

Big Cut, Big Fill

The Atglen & Susquehanna in Providence Township



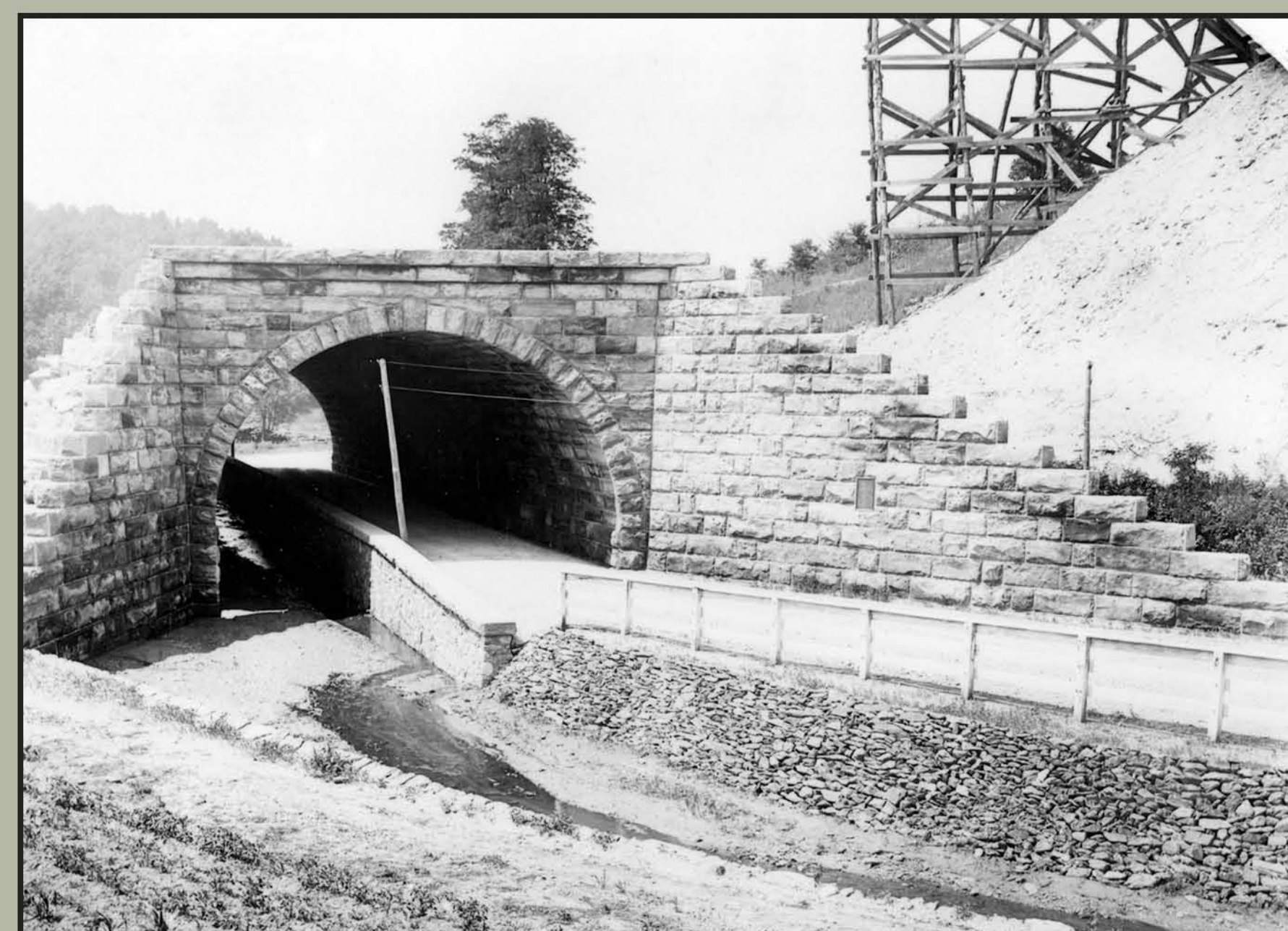
Kline Collection, Railroad Museum of Pennsylvania, PHMC.

Eight A&S section contracts were awarded in the spring of 1903 for masonry and grading, although excavation might have more accurately described work in Providence. McManus was first to begin work. Compressed air drills (foreground of image above) sunk pilot holes in rocky sections for dynamite blasting. British steam shovels removed the debris in descending layers, along with a crew of 300 men under McManus.

