potomac in March 1936, causing extensive damage to the *deserted* canal. Included in the damage to the waterway was the destruction of numerous lockhouses. According to various reports, the following structures were either partially damaged or completely swept off their foundations:

Back of lockhouse at Lock No. 33	Destroyed
Northwest corner of lockhouse at Lock No. 33	Knocked in by heavy drift
Lockhouse at Lock No. 40	Swept away
Lockhouse at Lock No. 41	Swept away
Lockhouse at Lock No. 44	Withstood high water that reached to within 3 feet of the peak of its roof.
Lockhouse at Lock No. 47	Swept away
Lockhouse at Lock No. 53	Swept away
Lockhouse at Dam No. 6	Swept away
Lockhouse at Lock No. 55	Swept away
Lockhouse at Lock No. 59	Swept away
Lockhouse at Lock No. 60	Swept away
Lockhouse at Lock No. 61	Swept away
Lockhouse at Lock No. 67	Swept away
Lockhouse at Lock No. 68	Foundation undermined
Lockhouse at Lock No. 75	Foundation undermined ¹⁰⁷

When the federal government acquired the Chesapeake and Ohio Canal from the Baltimore and Ohio Railroad in 1938, the National Park Service promptly set about to restore the waterway as a scenic natural recreation area. As an experiment, it planned first to re-construct the 22 miles between Georgetown and Seneca Falls. Two Civilian Conservation Corps camps were established on the canal to carry out this project. Within two years the 22 miles section of the canal was extended to Seneca.¹⁰⁸

While the restoration work was underway during the summer of 1939, Thomas Vint, Chief of Planning of the Branch of Plans and Design, issued a report detailing the National Park Service plans for the canal. In his report, Vint indicated the type of work that had been performed on the lockhouses:

The first of the lockhouses now stands, rebuilt, at the southwest corner of Seventeenth Street and Constitution Avenue. It was moved more than twenty years ago from its original site, where it had been built in 1837 on the canal connecting the C & O outlet with Tiber Creek, flowing then into the Anacostia River. This building has characteristic dormers, much like those of the house at Lock No. 16. These have furnished the pattern for the dormers it has been necessary to add to other lockhouses in order to give light and ventilation to rooms under the roofs.

¹⁰⁶ *Whitewash Formulas*, Correspondence of Office of Trustees. A copy of these formulas may also be seen in Appendix J.

¹⁰⁷ Wine to Nicolson, Mar. 17, 1936, Sterling to Nicolson, Mar. 22, 1936, Burgan to Nicolson, Mar. 24, 1936, and Nicolson to Horton, Dec. 19, 1936, Correspondence of Office of Trustees. In late August 1936, the house at Lock No. 63 1/3 burned to the ground. Sterling to Nicolson, Aug. 31, 1936, Correspondence of Office of Trustees.

¹⁰⁸ Walter S. Sanderlin, *The Great National Project* (Baltimore, 1946), pp. 280–81.

The next house above [the Georgetown level] . . . is at Lock No. 5 . . . It differs from all the other lockhouses in that it is of frame construction on a stone first story. As the exterior was in bad condition it was necessary to rebuild. The frame, when uncovered, was found to be in good condition and, moreover, an excellent example of the skill and sound quality characteristic of the carpentry of the period. In rebuilding this house no change has been made in the exterior except by the addition of two windows in the gable ends and of the dormers in the attic story, but the interior has been rearranged to provide the facilities now regarded as necessary to comfort and health.

At Lock No. 6 is the first of the typical stone houses. . . Here, as elsewhere, slight individual variations from type appear, caused by small differences in conditions. In this case the variation is in the projecting side walls at the south end to form the foundations for a wooden kitchen. This building is sound and in usable condition.

The house at Lock No. 7 is the first of the stone houses selected for rebuilding under the restoration program. Floods had damaged the masonry so badly that one corner had collapsed. It had been relaid sometime in the past, but so badly that it had to be taken down again and rebuilt properly to insure future stability. The building presents no unusual features. The design for restoring it introduces dormers and modern facilities as in the house at Lock No. 5. . . In excavating the basement, . . . it was necessary to strengthen the structure.

At Lock No. 8 is another stone house of the usual type, still usable in the condition to which it was brought by the repairs authorized in 1868.

The building at Lock No. 9 is a light wooden structure erected on stone foundations. There is no record of its history, and it seems to be of comparatively recent date, with an even later addition. It is hardly usable without repairs.

Another of the old stone houses stands at Lock No. 10. It is on higher ground a short distance from the Canal. . . and is in good condition. This is the third lockhouse selected for restoration and the problem is much the same as that of the house at Lock No. 7. On doors remaining in this house were found some of the original items of hardware, which have been reproduced to equip the other houses.

Lock No. 11 has another of the typical stone houses to which nothing is being done. [Accompanying photograph shows a small shed addition to house.]

The house at Lock No. 12 is a departure from the type, being a frame building on shallow stone foundations, and a little larger than the earlier houses. It is in poor condition and, if ever needed in the operation of the Canal, it will have to be entirely rebuilt.

At Lock No. 13 stands another typical stone house, in fair condition. No work has been done here.

Another typical house is at Lock No. 14. On characteristic stone foundations with concrete additions of later date the frame building is hardly in condition for use, but no work is contemplated on it.

At Locks Nos. 15 and 19, although records show that houses once existed, scarcely any trace remains.

On a rocky ledge overhanging Lock No. 16 is a stone house having two stories and an attic with dormers, and a chimney at each end. . . The building is in sound condition, being out of reach of all but the highest floods, but considerable work would be required to render it habitable.

At Lock No. 17 is a modern frame house of no historical value.

The walls of another stone house stand at Lock No. 18. This structure was gutted by fire not many years ago, but the standing masonry walls are a picturesque ruin, and will be preserved in this condition.

The Great Falls area, including Lock No. 20, contains the most interesting group of structures on the Canal. First among them is the celebrated Lock Tavern, begun as a typical tender's house in 1828. Before it was completed, however, a demand for greater accommodation showed itself. As a result, two brick additions were begun at once, and by 1832 the building in approximately its present size was completed. In 1876 a wooden shed was added for use as a kitchen, and in 1926 this was removed and a similar frame structure, built by the tenant, replaced it. Until the best use for this building that has provided food and shelter on the Canal for the greater part of a century is determined, only the most sorely needed repairs to save the building from further dilapidation are to be made.

Near the Tavern stands a log house built about 1884 and used since as a tender's dwelling. This small building is being into good condition and will continue to serve its original purpose. It is interesting to note that the occupant of the log structure considers it to be most comfortable, as the thick log walls keep it cool in summer and warm in winter.

Also in this group are two frame houses erected at the same time as the log house, but of no importance, either historically or economically, to the Canal. It is proposed to raze both and use the salvaged material wherever possible on other buildings.

Above Great Falls, after a stretch of several miles, is Lock No. 21 or Swain's Lock, with a stone house of still another type. This is in usable condition but needs repairs.

Lock No. 22 has a house of the type built from the 1836 specification, in good condition and needing little or no repair work.

At Lock No. 23 are old foundation walls carrying a log house of later date.¹⁰⁹

An extensive report on the physical history of the canal was made by Historian John R. Miele in the fall of 1963. In the report he listed the location, type of construction and existing condition of the lockhouses on the canal as follows:

Locks Nos. 1, 2, 3 and 4	No evidence of the lockhouse
Lock No. 5	No evidence of the lockhouse
Lock No. 6	Berm side, stone, inhabited
Lock No. 7	Berm side, stone, good condition
Lock No. 8	Berm side, stone, good condition
Locks Nos. 9 and 10	Berm side between the two locks, stone, inhabited
Lock No. 11	Towpath side, stone, good condition
Locks Nos. 12, 13 and 14	No evidence of the lockhouse
Locks Nos. 15 and 16	Berm side of Lock No. 16, stone, good condition
Locks Nos. 17 and	Berm side of Lock No. 18, stone, ruins

¹⁰⁹ Thomas Vint, *Outline Report of Architectural Work on the Restoration of the Chesapeake and Ohio Canal for Recreational Use*, pp. 8–13.

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Locks Nos. 19 and 20	Great Falls Tavern also served as the locktender's house
Lock No. 21	Berm side, stone, inhabited
Lock No. 22	Towpath side, stone, good condition
Lock No. 23	No evidence of the lockhouse
Lock No. 24	Berm side, stone, fair condition
Lock No. 25	Upper towpath side, brick, good condition
Lock No. 26	Berm side, frame, poor condition
Lock No. 27	Upper towpath side, stone, fair condition
Lock No. 28	Towpath side, brick, fair condition
Lock No. 29	Berm side, brick, good condition
Lock No. 30	No evidence of lockhouse
Lock No. 31	Lower berm side, brick, inhabited
Lock No. 32	No evidence of lockhouse
Lock No. 33	Photograph shows lockhouse to have been on towpath side
Lock No. 34	Towpath side, stone foundation
Lock No. 36	Berm side on hill, frame, very poor condition
Lock No. 37	Upper berm side, brick, good condition
Lock No. 38	No evidence of lockhouse
Lock No. 39	Upper berm side, brick foundation
Lock No. 40	Berm side, stone foundation
Guard Lock No. 4	About 100' away from lock on berm side, stone foundation
Lock No. 42	Berm side, brick foundation
Lock No. 43	Lower berm side, brick, inhabited
Lock No. 44	Towpath side, frame, good condition
Guard Lock No. 5	Berm side on hill, inhabited
Lock No. 45	Lower berm side, brick, inhabited
Lock No. 49	Berm side, brick, inhabited
Lock No. 50	Berm side, frame, poor condition
Watchhouse, Lock No. 50	At this lock stands a small frame structure which gave shelter to the locktender in inclement weather. These watchhouses probably stood at many of the locks when the canal was in operation.
Lock No. 51	Towpath side, stone, ruins
Lock No. 52	Towpath side, frame, poor condition
Lock No. 53	Towpath side, stone and concrete foundation, ruins
Lock No. 54	Lower berm side, frame, inhabited
Lock No. 55	Berm side, stone foundation
Lock No. 56	Towpath side, frame, poor condition
Lock No. 57	Towpath side, log, ruins
Lock No. 58	Towpath side, stone, foundation
Lock No. 59	Towpath side, stone foundation
Lock No. 60	Towpath side, stone foundation
Lock No. 61	Towpath side, stone foundation
Lock No. 62	Towpath side, concrete foundation

Locks Nos. 63 1/3, 64 2/3, and 66	No evidence of lockhouse in vicinity of these three locks
Lock No. 67	Towpath side, stone foundation
Lock No. 68	Towpath side, frame, inhabited
Lock No. 70	Upper towpath side, frame, fair condition
Lock No. 71	Upper towpath side, frame, poor condition
Lock No. 72	Towpath side, frame, fair condition
Lock No. 73	Towpath side, stone foundation
Lock No. 74	Towpath side, frame, very poor condition
Lock No. 75	Towpath side, log, very poor condition ¹¹⁰

¹¹⁰ John R. Miele, *The Chesapeake and Ohio Canal: A Physical History*, 1965, pp. 55–58. The report was based on a field survey made by Miele in the fall of 1963. A copy of this report may be seen in Appendix K.

APPENDIX A

Ca. OCT. 1828

Specification of a lockkeeper's house

MASONRY—The building to be of stone and to be 30 x 18 feet over the walls, with a cellar under the kitchen part 6 feet in the clear, with a floor of earth, the walls to be 22 inches thick, and have a projection on the outside of 6 inches all round, and at least one course of stone high the cellar door to have stone steps, and a locust frame with grooves to receive the doors, which are to have substantial strap hinges and be fastened in the usual way with a padlock; there will be a window on each side consisting of a single sash each of 10 x 12 glass & 3 lights in width, each to shut in an oaken frame, the sash, to have hinges, to open upwards.

PRINCIPAL STORY—The floor to be 2 feet above the surface of ground; the walls to be 20 inches thick, and that part not over the cellar to have a footing of stone all around of 6 inches more, one course of stone high, the space between the ground and the bottom of floor to have 3 slits in each side, 9 x 4 inches, to be covered with perforated iron or copper plates, to exclude vermin, and admit air, under the end where there is no cellar: the height in the clear of the story to be 8 feet between floor & ceiling.

ATTIC STORY—The walls to be 18 inches thick and three feet high from the top of floor to the square: The peak of the roof to be 6 feet above side walls: The stone to be laid in clay mortar excepting 3 inches on the outside of the walls above ground and the inside of the cellar which 3 inches is to be good lime mortar and well pointed.

CHIMNEY STALK—To be begun as near the surface of the ground as a good foundation can be obtained, one side to be supported by the cross wall of cellar, the foundation to be of stone 8 x 4 feet to top of arch of oven where it will be 6 x 4 feet the stalk may be of brick or stone; if built of stone, the openings of the fireplaces, the insides of the flues, & the oven should be of brick; and the top above the roof should be hammered; or built of hard bricks, and good mortar: the kitchen flue to be 18 x 12 and that of the parlor 12 x 12 inches after they are plastered. The outside doors to have stone sills, and stone steps; the window sills should be of stone, or locust painted and sanded. All the lintels of the doors & windows are to be of stone.

