HISTORIC RESOURCE STUDY CHESAPEAKE & OHIO CANAL NHP

5. A CHRONOLOGICAL DESCRIPTION OF THE CONSTRUCTION OF THE C & O CANAL: 1828–1850

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I. GENERAL CHRONOLOGY OF THE CONSTUCTION OF THE CHESAPEAKE & OHIO CANAL: 1828–1850

1828

June 23: President Charles F. Mercer was authorized by the canal board to engage Benjamin Wright as chief engineer of the canal company. Additional surveyors and engineers were to be hired to aid Wright in preparing an unspecified section of the canal for immediate excavation.¹

June 24: The company clerk was ordered to proceed immediately along both shores of the Potomac River between Seneca Creek and Cumberland for the purpose of obtaining land for the location of the canal. He was also authorized to purchase land on which was located materials for the construction of the waterway.²

June 24: Since the company stockholders and the citizens of the District of Columbia wanted the construction of the canal to commence on July 4, the canal board determined the work with the city authorities toward this goal. Following the passage of a resolution by the Washington Board of Aldermen and Common Council on July 1, the canal directors agreed to begin the excavation of the waterway with appropriate ceremonies on July 4, near the Powder Magazine at the head of Little Falls.³

June 26: President Mercer informed the canal board that notice had been served upon him on June 24 "of an injunction granted by Theodore Bland, Chancellor of the State of Maryland, at the suit of the Baltimore & Ohio Railroad Company." This injunction prevented the construction of the canal above Point of Rocks. The canal board, upon learning of this legal ploy by the railroad, resolved to engage Walter Jones, a local attorney, as counsel for the canal company and to hire additional legal counsel in Frederick, Maryland, to look after their interests. Later, on July 10, the board voted to retain Francis Scott Key, a lawyer in Georgetown, as an assistant counsel in the case.⁴

June 26: The canal board voted unanimously to adopt the route for the canal surveyed by the U. S. Board of Engineers and by James Geddes and Nathan S. Roberts along the north bank of the Potomac River below Cumberland.⁵

July 2: The canal board determined to take immediate steps to secure conveyances of land to the canal company in the states of Maryland and Pennsylvania for the commencement of the western section of the waterway between Cumberland and Pittsburgh as surveyed by the U. S. Board of Engineers in 1824–25. Andrew Stewart, a director of the company, was authorized to effect these land conveyances and, if necessary, to initiate condemnation proceedings under the state laws. ⁶

July 4: On this date, groundbreaking ceremonies for the canal were held near the Powder Magazine at the head of Little Falls. To add to the significance of the occasion, the board invited Presi-

¹ Proceedings of the President and Board of Directors, A, 2.

² *Ibid*, 6.

³ *Ibid*, 5, 9.

⁴ *Ibid*, 8, 21.

⁵ *Ibid*.

⁶ *Ibid*, 10.

dent John Quincy Adams to attend the ceremonies and to turn the first spadeful of earth. Many representatives of official Washington and of the foreign delegations were among the dignitaries present at the ceremonies. After breakfasting in Georgetown, the directors and their guests proceeded up the river about five miles in boats especially provided for the occasion. They disembarked at the foot of Little Falls and went directly to the Powder Magazine at the head of the falls.

After a number of short speeches, President Adams gave his blessing to the undertaking by emphasizing the national character of the work. At the conclusion of his address, he took the spade and began to break the ground. Unfortunately, his spade struck a root and his effort was foiled. After a second failure, Adams took off his coat, again took up the shovel, and with the cheers of the audience finally succeeded in breaking the ground. The members of the official party returned to Georgetown where they partook of a lavish dinner. The affair was a huge success, focusing public attention on the Chesapeake & Ohio Canal as a national work and overshadowed the inaugural ceremonies of the Baltimore & Ohio Railroad in Baltimore on the same day.⁷

July 5: The directors authorized President Mercer to employ several principal engineers and a number of assistant engineers to survey and prepare for placing under contract the eastern section of the canal from Little Falls to Cumberland.

The board resolved that public notice should be given that proposals for the excavation, embankment and walling of the canal prism between Little Falls and Great Falls would be received at the C&O Canal Company office on August 14–16. Similar notice was also to be given that proposals for building from 18 to 20 locks and the masonry structures on this section of the canal were to be received October 1–20.

Immediate steps were authorized to locate the most convenient points along the Potomac River at which suitable stone could be obtained for the construction of the masonry works on the waterway. Similar inquires were to be made where suitable lime could be found near the river for making hydraulic cement. If necessary, a sum of \$20 was to be offered as a reward to anyone who could discover large quantities of this material near the line of the canal. 8

July 19: Chief Engineer Wright informed the board that the line of the canal from Great Falls to Seneca Creek was under survey and would be prepared for letting out contracts for the embankment, excavation and walling of the canal prism August 14–16. Proposals for the five locks and other masonry structures on this subdivision would be received October 1–20.

July 30: After considerable pressure from the stockholders and citizens in Washington had been brought to bear on the directors to locate the eastern terminus of the canal in the District of Columbia, the board decided to hold a general meeting in the Washington City Hall on September 10 to resolve the question. Clerk John P. Ingle was instructed to place weekly notices of the meeting in the Philadelphia *American Daily Advertiser*, the Baltimore *American*, the *Virginia Free* and the Washington *National Intelligencer*. Two weeks later on August 9, the board appointed a

⁷ Washington *National Intelligencer*, July 7, 1828, and Walter S. Sanderlin, *The Great National Project: A History of the Chesapeake & Ohio Canal* (Baltimore, 1946), 59–60. See Appendix A for President John Quincy Adams' reminiscences of the ground-breaking ceremonies which are excerpted from *Memoirs of John Quincy Adams*, Vol. 8, 49–50. The use of the Fourth of July for the formal inauguration of internal improvements projects was a common practice in those years. For example, the Erie Canal began construction on July 4, 1817.

⁸ Proceedings of the President and Board of Directors, A, 11–13.

⁹ *Ibid*, 24–25.

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committee to consult with Attorney General William Wirt and members of Congress concerning the position the canal company should take at the general meeting. ¹⁰

August 2: The board determined that President Mercer should direct the preparation, printing and distribution of proposals for the prospective contractors who were ready to bid for the excavation, embankment and walling of the canal prism. On August 9, Mercer submitted a printed form of the proposals; and on August 18, he submitted a second printed form of the contracts for work on the canal.¹¹

July 10: Six newspapers were selected by the board to be used for advertising purposes by the canal. The newspapers were: the Washington *National Intelligencer*, Alexandria *Gazette*, *Virginia Free Press* (Charleston), Hagerstown *Herald*, Cumberland *Advocate*, and Pennsylvania *Democrat* (Uniontown). ¹²

August 9: The board voted to give public notice that proposals would be received between October 15–20 for the entire section of the canal between Seneca Creek and Point of Rocks, a distance of about 27 miles. Bid would be accepted for the sections, socks, aqueduct and culverts on that stretch of the line. The forms for the proposals were to be ready for distribution by October 1. The letting of these contracts was to be published in all the newspapers of the counties bordering on the Potomac and in the Winchester papers, in addition to those that had been selected on July 10. 13

August 20: After examining 462 proposals submitted by some 100 contractors, the board let contracts for the 34 sections between Little Falls and Seneca Creek. Most of the successful bidders had prior experience in the construction of canals in New York, Pennsylvania, Ohio, Connecticut and Canada, New York and Pennsylvania men secured 18 of the contracts, amounting to \$160,000 of a total of \$218,000 let.¹⁴

August 21: The canal company formally accepted the Potomac Company's surrender and conveyance "of all its rights and privileges." ¹⁵

August 23: The board took action to organize its corps of engineers to direct the operations on the canal. The Board of Engineers was to consist of Chief Engineer Wright assisted by two directors, positions to be offered to Nathan S. Roberts and John Martineau. In addition, President Mercer was authorized to employ the number of resident and assistant engineers, rodmen and axemen that the Board of Engineers would require.

On this date, the Board of Engineers was also directed to survey and estimate the cost of building a feeder from the Monocacy River to the line of the canal. ¹⁶

August 30: Upon the petition of several contractors, the board ordered that building materials and provisions for the contractors would be allowed to pass through the old Potomac Company locks

¹⁰ *Ibid*, 31–32, 35–37.

¹¹ *Ibid*, 34, 35, 40.

¹² *Ibid*, 22.

¹³ *Ibid*, 37–38.

¹⁴ *Ibid*, 41–43, and Sanderlin, *The Great National project*, 67–68.

¹⁵ Proceedings of the President and Board of Directors, A, 43–44.

¹⁶ *Ibid*, 47–49, 54–55. Roberts and Martineau later accepted the positions offered to them.

at Little Falls and Great Falls without payment of toll charges. The move was made to hasten construction and lessen the impact of rising building costs.

The directors also instructed the Board of Engineers to construct a road or pathway along the line of the canal at the expense of the company.

Phineas Janney, a director of the company, was appointed to obtain Thomas Fairfax's consent for the construction of a saw mill at Great Falls for the use of the company. On September 3, Janney reported that Fairfax had given his consent.¹⁷

September 3: The canal company adopted an official seal commemorating the purposes of the waterway. Designed by Benjamin Chambers, the brass seal was to be impressed on all contracts of the company accompanied by the signature of the president or the director acting in his place.¹⁸

September 10: On this date, a general meeting of the stockholders of the canal company convened to determine the location of the eastern terminus of the waterway. President Mercer, on behalf of the directors, recommended to the stockholders that if Attorney General Wirt found that the company charter gave the authority for such action that the canal be extended from Little Falls to Rock Creek along the line surveyed by Wright and Martineau in August. When the Corporation of Washington built a basin at the mouth of Tiber Creek, the company would extend the canal to that point unless the corporation wished to construct the extension. A request would be made to Congress to aid the company in extending the canal to the Navy Yard and to Alexandria via an aqueduct across the Potomac, the northern abutment of which would be built by the company. The stockholders promptly agreed to the recommendation as it offered a compromise between those who desired the eastern terminus at Little Falls and those who wanted the company to extend its works to the Eastern Branch (Anacostia River). ¹⁹

September 19: The board passed five resolutions relative to the construction of the canal: (1) each lock chamber was to be 15 feet wide in the clear so they would correspond with the locks on the canals in New York, Ohio and Western Pennsylvania; (2) the canal between its eastern terminus and the Shenandoah River at Harpers Ferry was to be six feet deep; (3) suitable places were to be selected for the immediate construction of as many lock-keepers' houses along the line of the canal as were needed by the Corps of Engineers in superintending its construction; (4) when the specifications for the October lettings were prepared, they were to be printed and distributed among the prospective contractors; and (5) the Board of Engineers was directed to locate and prepare for contract the portion of the canal between Little Falls and Rock Creek, including the basin at the latter location. As a part of this operation, the engineers were to report the plan and estimate of a road to replace the public highway which would be destroyed by the construction of this section of the canal.²⁰

September 27: The board determined that proposals be received at the next letting for double and single locks and that the directors retain the alternative of adopting either plan. The board of en-

¹⁷ *Ibid*, pp.53–54, 56–67. This saw mill was located at Matildaville on the Virginia side of the river and was contracted to William Apsey. See *Ibid*, B, 452; and Apsey to Mercer, June 17 and July 18, 1829, Ltrs. Recd., C&O Co.

¹⁸ *Ibid*, 63–64. For a description of the seal, see Appendix B.

¹⁹ Ibid, 76–78; Proceedings of the Stockholders, A, 23–32; Proceedings of the President and Directors of the Chesapeake & Ohio Canal and of the Corporations of Washington, Georgetown and Alexandria, in Relation to the Location of the Eastern Termination of the Chesapeake & Ohio Canal (Washington, 1828), 1–15.

²⁰ Proceedings of the President and Board of Directors, A, 80–82.

gineers was ordered to report on the relative cost and advantages of building single and double locks on the canal from its eastern terminus to the Shenandoah.

Walter Smith, one of the company directors, was authorized to speed the commencement of operations on the canal by making private contracts for the satisfaction of landowners through whose property the line of the canal would pass between Rock Creek and Seneca Creek. When he could not arrive at an agreement with the proprietor, he was to submit the case to outside arbitration. Where private contracts could be consummated by purchasing outright the right of the owner in the lot or part of the lot of the tract to be acquired, he was to do so for the benefit of the company.

The directors voted to appoint a superintendent of stone work and a superintendent of wood work to each division of the canal. These individuals would be treated as engineers and would work under the direction of the board of engineers.

President Mercer was instructed to have the superintendent of wood work construct a saw mill at Matildaville near the Great Falls on the Virginia side of the Potomac. The saw mill was to supply locust timber for the lock gates and scantling and plank to the contractors as needed during the construction of the waterway. ²¹

October 16: Attorney General William Wirt submitted to President Mercer his legal opinion on the question of whether the canal company's charter permitted the extension of the waterway to Rock Creek. According to his understanding of the legislative acts of Virginia and Maryland and the company charter, the precise location of the canal's eastern termination was not defined. However, since the documents specified that the terminus of the canal was to be at tidewater in the District of Columbia, the company could legally locate its terminus anywhere in the District.²²

October 18: The directors resolved that the portion of the canal between Rock Creek and Little Falls be placed under contract when Chief Engineer Wright reported that the company engineers had completed their surveys. The Seneca and Monocacy feeders and Dams Nos. 1 and 2 also were to be let for contract at his discretion. The time for this letting was subsequently fixed by Wright for December 4. 23

October 21–25: After traveling up the canal from Georgetown and holding a three-day meeting at Leesburg, Virginia, President Mercer and the board of directors let 50 sections of the line from Seneca Creek to Point of Rocks and much of the masonry work between Little Falls and Point of Rocks. There were 1,308 proposals for these contracts. The work that was let included Sections Nos. 35–84, Locks Nos. 5–27, Aqueduct No. 1 and Culverts Nos. 10–12 and 17.²⁴

October 31: The board accepted a proposal by Hovey and Hitchcock to construct Aqueduct No. 2 across the Monocacy. ²⁵

November 15: As there was an apparent labor shortage in the Potomac Valley, the board voted to begin advertising its need for workers in Europe.

²¹ *Ibid*, 82–84.

²² *Ibid*, 89.

²³ *Ibid.* 92.

²⁴ *Ibid*, 93–98; and Sanderlin, *The Great National project*, 68. See Appendix D for a list of the contractors.

²⁵ Proceedings of the President and Board of Directors, A, 100.

The directors determined to send a proposal to the authorities in Frederick that the company would convert the contemplated Monocacy feeder into a navigable canal provided the city and county would build an extension to the town.

The board decided that it was expedient to substitute ferries for bridges and fords across the canal. A petition was to be drawn up and presented to the Maryland legislature to authorize such substitution wherever the canal passed through the territory of that State. To achieve this goal with the least inconvenience to the landowners along the Potomac, the board wanted the State to grant it authority to acquire all the property between the canal and the river.²⁶

November 22: The board organized the canal line and made assignments of the engineers to the administrative divisions of the canal. The directors divided the entire canal into three parts: eastern, middle and western. Inasmuch as the chapter required that construction begin to the east, that leg of the canal was subdivided into three parts of 120 sections each. The average section was half a mile in length, and twenty sections generally formed a residency.

A list of rules and regulations to govern the administration of the engineering corps was adopted and published. The engineer corps was divided into five grades: chief engineer, board of engineers, resident engineers, assistant engineers and rodmen. The board of engineers consisted of three members, each of whom also had charge of one division of the eastern section. The engineer in charge of the first division was automatically chief engineer.²⁷

November 22: The board determined to stimulate the pride of the contractors in their work on the canal by announcing that rewards were to be given for quality construction. The rewards to be issued were as follows: (1) a silver cup valued at \$50 for the best constructed lock on the first division completed within the specified time limit of the contracts; (2) a silver medal valued at \$10 for the best constructed culvert of any letting; (3) a silver medal valued at \$20 for the best portion of slope or vertical walling consisting of at least 500 perches of stone on a residency; (4) a silver medal valued at \$30 for the best executed section of the first division; (5) a silver medal valued at \$20 for the first section to be completed in any given letting; and (6) a silver medal valued at \$10 for the greatest sum of common excavation done on any section in a given month.²⁸

November 22: President Mercer informed the board that the Baltimore & Ohio Railroad had advertised to contract for the construction of their line across the right-of-way of the canal at Point of Rocks. Accordingly, the directors authorized him to apply for an injunction to prevent any further proceedings in the contemplated letting of such contracts. Mercer was also given permission to employ former Attorney General William Wirt as an attorney of the company to assist Walter Jones in conducting the legal suits between the two companies.²⁹

November 29: Chief Engineer Wright submitted specifications for the pier at the Rock Creek Basin, the dams, the locks and the bridges. Accordingly, Clerk Ingle was ordered to print these documents for distribution.³⁰

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²⁶ *Ibid*, 104–105. Wilson M. C. Fairfax and Alfred Cruger were directed to survey all the land between the projected canal line and the river from Georgetown to Harpers Ferry preparatory to the land acquisition program.

²⁷ *First Annual Report* (1829), C&O Co., in *Proceedings of Stockholders*, A, 48; and *Proceedings of the*

²¹ First Annual Report (1829), C&O Co., in Proceedings of Stockholders, A, 48; and Proceedings of the President and Board of Directors, A, 107–115. See Appendix E for a list of the engineers on the first division of the canal.

²⁸ Proceedings of the President and Board of Directors, A, 115–116.

²⁹ *Ibid*, 117.

³⁰ *Ibid*, 119.

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November 29: When the board received word that the authorities at Frederick would not build a navigable canal to the contemplated feeder on the Monocacy River, they resolved to drop plans temporarily for the proposed feeder.³¹

December 3: The board agreed to advertise for the delivery to the company's saw mill at Great Falls of a large quantity of rough timber. The timber was to be used for sawed post and rail fences and for the posts and crossbars of the lock gates.³²

December 10: After considering a number of proposals at the Engineer's Office in Georgetown, the board let contracts for the five miles between Rock Creek and Little Falls. This work included Sections A–H, Locks Nos. 1–4, Dams Nos. 1–2, bridges Nos. 1–2, seven culverts, and the pier, waste weir and tide lock at the Rock Creek Basin³³.

December 11: Chief Engineer Wright reported to the board on the number and location of the lockkeepers' houses necessary for the accommodation of the Resident Engineers. The board then accepted the bids for 12 lockhouses.³⁴

1829

January 7: The board authorized President Mercer to commence advertisements in Virginia for the purpose of attracting laborers to the canal.³⁵

January 21: The directors resolved to receive proposals for the supply of locust timber for the lock gates.³⁶

January 31: To alleviate the continuing labor shortage along the line of the canal, the board authorized President Mercer to make an arrangement with Henry Richards, a Welshman formerly employed on the Erie and Chesapeake and Delaware Canals, to serve as the agent of the Chesapeake & Ohio Canal Company in Great Britain and to secure laborers to work on the project. The board also continued to negotiate for workers from the British Isles through James Maury, the American consul at Liverpool. On March 6, an agreement was made with Richards, and he was soon sent to England to recruit laborers in cooperation with Maury.³⁷

March 6: Because of the continuing intransigence of many landowners along the line of the canal to surrender their properties to the company, the board ordered that condemnation proceedings be initiated to acquire the necessary land for the canal's right-of-way between Rock Creek and Point of Rocks. A jury was to be called for this purpose on March 24.

³² *Ibid*, 123.

³¹ *Ibid*, 119.

³³ *Ibid*, 127. See Appendix F for a list of the contractors for this work.

³⁴ *Ibid*, 129. See Appendix G for a list of the contractors for the lockhouses.

³⁵ *Ibid*, 140.

³⁶ *Ibid*, 146.

³⁷ *Ibid*, 153, 175; Mercer to Maury, March 7 and July 8, 1829 and Mercer to Richards, July 8, 1829, Ltrs. Sent, C&O Co.

³⁸ Proceedings of the President and Board of Directors, A, 175.

March 14: Earlier on February 28, President Mercer had informed the directors that the contracts for Locks Nos. 5–8; 12; 15–18; 19–20; 23–24 and 26 had been abandoned. Accordingly, the board accepted new proposals to construct the locks, and on March 14, declared new contracts. The guard lock and feeder at Seneca Falls also were contracted to the firm of Holdsworth and Isherwood.³⁹

March 17: The directors authorized Inspector of Masonry Alexander B. McFarland to make a contract with Boteler and Reynolds, who owned the Potomac Mills at Shepherdstown, for the delivery of 50,000 bushels of water lime to the canal works at 17 cents per bushel. Stone of a suitable quality for hydraulic lime had been discovered near Shepherdstown, on the Virginia side of the river, early in 1828, and a mill and kiln had been erected to grind and burn the lime. 40

March 18: At a special meeting of the board, President Mercer announced that a suit brought by John Mason *et al.* of Georgetown to prevent the extension of the canal through Georgetown had been dismissed by the U.S. Supreme Court. Since the work on the canal between Little Falls and Rock Creek had been suspended pending the outcome of the suit, work on this portion of the waterway was to be rushed to completion.⁴¹

March 18: The directors decided that the plan of the canal should be changed so "as to form a berm bank...not exceeding forty feet in width" wherever the Chief Engineer recommended such a modification. Later on April 22, the board directed that the width of the canal prism be reduced in order to add six feet to the breadth of the berm bank between Georgetown and Little Falls. This berm was to serve as a new roadway between these two points, replacing the road which had been destroyed by the line of the canal.⁴²

March 18: The board accepted the proposal submitted by James O'Brien for the construction of Lockhouse No. 6. 43

April 4: As early as the spring of 1829, the company realized that the rising construction costs would jeopardize the completion of its work. To offset this danger and to increase the subscriptions to the level necessary to finish the canal, the board, on April 4, constituted Richard Rush as the agent of the company to open books in Europe to receive subscriptions up to \$6,000,000 for the eastern section and \$10,000,000 for the entire canal.⁴⁴

April 8: Inspector of Masonry McFarland informed the board that he had discovered a blue hydrate of lime about 100 yards from the Potomac Mills in Shepherdstown. Because he considered this stone to be superior to that for which the company had contracted, the board ordered him to extend the existing contract with Boteler and Reynolds to 100,000 bushels of hydraulic cement using the blue stone.⁴⁵

³⁹ *Ibid*, 178–179. See Appendix H for a list of the contractors for the relet locks. The locks were relet generally at prices 25 percent above those in the original contracts.

⁴⁰ *Ibid*, 181; and Boteler to Mercer, January 14 and 22, 1828, in U.S., Congress, House, Committee on Roads and Canals, *Report of the Committee on Roads and Canals*, H. Report 141, 20th Congress, 1st Session, 1828, Appendix 4, 38–39.

⁴¹ Proceedings of the President and Board of Directors, A, 182.

⁴² Ibid, 183–184, 204, 215. John W. Baker built the new road along Sections C. F.

⁴³ *Ibid.* 186–187.

⁴⁴ Ibid, 190–191, and First Annual report (1829), C&O Co., in Proceedings of Stockholders, A, 50.

⁴⁵ Proceedings of the President and Board of Directors, A, 195–196.

April 8: By the early spring of 1829, many contractors were facing financial hardship resulting from the rising cost of construction materials and labor. To prevent the bankruptcy of capable contractors who were willing to continue their operations, the board authorized President Mercer to provide additional compensation to them. This authority was given at first only for the lock contractors but was later extended to those on the aqueducts and sections.⁴⁶

April 25: The board was informed that the local jury had completed the condemnation of land required for the construction of the canal through Georgetown to the Montgomery County line at a sum of \$30,000. The board accepted the verdicts and appropriated the funds. The board also decided to sell the buildings and other improvements on the line of the canal in Georgetown at a public sale after five-days notice had been given in the Georgetown *Columbian*. 47

April 25: Apparently the Potomac Mills were not supplying the canal works with sufficient quantities of water lime, because on this date, Chief Engineer Wright was ordered to purchase 4,000 bushels "of the best New York water lime."

April 29: Despite delays caused by the legal dispute with the Baltimore & Ohio Railroad, the canal board began early preparations to extend their line up the Potomac Valley above Point of Rocks. On this date, Resident Engineer Alfred Cruger submitted to the board his plans, profiles and field notes from his recent survey of the line between Point of Rocks and Williamsport. 49

May 20: The directors ordered the company engineers to build a berm bank or roadway 30 feet wide on each side of Rock Creek Basin. 50

May 20: President Mercer was authorized to engage the services of 300 stonecutters and masons from Europe. He was also directed to make loans to the contractors to enable them to transport additional stonecutters and masons from other parts of the United States. Later, on June 10, he was instructed to provide for the importation of common laborers from Europe.⁵¹

June 1: The President and directors informed the canal company stockholders that the line of the canal between Rock Creek and Point of Rocks was under contract. This 48-mile distance included 92 sections, two aqueducts, about 60 culverts, two dams, 27 locks, 17 lockhouses and several basins. The contractors had commenced operations on 73 sections prior to May 1 and on the remaining sections after that date. Section No. 78, the first to be completed, had been constructed between January 15 and May 6. The previous winter had been so severe that the contractors who had begun construction after the August letting were no further ahead in their operations than those who had elected to begin after the arrival of spring. The contractors for the masonry works were generally further behind on their operations than were those for the excavation. The board had enlarged the general dimensions of the canal to 60 feet wide at the surface, 42 feet wide at the bottom, and six feet in depth to improve the course of the waterway at little additional cost. The enlarged dimensions, which were to apply to the canal between Georgetown and Harpers Ferry,

⁴⁶ Ibid, 196, 202, 205.

⁴⁷ *Ibid*, 209.

⁴⁸ *Ibid*, 209.

⁴⁹ *Ibid*, 213.

⁵⁰ *Ibid*, 228.