Some of the cut material formed the towering berm over what eventually became separate north and south bound tunnels for Route 272 (lower left images).

Completion of the A&S (1906) coincided with mandatory retirement (age 70) for the PRR's notable Chief Engineer, William H. Brown (b.1836 - d.1910). Born in Little Britain Township, Brown served the

PRR for 44 years. In his 32 years as Chief, the PRR was physically transformed by a succession of engineering triumphs. Brown and McManus had concurrent careers and numerous joint projects with the PRR. For the last twenty years of Brown's life, the two were next-door neighbors in Philadelphia's Powelton Village.



Columbia Historic Preservation Society, Columbia, PA.



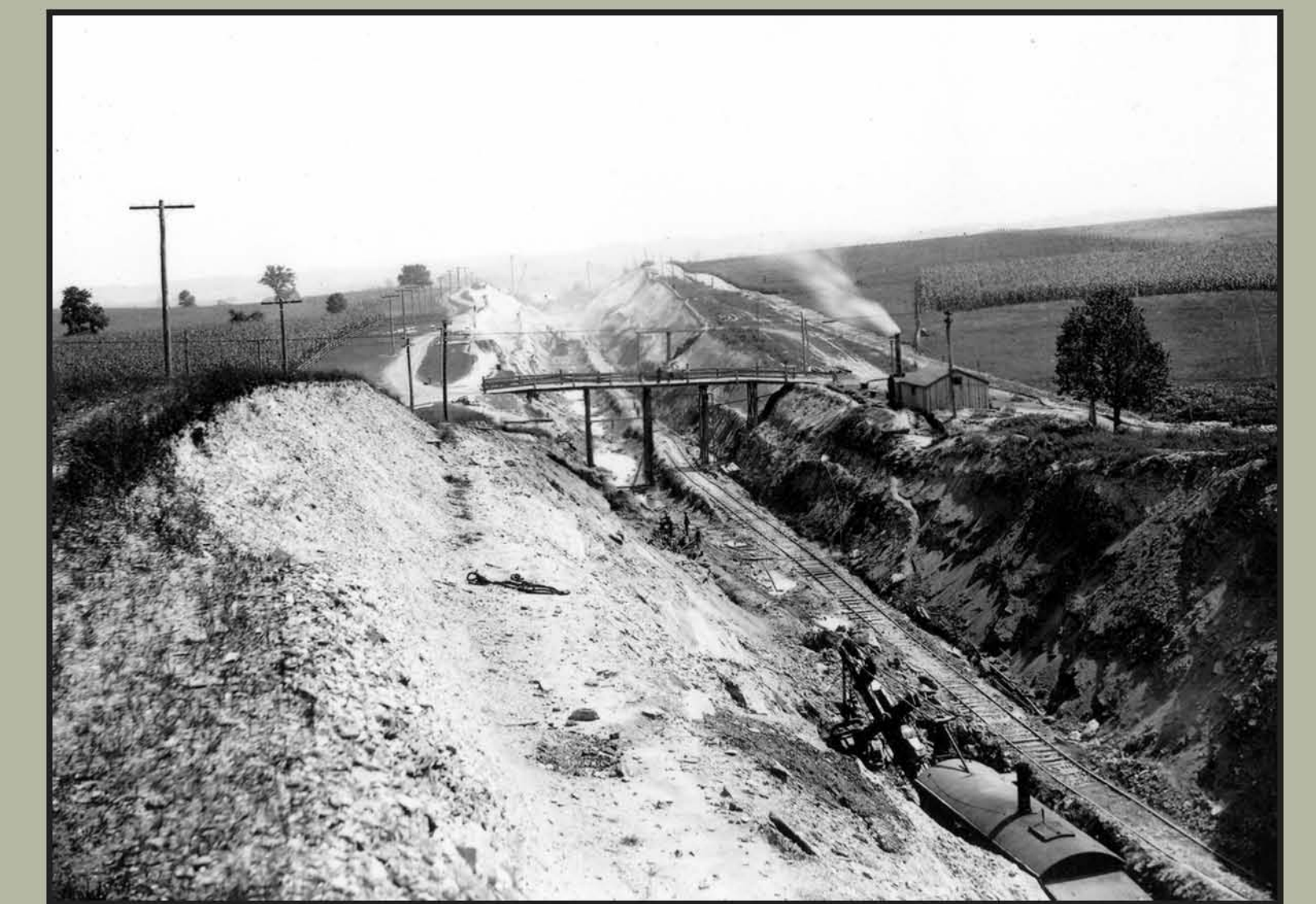
James P. Shuman photograph, Railroad Museum of Pennsylvania, PHMC.

