CORK RUN TUNNEL
(Berry Street Tunnel)
(Tunnel No. 2)
Pittsburgh and Steubenville Railroad
from the Chartiers Avenue Bridge, heading
2371 feet west
Pittsburgh
Allegheny County
Pennsylvania

HAER No. PA-382

HAER
PA
2-PITBU,
71-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

HAER
PA
2-PITBU,
71-

HISTORIC AMERICAN ENGINEERING RECORD

CORK RUN TUNNEL
(Berry Street Tunnel)
(Tunnel No. 2)

HAER No. PA-382

LOCATION:

Pittsburgh and Steubenville Railroad, from the Chartiers Avenue Bridge, heading 2371 feel west
Pittsburgh, Allegheny County
Pennsylvania
UTM: 17.579560.4470860
QUAD: Pittsburgh West, 1:24,000

DATE OF CONSTRUCTION:

1851-56/1862-65/1871-73/c.1900

BUILDER:

1851-56 Pittsburgh and Steubenville Railway Company
1862-65 Western Transportation Co.
1871-73 Pittsburgh, Cincinnati and St. Louis Railway Company
c.1900 Pennsylvania Company

PRESENT OWNER:

Buncher Corporation
Pittsburgh, Pennsylvania

PRESENT USE:

Not in use.

SIGNIFICANCE:

The Cork Run Tunnel is one of nine tunnels constructed on the original Pittsburgh and Steubenville Railroad and the only one that remains. The tunnel provided an important link between Pittsburgh and all points west on the main line.

PROJECT INFORMATION:

During construction of the Port Authority Busway/HOV project, the Port Authority of Allegheny County proposes to reconstruct the tunnel. In a Memorandum of Agreement, the State Historic Preservation Officer stipulated documentation of the Cork Run Tunnel, a contributing structure within the Panhandle Historic District. A National Register of Historic Places nomination form for the District was prepared by Christine Davis Consultants, Inc.

Christine Davis and Frank Kurtik
Christine Davis Consultants, Inc.
560 Penn Street, Verona, PA 15147

INTRODUCTION

The Cork Run Tunnel passes through the 28th Ward of the City of Pittsburgh and the Borough of Ingram in Allegheny County, Pennsylvania. The tunnel was constructed by the Pittsburgh and Steubenville Railroad, one of many such lines laid out and built by entrepreneurs to increase access to the nation's natural resources, particularly bituminous coal, gas, oil and timber. The long-term success of these industrial lines often relied upon their ability to tie into larger transportation networks provided by trunk railroad lines. Through its various incarnations, the development of the Pittsburgh and Steubenville Railroad into the Panhandle Division of the Pennsylvania Railroad Company is typical of connecting railroads in the Pittsburgh region.

When owned by the Pennsylvania Railroad Company, the Cork Run Tunnel served the Main Line of the Panhandle Division, Eastern Ohio Grand Division in the Central Region. Now owned by the Buncher Corporation, the tunnel is included within the Panhandle Historic District. The Historic District includes a total of thirty-five structures: the rail corridor, seventeen bridges (or bridge abutments), nine ashlar retaining walls, two signal tower niches, the Oakwood Culvert, the Cork Run Tunnel (also known as the Berry Street Tunnel), the Corliss Street Tunnel, the Esplen Fly-Over, the Sheraden Depot and the Ingram Station.