⁵¹ *Ibid*, 226, 284.

had been prompted partially by the conditions attached to the Congressional subscription to canal company stock and partially by the intention of the board to provide water power to Georgetown manufacturers.⁵²

June 6: At the urging of Alexander B. McFarland, the newly appointed Superintendent of Cement at Shepherdstown, the board ordered that a cement house be built near the Potomac Mills to protect the hydraulic lime until it was needed on the canal. The sum of \$350 was appropriated for this purpose.⁵³

June 8: The directors ordered Chief Engineer Wright to supply the contractors on the first and second residencies with adequate supplies of Roman cement. Thomaston lime was to be used as a cement for backing. These arrangements were to last until sufficient quantities of good water lime could be procured from Shepherdstown.⁵⁴

June 10: The board authorized the purchase of locust and heart pine for the construction of lock gates. Nathaniel Billington's proposal for locust timber was accepted at 39 cents per cubic foot, and James Campbell's proposal to supply best heart pine in 2-inch plank was approved at \$1.62½ per 100 feet, board measure. 55

July 1: It was reported to the board that Messrs. R. and H. Fowler of New York, subcontractors under Hurd, Canfield & Co., had completed Section No. 78. As this was the first section to be completed on the canal, the Fowlers were entitled to a \$20 silver medal. However, at their request, the board gave them \$20 in cash in lieu of the medal.⁵⁶

July 15: The problems caused by the continuing labor shortage in the Potomac Valley and by the stalemated legal dispute with the Baltimore & Ohio Railroad were much in evidence at the board's meeting on this date. President Mercer was directed to pay the expense of transporting workers from New York to the line of the canal. However, when Mercer recommended the purchase of 100 slaves who were to be instructed in the art of stonecutting and masonry, the board refused to support him. As a result of the work already executed and of the controversy with the railroad, the directors reduced the number of residencies from five to four and determined to terminate the services of an unspecified number of engineers.⁵⁷

August 5: Upon the recommendation of Chief Engineer Wright, the board approved the use of cast iron paddle gates for the locks. Patented by John F. King of Washington, the lower lock gates were each to have two paddles, 2 feet by 18 inches and weighing about 160 to 180 pounds.⁵⁸

The board was informed by Inspector of Masonry Robert Leckie that James O'Brien recently had completed Lockhouse No. 5. This was the first such structure on the canal to be fin-

⁵² First Annual Report (1829), C&O Co., in Proceedings of the President and Board of Directors, A, 242–244; 256–257; 267–268.

⁵³ Proceedings of the President and Board of Directors, A, 276.

⁵⁴ *Ibid*, 278. Two days later, the directors purchased 50 casks of New York water cement already in Georgetown and ordered 200 more for immediate delivery.

⁵⁵ *Ibid*, 284.

⁵⁶ *Ibid*, 298.

⁵⁷ *Ibid*, 308–310; 363.

⁵⁸ *Ibid*, 318; Wright to President and Directors, July 30, 1829; and King to President and Directors, August 7, 1829, Ltrs. Recd., C&O Co. Earlier, the plan for the lower lock gates consisted of six wooden paddle gates opening from lateral culverts. *Proceedings of the Stockholders*, A, 19.

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ished. According to Leckie, O'Brien was an excellent stone mason and had made one of the best stone jobs on the entire line.⁵⁹

The board directed Inspector of Masonry Leckie to provide for the construction of suitable buildings along the line of the canal for storing cement.⁶⁰

August 19: The directors appointed a committee to draw up a contract with O. H. Dibble for excavating and walling the Rock Creek Basin. After several weeks of negotiations, the signed contract was presented to the board and was promptly approved.⁶¹

August 26: It was reported to the board that work all along the line of construction was halted because of sickness. Because many of the engineers and contractors were away from the canal, the board was unable to push the work. 62

September 11: Plagued by the late summer sickness and the rapidly rising cost of construction materials, many contractors had suspended their operations. In an effort to get the work resumed, the board voted to inform the contractors that it would consider as abandoned all works not under operation by October 5. 63

September 24: The first flood to affect construction of the canal occurred in early August. The areas hardest hit by the freshet were Little Falls, Great Falls and Seneca. The contracts had not provided for additional compensation to cover damages from flooding during construction, the contractors began requesting supplemental aid to cover their losses.⁶⁴

September 25: President Mercer informed the board that he had let the contracts for all the culverts, "except such as were before specially let," to two firms. The culverts below Seneca Creek were contracted to McCord & Mowry, while those above that point were let to Albert Hovey. 65

September 29: C. K. Gardner of the U. S. Post Office Department notified President Mercer that seven post offices had been established along the canal during the winter of 1828–1829 for the convenience of canal officials and contractors. It is apparent that this had been accomplished after the canal company had put pressure on the postal service to do so. The canal company evidently felt that by providing mail service along the line of construction, faster and more effective communication could be had, which in turn would facilitate construction. The seven locations were as follows: Powder Magazine at Little Falls, Bear Island, Clementon, Seneca Mills, Conrad's Ferry, Mouth of Monocacy and Catoctin. Additional post offices would be established at other locations

⁶³ *Ibid*, 346. An inspection tour by President Mercer in mid-September revealed that there were at work on the canal about 1,600 hands, the lowest number of laborers since the commencement of construction. The greatest number of workers was on the stretch between Little Falls and Georgetown, where the epidemic had not spread. The area most affected by the spread of the disease was the line between Seneca and Edward's Ferry. *Ibid*, 353.

⁵⁹ O'Brien to President and Directors, August 5, 1829; and Leckie to president and Directors, August 2, 1829, Ltrs. Recd., C&O Co.

⁶⁰ Proceedings of the President Board of Directors, A, 318–319.

⁶¹ *Ibid*, 321, 331.

⁶² *Ibid*, 335.

⁶⁴ Holdsworth and Isherwood to president and Directors, September 24, 1829, and Wright to Mercer, October 3, 1829, Ltrs. Recd., C&O Co.; and *Proceedings of the President and Board of Directors*, A, 320–321. ⁶⁵ *Proceedings of the President and Board of Directors*, A, 357.

if they were at least four miles apart. Beginning immediately, the mail was to be delivered twice daily along the canal by horseback. ⁶⁶

October 6: Throughout the fall, the problems associated with importing foreign workers troubled the canal company. On October 6, the board directed Clerk Ingle to arrange for the release from prison of those imported laborers who had been incarcerated as "absconding servants" on the condition that they promised to return to the canal works. The following week on October 12, the directors learned that many of the imported laborers had run away and gained employment with the Baltimore & Ohio Railroad, while others had fled to Baltimore to seek the protection of the law. On October 21, Dr. John Little, a Trustee of the Poor in Georgetown, informed the board that 126 workmen from the canal had come destitute and sick to that town. Later, in early November, the company caught up with many of the deserters and prosecuted them as runaways and debtors.⁶⁷

November 7: Chief Engineer Wright submitted a plan for waste weirs along with a list of the number to be built below Seneca Creek. The board approved his report and ordered Clerk Ingle to advertise on the company's office door for the letting of the necessary contracts. ⁶⁸

1830

January 13

The directors notified the contractors on the line from Rock Creek to Seneca that their contracts had expired on December 31. However, as satisfactory progress had been made on most of the works, they agreed to set June 1 as the date when all work should be completed to Seneca Falls. The exceptions to this general extension were the heavy embankments requiring time to settle and the culverts. The former were to be completed by May 15 and the latter by April 15. Each contractor would be required to augment his work force to insure that his work would be finished within the specified time. ⁶⁹

January 29: The board ordered that a contract be negotiated with Boteler and Reynolds for the supply of 60,000 bushels of Shepherdstown cement in addition to the quantity previously authorized. All of the cement was to be delivered prior to September 1. While the terms of the contract would be the same as earlier ones, the company would pay an additional one cent per bushel for the lime that was delivered before June 1.⁷⁰

January 29: President Mercer and Chief Engineer Wright were authorized to contract for the construction of waste weirs between Georgetown and Seneca Creek.⁷¹

⁶⁶ Gardner to Mercer, September 29, 1829, and Nelson to Mercer, September 28, 1829, Ltrs. Recd., C&O Co. Later on February 19, 1930, two more post offices were established at Section No. 8 and Edward's Ferry.

⁶⁷ Proceedings of the President and Board of Directors, A, 368, 374, 377–381, 389; Wirt to Ingle, October 28 and November 4, 1829; and Little to President and Directors, October 13, 1829, Ltrs. Recd., C&O Co.; and Sanderlin, *The Great National Project*, 74–78.

⁶⁸ Proceedings of the President and Board of Directors, A, 390.

⁶⁹ *Ibid*, B, 8–9.

⁷⁰ *Ibid*, 16–17.

⁷¹ *Ibid*, 18.

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February 3: The board directed President Mercer to contract with Brackett and Guy for the purchase of 40,000 bushels of water lime at 20 cents per bushel of 70 pounds. The cement was to be delivered by June 1 from their mill on the manor of Charles Carroll of Carrollton at Tuscarora near the Monocacy River. ⁷²

February 5: The directors ordered that public notice be given that bids for the construction of the culverts between Seneca and Point of Rocks and of Lock No. 25 would be accepted until February 24. The resident engineers were instructed to report those sections above Seneca that had been abandoned and to arrange for their reletting as soon as possible.⁷³

February 12: Apparently, the canal company was still having difficulty in acquiring a sufficient supply of hydraulic lime, for on this date Clerk Ingle was instructed to advertise for the purchase of 20,000 bushels of New York water cement to be delivered at Georgetown in April.⁷⁴

February 19: President Mercer was authorized to make a contract for raising the upper chamber and gates of the Old Potomac Company locks at Little Falls to adapt them for use with the increased depth on the new canal. The Little Falls Skirting Canal, which had been converted into a feeder for the Chesapeake & Ohio, had been four feet deep. To insure the new canal of an adequate supply of water, the old canal had been increased to a depth of six feet.⁷⁵

March 3: Chief Engineer Wright was authorized to use Bradford Seymour's patent cast iron lattice gates for one of the locks as an experiment. Already in use on the Erie, Pennsylvania and Ohio Canals, the gates were later installed in the lower gates of Locks Nos. 26–27. ⁷⁶

May 31: The board ordered Chief Engineer Wright to prepare an estimate and specification for the northern abutment of the Alexandria Aqueduct prior to making a contract for its construction. Later on October 23, he submitted a design for the abutment to the directors. At that time, they instructed him to make a further study of its cost and to determine the expediency of immediate construction.⁷⁷

June 7: The president and directors reported to the second annual meeting of the stockholders that they expected to bring into use "twenty of the new locks, and the entire canal, from Seneca to the old locks below Little Falls, by the next fourth of July." Although the original intention had been to complete the section by December 31, 1829, the company officials were encouraged that the works had been completed in "little more than eighteen months from the actual commencement" of the canal.

This good news was counterbalanced by the continuing controversy with the Baltimore & Ohio Railroad. After failing to quash the injunction in legal proceedings at Annapolis in August, 1829, the board had reduced the number of engineers and suspended the operations above Seneca, except for those on Aqueducts Nos. 1 and 2 and several difficult sections. They had made provision to relet the contracts for those masonry works above Seneca that had been abandoned but

⁷² *Ibid*, 21. The contract was confirmed on February 19. Later on June 16, the directors discontinued this contract until the quality of the cement could be improved.

⁷³ *Ibid*, 23.

⁷⁴ *Ibid*, 25.

⁷⁵ *Ibid*, 27.

⁷⁶ *Ibid*, 34–35.

⁷⁷ *Ibid*, 87, 208.

with the stipulation that no cement would be supplied until the work below Seneca was finished. 78

June 12: William Archer, who had been appointed by the stockholders to report on the progress of the construction in Georgetown, stated that work there was advancing. The Rock Creek Basin was progressing to rapid completion under the supervision of Chief Engineer Wright. The locks and bridges in Georgetown were nearly done as was the portion of the canal between the Foundry and the Market House. A short section of the canal above Georgetown had been filled with water, and the embankments had withstood the pressure of the water very well.⁷⁹

June 25: After examining the canal from Little Falls to Seneca Creek, the directors determined not to water the canal on July 4 as had been discussed earlier except for certain sections that had been completed. Since the work was nearly finished on this section, the contractors were ordered to have their operations done by August 1. Two days earlier, the board extended the time for completion of the Georgetown level to September 25.

July 24: The board authorized President Mercer to enlarge the lockkeepers' houses at Locks Nos. 20 and 23, provided the cost of the former did not exceed \$1,300 and that of the latter \$1,000. The company's shanties near Little Falls were to be taken down and the materials used to enclose the grounds around the two lockhouses.⁸¹

August 7: The directors ordered the engineers to advise the contractors that water would be admitted into the canal between Dams Nos. 1 and 2 on September 25. At the same time, lockkeepers were appointed for this portion of the canal.⁸²

August 18: Clerk Ingle reported to the board that he had directed W. W. Fenlon to contract with Paterson, Wolcott & to paint some of the completed lock gates for the sum of \$25 per lock. 83

August 21: When the Alexandria Canal Company requested the services of an engineer to survey the route of its waterway, the board recommended that Chief Engineer Wright perform this job. Soon after submitting a design for the northern abutment of the Potomac Aqueduct on October 23, Wright left the Chesapeake & Ohio Canal and moved to New York City. On November 20, the directors selected Nathan S. Roberts to aid in the location of the Alexandria Canal whenever his services were needed.⁸⁴

August 30: Benjamin Wright tendered his resignation from the office of chief engineer to become effective October 1. His stated reason for resigning was due to the fact that difficulties with the Baltimore & Ohio Railroad would hold up active construction operations above Seneca for the foreseeable future. The board accepted his resignation and agreed to abolish the position of chief

⁸² *Ibid*, 156–159. See Appendix I for a list of the lockkeepers and the location of the lockhouses.

⁷⁸ Second Annual Report (1830), C&O Co., in Proceedings of the President and Board of Directors, B, 97–98.

⁷⁹ Proceedings of the Stockholders, A, 119–121.

⁸⁰ Proceedings of the President and Board of Directors, B, 128–130.

⁸¹ *Ibid*, 148.

⁸³ Fenlon to Ingle, August 18, 1830, Ltrs. Recd., C&O Co. This price covered the cost of two common coats of paint.

⁸⁴ Proceedings of the President and Board of Directors, B, 167, 208, 224.

engineer when Section A, the Rock Creek Basin and Georgetown tidelock were completed. Other engineering positions were to be eliminated also. After that time, there would be only two residencies covering the line between Georgetown and Point of Rocks: the first would extend from the tide lock to Section No. 40, and the second thence to Point of Rocks. The office of the first resident engineer, Thomas F. Purcell, would be near Seneca Creek, while the office of the second resident engineer, Daniel Van Slyke, who would double as superintendent of the canal, would be located near the mouth of the Monocacy River. 86

September 25: The board determined that "suitable provision be made for passing horses and foot passengers across the locks from the towing path to the lockkeepers' houses in such manner as not to obstruct the navigation of the canal." The bridge across the canal at Little Falls was to be elevated so as not to hinder canal navigation.⁸⁷

October 2: Before the canal was opened to regular navigation, experiments were made to test its capability of holding water and handling boats. Thus, the first recorded boat passed from Little Falls to Seneca on October 1. That night, a breach occurred in an embankment near the lower end of Section No. 15. Accordingly, the board ordered the construction of a wall, three feet high and eighteen inches thick, on the river side of the high embankment on Sections Nos. 12, 13, 15 and 18. The experiment also revealed the need for flumes around the locks, the directors instructed Superintendent Van Slyke to construct a flume around one lock to test its ability to handle the flow of water. 88

November 26: In a supplementary report to the company stockholders, President Mercer observed that numerous boats had navigated the distance between Dams Nos. 1 and 2. Work on the Georgetown level was nearly done, with only a little masonry and embanking remaining to be done. Only several months' work would complete the canal to Point of Rocks with the exception of Aqueducts Nos. 1 and 2, Lock No. 24, and Dam No. 2. These structures would require from six to 12 months of labor. To permit navigation to Harpers Ferry, the board was considering a plan to feed the canal at Point of Rocks and from thence extend a slackwater navigation to the Shenandoah River. 89

1831

January 4: Apparently, the canal was still only in partial use, for on this date, the board decided to suspend navigation on the canal until February 15 so that work on Sections Nos. 13 and 14 could be completed. 90

March 19: Superintendent Van Slyke on April 2 informed Mercer that the canal between Little Falls and Seneca Falls had been opened to navigation on this date. During the first two weeks of navigation, the canal had been throughd with boats. Because it was difficult to preserve order among the boatmen, he recommended that navigation regulations be adopted and enforced. Later, on July 16, a list of regulations was drawn up and published.⁹¹

⁸⁵ *Ibid*, 170.

⁸⁶ *Ibid*, 171–174. Wright finally left the service of the company on November 13.

⁸¹ *Ibid*, 189.

⁸⁸ *Ibid*, 191–192; and Van Slyke to President and Directors, October 2, 1830, Ltrs. Recd., C&O Co.

⁸⁹ Proceedings of the President and Board of Directors, B, 231–135.

⁹⁰ Ibid, 250

⁹¹ Van Slyke to Mercer, April 2, 1831, Ltrs. Recd., C&O Co.

April 1: When Nathan S. Roberts asked for a temporary leave of absence, the board instructed President Mercer to inform him that the legal obstructions to the extension of the canal above Point of Rocks made it necessary for them to abolish his engineering position on the second division of the waterway. 92

April 29: Prior to the introduction of water in the canal, the practice of the canal company had been to manure the banks and plant grass and trees on them. It was thought that these practices gave the banks greater strength and stability. On this date, the board ordered the suspension of these activities on the unfinished line above Seneca. Apparently, investigation of the operable waterway below that point had revealed the destructive tendencies of these earlier methods. ⁹³

May 6: President Mercer was authorized to request from the Secretary of War that several members of the U. S. Topographical Engineers examine the canal and report on its present condition, the adequacy of its plan, and the execution of its construction. Later on May 20, Colonel John J. Abert informed Mercer that he and Colonel James Kearney would undertake the examination in June.⁹⁴

May 27: Following an inspection tour of the canal from Georgetown to Point of Rocks by the directors, they made several decisions affecting the lock bridges, the lock gates and the lock flumes. A pivot bridge for wagons and carriages was to be built over Lock No. 13, and broad planks were to be substituted for the plank and timber that had been thrown across the locks so as to enable the lockkeepers to discharge their duties more promptly. As an experiment in facilitating the filling of the locks, a small sluice gate operated by a lever was to be constructed around all the locks; the flumes were to be as far from the lock chamber as practicable, their bottoms were to be five feet above the bottom of the canal, and each was to have sills and gates.⁹⁵

June 6: The president and directors reported to the third annual meeting of the company stock-holders that early in the spring the navigation had been extended one mile below Little Falls and more recently one mile further to within sight of Georgetown. A packet boat carrying United States mail was already making daily trips to Seneca from where two public stage lines took the mail and passengers to Leesburg, Virginia via Edward's Ferry. The canal works in Georgetown were nearly completed, and it was anticipated that boats would pass through the tide lock by July 4.

The president and directors gave the stockholders a brief resume of the state of the unfinished line of the canal above Seneca. Locks Nos. 24 and 25 were nearly completed while the foundations of Locks Nos. 26 and 27 had been laid. Aqueduct No. 1 was nearing completion, but Aqueduct No. 2 which had been let to three different contractors was not expected to be finished until November. The culverts were in varying stages of construction, but all of them were expected to be finished by mid-September. Most of the sections were done, and the remainder could be completed within 90 days.

⁹² Proceedings of the President and Board of Directors, B, 295.

⁹³ *Ibid*, 309.

⁹⁴ Ibid 311 319

⁹⁵ *Ibid*, 324–325. Later on June 10, the board ordered that pivot bridges be constructed over Locks Nos. 26 and 27 and that ferries be provided in all other places where the company had been bound by agreement or by jury verdict to do so. It had been the original intention of the board to build as few bridges as possible and to provide access across the canal by ferries.

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Because the controversy with the Baltimore & Ohio Railroad still prevented construction above Point of Rocks, three plans had been advanced for watering the 26 miles above Seneca. The plans, none of which had yet been adopted, included the use of the Monocacy River as a feeder, the construction of a dam below Point of Rocks, and the combined introduction of the Tuscarora, Little Monocacy and several lesser streams into the canal as feeders. ⁹⁶

June 10: The board took measures to protect the recently completed embankments from slippage. Where the embankments showed tendencies of washing, the directors ordered that back drains be constructed to catty off the water from the towpath and berm. In addition, the directors, reversing an earlier stand, voted to cover the bank slopes with manure or enriched soil and plant grass seed on the embankments.⁹⁷

June 11: The directors authorized Clerk Ingle to arrange for the printing of 500 copies of the Albert and Kearney report on their recent examination of the canal. In their investigation of the canal, the two topographical engineers commented favorably upon the plan and the construction of the canal. The report is perhaps the earliest comprehensive examination of the engineering technology employed in the design and construction of the waterway. On this date, Abert was elected to a one-year term as a director of the canal company, thereby providing the company with the services of a well-known engineer. 98

July 16: President Mercer submitted to the board the "Regulations for Navigating the Canal." After reviewing the rules, the directors approved them and ordered them to be printed and distributed. Six days later, the board formally announced that the canal "between the Seneca feeder and the wooden stock next above the foundry and the bridges and roadways within that distance, be declared open and free for trade and passing, subject to the Regulations of the Company." ⁹⁹

July 25: The canal company stockholders passed the following resolution relative to the extension of their works from the Rock Creek Basin to the mouth of Tiber Creek:

Whereas the Corporation of Washington have purchased the Washington Canal and have advertised for proposals for excavating and completing the same, and whereas that part of said canal, from the mouth of the Tiber to 6th Street West is to form a basin for the reception of the waters of the Chesapeake & Ohio Canal; Therefore Resolved, That the President and Directors of the Chesapeake & Ohio Canal Company, be instructed to commence that part of the said Canal extending from the Basin at Rock Creek to the mouth of the Tiber to prosecute the same simultaneously with the work on said basin, provided the said President and Directors shall be satisfied upon a full consideration of all circumstances, be of opinion, that is properly chargeable to the said Corporation. ¹⁰⁰

August 12: Resident Engineer Purcell was directed to survey and locate the extension of the canal from the Rock Creek Basin to Tiber Creek. The extension was to be forty feet wide at the surface and six feet deep and its sides were to be dry-walled. 101

⁹⁸ Ibid, B, 386–387, and U. S., Congress, House, Committee on Roads and Canal, Chesapeake & Ohio Canal, H. Report 414 to accompany H. R. 94, 23rd Congress, 1st Session, 1834, 88–105.
⁹⁹ Ibid, B, 410–419, 432.

⁹⁶ Third Annual Report (1831), C&O Co., 334–339.

⁹⁷ *Ibid*, 383–384.

¹⁰⁰ Proceedings of the Stockholders, A, 186–187.

¹⁰¹ Proceedings of the Stockholders, B, 439

September 16: The board passed two measures relating to the canal in Georgetown. First, a 20-foot wide berm was to be built along the lower side of the canal between High and Frederick Streets. Second, in order to restore the 20-foot wide public highway on the upper side of the canal between High and Congress Street, condemnation proceedings were to be initiated to acquire title to the necessary properties. The proprietors were to be given the right to restore the buildings on the condemned property if they so desired. 102

September 19: Resident Engineer Purcell informed the board that the canal through Georgetown had been watered. At the conclusion of their meeting, the directors embarked on their packet boat, the "C. F. Mercer," and passed through Locks Nos. 1–4 and landed on the pier at the Rock Creek Basin. ¹⁰³

October 28: The board ordered that proposals be received for removing the saw mill at Matildaville to a more suitable site on the Maryland side of the Potomac. All moveable parts of the saw mill were to be stored temporarily at the canal company store house in Georgetown for safekeeping.¹⁰⁴

November 15: Resident Engineer Purcell reported to the board on his survey of extending the canal from the Rock Creek Basin to Tiber Creek. His report included "an experimental survey of the same thro' the 26th Street West." After considering the merits of his survey, the directors ordered Purcell to make another examination for the canal extension "through Virginia Avenue by tunneling where necessary—the tunnel to be protected by a brick arch." A letter from the Mayor of Washington was also read to the board giving notice that the City of Washington would not pay its \$1,000,000 stock subscription to the C&O Canal Company until the Washington Canal was built. Accordingly, the directors ordered Clerk Ingle to inform the mayor that the extension would be placed under contract. ¹⁰⁵

December 17: After further surveys by Purcell and consultation with Abert, the board adopted a plan for the extension of the canal from the Rock Creek Basin to 17th Street. Purcell was ordered to locate the extension of the line and prepare specifications for the work. When this was done, Clerk Ingle was to advertise for job bids which would be received until December 12. 106

1832

January 7: President Mercer informed the board that the Maryland Court of Appeals, by a vote of 3 to 2, had confirmed the canal company in its claim to the right of prior location *vis a vis* the Baltimore & Ohio Railroad in the disputed passes above Point of Rocks. In making this decision, the judges reversed the decision of the Chancellor, who in the September, 1831 term had released the railroad from the injunctions against it and made those against the canal permanent. The decision had a significant affect on the canal because it opened the way for construction above Point of Rocks.

¹⁰² *Ibid*, C, 2–3.

¹⁰³ *Ibid*, 5.

¹⁰⁴ *Ibid*, p.21.

¹⁰⁵ *Ibid*, p.26.

¹⁰⁶ *Ibid*, 31, 38, 40, 42.

The directors immediately took steps to commence operations from Point of Rocks to Dam No. 4 above Williamsport. Public notice was to be given that the 12-mile stretch of the canal to Dam No. 3 at Harpers Ferry would be let in "convenient sections" at Harpers Ferry on February 23. At the same time, it was to be announced that the portion of the canal between Dams Nos. 3 and 4 would be let at Shepherdstown on April 4. This construction would allow the canal company to meet the terms of its charter which called for the building of 100 miles of waterway by 1833

Engineers Purcell and Cruger were commissioned to locate the line all the way to Williamsport. They were to prepare for contract those sections which involved heavy embankments, steep side cutting, deep cutting and rock excavation by the aforementioned dates. In their preparations, they were to adhere to the plan of the canal already constructed as far as Harpers Ferry, but from that point, the canal was to be only 50 feet wide. ¹⁰⁷

January 14: Upon their receipt of the official copy of the decision by the Maryland Court of Appeals, the board determined that contracts would be let on February 23 for the 12 miles between Point of Rocks and Harpers Ferry. At the same time, the directors authorized President Mercer to make contracts for the two miles immediately above Point of Rocks without the usual public advertisement. The two miles included some of the narrowest of the disputed passes, and the directors were eager to occupy the most favorable location for their waterway. 108

January 21: After considering the various proposals for extending the canal from the Rock Creek Basin to 17th Street, the board accepted the offer of John Carothers for Section I and the bid of J. W. Baker for Section K. The contractors were prohibited from sand blasting during the excavation operations, and they were liable for all damages done by their rock blasting. ¹⁰⁹

February 4: President Mercer informed the board that he had let contracts for Sections Nos. 85–89 pursuant to their order of January 14. Sections Nos. 85–86 were let to Hoffman and Lyles and Sections Nos. 87–89 to Williams and Dawes. 110

February 4: The board unanimously voted to construct a lock at 17th Street in Washington to provide access for boats between the Washington branch canal and the Potomac River via Tiber Creek. That same day, a proposal by C. T. Le Baron and I. G. Camp was accepted for the construction of the lock. The contract called for a granite lock; but later, on April 30, the contract was changed to a lock of cut sandstone. ¹¹¹

¹⁰⁷ *Ibid*, 48–49; *Proceedings of the Stockholders*, A, 196; *Fourth Annual Report* (1832), C&O Co., in *Proceedings of the Stockholders*, A, 200; and Sanderlin, *The Great National Project*, 90–91. Apparently, contracts for masonry were not included in this letting, for in separate actions of the board it was determined to let contracts for Dam No. 3 and Aqueduct No. 3 on February 1 and to postpone the contracting for locks pending a study of the merits of filling the locks with water through lateral culverts and through the lock gate valves.

gate valves.

