

The Shade Gap Railroad
The East Broad Top's Southern Connection
by Vagel Keller & Richard Keller, d.



This is the station and ancillary buildings at Shade Gap, PA, looking north (RR west) ca. 1946. PA Hwy 35 passes over the tracks in the foreground.

Much has been written about the Shade Gap Branch, most notably by Rainey and Kyper in *East Broad Top* (Golden West Books, 1984) and by Lee Rainey in his series, "The EBT in the Iron Age," *Railroad Model Craftsman*, March - June, 1990. Frank Kyper introduced the topic in the Friends of the East Broad Top's *Timber Transfer*, Vol. 2, Nos. 3 & 4, 1985. In addition, valuable background information on early railroad activities affecting the SGRR appears in *Centennial History of the PRR, 1846-1946*, by Burgess and Kennedy; *The History of the Cumberland Valley Railroad, 1835-1919*, by Paul J. Westhaeffer; *Railroads of Pennsylvania Encyclopedia and Atlas*, by Thomas T. Taber III; *Railroads of Western Franklin County*, by Randy Watts; *Pennsylvania Transportation*, by George Swetnam; *Vanderbilt's Folly: A History of the Pennsylvania Turnpike*, by William H. Shank, P.E.; and *The Pennsylvania Turnpike: A History*, by Dan Cupper. This article seeks to synthesize information from those sources and from primary archival sources to tell a comprehensive story of the EBT's southern connection.

The first reference to what would later become the Shade Gap Railroad appeared in the EBT's corporate minutes for March 12, 1877, transcribed by George M. Hart in 1965:

"A projected RR from Selinsgrove [on the Susquehanna River, north of Harrisburg, PA] to Hancock, MD. Grading nearly finished between Selinsgrove and Mifflin [on the Juniata River, east of Mt. Union]. This will pass Shade Gap -- three miles away. Will watch if connection will be beneficial."

This report probably referred to two projected railroads, the Selinsgrove and North Branch and the Huntingdon, Franklin, and Fulton. Taber's *Railroads of Pennsylvania* records that the S&NB was incorporated in 1871 to run between Port Treverton and Selinsgrove in the Susquehanna Valley, with a 31-mile branch to Mifflintown on the Juniata River. By 1883 the Susquehanna Southwestern RR, part of the New York Central system, had leased it, but it was still no more than an empty grade and dropped from the historical record thereafter. The HF&F was never incorporated, but a Pennsylvania Department of Internal Affairs Report for 1877 listed it as being chartered to run from Mifflintown to Hancock, MD - 82 miles.

The EBT's plan for a southeastern extension began with the appointment of a committee to study the feasibility of a branch to Shade Gap in January 1878. Three years passed before the Board of Directors acted, however.

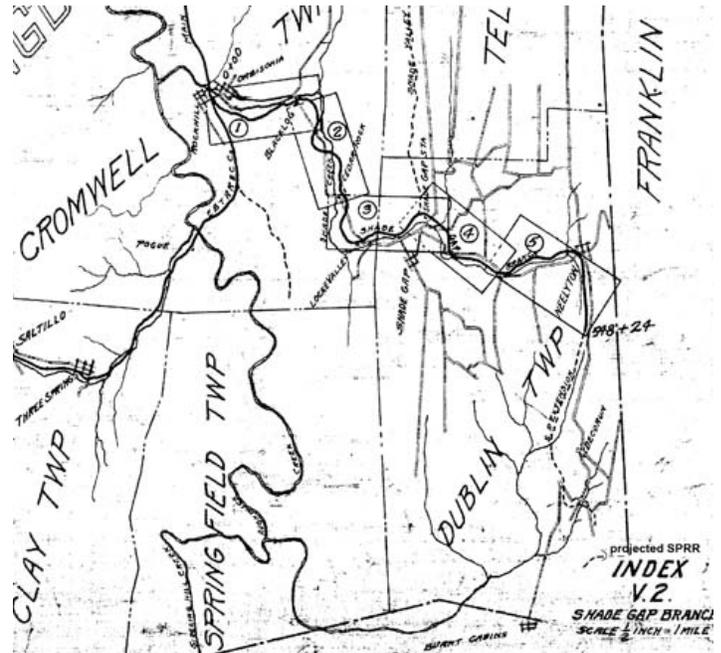
The minutes of the May 24, 1881 board meeting noted EBT President William A. Ingham's progress report:

"Proposed extension of our road is exciting. On May 13th [1881], a party crossed the country from Loudon on the South Penn RR in the Cumberland Valley via Cowans Gap, Burnt Cabins, and Shade Gap to Rockhill. The country between CG [Cowans Gap] and Rockhill will admit of a cheap line and good grades. East of Cowans Gap for five miles the descent into [Path Valley] will be costly." I have tried to obtain survey made ... ten years ago without getting track of it. There are three or four competitors out for trade in the Cumberland Valley -- The Cumberland Valley RR [CVRR] and the

Western Maryland RR [later reorganized as Western Maryland Railway] to name two -- and the Peach Bottom RR is contemplating extension from York to Shippensburg. It would be to our advantage to build to connect with all three."

Ingham proposed a route following Shade Creek from Blacklog Narrows to Shade Gap, thence along Trout Run (west of present-day US Highway 522) to Burnt Cabins – a distance of eighteen miles. (SEE map) From Burnt Cabins his reconnaissance led six miles southeast along the western shoulder of Tuscarora Mountain, following the South Branch of Little Aughwick Creek. Ingham proposed a route following Shade Creek from Blacklog Narrows to Shade Gap, thence along Trout Run (west of present-day US Highway 522) to Burnt Cabins – a distance of eighteen miles. (SEE map) From Burnt Cabins his reconnaissance led six miles southeast along the western shoulder of Tuscarora Mountain, following the South Branch of Little Aughwick Creek. By July 19, 1881 the survey was under way, and by September a 4.73 mile route was marked to Shade Gap, with crews at work staking out the route from there to Burnt Cabins. New iron ore deposits had been discovered, and the only question -- admittedly a big one -- was how the EBT would raise the estimated \$150 thousand needed to complete the extension as far as Cowans Gap. In November the directors approved the final leg of the survey to Cowans Gap. But three years would pass before anything more was done along this line and the impetus would come from a decidedly different quarter.

The EBT's plans for a connection with the Cumberland Valley RR came to naught. In about 1871 the CVRR (controlled by the Pennsylvania RR, with which the EBT already connected at Mt. Union) had organized the Southern Pennsylvania Railway & Mining Company to tap iron ore deposits in Cowans Gap. The CVRR financed construction of SPR&M's line from Marion Junction, seven miles south of Chambersburg, PA, across southwestern Franklin County to Richmond Furnace, site of a defunct iron furnace operation. From there rails eventually extended tended up the east slope of Tuscarora Mountain. For a time significant amounts of ore were shipped out, but this traffic was sporadic after 1875 and seems to have ceased during 1880. Then, in 1882, a report by the Pennsylvania State Geological Survey showed the iron ore in the area of Cowans Gap to be so low in iron content as to be "worthless." Thus ended the EBT's ambitions in that direction.



This index map from the EBT's valuation report to the Interstate Commerce Commission in 1918 shows the then-extant Shade Gap Branch as a solid black line running southeast from Orbisonia (upper left) and terminating south of Neelyton (right center). The dashed line marking the unfinished grade south terminates just short of the present-day west portal of the Pennsylvania Turnpike's Tuscarora Tunnel, the location of the proposed South Pennsylvania RR's tunnel. Burnt Cabins is a short distance southwest of the tunnel. FEBT collection.



This view looks northwest from atop Tuscarora Mountain over the village of Neelyton toward Shade Gap, evident as a notch in the ridge in the distance. The grade of the Shade Gap Branch entering Neelyton and extending northeast and southwest along the foot of the mountain is approximated by the white line. Vagel Keller photo.

Later in 1882 the Shade Gap extension got a new lease on life when the New York Central began surveying a southern route from Harrisburg to Pittsburgh under an old charter for the Harrisburg and Western Railroad. The EBT's directors noted that "a connection via Shade Gap with this new road (to be called the South Penn) would shorten the distance from Orbisonia to New York City by 43 miles, to Harrisburg by 28 miles, Philadelphia by 24 miles, and Baltimore by 50 miles." The events surrounding this battle in the perennial war between the giant NYC and PRR systems are well covered in *East Broad Top* and elsewhere. Of immediate concern for this article was the South Penn's construction of a mile-long tunnel through Tuscarora Mountain, the west portal of which was located near Burnt Cabins on the EBT's surveyed route to Cowans Gap.