CARPENTER WORK—Joists of first floor to be 3 x 9 inches: of 2d floor 3 x 8 inches. Floors, to be of 1 ¼ heart pine planed and tongued and grooved. Doors to be of 1 ¼ heart pine not to exceed 6 inches in width to be battened and fastened with wrought nails the outside doors, to have jamb casings of 2 inch heart pine, let into the sills and framed at the top the outside doors to have substantial strap hinges put on with screws, the front door to have a good stock lock, and the kitchen door an inside bolt, the parlor door to be furnished with a good 7 inch nob lock, all the rest of the doors to have thumb latches.

Windows—Those in the principal story to have 10 x 12 glass, those in the upper story to have 8 x 10 glass: The casings to be 1¼ inch yellow pine plank.

A sash of 10 x 12 glass is to be put over the front door to light the entry.

ROOF—To have 10 pairs of rafters, 4 inches deep at top and 6 inches at lower end and three inches thick to be framed together at top and be secured by a brace at a point on the rafter that will afford a clear head way of 6 feet 4 inches in the attic story; the horizontal slope of foot of rafters to project 6 inches over the face of the wall & to have a plansier or casing, spiked to them, to extend to face of wall, the shingles to project 4 inches over that, making in all 10 inches of projection; the lower ends of rafters to be notched into a wall plate, and spiked to it; said wall plate to be 4 inches thick, and spiked to pieces of 3 x 4 scantling; built angling into top of wall, a rafter of 1 ½ inch plank to be built in the center of gables to project like the others: Sheeting, to be ¾ boards, laid close, the shingles to be cypress, of good quality 18 inches long, & to show 5 ½ inches to the weather & not less than 4 inches wide [here a word is missing due to torn ms., but it is probably] and 5/8 thick.

CARPENTER WORK OF INSIDE—The inside doors to have plain jamb casings; the washboards and surface to be plain, only single beaded; the mantle pieces to have plain pilasters, and moldings to support the shelf: The spaces to the right & left of front entry to have stud partitions, the space between chimney stalk & back wall to have a two inch plank partition, the space between the fireplace and door of stairway to be stud partition the stair to be plain with a nosing. The partition separating the rooms in attic story, to be 1 ½ inch plank: The small closet to be finished in a plain manner.

PLASTERING—The ceilings, and stud partitions, to be lathed and those, as well as the walls to be finished with three coats of good lime mortar, made with glue and proper proportions of good clean sand.

APPENDIX B

Ca. OCT. 1828

Estimate of the Expense of a Lockkeeper's house

Stone and Brick			
60	Cubic yards digging in foundation	@ \$.20 per yd.	12.00
124	Perches stone laid in clay, 3 inches in lime mortar	@ \$ 2.50 per p.	310.00
4000	Bricks of good quality laid in lime mortar	@ \$10.00 per m.	40.00
60	Running feet blue stone in steps, lintels & sills	@ \$.25 per ft.	15.00
Lumber			
3250	Feet common white pine plank	@ \$.50 per 100 ft.	48.75
1822	Feet 4/5 hart pine	@ \$ 2.75 per m.	50.18 ³ / ₄
4000	Shingles	@ \$10.00 per m.	40.00
150	Pounds of nails	@ \$.08	12.00
	Hardware		17.62 ¹ / ₂
Workmanship			
8	Squares flooring including laying joists roof	A 4.00 per s.	32.00
	Roof		32.56
6	Doors a 3.75 = \$22.50 + 2 mantle pieces = \$8		30.50
330	Feet washboard & surface a 4¢ = \$13.20 + stair at \$11		24.20
150	Feet partitions at 5¢ = \$7.50 + Closet at \$6.00		13.50
7	Windows = \$42 + cellar door and frames at \$7.50		49.50
	Plastering on walls	A 22¢ per yd.	32.50
	Plastering on laths	A 30¢ per yd.	34.80
	Painting		30.00
	Crane for fireplace		<u>3.50</u>
			\$828.46

Drawings and other Records Concerning Construction, C & O Co.

APPENDIX C

July 16, 1831

RULES FOR THE COLLECTORS OF TOLLS ON THE CHESAPEAKE AND OHIO CANAL

Whenever a descending Boat or Float applies for admission into the Canal, through the Guard Lock at Rushville, the Register and Lockkeeper thereat shall see that such boat or float is equipped as the general regulations respecting the navigation of the Canal require, and if not registered, shall see that such boat or float, if designed for a regular trader, is duly numbered and registered before it proceeds on its voyage. Having discharged this duty, the Register shall next inspect her cargo, and make out and sign a faithful list thereof, to be called a way bill, according to such printed form as may be supplied to him. This way bill he shall deliver to the owner, master, or other person having charge of such boat or float, before he enters the Guard Lock. The several way bills shall be numbered in the order in which they are issued. Of every such way bill, he shall at the same time make a brief entry in a book to be kept by him for that purpose, and ruled in columns, according to such stated forms as he may be instructed to use; which columns shall comprehend the number and date of the way bill, the number and class of the boat or float, the contents of her cargo, her destination, and the name of the owner, master, or other person having charge thereof.

The owner, master, or other person, in proceeding to his destination, shall deliver up this way bill to the Collector at or near Georgetown, if the destination of the boat or float be to or below the same; if to a point above, to the District Lockkeeper next above the part of the Canal to which his cargo is destined; and shall pay to the Collector, or to such District Lockkeeper, as the case may be, the toll chargeable on such boat.

Each such way bill shall be forwarded to the Company's Office in Washington, at the end of the month in which it is received, accompanied by an account of the tolls received thereon, the amount of which shall be forthwith deposited in Bank to the credit of the Company.

If any boat within the Canal shall proceed from one place to another thereon, above the Collectors office in Georgetown, and below Rushville, the owner, master, or other person having charge thereof, shall receive a permit to proceed to his destination, from the first District Lockkeeper by whose house he last passes. Forms of such permits shall be supplied the Lockkeepers, and shall be filled up with the supposed tonnage of the boat, and the distance between its place of departure and destination, and the amount of toll chargeable thereon.

Every owner, master, or other person having charge of any boat or float which may offer to pass any lock, may be required by the District Lockkeeper, or his assistant, to produce the boat's register and way bill or permit, or if his boat shall have commenced her voyage below Rushville, to state the place or places at which he took in her cargo, if he has any, and his destination, and shall pay a toll thereon according to the distance he has navigated the Canal.

Every owner, master, or other person having charge of any boat or float, who shall refuse either to show to any Lockkeeper demanding sight thereof, his register, bill of lading, or permit, or being without, either to state from whence he began his voyage, or took in, or increased his cargo, shall be refused a passage through the Lock at which demand is made.

Each Lockkeeper shall monthly report the date of passage, number or description, owner's name, destination and cargo, of every boat or float which shall pass through his Lock without a bill of lading, and shall render in his monthly accounts and deposit in Bank to the credit of the Company, such sums as he may collect as tolls thereon.¹¹¹

¹¹¹ *Proceedings of the President and Board of Directors*, B, pp. 419–421.

APPENDIX D

July 16, 1831

DISTRIBUTION OF THE CHESAPEAKE AND OHIO CANAL, FOR THE PURPOSES OF NAVIGATION, INSPECTION, AND REPAIRS, INTO LOCKKEEPERS DISTRICTS.

The first Lockkeeper's District shall extend from the eastern termination of the Canal in Washington, to the waste weir next above the old locks at the Little Falls of Potomac, and shall include the basin between Georgetown and Washington, as well as those locks.

The second Lockkeeper's District shall extend from the first, as high up as to include the waste weir next above the United States powder magazine, and shall also include the dam and feeder at the Little Falls.

The third Lockkeeper's District shall extend from the second, to the lower end of the external slope of protection wall next above the culvert over Cabin John Run.

The fourth Lockkeeper's District shall extend from the third district, to the first culvert above his dwelling house.

The fifth Lockkeeper's District shall extend from the fourth, to the waste weir through the berm of the Canal next below the entrance of the Rocky Run Feeder.

The sixth Lockkeeper's District shall extend from the fifth, to the lower end of the first high vertical protection wall above, and shall embrace Rock Run dam and feeder.

The seventh Lockkeeper's District shall extend from the sixth to the lower end of the first external slope or protection wall above the Great Falls of Potomac.

The eighth Lockkeeper's District shall extend from the seventh, to the first high bluff above the culvert over Watt's branch.

The ninth Lockkeeper's District shall extend from the eighth, to the lower end of the first external slope or protection wall above the culvert over Muddy Branch.

The tenth Lockkeeper's District shall extend from the ninth, to the upper end of the external slope or protection wall next above the Seneca aqueduct.

The Lockkeeper of the first Division will have charge of the Tidelock, the four lift locks next above the same, and the locks at Little Falls, with three assistants, one of whom shall live at the lockhouse near the old locks and attend the same.

The Lockkeeper of the second District will have charge of two locks, with one assistant, who shall live at the lockhouse, which he himself does not occupy.

The Lockkeeper of the fifth District will have charge of three locks, with one assistant, who shall live at the lockhouse, which he himself does not occupy.

The Lockkeeper of the Sixth District will have charge of three locks, with one assistant.

The Lockkeeper of the seventh District will have charge of six locks, with two assistants; one of whom shall live at the lowest lockhouse on his district, and the other at the lockhouse next [to] his own.

The Lockkeeper of the tenth District will have charge of the Seneca Guard, and two lift locks, and be required to keep an assistant, until the Canal above Seneca be brought into use, and after that, two assistants; one of whom shall live at the lockhouse near the Seneca aqueduct.

The several District Lockkeepers, and their assistants, will have charge of all the Company's works and property of every description within, or appertaining to the part of the Canal within their respective districts, and will be held responsible for the due care and preservation thereof,

from all damages, trespasses, and injuries, and for keeping in order the grounds, fences, etc. about their locks and houses.

The District Lockkeepers will appoint, and pay their own assistants; they will themselves be appointed by the President of the Company, on his nomination, approved by the Board of Directors, and will be removable at his discretion, or that of any two Directors of the Board, in the absence of the President.

All orders will be given them, either by, or through the President of the Company, The Superintendent of repairs, or some specially authorized officer, or engineer of the Company, and they will be held responsible for the prompt, diligent, and faithful execution thereof.

Their ordinary standing duties shall be as follows:

To attend constantly and diligently by day and night, to the filling or emptying of the lock or locks, within their respective districts, and to the passage of all boats or floats, through the same, according to the general regulations of the President and Directors, and to such further or particular instructions as they may hereafter receive, in relation thereto.

They shall never absent themselves from their districts, but by special leave of the President of the Company, or of the Superintendent of repairs, except in cases of unavoidable necessity, and in cases of this description they shall always leave some safe and trusty substitute to supply their places until their return.

The District Lockkeepers, are constituted inspectors of the Canal, and its various appurtenances, and of the Company's grounds and property within their respective districts. As such, they are required personally to examine or ascertain, by their assistants, the actual condition of all the works and property of the Company, within their respective districts, once at least in every week; and when practicable, once at least every other day. In doing so, they shall carefully examine the several locks, aqueducts, culverts, waste weirs, bridges, dams, embankments, slopes, and walls committed to their care; and once every month they shall report in writing, to the Board, through the Superintendent of repairs, the condition of the same, and the number of visits they have made; if any damage or injury has been sustained by any of the said works, since their last monthly report, the nature, extent, and cause thereof, and if any be apprehended, the grounds for such apprehension.

If a District Lockkeeper shall, at any time, discover, that any of the works on the Canal, within his district, are out of repair, he shall immediately report the fact in person or by express, which, for that purpose, he is authorized to hire, to the Superintendent of Repairs, and if from the nature of the repairs required, or of the damage apprehended, time be not allowed without farther injury to the Canal or its appurtenances, to wait the orders of the Superintendent, the Lockkeeper shall consider himself empowered, and he is required, at the cost of the Company, to take immediate steps, in the absence of the Superintendent, to repair the injury which has happened, or to prevent that which is apprehended. Of all expenses so incurred by him, for the benefit of the Company, he shall keep a fair account, a copy of which, he shall hand over to the Superintendent, as soon as his presence shall enable him to take charge of such repairs, the Superintendent shall repay to the Lockkeeper, the sums so expended. All such accounts shall be settled as soon as practicable, after they arise, and, at least, once in every month.

No Lockkeeper shall be entitled to receive his monthly pay, who shall have an unsettled account with the Company.

The District Lockkeepers shall be bound, if required, to provide by themselves, or their assistants, accommodation and subsistence, at a reasonable rate, not to exceed a given sum per week, for the Superintendent, and such hands or laborers as may be engaged in such repairs, or on any

improvements upon, or alterations of the Canal.