108 Proceedings of the President and Board of Directors, C, 52–53; and Mercer to Cruger and Purcell, January 23, 1832, Ltrs. Sent, C&O Co.

¹⁰⁹ Proceedings of the President and Board of Directors, C, 56. The two sections were to be built according to the same dimensions of the canal through Georgetown, and both sides of the prism were to be protected by a vertical wall where it was practicable.

¹¹⁰ *Ibid*, 63; and Ledger A, 1828–1841, 360, 362, 364, 366, 368.

¹¹¹ *Ibid.* 63–64; 130.

February 25: The board let contracts for the construction of Dam No. 3 and Aqueduct No. 3. The proposal of William Easby was accepted for the dam, while that of Tracy and Douglas was approved for the aqueduct. 112

March 10: The board adopted the specifications for the locks and culverts between Point of Rocks and Harpers Ferry. The time set for receiving proposals for these structures was set at March 14.

The directors also ordered that the towpath in Georgetown between Congress Street and the west side of Frederick Street "be widened where practicable and where necessary." A wall was to be erected on the margin of the towpath to prevent slides. 113

March 14: The directors took under consideration the proposals and declared contracts for Sections No. 90–112, covering the distance between Point of Rocks and Harpers Ferry. A contract was also let to Lewis Wernwag for the construction of Guard Lock No. 3. The contractors were to commence these works immediately and complete them by December 1.¹¹⁴

March 17: On this date, the board let the contracts for the locks and culverts between Point of Rocks and Harpers Ferry. The following contractors' proposals were accepted for the locks: Nos. 30–31 to Obediah Gordon, No. 32 to Lewis Wernwag, No. 33 to James O'Brien, and Nos. 34–35 to Henry Smith. The following contractors' proposals for the culverts were accepted: Nos. 75–79 to Dawes & Williams, Nos. 80–83 to James O'Brien, Nos. 84–87, 89 to Watson, Tainter & Co., and Nos. 88, 90–94 to the John Hay Co. 115

March 31: The board entered into an agreement with H. B. Richards to quarry and lay stone coping on the front of the Rock Creek Pier and on the towpath wall in Georgetown. 116

May 7: After receiving word from Resident Engineer Purcell that some 22 miles of the line above Harpers Ferry had been located, the directors resolved to receive job proposals for the construction of Sections Nos. 113–156 until May 30. The contracts for the 44 sections between Harpers Ferry and Dam No. 4 would be let on June 2 and those for the masonry works at a later time. 117

May 15: Upon the recommendation of President Mercer, the board ordered the company engineers to locate and to prepare for contract the portion of the canal between Dam No. 4 and Licking Creek. 118

May 31: The question of constructing the Alexandria Aqueduct continued in a stalemate in the face of opposition by Georgetown merchants and the indifference of the C&O Canal Company. As the site for its northern abutment still had not been chosen, the board ordered Purcell to determine its location in conjunction with the chief engineer of the Alexandria Canal Company. Later, on June 7, Alfred Cruger and Wilson M. C. Fairfax were appointed to assist Purcell. On June 23, the board directed Cruger to prepare a plan, specification and preliminary cost estimate for the

¹¹² *Ibid*, 78. Later, the contract with Easby was abrogated when the board decided to use the Government Dam for its water supply.

¹¹³ *Ibid*, 99.

¹¹⁴ *Ibid*, 104–105. A list of the contractors for these sections may be seen in Appendix J.

¹¹⁵ *Ibid*, 109.

¹¹⁶ *Ibid*, 117–118.

¹¹⁷ *Ibid*, 136–137.

¹¹⁸ *Ibid*, 139.

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construction of the abutment. Two weeks later, on July 7, Purcell notified the directors that the site for the abutment had been selected. 119

June 2: The board let contracts for Sections Nos. 113–157, covering the distance between Dams Nos. 3 and 4. The directors also accepted the following bids for some of the masonry work: Lock No. 36 to Fries and McDonnell, Lock No. 39 to Wilson and Bryan, and Culverts Nos. 95–99 to Tracy and Douglas. 120

June 4: The president and directors reported to the fourth annual meeting of the company stockholders that great strides had been made to execute the construction of the canal since the favorable decision by the Maryland Court of Appeals. Furthermore, the line of the canal between Seneca and point of Rocks, on which operations generally had been suspended because of the lack of water from the proposed Dam No. 3, was nearly completed. The chief structure still to be finished was Aqueduct No. 2, but it was anticipated that the structure would be completed before the recently contracted works above Point of Rocks were ready for the admission of water. ¹²¹

June 5: The board let contracts for the construction of Aqueduct No. 4 and the culverts between Harpers Ferry and Dam No. 4. The contract for Antietam Aqueduct was let to Gibson, Noonan, Medler & Fresh & Co. The contractors whose proposals for the culverts were accepted are as follows: Nos. 100–104, 106–107, 113–118 to Gibson, Noonan, Medler & Fresh & Co.; No. 105 to Moore and Temple; Nos. 108–110, 112 to George W. Hunter; and No. 111 to J. P. and J. Dougherty. 122

June 7: The proposal of Joseph Hollman was accepted for the construction of Dam No. 4. After some modifications in their original bids, Gibson, Noonan, Medler & Fresh & Co. was given the contracts for Locks Nos. 37–38. 123

June 23: The canal directors began to face two serious obstacles to the further progress of the canal: the five years allowed by the charter for the construction of the first 100 miles would expire in 1833, and the approaching exhaustion of the company's immediate financial resources. Accordingly, the board urged the engineers to consider the following temporary expedients in building the canal above Point of Rocks: deferring the construction of a dam at Harpers Ferry; substituting a suspension aqueduct with a wooden trunk for the proposed stone aqueduct across the Antietam; reducing the width of the canal to 20 feet and the depth to five feet on those sections requiring heavy excavation; dispensing with the coping of the culverts, aqueducts and locks except that required for hanging the lock gates; and slackwater navigation at various points.

The board also determined to hire two individuals who would expedite the construction. To prevent a serious work stoppage during the approaching "sickly season," a physician would be employed to inspect the line of the canal from July to October. His duties were to commence an investigation of the living conditions in and around the workers' shanties, to submit a list of recommendations to protect the health of the canal company personnel, contractors and laborers, and to insure an adequate supply of medicine for the workers.

¹¹⁹ *Ibid*, 157, 165, 176, 184.

¹²⁰ *Ibid*, 159–161. A list of the contractors for Sections Nos. 113–157 may be seen in Appendix K.

¹²¹ Proceedings of the Stockholders, A, 224.

¹²² Proceedings of the President and Board of Directors, C, 163.

¹²³ *Ibid*, 165.

A superintendent of construction would be appointed to oversee the work above Point of Rocks. This man would henceforth make all contracts and inspect the works in progress subject to the general direction of the board. He was also to provide for the care of the sick in his jurisdiction. ¹²⁴

July 2: At the recommendation of the resident engineers, the board ordered that where it was expedient, hammer-dressed face work should be substituted for cut-stone face work on the masonry structures above Point of Rocks as a means of lowering construction expenses. 125

July 17: The directors determined to let contracts for the portion of the canal from Sections Nos. 173–203 on August 23. The line of the canal immediately above Dam No. 4, comprising Sections Nos. 158–172, was to be designed for slackwater navigation and would not be let for construction until after the first 100 miles of the canal were completed. In this way, the canal company would meet the terms of its charter. 126

August 18: At the recommendation of John J. Abert, the board determined to dispense with the construction of Dam No. 3. Instead, the company engineers were directed to make arrangements to use the water backed by the government dam at Harpers Ferry. Accordingly, a head gate or guard lock was designed for such a connection between the dam and the canal, and the contract for the work was let to Fries and McDonnell. 127

August 25: The board approved the plan of a bridge and stop gate to be constructed on Section K at G Street in Washington. The proposal of Michael Corcoran was accepted for the masonry and that of Gideon Davis for the iron railing. 128

August 25: The board let contracts for the sections, locks, culverts and aqueducts between Section No. 173 and Dam No. 5. William and Michael Byrne and Paul Provest were given contracts for Sections Nos. 173 and 187–200, Locks Nos. 43–44, Culverts Nos. 120 and 129–135, Aqueduct No. 5 and Dam No. 5. The other contractors whose proposals were accepted were as follows: No. 174, C. and M. Offutt and R. Anderson; No. 175, Philip Mays & Co.; No. 176, Patrick Kenney; No. 180, Chamberlain and Brown; No. 181, Monegan and Breslin; No. 182, Watkins and Magruder; No. 183, Polly and Draper; No. 184, James Gibbs; No. 185, Adam Young; and No. 186, P. Donovan. The contracts for all these structures specified that the work was to be completed within 12 months. At the same time, a private contract was entered into with Gibson, Noonan & Fresh for the construction of Lock No. 40, the letting of which had been suspended temporarily in June. 129

August 31: The summer of 1832—the first in which unrestricted construction was possible—proved the most disastrous to the workers. Late in August, Asiatic cholera made its appearance on the line near Harpers Ferry, and it gradually spread westward to Williamsport. As a result of the plague, work was suspended on many of the sections, and fear spread rapidly among the workers. Despite the attempts by the company to aid the victims, many laborers died and many others fled

¹²⁴ *Ibid*, 174–175.

¹²⁵ *Ibid*, 179.

¹²⁶ *Ibid*, 181–182, 189.

¹²⁷ *Ibid*, 191–192, 207.

¹²⁸ *Ibid*, 209.

¹²⁹ *Ibid*, 209–211. Some time later, Sections Nos. 201 and 202 were let to the firm of William and Michael Byrne and Paul Provest.

the line of the canal in panic. By the early winter months when the epidemic began to subside, the westward progress of the waterway had all but halted. 130

November 3: Despite the disruption to construction caused by the Asiatic cholera epidemic, the board continued to press for the completion of the waterway between Point of Rocks and Harpers Ferry. The directors voted to give discretion to President Mercer and the resident engineers to raise the prices for the unfinished masonry on that stretch of the canal as an incentive for the rapid completion of the works. In the future, no monthly estimates were to be made above Harpers Ferry that was under contract to a firm that had suspended work below that town. ¹³¹

1833

February 23: President Mercer announced to the board that the General Assembly of Virginia had passed an act directing the State to purchase 2,500 shares of canal company stock. In return, the company on March 1 agreed to appropriate \$80,000 for the construction of outlet locks to permit boats to pass to and from the river. The locks were to be located at the mouth of Goose Creek, the ferry at Shepherdstown, and the mouth of Opequon Creek. The locks were to be completed by November 1, 1835. 132

April 20: The contract for the construction of Lock No. 45 was let to Byrne, Lathrop and Provest. The portion of the lock that would be underwater when Dam No. 5 was completed was to be constructed immediately. When the dam was finished, operations on the lock would resume so that it could be used as a means of passing boats from the slackwater pool behind the dam to the canal prism. ¹³³

May 4: The board authorized President Mercer to request the Secretary of the Treasury to order an inspection of the canal. During the current month, the directors anticipated that the canal below Harpers Ferry would be watered. In addition to the 64 miles of completed waterway, 38 miles were under contract. 134

May 9: After a lengthy battle between the railroad and canal companies over the joint construction of their works between Point of Rocks and Harpers Ferry, an agreement was reached in which the state as well as the companies would participate. In return for permission to construct its tracks between the two towns, the railroad company subscribed to \$266,000 of canal stock. The canal company undertook the grading of 4.1 miles of roadbed at the narrow pass where both works came together. As its part, the legislature offered to pass two acts, long the subject of dispute between it and the canal, when the railroad reached Harpers Ferry. These gave the canal

¹³⁰ *Ibid*, 212, 214–215; Charles N. Rush to president and Directors, August 5, 1832; Mercer to Ingle, September 3, 1832; Boteler to Ingle, September 4, 1832; B. price to Ingle, September 5, 1832; Purcell to President and Directors, September 11, 1832; and Rush to President and Directors, August 5, 1832, Ltrs. Recd., C&O Co.; and Sanderlin, *The Great National Project*, 93–97.

¹³¹ Proceedings of the President and Board of Directors, C, 233. Later the board agreed to divide the sections in this area among several contractors in order to expedite the work.

¹³² *Ibid*, 288, 293.

¹³³ *Ibid*, 313, 322.

¹³⁴ *Ibid*, 336. On June 5, Mercer was informed that Captain William Gibbs McNeill of the U.S. Topographical Engineers had been assigned to conduct the survey.

permission to sell surplus water and to begin the western section before completing the eastern part of the work. 135

May 29–30: During an inspection tour of the canal from Georgetown to Williamsport, the directors made numerous decisions relative to the construction of the canal. At Shepherdstown on May 29, they let contracts for grading the 4.1 miles of railroad bed between Point of Rocks and Harpers Ferry. The first two miles below the Harpers Ferry Bridge were assigned to Thomas MacCubbin, the first 1-1/20 miles at the lower end of Point of Rocks were given to Hollman and Lyles, and the remaining portion at the upper end of Point of Rocks was let to Hugh Stewart. The contract for the Shepherdstown River Lock was given to John Cameron.

At Williamsport on the 30th, the directors determined that the canal under construction there be extended to the rock cliffs above the Galloway Mill. The outlet locks under construction above the mouth of the Opequon were to be transferred to the lower end of the extension. A towpath was to be constructed along the margin of the slackwater pool behind Dam No. 4 to facilitate navigation. ¹³⁶

June 3: The president and directors reported to the fifth annual meeting of the stockholders that the construction of the waterway had been impeded greatly by the cholera epidemic. However, the masonry between Point of Rocks and Harpers Ferry was expected to be completed within several days, and it was anticipated that the canal between the later town and Seneca would be watered by July1. Operations above Harpers Ferry had resumed on an active scale in April with an average force of 2,700 laborers and 655 work animals and a weekly use of 7,000 pounds of gunpowder. ¹³⁷

June 5: The board ordered that the wrought iron paddle gate made by William Easby for Guard Lock No. 3 should be used in a lift lock to test its practicality. 138

June 28: A contract was let to J. and A Provest to build Sections Nos. 165–172. This work was to be completed by March 1, 1834. 139

August 20: The board approved a specification drawn up by Engineer Purcell for the towpath along the slackwater above Dam No. 4. The towpath, comprising Section Nos. 157–165, would stretch from the Dam to Lock No. 41. Accordingly, the directors ordered that a contract be made immediately to execute the work. 140

November 1: Charles B. Fisk, superintendent of the canal between Dams Nos. 2 and 3, reported to the board that water had been admitted into the canal at Harpers Ferry and that it had reached nearly to Seneca. ¹⁴¹

¹³⁵ Laws and Resolutions Relating to the Chesapeake & Ohio Canal (Washington, 1855), 42–48; Proceedings of the Stockholders, A, 268–274; and Proceedings of the President and Board of Directors, C, 312, 340–346, 350–351.

¹³⁶ Proceedings of the President and Board of Directors, C, 357–360.

¹³⁷ Proceedings of the Stockholders, A, 276–277.

¹³⁸ Proceedings of the President and Board of Directors, C, 370.

¹³⁹ *Ibid*, 392.

Ibid, 419; and Ledger A, 1828–1841, 505. A contract for the work was let shortly thereafter to Midler & Co., but the firm formally relinquished its contract on January 15, 1834.
 Ibid, D, 3.

November 15: Engineer Purcell reported to the board on the best means of providing for the Potomac River trade above Dam No. 5 prior to the completion of the canal below that point. After studying the possible alternatives, he concluded that a temporary lock around the south wing of the dam was most appropriate. The board accepted his recommendation and ordered him to draw up plans and specifications for a lock to be built of wood, or wood and stone combined. When he had determined which plan was best suited to the interests of the company, he was to let a contract for its construction to Stoughton & McGinley. 142

November 22: Engineer Cruger was ordered to lead a group of company engineers in locating and estimating the cost of the canal from Dam No. 5 to Hancock on the Maryland shore of the Potomac River. At the same time, he was to examine the Virginia shore of the river between those two points and compare the costs of building the canal on the two side of the river. 143

December 9: On this date, the report of Captain William Gibbs McNeill was read to the directors. At the request of the board, he had been assigned by the Secretary of War in June to survey the completed and unfinished portions of the canal from Georgetown to Dam No. 5. At the time of his survey, the line to Point of Rocks was ready for the admission of water except for several places where slight problems needed repairs. McNeill, as had Abert and Kearney several years before, commented favorably upon the quality of construction that he found. 144

1834

January 6: The board ordered Clerk Ingle to arrange with the contractors employed on the line of the canal above Dam No. 4 for the temporary suspension of their work with the exception of the lock around Dam No. 5. If the contractors wished to continue their operations, they would have to accept payment with the stocks of the Corporations of Washington and Georgetown held by the canal company or with interest-bearing company bonds. ¹⁴⁵

January 18–24: Open warfare broke out between rival factions of the Irish laborers during the idle winter months. A preliminary skirmish took place between the Corkonians, who were working near Dam No. 5, above Williamsport, and the Longfords, or Fardowners, from the vicinity of Dam No. 4, below the town. Several were killed in the clash before the militia arrived on the scene to restore order. Despite the efforts of local citizen patrols, the Corkonians broke loose again in a few days, committing various acts of violence on the line. On January 24, some 700 Longfords met a force of 300 Corkonians on a hilltop near Dam No. 5. At least five Corkonians were killed in the short, pitched battle and many more in the woods during the flight that followed. After the victorious Longfords returned to their shanties at Williamsport, the local militia kept order until two companies of U. S. Troops arrived from Fort McHenry¹⁴⁶

¹⁴⁴ *Ibid*, 29; and Report 414, pp.141–157.

¹⁴² *Ibid*, 13, 22. The lock was completed by May 2, 1834, and it was rebuilt by Wilcox and Stoughton in September 1834.

¹⁴³*Ibid*, 18.

¹⁴⁵ Proceedings of the President and Board of Directors, D, 39.

¹⁴⁶ Niles' Register, Vol. XLV (January 25, 1834), 336; *Ibid*, Vol. XLV (February 1, 1834), 382–383; and Purcell to Ingle, January 23, 1834; Raton to Janney, Smith and Gunton, January 31, 1834; and Purcell to President and Directors, January 29, 1834, Ltrs. Recd., C&O Co.

February 7: The canal directors agreed to construct and pay for the culverts that "were necessary on that part of the Baltimore & Ohio Railroad" which was to be graduated by the canal company. 147

March 18: Superintendent Fisk informed the directors that it would be necessary to build several waste weirs on the line of the canal above Harpers Ferry now about to be opened to navigation. The board authorized the construction of those waste weirs that were indispensable to the security of the canal and that would be easily let for contract.¹⁴⁸

April 11: Engineer Cruger submitted his report on the survey of the line of the canal between Dam No. 5 and the Cacapon River. Because the canal company finances were desperate, the report was filed away for future consideration. ¹⁴⁹

April 17: The canal company reported to the House Committee on Roads and Canals that 64 miles of the canal, stretching from Georgetown to Harpers Ferry, had been completed in October 1833. On the remaining portion of the canal under contract, only one lock and Aqueduct No. 4 remained to be finished, to complete the line to Dam No. 4. The distance between Dams Nos. 4 and 5 would be completed by the fall of 1834 as the majority of the work on this portion of the line was already done. As of March 1, the sum of \$3,547,661.50 had been spent on building the canal. ¹⁵⁰

May 3: The contractors building the railroad for the canal company above Point of Rocks applied for ant extension of time in which to complete their contracts. Because the railroad consented to the time extension, the canal board directed that the contracts should be completed by July 1, 1834. ¹⁵¹

June 2: The president and directors informed the sixth annual meeting of the company stockholders that operations on the canal during the preceding 12 months had been hampered by the desperate state of the company's finances. At that time, the canal had been completed to Dam No. 4, some 86 miles west of Washington. In addition, 20 miles of the canal above that point were nearly done, but work on this stretch had been suspended temporarily until more funds became available. The railroad above Point of Rocks, which the canal company had agreed to build, would be completed in July with funds supplied by the Baltimore & Ohio Railroad Company. 152

September 18: The board appointed Directors John J. Abert and William Gunton to proceed to Williamsport for the purpose of putting under contract all work necessary to complete the canal to Dam No. 5. On October 1, the two men reported that the principal obstacle to the achievement of this objective had been the abandonment of Sections Nos. 165–172 by J. & A. Provest. Accordingly, the sections had been relet to the subcontractors of the Provests with the stipulation that the work be done by March 1, 1835. The contracts for Culverts Nos. 118 and 119 were also let, the former to William Broun and the latter to Slayman & Donley. After an inspection of the ground

¹⁴⁷ *Ibid*, 47.

¹⁴⁸ Proceedings of the President and Board of Directors, D, 56.

¹⁴⁹ *Ibid*, 72.

¹⁵⁰ Report 414, 16, 187.

¹⁵¹ Proceedings of the President and Board of Directors, D, 85.

¹⁵² Sixth Annual Report (1834), C&O Co., 3–5.

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between Dams Nos. 4 and 5, the two directors urged the board to erect a stop gate at the upper end of the heavy work above Williamsport. 153

October 18: The directors instructed Engineer Fisk to have the canal correctly measured from the tide lock at Georgetown to Shepherdstown. Stones or locust posts were to be placed on the berm side of the canal at intervals of one mile, designating the distance from the eastern terminus.¹⁵⁴

December 3: Engineer Purcell notified the directors that water had been admitted into the canal at Dam No. 4. Thus it was necessary to provide for lockkeepers, the board authorized Fisk to take charge of the newly opened section of the canal, to appoint temporary lock operators, and to erect shanties for their accommodation. ¹⁵⁵

1835

January 21: Charles B. Fisk requested and received permission from the board to build three waste weirs on the recently completed section of the canal between Shepherdstown and Dam No. 4. 156

February 25: The board moved to extend the date of completion of Sections Nos. 166, 170, 171 and 172 to March 15 because the Irish laborers on these sections had struck recently for higher wages. The strike had delayed operations on these sections, the last to be finished before the canal could be watered between Dams Nos. 4 and 5. 157

March 20: The board was informed that the Maryland legislature had passed an act authorizing a loan of \$2,000,000 to the canal company to complete the waterway to Cumberland. At a meeting of the company stockholders on April 22, the company formally accepted the loan. 158

April 1: The board ordered Fisk to make immediate arrangements to revise the location of the line of the canal from Dam No. 5 to the Cacapon River that had been made in the spring of 1834 by Alfred Cruger. This stretch of the waterway was to be prepared for contract, although Fisk was instructed to designate which sections could be deferred temporarily. ¹⁵⁹

April 22: President George C. Washington informed the stockholders that since their June 1834 meeting, navigation had been opened 48 miles above Harpers Ferry. The canal was now open for a distance of 110 miles above Washington, in addition to an eight-to-ten-mile slackwater navigation above Dam No. 5. 160

¹⁵³ Proceedings of the President and Board of Directors, D, 161, 166–168. The contract for the stop gate was let to E. & J. Stake on November 12, 1834.

¹⁵⁴ *Ibid*, 175.

¹⁵⁵ *Ibid*, 199.

¹⁵⁶ *Ibid*, 224. The contract for these three structures was let to John Cameron; they were completed in late April.

¹⁵⁷ *Ibid*, 234, 254–257; and Hagerstown *Torchlight* quoted in *Niles' Register*, Vol. XLVII (February 25, 1835), 429.

¹⁵⁸ Proceedings of the Stockholders, A, 363–378; and Proceedings of the President and Board of Directors, D, pp.261, 265, 281–183.

¹⁵⁹ Proceedings of the President and Board of Directors, D, 269–270.

¹⁶⁰ Proceedings of the Stockholders, A, 368.

April 29: Upon the acceptance of the \$2,000,000 loan from the State of Maryland, the board appointed a committee to report on a plan to extend the canal from Dam No. 5 to Cumberland. In their first report on this date, the committee urged that this part of the canal be placed under the immediate superintendence of a commissioner to be appointed by the board. The work had moved so far westward that it was no longer possible for the directors, meeting in Washington, to maintain adequate control of operations. The commissioner, according to the committee, should have authority over lesser officials, land acquisition, company property utilization, and reletting abandoned contracts. After some discussion, the board accepted the committee's proposals and appointed one of its own members, George Bender, to fill the office of commissioner. ¹⁶¹

April 29: In an effort to reduce construction expenses, the board resorted to building small, temporary lockhouses. On this date, Josephus Beall was paid for the building of three such structures. During the fall and winter of 1834–35, Isaac Williams also built four temporary lockhouses at Locks Nos. 28, 29 34 and 37. ¹⁶²

May 25: The board directed Engineer Purcell to examine and locate the line of the canal from the South Branch to Cumberland. The work was to be prepared for contract as soon as possible. Following this location, he was to locate the line from the Cacapon River to the South Branch. 163

May 25: The board let a contract to Joseph Hollman to construct a flume around Lock No. 44 and a "suitable" brick or stone lockkeepers house near the lock. He also was given the privilege of constructing, at his own expense, a dry dock for the repair of boats. As part of the contract, Hollman was appointed lockkeeper at an annual salary of \$150, and he agreed to pay an annual rent of \$150 for the use of surplus water at the lock. ¹⁶⁴

May 27: Following negotiations with Alexandria Canal Company, the board appointed Captain William Turnbull to superintend the construction of the northern abutment of the Potomac Aqueduct. Preparatory to letting of a contract for the work, Turnbull was instructed to prepare a plan, specification and cost estimate for the structure. 165

June 1: President George C. Washington informed the seventh annual meeting of the company stockholders that the \$2,000,000 loan from the State of Maryland in March had afforded "the means for a spirited prosecution of the eastern section" and had strongly fortified "our belief in the ultimate connection with the Western waters." According to the president, a continuous canal was "now opened for navigation for the distance of one hundred and ten miles, from the basin in Washington to Dam No. 5, with the exception of about three miles of slack water above Dam No. 4, along Galloway's cliffs, where it is designed to construct a towpath, using the river (having a depth of from ten to fifteen feet) in place of a canal." During the past 12 months, the canal between Dams Nos. 4 and 5 had been finished and opened to navigation.