This was the opportunity for which the EBT's directors had been waiting, and they quickly incorporated the Shade Gap Railroad. The route followed the original survey through Blacklog Narrows and up Shade Creek, but now passed about 1/2 mile east of Shade Gap village, thence southeast to Neelyton. From Neelyton, the survey crews located a route running south along the North Branch Little Aughwick Creek, then east through broken terrain to a point about 1/2 mile from the east portal of the South Penn's Tuscarora Tunnel. A long trestle was planned to carry the SGRR tracks from there to the interchange yard near the portal. (SEE map, p. 2)

In December 1883 the EBT assumed operating and maintenance responsibilities for the SGRR, which never owned any engines or rolling stock of its own. The EBT expected RI&C's annual tonnage on the line, to produce at least \$9,000 in revenue. Tolls ranging from 1 cent per ton-mile for the length of the road up to 2 cents per ton-mile for distances less than five miles were to be charged and the EBT was to receive 70% of gross passenger receipts on the SGRR.

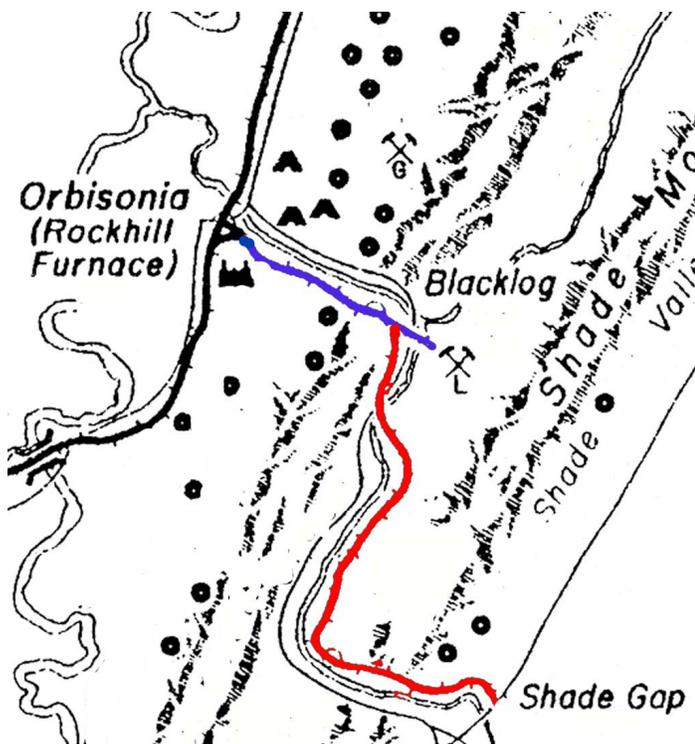
Two events point to possible plans to eventually broaden the SGRR to standard gauge. In November, 1883 the EBT's South Penn committee recommended that the track be "laid down as narrow gauge, but [with] masonry for standard gauge." The track, laid between September 16 and December 16, 1884, was 56 pounds per yard, the general weight of standard gauge rail and heavier than any rail on the EBT mainline at that time.

On January 12, 1885, the directors were informed, the "first division of the Shade Gap RR has been completed and opened for traffic from Rockhill Gap to Shade Gap. And the greater portion of the grading on the balance of the road to the junction with the South Penn is done." Construction supplies moved by wagon from Shade Gap to the tunnel site. Ralph Miller was a former resident of Neelyton who actually worked on the construction crews who later extended the Shade Gap branch from Shade Gap to Neelyton in 1907. According to Mr. Miller in an interview recorded by the Friends of the East Broad Top,

"The grade was finished and bridges built for the full length of the extension. Most bridges were stone abutments with timber supports but there were some arches (I saw one just north of Burnt Cabins). There were no heavy grades."

One man] remember[ed] his father telling him about hauling timbers for the trestle at Burnt Cabins on the graded right of way with a team of horses and a flat sled. The bridges had been covered with planks for the horses but one went through breaking a leg and had to be shot. His father was paid \$1.50 for a ten hour day for himself and team of horses."