Each Lockkeeper and Lockkeeper's assistant shall be furnished with 2 wheel-borrows, 3 shovels, a pick and a crow-bar, to be used in the improvement and repair of the Canal, whenever required, and shall be held responsible for the good order and safe keeping of the same; and each District Lockkeeper, in his monthly return to the board, shall state the number and condition of the tools within his District.

In addition to his monthly pay, each District Lockkeeper, shall be entitled to an enclosed lot, near his house.

Every lockkeeper shall be at liberty, subject to the restraints and regulations of the existing laws, to accommodate the boatmen, and other travelers at his lock house, provided that under no circumstances whatever, shall any Lockkeeper, or his assistant, be allowed to sell or to supply on any terms, to any boatmen, traveler, or other person, any spirituous, or intoxicating liquor, or to allow the use or consumption of any such liquor within or upon his premises, unless particularly authorized so to do by the President and Directors of the Company; and for any violation of this rule, the offender shall be immediately discharged from the service of the Company.

In like manner any District or Assistant Lockkeeper, who shall at any time be found in a state of intoxication, shall be forthwith discharged.

Every District Lockkeeper, and his assistant, shall afford to the boatmen and all other persons navigating the Canal, every aid and accommodation in his power, while he duly enforces the regulations for the protection of the Canal and its works—he shall instruct the boatmen how to navigate the Canal, to the best advantage, and especially to what part of their boat they should attach their tow or tracking line; how to track it with most comfort to themselves, and especially the manner of entering and passing out of the locks, and the use of their bow and stern strapping or snubbing ropes.

Every District Lockkeeper having reason to suspect a boat or float to have increased her cargo subsequent to the date of her way bill, is authorized to call upon the owner, master, or other person having charge of said boat or float for a sight of his way bill, to compare with the actual cargo of such boat, and if any augmentation of such cargo shall appear to have been made, subsequently to the date of the permit or way bill, to endorse a notice thereof, on such way bill, for the information of the Collector, and the other Lockkeepers.

All boats or floats left by their owners, or such persons as may have had charge thereof, either sunk in the canal or loosely floating thereupon, and all floating logs, planks or branches of trees, as well as other nuisances within the Canal, the Lockkeeper of the district within which the same may be, shall promptly cause to be removed or abated.

Every District Lockkeeper is required to pay particular attention to the orders regulating the height of water in the several levels between the locks of his district; and the Lockkeepers of the eighth and ninth districts, may be required to receive their orders through the Lockkeepers of the seventh or of the tenth district; and in like manner those of the second, third, and fourth, through the Lockkeepers of the first or fifth district.

In all cases, where practicable, the various levels shall be regulated by the use of the wastes and feeders of the Canal, reserving the side Culverts and paddle gates of the Locks for their appropriate use—that of filling and emptying the locks when required by the passage of boats.

Each District Lockkeeper shall see that obvious and suitable marks, by description stones or boards, be kept up, above and below each Lock, to denote where a boat approaching the same, shall slacken its speed or await its turn for entering the Lock, if other boats have a right to precede it.

No Lockkeeper is authorized to practice himself, or to countenance others, in resisting, by violence, except in self-defense, any outrageous or disorderly conduct on the Canal, but he shall take, at the cost of the Company, prompt measures to suppress and punish the same, by the judicial tribunals having cognizance thereof.¹¹²

¹¹² *Proceedings of the President and Board of Directors*, B, pp. 421–428.

APPENDIX E

CONSTRUCTION COSTS OF LOCKHOUSES, AS OF MARCH 31, 1834

Lockhouse No.	Location	Cost
2	Section A for Locks Nos. 1-4 and Tidelock	\$120.02
3 & 4	Section No. 1 for Locks Nos. 5-6 and Guard Lock No. 1	\$1,432.03
5	Section No. 4 for Lock No. 7	\$720.00
6	Section No. 7 for Lock No. 8	\$785.75
7 & 8	Section No. 8 for Locks Nos. 9-11	\$1,563.98
9	Section No. 9 for Locks Nos. 12-14	\$836.74
10	Section No. 17 for Locks Nos. 15-16	\$818.25
11 & 12	Section No. 18 for Locks Nos. 17-20	\$6,452.27
13	Section No. 23 for Lock No. 21	\$765.00
14	Section No. 29 for Lock No. 22	\$853.20
15	Section No. 34 for Lock No. 23 and Guard Lock No. 2	\$2,338.00
16	Section No. 35 for Lock No. 24	\$1,066.25
17	Section No. 51 for Lock No. 25	\$903.00
18	Section No. 68 for Lock No. 26	\$849.00
19	Section No. 72 for Lock No. 27	\$893.25
	Section No. 104 for Lock No. 31	\$1,031.40
	Section No. 108 for Lock No. 32	\$226.66
	Section No. 111 for Lock No. 35	<u>\$70.42</u>
		\$21,725.22 ¹¹³

¹¹³ *House Report No. 414*, pp. 178-187.

APPENDIX F

FEB. 10, 1836 SPECIFICATION

For a Lockkeepers House (30 by 18 Feet)

To Be Erected on the Line of the Chesapeake and Ohio Canal.

MASONRY—The building to be of brick or stone, at the option of the contractor.

CELLAR—There will be a cellar under the whole house, six feet in the clear, with a floor of earth. The cellar walls will be of stone, 22 inches thick, and shall project 2 inches outside of and around the building. The foundation course of these cellar walls shall project 6 inches outside of the 22 inches. The level of the foundation walls shall be at least one foot below the cellar floor. The cellar door shall have some steps, and a locust frame, with substantial strap hinges, and fastened in the usual way with a padlock. There will be two windows in the cellar, one on each side of the house, consisting each of a single six light sash of 8 by 10 glass, shutting in a locust frame, the sash having hinges to open upwards. From the cellar there shall be a good and sufficient drain, protected by an iron grate.

CHIMNEY—The chimney shall be in the middle of the building; its foundation shall be on level with the cellar walls, and may be either brick or stone; no wood shall be used to support the chimney, unless at such distance below the hearths, as shall, in the opinion of the Engineer, be safe from fire. Above the floor of the principal story the chimney shall be of brick.

PRINCIPAL STORY—The principal story will be eight feet in the clear between the floor and ceiling, and its walls will be 14 ¼ inches if of brick and 20 inches if of stone. The walls of the attic story, lengthwise of the building, will be the same thickness as the principal story. The end walls of the attic will only be 9 inches if of brick and 12 inches if of stone. From the top of the chamber floor to the square will be 3 ½ feet. The peak of the roof will be six feet above the side walls. In the clear, between the floor and ceiling of the attic, will be six feet three inches.

ROOMS—There will be two rooms in each story. The washboards and surface will be plain. To each of the two lower rooms, there shall be an outer door; there shall also be a door leading from one to the other of these rooms. There shall be a door for the stairs leading from one story to the other; and also between the two upper rooms.

DOORS—The doors (five in number, exclusive of the cellar door) shall all be plain paneled, each having a Pennsylvania or German lock, with iron handles. The outside doors will have locust sills and locust lintels; they will have jamb casings of two inch heart pine let into the sills, and framed at top; they shall also have substantial strap hinges, put on with screws.

WINDOWS—In the lower story there will be five windows of twelve lights, 10 by 12. In the upper story there will be four windows of nine lights each, 10 by 12, glass. The casings will be of 1 ¼ inch yellow pine plank. The sills and lintels will be of locust.

PLASTERING—The whole interior of the building above the cellar shall be plastered, except the partition separating the two rooms in the attic story, which will be of 1 ½ inch plank. The plaster shall be finished in the most durable manner, with two coats.

STAIRS AND CLOSETS—The stairs will be plain, and of such rise, and tread, and width, as the Engineer may direct. The closets, two in number, one in each of the lower two rooms, will be finished in a plain manner, with battened doors.

FIREPLACES—There will be two fireplaces, one in each of the lower rooms; each having a mantelpiece, with two pilasters; an iron crane shall be put in the kitchen fireplace.

JOISTS—The joists of the first floor shall be three by twelve inches; of the second, three by ten inches; sixteen inches apart, from center to center, of good yellow pine.

FLOORS—The floors are to be 1 ¼ inch heart pine, planed, and tongued and grooved.

ROOF—The roof will have sixteen pairs of rafters, five inches deep at the top, and eight inches deep at the lower end, and three inches thick, framed together at top, and secured by a collar seam at the point that shall give the required height of six feet three inches in the clear in the upper story. The method of securing the foot of the rafters shall be in the most substantial manner, by means of wad plates properly connected with the top of the brick work, of not less than four inches in thickness and nine inches in width. The projection over the wall, and the finish at the foot of the rafters, shall be such as to present a workmanship appearance. The sheathings will be of three-fourth inch board, laid close; the shingles of the best quality of cypress, eighteen inches long, showing 5 ½ inches to weather, and not less than four inches wide and five-eighths thick.

PAINTING—All of the woodwork outside shall have three coats, and the inside two coats of the best English white lead oil paint, well put on.

MATERIALS, ETC.—The quality of the brick and of the stone work of the whole building shall be such as the Engineer shall approve of; and the bond, also, of the brick and stone work shall be such as he shall direct.

The whole of the masonry, from the foundation up, shall be laid in good and approved lime mortar, except 1 ½ feet in height at the top of the stone masonry, which shall be laid in mortar made of the best water cement.

PLAN—A plan shall be furnished by the Engineer to the contractor, showing the exact position of doors, windows, closets, etc.

PROPOSAL

I propose to build a house according to the foregoing specification, near to Locks Nos. 45 & 46 on the line of the Chesapeake and Ohio Canal, in a good and substantial manner, and to furnish all materials proper therefore, for the gross sum of: \$950.00

For any additional masonry required in consequence of founding the walls lower than described in the specifications, or for other reasons, per perch of twenty-five cubic feet: \$2.00

For the excavation for the house and the cellar drain, per cubic yard: \$0.25

The masonry of the cellar drain will be paid for at the estimate of the Engineer, but the above prices include the leveling off of the cellar floor, and the leveling around the building to the original surface of the ground.

Whatever tolls may be paid to the Canal Company for the transportation of materials will, upon completion of the house, be added to the final account of the contractor, and refunded to him.

Signed this _____ day _____, 183__

APPENDIX G

Prin Assist Engrs
Office for Tunnel Residency

To be built of logs, well chinked & daubed: to be ^{at} 22 x 16
outside & to have two porches (see Plan.)

The Room to have a double floor of $1\frac{1}{4}$ Planks
& to be lilled overhead with 1 plank planed, tongued
& grooved & nailed to proper joists. -

The whole including the Porches to be shingled
in with good white oak shingles.

The Windows to be hung like folding doors
& to open inwardly. -

The doors to be battered doors & both to
have good heavy locks; the doors will be of $1\frac{1}{2}$ or 2
planks & well primed together. -

The chimney to be of stone laid in Clay mortar. -
The whole building to stand on posts of round timber,
barked, braced together & of such height as to place
the top of the office floor 5 ft above ground.

The whole exterior of the Building, Posts
Braces &c except the Roof & the entire inside of
the office room to be well whitewashed with two
coats of good quick lime wash. - (The underside of
the office & porch floors the inside of the porch Roofs &c
are included in the parts to be whitewashed. -)

The porch to have a sufficient number of
uprights or pillars & the entire structure to be completed
in a workmanlike manner & in conformity to the sketch.

Elwood Moore

Managers dtd
July 3rd 1838

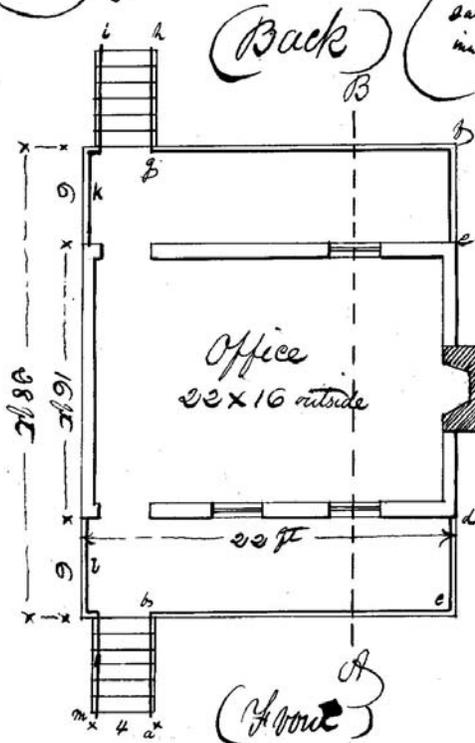
The Windows all, to have substantial Battered Shutters in One flap & with suitable fastenings.

Windows

to have each 16 lights of 8x10 glass, hung in two sashes of the whole height, having 8 lights in each sash & opening from top & bottom inwards like folding doors.