The board, anxious to begin construction above Dam No. 5, had sent out two surveying parties after the \$2,000,000 loan. One group, led by Resident Engineer Fisk, was currently preparing the line between Dam No. 5 and the Cacapon River for contracting, while a small party, under Resident Engineer Purcell, was surveying the line from the South Branch to Cumberland.

¹⁶¹ Proceedings of the President and Board of Directors, D, 270, 294–301.

¹⁶² Ibid, 301; and Articles of Agreement with Isaac Williams, October 2, 1834, Ltrs. Recd., Chief Engineer.

¹⁶³ Proceedings of the President and Board of Directors, D, 311, 318–319.

¹⁶⁴ *Ibid*, 314.

¹⁶⁵ *Ibid*, 320. Turnbull submitted the requested documents on August 5.

As soon as the necessary arrangements could be made, the line between the Cacapon and South Branch would be made. During the summer, the board intended to let contracts for the masonry structures and the sections requiring heavy excavation. Since there was a lack of good building stone in the upper Potomac Valley, the board suggested the construction of temporary wooden locks where it was necessary. ¹⁶⁶

June 1: The board took several steps to expedite the future work on the canal above Dam No. 5. Contracts were ratified with James Hook of Hancock and George Reynolds of Cumberland to supply the line with hydraulic cement. A storehouse was to be built at McCoys Ferry to receive the cement, and Commissioner Bender was authorized to contract for the transportation of the cement to that point. ¹⁶⁷

June 17: A committee of the board was authorized to contract "for the construction of a Stop Gate at or near the site of the late temporary lock on Sect. D and also for the rubble stone wall proposed for the security of the embankment of Section B, both above and below the foundry. 168

June 17: The board ordered Clerk Ingle to advertise for proposals for the construction of those sections, locks, aqueducts, culverts and dams between Dam No. 5 and the Cacapon that Resident Engineer Fisk certified as being ready for contract. The rime line for completion of the masonry was set at October 1, 1836, and that for the rest of the work at November 1, 1836. 169

July 3: After examining the proposals for the masonry structures and difficult sections between Dam No. 5 and the Cacapon River, the board let a large number of contracts. ¹⁷⁰

July 8–22: During this period, the board examined the entire line of the canal from Georgetown to Cumberland. Among the most significant decisions that the directors made were the following:

- (1) A site was chosen for the Goose Creek River Lock as required by the 1833 act passed by the Virginia legislature. Resident Engineer Fisk was directed to prepare a plan and cost estimate preparatory to placing the lock under contract;
- (2) Upon finding that Sections Nos. 167–168 were located too close to the river, the directors ordered that new section be formed farther from the water provided that the additional land could be obtained at a reasonable cost;
- (3) The directors instructed Purcell to ascertain the best route for the canal and Dam No. 8 in the vicinity of Cumberland. Although somewhat undecided, they were inclined to pass the canal behind the town of Wills Creek, the shortest line to the west.¹⁷¹

August 5: The board directed that mile posts be erected on the towpath side of the recently opened portion of the canal.

¹⁶⁶ Seventh Annual Report (1835), C&O Co., 3–11.

¹⁶⁷ Proceedings of the President and Board of Directors, D, 324. On June 10, a contract was let to George Shafer, a Williamsport water lime manufacturer, to supply additional cement to the line.

¹⁶⁸ *Ibid*, 342. A contract for the stop gate was let to William Easby in August and the structure was completed in the spring of 1837.

¹⁶⁹ *Ibid*. 341.

¹⁷⁰ *Ibid*, 360–362. *Ibid*, 9.

¹⁷¹ *Ibid*, 363–371.

The board approved a proposal by William Easby to construct the gates and other woodwork for the stop lock about to be constructed on Section C. Easby was also to build gates and other woodwork for the waste weir to be constructed at the Old Locks near Little Falls. ¹⁷²

September 2: The board accepted the bid of Michael Byrne to construct the river lock at Edward's Ferry and specified that the work was to be done by June 1, 1836. The proposal of John Cameron was approved for the building of Culverts Nos. 183–186.

The board ordered the division superintendents to determine the proper sites for lockhouses to be built along the canal. The locations of the houses were to be chosen having reference to the construction of flumes and the use of water power. Clerk Ingle was directed to advertise for proposals to build the lockhouses and to fence in the attached grounds. ¹⁷³

October 21: Periodically, the board let contracts for additional sections above Dam No. 5. On this date, the directors approved the bid of Enos Childs for Section No. 208, and later, on January 20, 1836, that of R. W. Watkins for Section No. 231. 174

November 5: The discussion over the route of the waterway at Cumberland was long and heated. The directors were at first inclined to pass the canal behind the town of Wills Creek, the shortest line to the west. Upon receiving repeated protests from the local citizens and an offer of the city to waive all claims to property damages, the directors on this date reconsidered their plans and adopted a low-level route along the river into the center of the town. ¹⁷⁵

November 11: The board ordered that proposals would be received until December 21 for constructing the dams, the masonry, and the difficult sections of the line of the canal between the Cacapon River and Cumberland. Bids were also to be received for the northern abutment of the Potomac Aqueduct. The date for receiving the proposals was later extended to January 6. ¹⁷⁶

December 4: Resident Engineer Fisk was authorized to prepare for contract those sections (excluding sections of light excavation) between Dam No. 5 and the Cacapon that he considered it expedient to let.¹⁷⁷

December 21: Purcell and Fisk recommended to the board that slackwater navigation be employed from Dam No. 5 to Lock No. 45. The directors accepted their report and ordered that this section of the canal be constructed according to the plans which they submitted. ¹⁷⁸

December 21: Upon the recommendation of Fisk, the board determined to build a tunnel about 3,000 feet long on the line below South Branch. The tunnel was to have a height above the water

¹⁷² *Ibid*, 373, 377.

¹⁷³ *Ibid*, 394–395.

¹⁷⁴ *Ibid*, 416; E., 10.

¹⁷⁵ Report of the Committee on the Location of the Canal from Dam No. 6 to Cumberland, October 9, 1835, Ltrs, Recd., C&O Co.; Proceedings of the Stockholders, A, 417–421; Proceedings of the President and Board of Directors, D, 423–424; Sanderlin, The Great National Project, 114–115. Earlier, the board had decided to omit the construction of Dam No. 7 after considering several sites for its location near the mouth of the South Branch.

¹⁷⁶ Proceedings of the President and Board of Directors, D, 427, 434. Difficult sections were defined as those that would cost over \$10,000 to construct.

¹⁷⁷ *Ibid*, 436.

¹⁷⁸ *Ibid*, 442–443.

line equal to the elevation of the permanent bridges on the canal. Fisk was directed to submit plans and estimates for the work. 179

1836

January 16: On January 9, Fisk informed the directors that the current estimated cost of the line from Dam No. 5 to Cumberland was much greater than any former estimates. Accordingly, the board appointed a committee to consider what work below the Cacapon not then under contract should be let and what structures above that point should be placed under contract. Upon the recommendation of Fisk, the board determined to let contracts for all those sections not then under contracts below the Cacapon River. All work above that river was to be suspended with the exception of Sections Nos. 333–334 (deep cut at Oldtown), Locks Nos. 54–55, and Paw Paw Tunnel. After considering the proposals already received for the work above the Cacapon, the board accepted the bid of William Woodburn for Sections Nos. 333–334 and that of Henry Smith for Locks Nos. 54–55. ¹⁸⁰

January 20: On the recommendation of Resident Engineer Fisk, the board ordered that a lock-keeper's house be constructed near the site of Locks Nos. 62–66. When it was completed, the house was to be used by the engineer supervising the construction of Paw Paw Tunnel. [181]

February 10: Resident Engineer Fisk submitted to the board a plan and specification for the Paw Paw Tunnel and an improved specification of lockhouses. Both plans were adopted by the board. The latter plan was to be used for all the lockhouses that would be built except for one at Prathers Neck and one near the tunnel, both of which were to have dimensions of 30 by 22 feet and modified floor plans.¹⁸²

February 10: The board considered the proposals for the sections between Dam No. 5 and the Cacapon River that were not under contract. On this date, the directors accepted bids for 34 sections. 183

March 15: After considering the proposals received for the construction of Paw Paw Tunnel, the board accepted the bid of Lee Montgomery providing that the conditions of the contract, which still had to be drawn, were agreeable to the interests of the canal company.¹⁸⁴

March 23: Two contracts were let on this date for masonry work between Dams Nos. 5 and 6. Henry Smith was given the contracts for the construction of a lockhouse at Lock No. 54 and of Culvert No. 198 on Section No. 258. ¹⁸⁵

March 30: The board received word that Thornton G. Bradley had offered to build the large lockhouse for Locks Nos. 62–66 at the site of Paw Paw Tunnel for \$1,275. The directors voted to of-

¹⁷⁹ *Ibid*, 443.

¹⁸⁰ *Ibid*, E, 2–6.

¹⁸¹ *Ibid*, 9.

¹⁸² *Ibid*, 18.

¹⁸³ *Ibid*, 18–19. A list of the contractors for Sections Between Dam No. 5 and the Cacapon River may be seen in Appendix M.

¹⁸⁴ *Ibid*, 29. On April 6, the contract was written with the stipulation that the tunnel be completed by July 1, 1838.

¹⁸⁵ *Ibid*, 32.

fer contracts to Bradley for both the large lockhouses at Prathers Neck and at the tunnel for \$1,200 each. They also determined to let contracts for the standard-sized lockhouses for \$950 each. 186

April 20: The board ordered the division superintendents to enclose the one-acre lots around the lockhouses with post and rail fences where the land for such purposes had been acquired by the canal company. 187

April 27: The board formally accepted a new seal for the canal company. The seal incorporated scenes from industry, agriculture and shipping with a canal shown as the connecting link binding these sectors of the economy together. The motto inscribed around the edge of the seal was the fitting Latin phrase, "Esto Perpetua Perservando." ¹⁸⁸

May 4: Since many of the contractors were being forced to abandon their contracts because of the rising costs of construction and labor, the board became alarmed that construction on the canal might soon come to a standstill. Accordingly, the board agreed to adopt a new policy that when a contract was one-half completed, the contractor would be paid one-fourth of the retained money on his contract then in the hands of the canal company. When three-fourths of the contract was completed, all but ten percent of the retained money would be returned to the contractor. 189

May 21: The board let contracts for 10 permanent lockhouses to three contractors. 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 G. Grove was awarded contracts for six houses at \$950 each, with the proviso that they were all to be enclosed and have their floors laid before 1837. The bid of Jonah Hood to build houses at Locks Nos. 35–36 was also accepted. ¹⁹⁰

May 27: The board let contracts for four culverts to two contractors: G. M. Watkins was given the contract for Culvert No. 162, while John Bain received the contracts for Culverts Nos. 160, 164 and 166, the latter two having been abandoned by James Lonergan. ¹⁹¹

June 4: A major flood struck the canal in late May and early June, causing great damage to the canal below Dam No. 5 and hampering operations above that point. Navigation from Georgetown to Harpers Ferry was not restored until mid-June and from Harpers Ferry to Dam No. 5 until early July. ¹⁹²

June 8: President George C. Washington informed the directors that the Maryland legislature had passed an act four days earlier authorizing a state subscription of \$3,000,000 to the stock of the canal company. The act was a comprehensive bill authorizing the expenditure of \$8,000,000 to various internal improvements in the State. ¹⁹³

¹⁸⁷ *Ibid*, 47.

¹⁸⁶ *Ibid*, 36.

¹⁸⁸ *Ibid*, 49.

¹⁸⁹ *Ibid*, 53–54.

¹⁹⁰ *Ibid*, 63.

¹⁹¹ *Ibid*, 66.

¹⁹² *Ibid*, 70–71, 77, 89.

¹⁹³ *Ibid*, 72, 81, 88.

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June 15: President Washington reported to the eighth annual meeting of the company stockholders that during the preceding year, the line of the canal between Dams Nos. 5 and 6 had been put under contract. Some sections were completed already, while others were nearly done. Paw Paw Tunnel and the deep cut at Oldtown, both requiring longer periods for their construction than any other works above the Cacapon, also had been placed under contract. While the work was progressing, the scarcity of laborers had prevented the work from progressing as rapidly as the board had wished. 194

June 20: The board let contracts to John Moore to construct Culverts Nos. 147–148 and 151–152. 195

June 20: The board authorized Resident Engineer Fisk to accept the Maryland governor's appointment to survey the country between the canal and Baltimore to determine the best location for a connecting cross-cut canal.

The board confirmed contracts that the commissioner had made with Michael Byrne Co. for the construction of Locks Nos. 45–46 and 48–50. 196

July 29: The directors let three contracts, the most important of which was for the construction of a towpath along the slackwater from Dam No. 4 to Lock No. 41. The board had adopted such a plan on April 14 and had accepted the specification for the work drawn up by Fisk on June 29. The contract was given to Joseph Hollman.

The other contracts let by the board were as follows: Stop Gate in Maryland abutment to Dam No. 4 to G. W. Rogers; waste on Section No. 243 to Daniel K. Cahoon; and Culvert No. 188 to G. W. Higgins. 197

August 10: The board let a contract to Thomas M. McCubbin for constructing a waste weir on Section No. 207. ¹⁹⁸

August 17: The board made three decisions concerning the construction of the canal: (1) mile posts were to be placed along the waterway above Harpers Ferry in the same manner as they were below; (2) The number of each lock and the elevation above tidewater were to be painted on the balance beams of the lower lock gates; and (3) the Williamsport Basin was to be walled as soon as the town council provided a conveyance for the wash of Potomac Street into Conococheague Creek. ¹⁹⁹

August 18: Upon the recommendation of Resident Engineer Fisk, the board adopted the use of "radiating shear paddle gates" in the locks between Dam No. 5 and the Cacapon River. A contract was let to Daniel Rodgers for finishing 10 sets of gates at \$366 each. The gates were to be made at the Smith & Co. Foundry in Alexandria, Virginia. 2000

August 20: Mindful of the dire straits of the contractors caused by rapidly rising costs of labor and materials, the board authorized Resident Engineer Fisk to recommend measures to prevent

¹⁹⁴ Eighth Annual Report (1836), C&O Co., 8.

¹⁹⁵ Proceedings of the President and Board of Directors, E, 78.

¹⁹⁶ *Ibid*, 76.

¹⁹⁷ *Ibid*, 41, 84–85, 115, 123.

¹⁹⁸ *Ibid*, 118.

¹⁹⁹ *Ibid*, 122–123.

²⁰⁰ *Ibid*, 124.

the continued abandonment of contracts. Fisk responded with a proposal to increase the estimates of 18 contractors by about eight percent, and the board quickly adopted the recommendation. Later, in February 1837, a directors' committee recommended a further advance of \$106,808 to the contractors on the 27 miles. In August 1837, Fisk made out estimates for the 50 miles above Cacapon at a 30 percent increase over January 1836 prices. ²⁰¹

August 25: The board had intended originally to build a feeder canal from the Cacapon River to the waterway, but it finally determined upon the construction of Dam No. 6near the mouth of the river. On this date, the board approved the plan and specification for the dam and its abutments and accompanying guard lock submitted by Fisk.

At the recommendation of Superintendent Elgin, the board let a contract to Jonah Hood for the construction of a lockhouse at Lock No. 32. So that the structure could be built at its approved location, Fisk was authorized to alter either the plan or size of the house.

Fisk was directed to employ temporary assistants to prepare the land on the line of the canal from the Cacapon River to the South Branch for jury condemnation or acquisition by the canal company. ²⁰²

September 6: The board let contracts to Henry Wade for the construction of Culverts Nos. 144 and $145.^{203}$

September 14: After considering the proposals for the construction of the Dam No. 6 complex, the board accepted the proposal of Joseph Hollman and George Reynolds for the dam and that of George Weaver for the dam abutments and guard lock.²⁰⁴

September 21: The board let a contract to John Seales to construct a waste weir on Section No. 203 just above Dam No. $5.^{205}$

September 26: The board determined to purchase a house and Lot No. 3 in Berlin (now Brunswick) for use as a lockhouse at Lock No. 30. The directors agreed to pay Robert Kimble, the owner, the sum of \$1,050 plus additional money to cover the cost of recent repairs to the house. ²⁰⁶

October 14: The board let a contract to William Brown for the construction of Waste Weir No. 55. 207

November 9: The board let a contract to Harvey Cogsil for constructing Waste Weir No. 59. 208

November 16: The board let a contract to George W. Higgins for constructing Culvert No. 188.²⁰⁹

²⁰¹ *Ibid*, 126–127, 129; Fisk to Bender, August 22, 1836 and August 3, 1837, Ltrs. Sent, Chief Engineer; Ingle to Henderson, January 4, 1837, and Ingle to Bender, February 9, 1837, Ltrs. Recd., C&O Co.; and *Report of the Committee to the Directors*, February 4, 1837, Ltrs. Recd., C&O Co.

²⁰² Proceedings of the President and Board of Directors, E, 130–131.

²⁰³ *Ibid*, 137.

²⁰⁴ *Ibid*, 141–142.

²⁰⁵ *Ibid*, 144. Available documentation indicates that this waste weir was identified as Waste No. 51.

²⁰⁶ *Ibid*, 121–122, 146.

²⁰⁷ *Ibid*, 156.

²⁰⁸ *Ibid*, 167.

²⁰⁹ *Ibid*, 168.

November 23: Commissioner Bender informed the board that labor disorders at Paw Paw Tunnel had hampered operations on that structure. The trouble had included beatings, destruction of property, and other forms of physical violence. He attributed the disturbances to the activities of a secret terrorist society from New York—probably an early labor union or Irish fraternal organization. ²¹⁰

December 7: The board authorized the construction of lockhouses at Tide Lock B (presently at the corner of 17th Street and Constitution Avenue) and at Lock No. 16.

December 28: The board approved a specification for the post and rail fence to be constructed on the towpath at various points between Point of Rocks and Harpers Ferry. Accordingly, the directors ordered that proposals be invited immediately for the construction of the fence. ²¹¹

1837

January 4: To prevent future damage to the Nolands Ferry vicinity from high water, the board authorized Superintendent Elgin to construct a waste weir near the foot of Lock No. 28 and to place in charge of the lockkeeper of Lock No. 27 a double set of stop planks for use at Monocacy Aqueduct. 212

February 15: Superintendent Elgin was authorized to let contracts to Elisha Howard and John Hoskinson to build a post and rail fence along the line of the canal at various points between Point of Rocks and Harpers Ferry. As part of the agreement between the canal company and the Baltimore & Ohio Railroad resulting from the Maryland Act of 1836 to promote internal improvements, the railroad paid \$2,723 to the canal for the erection of the fence. ²¹³

March 1: When operations on the canal resumed, the construction was threatened by a critical labor shortage. Accordingly, the board sent Superintendent of Masonry McFarland to Philadelphia and New York to induce workers to come to the canal. However, he was instructed not to bind the canal company to any payment of funds to those who agreed to work on the waterway.²¹⁴

April 1: To avoid the difficulties to construction, which had been experienced by the erection of Dam Nos. 4 and 5 and the consequent backing of water for miles, the board let a contract to John Cameron for the construction of Aqueduct No. 8. The contract was approved with the proviso that it could be terminated when the abutments had been built one foot above the apex of Dam No. 6.²¹⁵

April 12: The canal board was anxious to begin operations on the 50 miles between Dam No. 6 and Cumberland, Chief Engineer Fisk was directed to report by May 10 on those sections, locks, aqueducts, culverts and dams which were ready for contract.²¹⁶

²¹⁰ *Ibid*, 172; and Bender to Washington, November 17, 1836, Ltrs. Recd., C&O Co.

²¹¹ Proceedings of the President and Board of Directors, E, 133, 179, 185.

²¹² *Ibid*, 189.

²¹³ *Ibid*, 166, 173–175, 185, 209.

²¹⁴ *Ibid*, 215.

²¹⁵ Ibid. 230.

²¹⁶ *Ibid*, 233–234. On this date, Fisk had his position title changed from Resident Engineer to Chief Engineer.

May 3: The board let a contract to William W. Warrington for the construction of all culverts between Dam No. 6 and Aqueduct No. 8. The contract permitted the canal company to terminate the agreement once the work was built one foot above the comb of Dam No. 6.²¹⁷

May 3: The board let a contract to James A. Foster to construct a lockhouse at Lock No. 33. 218

May 10: The board authorized Commissioner Bender to accept proposals for the construction of lockhouses required on the line of the canal under contract between Dams Nos. 5 and 6. The price of the structures was not to exceed \$950.²¹⁹

May 17: The canal board authorized Commissioner Bender to accept proposals for the two large lockhouses at Prathers Neck and at Paw Paw Tunnel. The prices for the structures were not to exceed \$1,250 each, and their dimensions were to be those adopted in February, 1836. ²²⁰

May 26: The board let a contract to James Ellis to build Waste Weir No. 62 on Section No. 243. 221

June 7: The board let a contract to William Broun for constructing a stop gate and bridge on Section No. 213. 222

June 12: The board let a contract to John Seale for constructing a towpath along the slackwater from Dam No. 5 to Lock No. 45. 223

June 12: President George C. Washington reported to the ninth annual meeting of the stockholders that the works on the canal had been "prosecuted with all possible vigor" during the past year. However, the construction had been hampered by the rising cost of construction and the competition for labor as a result of the numerous internal improvements under construction in the east. The 27-mile line between Dam No. 5 and 6 was still under construction, and the Paw Paw Tunnel and deep cut at Oldtown were underway. Under a provision of the law of the State of Virginia making a subscription of \$250,000 to the stock of the canal company, two outlet locks had been built at Edwards Ferry and near the junction of the Shenandoah and the Potomac Rivers. Since the last annual meeting, the towpath for the slackwater pool behind Dam No. 4 had been put under contract; two miles of it were finished and in use, and the remaining 1-1/4 miles would be completed during the summer. Excellent progress had been made on Dam No. 6. To avoid the difficulties in construction which had been experienced by the erection of Dams Nos. 4 and 5 and the consequent backing of water for miles, the board had placed under contract the section above Dam No. 6, Aqueduct No. 8, and the culverts that opened into the pool. Many of the engineers were at work locating the line from the Cacapon to Cumberland so that by August 1 contracts for

²¹⁷ *Ibid*, 250. On June 19, the contract was reassigned to Robert Taylor prior to the commencement of construction.

²¹⁸ *Ibid*, 245–250.

²¹⁹ *Ibid*, 256.

²²⁰ Ibid, 259.

²²¹ *Ibid*, 264–265.

²²² *Ibid*, 213.

²²³ *Ibid*, 276.

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the entire line between the latter and the Narrows could be let. Below the Narrows, the masonry works and the difficult sections would also be let. 224

June 23: The board let a contract to Michael Byrne for the construction of a double square drain. The structure is identified as No. 138, indicating that it may have been numbered consecutively with the culverts. ²²⁵

July 19: It was reported to the board that a lockhouse had been completed at Guard Lock No. 5 by George Fagen. This indicates that the contract, which did not appear in the written proceedings of the directors, probably had been let some time during the early spring. ²²⁶

July 19: Clerk Ingle submitted to the board a revised form for contracts to be used in the approaching letting. This form was the printed 1837 specifications and contracts, many of which remain extant.²²⁷

July 24: The board let contracts for the construction of four lockhouses. The proposal of James A. Foster for a house 20-by-32 feet at Lock No. 38 was accepted, while the bids of Jesse Schofield for standard-size houses at Locks Nos. 46, 51 and 53 were approved. 228

September 20: In order to construct the sections immediately above Dam No. 6 before the structure's backwater would affect them, the board let contracts for Sections Nos. 263–264 to John H. Mann and for Sections Nos. 265–266 to Barnard Groman. 229

September 27: The board let contracts for the construction of 54 sections and four locks between Dam No. 6 and Cumberland. The sections were to be completed by December 15, 1839, and the locks by November 1, 1839. ²³⁰

September 29: The board let contracts for the construction of Aqueducts Nos. 9–11, Locks Nos. 56–66 and 69–72, Dam No. 8, and Guard Lock No. 8. In addition, a contract was let to Timothy Cunningham to build a stop gate on Section No. 217. ²³¹

October 4: The board let a contract to E. M. Gatton for the construction of Culvert No. 213. 232

November 15: Superintendent Elgin was authorized to construct a waste weir immediately below Lock No. 30. ²³³

1838

²²⁴ Ninth Annual Report (1837), C&O Co., 3–15.

²²⁵ Proceedings of the President and Board of Directors, E, 282.

²²⁶ Ibid, 293.

²²⁷ *Ibid*.

²²⁸ *Ibid*, 295.

²²⁹ *Ibid*, 315–316.

²³⁰ *Ibid*, 317–319. A list of the contractors may be seen in Appendix N.

²³¹ *Ibid*, 320–321. A list of the contractors for these works may be seen in Appendix O.

²³² *Ibid*, 324.

²³³ *Ibid*, 336.

January 24: The board let three contracts for protection walls at various points along the canal. Enos Childs was to build rubble masonry walls at both ends of Aqueduct No. 6; Andrew Small was to build a rubble masonry wall from Aqueduct No. 7 to Lock No. 52; and John Bain was to build a dry wall to buttress the turnpike on Section No. 226. 234

April 2: Clerk Ingle was ordered to advertise for proposals for the construction of those sections and masonry structures which were let in September 1837 but which had not been placed under formal contract. All the culverts from Dam No. 6 to Cumberland were also to be advertised for bids. 235

May 18: The board reorganized the corps of engineers in order to expedite the work on the canal above Dam No. 6. Between the Cacapon River and Cumberland, there were to be four divisions, each under the supervision of a principal assistant. The first division extended from Dam No. 6 to Section No. 287 with John A. Byers in charge; the second division, covering Sections Nos. 288-323, was placed under Ellwood Morris; the third division, comprising Section Nos. 324–349, was assigned to Charles H. Randolph; and the fourth division, from Section No. 350 to Cumberland, was put in charge of Joshua Gore. 236

May 23: The board confirmed a contract that had been negotiated with George Shafer to supply cement from his newly opened mill at Roundtop Hill to the line of the canal between Dam No. 6 and the upper end of Paw Paw Tunnel. At the same meeting, the board authorized Chief Engineer Fisk to negotiate a contract with James C. Lynn to supply cement from his mill at Cumberland to the works above the tunnel. 237

The board considered the proposals that had been received under their order of April 2 and accepted bids for 17 sections and Aqueduct No. 9.²³⁸

May 24: The board considered additional proposals that had been received under their order of April 2 and accepted offers for Locks Nos. 57-67 and Culverts Nos. 204, 210, 219-220, 225 and $229.^{239}$

May 30: The board let a contract to Michael Byrne for the construction of five cement houses along the line of construction. ²⁴⁰

June 4: President George C. Washington informed the tenth annual meeting of the company stockholders that the delay in putting into effect the June 1836 act by the Maryland legislature authorizing the subscription of \$3,000,000 to the stock of the company had hampered operations on the canal during the preceding months. Other factors which had prevented the canal between Dams Nos. 5 and 6 from being opened to navigation on June 1 as had been anticipated were the extremely high water which suspended work on Dam No. 6 in the spring, the labor strife at

²³⁵ *Ibid*, 382.