The name of the tunnel is attributed to Cork Run, a tributary of the Ohio River just below Pittsburgh. The valley above the stream's mouth was covered with fill in the late 19th century era of Pittsburgh's industrialization. The resulting artificial plain afforded a wide expanse of land for the Sheraden yards at the Pittsburgh portal of the tunnel. [1] Geologically, the tunnel is situated in the Unglaciated Allegheny Plateau. The strata through which the tunnel passes are part of the Casselman Formation of the Conemaugh Group within the Pennsylvania System. The top of the Conemaugh Group is the interface with the Pittsburgh Coal while the site bedrock is known as Ames Limestone. The Cork Run Tunnel was driven through the Birmingham sandstone and shale. Overlying these strata are the Birmingham "Schenley" red beds, Wellersburg coal, Morgantown sandstone, and Clarksburg claystone. The tunnel is located on the northwestern flank of the Carnegie syncline and the axis of the tunnel parallels the structural axis of the syncline. The stratigraphic units rise to the tunnel's northeastern or Pittsburgh Portal and dip to the southwestern or Ingram Portal. [2]

Early Tunnel Construction

Although tunneling was practiced by ancient civilizations, most notably the Romans, it was not until the nineteenth century that this method of overcoming natural obstacles had its full development. Canal and railroad construction as practiced on the European continent and in England by the famed engineer, Isambard Kingdom Brunel, among others, provided the models for American tunnel driving. While the first tunnel ever built in the United States was a canal tunnel begun in 1818 for the Schuylkill Navigational Canal, the first railroad tunnel built here was the Staple Bend Tunnel constructed between 1828 and 1834. It served the Allegheny Portage Railroad which carried the Pennsylvania Main Line Canal over the Allegheny Mountain in Cambria County. [3] The Staple Bend Tunnel's portals employed the use of ashlar for the facade which was executed in a style reflecting a Greek Revival architectural influence. Ashlar was used to line the first 150 feet of each of the 901-foot tunnel's end sections. [4] The middle of the tunnel was cut into bedrock and was not lined.

The second railroad tunnel in the United States was built between 1835 and 1837 for the Philadelphia and Reading Railroad. It was the first American tunnel to be advanced from shafts sunk through overburden to the tunnel floor level. Only a total twenty-nine tunnels had been constructed for rail lines in all of the United States by 1850. [5] In the following year, W. Milnor Roberts was engaged by the Pittsburgh and Steubenville Railroad to serve as a consulting engineer during construction of its new line. [6] With his broad experience in canal and railroad construction, Roberts was uniquely qualified for such a post. He began working on the Union Canal in Pennsylvania when he was only fifteen years of age and became the chief engineer of the Lancaster & Harrisburg Railroad at the age of twenty-five. Subsequently, he designed and oversaw the construction of many railroads and canals. In 1852, the year after Roberts was engaged by the Pittsburgh and Steubenville Railroad for work on a route that included the Cork Run Tunnel, he was commissioned to design the Allegheny Tunnel on the New Allegheny Portage Railroad. [7]

Construction of the Cork Run Tunnel

The Cork Run Tunnel was one of nine original tunnels on the Panhandle line between Pittsburgh and Steubenville. The Pittsburgh and Steubenville Railroad planned a tunnel at this location to carry the line from an embankment along the Ohio River up a grade of fifty-two feet to the base of a steep ridge near Cork's Run.

The summit of the ridge is approximately 800 feet above the pool level of the Ohio River. The first construction phase for the Cork Run Tunnel began between 1851 and 1856 when the project was designed as a single-track brick arch tunnel of 2,100 feet in length. There were three components of the tunnel's construction: 1) sinking the construction shaft in the center of the tunnel; 2) excavation and lining of the tunnel; and 3) excavation of the eastern and western approaches with cuts up to 70 feet deep.

The approaches to the Cork Run Tunnel more than doubled the length of excavations necessary to form the structure. The eastern approach to the tunnel extended for 1,800 feet while the western approach extended for 1,200 feet. The horseshoe shape of the original tunnel arch measured thirteen feet at the spring line and twelve feet at grade. Five courses of brick lined the arch while a combination of brick and rubble masonry lined the side walls. A grouting of cement supported spaces between the brick and bedrock. The tunnel measured sixteen feet two inches from the top of the rail to the crown of the arch.