Top of windows are not to exceed 60 inches above the floor.

doors to be 3 ft wide & 6 1/2 ft high in the clear

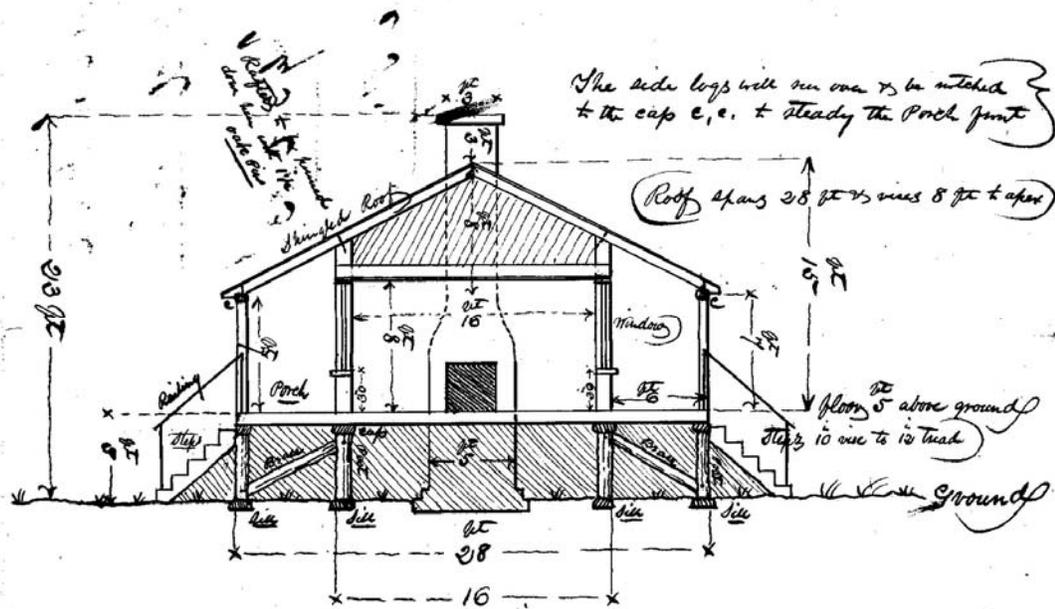


Plan

a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z.

a railing 3 1/2 ft high

i, k, l, m also railing same ht



The side logs will run over & be attached to the caps c, e. & steady the porch joint

Roof spans 28 ft & rises 8 ft to apex

floor 5 ft above ground
Steps 10 rise to 10 tread

Section

From A to B looking toward C.

Showing also the steps, which strictly would not be seen in that view.

APPENDIX H

April 7, 1870

Contract and Specification for Lockhouse at Lock No. 31

This agreement made this seventh day of April in the year eighteen hundred and seventy, between the Chesapeake & Ohio Canal Company of the first part and Robert W. Grove of Washington County state of Maryland of the second part,

Witnesseth that the said party of the second part has agreed and does hereby agree with the said party of the first part, for the consideration hereinafter mentioned, to furnish at his own proper cost all the necessary materials, labor & appliances and to build in a good and substantial manner in conformity with the specifications and plans hereto annexed, a lockkeepers house at Lock No. 31 of the said Chesapeake and Ohio Canal: to commence the same within 10 days from the date hereof, and to complete and deliver it up by the 10th day of July of the current year, and for the said house built and completed in the time and manner specified the said part of the first part will pay to the said second party the sum of one thousand, six hundred and ninety five dollars (\$1,695) upon the completion and delivery and acceptance of the same. \$500 of said amount to be paid when the materials are delivered. Witness the hand and seal of said Robert W. Grove, and on the part of the Chesapeake & Ohio Canal Company the signature and seal of William R. Hutton, its Engineer.

Test: *R. W. Grove*
Robt. W. Grove Seal
Wm R. Hutton Seal
As to signature of W. R. Hutton
J. M. Colton

Specification of Material & Workmanship required in the Construction of a Lockkeepers house at Lock No. 31 of the Chesapeake & Ohio Canal

The building will conform to the drawings. It will be 30 feet long, 17 feet 4 inches wide, one and a half stories high, with back building 10' 9" by 13' 6", one story high with cellar under back building only, to be located on the site of the present Lockhouse or thereabouts. The precise location to be marked off by the Engineer or General Superintendent of the Canal Company. The present building will be taken down or removed by the Contractor and the materials will become his property on the completion of the new one. The cellar will be excavated to a depth of 6 ft. 6 inches below the underside of joist of main floor, trenches for footings of cellar wall 6 inches lower. Trenches for other walls to go 1 ft. 6 inches below the surface of the ground. They will be made smooth and level in the bottom and of the proper width. The earth removed to be deposited within fifty feet as the Engineer or Superintendent directs. Foundations and cellar walls of rubble masonry of sound well shaped stone properly laid & bonded, to a fair face, the openings neatly made.

Bricks to be of good quality, not more than one fourth salmon, will be laid to fair face, true and

plumb, wooden blocks to be built in where required.

Mortar for stone work to contain 1 barrel of cement to 2 barrels of lime, all properly proportioned as to sand and as the Eng. or Supt. May approve. Flues and breasts as plan, the former 14 inches square neatly parged throughout and carefully laid. Lumber to be of good quality, seasoned and in every respect suitable for the purpose for which it is intended. Floors of the yellow pine boards, tongued and grooved & secret nailed to 2 x 10 joists spaced 2 feet between center, bearing at least 6 inches on the walls, with a row of cross bridging, in each wide floor. Proper trimming around flues & partitions of 2½ x 4 studding spaced 2 feet between centers carried by double joist. Roof as plan, rafters 3 x 8 spaced 2 feet, collar beams 2 x 6 notched in and spiked. Rafter to rest on a 3 x 8 plate. The ends to project 1 ft. and be boxed in. This at eave and gables to be lathed with strong roofing laths (3" x 1¼"), shingled with No. 1 cypress shingles, showing 6 inches.

Doors—The two outside doors and 3 inside doors on first floor to be 1 3/8 inch thick, 4 panel, square worked. Front door to have raised panel on outside & transom light. Oak sills to outside doors—good lintels over all openings, all to be properly hung. There will also be three light batten doors to pantry and room upstairs—all except pantry to be 2' 10" x 6' 10". Windows, 11 in number, all 12 light 8 x 10 glass, sash 1¼ inch thick in solid frames 1 3/8 inch. Lower windows to have solid panel shutter. Stair way as plan, 2nd flight enclosed with "pine" boards tongued and grooved, a platform, as plan, at front and back door. Step ladder properly made to cellar, and a cellar door, double & hinged, plain skirtings 6 inches wide 4/4 thick to all rooms and passages—put in over plastering, 1¼ inch inside window sills. Doors & window frame to come even with line of plastering, ceilings & partitions to be lathed in three coats, brick walls in two coats with white finish. All wood work usually painted to receive three coats plain colors in oil, all necessary window and door fastenings and iron mougery & fittings and of good quality, to be furnished & put in. On completion to be cleared up & delivered in good order & complete. All to be done in good & workmanlike manner of proper material, subject to the inspection & approval of the Engineer or General Superintendent of said Canal, who shall decide all questions relative to this contract.

APPENDIX I

Annapolis, November 1, 1879

Report of Frank J. Morrison on Installation of Telephone System on the Chesapeake and Ohio Canal

Hon. A. P. Gorman
President, Chesapeake & Ohio Canal Co.

Sir:

Under instructions from your Board during the year 1878, I made a complete survey of the Chesapeake & Ohio Canal, for the purpose of construction a Telegraph line and establishing stations at proper points for the transaction of the Company's business and to expedite the making of repairs when necessary.

In January of the current year, I reported to you that if the line of poles put up by the Superintendent of Divisions on the Canal could be used, that the cost of putting up the wire, including line wire insulation, etc., would be in round numbers about \$14,000.

From time to time poles have been erected on which it was proposed to place the wires. In March of the current year however, under your direction, I made an inspection of the poles and condition of the work and found that the poles already up were too light for the purpose for which they were intended. It was therefore deemed expedient to supply entirely new poles, which would not only carry wires to provide for the addition of other wires from time to time, as the wants of the Company might require. I also found that the dense growth of timber along the canal necessitated the employment of gangs of men other than those engaged in construction to open the way for the building of the line. I began work on the 12th day and completed and put the line in service through its entire length on the first of October. Although it was not until the 31st of the same month that the line was cleared of trees and overhanging brush and placed in perfect condition. The original plan for a Telegraph line was abandoned because of the cost of skilled Telegraph operators and telephones were put in which are now being successfully worked by the Locktenders and other canal employees. Every assistance was rendered by the officers and employees of the canal company to expedite the work, men and material were promptly supplied and in little over five months a line was constructed which from the difficulties to be overcome would ordinarily have taken at least double that time. In many places the only foot hold we could obtain for the poles was by drilling into solid rock. In spite of this, and other difficulties, the work was completed in the short time above mentioned. The Canal Company is now in possession of one of the best telegraph lines.

The following description of the work, material and equipment will give you a proper understanding of the character of the line. The poles are Chestnut timber not less than six inches at the top, twenty-five feet high on plains, with from thirty to forty five feet high at crossings and other places when required. The average depth in the ground is four & one half feet, except in curves and strains when from five to six feet set was given them. They are set in driven clay and every precaution taken to prevent them from caving in on curves. White oak brackets fastened to the poles with six-inch spikes support the glass insulators upon which the line wire is securely fastened with tie wire of its own gauge. The line wires are No. nine galvanized wire and stood all standard tests for conducting tensile strength, etc. The equipment consists of Forty Eight "Edison

Universal telephones” comprising Transmitter, Desk Pony, Crown Receiver Switch Key, Signal Bell and Relay. The battery consists of four hundred cells of “Call and Gravity Battery” distributed as follows:

Georgetown	35	cells
Woods Lock	25	“
Dam No. 4	15	“
Dam No. 6	25	“
Cumberland	24	“

The remaining stations, thirty-eight in number, have 195 cells, distributed five cells to each station where telephones are placed. The telephones are set up in the watch boxes and Lockkeepers houses and connected to the outside line wire by No. four gauge insulated copper wire. Where the wire pass through the walls of these buildings, hard rubber tubing is inserted through which they are passed to insure perfect insulation. All the wires and instruments are protected by lightning arrestors connected to heavy copper plates, which are buried in the damp earth at a proper depth to insure perfect ground connection. All the materials, and all the work, is of the very best description, and all the appliances which modern science has furnished has been applied to make the service as nearly perfect as possible.

Portions of the line have been in service since the middle of September and the entire line since the first of October. The officers of the canal report the service entirely satisfactory. In addition to the main line from the Collectors Office at Georgetown to the Collectors Office at Cumberland, I built and equipped two short auxiliary lines. One from the Consolidation Coal Company Wharf at Georgetown to Lock No. 5, a distance of six and one half miles, to be used for the purpose of regulating boats on the Georgetown level. The other, over the Tunnel at Paw Paw, to be used for the purpose of regulating boats passing through the Tunnel.

The total number of poles used in the construction was:

5,273	Twenty five feet long
24	Forty five “ “
13	Forty “ “
55	Thirty five “ “

And three hundred poles twenty-five feet long, span, distributed at different points along the line for repairs making a total of 5,665 poles. 69,300 lbs. of wire was used, including the wire for the auxiliary lines and tie wire, and 7,500 screw glass insulators with 6,000 brackets. The telephones are placed at the following named places:

Collectors Office at Cumberland
 Bodigan’s Lock
 Crawfis’ Lock
 Twiggs Lock
 Darkey’s Lock
 West end of Tunnel
 East end of Tunnel, Lock 66 1/3

Bells Lock
Ashkettles Lock
Dam No. 6
Murrays Lock
Brewers Lock
Ticis Lock
Sterling' Shanty
Sir Johns Run
Williamsport
Hughes' Shanty
Moraveys Lock, Big Slackwater
Guard Lock Dam No. 4
Burgans Shanty
Deloney's Lock
Marrows Shanty
Shepherdstown
Drennang House Boat
Zimmermans Lock
Strippeys Lock
Harpers Ferry
Superintendent Moore's Lock
McKernan's Lock
Berlin
Maumons Lock
Woods Lock, head of nine mile level
Whites Ferry
Lock at head of eight mile level
Seneca Feeder Lock
Great Falls
Moon's Lock
Outlet Lock
Browning's Shanty
Collectors Office, Georgetown
Winship's Office, Consolidation Coal Cos. Office
Dam No. 5

At Georgetown (Collectors Office) and the station at the east end of the Tunnel, the extra telephones were placed to work the auxiliary lines, making a total of forty-six telephones inserted. We have two span telephones on hand, to be placed subject to order, making a total of forty-eight telephones.