²³⁴ *Ibid*, 359.

²³⁶ *Ibid*, 412–415.

²³⁷ *Ibid*, 421–422. The board confirmed a contract with Lynn on June 28.

²³⁸ *Ibid*, 423. A list of the contractors for these works may be seen in Appendix P.

²³⁹ *Ibid*, 424–425. Evidently, the canal company was having difficulty in getting bids for the culverts above Dam No. 6 because the board authorized Fisk to accept proposals for the remaining culverts at prices not exceeding ten percent above his cost estimates. A list of the contractors for these works may be seen in Appendix Q. ²⁴⁰ *Ibid*, 428.

Prather's Neck which had led to a work stoppage, and the abandonment and reletting of numerous contracts for increases of from 25 to 40 percent. Despite these problems, the line between the two dams would be opened to navigation during the summer. Anxious to complete the canal to Cumberland, the heaviest sections and the aqueducts above the Cacapon had been placed under contract in September.²⁴¹

September 25: The board let contracts to George G. Johnson for the construction of Culverts Nos. 234–241. 242

July 4: Despite all the financial reverses of the canal company, the board still had not given up the idea of constructing the canal all the way to Pittsburg. Accordingly, Chief Engineer Fisk was directed to begin locating the line of the canal in Will's Creek Valley and on any other part of the "Summit Section" where it was likely that there would be competition for the right-of-way between the canal and the Baltimore & Ohio Railroad.²⁴³

July 18: The board authorized President Washington to initiate a policy of discharging disorderly men employed along the canal. Furthermore, he was to take steps to prevent their reemployment on the canal in the future. In this way, the directors attempted to expedite the work by eliminating the periodic labor strife which had hampered operations on the canal.²⁴⁴

July 18: Upon the recommendations of Chief Engineer Fisk, the board let the following contracts for the construction of culverts: James Brownlie, No. 206 on Section No. 283; No. 207 on Section No. 286; No. 208 on Section No. 291; John Riley, No. 209 on Section No. 296; John Waldron, No. 211 on Section No. 311; John Lobdell, No. 215 on Section No. 322; Robert McGregor, No. 216 on Section No. 330, No. 217 on Section No. 331; Robert McGregor, No. 216 on Section No. 330, No. 217 on Section No. 331; Patrick Crowley, Nos. 226–228 on Section No342; and William Lockwood, No. 232 on Section No. 347, No. 233 on Section Nor 348.

September 28: The board let a contract to John Bain for constructing a stop gate on Section No. 228. 246

October 17: Chief Engineer Fisk presented to the board a proposal from William Easby for completing the lock gates abandoned by Thornton C. Bradley and for several towpath bridges and gates for waste weirs and lock flumes. The proposal was accepted.²⁴⁷

1839

January 5: Chief Engineer Fisk informed the board that the line of the canal between Dams Nos. 5 and 6 was nearly ready to be watered. Accordingly, the board appointed John G. Stone to be superintendent of the new division.²⁴⁸

²⁴¹ Tenth Annual Report (1838), C&O Co., 3, 9, 12, 25.

²⁴² Proceedings of the President and Board of Directors, E, 446.

²⁴³ *Ibid*, 456.

²⁴⁴ *Ibid*, 466.

²⁴⁵ *Ibid*, 467.

²⁴⁶ *Ibid*, 498.

²⁴⁷ *Ibid*, 507–508.

²⁴⁸ *Ibid*, F, 3–4.

January 5: In an effort to economize and to hurry construction, the board began a policy of dispensing with certain culverts and other structures that were not deemed important to the construction of the canal. One of the first of the previously contracted culverts to be disposed of in such a manner was Culvert No. 146. ²⁴⁹

March: The Alexandria Canal Company offered to contract for the construction of that part of the northern abutment of the Potomac Aqueduct which the C and O had agreed to fund. The board accepted this offer and authorized the letting of a contract.²⁵⁰

April 17: Superintendent Stone informed the board that water had been admitted into the canal between Dams Nos. 5 and 6. President Washington nominated, and the board approved, the following men to be lock tenders: Philip Trammel for Locks Nos. 45–46; Daniel Brewer for Locks Nos. 47–50; Henry Rowland for Locks Nos. 51–52; Hugh Connor for Lock No. 53; and James Neal for Guard Lock No. 6.²⁵¹

May 15: Upon the recommendation of Chief Engineer Fisk, the board agreed to dispense with the construction of Culverts Nos. 202 ½, 203, 205, 209, 213, 214, 219, 220, 222, 225, 226, 227, 229 and 232. Because the canal finances were approaching exhaustion, this measure was taken as a step toward economy. ²⁵²

June 3: President Washington informed the eleventh annual meeting of the company stockholders that construction was progressing as rapidly as possible. The entire line of the canal from Georgetown to Dam No. 6, embracing 135 miles, was open to navigation, the 27 ½-mile distance between Dams Nos. 5 and 6 having been watered early in April. This portion of the canal was completed with the exception of three lockhouses, the graveling of Dam No. 6, and some comparatively light work.

The line above the Cacapon River had been progressing with a force varying from 2,500 to 3,000 laborers. A number of sections were completed, and most of the heavy sections were nearly finished. It was intended by the board to let the abandoned sections and masonry as well as the previously uncontracted works in the near future to insure that the canal would be finished to Cumberland within two years. Good progress had been made on the tunnel, having two-thirds of its length already bored. ²⁵³

August 5: The canal company stockholders considered and adopted a special report by its general committee relative to the condition of the canal from Georgetown to Cumberland. During the latter part of June, the general committee and several company officials had traveled the entire length of the canal, and the report included their observations on both the finished and unfinished portions of the waterway. On the 50 miles above Dam No. 6, there were under contract (including those already completed) 59 sections, 17 locks, 3 aqueducts, 13 culverts, 1 dam and guard lock, and 1 tunnel. In addition, the following had once been under contract but subsequently abandoned and not relet: 6 sections, 5 locks, 1 aqueduct, 9 culverts, and 1 lockhouse. Of the work that had never been under contract, there were: 34 sections, 7 culverts, 12 lockhouses, 16 wastes and waste weirs, 9 bridges and 4 stop gates. Nearly one-third of the work on the canal above the Ca-

²⁴⁹ *Ibid*, 5.

²⁵⁰ *Ibid*, 29.

²⁵¹ *Ibid*, 38.

²⁵² *Ibid*, 56.

²⁵³ Eleventh Annual Report (1839), C&O Co., in Proceedings of the Stockholders, B, 210–214.

capon was completed, with the distance of about 15 miles at either end approximately one year ahead of the middle portion. ²⁵⁴

September 25: The canal company was facing a complex two-fold problem in the summer and fall of 1839—that of liquidating its staggering debt and of finding some means to push the construction of the canal to a successful conclusion. The alternative was to suspend all operations until adequate funding could be obtained. On this date, the board initiated a new policy by authorizing the issuance of \$200,000 in canal scrip and by establishing a trust fund of five percent Maryland bonds to redeem the scrip as it was received for tolls and rents, This policy was employed regularly until construction was suspended in 1841. ²⁵⁵

October 14: Upon the recommendation of Chief Engineer Fisk, the board ordered President Francis Thomas to proceed to the canal and make arrangements with some of the contractors to suspend the construction of those works which could be delayed without serious injury to the ultimate completion of the waterway. Thomas was authorized to take further steps to reduce the expenditures of the company.

At the same time, the board received word from a number of contractors requesting that a military force be kept in the vicinity of the canal to preserve peace among the laborers. The board authorized the president to forward this request to the Governor of Maryland.²⁵⁶

December 21: After Chief Engineer Fisk reported that the following works were still unfinished and that their contracts had expired, the board declared the contracts to be abandoned: Sections Nos. 262, 264, 265, 269, 272, 293, 296, 297, 317, 318, 321, 329, 342, 347, 348, 350, 361, 367; Dam No. 8; Aqueducts Nos. 9 and 11; Locks Nos. 54, 56, 58, 72, 73, 74; and Culverts Nos. 206, 234–241. The board was willing to continue the construction of Sections Nos. 137–318, Aqueduct No 11 and Locks Nos. 72–74 providing satisfactory arrangements could be made with the contractors. Fisk was authorized to negotiate with the contractors for Sections Nos. 268, 279, 294, 320 and 324 for the suspension of their works.

1840

February 27: The board approved modified contracts let to George Hoblitzell, William P. Sterritt and James Brounlie to recommence work on Section No. 367, Dam No. 8 and Culvert No. 206, respectively. ²⁵⁸

May 27: The board let a contract to Lewis Wernwag for the construction of a pivot bridge at Nolands Ferry, which the directors had ordered to be built in February. ²⁵⁹

²⁵⁴ Report of the General Committee of the Stockholders of the Chesapeake & Ohio Canal Company, August 5, 1839 (Washington, 1839), 22–23.
²⁵⁵ Proceedings of the President and Board of Directors, F, 108, 120–121, 132; and Thomas to Pinckney,

²⁵⁵ Proceedings of the President and Board of Directors, F, 108, 120–121, 132; and Thomas to Pinckney, November 1, 1839, Ltrs. Sent, C&O Co.

²⁵⁶ Proceedings of the President and Board of Directors, F, 112–113.

²⁵⁷ *Ibid*, 137–138. Arrangements were made on January 22, 1840, to continue work on Sections Nos. 293 and 329 and Lock No. 72, the modified contracts calling for completion date by May or June, 1841. On January 23, 1840, the board agreed to a modified contract for the continuation of work on Sections Nos. 152–154; 156–157.

²⁵⁸ *Ibid*, 177.

²⁵⁹ *Ibid*, 215–216.

June 2: The president and directors reported to the twelfth annual meeting of the company stockholders that rising construction costs and deteriorating finances had caused a virtual suspension of operations on the "fifty-mile" section of the canal above Dam No. 6. Generally, the sections were far ahead of the masonry. Of the 99 sections on this line, 29 were completed, 18 were nearly finished, 17 were partially done but no longer under contract, and 35 had never been under contract. The masonry was largely suspended except for the 10 miles immediately above Dam No. 6 and the 10 immediately below Cumberland: of the 22 locks, five were nearly completed, materials had been prepared for five others, and 12 were not under contract; of the 30 culverts, five were finished, six others had been commenced, and nineteen were not under contract; of the four aqueducts, two were nearly done while two had hardly been started and were not presently under contract. Dam No. 8 and Guard Lock No. 8 at Cumberland were more than half done. However, none of the bridges, wastes, or waste weirs had been placed under contract. Within days, the heading of the Paw Paw Tunnel would be excavated from end to end while the lower half of the excavation was nearly one-third done. ²⁶⁰

July 17: Chief Engineer Fisk notified Clement Cox, chairman of the committee of the stockholders, that work on the canal above Dam No. 6 was continuing at a spasmodic pace. Three thousand men were needed in constant employment to complete the waterway in two years, but only one-half that number was on the line. The masonry structures were about one year behind the sections, and the labor force was largely deficient in mechanics that were able to do masonry work. Of the masonry that was done, most was confined to the two ends of the line, leaving an intermediate distance of nearly 30 miles with its masonry scarcely begun.

From Dam No. 6 to the lower end of Seven-Mile Bottom, the sections were 80 percent done, and the five locks, two aqueducts, and five culverts about 50 percent completed. Between Seven-Mile Bottom and a point opposite the mouth of the South Branch, the sections were 40 percent completed, the Paw Paw Tunnel over 60 percent, and the nine locks, one aqueduct, and seven culverts less than 10 percent. On the next nine miles up to the lower entrance of The Narrows, the sections were over 60 percent completed, and the four locks and eleven culverts less than one percent. The sections on the remaining 10-½ miles to Cumberland were nearly 75 percent done, while the four locks, one aqueduct, seven culverts and Dam No. 8 complex were over 60 percent finished. The fifteen lockhouses and the numerous bridges and waste structures on the "fifty-mile" section were not presently under contract and were less than five percent done. 261

July 19: Accompanying the board's determination to continue construction on the basis of the unrestricted issuance of scrip was the first large turnover of canal employees. This was partly the result of a disagreement with the new policies and partly the effect of the application of the spoils system in the operation of the canal. Many old and reliable officials were dismissed or voluntarily retired, including the clerk, the treasurer, Chief Engineer Fisk, and several division superintendents. Some of the ousted officials carried into the newspapers their opposition to the directorate, thereby further undermining public confidence in the canal project. The board met sporadically throughout the summer and fall, and construction continued at a spasmodic pace. 262

²⁶⁰ Twelfth Annual report (1840), C&O Co., 13–15.

²⁶¹ Fisk to Cox, July 17, 1840, in *Thirteenth Annual Report* (1841), C&O Co., 52–61.

²⁶² Proceedings of the President and Board of Directors, F, 246, 256–257, 259; and Ingle to President and Directors, June 10, 1840; Fisk to President and Directors, October 1, 1840; and Morris to Thomas, December 4, 1840, Ltrs. Recd., C&O Co.

September 26: President Thomas informed the board that the following works were the only ones in progress: 2 aqueducts, 1 culvert, 5 locks, 15 sections, 1 tunnel, 1 dam and the Deep Cut. Of these works, 8 sections, 1 culvert, 5 locks and 1 aqueduct were nearly completed. Accordingly, he recommended that several engineering positions be abolished as soon as Sections Nos. 268, 274–275, 279, 281, 312, 320 and 367, the culvert, Aqueduct No. 11, and Locks Nos. 55, 72 and 73 were completed. 263

1841

March 16: When the Maryland Legislature adjourned in March without providing effective aid to the canal and with the trust fund near exhaustion, the board reversed its former policy by forbidding the issuance of more scrip until means were provided to repay it and by preparing to suspend operations. ²⁶⁴

June 7: The board of directors informed the thirteenth annual meeting of the canal company stockholders that operations had nearly ceased on the waterway. Between 600 and 700 laborers were at work on seven sections, the tunnel, and Aqueduct No. 11. The contractors and workers were totally without money and were virtually destitute of credit. Unless the company bonds could be marketed in Europe or the Maryland Legislature provided effective aid, construction would be suspended. During the past year, approximately \$467,000 worth of work had been done, but more then \$1,600,000 still remained. 265

August 7: When the board was informed that State of Maryland would not provide effective aid for the completion of the canal, it was determined to suspend operations indefinitely. The directors instructed the clerk to notify the contractors to stop their work and the chief engineer to commence making final estimates. At the same time, they agreed to accept drafts on the company by the contractors in order to encourage them to continue the work on their own until further aid was forthcoming. Work on the canal continued spasmodically a little longer and then it came to an end. ²⁶⁶

1843: Alexandria Canal Opened

December 2: The Potomac Aqueduct was formally opened for use 10 years after work was begun on the Virginia side. The northern abutment which the canal company had paid for was completed in 1841. The entire structure had been built under the direction of Major William Turnbull of the U.S. Topographical Engineers.

1842-1847

Construction on the canal remained at a standstill until late 1845 while canal officials sought adequate funding to complete the canal. After attempting a number of schemes, friends of the canal induced the Maryland Legislature in March, 1845, to pass a canal bill authorizing the company to issue \$1,700,000 of preferred construction bonds on the mortgage of its revenue when it received

²⁶³ Proceedings of the President and Board of Directors, F, 256–257.

²⁶⁴ *Ibid*, 297.

²⁶⁵ *Thirteenth Annual Report* (1841), C&O Co., 9, 61–63.

²⁶⁶ Proceedings of the President and Board of Directors, F, 377–378, 381; Fisk to President and Directors, December 1, 1842, Ltrs. Recd., C&O Co.; and Fourteenth Annual Report (1842), C&O Co., 3.

guaranties from interested coal companies for 195,000 tons of coal annually for five years. Following the approval of the guaranties by the Governor of Maryland in August 1845, the board on September 23 let a contract to Walter Gwynn, William Thompson, James Hunter and Walter Cunningham to complete the canal. By the terms of the contract, Messrs. Gwynn and Company agreed to provide the materials of the required quality according to the specifications of the chief engineer, to begin work in 30 days, and to complete the canal by November 1, 1847.

Gwynn and Company sublet all the sections in October 1845, and the contractors placed a token force on the line by November 1, pending successful negotiations for the necessary funding to finance large-scale construction. Conditions resulting from the Mexican War and the inability of canal officials to negotiate the sale of the bonds hampered the work. By May 1, 1846, the work done amounted to only \$55,384, and by July, work on the canal had ceased entirely.

Following another year of negotiations, an agreement was reached whereby a group of 29 capitalists in New York, Boston and Washington took \$500,000 of the bonds, the subcontractors \$200,000, the Commonwealth of Virginia \$300,000, and the District cities \$100,000. Work was resumed on November 18, 1847, under a modified contract. The old company was reorganized and a new one succeeded to its contract with the canal board. Gwynn and Cunningham retired, but the remaining partners, Hunter and Thompson, continued, with the addition of a third partner, Thomas Harris. ²⁶⁷

1847

December 8: The board approved a contract that President James M. Coale had negotiated with Owen Ardinger to construct a dry dock on the berm side of the canal near Williamsport. At the same time, the directors authorized Coale to grant permission to qualified persons who submitted requests for the right to build dry docks along the canal. All the dry docks were to be constructed under the direction of the chief engineer or the division superintendents.²⁶⁸

1848

April 11: John Davis, Nathan Hale and Horatio Allen, trustees of the parties that furnished the funds for the canal's completion and agents of Hunter, Harris & Co. informed the board that work was underway on the "fifty-mile" section. From Dam No. 6 to Cumberland, there were 84 sections, 16 locks, 1 dam, 3 aqueducts, 23 culverts, 10 waste weirs, 8 road bridges and ferries, 17 lockhouses and 2 stop gates. For administrative purposes, the 84 sections were divided into three classes: (1) 30 were finished before the work stoppage in 1841; (2) six were nearly finished and required final dressing work; and (3) 48 were hardly commenced. The first two classes comprised the heavy sections, and the contractors had placed their remaining work under the supervision of three work parties. The 48 sections in the third class were light sections and had been put under

²⁶⁷ Niles' Register, Vol. LXVIII (March 8, 1845), 16; *Ibid*, Vol. LXVIII (March 15, 1845), 23–24; *Ibid*, Vol. LXXII (October 25, 1845), 128; *Proceedings of the President and Board of Directors*, G, 317–318, 320–323, 353–354, 443; *Eighteenth Annual Report* (1846), C&O Co., 8–11; *Twentieth Annual Report* (1848), C&O Co., 7–8; and Fisk to President and Directors, June 25, 1846; and C. Cox to Coale, July 10, 1846, Ltrs. Recd., C&O Co. During the interim of construction, the board had adopted various economy measures to facilitate the construction of the canal, including the substitution of Kyanized wood for stone in the locks, and the postponement of building lockhouses and arching the tunnel until after the canal was opened to Cumberland Sanderlin, *The Great National Project*, 157.

²⁶⁸ Proceedings of the President and Board of Directors, H, 112. Earlier on October 2, the board had authorized John Moore, the lock tender at Georgetown, to construct a dry dock for the repair of boats near Lock No. 1.

subcontractors.²⁶⁹ Work had been commenced on all of these sections except Nos. 295–296, 314 and 321, and preparations were nearly ready to begin on these. Within two months, it was anticipated that six-to-eight of these sections would be completed, at which time the laborers would be transferred to other sections still in progress.

Paw Paw Tunnel, located between Sections Nos. 299 and 311, had been contracted to McCullough & Day.

Arrangements had been made to complete the lift locks as follows: Locks Nos. 54 and 56 (masonry) to Moyle, Randal & Jones; Lock No. 58 (masonry) still not let; Locks Nos. 59–61 (composite) to Ritner & Co.; Locks Nos. 62–66 (composite) to Buell & Watt; Lock No. 67 (composite) to William P. Sterritt; and Locks Mos. 68–71 (masonry) to Fallan and Ambrose. The weigh lock at Cumberland was still not under contract.

The foundation of Dam No. 8 had been laid up to low water. Nearly one-fourth of the stone required for the dam was prepared and most of the timber was cut and delivered. The structure was under contract to William Lockwood.

Of the 23 culverts, 18 were let to contractors. The five remaining culverts were located between Section No. 352 and Cumberland and were about one-half completed. When the other masonry was more advanced, these culverts would be put under contract.

Three of the ten wastes and waste weirs had been put under contract to the following persons: one on Section No. 258 to Moyal, Randal and Jones; one on Section No. 320 to R. Sims and Co.; and one on Aqueduct No. 10 to Hunter, Harris and Co.

Three aqueducts were still not finished. Aqueduct No. 8 needed less than 300 perches of rubble masonry, a task apparently assigned to the Hunter, Harris and Co. construction team. The completion of Aqueduct No. 9 had been subcontracted to Thomas Bell who was expected to commence laying the arch within three weeks. Aqueduct No. 10, which had only one abutment laid, was assigned to the Hunter, Harris and Co. construction team.

Hunter, Harris and Co. made arrangements to furnish the cement required for the masonry works. They had contracted with George Shafer at the Round Top Cement Mill to burn, grind and deliver 12,000 bushels per month for 10 months, and with Charles Locker at Cumberland for 6,000 bushels per month for 10 months.²⁷⁰

June 5: President Coale reported to the twentieth annual meeting of the canal company stockholders that work on the waterway was progressing rapidly. It was anticipated that the canal would be completed to Cumberland before October 1, 1849, the date limited by the contract.²⁷¹

October 10: To facilitate the construction of the waterway and to reduce the time and cost of completing the canal, the board determined to build Locks Nos. 68–71 on the composite plan and dispense with the erection of a bridge, forebay and Culvert No. 218 near Oldtown. ²⁷²

December 8: The board authorized John G. Stone, Superintendent of the Third Division, to build a lockhouse on the company's land at Lock No. 44 at as low a rate as practicable.²⁷³

²⁶⁹ Twentieth Annual Report (1847), C&O Co., Appendix D, 17–18.

²⁷⁰ *Ibid*, 16–21.

²⁷¹ Ibid. 8–9.

²⁷² Proceedings of the President and Board of Directors, H, 214–216.

²⁷³ *Ibid*, 228.

1849

June 4: Chief Engineer Fisk reported to the twenty-first annual Meeting of the canal company stockholders the construction was progressing at such a pace that it would probably be completed by December 10. To back his optimistic prediction, he submitted a list of work done and work to be done as follows:

	WORK	WORK TO	TOTAL
	DONE	BE DONE	
Sections	\$297,385	\$172,586	\$469,971
Tunnel and its Deep Cuts	86,081	91,919	178,000
Composite & Masonry Locks	74,308	153,523	227,831
Aqueducts	30,337	41,370	71,707
Culverts	63,423	58,250	121,673
Wastes and Waste Weirs	2,283	39,703	41,986
Lockhouses, Bridges, Roads & Ferries	6,375	16,629	23,004
Dam No. 8 and Guard Lock No. 8	16,757	5,043	21,800
Miscellaneous		16,746	16,746
Cement Transportation	6,010	13,001	19,011
Weigh Lock and House		18,500	18,500
Totals	\$583,209	\$638,070	\$1,221,279

As of May 25, the following numbers and classes of workers were employed on the line of the canal: 77 bosses, 39 blacksmiths, 54 carpenters, 75 drillers and blasters, 107 quarrymen, 59 stonecutters, 73 masons, 112 mason tenders, 6 brick molders, 50 brick makers, 16 bricklayers, 19 bricklayer tenders and 760 laborers. The total number of all classes of laborers and workmen was 1,447. There were also 233 drivers, 562 horses, 26 mules, and 6 oxen employed to drive and to work 285 carts, 20 scoops, 13 ploughs, 11 two-horse wagons, 3 three-horse wagons, 29 four-horse wagons, 1 six-horse wagon, 5 one-horse railroad cars, 14 two-horse railroad cars, 10 three-horse railroad cars, 14 drags, 4 brick-molding machines, and numerous cranes.

To facilitate the construction and reduce the cost of completing the canal, it had been determined to build Locks Nos. 68–71 on the composite plan and dispense with the erection of a bridge, forebay and Culvert No. 218 near Oldtown. ²⁷⁴

September 27: The board extended the date for the completion of the canal after Hunter, Harris and Co. informed the directors that they were unable to finish construction in the specified time. Among the problems which had slowed their operations were the sickness and scarcity of workers and the ever-present financial troubles resulting from the slow sale of bonds and the excess of costs over estimates.²⁷⁵

1850

January 28: The Virginia and Maryland Bridge Company requested permission to build a bridge across the canal at Shepherdstown opposite the bridge they were then building across the Potomac River. Upon the recommendation of Chief Engineer Fisk, the board offered to contribute \$1,000 toward the construction of the bridge over the canal provided that the bridge company

²⁷⁴ Twenty-First Annual Report (1849), C&O Co., Appendix A, 23–27.

²⁷⁵ Proceedings of the President and Board of Directors, H, 274–275; 300–301.

agreed to build it according to Fisk's specifications and to keep it in repair when it was completed.²⁷⁶

January 28: To speed the work and to reduce the cost of construction, Chief Engineer Fisk recommended that locust timber be substituted for stone in the coping of the towpath in the Paw Paw Tunnel. Anxious to economize and to see the work completed, the board adopted this measure.²⁷⁷

March 21: The board again took a step to save time and money in finishing the canal by ordering that the coping of the composite locks be changed from stone to wood.²⁷⁸

April 17: Troubles came to a head when the financial difficulties of Hunter, Harris and Co. brought about a suspension of the work for several days and the threat of violence. The workers, who had been unpaid for some time, were demanding satisfaction. The trustees, Davis, Hale and Allen, took over the contract on assignment from Hunter, Harris and Co. and resumed work. The date for the completion of the canal was extended to July 1 and then to August 1.²⁷⁹

June 3: President James M. Coale informed the twenty-second annual meeting of the canal company stockholders that water would be admitted into the first 10 miles of the canal between Cumberland and Lock No. 72 early the following week. With the present labor force at work on the canal, it was anticipated that the canal could be watered down to Dam No. 6 by mid-July. The current estimate of the chief engineer was that \$49,227 worth of work needed to be done, and of this sum \$9,000 could be executed after the admission of water. The labor force at work on the line at present consisted of 37 bosses, 7 blacksmiths, 70 carpenters, 22 quarrymen, 10 stonecutters, 20 masons, 33 mason tenders, and 414 laborers, making a total of 613 men. There were also 104 drivers, 215 horses, 147 carts, 14 two-horse railroad cars, 4 three-horse railroad cars and numerous wagons.