The practice of sinking a shaft at or near a planned tunnel's mid-point was often carried out to expedite the job as opposed to working from the ends only. The use of shafts created additional expense because the ventilation and removal of excavated materials took place through the shaft. Openings were required for lighting the work space and providing for the emission of smoke. [8] Construction of the Cork Run Tunnel began with the sinking of such a shaft from a point near the top of the hill and 800 feet west of the east entrance. The shaft was sunk to the level of the tunnel floor. From the bottom of the shaft, the tunnel excavation began on the west or Ingram portal with work progressing east to a point 300 feet from the Pittsburgh portal.

By 1856, the major task of excavating the deep cut into bedrock for the approach leading to the tunnel's Ingram portal was mostly completed. Here, the cut continued for 1,200 feet through nearly 70 feet of cover near the portal. At the Pittsburgh Portal, work was completed for approximately 1,700 feet and the arch lined with brick masonry. The heading continued for another 100 feet. The total approach cut at the Pittsburgh Portal measured 1,800 feet in length with a planned depth of seventy feet. However, this approach was only partially excavated, and no work was completed within the east end of the tunnel when in 1856 the project was temporarily abandoned due to financial problems. By 1860, the Pittsburgh and Steubenville Railroad extended for forty-two miles between the two cities. [9] Six years later, in 1862, the Western Transportation Company was formed to recommence the work on the Cork Run Tunnel and other railroad projects in Pennsylvania. This

company brought the tunnel project to completion in 1865. Among members of the board of Directors was J. Edgar Thomson, President of the Pennsylvania Railroad. [10] Once the tunnel was completed, defects in the earlier construction phase became apparent and within a year its safety and structural integrity came under scrutiny. Because the tunnel was not cut to sufficient height and width, the number of brick courses in some places had been reduced from five to only two or three. Sections of the side wall were formed of rubble stone masonry measuring only four to six inches thick, and the mortar mixture proved to be of inferior quality. Most importantly, there were hollow spaces in the wood timbering used to buttress irregular cuts made during construction of the arch and many timbers began to decay leaving voids. Necessary repairs to the masonry created significant delays in rail traffic.

In order to maintain traffic along the route during the repair process, scaffolding erected for this work had to be removed regularly to allow trains to pass through. The delays and costs accelerated until it was estimated that the cost for each cubic yard of masonry was "the enormous sum of $69". [11] In the 1850s, when the erection of the tunnel was initiated, the average daily construction rate for tunnels in the 1850s ranged from 2.33 to 5.56 feet per day with costs ranging from $2.00 to $6.60 per cubic yard. [12] Adding to the existing problems with traffic delays at the tunnel, transporting the materials for repair projects over the existing single line compounded the already-existing traffic problem. At the end of 1868, the total cost for work between Birmingham and Cork Run (a three-mile stretch of track) was $291,637.60. [13] Once completed, the tunnel continued to provide both passenger and freight service. Passenger stations had been present along the Panhandle route at least as early as 1867. On the Ingram side of the Cork Run Tunnel, the Fleece Dale Farm Plan of Lots (developed in September of 1867) indicated a road to the "Ingram Station" located near the tunnel. [14] In 1879, the Sheraden station was located within a "most delightful country district... The land above the tunnel is devoted to agriculture." This "scene of rural gaiety" included land that had been divided into large gardens to supply wholesale produce to Pittsburgh markets. The Ingram station "abounds with richest scenery" on hills forming a backdrop for "God's orchards in varied foliage". [15]

The single-track Cork Run Tunnel, completed in 1865, served the railroad for five years until the Pittsburgh and Steubenville Railroad was re-formed as the Pittsburgh, Cincinnati and St. Louis Railway Company (PCC&StL). Soon after the new company was organized, Engineer M. J. Becker wrote to President of the Company, J. L. Jewett of Steubenville, Ohio regarding the need for double

tracking the line. Becker apparently made a good case for his cause since a contract came to be concluded with Alexander Christie on March 16, 1868 for all the masonry, excavation and embankment between Birmingham (now part of Pittsburgh's South Side) and the Cork Run Tunnel. Under this contract, 40,000 cubic yards of earth and rock were excavated and removed to prepare for the permanent roadbed for the second track and 33,352 cubic yards of masonry were used for retaining walls. At the same time, the voids beneath dangerous trestles were infilled to make solid embankments. [16]

In July of 1870, the decision was made to widen and re-arch the tunnel to accommodate a double track system. The company awarded a contract to Owens and Morney of Pittsburgh to widen the tunnel and to lengthen it by 300 feet on the Pittsburgh approach.