For ordinary working, the line is divided into three sections by switches placed at the following named points: Dam No. 6, Dam No. 4 and Woods Lock (head of nine mile level). Three switches are so arranged that by a simple movement, the whole line can be thrown together making a continuous circuit from Georgetown to Cumberland. To keep the line and instruments in order, I recommend the employment of three line Repairers, who have been and are now employed in that capacity.

All of which is respectfully submitted
J. F. Morrison
E. Engr.

APPENDIX J

Two Formulas for Whitewash Used on the Canal, C.A. 1900–1920

The following formula for whitewashing has been found by experience to answer on wood, brick, and stone, nearly as well as oil paint, and is much cheaper:

Slake half a bushel of unslaked lime with boiling water, keeping it covered during the process. Strain it and add a peck of salt, dissolved in warm water; three pounds of ground rice put in boiling water and boiled to a thin paste; half a pound of powdered Spanish whiting, and a pound of clear glue dissolved in warm water; mix these well together, and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and when used put it on as hot as possible, with painter's or whitewash brushes.

The following formula for mixing whitewash, when properly made and put on, gives a white that does not easily wash or rub off, viz: To ten parts of best freshly slaked lime add one part of best hydraulic cement; mix well with salt water and apply quite thin.

APPENDIX K

Location, Type of Construction and Present Condition of Lockhouses Fall 1963

Locks Nos. 1, 2, 3 and 4	No evidence of the lockhouse
Lock No. 5	No evidence of the lockhouse
Lock No. 6	Berm side, stone, inhabited
Lock No. 7	Berm side, stone, good condition
Lock No. 8	Berm side, stone, good condition
Locks Nos. 9 and 10	Berm side between the two locks, stone, inhabited
Lock No. 11	Towpath side, stone, good condition
Locks Nos. 12, 13 and 14	No evidence of the lockhouse
Locks Nos. 15 and 16	Berm side of Lock No. 16, stone, good condition
Locks Nos. 17 and 18	Berm side of Lock No. 18, stone, ruins
Locks Nos. 19 and 20	Great Falls Tavern also served as the locktender's house
Lock No. 21	Berm side, stone, inhabited
Lock No. 22	Towpath side, stone, good condition
Lock No. 23	No evidence of the lockhouse
Lock No. 24	Berm side, stone, fair condition
Lock No. 25	Upper towpath side, brick, good condition
Lock No. 26	Berm side, frame, poor condition
Lock No. 27	Upper towpath side, stone, fair condition
Lock No. 28	Towpath side, brick, fair condition
Lock No. 29	Berm side, brick, good condition
Lock No. 30	No evidence of lockhouse
Lock No. 31	Lower berm side, brick, inhabited
Lock No. 32	No evidence of lockhouse
Lock No. 33	Photograph shows lockhouse to have been on towpath side
Lock No. 34	Towpath side, stone foundation
Lock No. 36	Berm side on hill, frame, very poor condition
Lock No. 37	Upper berm side, brick, good condition
Lock No. 38	No evidence of lockhouse
Lock No. 39	Upper berm side, brick foundation
Lock No. 40	Berm side, stone foundation
Guard Lock No. 4	About 100' away from lock on berm side, stone foundation
Lock No. 42	Berm side, brick foundation
Lock No. 43	Lower berm side, brick, inhabited
Lock No. 44	Towpath side, frame, good condition
Guard Lock No. 5	Berm side on hill, inhabited

Lock No. 45	Lower berm side, brick, inhabited
Lock No. 49	Berm side, brick, inhabited
Lock No. 50	Berm side, frame, poor condition
Watchhouse at Lock No. 50	At this lock stands a small frame structure which gave shelter to the lock-tender in inclement weather. These watchhouses probably stood at many of the locks when the canal was in operation.
Lock No. 51	Towpath side, stone, ruins
Lock No. 52	Towpath side, frame, poor condition
Lock No. 53	Towpath side, stone and concrete foundation, ruins
Lock No. 54	Lower berm side, frame, inhabited
Lock No. 55	Berm side, stone foundation
Lock No. 56	Towpath side, frame, poor condition
Lock No. 57	Towpath side, log, ruins
Lock No. 58	Towpath side, stone, foundation
Lock No. 59	Towpath side, stone foundation
Lock No. 60	Towpath side, stone foundation
Lock No. 61	Towpath side, stone foundation
Lock No. 62	Towpath side, concrete foundation
Locks Nos. 63 1/3, 64 2/3 & 66	No evidence of lockhouse in vicinity of these three locks
Lock No. 67	Towpath side, stone foundation
Lock No. 68	Towpath side, frame, inhabited
Lock No. 70	Upper towpath side, frame, fair condition
Lock No. 71	Upper towpath side, frame, poor condition
Lock No. 72	Towpath side, frame, fair condition
Lock No. 73	Towpath side, stone foundation
Lock No. 74	Towpath side, frame, very poor condition
Lock No. 75	Towpath side, log, very poor condition ¹¹⁴

¹¹⁴ John R. Miele, *The Chesapeake and Ohio Canal: A Physical History*, 1965, pp. 55 –58.

BIBLIOGRAPHY

PRIMARY SOURCES

1. MANUSCRIPT MATERIALS

- Washington, D. C. National Archives, Record Group 79. Assessment Book for Sections 19–38, 1828–31, 1 vol.
Assessment Book of the 5th Residency of the 1st Division, 1829–33, 1 vol.
Correspondence of Office of Trustees, 1913–38, 5 ft.
Drafts of Letters Sent by the Chief Engineer, 1836–38, 46–52, 2 in.
Drafts of Letters Sent by the Commissioner of the Chesapeake and Ohio Canal, 1835–40, 2 in.
Drawings and Other Records Concerning Construction, 1828–1937, 1 ft.
Index to Correspondence, 1913–38, 3 in.
Index to Proceedings of Stockholders, 1828–83, 1 vol.
Index to Proceedings of the President and Directors, 1828–90, 2 vols.
Ledgers, 1828–90, 5 vols.
Letter Book of the Resident Engineer of the 1st Residency of the 1st Division, 1828–31, 1 vol.
Letter Book of the Resident Engineer of the 5th Residency of the 1st Division, 1828–31, 1 vol.
Letter Book of the Commissioner of the Chesapeake and Ohio Canal, 1835–42, 3 vols.
Letters Received by the Chief Engineer, 1834–52, 5 ft.
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Letters Received by the Office of the President and Directors, 1828–89, 24 ft.
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Letters Received by Thomas L. Patterson, Assistant Engineer, 1841–42, ½ in.
Letters Sent by the Chief Engineer, 1838–39, 1 vol.
Letters Sent by the Office of the President and Directors, 1828–70, 12 vols.
Letters Sent by the Office of the President and Directors, 1879–81, 1 vol.
Letters Sent from the Engineer's office at Cumberland, 1835–39, 1 vol.
National Park Service Central Classified Files, National Capital Parks, 1933–49.
Printed Materials, 1816–1907, 6 in.
Proceedings of Stockholders, 1828–89, 5 vols.
Proceedings of the President and Directors, 1828–90, 13 vols.
Records Concerning Proposed Extension of the Canal, ca 1874, 3 in.
Records of Ellwood Morris, Principal Assistant Engineer, 1838–40, 4 in.
Records of William A. Pratt, Assistant Engineer, 1838, ½ in.
Register of Letters Received by the Chief Engineer, 1835–40, 1 vol.
Register of Letters Received by the Office of the President and Directors, 1828–70, 1 vol.

2. PUBLISHED DOCUMENTS

- Annual Reports*, Chesapeake and Ohio Canal Company, 1828–1889.
Report of the General Committee of the Stockholders of the Chesapeake and Ohio Canal, Wash-

ington, 1839

Report to the Stockholders on the Completion of the Chesapeake and Ohio Canal to Cumberland, with a Sketch of the Potomac Company, and a General Outline of the History of the Chesapeake and Ohio Canal Co., from its origin to February 1851, Frederick, 1851

U. S. Congress, House Committee on Roads and Canals, *Chesapeake and Ohio Canal*, H. Report 141, 20th Congress, 1st Session, 1828

Committee on Roads and Canals, *Chesapeake and Ohio Canal*, H. Report 414 to Accompany H. R. 94, 23rd Congress, 1st Session, 1834

———. Committee on Public Lands, *Chesapeake and Ohio Canal Report*, H. Doc. 687, 81st Congress, 2nd Session, 1950

SECONDARY SOURCES

BOOKS

Dunbar, Seymour *History of Travel in America* New York, 1837

Hahn, Thomas F. *Towpath Guide to the C & O Canal* 4 vols. Glen Echo, Maryland, 1971

Harlow, Alvin F. *Old Towpaths* New York, 1927

Hulbert, Archer B. *The Great American Canals* Cleveland, 1904

Sanderlin, Walter S. *The Great National Project* Baltimore, 1946

Scharf, J. Thomas *History of Western Maryland* 2 vols. Philadelphia, 1882

Ward, George Washington *The Early Development of the Chesapeake and Ohio Canal Project* Baltimore, 1899

PERIODICALS

Bearss, Edwin C. "1862 Brings Hard Times to the Chesapeake and Ohio Canal" *West Virginia History* January 1969

———. "War Comes to the Chesapeake and Ohio Canal" *West Virginia History* April 1968

Lee, Ronald F. "Chesapeake and Ohio Canal" *Columbia Historical Society Bulletin* Fall 1939

Sanderlin, Walter S. "The Vicissitudes of the Chesapeake and Ohio Canal During the Civil War" *Journal of Southern History* February 1945

TECHNICAL STUDIES

Larrabee, Edward McMillan "A Survey of Historic and Prehistoric Archeological Sites Along the Chesapeake and Ohio Canal National Monument" 1961

Miele, John R. "The Chesapeake and Ohio Canal: A Physical History" 1968

"Report of Civilian Conservation Corps Operations in the National Capital Parks, October 15, 1933–June 30, 1942"

Sanderlin, Walter S. "A Study of the History of the Potomac River Valley" Washington, 1950

Vint, Thomas "Outline Report of Architectural Work on the Restoration of the Chesapeake and Ohio Canal for Recreational Use" 1939

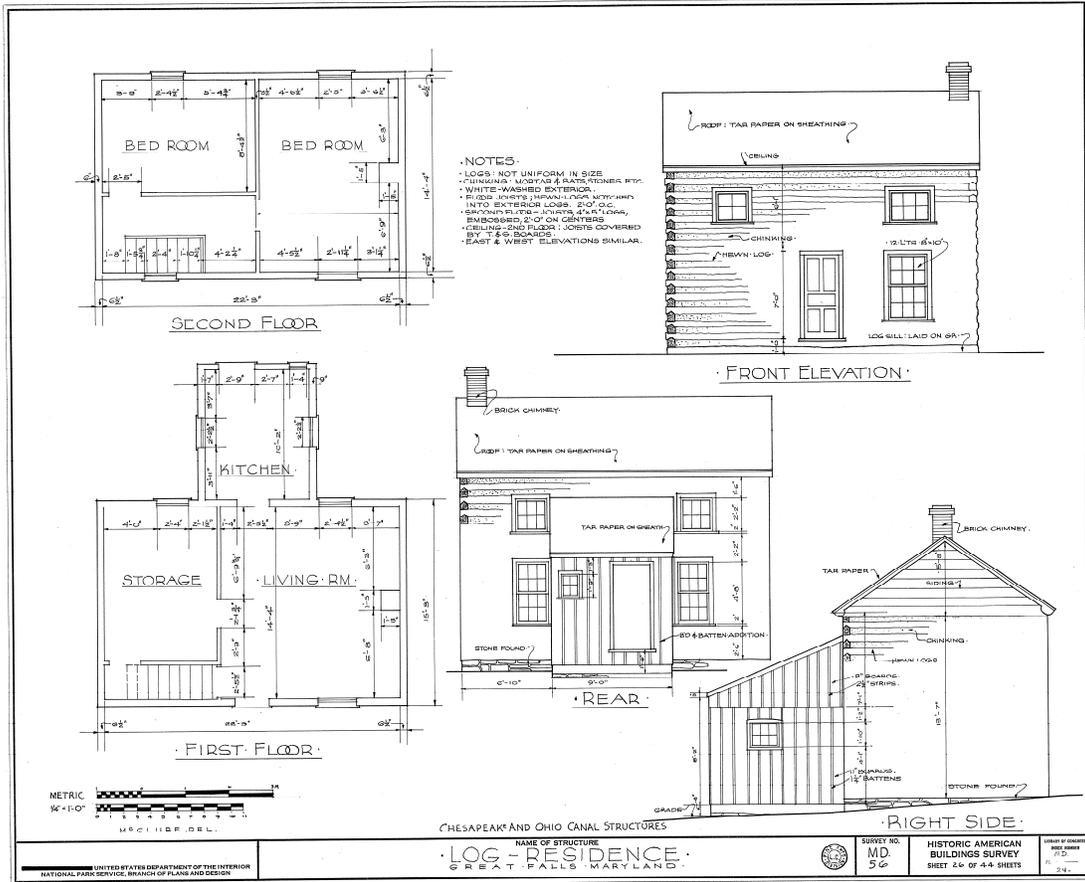
Young, Rogers W. "A Preliminary Historical Study on the Area Along the Maryland Shore of the Potomac at Great Falls During the Heyday of the Chesapeake and Ohio Canal, 1858–80" 1939