No other section of the eastern A&S more fully demonstrated the Pennsylvania Railroad's (PRR) commitment to re-shape the landscape for an optimum freight road than its seven miles through Providence Township. The gentle compound curve (on paper) became a canyon that few residents could have anticipated. The A&S bisected farms with gaping, unstable slopes. It spanned the route with twelve new road bridges (upper right image) and crossed another dozen streams. Unwilling to compromise its goal of minimal grades for trains, the A&S found no naturally accommodating corridor through Providence. The PRR incised one.

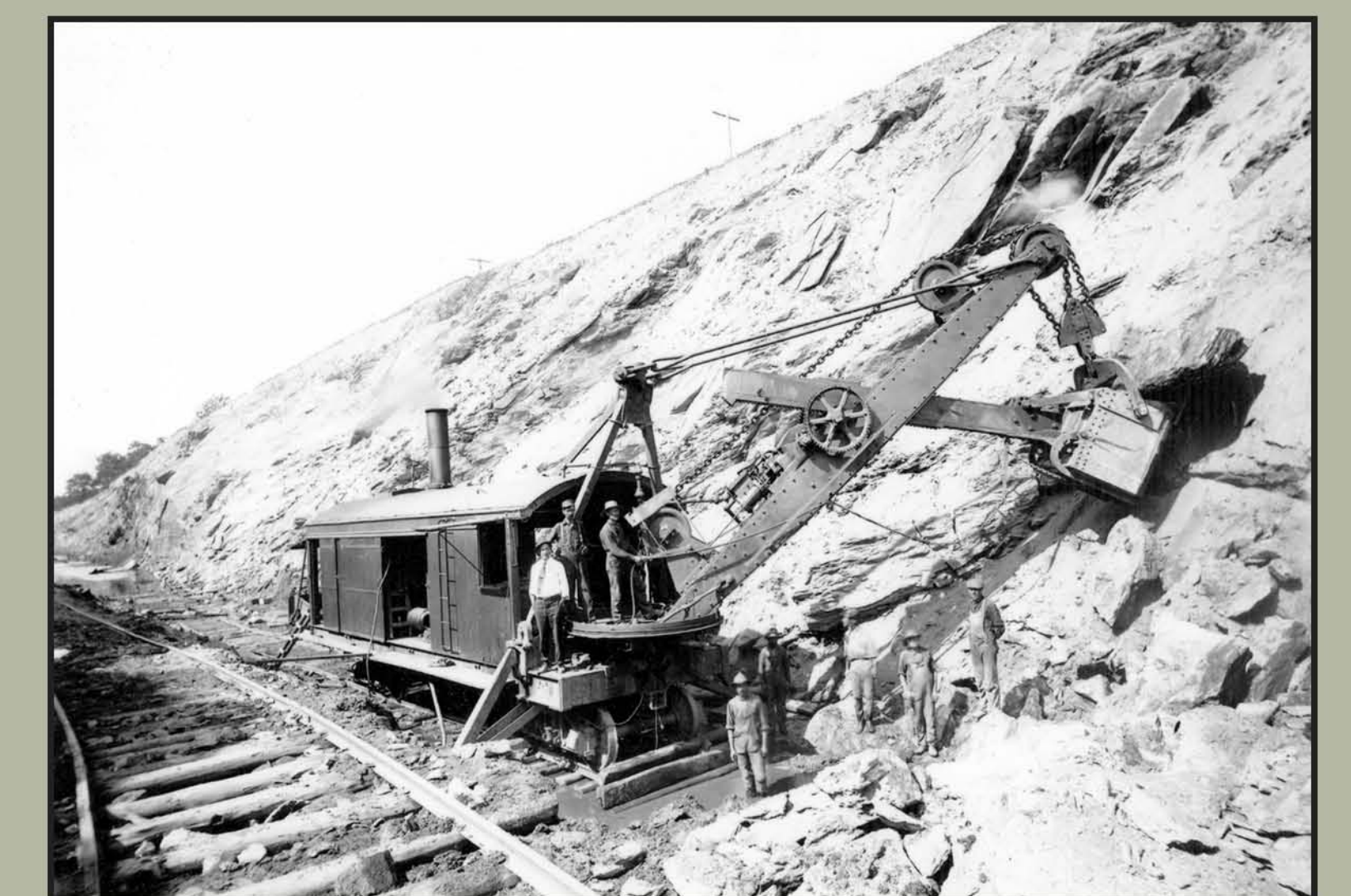
It was likely no accident that one of the nation's most experienced railroad contractors, McManus Construction Company of Philadelphia, was awarded the arduous Providence section. Work extended westward from Quarryville, where an existing railroad branch from Lancaster hauled in materials and massive steam shovels. At least three temporary rail spurs trailed off the older railroad to supply A&S work sites. In the cuts, temporary construction track bobbed along the deepening route, requiring constant relaying to stay ahead of the track-bound shovel (center right images). McManus removed an estimated 1.3 million cubic yards of rock and earth over seven cuts, as deep as ninety feet.