Apparently, the profits expected from hauling construction materials did not materialize because of a lack of return traffic. In April, the directors were informed of an operating cost deficit caused by "the inconvenience of starting every train out to Shade Gap to make a return connection at Rockhill." The bottom fell out four months later when, on August 18, work on the the South Penn RR was stopped. Wall Street financier J. P. Morgan had brokered a peace between the warring titans. In exchange or PRR stopping construction of a line up the Hudson River, NYC agreed to sell the PRR its



"First Division" of the Shade Gap RR (red line). It began at a junction with the Rockhill Iron & Coal Co. tram (blue line) to Shade Gap. HABS/HAER.

rights to the South Penn charter. Although the EBT still hoped for an extension of the Cumberland Valley over the mountain at Cowans Gap, the CVRR had by this time dropped all plans for extending the SPR&M line (later known as the South Penn Branch) beyond Richmond Furnace, except to serve lumbering operations on the east slope of Tuscarora Mountain. Plans to lay track the SGRR south of Shade Gap were suspended. Timbers for the SGRR's long trestle north of Burnt Cabins were scavenged for fire wood by local residents and the smaller bridges between Neelyton and the end of grade slowly rotted away.

Following the South Penn affair, the EBT focused on developing iron ore traffic closer to home on the SGRR, which combined with the RI&C Co. to extend tracks north of Shade Gap station along the eastern flank of Shade Mountain. Eventually, the Shade Valley Branch was eight miles long and served six ore mines. From south to north, these were:

<u>Name</u>	<u>Year</u>	<u>Distance</u>
Robinson	1885	adjacent
Sherrer	1886	1/2 mile
Starr (Stair)	1887	2 miles
Goshorn	1888	4 miles
Nancy	1890	6 miles
Richvale	1890	8 miles

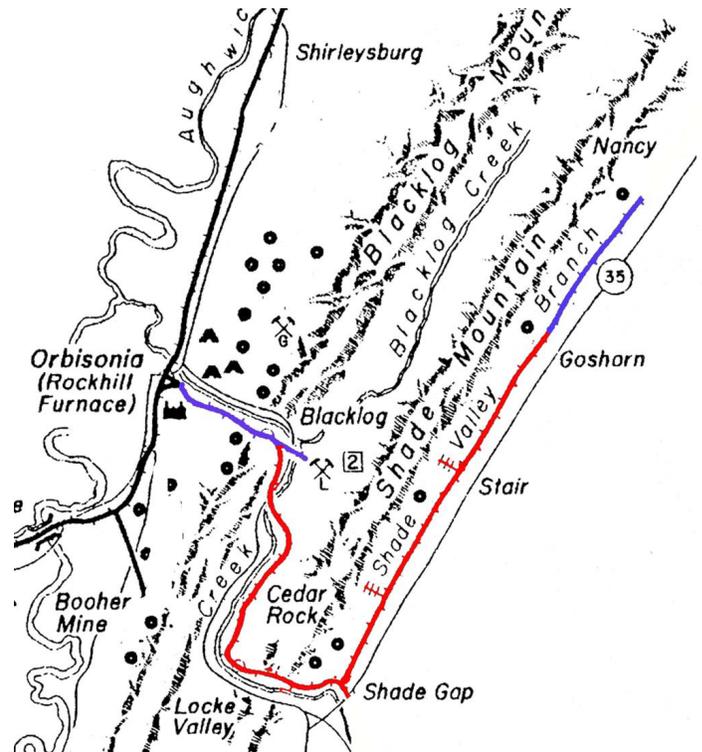
Limestone for the Rockhill Furnaces came from Grove's Quarry, east of the confluence of Blacklog and Shade creeks (at the end of the RI&C tram way), and iron ore continued to flow from the old McCarthy mine in Blacklog Narrows.

From 1885 to 1908 the fortunes of the Shade Gap Railroad followed those of the RI&C Co. Numerous schemes for railroads along the general lines of the SGRR's grade south of Neelyton came and went (the 3-foot gauge Tuscarora Valley RR actually graded a line from Blairs Mills, a few miles northeast Nancy, to Burnt Cabins in 1898), but all went the way of the South Penn. Incidentally, the South Penn project was brought back to life, briefly, between 1888 and 1896 -- this time it was war between the PRR and an alliance of the Reading Co. and the Western Maryland -- but the SGRR and parent EBT took no action. A note in the directors' record for February 28, 1888 reveals their skepticism:

"The renewal of work on the South Penn RR, which is promised positively, will make it advisable to complete the unfinished portion of the Shade Gap RR -- but after our unhappy experience it seems better to wait a while longer."