In order to hurry the work to completion, various steps had been taken to reduce the time and cost of construction. On one hand, there had been a substitution in the composite plan, for the masonry, in the construction of five lift locks, and of wooden, for stone coping, to a considerable extent upon the composite locks, the Paw Paw Tunnel towpath, and several wastes. On the other hand, numerous works had dispensed with, including two culverts, one bridge, one forebay, one stone and one wooden waste weir, and one lockhouse.²⁸⁰

June 25: The board determined to dispense with building the weigh lock at Cumberland until after the canal was completed.²⁸¹

July 17–18: The resources of the trustees, Davis, Hale and Allen, were exhausted by mid-July and work again stopped. The board promptly declared the contract abandoned and negotiated a new one with Michael Byrne providing for the completion of the canal for \$3,000 cash and \$21,000 in bonds. ²⁸²

²⁷⁷ *Ibid*, 324–325.

²⁷⁶ *Ibid*, 323.

²⁷⁸ *Ibid*, 341–342.

²⁷⁹ Ibid, 349, 365; and Twenty-Second Annual Report (1850), C&O Co., 6–7.

²⁸⁰ Twenty-Second Annual Report (1850), C&O Co., 3–4, 13–15.

²⁸¹ Proceedings of the President and Board of Directors, H, 364.

²⁸² *Ibid*, 369–372.

October 10: The eastern section of the Chesapeake & Ohio Canal, the only part ever to be completed, was formally opened to trade at Cumberland. Following gala ceremonies at the basin, a procession of canal boats proceeded down the waterway toward Georgetown. After 22 years of intermittent enthusiasm and despair, the canal was navigable to Cumberland.²⁸³

November 27: The board ordered that a marble slab or block be placed "in a conspicuous position in the masonry of, or on the line of the canal" with the names of the president, directors, officers, state agents and the date of completion. The monument, a short obelisk, was built near the Wisconsin Avenue Bridge over the canal in Georgetown.²⁸⁴

1851

February 27: The president and directors reported to a special meeting of the canal company stockholders that Byrne had progressed with his operations to the point that, on October 10, the canal had been opened for navigation to Cumberland. Some light work still remained to be done which did not interfere with the passage of boats, and he had continued to press forward with the work through the winter. On February 17, the final payment was made to him pursuant to the provisions of his contract. This date marked, in a technical sense, the formal completion of the canal to Cumberland.

The canal, built at a total cost of \$11,071,176.21, or \$59,618.61 per mile was described as follows in the report:

The Chesapeake & Ohio Canal, between Georgetown and Cumberland, lies on the north, or Maryland side, of the river, with the advantages of a southern exposure, and pursues the immediate valley of the Potomac throughout its whole length, except at a point called Paw Paw Bend, about 27 miles below Cumberland, where it passes through the mountain by a tunnel 3.118 feet in length, and lined and arched with brick laid in cement, by which, about six miles, in distance, have been saved. From the Rock Creek Basin in Georgetown, where it first reaches tidewater, to the basin at Cumberland, is one hundred and eighty-four and four-tenths miles, and the total rise from the level of mid-tide, at Georgetown, to the Cumberland basin, is 609.7 feet. This ascent is overcome by 74 lift locks, and a tide lock that connects Rock Creek Basin with the Potomac River. At the terminus of the extension of the canal, at the mouth of the Tiber in the city of Washington, is another tide lock, which connects it with the Potomac River, and also with Washington city canal. The latter canal passes entirely through the city, and terminates on the eastern branch near the navy yard. From a point about a mile west of Rock Creek Basin, the Alexandria Canal, seven miles in length, diverges from the Chesapeake & Ohio Canal, crosses the Potomac River by an aqueduct 1600 feet long, and connects with tidewater at Alexandria. The Chesapeake & Ohio Canal is constructed for a depth of six feet throughout. From Georgetown to Harpers Ferry, 60 miles—it is 60 feet wide at the surface, and 42 feet at the bottom. From Harpers Ferry to Dam No. 5, 47 miles, the width of the surface is 50 feet, and at the bottom 32 feet, and from Dam No. 5 to Cumberland, 771/2 miles, the surface width is 54 feet, and the bottom 30 feet. The average lift of the locks a little exceeds 8 feet. They are 100 feet long and 15 feet wide, in the clear, and are capable of passing boats carrying 120 tones (of 2,240 lbs.).

The present supply of water for the canal is drawn entirely from the Potomac. For this purpose, dams have been constructed across the river at seven different points.285

²⁸³ *Ibid*, 379–380; Cumberland *Civilian*, October, 1850; and Georgetown *Advocate*, October 15, 1850.

²⁸⁴ Proceedings of the President and Board of Directors, H, 384.

²⁸⁵ Report to the Stockholders on the Completion of the Chesapeake & Ohio Canal to Cumberland, with a Sketch of the Potomac Company, and a General Outline of the History of the Chesapeake & Ohio Canal Co., From Its Origin to February, 1851... Made February 27th, 1851 (Frederick, 1851), 111–112.

II. INDIVIDUAL CHRONOLOGIES OF THE CONSTRUCTION OF MAJOR STRUCTURES ON THE CANAL: 1828–1850

A. LIFT LOCKS

Locks Nos. 1–4: Section A

December 10, 1828: Contract let to Dibble, Beaumont and McCord.

June-July, 1829: Work commenced on locks.

April, 1831: Work completed on locks.

Cost: \$34,052.08

Locks Nos. 5-6: Section No. 1

October 25, 1828: Contract let to Bennett and Brackett. March 14, 1829: Contract relet to Abram Knapp and Co.

May, 1829: Work commenced on locks.

September, 1830: Work completed on locks.

Cost: \$18,985.67

Lock No. 7: Section No. 4

October 25, 1828: Contract let to Brackett and Hovey.

January, 1829: Work commenced on lock.

February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Fenlon and Bosteder,

April, 1829: Work recommenced on lock. September, 1829: Work completed on lock.

Cost: \$9,493.43

Lock No. 8: Section No. 7

October 25, 1828: Contract let to Brackett and Hovey. March 14, 1829: Contract relet to Abram Knapp and Co.

April, 1829: Work commenced on lock.

July, 1830: Work completed on lock.

Cost: \$9,043.14

Lock No. 9: Section No. 8

October 25, 1828: Contract let to W. W. Fenlon and Co.

February, 1829: Work commenced on lock. September, 1830: Work completed on lock.

Cost: \$9,540.98

Lock No. 10: Section No. 8

October 25, 1828: Contract let to Kavenaugh, Knox, Hale and Nichols.

January, 1829: Work commenced on lock.

March 3, 1830: Contract abandoned.

March, 1830: Contract relet to Douglas and Small.

March, 1830: Work recommenced on lock.

August-September, 1830: Work completed on lock.

Cost: \$9,729.22

Lock No. 11: Section No. 8

October 25, 1828: Contract let to Kavenaugh, Knox, Hale and Nichols.

January, 1829: Work commenced on lock. July, 1830: Work completed on lock.

Cost: \$10,089.18

Lock No. 12: Section No. 9

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock. February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Fenlon and Bosteder.

August, 1830: Work completed on lock.

Cost: \$10,650.31

Lock No. 13: Section No. 9

October 25, 1828: Contract let to Patrick Donnelly. December, 1829: Contract let to Charles Mowry. December, 1829: Work commenced on lock. September, 1830: Work completed on lock.

Cost: \$9,300.81

Lock No. 14: Section No. 9

October 25, 1828: Contract let to Patrick Donnelly. June, 1829: Contract relet to Wood and Kendall.

June, 1829: Work commenced on lock. September, 1830: Work completed on lock.

Cost: \$9,673.87

Lock No. 15: Section No. 17

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock. February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Abram Knapp and Co.

April, 1829: Work recommenced on lock. July, 1829: Work completed on lock.

Cost: \$10,349.83

Lock No. 16: Section No. 17

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock. February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Abram Knapp and Co.

April, 1829: Work recommenced on lock.

July, 1829: Work completed on lock.

Cost: \$10,001.78

Lock No. 17: Section No. 18

October 25, 1828: Contract let to Henry and Roberts. March 14, 1829: Contract relet to Abram Knapp and Co.

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April, 1829: Work commenced on lock.

July, 1830: Work completed on lock.

Cost: \$10,941.81

Lock No. 18: Section No. 18

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock.

February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Abram Knapp and Co.

April, 1829: Work recommenced on lock.

July, 1830: Work completed on lock.]

Cost: \$9,383.61

Lock No. 19: Section No. 18

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock.

February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Fenlon and Bosteder.

November, 1829: Work recommenced on lock.

October-November, 1830: Work completed on lock.

Cost: \$10,139.11

Lock No. 20: Section No. 18

October 25, 1828: Contract let to J. and J. Maynard.

January, 1829: Work commenced on lock.

February, 1829: Contract abandoned.

March 14, 1829: Contract relet to Abram Knapp and Co.

April, 1829: Work recommenced on lock.

July, 1830: Work completed on lock.

Cost: \$9,355.52

Lock No. 21: Section No. 23

October 25, 1828: Contract let to Holdsworth and Isherwood.

July, 1829: Work commenced on lock.

October 12, 1829: Contract relinquished.

October 21, 1829: Contract relet to Richard Gorsline.

October, 1830: Work completed on lock.

Cost: \$8,327.76

Lock No. 22: Section No. 29

October 25, 1828: Contract let to Kenney and Roberts.

March 14, 1829: Contract relet to F. C. Clopper.

April, 1829: Work commenced on lock.

May, 1831: Work completed on lock.

Cost: \$7,969.28

Lock No. 23: Section No. 34

October 25, 1828: Contract let to Kenney and Roberts.

March 14, 1829: Contract relet to Holdsworth and Isherwood.

June, 1829: Work commenced on lock. January, 1831: Work completed on lock.

Cost: \$8,912.80

Lock No. 24: Section No. 35

October 25, 1828: Contract let to Holdsworth and Isherwood.

March, 1829: Work commenced on lock.

May 5, 1830: Contract assigned to Richard Holdsworth.

March, 1832: Work completed on lock.

Cost: \$8,886.88

Lock No. 25: Section No. 51

October 25, 1828: Contract let to Lafferty and Boland.

July, 1829: Work commenced on lock.

January-February, 1830: Contract abandoned.

April 21, 1830: Contract relet to James Stewart.

June, 1830: Work recommenced on lock.

October, 1831: Work completed on lock.

Cost: \$11,191.64

Lock No. 26: Section No. 68

October 25, 1828: Contract let to Amos Johnson.

March 14, 1829: Contract relet to Abram Knapp and Co.;

firm subcontracted lock to Stewart and Douglas

January, 1831: Work commenced on lock.

July-August, 1832: Work completed on lock.

Cost: \$10,376.30

Lock No. 27: Section No. 72

October 25, 1828: Contract let to Lafferty and Boland.

January, 1829: Work commenced on lock.

February, 1830: Contract abandoned.

February 12, 1830: Contract relet to D. Canfield.

November 26, 1830: Contract relet to Andrew Small.

March, 1831: Work recommenced on lock.

June, 1832: Work completed on lock.

Cost: \$11,323.75

Lock No. 28: Section No. 87

March 24, 1832: Contract let to J. B. and D. K. Cahoon.

May, 1832: Work commenced on lock.

July, 1832: Work completed on lock.

Cost: \$9,734.55

Lock No. 29: Section No. 90

March 17, 1832: Contract let to J. B. and D. K. Cahoon.

May, 1832: Work commenced on lock.

August 18, 1832: Contract abandoned.

August 25, 1832: Contract relet to Littlejohn and Thompson.

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November, 1833: Contract abandoned and work recommenced by canal company.

April, 1834: Work completed on lock.

Cost: \$9,457.05

Lock No. 30: Section No. 98

March 14, 1832: Contract let to Obadiah Gordon

June, 1832: Work commenced on lock.

July, 1832: Contract abandoned.

August – September, 1832: Contract relet to Andrew Small.

October, 1832: Work recommenced on lock.

October, 1833: Work completed on lock.

Cost: \$11,694.51

Lock No. 31: Section No. 104

March 17, 1832: Contract let to Obadiah Gordon.

May, 1832: Work commenced on lock.

December 31, 1832: Contract abandoned.

January, 1833: Contract relet to John M. Moore.

January, 1833: Work recommenced on lock.

September, 1833: Work completed on lock.

Cost: \$16,085.49

Lock No. 32: Section No. 108

March 17, 1832: Contract let to Lewis Wernwag.

September, 1832: Contract assigned to John Hay.

September, 1832: Work commenced on lock.

January 18, 1833: Contract abandoned and construction assigned to Charles B. Fisk,

with John Hay as principal builder.

February, 1833: Contract relet to Gibson and Co.; firm subcontracted lock to Littlejohn and Co.

February, 1833: Work recommenced on lock.

July, 1833: Work completed on lock.

Cost: \$11,298.85

Lock No. 33: Section No. 109

March 17, 1832: Contract let to James O'Brien.

April – May, 1832: Contract relet to Lewis Wernwag.

June, 1832: Work commenced on lock.

September, 1832: Contract abandoned.

September, 1832: Contract relet to Littlejohn and Co.

September, 1832: Work recommenced on lock.

September, 1833: Work completed on lock.

Cost: \$20,728.05

Lock No. 34: Section No. 111

March 17, 1832: Contract let to Henry Smith.

April 21, 1832: Contract relet to Fries and McDonnell.

May, 1832: Work commenced on lock.

November, 1833: Work completed on lock.

Cost: \$10,282.66

Lock No. 35: Section No. 112

March 17, 1832: Contract let to Henry Smith.

April 21, 1832: Contract relet to Fries and McDonnell.

June, 1832: Work commenced on lock. October, 1834: Work completed on lock.

Cost: \$10,809.19

Lock No. 36: Section No. 112

June 2, 1832: Contract let to Fries and McDonnell.

July, 1833: Work commenced on lock. November, 1834: Work completed on lock.

Cost: \$9,659.80

Lock No. 37: Section No. 122

June 7, 1832: Contract let to Gilson, Noonan, Midler and Fresh and Co.

September, 1832: Work commenced on lock.

August, 1833: Work completed on lock.

Cost: \$11,453.13

Lock No. 38: Section No. 133

June 7, 1832: Contract let to Gilson, Noonan, Midler and Fresh and Co.

September, 1832: Work commenced on lock. September, 1833: Work completed on lock.

Cost: \$7,725.85

Lock No. 39: Section No. 135

June 2, 1832: Contract let to Wilson and Bryan.

July 17, 1832: Contract abandoned.

August 25, 1832: Contract relet to Gilson and Co.

January, 1833: Work commenced on lock.

April, 1833: Contract abandoned.

June 17, 1833: Contract relet to Jacob and Alexander Provest.

September, 1833: Work recommenced on lock. September, 1834: Work completed on lock.

Cost: \$9,265.00

Lock No. 40: Section No. 146

August 25, 1832: Contract let to Gibson, Noonan and Fresh.

January, 1833: Work commenced on lock. June–July, 1834: Work completed on lock.

Cost: \$10,202.00

Lock No. 41: Section No. 166

August 25, 1832: Contract let to Michael Byrne and Co.

January, 1833: Work commenced on lock.

November-December, 1834: Work completed on lock.

Cost: \$10,930.66

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Lock No. 42: Section No. 167

August 25, 1832: Contract let to Michael Byrne and Co,

February, 1833: Work commenced on lock.

November–December, 1834: Work completed on lock.

Cost: \$8,349.96

Lock No. 43: Section No. 173

August 25, 1832: Contract let to Michael Byrne and Co.

February, 1833: Work commenced on lock.

January, 1835: Work completed on lock.

Cost: \$9,634.40

Lock No. 44: Section No. 187

August 25, 1832: Contract let to Michael Byrne and Co.

September, 1832: Work commenced on lock.

November, 1834: Work completed on lock.

Cost: \$10,485.82

Lock No. 45: Section No. 202

April 20, 1833: Contract let to Byrne, Lathrop and Provest to construct lock below water line.

June, 1833: Work commenced on lock.

November, 1834: Work completed under contract.

July 3, 1835: Contract let to W. Morrow to complete lock.

February 2, 1836: Contract abandoned.

June 20, 1836: Contract relet to Michael Byrne and Co.

August, 1836: Work recommenced on lock.

November, 1836: Work completed on lock.

Cost: \$12,488.81

Lock No. 46: Section No. 203

July 3, 1835: Contract let to John C. Lissig.

February 2, 1836: Contract abandoned.

June 20, 1836: Contract relet to Michael Byrne and Co.

November, 1836: Work commenced on lock.

May, 1838: Work completed on lock.

Cost: \$12,964.00

Lock No. 47: Section No. 206

July 3, 1835: Contract let to Daniel K. Cahoon.

January, 1836: Work commenced on lock.

November, 1837: Work completed on lock.

Cost: \$10,546.05

Lock No. 48: Section No. 208

July 3, 1835: Contract let to Daniel K. Cahoon

December 9, 1835: Contract abandoned.

June 20, 1836: Contract relet to Michael Byrne.

January, 1837: Work commenced on lock.

May, 1838: Work completed on lock.

Cost: \$13,232.82

Lock No. 49: Section No. 208

July 3, 1835: Contract let to Daniel K. Cahoon.

December 9, 1835: Contract abandoned.

June 20, 1836: Contract relet to Michael Byrne.

January, 1837: Work commenced on lock.

May, 1838: Work completed on lock.

Cost: \$17,365.28

Lock No. 50: Section No. 208

July 3, 1835: Contract let to Daniel K. Cahoon.

December 9, 1835: Contract abandoned.

June 20, 1836: Contract relet to Michael Byrne.

April, 1837: Work commenced on lock. May, 1838: Work completed on lock.

Cost: \$13,783.30

Lock No. 51: Section No. 234

July 3, 1835: Contract let to Robert Brown.

January, 1836: Work commenced on lock.

August 9, 1837: Contract abandoned.

December 6, 1837: Contract relet to William Storey.

December, 1837: Work recommenced on lock.

April, 1838: Work completed on lock.

Cost: \$16.257.24

Lock No. 52: Section No. 234

July 3, 1835: Contract let to Robert Brown.

January, 1836: Work commenced on lock.

August 9, 1837: Contract abandoned.

August 23, 1837: Modified contract relet to Robert Brown.

November, 1837: Work recommenced on lock.

April, 1839: Work completed on lock.

Cost: \$15.191.61

Lock No. 53: Section No. 249

July 3, 1835: Contract let to Patrick McGinley.

September, 1835: Work commenced on lock.

January, 1836: Work stopped on lock.

March 15, 1836: Contract assigned to Thomas Fealey.

March, 1836: Work recommenced on lock.

January, 1837: Work completed on lock.

Cost: \$11,387.62

Lock No. 54: Section No. 258

January 16, 1836: Contract let to Henry Smith.

May 1836: Work commenced on lock. December 28, 1839: Contract abandoned.

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No further work done on this lock until work resumed on the canal in November, 1847. At the time of its abandonment, the lock was 40 percent completed at a cost of \$6,066.43. When work resumed in 1847, Hunter, Harris and Co. subcontracted this lock to Moyle, Randal and Jones for its completion.

1848–49: Work completed on lock.

Lock No. 55: Section No. 258

January 16, 1836: Contract let to Henry Smith. November, 1836: Work commenced on lock. October, 1840: Work completed on lock.

Cost: \$13,621.54

Lock No. 56: Section No. 262

September 29, 1837: Contract let to John Cameron.

March, 1838: Work commenced on lock. December 28, 1839: Contract abandoned.

No further work was done on this lock until work resumed on the canal in November, 1847. At the time of its abandonment, the lock was 50 percent completed; at a cost of \$9,475.09. When work resumed in 1847, Hunter, Harris and Co. subcontracted this lock to Moyle, Randal and Jones for its completion.

1848–49: Work completed on lock.

Lock No. 57: Section No. 267

September 29, 1837: Contract let to W. C. Steedman.

May 24, 1838: Contract relet to James Wherry.

August, 1838: Work commenced on lock.

March, 1840: Work completed on lock.

Cost: \$17,774.39

Lock No. 58: Section No. 276 (Composite Lock)

September 29, 1837: Contract let to W. C. Steedman.

May 24, 1838: Contract relet to James Wherry.

August, 1838: Work commenced on lock.

December 28, 1839: Contract abandoned.

No further work was done on this lock until work resumed on the canal in November, 1847. At the time of its abandonment, the lock was 40 percent completed; at a cost of \$8,922.16. When work resumed in 1847, Hunter, Harris and Co. subcontracted this lock to an unnamed firm (according to available canal company records) for its completion.

1848–50: Work completed on lock.

Locks Nos. 59–66: Sections Nos. 282–299 (Composite Locks)

September 29, 1837: Contract for Lock No. 59 let to Edward H. Fielding. September 29, 1837: Contract for Locks Nos. 60–66 let to Michael Byrne.

November, 1838: Work commenced on locks.

December 28, 1839: Work suspended on locks.

September, 1845: Contract let to Gwinn and Co.;

subcontracted to Marcellus Ritner and Co.

April, 1846: Work recommenced on locks.

April-May, 1846: Contract abandoned.

November, 1847: Contract let to Hunter, Harris and Co.; Locks Nos. 59–61 were subcontracted to Ritner and Co.; and Locks Nos. 62–66 were subcontracted to Buell and Watt.

November, 1847: Work recommenced on locks.

June-July, 1850: Contract abandoned.

July, 1850: Contract relet to Michael Byrne.

July, 1850: Work recommenced on lock.

August, 1850: Work completed on Locks Nos. 61-66.

September, 1850: Work completed on Locks Nos. 59-60.

Lock No. 67: Section No. 322 (Composite Lock)

May 24, 1838: Contract let to Joshua Lobdell.

August, 1838: Work commenced on lock.

November 28, 1838: Contract abandoned.

No further work was done on this lock until work resumed on the canal in November, 1847. At the time of its abandonment, the lock was barely begun; only \$740.56 worth of work had been done on it. When work resumed in 1847, Hunter, Harris and Co. subcontracted this lock to William P. Sterritt for its completion.

1848–50: Work completed on the lock.

Lock No. 68: Section No. 329 (Composite Lock)

September 27, 1837: Contract let to Robert McCoy.

May 16, 1838: Contract assigned to J. Noble Nisbet.

November 14, 1838: Contract abandoned.

No work had done on this lock at the time of its abandonment, and nothing was done on it until work resumed on the canal in November, 1847. At that time, Hunter, Harris and Co. subcontracted this lock to Fallan and Ambrose for its completion.

1849–50: Work completed on lock.

Lock No. 69: Section No. 331 (Composite Lock)

September 29, 1837: Contract let to William Pratt.

April, 1838: Work commenced on lock.

July 18, 1838: Contract abandoned.

No further work was done on this lock until work resumed on the canal in November, 1847. At the time of its abandonment, this lock was barely begun; only \$759.12 worth of work had been done on it. When work resumed in 1847, Hunter, Harris and Co. subcontracted this lock to Fallan and Ambrose for its completion.

1849–50: Work completed on lock.

Lock No. 70: Section No. 332 (Composite Lock)

September 29, 1837: Contract let to William Pratt.

July 18, 1838: Contract abandoned.

No work had done on this lock at the time of its abandonment, and nothing was done on it until work resumed on the canal in November, 1847. At that time, Hunter, Harris and Co. subcontracted this lock to Fallan and Ambrose for its completion.

1849–50: Work completed on the lock.

Lock No. 71: Section No. 332 (Composite Lock)

September 29, 1837: Contract let to William Pratt.

July 18, 1838: Contract abandoned.

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No work had done on this lock at the time of its abandonment, and nothing was done on it until work resumed on the canal in November, 1847. At that time, Hunter, Harris and Co. subcontracted this lock to Fallan and Ambrose for its completion.

1849–50: Work completed on lock.

Lock No. 72: Section No. 347

September 29, 1837: Contract let to G. W. Henry.

September 7, 1838: Contract relet to Thomas N. MacCubbin.

February, 1839: Work commenced on lock. December 28, 1839: Contract abandoned.

January 22, 1840: Modified contract relet to Thomas N. MacCubbin.

November, 1841: Work completed on lock.

Cost: \$20,853.85

Lock No. 73: Section No. 350

September 27, 1837: Contract let to George G. Johnson.

August, 1838: Work commenced on lock. December 28, 1839: Contract abandoned.

January 23, 1840: Modified contract relet to George G. Johnson.

December, 1840: Work completed on lock.

Cost: \$18,209.04

Lock No. 74: Section No. 350

September 27, 1837: Contract let to George G. Johnson.

April, 1838: Work commenced on lock. December 28, 1839: Contract abandoned.

January 23, 1840: Modified contract relet to George G. Johnson.

March, 1841: Work completed on lock.

Cost: \$20,547.35

Lock No. 75: Section No. 350

September 27, 1837: Contract let to George G. Johnson.

March, 1838: Work commenced on lock. August, 1840: Work completed on lock.

Cost: \$18,007.50

B. TIDE LOCKS

Tide Lock A: Section A

December 10, 1828: Contract let to Dibble, Beaumont and McCord.

April, 1830: Construction commenced on tide lock. April, 1831: Construction completed on tide lock.

Cost: \$16,620.42

Tide Lock B: Section I

February 4, 1832: Contract let to C. F. LeBaron and I. G. Camp.

April, 1832: Work commenced on tide lock. December 1, 1832: Contract abandoned.

December, 1832: Work recommenced on tide lock with company hands.

September, 1834: Work completed on tide lock.

Cost: \$10,105.30

C. RIVER LOCKS

Edward's Ferry River Lock: Section No. 51

September 2, 1835: Contract let to Michael Byrne. October, 1835: Work commenced on outlet lock. November, 1838: Work completed on outlet lock.

Cost: \$19,174.08

Shenandoah River Lock: Section No. 109

July–August, 1832: Contract let to Littlejohn and Co. September, 1832: Work commenced on outlet lock.

June, 1833: Work completed on outlet lock.

Cost: \$12,544.00

Shepherdstown River Lock: Section No. 133

May 20, 1833: Contract let to John Cameron. July, 1833: Work commenced on outlet lock. January, 1835: Work completed on outlet lock.