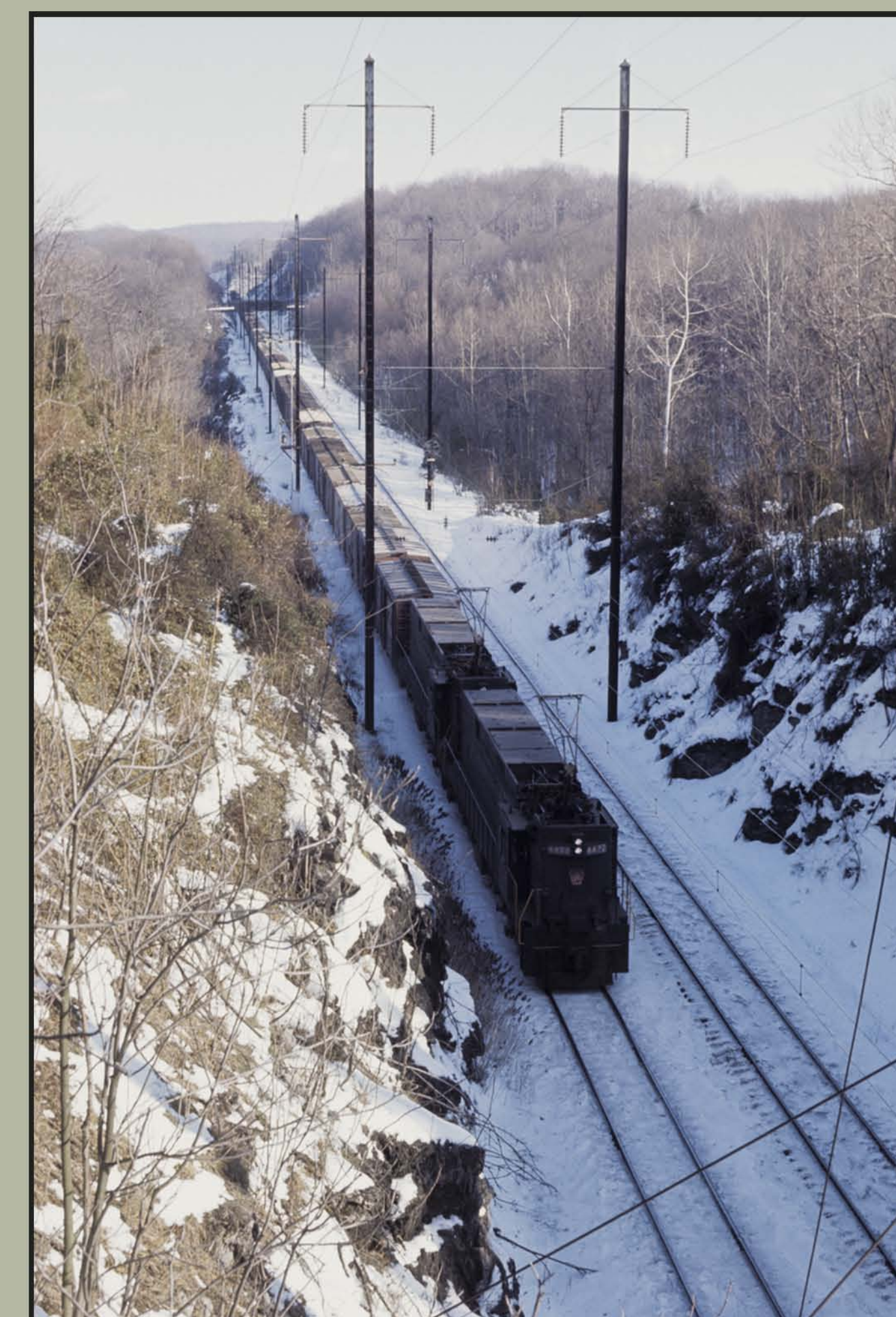
Courtesy of LancasterHistory.org, Lancaster, PA.