Remnants of the long-abandoned Shade Gap Branch are still visible to the trained eye. This stone box culvert just south of the grade crossing over Shade Valley Lane near the Cedar Rock station is one example. Vagel Keller photo, 2009



Indeed, in 1886 the treasurer had reported that, before the EBT stopped work beyond Shade Gap, "some \$60,000 had been expended, which appear[ed] lost," requiring "revision of the tripartite expenses between EBT, SGRR, and RI&C -- sharing the loss." Struggling to make ends meet in the aftermath of the Panic of 1893, the EBT had to be content with gleaning what revenue it could from on-line sources.

Any record of operations on the SGRR after July, 1885 (if such a record exists) lies out of public view in Orbisonia Station, but Lee Rainey's "The EBT in the Iron Age, Part I: History and Traffic", RMC, March, 1990 provides a well thought out estimate of traffic through the end of the Rockhill company's blast furnace operations in 1908. The EBT operated 3 trains a day between Rockhill and Shade Gap. Iron ore, of course, flowed from the Shade Valley mines until a labor dispute idled the Rockhill Furnace in 1893. Rainey estimates that up to 160 tons of fossil ore per day, primarily from the Shade Valley mines, were delivered to the furnace in the years prior to 1890. This would require 19 of the wooden hoppers then used by the EBT.

Lumber, ties, shingles, barrel staves, and bark moved in either direction on the SGRR. Rainey cites sawmills of varying size operating all along the line, including a water-powered mill at Locke Valley, and Peterson & Co., of Neelyton, reportedly shipped up to 10,000 shingles a day from Shade Gap. The Board of Directors' minutes reveal that the lumber trade on the SGRR was especially heavy during its early years, so much so that the directors considered a "prohibitory tariff on railroad ties due to depletion of timber" in 1887. Rainey further noted that bark for making tannic acid was loaded at the Nancy mine spur in 1895 and may have been consigned to the Minnic tannery in Shade Gap. That plant also received hides via the EBT's interchange with the PRR in Mt. Union. Beelman's coal delivery trestle at Shade Gap and the Neelyton Supply Co. trestle received shipments from the RI&C's cleaning and washing facility at Robertsdale (this was before the new facility was built at Mt. Union during World War I). Farming accounted for most of the remaining freight traffic on the SGRR: cattle and flour out, lime and fertilizer in.

A new passenger coach and combine arrived in December 1885 from the EBT's "old friends and stockholders, Billmeyer and Smalls" to provide twice-daily round trip passenger service between Rockhill and Starr. As the iron mining operations expanded on the Shade Valley Branch (or Shade Gap ore extension), the SGRR's passenger volume and revenues increased significantly. Passenger shelters were erected in 1887 at Cedar Rock and Locke Valley, between Blacklog and

Shade Gap, and receipts that year -- predominantly from 10 cent round trip miners's fares -- increased by \$2550 over those for 1886. Indeed, traffic was heavy enough that, on May 24, 1887, the EBT's superintendent recommended the purchase of another locomotive "as the Shade Gap branch require[d] the whole time of one engine. In response, the EBT purchased its first ten wheeler, No. 8 ("Tuscarora"). It was less powerful than the low-drivered 2-8-0 Consolidations that hauled the coal on the mainline, but its 48-inch drivers were less prone to slipping.

At Goshorn's, the SGRR assumed the cost of construction of a new passenger station, freight house, and water station and for putting up telephone wire in April 1888. This work was completed by January 1889. Apparently, the Goshorn family was granted the right to establish a general store in the building serving as passenger station.