———. “Preliminary Historical Memorandum on the Construction of Certain of the Lock Houses on the Chesapeake and Ohio Canal between Georgetown and Seneca creek” 1939

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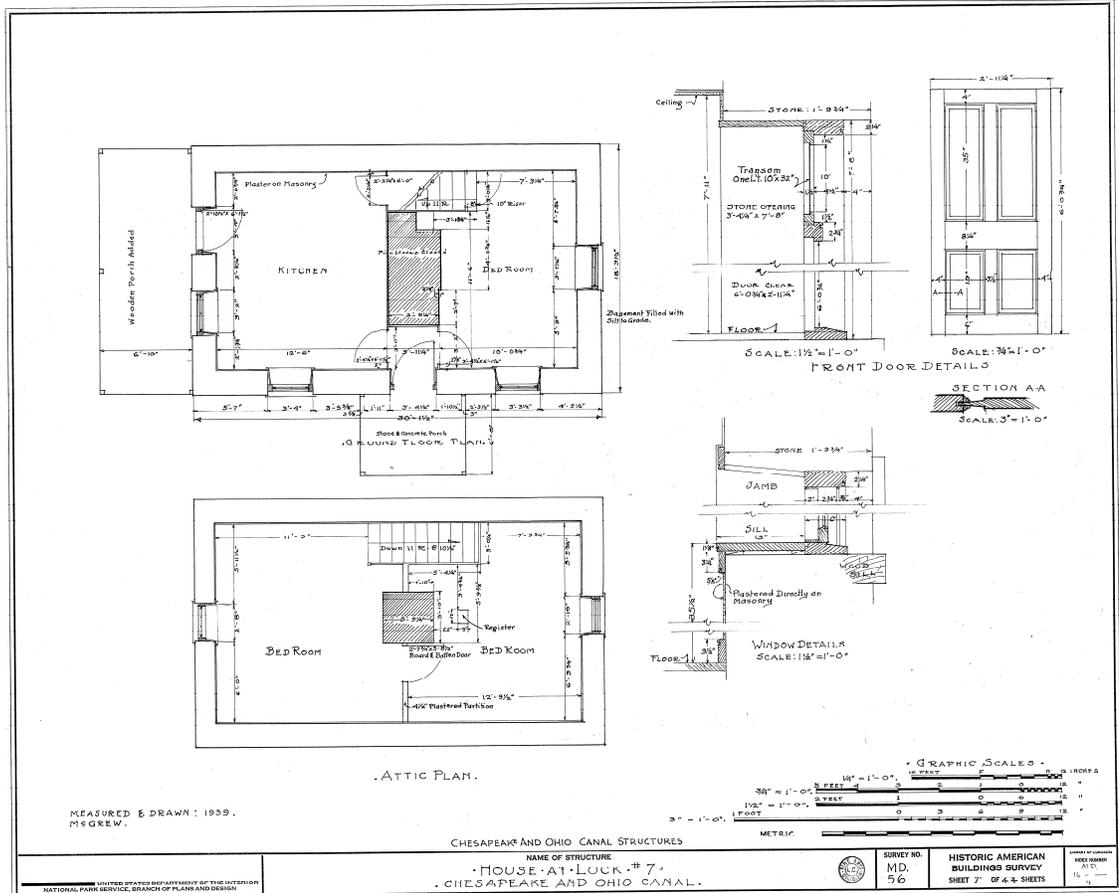
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Drawing 1, Log Lockhouse near Lock 20
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Survey No. changed to MD-56-0 sheet 1 of 1

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By Historic American Building Survey. This drawing complements Illustration 3



CHESAPEAKE AND OHIO CANAL STRUCTURES		SURVEY NO.		HISTORIC AMERICAN BUILDING SURVEY	
NAME OF STRUCTURE		MD.		SHEET 7 OF 43 SHEETS	
HOUSE AT LOCK # 7		56			
CHESAPEAKE AND OHIO CANAL					

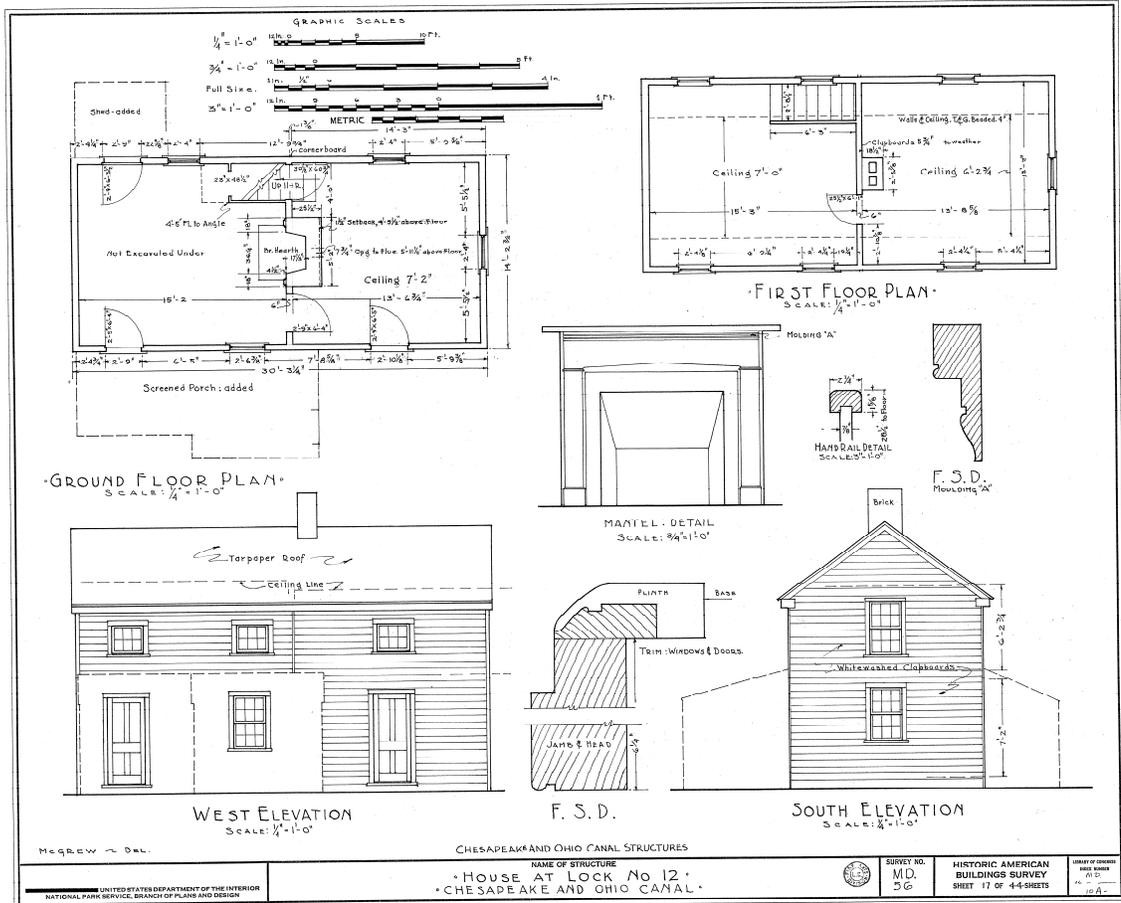
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Drawing 3, Lockhouse at Lock 7, Sheet 2 of 2
 By Historic American Building Survey. This drawing complements Illustration 3



Survey No. changed to MD-56-C sheet 2 of 2

Drawing 4, Lockhouse at Lock 12, Sheet 1 of 1
By Historic American Building Survey. This drawing complements Illustration 4.



McGraw - Del.

CHESAPEAKE AND OHIO CANAL STRUCTURES

NAME OF STRUCTURE
 • HOUSE AT LOCK No 12 •
 • CHESAPEAKE AND OHIO CANAL •

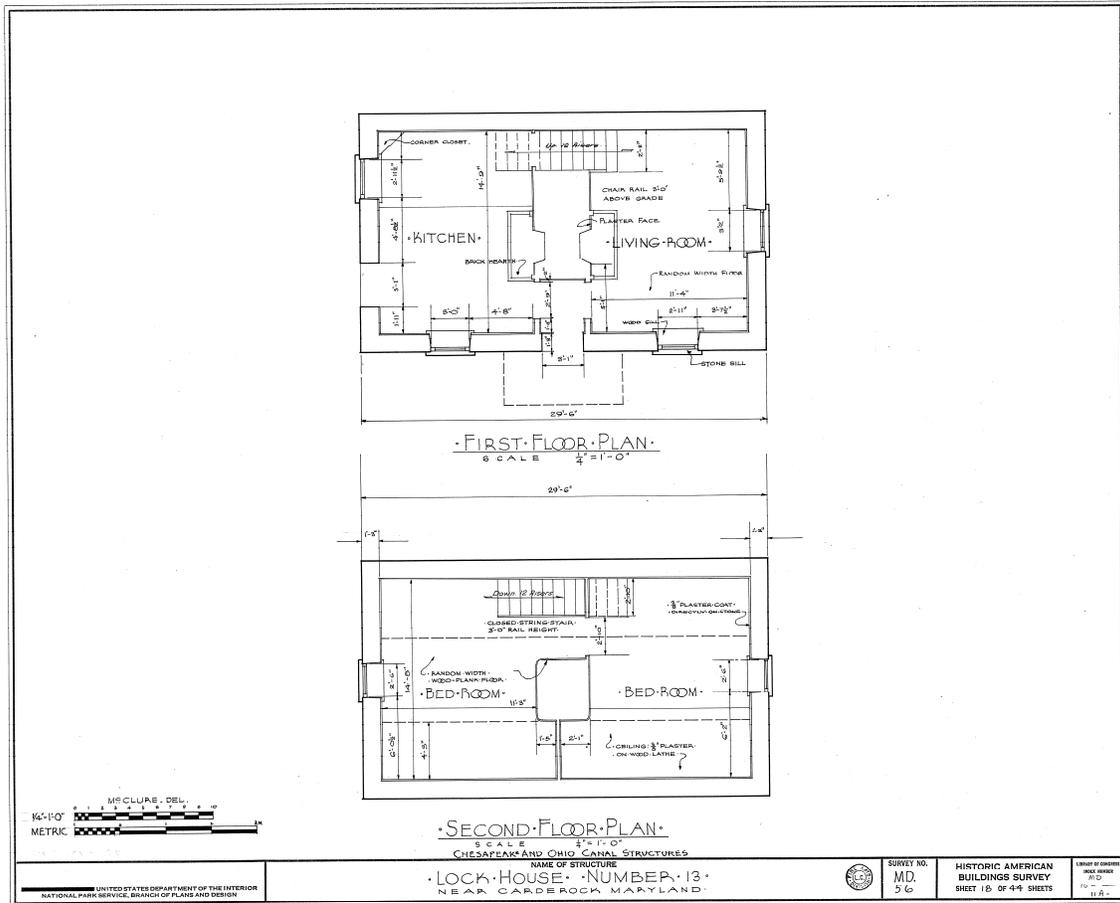
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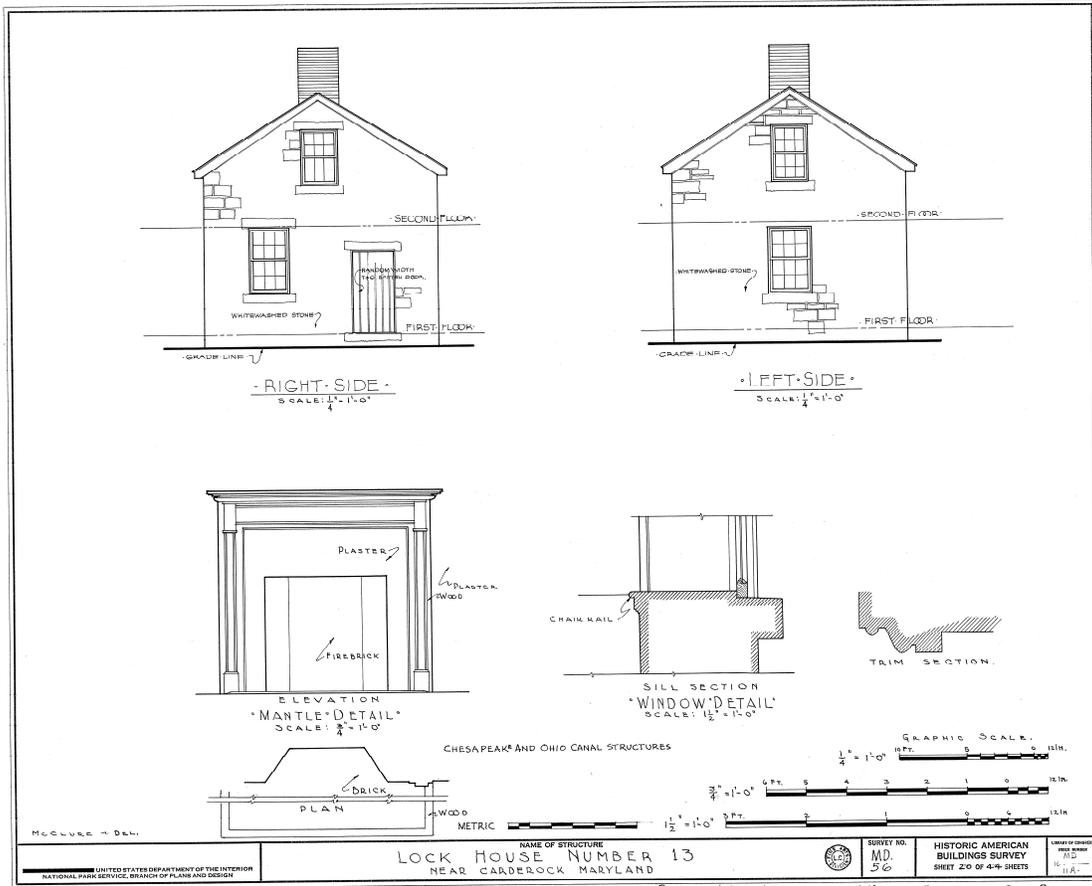
Survey No. changed MD-56 H sheet 1 of 1