The Cork Run Tunnel, built into solid rock, extends from the base to a height of twenty-one feet near the crown of the arch. Timbers supported the upper arch. The classic basket-arch of the tunnel was created when the structure was expanded to accommodate two tracks. The original horse-shoe shape of the single track tunnel was altered during this expansion when the tunnel was increased bilaterally in width from the center line of the original single track. In this way, the center line of the tunnel when it served as a single track also served as the center line for the double track. Two courses of sandstone formed the sidewall foundations, while the upper courses were checked to receive the brick courses above. The sidewalls curved at a radius of twenty-five feet, while the semi-circular top arch had a radius of twelve feet six inches. The brick walls measured two feet two inches in thickness and were laid in hydraulic cement obtained from R. J. Beeson of Uniontown, Pennsylvania. The tunnel arch was made of six courses of brick and cut sandstone was used for the portal facades. [17] The double track extended west for sixteen miles from Pittsburgh and greatly facilitated the handling of heavy traffic, notably carloads of coal. The Cork Run Tunnel reconstruction was completed in April of 1873. [18]

The critical need for adequate switching and signalling mechanisms at the tunnel became increasingly evident as trains derailed inside the tunnel, an event which seems to have occurred with some frequency. For example, on March 1, 1873, the *Pittsburgh Evening Chronicle* reported delays from derailed trains in the Cork Run tunnel on two consecutive days. Passengers had to leave the train and walk through the tunnel to their destinations. The tunnel posed a second problem with insufficient clearance between the tracks. Although the tunnel could handle most freight trains passing in opposite directions on the double-track line, many large freight cars could not pass side-by-side. Two passenger cars were

not permitted to pass at the same time through the tunnel. [19] To coordinate trains in the tunnel, the railroad company constructed an interlocking signal station beneath the Chartiers Avenue Bridge. At the tunnel's Pittsburgh approach, a guard station of concrete was built.

In late 19th century Pittsburgh, the movement of trains loaded with bituminous coal was of heavy volume on routes in and around Pittsburgh. The bottleneck at Cork Run was an especially egregious example, demonstrated by the use of the Pittsburgh, Chartiers and Youghiogheny Railway (PC&Y) as an alternate route around the Cork Run Tunnel. Formed in 1881, the nineteen-mile line transported primarily bituminous coal between the south side of Pittsburgh and Mansfield, now Carnegie. [20] The PCC&StL Railway and the Pittsburgh and Lake Erie Railroad Company jointly owned the PC&Y, but the Panhandle Division purchased the line in 1892. As the freight traffic increased, the PC&Y constructed the Scully freight yards in 1905. [21]

The bottleneck at Cork Run Tunnel and the need to divert coal arriving from the south away from the City of Pittsburgh continued to pose a transportation problem. To remedy this situation, construction on the Ohio Connecting Railway (OCR) began in 1889. The line opened on October 20, 1890 with a bridge between West Carson Street and across the Ohio River where the line connected the Pittsburgh, Ft. Wayne and Chicago Railroad on the opposite shore. [22] In the 1880s, the area above and adjacent to the tunnel was subdivided into lots and developed with a grid of residential streets. Suburban dwellings were built over the tunnel. [23] After one of the streets (Berry Street) was established on April 5, 1910, the tunnel became known as the Berry Street Tunnel. [24]