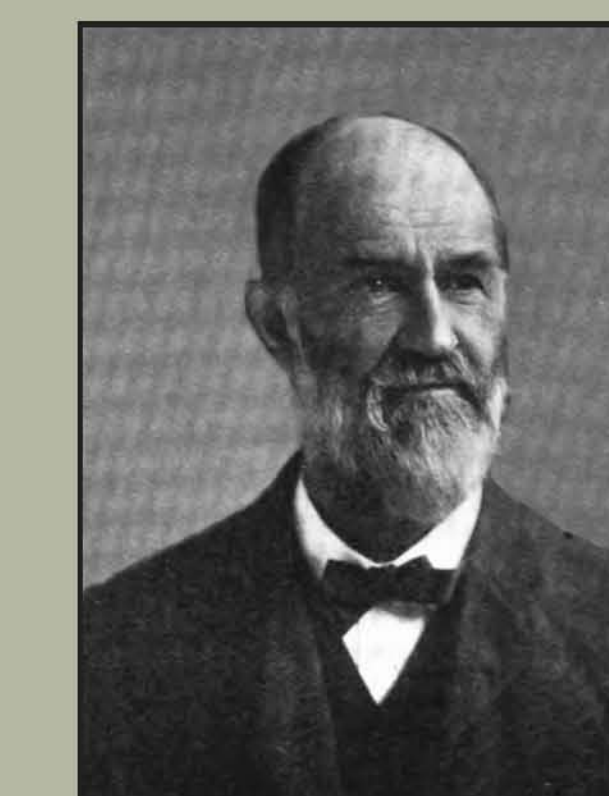
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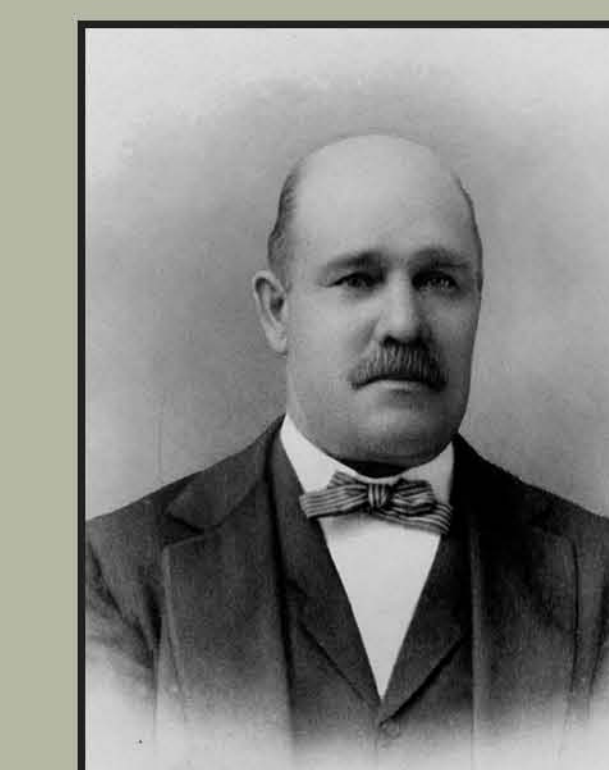
Columbia Historic Preservation Society, Columbia, PA.



James P. Shuman photograph, Railroad Museum of Pennsylvania, PHMC.



William H. Brown, Chief Engineer
Pennsylvania Railroad



Patricius McManus, Contractor
A&S Section 3, Providence Twp.



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