Drawing 5, Lockhouse at Lock 13, Sheet 1 of 3
 By Historic American Building Survey. This drawing complements Illustration 5



Survey No. changed MD-56-I sheet 1 of 3

Drawing 7, Lockhouse at Lock 13, Sheet 3 of 3
By Historic American Building Survey



McCLURE - DEL. CHESAPEAKE AND OHIO CANAL STRUCTURES

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE, BRANCH OF PLANS AND DESIGN	NAME OF STRUCTURE LOCK HOUSE NUMBER 13 NEAR CARDEROCK MARYLAND	SURVEY NO. MD. 56	HISTORIC AMERICAN BUILDINGS SURVEY SHEET 20 OF 49 SHEETS	DATE OF DRAWING MD. 1956
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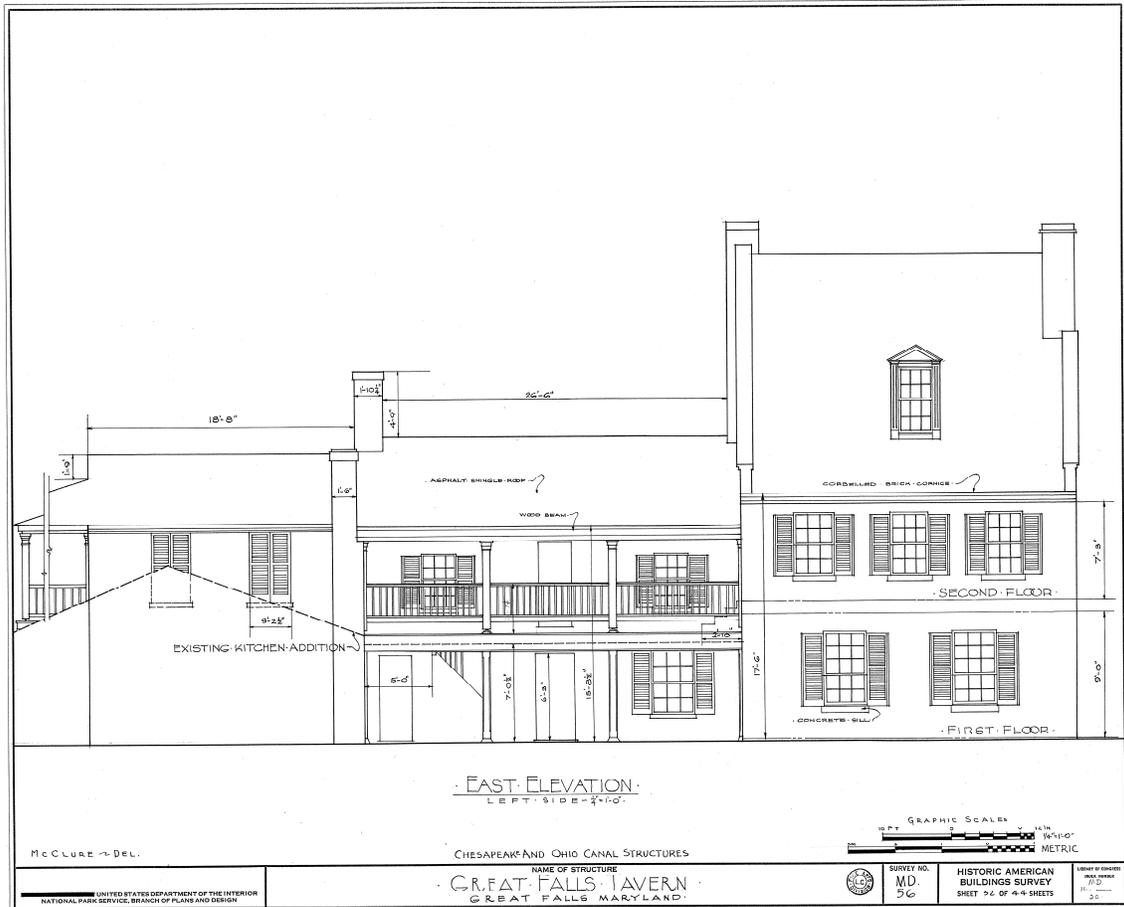
Survey No. changed to MD-56-I sheet 3 of 3

Drawing 8, Great Falls Tavern, Sheet 8 of 10
By Historic American Building Survey. This drawing complements Illustration 6.



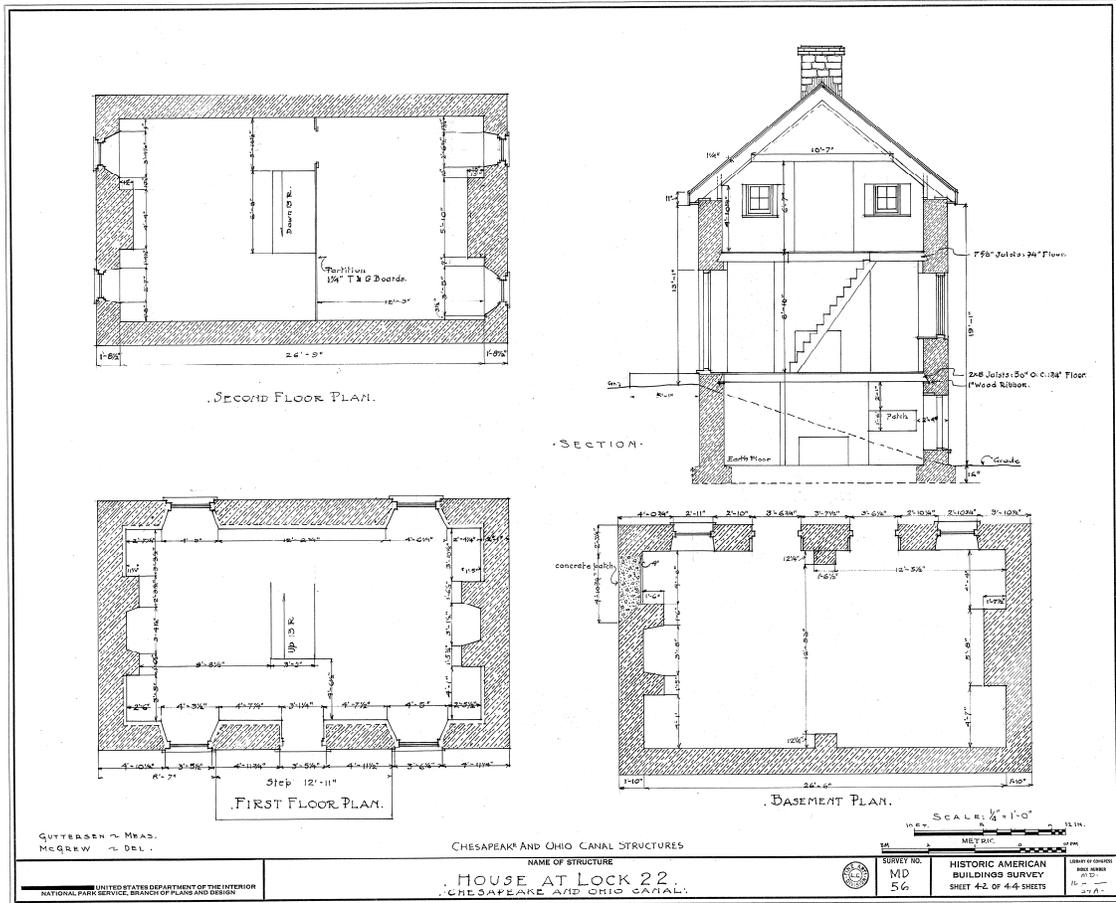
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Drawing 9, Great Falls Tavern, Sheet 6 of 10
 By Historic American Building Survey. This drawing complements Illustration 7
 although the angle is different.



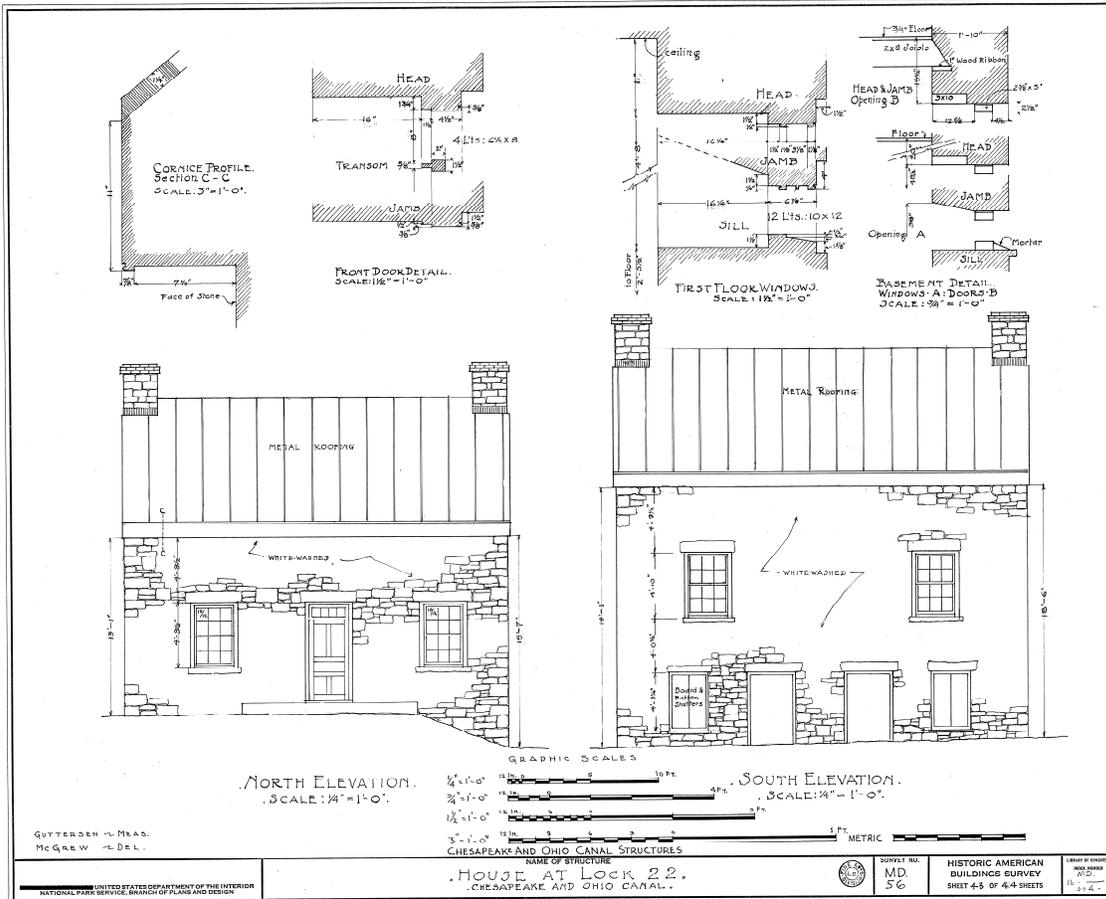
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Drawing 10, Lockhouse at Lock 22, Sheet 1 of 3
By Historic American Building Survey. This drawing complements Illustration 8.