On May 30, 1893 the Rockhill furnace operation closed due to a strike and the down-turn of iron business caused by the Panic of 1893. Shade Valley ore mining was suspended, never to be resumed, resulting in a reported loss of 2000 tons per month from ore traffic. The following year, 1894, was the "most disastrous year in [EBT's] history," according to the Board's minutes, which included this sad note:

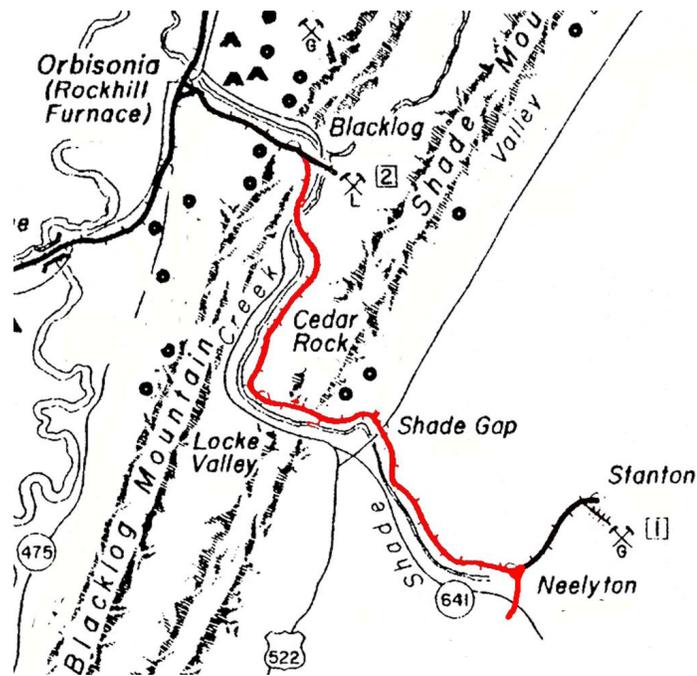
1/14/1895: "Shade Gap RR previously earned about \$200 per month but since Rockhill Furnace went out and the fossil ore mines were closed we now operate at a loss of \$200 per month. We now have under consideration the abandonment of the branch and forfeiture of the lease."

Although Superintendent Alfred W. Sims was opposed to abandoning the line, the Board of Directors formed a committee to consider such a measure at its January 1895 meeting. Trains continued to operate over the Shade Gap RR, but passenger service beyond Shade Gap station ended upon Sims' death in April of that year. Within two years the rails on the RI&C-owned grade north of Goshorn were taken up. When the Rockhill Furnaces resumed operation in 1902 local land owners declined to sign ore leases with the newly Rockhill Furnace Co., and the entire Shade Valley extension was taken up by 1904.

In the meantime, big changes were beginning to happen on the EBT under the energetic management of its new Superintendent - soon to be President - Robert S. Seibert. In 1907 the Rockhill Furnaces went out of blast never to be restarted; RI&C shifted to the production of coal and the EBT's purpose changed from serving the blast furnaces to shipping the extensive mineral resources

along its mainline and branches to external markets. Limestone for the Rockhill Furnaces came from Grove's Quarry, east of the confluence of Blacklog and Shade creeks (at the end of the RI&C tram way), and iron ore continued to flow from the old McCarthy mine in Blacklog Narrows.

The modernization program undertaken by Seibert is well documented in Rainey & Kyper's *East Broad Top*, which credits him with insuring that the EBT, alone among eastern narrow gauge railroads, was able to survive into the mid-20th Century and beyond as both a common carrier and, later, a successful, long-lived tourist operation. Of importance to this discussion is his impact on revitalizing the moribund Shade Gap Railroad.



In 1908 the EBT purchased the RI&C tram line through Blacklog Narrows, and in 1910 the SGRR - always a subsidiary of the EBT - finally rehabilitated the old grade between Shade Gap and Neelyton, laid tracks on it in 1910, and extended a long spur south of Neelyton to the new lumber yard of Wiley & Peterson in 1912. Shortly thereafter, the EBT formally merged the SGRR, designating it the Shade Gap Branch in 1913. Seibert's foresight paid off when, in 1919, the General Refractories Company (GREFCO), one of three firms to operate fire brick plants in Mt. Union, opened a gannister rock quarry on the western flank of Tuscarora Mountain north of Neelyton. The Stanton quarry would justify the Shade Gap Branch's existence for twenty years.



Robert S. Seibert started as a ticket agent for the EBT in 1874 but soon "went West," where he amassed a fortune building and running railroads. His return to the EBT infused much-needed capital into the narrow gauge line.