Cost: \$15,244.41

D. GUARD LOCKS

Guard Lock No. 1: Section G-H

The water from the pool behind Dam No. 1 was let into the canal by means of a feeder and guard lock. These structures had been part of the Potomac Company's Little Falls Skirting Canal and were adapted for use by the Chesapeake and Ohio Canal at a cost of \$3,197.82.

Guard Lock No. 2: Section No. 34

March 14, 1829: Contract let to Holdsworth and Isherwood.

June, 1829: Work commenced on guard lock. November, 1830: Work completed on guard lock.

Cost: \$7,338.99

Guard Lock No. 3: Section No. 112

August 18, 1832: Contract let to Fries and McDonnell.

August, 1832: Work commenced on guard lock.

August-September, 1833: Work completed on guard lock.

Cost: \$7,120.75

Guard Lock No. 4: Section No. 156

March 4, 1833: Contract let to Joseph Hollman.

April, 1833: Construction commenced on guard lock. April, 1834: Construction completed on guard lock.

Cost: \$8,720.81

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Guard Lock No. 5: Section No. 202

August 25, 1832: Contract let to Michael Byrne and Co.

March, 1833: Work commenced on guard lock.

January, 1835: Work completed on guard lock.

Cost: \$8,428.31

Guard Lock No. 6: Section No. 258

September 14, 1836: Contract let to George Weaver. October, 1836: Work commenced on guard lock.

September-October, 1838: Work completed on guard lock.

Cost: \$46,548.58 (includes Dam No. 6 abutments)

Guard Lock No. 8: Section No. 367

September 29, 1837: Contract let to William P. Sterritt and William Lockwood.

May, 1838: Work commenced on guard lock.

December 28, 1839: Contract abandoned.

February 27, 1840: Contract relet to William P. Sterritt.

February, 1840: Work recommenced on guard lock.

Early 1842: Work suspended.

November, 1847: Contract let to Hunter, Harris and Co. to finish canal;

Subcontract to William Lockwood in December, 1847.

April–May, 1848: Work recommenced on guard lock.

April-May, 1850: Work completed on guard lock.

Cost: \$79,992.99 (includes Dam No. 8; 1842 assessment)

E. AQUEDUCTS

Aqueduct No. 1 [Seneca Aqueduct]: Section No. 35

October 25, 1828: Contract let to Holdsworth and Isherwood.

July, 1829: Work commenced on aqueduct.

March-April, 1832: Work completed on aqueduct.

Cost: \$24,340.25

Aqueduct No. 2 [Monocacy Aqueduct]: Section No. 73

August 20, 1828: Contract let to Hovey and Legg; on October 31, Hitchcock was substituted for Legg.

March, 1829: Work commenced on aqueduct.

December, 1829: Contract abandoned.

December 9, 1829: Contract relet to Asher P. Osborn.

August 7, 1830: Contract assigned to Byrne and LeBaron.

May, 1833: Work completed on aqueduct.

Cost: \$128,859.23

Aqueduct No. 3 [Catoctin Aqueduct]: Section No. 91

February 25, 1832: Contract let to Tracy and Douglas.

April, 1832: Construction commenced on aqueduct.

February, 1834: Construction completed on aqueduct.

Cost: \$33,325.92

Aqueduct No. 4 [Antietam Aqueduct]: Section No. 126

June 5, 1832: Contract let to Gibson, Noonan, Midler and Fresh and Co.

October, 1832: Work commenced on aqueduct.

April, 1835: Work completed on aqueduct.

Cost: \$24.337.33

Aqueduct No. 5 [Conococheague Aqueduct]: Section No. 188

August 25, 1832: Contract let to Michael Byrne and Co.

February, 1833: Work commenced on aqueduct.

October-November, 1835: Work completed on aqueduct.

Cost: \$43,283.78

Aqueduct No. 6 [Licking Creek Aqueduct]: Section No. 222

July 3, 1835: Contract let to Richard Holdsworth.

September, 1835: Work commenced on aqueduct.

February 24, 1837: Contract reassigned to Enos Childs after death of Holdsworth.

October 25, 1837: Contract abandoned.

November 8, 1837: Contract reassigned to Enos Childs.

May, 1838: Work completed on aqueduct.

Cost: \$48,023.45

Aqueduct No. 7 [Tonoloway Aqueduct]: Section No. 235

July 3, 1835: Contract let to Robert Brown.

September, 1835: Work commenced on aqueduct.

June, 1839: Work completed on aqueduct.

Cost: \$48,423.10

Aqueduct No. 8 [Sideling Hill Creek Aqueduct]: Section No. 263

April 1, 1837: Contract let to John Cameron.

April, 1837: Work commenced on aqueduct.

May-June, 1840: Work completed on aqueduct to the point that a final estimate was paid.

November, 1847: Hunter, Harris and Co. let subcontract to Gonder, Brayton and Co.;

subcontract assigned to Fraser and Co.

Spring, 1850: Finishing touches put on aqueduct.

Cost: \$39,050.07 (1840 final estimate)

Aqueduct No. 9 [Fifteen Mile Creek Aqueduct]: Section No. 271

September 29, 1837: Contract let to William Pratt.

May 23, 1838: Contract relet to Enos Childs.

September, 1838: Work commenced on aqueduct.

December 28, 1839: Contract abandoned.

July 23, 1840: Contract let to George S. marsh.

July, 1840: Work recommenced on aqueduct.

April, 1842: Contract abandoned.

November, 1847: Hunter, Harris and Co. let a subcontract to Gonder, Brayton and Co.;

subcontract to Thomas Bell.

March-April, 1848: Construction recommenced on aqueduct.

Summer, 1850: Construction completed on aqueduct.

Cost: \$28,119.51 (1842 assessment)

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Aqueduct No. 10 [Town Creek Aqueduct]: Section No. 323

September 29, 1837: Contract let to Frederick Pratt.

April, 1838: Work commenced on aqueduct.

November 14, 1838: Contract abandoned.

November, 1847: Hunter, Harris and Co. recommence work on aqueduct.

Summer, 1850: Construction completed on aqueduct.

Cost: \$3,747.89 (1838 assessment)

Aqueduct No. 11 [Evitts Creek Aqueduct]: Section No. 360

September 29, 1837: Contract let to George G. Johnson.

February, 1838: Work commenced on aqueduct.

December 28, 1839: Contract abandoned.

January 23, 1840: Modified contract relet to George G. Johnson.

October, 1841: Work completed on aqueduct to the point that a final estimate was paid.

November, 1847: Contract let to Hunter, Harris and Co.

Spring, 1850: Finishing touches put on aqueduct.

Cost: \$45,986.00 (1841 assessment)

F. DAMS

Dam No. 1: Section No. 1

December 10, 1828: Contract let to Dibble, Beaumont and McCord.

June, 1829: Construction commenced on dam.

May 19, 1830: Contract terminated when dam was completed to Snake Island.

March 11, 1831: Contract relet to Samuel Goodrich to finish dam to Virginia shore.

Spring, 1831: Work recommenced on dam.

Spring, 1831: Contract abandoned.

June, 1831: Work recommenced on dam under Superintendent John Y. Young and company

hands.

April, 1832: Work completed on dam from Snake Island to Virginia shore.

Cost: \$37,091.30

Dam No. 2: Section No. 34

December 10, 1828: Contract let to Dibble, Beaumont and McCord.

July, 1829: Construction commenced on dam.

May 19, 1830: Contract terminated.

August 7, 1830: Contract relet to Obediah Gordon; he was aided by Elias Gumaer.

August, 1830: Work recommenced on dam.

October, 1831: Work completed on dam.

Cost: \$26,978.95

Dam No. 3: Section No. 109

Dam No. 3 was neither constructed nor owned by the Chesapeake and Ohio Canal Company. It was built by the United States Government to supply water power to the musket factory of the United States Amory at Harpers Ferry. Two dams, built in 1799 and 1809, preceded the government dam used by the canal company.

July, 1820: Contract let to John Lowstetter.

1821: Work completed on government dam.

Dam No. 4: Section No. 156

June 7, 1832: Contract let to Joseph Hollman. September, 1832: Work commenced on dam.

June, 1835: Work completed on dam.

Cost: \$50,803.17

Dam No. 5: Section No. 202

August 25, 1832: Contract let to Byrnes and Co.

March, 1833: Work commenced on dam. December, 1834: Work completed on dam.

Cost: \$47,088.67

Dam No. 6: Section No. 258

September 14, 1836: Contract let to Joseph Hollman and George Reynolds;

contract for abutments let to George Weaver.

October, 1836: Construction commenced on abutments.

March, 1837: Construction commenced on dam.

August-September, 1838: Construction completed on abutments.

September 7, 1838: Contract for dam abandoned.

September, 1838: Work recommenced on dam with company hands under Superintendent John R. Young.

February, 1839: Work completed on dam.

Cost: \$102,390.75 (including abutments and guard lock)

Dam No. 8: Section No. 367

September 29, 1837: Contract let to William P. Sterritt and William lockwood.

May, 1835: Construction commenced on dam.

December 28, 1839: Contract abandoned.

February 27, 1840: Contract relet to William P. Sterritt.

February, 1840: Work recommenced on dam.

Early 1842: Work suspended.

November, 1847: Contract let to Hunter, Harris and Co. to finish canal; subcontract for Dam No.

8 let to William Lockwood in December, 1847.

April-May, 1848: Work recommenced on dam.

April-May, 1850: Work completed on dam.

Cost: \$72,992.99 (includes Guard Lock No. 8; 1842 assessment)

G. LOCKHOUSES

Lockhouses for Locks Nos. 1-4: Section A

Canal company records are not clear about the lockhouses in Georgetown, but they appear to indicate that there were two or three structures serving this purpose. A canal company ledger covering the period 1828–1841 seems to indicate that there were at least two lockhouses on Section A. There are no dates, contractors or cost estimates for these houses; thus, it might be deduced that the canal company adapted existing structures for use as lockhouses in Georgetown. Locust–post fences were built around these two structures in the spring of 1831 by James Hook, at a cost of \$174.90.

The same ledger indicates that a lockhouse (other canal documents identify this structure as Lockhouse No. 2) was located on Section A between Locks Nos. 2 and 3. The work done on this structure was done in the spring of 1830 and of 1831 at a cost of \$120.02. Because the average cost of a lockhouse was over \$700, it can be assumed that this lockhouse was also an existing structure adopted for use by a lock tender. Most of this work was ascribed to Michael Corcoran.

Lockhouses for Locks Nos. 5-6: Section 1

(Canal company records identify these as Lockhouses Nos. 3–4, respectively)

December 11, 1828: Contract for Lockhouse No. 4 let to Thomas and Munroe.

Spring, 1829: Contract for Lockhouse No. 3 let and contract for Lockhouse No. 4 relet to Richard Grosline.

May 1829: Work commenced on lockhouses.

September 1829: Work completed on lockhouses.

Cost: \$1,432.03

Lockhouse for Lock No. 7: Section No. 4

(Canal company records identify this as Lockhouse No. 5)

March 28, 1829: Contract let to James O'Brien

May 1829: Work commenced on lockhouse.

July 1829: Work completed on lockhouse.

Cost: \$720.00

Lockhouse for Lock No. 8: Section No. 7 (Canal company records identify this as Lockhouse No. 6)

Spring, 1829: Contract let to Thornhill and McKennie.

June, 1829: Work commenced on lockhouse.

May, 1830: Work completed on lockhouse.

Cost: \$785.75

Lockhouse for Locks Nos. 9–10: Section No. 8

(Canal company records identify this as Lockhouse No. 7)

August 20, 1828: Contract let to Henry B. Richards.

December, 1828: Work commenced on lockhouse.

Spring, 1829: Contract abandoned.

Spring, 1830: Contract relet to W. W. Fenlon and Co.

April, 1830: Work recommenced on lockhouse.

May, 1830: Work completed on lockhouse.

Cost: \$774.73

Lockhouse for Lock No. 11: Section No. 8

(Canal company records identify this as Lockhouse No. 8)

September 11, 1828: Contract let to Morgan Kavenaugh and Co.

May, 1829: Work commenced on lockhouse.

March, 1830: Work completed on lockhouse.

Cost: \$789.25

Lockhouse for Locks Nos. 12-14: Section No. 9

December 11, 1828: Contract let to J. W. Maynard.

Spring, 1829: Contract relet to Thornhill and McKennie.

June, 1829: Work commenced on lockhouse.

May, 1830: Work completed on lockhouse.

Cost: \$836.74

Lockhouse for Locks No. 15-16: Section No. 17

(Canal company records identify this as Lockhouse No. 10)

December 11, 1828: Contract let to J. W. Maynard.

Summer, 1829: Contract relet to Pine, Crown and Darlington.

Spring, 1830: Contract relet to Robert Warfield. June, 1830: Work commenced on lockhouse. June, 1831: Work completed on lockhouse.

Cost: \$818.25

Lockhouse for Lock No. 16: Section No. 17

(Canal company records identify this as house to Lock No. 16)

June 7, 1837: Board authorized Superintendent John Y. Young to build lockhouse.

CA. spring, 1838: Work commenced on lockhouse with company hands.

April, 1839: Work completed on lockhouse.

Cost: \$892.16

Lockhouse for Locks Nos. 17-18: Section No. 18

(Canal company records identify this as Lockhouse No. 11)

December 11, 1828: Contract let to J. W. Maynard.

December 2, 1829: Contract relet to Pine, Crown and Darlington.

December, 1839: Work commenced on lockhouse.

August, 1830: Work completed on lockhouse.

Cost \$749.00

Lockhouse for Locks Nos. 19-20: Section No. 18

(Canal company records identify this as Lockhouse No. 12)

December 11, 1828: Contract let to J. W. Maynard.

December 2, 1829: Contract relet to Pine, Crown and Darlington.

December, 1829: Work commenced on lockhouse.

March, 1831: Work completed on lockhouse.

Cost: \$739.00

Soon after its completion, Lockhouse No. 12 was enlarged, remodeled and named Crommelin

House.

Lockhouse for Lock No. 21: Section No. 23

(Canal company records identify this as Lockhouse No. 13)

December 2, 1829: Contract let to Pine, Crown and Darlington.

Spring, 1831: Contract relet to Henry B. Richards.

May, 1831: Work commenced on lockhouse.

August, 1832: Work completed on lockhouse.

Cost: &765.00

Lockhouse for Lock No. 22: Section No. 29

(Canal company records identify this as Lockhouse No. 14)

December 11, 1828: Contract let to Wines, Brackett and Wines; company later reorganized under Ruben Brackett.

Chesapeake & Ohio Canal Historic Resource Study Unrau: 5. Construction Chronology: 1824–1850

October, 1829: Work commenced on lockhouse.

April, 1830: Work completed on lockhouse.

Cost: \$853.20

Lockhouse for Lock No. 23 and Guard Lock No. 2: Section No. 34

(Canal company records identify this as Lockhouse No. 15)

November, 1829: Contract let to Charles Shepherd.

Summer, 1830: Contract relet to Thomas and Munroe.

Fall, 1830: Contract relet to Mathias Duffie (contract let to Obediah Gordon to build basement).

October, 1830: Work commenced on lockhouse.

Cost: \$958.49

Soon after its completion, Lockhouse No. 15 was enlarged, remodeled and named Rushville House.

Lockhouse for Lock No. 24: Section No. 35

(Canal company records identify this as Lockhouse No. 16)

December 11, 1828: Contract let to Holdsworth and Isherwood.

November, 1829: Work commenced on lockhouse.

April, 1830: Work completed on lockhouse.

Cost: \$1,066.25

Lockhouse for Lock No. 25: Section No. 51

(Canal company records identify this as Lockhouse No. 17)

December 11, 1828: Contract let to Thomas and Munroe.

November, 1829: Work commenced on lockhouse.

March, 1830: Work completed on lockhouse.

Cost: \$903.00

Lockhouse for Lock No. 26: Section No. 68

(Canal company records identify this as Lockhouse No. 18)

December 11, 1828: Contract let to Thomas and Munroe.

June, 1829: Work commenced on lockhouse.

January, 1830: Work completed on lockhouse.

Cost: \$849.00

Lockhouse for Lock No. 27: Section No. 72

(Canal company records identify this as Lockhouse No. 19)

December 11, 1828: Contract let to Thomas and Munroe.

June, 1829: Work commenced on lockhouse.

June, 1830: Work completed on lockhouse.

Cost: \$893.25

Lockhouse for Lock No. 28: Section No. 87

(Canal company records identify this as house to Lock No. 28)

May 21, 1836: Contract let to Michael Foley.

June, 1836: Work commenced on lockhouse.

May, 1837: Work completed on lockhouse.

Cost: \$983.16

Lockhouse for Lock No. 29: Section No. 89

(Canal company records identify this as house to Lock No. 29)

May 21, 1836: Contract let to Michael Foley.

June, 1836: Work commenced on lockhouse.

May, 1837: Work completed on lockhouse.

Cost: \$947.98

Lockhouse for Lock No. 30: Section No. 98

(Canal company records identify this as house to Lock No. 30)

August 16, 1836: Board authorized Superintendent William S. Elgin to purchase a house and Lot No. 3 in Berlin (now Brunswick) for use as the lockhouse at Lock No. 30; selling price – \$1,050; owner – Robert Kemble.

September 26, 1836: Board authorized Elgin to pay Kemble additional sum for repairs recently made to the house.

Lockhouse for Lock No. 31: Section No. 104

(Canal company records identify this as Lockhouse No. 23)

May 24, 1833: Contract let to Peter G. Mathias.

May, 1833: Work commenced on lockhouse.

August, 1833: Work completed on lockhouse.

Cost: \$1,031.40

Lockhouse for Lock No. 32: Section No. 108

(Canal company records identify this as house to Lock No. 32)

August 24, 1836: Contract let to Jonah Hood.

September, 1836: Work commenced on lockhouse.

April, 1837: Work completed on lockhouse.

Cost: \$1,169.45

Lockhouse for Lock No. 33: Section No. 109

(Canal company records identify this as house to Lock No. 33)

Spring, 1837: Contract let to James A Foster.

May, 1837: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost: \$1,035.60

Lockhouse for Lock No. 34: Section No. 111

(Canal company records identify this as house to Lock No. 34)

May 21, 1836: Contract let to Michael Foley.

June, 1836: Work commenced on lockhouse.

October, 1836: Work completed on lockhouse.

Cost: \$999.62

Lockhouse for Locks No. 35-36 and Guard Lock No. 3: Section No. 112

(Canal company records identify this as house to Locks 35 and 36 and Guard Lock No. 3)

May 21, 1836: Contract let to Jonah Hood.

August, 1836: Work commenced on lockhouse.

April, 1837: Work completed on lockhouse.

Cost: \$1,074.25

Chesapeake & Ohio Canal Historic Resource Study Unrau: 5. Construction Chronology: 1824–1850

Lockhouse for Lock No. 37: Section No. 122

(Canal company records identify this as house to Lock 37)

Spring, 1836: Contract let to James and Baker.

May 21, 1836: Contract relet to John D. Grove.

August, 1836: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost \$981.25

Lockhouse for Lock No. 38: Section No. 133

(Canal company records identify this as house to Lock 38)

July 24, 1837: Contract let to James A. Foster.

September, 1837: Work commenced on lockhouse.

September, 1838: Work completed on lockhouse.

Cost: \$1,530.34

Lockhouse for Lock No. 39: Section No. 135

(Canal company records identify this as house to Lock 39)

Spring, 1836: Contract let to Jams and Baker.

May 21, 1836: Contract relet to John D. Grove.

August, 1836: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost: \$1,259.73

Lockhouse for Lock No. 40: Section No. 146

(Canal company records identify this as house to Lock 40)

Spring, 1836: Contract let to James and Baker.

May 21, 1836: Contract relet to John D. Grove.

October, 1836: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost: \$1,029.18

Lockhouse for Guard Lock No. 4: Section No. 156

(Canal company records identify this as house to Guard Lock No. 4)

Spring, 1836: Contract let to James and Baker.

May 21, 1836: Contract relet to John D. Grove.

December, 1836: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost: \$1,056.14

Lockhouse for Locks Nos. 41–62: Section No. 173

(Canal company records identify this as house to Locks 41 and 42)

Spring, 1836: Contract let to James and Baker.

May 21, 1836: Contract relet to John D. Grove.

August, 1836: Work commenced on lockhouse.

July, 1837: Work completed on lockhouse.

Cost: \$1,005.92

Lockhouse for Lock No. 43: Section No. 173

(Canal company records identify this as house to Lock 43)

Spring, 1836: Contract let to James and Baker. May 21, 1836: Contract relet to John D. Grove. August, 1836: Work commenced on lockhouse. July, 1837: Work completed on lockhouse.

Cost: \$980.74

Lockhouse for Lock No. 44: Section No. 187

(Canal company records identify this as house for Lock No. 44)

Spring, 1835—Contract let to Joseph Hollman.

June, 1845: Board authorized Superintendent John G. Stone to build lockhouse.

Summer-fall, 1845: Lockhouse built by company hands under supervision of Stone.

Cost: Approximately \$300

Lockhouse for Guard Lock No. 5: Section No. 202

(Canal company records identify this as house to Guard Lock No. 5)

Spring, 1837: Contract let to George Fagen.

Summer, 1837: Work commenced on lockhouse.

June, 1837: Work completed on lockhouse.

Cost: \$1,058.50

Lockhouse for Locks Nos. 45-46: Section No. 203

(Canal company records identify this as house to Lock 49)

Spring, 1837: Contract let to Jesse Schofield.

Summer, 1837: Work commenced on lockhouse.

June, 1839: Work completed on lockhouse.

Cost: \$1,109.80

Lockhouse for Locks Nos. 47-50: Section No. 206

(Canal company records identify this as house to Lock 49)

Spring, 1837: Contract let to Jesse Schofield.

August, 1837: Work commenced on lockhouse. February, 1839: Work completed on lockhouse.

Cost: \$1.447.50

Lockhouse for Locks Nos. 51–52: Section No. 233

(Canal company records identify this as house to Lock 51)

July 25, 1837: Contract let to Jesse Schofield.

September, 1837: Work commenced on lockhouse.

December 26, 1838: Contract abandoned.

May 15, 1839: Contract relet to John W. Beideman.

June, 1839: Work recommenced on lockhouse.

July, 1840: Work completed on lockhouse.

Cost: \$1,016.60

Lockhouse for Lock No. 53: Section No. 253

(Canal company records identify this as house to Lock 53)

July 24, 1837: Contract let to Jessie Schofield.

December 26, 1838: Contract abandoned.

May 15, 1839: Contract relet to John W. Beideman.

Chesapeake & Ohio Canal Historic Resource Study Unrau: 5. Construction Chronology: 1824–1850

July, 1839: Work commenced on lockhouse. July, 1840: Work completed on lockhouse.

Cost: \$975.00

Lockhouse for Locks No. 54–55 and Guard Lock No. 6: Section No. 259

(Canal company records identify this as house at Dam No. 6)

Canal company records appear to indicate that a temporary shanty was built near Guard Lock No. 6 by company hands during the fall of 1840 to house the lock tender for Locks Nos. 54–55 and Guard Lock No. 6. It is also possible that a nearby building may have been adapted for use as a lockhouse. The sum of \$30 was expended on December 31, 1842 for this purpose.

While the canal company records are not clear, company engineers apparently built a larger structure to serve as a lockhouse for these locks during 1849–1850. There is no indication that any work was done on the lockhouse, and the contract was declared abandoned on May 11, 1839.

Canal company records indicate that a contract for the construction of a lockhouse at Lock No. 54 was let to Henry Smith on March 23, 1836. There is no indication that any work was done on the lockhouse, and the contract was declared abandoned on May 11, 1839.

Lockhouses for Locks No. 56–75

(Canal company records identify these as Lockhouses at the following locks: Nos. 56, 57, 58, 59, 60, 61, 62, 66, 67, 68, 70, 72, 73, 75 and Guard Lock No. 8)

When work resumed on the "fifty-mile" section of the canal on November 18, 1847, Hunter, Harris and Co. subcontracted for the construction of these lockhouses. Canal company records do not indicate the names of the subcontractors, the dates of construction, or the building costs. The records indicate that not all of these lockhouses were completed by October 10, 1850, when the canal was formally opened to navigation. It may be assumed that they were completed during the following year.

H. STOP LOCKS (STOP GATES)

Stop Lock: Section C

August 5, 1835: Contract let to William Easby. August, 1835: Work commenced on stop lock. March–April, 1837: Work completed on stop lock.

Cost: \$4,375.36

Stop Gate: Section No. 38

Resident Engineer Charles B. Fisk apparently directed the construction of this stop gate between March, 1835 and March, 1836. Company laborers were used for the work.

Cost: \$122.43

Stop Gate: Section No. 156

July 29, 1836: Board authorized George W. Rodger, a company employee, to build the structure.

December, 1837: Work commenced on stop gate.

April, 1839: Work completed on stop gate.

Cost: \$5,375.48

Stop Gate: Section No. 195

November 12, 1834: Contract let to Eli and J. S. Stake.

November, 1834: Work commenced on stop gate.

May, 1835: Work completed on stop gate.

Cost: \$585.12

Stop Gate: Section No. 209

June 25, 1838: Contract let to Philip Gormley. July, 1838: Work commenced on stop gate. June, 1839: Work completed on stop gate.

Cost: \$4,399.98

Stop Gate: Section No. 213

June 7, 1837: Contract let to William Brown. June, 1837: Work commenced on stop gate. July, 1838: Work completed on stop gate.

Cost: \$2,490.70

Stop Gate: Section No. 217

September 29, 1837: Contract let to Timothy Cunningham.

June, 1838: Work commenced on stop gate. February, 1839: Work completed on stop gate. Cost: \$3,720.20 (including adjacent waste weir)

Stop Gate: Section No. 228

September 28, 1838: Contract let to John Bain. October, 1838: Work commenced on stop gate. June, 1839: Work completed on stop gate.

Cost: \$2,439.29

I. FEEDERS

Rocky Run Feeder: Section No. 9

Spring, 1830: Contract let to John Seale.

June, 1830: Work commenced and completed on feeder.

Cost: \$198.60

Great Falls Feeder: Section No. 18

June 4, 1830: Contract let to Bargy and Guy. May, 1830: Work commenced on feeder. April, 1831: Work completed on feeder.

Cost: \$2,110.45

Tuscarora Feeder: Section No. 78

February 6, 1833 – Contract let to Stephen Sands. February, 1833: Work commenced on feeder. November, 1833: Work completed on feeder.

Cost: \$3,151.69

Chesapeake & Ohio Canal Historic Resource Study Unrau: 5. Construction Chronology: 1824–1850

J. MISCELLANEOUS STRUCTURES

Paw Paw Tunnel: Sections Nos. 309-310

March 15, 1836: Contract let to Lee Montgomery.