In the valley of Cork's Run, the railroad company created the Sheraden Yards by infilling the steep valley to accommodate fourteen series of tracks. Sheraden was one of the smaller yards on the line, but it was important because of its location in the approach to the tunnel. In order to construct the yards, a series of streets in the former Edward McGinnis Plan of Lots were vacated including Railroad, Neville and Short Streets. In 1913, Ravine Street, which crossed the former ravine of Corks Run, was vacated for the expansion of the yard. [25] The Sheraden Yards were a significant component of the Panhandle Division. In 1908, the Yard was composed of fourteen freight and passenger train tracks, as well as various sidings for a lumber company, the Harper Grain Elevator and a coal trestle. [26] A freight house, ice house, and scales were located in the yards. Also included were a receiving yard with space for 214 cars, the classification yard for 417 cars, the west-bound yard for 243 cars, and space for 229 other cars.

This series of fourteen tracks with yard space for 1,103 railroad cars all funneled to the two tracks leading to the Cork Run Tunnel.

Between the Sheraden Yards and West Carson Street along the Ohio River, the City of Pittsburgh proposed to construct the Corliss Street Tunnel in 1912 beneath four main tracks of the Panhandle, three Ohio Connecting tracks and one siding. [27] At that time, the Main Line of the OCR continued north along the Ohio River, while the Sheraden Branch of the OCR connected the Sheraden Yards with the mainline.

Despite the complete reconstruction of the tunnel in 1873, costly repairs continued to plague the structure. The tunnels and bridges on the line were inspected twice a year when a work train and caboose traveled the line to tamp the linings of the tunnel arches with hammers and picks. An example of the continual problems with the tunnel occured on July 11, 1897 when a section of bricks, totalling more than a half a railcar load, fell from the roof of the tunnel about 300 feet from the Ingram portal and directly over the east-bound track. Inspectors examined the roof and determined that the "entire roof was giving away" and that it would be necessary to erect regular tunnel centers and rebuild the lining. [28]

On September 10, 1902, the inspection report noted that the exhaust from the steam engines resulted in "considerable" deterioration of the cement joints in the Cork Run Tunnel. The inspectors suggested that the old "Louisville" mortar should be replaced with Portland cement. At that time, it was estimated that 2,000 square feet of the tunnel would require patching at an approximate cost of $2,000. [29] In addition, the rock cut on Pittsburgh side of the tunnel was eroding and falling into the drainage ditch along the tracks. When the ditches filled with eroded stone, water covered the tracks.

In 1906, R.E. McCarty, General Manager of the Panhandle Division, described the difficulties maintaining the Cork Run Tunnel.

> "We have had a gang of masons working in this tunnel almost continuously for the last ten years.. the cost of maintenance will no doubt increase as years go on, to say nothing of the difficulties and dangers both to employees and passengers."

At that time, McCarty proposed to either widen and re-line the tunnel or to construct a duplicate tunnel beside the existing structure. [30] A detailed inspection of the tunnel was completed and the results presented to the General Manager on June 6, 1906. Four months before the inspection, the innermost ring of brick and decaying mortar had been replaced and the new bricks were laid with

Portland cement. During the inspection, however, the whole arch was still badly deformed and cracked with each ring of brick separating from the others. The company seriously considered the proposal to construct a second double-track tunnel adjacent to the Cork Run Tunnel for passenger traffic. The cost estimate was $425,000 for the new tunnel to be constructed along the existing tunnel or only $120,000 more than the cost of relining and widening Cork Run Tunnel.

The maintenance of service during tunnel repairs became a critical issue. Men making repairs to the arch stood on ladders until a train entered the tunnel at which point they would have to lower the ladders and run to a series of manholes on the north side of the tunnel. This dangerous situation resulted in the death of workers, long delays and escalated expenses. In 1906, approximately 160 passenger and freight trains regularly passed through the tunnel each day. During periods of repair, the majority of trains could be detoured through the Scully Yards on the Pittsburgh, Chartiers and Youghiogheny Railroad, yet, thirty-five freight trains and fifty-five passenger trains had to use the tunnel each day during construction work. As repairs continued through November of 1918, a derrick caused a cave-in resulting in the death of one laborer and the destruction of the tunnel's portal stones. [31] Repairs made to the tunnel at that time included the driving of wooden plugs into the wall to which iron ribs were fastened. Behind the ribs, wood lagging was placed to act as a form for the brick work.