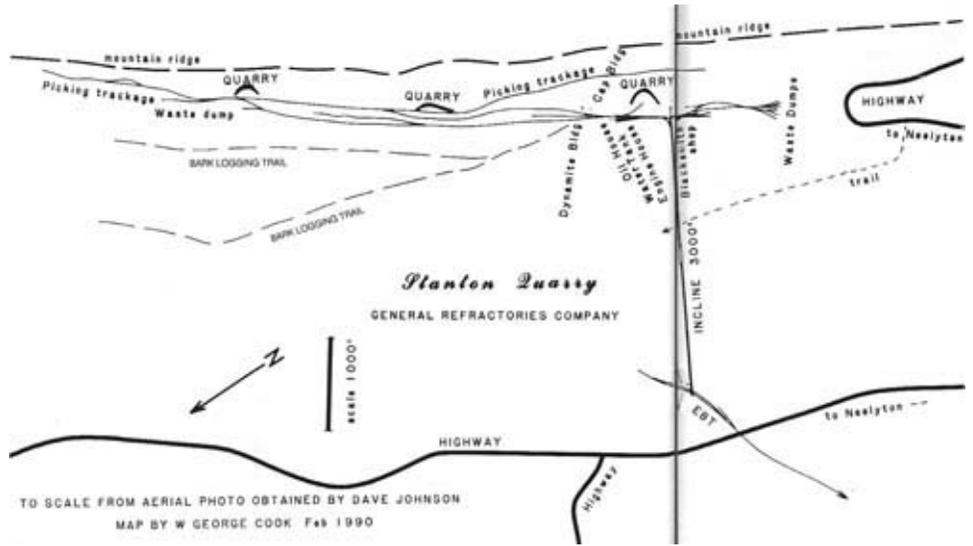


The 25-ft high concrete culvert over Shade Creek was part of the Seibert modernization program. It replaced an old wrought iron deck truss that would not withstand the heavy gannister tonnage from the GREFCO quarry.

GREFCO ceased quarrying operations at Stanton at the end of 1939, and the EBT removed the tracks on the Stanton spur back to Neelyton during 1940.

During that same year, however, the Shade Gap Branch saw an unprecedented amount of traffic due to the construction of the Pennsylvania Turnpike - America's first "super highway" - on the old South Penn Railroad grade. That year saw 16,789 tons of cement, used in the construction of the Tuscarora Tunnel and roadway running west toward the Breezewood interchange, shipped over the Shade Gap Branch.

How ironic that the last shipments south of Shade Gap of the branch were for a transportation mode that was unforeseen at its inception?



The GREFCO quarry, the layout of which is shown in the diagram at the top of the page, employed a small 0-4-0T switcher.



EBT 2-8-2 No. 17 passes Orbonia station with three empty standard gauge cement hoppers riding on narrow gauge trucks during the traffic boom on the Shade Gap Branch in 1940. The empty cars will be remounted on standard gauge trucks and handed over the PRR at Mt. Union, where inbound, loaded cement hoppers will undergo the reverse process.

After the Turnpike boom of 1940 the Shade Gap Branch's days were numbered. In 1943, at the peak of the World War II scrap drive, the tracks between Neelyton and Shade Gap were taken up. Apparently, only occasional shipments of ties produced by portable sawmills that dotted the landscape in southern Huntingdon County justified keeping the tracks south of Blacklog Narrows in service. The EBT never used creosoted ties during its common carrier era, which required a more or less continuous flow of replacement ties to be maintained.

The end finally came in 1946, when the the track from Shade Gap to the grade crossing over US Hwy 522 at the east end of Blacklog Narrows came up, although the last vestige of the Shade Gap Railroad - the original RI&C tram road - survived as a tie-loading spur until the end of the EBT's common carrier life in April 1956.

Today the legacy of the Shade Gap Branch sees seasonal weekend trolley car traffic with tourists visiting the Rockhill Trolley Museum, which continues to operated from its facilities adjacent to the EBT's Rockhill yard and shops complex even as the EBT, itself, ceased tourist operations in 2012.



Above, the view at Shade Gap, looking north, in 1946, and, below that, looking south at the US 522 grade crossing at Blacklog.



Rockhill Trolley Museum's "Red Arrow" interurban train set sits at the end of the line at Blacklog. RTY Facebook Page, 4/17/2018