June, 1836: Work commenced on tunnel.

November, 1841: Work suspended on tunnel.

November, 1848: Contract let to Hunter, Harris and Co. to complete the canal; subcontract to finish tunnel let to McCulloch and Day.

1850: Work completed on tunnel (except for brick lining which was completed after the canal was opened to navigation).

Cost: \$616,478.65 (includes adjoining deep cuts; 1841 assessment)

Broad Run Trunk: Section No. 53

(Canal company records identify this structure as Culvert No 44½)

October 1, 1829: Contract let to Albert Hovey.

Winter, 1829: Contract abandoned.

Summer, 1830: Contract relet to James Costigan.

October, 1830: Work commenced on culvert.

March, 1831: Contract abandoned.

March 11, 1831: Contract relet to Bargey and Roach. November, 1831: Contract recommenced on culvert.

August, 1832: Contract abandoned.

Fall, 1832: Contract relet to Thomas Walter.

December, 1832: Work recommenced on culvert.

May, 1833: Work completed on culvert.

Cost: \$[not provided]

Note: Culvert No 441/2 was washed out in a flood of 1846, and was replaced by a wooden trunk as a temporary expedient. By 1856, the structure had deteriorated to a point where maintenance was no longer feasible. At this time, it was decided to rebuild the structure as a wooden trunk; and aside from routine repairs, no major work appears to have been done on the structure between 1857 and 1924.

Rock Creek Basin: Section A

(Including mole, basin, causeway and waste weir)

December 10, 1828: Contract let to Dibble, Beaumont and McCord.

May, 1829: Work commenced on basin and related structures.

October, 1831: Work completed on basin and related structures.

Cost: \$69,567.20

Towpath for Big Slackwater: Sections Nos. 157-166

July 29, 1836: Contract let to Joseph Hollman.

August 17, 1836: John D. Grove became partner of Hollman.

September, 1836: Work commenced on towpath. December, 1838: Work completed on towpath.

Cost: \$31,416.36

Towpath for Little Slackwater: Section No. 203

June 12, 1837: Contract let to John Seale.

November, 1837: Work commenced on towpath.

April, 1839: Work completed on towpath. Cost \$8,204.40

APPENDIX A

PRESIDENT JOHN QUINCY ADAMS'S REMINISCENCES OF CANAL GROUND-BREAKING CEREMONIES, ON JULY 4, 1828.

"4th, Independence Day. Chesapeake and Ohio Canal commenced. Between seven and eight this morning, I went with my son John to the Union Hotel, at Georgetown, where were assembling the President and Directors of the Chesapeake and Ohio Canal Company; the Mayors and Committees of the corporations of Washington, Georgetown, and Alexandria; the heads of Departments, foreign Ministers, and a few other invited persons. About eight o'clock a procession was formed, preceded by a band of music, to the wharf, where we embarked in the steamboat Surprise; followed by two others, we proceeded to the entrance of the Potomac Canal, and up that in canalboats to its head—near which, just within the bounds of the State of Maryland, was the spot selected for breaking the ground. The President of the Chesapeake and Ohio Canal Company, with a very short address, delivered to me the spade, with which I broke the ground, addressing the surrounding auditory, consisting perhaps of two thousand persons. It happened that at the first stroke of the spade it met immediately under the surface a large stump of a tree; after repeating the stroke three or four times without making any impression, I threw off my coat, and, resuming the spade, raised a shovelful of the earth, at which a general shout burst forth from the surrounding multitude, and I completed my address, which occupied about fifteen minutes. The President and Directors of the Canal, the Mayors and Committees of the three Corporations, the heads of Departments, members of Congress, and others, followed, and shoveled up a wheelbarrow-full of earth. Mr. Gales, the Mayor of Washington, read also a short address, and was answered extemporaneously by Andrew Stewart, the Director of the Company from Pennsylvania. After a short repose under a tent on the banks of the canal, we returned by the canal-boats to the landing, and thence in the steamboat, where, as we re-descended the Potomac, the company partook of a light collation upon the deck. I was asked for a toast, and gave, 'The Chesapeake and Ohio Canal: perseverance.' Mr. Mercer and Mr. Rush also gave toasts.

"About half-past two I was landed by Davidson's wharf, where my carriage was waiting, and, after taking Mr. Rush home, I returned to mine. The Marshals of the day escorted me home on horseback, came in and took a glass of wine, and took leave with my thanks for their attentions. The day was uncommonly cool for the season, with a fresh breeze, and towards evening there was a gentle shower. The exertion of speaking in the open air made me hoarse, and with the anxiety, more oppressive than it should have been, to get well through the day, exhausted and fatigued me, so that I was disqualified for thought or action the remainder of the day. As has happened to me whenever I have had a part to perform in the presence of multitudes, I got through awkwardly, but without gross and palpable failure. The incident that chiefly relieved me was the obstacle of the stump, which met and resisted the spade, and my casting off my coat to overcome the resistance. It struck the eye and fancy of the spectators more than all the flowers of rhetoric in my speech, and diverted their attention from the stammering and hesitation of a deficient memory. Mr. Vaughan, Chevalier Bangeman Huygens, Barons Krudener and Stackelberg, and several other members of the Corps Diplomatique were present, and thought it, perhaps, a strange part for a President of the United States to perform.

Governor Kent, of Maryland, was there, as one of the directors of the company, and compared the ceremony to that said to be annually observed in China."

¹ Excerpted from Memoirs of John Quincy Adams, Vol. 8, 49–50.

APPENDIX B

DESCRIPTION OF THE SEAL OF THE CHESAPEAKE & OHIO CANAL COMPANY, SEPTEMBER 3, 1828:

"In diameter two inches and seven twentieths of an inch, its surface quartered and having in one quarter a Loom in operation with a weaver seated at it; in another quarter a Man ploughing with a single horse; and in a third quarter two boats underway, one drawn by a horse, the other impelled by steam, & on the fourth quarter a ship under full sail; the said devices being designed to denote Agriculture, Manufactures, Internal and External Commerce. Over the seal as a Crest two clasped hands with the motto, "Esto Perpetua", illustrative of the union of the Eastern and Western waters, to be accomplished by the Chesapeake & Ohio Canal; and below a Mountain, perforated by a Tunnel, with the motto "Perseverando", indicating the manner of effecting this Union, and the long continued labor which it may require. Around the quartering of the field, are the words "Chesapeake & Ohio Canal Company."

¹ Proceedings of the President and Board of Directors, A, 63.

APPENDIX C

LIST OF CONTRACTORS FOR 34 SECTIONS BETWEEN LITTLE FALLS AND SENECA FALLS, AUGUST 20, 1828^1

Section	Contractor	Section	Contractor
1	A. B. Hovey & Co.	18	Daniel Renner
2	Daniel Bussard	19	Joseph H. Bradley
3	Daniel Bussard	20	James C. Lackland
4	John W. Baker	21	Thomas Crown
5	Daniel Bussard	22	John Farqurharson & Co.
6	Wathen and Underwood	23	Henry Smith
7	Clark & Clements	24	William Scott
8	W. W. Fenlon & Co.	25	Arnold T. Winsor
9	Daniel Bussard	26	Callen & Clements
10	Daniel Bussard	27	James O'Reilly
11	David Bussard	28	Washburn, Gustin & Bond
12	George Ketchum	29	Rubin Bracket & Co.
13	Thomas B. Tripp	30	H. W. Campbell
14	W. W. Fenlon & Co.	31	H. W. Campbell
15	Parmencies Asams	32	A. B. Hovey & Co.
16	Luke Hitchcock	33	A. H. Millard
17	Henry Smith	34	H. W. Campbell

¹ Proceedings of the President and Board of Directors, A, 41–41.

APPENDIX D

CONTRACTORS FOR SECTIONS BETWEEN SENECA FALLS AND POINT OF ROCKS AND FOR MASONRY WORK BETWEEN LITTLE FALLS AND POINT OF ROCKS, OCTOBER 25, 1828:¹

Section	Contractor	Section	Contractor
35	Knapp & Co.	60	McIntosh & Co.
36	Knapp & Co.	61	Richard Cromwell
37	Knapp & Co.	62	Richard Cromwell
38	Knapp & Co.	63	Darrow & Whitmore
39	Crown & Lanham	64	Darrow & Whitmore
40	Thomas Crown	65	McIntosh & Bennett
41	Plater & Helm	66	A. H. Millerd
42	Plater & Helm	67	R. Brackett & Co.
43	Plater & Helm	68	R. Brackett & Co.
44	Plater & Helm	69	R. Brackett & Co.
45	Plater & Helm	70	R. Brackett & Co.
46	Plater & Helm	71	T. McIntosh & Co.
47	Thomas Crown	72	()
48	Thomas Crown	73	J. Hurd & Co.
49	Higgins & Owens	74	Donley & Co.
50	Higgins & Owens	75	McIntosh & Bennett
51	Higgins & Owens	76	McIntosh & Bennett
52	Higgins & Owens	77	Donley & Co.
53	()	78	J. Hurd & Co.
54	J. Costigan	79	J. Hurd & Co.
55	Garey Hickman	80	J. Hurd & Co.
56	T. Gatton & Co.	81	J. Hurd & Co.
57	H. W. Campbell	82	J. Hurd & Co.
58	T. H. McCubbin	83	J. Hurd & Co.
59	W. A. Nichols & Co.	84	Walter B. Kemp
Lock	Contractor	Lock	Contractor
5	Bennett & Brackett	17	Kenny & Roberts
6	Bennett & Brackett	18	J. & J. Maynard
7	Brackett & Hovey	19	J. & J. Maynard
8	Brackett & Hovey	20	J. & J. Maynard
9	W. W. Fenlon & Co.	21	Holdsworth & Isherwood
10	Hale & Nichols	22	Kenny & Roberts
11	Kavenaugh & Knox	23	Kenny & Roberts
12	J. & J. Maynard	24	Holdsworth & Isherwood
13	Patrick Donnelly	25	Lafferty & Boland
14	Patrick Donnelly	26	Amos Johnson
15	J. & J. Maynard	27	Lafferty & Boland
16	J. & J. Maynard		-
AQUEDUC'	Τ NO. 1	Holdsworth & Ishery	wood
CULVERTS		W. W. Fenlon & Co	

¹ Proceedings of the President and Board of Directors, A, 93–98

APPENDIX E

LIST OF ENGINEERS APPOINTED ON THE FIRST DIVISION OF THE CHESAPEAKE & OHIO CANAL, NOVEMBER 22, 1828¹

The distribution of the engineers on the first division of the canal was as follows:

- (a) to the first residency, covering the line from the eastern termination of the canal through Section No. 6, were assigned Thomas F. Purcell, resident engineer, Charles D. Ward, assistant engineer, Peter Von Smith, rodman, and Randolph Coyle, volunteer rodman;
- (b) to the second residency, covering Sections Nos. 7–18, were assigned Daniel Van Slyke, resident engineer, Herman Boye, assistant engineer, and James Mears, Jr., rodman;
- (c) to the third residency, covering Sections Nos. 19–38, were assigned W. M. C. Fairfax, resident engineer, William Beckwith, assistant engineer, R. J. Bowie, rodman, and Thomas H. DeWitt, volunteer rodman;
- (d) to the fourth residency, covering Sections Nos. 39–64, were assigned Erastus Hurd, resident engineer, Charles B. Fisk, assistant engineer, and L. G. Davis, rodman; and
- (e) to the fifth residency, covering Sections Nos. 65–84, were assigned Alfred Cruger, resident engineer, Charles Ellet, assistant engineer, and William Wallack, rodman.

 $^{^{\}rm 1}$ Proceedings of the President and Board of Directors, A, 107–115.

APPENDIX F

LIST OF CONTRACTORS FOR WORK ON CANAL BETWEEN ROCK CREEK AND LITTLE FALLS, DECEMBER 10, 1828^1

Section A B C D E F G	Contractor Issac McCord & Co. John Baker B. J. Forrest & Co. Hewes, Lewis & Hewes Hewes, Lewis & Hewes
Dam 1 2	Contractor Issac McCord & Co. Issac McCord & Co.
Bridge 1 2	Contractor Issac McCord & Co. Issac McCord & Co.
Lock 1 2* 3* 4*	Contractor Issac McCord & Co. Issac McCord & Co. Issac McCord & Co. Issac McCord & Co.

* with bridges

Culvert	Contractor
E	B. S. Forrest & Co.
F	B. S. Forrest & Co.
G	B. S. Forrest & Co.
H	B. S. Forrest & Co.
I	B. S. Forrest & Co.
K	Hewes, Lewis & Hewes
L	Hewes, Lewis & Hewes

Pier, Waster Weir and Tide Lock at Rock Creek Basin—Isaac McCord & Co.

¹ Proceedings of the President and Board of Directors, A, 127.

APPENDIX G

LIST OF CONTRACTORS FOR LOCKHOUSES, DECEMBER 11, $1828^{1}\,$

House	Contractor
4	Thomas & Munroe
7	Richards & Kavenaugh
8	M. Kavenaugh & Co.
9	J. W. Maynard
10	J. W. Maynard
11	J. W. Maynard
12	J. W. Maynard
14	Wines, Bracker & Wines
16	Holdsworth & Isherwood
17	Thomas & Munroe
18	Thomas & Munroe
19	Thomas & Munroe

¹ Proceedings of the President and Board of Diredctor, A, 129.

APPENDIX H

LIST OF CONTRACTORS FOR RELET LOCKS, MARCH 14, 1829¹

Lock	Contractor
5	A. Knapp & Co.
6	A. Knapp & Co.
7	Fenlon & Bosteder
8	A. Knapp & Co.
12	Fenlon & Bosteder
15	A. Knapp & Co.
16	A. Knapp & Co.
17	A. Knapp & Co.
18	A. Knapp & Co.
19	Fenlon & Bosteder
20	A. Knapp & Co.
22	F. C. Clopper
23	Holdsworth & Isherwood
26	A. Knapp & Co.

¹ Proceedings of the President and Board of Directors, A, 178.

APPENDIX I

LIST OF LOCK TENDERS AND LOCATION OF LOCKHOUSES FROM LITTLE FALLS TO SENECA FALLS, AUGUST 7, 1830^1

Lock Lockhouse Section Loc	ck Keeper
5 3 1 Mr.	. Whalen
6 4 1 Wil	lliam Connor
7 5 4 Rot	bert Brooke
8 6 7 Sol	omon Drew
9&10 7 8 The	omas Burgess
11 8 8 Mr.	. Edmonston
12, 13 & 14 9 9 Cha	arles L. Sears
15 & 16 10 17 (No	name given)
17 & 18 11 18 Wil	lliam Roberts
19 & 20 12 18 Wil	lliam Roberts
21 13 23 Mr.	. Fuller
22 14 29 Mr.	. Wright
23 15 34 Lev	wis Sewell

¹ *Proceedings of the President and Board of Directors*, B, 157–159. Later on November 20, W. W. Fenlon was selected as lock-keeper of Locks Nos. 19 and 20 with general supervision of Locks Nos. 15–18.

APPENDIX J

LIST OF CONTRACTORS FOR SECTIONS FROM POINT OF ROCKS TO HARPERS FERRY, MARCH 14, 1832^1

Section	Contractor	Section	Contractor
90	Williams & Dawes	102	Offutt & Stone
91	Kemp G. Carter	103	Judson C. Pumphoy
92	Fred Bryan	104	L. F. & J. Pumphrey
93	Hawley & Campbell	105	L. F. & J. Pumphrey
94	O'Neill & Lanaghan	106	Pat McLaughlin
95	Ennis, Grimes & Ennis	107	Andrew Clements
96	Bers & Hyde	108	James Collan
97	Zach & Siatton	109	T. & S. McCoy
98	Watkins & Gatton	110	Bernard Collins
99	Lemuel Offutt	111	H. A. & J. Stewart
100	T. S. & G. M. Watkins	112	Henry Smith
101	Stephen Sands		

¹ Ledger A, 1828–1841, 370–414.

APPENDIX K

LIST OF CONTRACTORS FOR SECTIONS NOS. 113–117 (DAMS NOS. 3–4), JUNE 2, 1832.

Section	Contractor	Section	Contractor
113	John Noonan	136	Stephen Sands
114	J. & B. Gorman	137	Stephen Sands
115	William Harte	138	Frink, Hubbard & Co.
116	Samuel Miller	139	Frink, Hubbard & Co.
117	Morris & Nurray	140	J. P. & J. Dougherty
118	James & Fresh	141	Joshua Jamison
119	Sullivan & Mahorney	142	Josephus Beall
120	Sherlock & Gene	143	Gatton & Watkins
121	Dolan & Harford	144	A. & T. N. Clements
122	William Pollock	145	A. & T. N. Clements
123	Tenning Dodge	146	G. M. & R. W. Watkins
124	John Noonan	147	John Stocksdale
125	Sherlock & Gene	148	Enos Childs
126	William Eldridge & Co.	149	Josephus Beall
127	Stephan Sands	150	Offutt & Maccubbins
128	Stephan Sands	151	Offutt & Maccubbins
129	Z. & E. M. Gatton	152	Offutt & Maccubbins
130	Z. & E. M. Gatton	153	Seale & Curran
131	Gatton & Watkins	154	Gorman, Conolly &
132	Gatton & Watkins	155	Kennedy & O'Neill
133	Simon Dwyer	156	Kennedy & O'Neill
134	Seale & Curran	157	Thomas Heunessey
135	Charles H. McCann		

¹ Ledger A, 1828–1841, 416–504.

APPENDIX L

LIST OF MASONRY STRUCTURES AND DIFFICULT SECTIONS BETWEEN DAM NO. 5 AND THE CACAPON RIVER LET FOR CONTRACT, JULY 3, 1835^1

Aqueduct	Contractor		
6	Richard Holdsworth		
7	Robert Brown		
			~
Lock	Contractor	Lock	Contractor
45	W. Morrow	49	Daniel K. Cahoon
46	I. C. Lissig	50	Daniel K. Cahoon
47	Daniel K. Cahoon	51	Robert Brown
48	Daniel K. Cahoon	52	Robert Brown
		53	Patrick McGinley
Section	Contractor	Section	Contractor
203	John Seale	226	James Lonergan
204	John Seale	229	R. W. Watkins
205	David Lyles	230	R. W. Watkins
206	David Lyles	235	Samuel S. Piddle
207	Thomas M. McCubbin	236	James Ryan
209	Michael McMahon	237	Samuel S. Piddle
222	Lee Montgomery	243	Daniel C. Cahoon
225	Anthony Loftus	244	Daniel K. Cahoon
247	John Gorman	252	Bernard Gorman
248	John Gorman	255	Thomas Barr
Culvert	Contractor	Culvert	Contractor
137	John Lambie	173	Michael Smith
138	David Lyles	174	Michael Smith
139	David Lyles	175	Michael Smith
140	James J. McElhery	176	James Ryan
141	Daniel K. Cahoon	177	E. H. Fielding
142	James J. McElhery	178	E. H. Fielding
143	James J. McElhery	179	E. H. Fielding
158	Lee Montgomery	180	E. H. Fielding
159	Lee Montgomery	181	E. H. Fielding
163	Anthony Loftus	182	E. H. Fielding
164	James Lonergan	189	Daniel K. Cahoon
165	James Lonergan	190	John Gorman
166	James Lonergan	191	John Gorman
167	James Lonergan	192	William Brown
168	Michael Smith	193	William Brown
169	Michael Smith	194	John Lambie
170	Michael Smith	195	Daniel K. Cahoon
171	R. M. Watkins	196	John Lambie
172	Michael Smith	197	Daniel K. Cahoon

¹ Proceedings of the President and Board of Directors, D, 360–362.

APPENDIX M

LIST OF CONTRACTORS FOR SECTIONS BETWEEN DAM NO. 5 AND THE CACAPON RIVER, FEBRUARY 10, 1836¹

Section	Contractor	Section	Contractor
210	George Young	233	P. McGirk
211	P. Driskell	234	M. Mulhollon
212	John Moore	238	W. Story
213	G. S. Marsh	239	W. Story
214	G. S. Marsh	240	S. Nichols
215	G. S. Marsh	241	G. Magruder
216	G. S. Marsh	242	W. Blakely
217	G. M. Watkins	245	G. W. Higgins
218	John Moore	246	E. M. Gatton
219	G. S. Marsh	249	Patrick Crowley
220	G. S. Marsh	250	Patrick Crowley
221	G. S. Marsh	251	Patrick Crowley
223	Lee Montgomery	253	Patrick Crowley
224	G. M. Watkins	254	T. Gealey
227	Jonah Hood	256	J. O. Hearn
228	Jonah Hood	257	J. Hynes
232	P. McGirk	258	Henry Smith

¹ Proceedings of the President and Board of Directors, E, 18–19.

APPENDIX N

LIST OF CONTRACTORS FOR 54 SECTIONS AND 4 LOCKS BETWEEN DAM NO. 6 AND CUMBERLAND, SEPTEMBER 27, 1837^1

Section	Contractor	Section	Contractor
262	John O'Neill	320	Casper Dull
269	John O'Neill	321	E. Y. Bright
270	George D. Jorman	322	Nahum Starr
271	John Bevans	323	Wells Hatch
272	John Kirkwood	329	Robert McCoy
273	Martin Phelan	335	George W. Henry
274	J. Ferguson	336	Isaiah Frost
275	Zenus Barnum	341	George W. Henry
276	Zenus Barnum	342	Anson Bangs
278	Peter Bargey	343	Anson Bangs
279	Joseph Miller	344	R. Worthington
280	George Grier	347	W. P. Sterritt
281	Harvey Hackley	348	W. P. Sterritt
292	Robert L. Patterson	349	George Grier
293	Robert L. Patterson	350	George W. Johnson
294	Harvey Hackley	351	George G. Johnson
297	R. H. Bangs	352	Dennis Dougherty
312	Bernard O'Friel	353	Patrick Driskell
313	John Waldron	354	Henry McCurdy
317	George Murray	355	Henry McCurdy
318	Patrick McEvoy	356	Patrick Hagan
319	E. M. Gatton	357	W. P. Sterritt
Section	Contractor	Section	Contractor
358	George Grier	363	Simon Nicholls
359	Henry McCurdy	364	Clark Burnham
360	Thomas M. McCubbin	365	Charles Murray
361	John Dougherty	366	H. Devine
362	Simon Nicholls	367	H. Devine
Lock	Contractor	Lock	Contractor
68	Robert McCoy	74	George G. Johnson
73	George G. Johnson	75	George G. Johnson

¹ Proceedings of the President and Board of Directors, E, 317–319.

APPENDIX O

LIST OF CONTRACTORS FOR MASONRY WORK BETWEEN DAM NO. 6 AND CUMBERLAND, SEPTEMBER 29, 1837¹

Aqueducts	Contractor			
9	Frederick Pratt			
10	Frederick Pratt			
11	George G. Johnson			
Lock	Contractors	Lock	Contractors	
56	John Cameron	63	Michael Byrne	
57	W. C. Steedman	64	Michael Byrne	
58	W. C. Steedman	65	Michael Byrne	
59	Edward H. Fielding	66	Michael Byrne	
60	Michael Byrne	69	William Pratt	
61	Michael Byrne	70	William Pratt	
62	Michael Byrne	71	William Pratt	
	-	72	G. W. Henry	

Dam No. 8 and Guard lock No. 8—Sterritt & Lockwood

¹ Proceedings of the President and Board of Directors, E, 320–321.

APPENDIX P

LIST OF CONTRACTORS FOR AQUEDUCT NO. 9 AND 17 SECTIONS LET UNDER APRIL 2 ORDER OF THE BOARD, MAY 23, 1838¹

AQUEDUCT NO. 9—Enos Childs

Section	Contractor
270	John O. Hearn
272	Enos Childs
274	Patrick Gormly
279	S. A. Leckey
294	McLean Moore
297	J. S. Thompson
317	Selah Chamberlain
318	Patrick Hagan
319	Wells Hatch
342	Patrick Crowley
344	J. Dilley
351	J. Harris
353	George Hoblitzell
356	George Hoblitzell
363	William Story
364	L. Gatton
365	Edward Doyle

¹ Proceedings of the President and Board of Directors, E,

APPENDIX Q

LIST OF CONTRACTORS FOR LOCKS NOS. 57–67 AND CULVERTS NOS. 204, 210, 219–220, 225, AND 229 LET UNDER APRIL 2 ORDER OF THE BOARD, MAY 24, 1838¹

Lock	Contractor
57–58	James Wherry
59–66	Michael Byrne
67	J. Lobdell
Culvert 204 210 219 220 225 229	Contractor C. B. Ford John Reiley Everitt & Dilley Everitt & Dilley G. W. Henry John Reiley

¹ Proceedings of the President and Board of Directors, E, 425. At a later unspecified time, Lock No. 68 was let to J. N. Nesbett.

APPENDIX R

LIST OF SUBCONTRACTORS FOR SECTIONS BETWEEN DAM NO. 6 AND CUMBERLAND, APRIL 11, 1848¹

Section	Contractor	Section	Contractor
260	Ignatius Renner		John Kelley
261	Ignatius Renner	316	Andrew McMahon
264	William Whitman	321	Dr. Fitzpatrick
269	William Whitman	324-328	Everitt & Dilley
272	Thomas Bell	329	John Eggert
277	William Whitman	330-332	Fraser & Co.
282-291	Ritner & Co.	337–338	John Waldron
295–296	Henry Gallagher	339-342	W. W. Buel & Co.
298–299	Buel & Watt	345	John McManus
311–312	McCullough & Day	346	John McQuard
313	Thomas Sims	347–348	Sterritt & Humber
314	John Eggert	351–352	Sterritt & Humber

¹ Twentieth Annual Report (1848), C & O Co., Appendix D, 17–18.

APPENDIX S

LIST OF CONTRACTORS FOR CULVERTS BETWEEN DAM NO. 6 AND CUMBERLAND, APRIL $11, 1848^1$

Culvert	Section	Contractor
202	262	Moyal, Randal & Co.
204	277	Moyal, Randal & Co.
206	283	Ritner & Co.
207	285	Ritner & Co.
208	291	Ritner & Co.
210	296	Henry Gallagher
211	313	R. Sims & Co.
212	316	R. Sims & Co.
215	322	Sterrtt & Co.
216	330	Bruce & Haughey
217	331	Bruce & Haughey
218	332	Bruce & Haughey
221	337	Bruce & Haughey
223	339	Bruce & Haughey
224	340	Bruce & Haughey
228	342	Bruce & Haughey
230	345	Bruce & Haughey
231	346	Bruce & Haughey

¹ Twentieth Annual Report (1848), C & O Co., Appendix D, 12.