While repair work continued, passenger service between Idlewood, Crafton and Sheraden had to be eliminated. The frequent detours and inconvenience of using the Scully route created "nervous apprehension" for customers. [32] Passenger service played an important local role in railroad use for the area west of Sheraden. Of the 131 trains that passed through Crafton in 1915, 101 were passenger trains. [33] However, during this period, the interurban trolley system expanded throughout Pittsburgh's suburban communities. The expense of constructing a new passenger train tunnel at Cork Run may have been eliminated as a result of this new transportation service.

McCarty's plan to either construct a second parallel tunnel or to widen the original tunnel was never undertaken. Instead, a cut-and-cover extension of 320 feet on the Pittsburgh portal occurred about 1900 and was most likely due to the differential weathering problem on the cut slope above the tunnel. This new cut-and-cover section of the tunnel was constructed in the steepest area of the former approach where rock falls onto the tracks created continual maintenance problems. [34]

Between the Cork Run Tunnel and the Sheraden Yards, the Chartiers Avenue Bridge over the Panhandle provided access across the tracks to Sheraden and the large railroad station on the north side of the bridge. In 1908, the Panhandle proposed a new bridge to carry Chartiers Avenue and the Pittsburgh Railways trolley tracks over new east and west bound passenger and freight tracks at the approach to the Cork Run Tunnel. [35] The existing Chartiers Creek Bridge was constructed in 1939.

The final major construction project in the tunnel occurred in 1963 when the Pennsylvania Company re-grouted the tunnel to seal voids in the liner and to prevent filtration of groundwater into the tunnel. In addition, patches of shotcrete were applied to the liner. [36]

In 1920, the American Railroad Association complained to the superintendant of the Panhandle Division that conditions at the Corliss yards were "very bad" with too much traffic being funneled through the yards. [37] Finally, on April 24, 1936 the Sheraden Yards were retired when the trackage was no longer needed. [38]

Ten tunnels - four in Pennsylvania and six in Ohio - were constructed on the original Pittsburgh, Cincinnati and St. Louis Railroad. When the Pennsylvania Railroad took over the line, Cork Run Tunnel was known as Tunnel #2 on the Panhandle Division. The four Pennsylvania tunnels were located in the City of Pittsburgh under Grant's Hill, at Cork Run, and in the towns of Bulger and Dinsmore in Washington County. Maintaining these tunnels became a financial burden to the railroad and repairs created delays and bottlenecks just at a time when the railroads needed to demonstrate efficiency. In 1906, the company removed the overburden above the Bulger Tunnel near Burgettstown so to make it an open cut, or in tunneling terminology, "daylighted." Finally, nine of the ten Panhandle tunnels were "daylighted" or abandoned, with the Cork Run Tunnel being the only one remaining in 1947. [39]

PHYSICAL DESCRIPTION OF THE TUNNEL

The Cork Run Tunnel measures 2,371 feet in length and has a diameter of approximately twenty-five feet with spacing between the tracks of eleven feet two inches. There is a four-degree curve in the east end of the tunnel. [40] Today, a residential housing plan covers the area above the original tunnel. The tunnel liner of red brick and mortar measures approximately two feet in thickness. Test borings for the tunnel were conducted between July 9 and August 6, 1993. Six courses of brick were identified in the tunnel

arch. The brick was laid over a grout of 0.2 to 0.5 feet in thickness. [41] A grout layer from 0.1 feet to 2.0 feet was present between the brick and the sandstone bedrock. Arched manhole niches built to protect workers during repair and construction periods are recessed into the north side of the tunnel's interior.