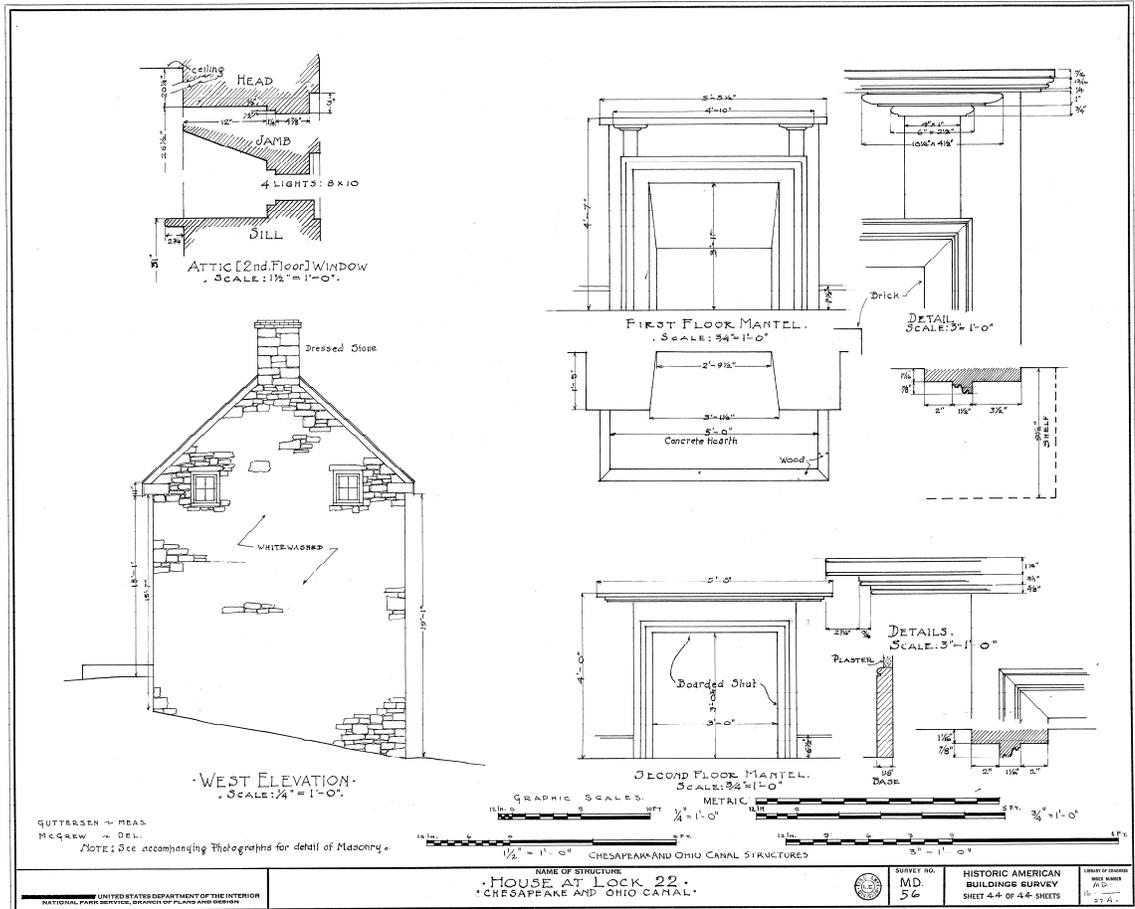
Survey No. changed to MD-56-Q Sheet 1 of 3

Drawing 11, Lockhouse at Lock 22, Sheet 2 of 3
By Historic American Building Survey



Survey No. changed to MD-56-Q sheet 2 of 3

Drawing 12, Lockhouse at Lock 22, Sheet 3 of 3
 By Historic American Building Survey



GUTTERSEN - REAS.
 MCGREW - DEL.
 NOTE: See accompanying Photographs for detail of Masonry.

NAME OF STRUCTURE
 HOUSE AT LOCK 22
 CHESAPEAKE AND OHIO CANAL

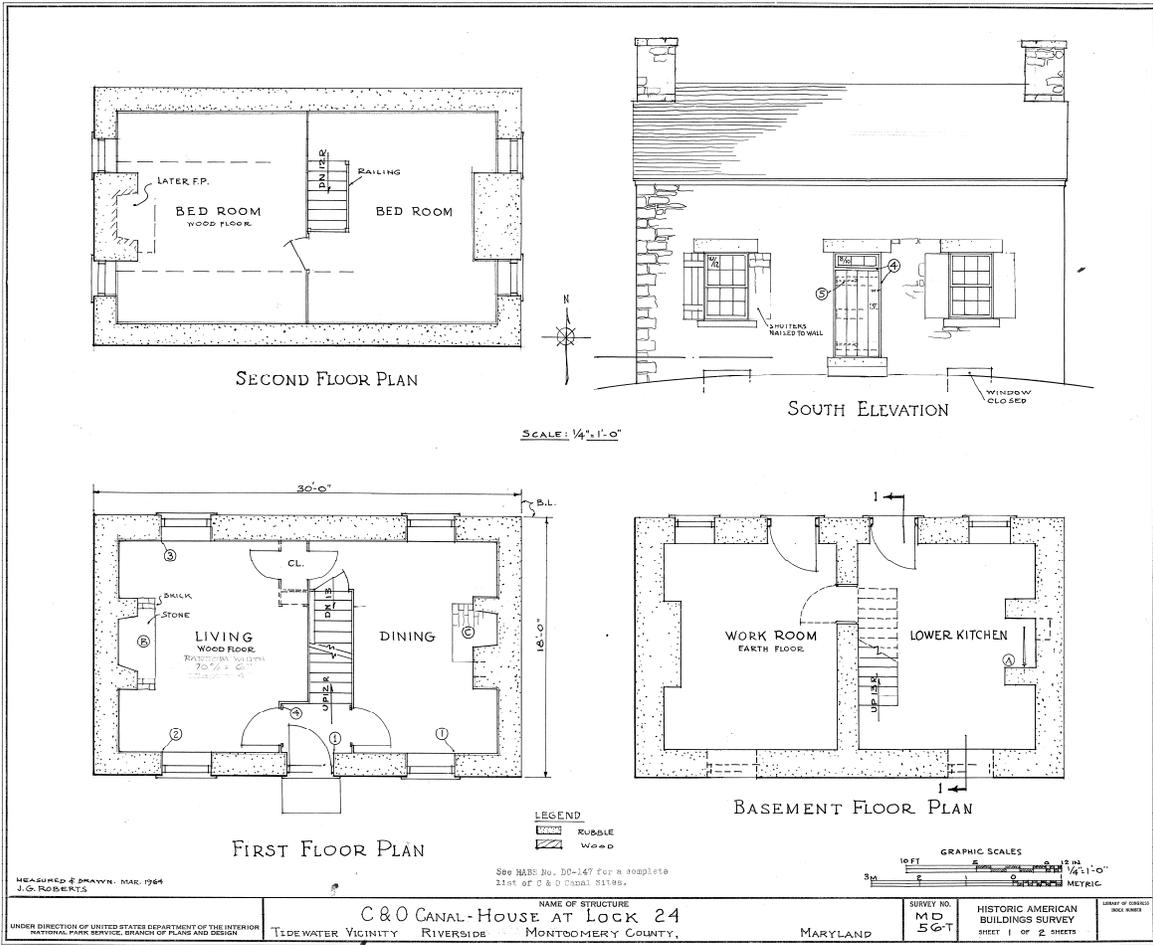
SURVEY NO.
 MD
 56

HISTORIC AMERICAN BUILDINGS SURVEY
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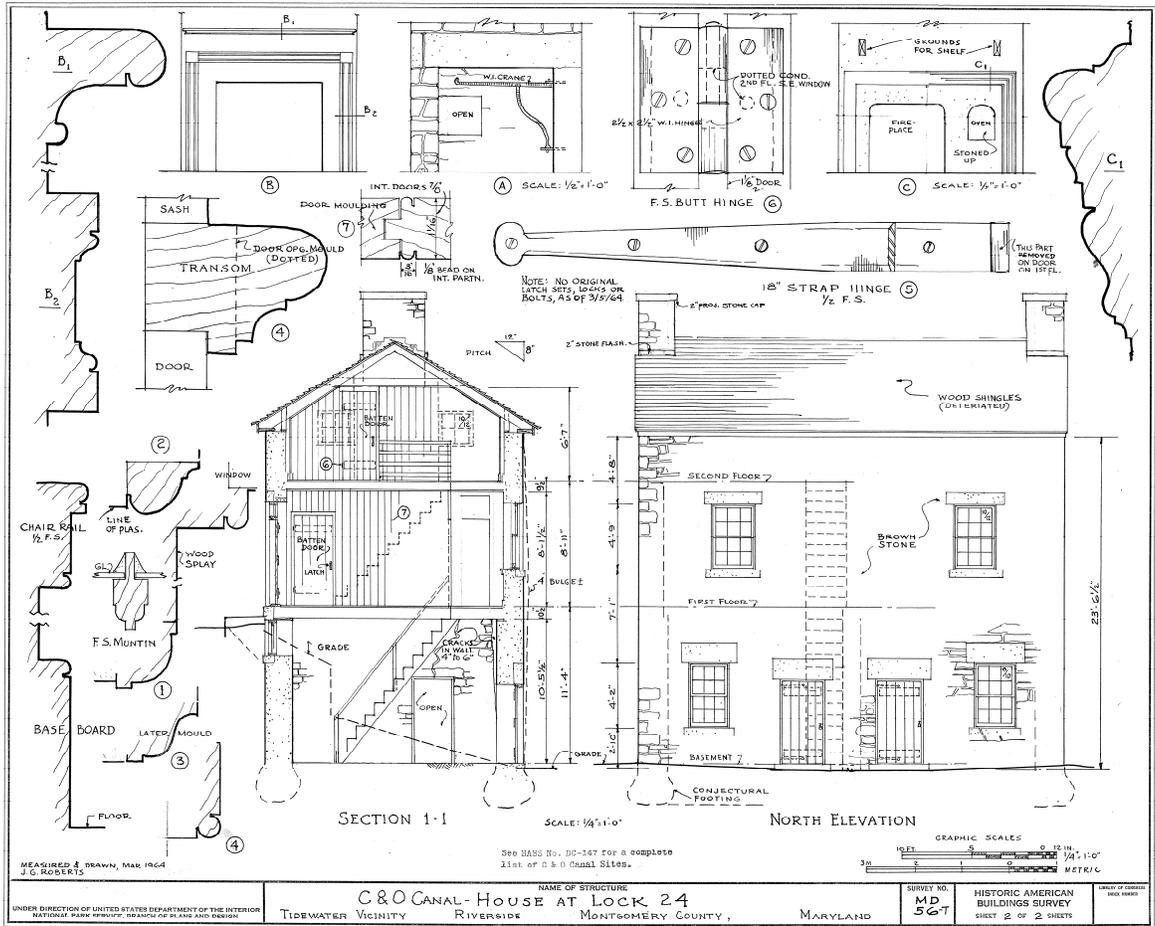
DATE OF DRAWING
 1925
 27-2

Survey No. changed to MD-56-Q sheet 3 of 3

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Illustration 1 Unidentified lockhouse with family standing in front, ca. 1900 photograph.
National Park Service Files, National Archives.



Illustration 2 Lockhouse of log construction, 1967 photograph.
From National Park Service Files, Department of the Interior



Illustration 3 House at Lock No. 7 during the major flood in March, 1936.
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Illustration 4 House at Lock No. 12, ca. 1936 photograph.
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Illustration 6 Great Falls Tavern (Crommelin House), ca. 1900 photograph. showing group of men standing on porch. From C & O Canal NHP Files.



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Photograph by John O. Brostrup. From Historic American Buildings Survey File,
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Photograph by Jack E. Boucher. From Historic American Buildings Survey Files.



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From Historic American Buildings Survey Files.



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Illustration 17 Fireplace in house at Lock No. 27, 1959 photograph.
Photograph by Jack E. Boucher. From Historic American Buildings Survey Files.



Illustration 18 House at Lock No. 36, front elevation, 1959 photograph.
Photograph by Jack E. Boucher. From Historic American Buildings Survey Files.



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Photograph by Jack E. Boucher. From Historic American Buildings Survey Files.



Illustration 20 House at Lock No. 49, rear view, 1967 photograph.
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Illustration 21 House at Lock No. 49, front view, 1967 photograph.



Illustration 22 House at Lock No. 54, front and southwest elevations,
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From Historic American Buildings Survey Files.



Illustration 23 House at Lock No. 54, rear and northwest elevations,
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Illustration 24 House at Lock No.72, 1962 photograph.
From National Park Service Files, Department of the Interior.



Illustration 25 House at Lock No. 75, 1967 photograph.
Photograph by Hugo Skrastins. From National Park Service Files, Department of the Interior.



Illustration 26 House at Lock No. 75, right side view.
Note 3 vertical braces, Prior to 1978 restoration.