The Pittsburgh Portal was constructed when the cut-and-cover extension of the tunnel was completed c. 1900. This cut-and-cover extension involved covering 320 feet of the original approach with fill. The fill does not reach the top of the original cut and today is covered with vegetation from the original portal to the existing portal. The Pittsburgh portal was constructed of rock-faced sandstone with an occasional axed sandstone block bearing chisel drafts on the edges suggesting stones from the earlier portal were included in the new construction. Square voussoirs form a basket arch with a raised keystone and a stone coping covers the top of the portal. The use of ashlar, voussoirs and coping represent a common practice on the railroad in cities or "places where appearance is of importance". [42]

The Pittsburgh portal is partially infilled with concrete and locked metal gates provide pedestrian access only. The rock cut at the portal is sixty feet in depth at the portal and continues to the Chartiers Creek Bridge where the rock cut is approximately twenty feet in depth. In the cut walls of the approach, concrete reinforces the approach and prevents erosion from the differential weathering of the high walls. The concrete has been applied since c. 1900 [43] and has been repaired and extended since that time. On the south side of the portal, there is a concrete gutter containing a metal pipe housing the communication lines between the tunnel and the former Sheraden tower. [44] An arched reinforced concrete guard station is located on the north side of the Pittsburgh approach near the portal.

On the Ingram approach, the tunnel plunges into the steep hillside. This portal is covered with concrete and capped with a coping of five courses of brick. The portal was damaged and repaired with concrete in November of 1918 when a derrick caused a cave-in resulting in the death of one laborer and the destruction of the tunnel's portal stones. [45] The approach to the Ingram Portal was cut into the Birmingham sandstone and shale from twenty feet in depth at the East Prospect Bridge to sixty feet in depth at the portal. The vertical rock cuts on both approaches experience continual differential weathering creating the potential for rockfalls. It was this condition that most likely resulted in the construction of the cut-and-cover section of the tunnel c. 1900. The steep sidewalls are so deeply undercut that rockfalls resulted, creating a continual safety hazard. Instead of repairing the

walls, the tunnel was elongated by approximately 320 feet on the Pittsburgh approach.

SIGNIFICANCE

The Cork Run tunnel is one of nine tunnels constructed on the original Pittsburgh and Steubenville Railroad line and the only one to remain extant. When the tunnel was built in 1850, there were only twenty-nine other tunnels in the nation. Remaining from the original 1850s construction is the original Ingram approach and a segment of the Pittsburgh approach. The Pittsburgh portal dates to the period when the cut-and-cover segment of the tunnel was constructed (c. 1900). The Ingram Portal was damaged during an accident in 1918 and is now covered with concrete parget. The interior brick arch remains in its original 1873 configuration, although extensive repairs have been made to the structure after its construction as a double-track tunnel.

REPOSITORIES

Records housed in the following repositories were used in the preparation of this report: the Library of Congress, the Carnegie Library of Pittsburgh, Hillman Library and Darlington Library (both of the University of Pittsburgh), the library of The Historical Society of Western Pennsylvania, the Pattee Library of The Pennsylvania State University and the Pennsylvania State Archives. In the course of research at Labor Archives in the Pattee Library of The Pennsylvania State University, a total of thrity-two boxes of records from the CONRAIL collection were examined. Although references to drawings of the Cork Run Tunnel were found in the documents, no blueprints or photographs could be located in the collection. Because the Cork Run Tunnel was the only tunnel still in operation by the 1940s, the drawings were most likely part of a collection housed in Pittsburgh office. CONRAIL's engineering department in Pittsburgh was contacted, however no drawings are known to be extant. When the Conrail office was relocated, many of the Pittsburgh District's records were destroyed.

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CORK RUN TUNNEL
(Berry Street Tunnel)
(Tunnel No. 2)
HAER No. PA-382 (Page 20)