

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCRS use only
received OCT 9 1979
date entered JAN 25 1980

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic ASHLEY PLANES

and/or common

2. Location off PA 309

street & number In the mountain cut from Ashley to Solomon Gap, lying south of Route 81 and west of Route 309 along Solomon Creek not for publication

city, town Ashley and vicinity Hanover & Fairview Townships vicinity of congressional district 11

state Pennsylvania code 42 county Luzerne code 079

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input checked="" type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input checked="" type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input type="checkbox"/> no	<input type="checkbox"/> military
			<input checked="" type="checkbox"/> other: <u>open land</u>
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation

4. Owner of Property

name Multiple

street & number

city, town _____ vicinity of _____ state _____

5. Location of Legal Description

courthouse, registry of deeds, etc. Luzerne County Courthouse

street & number North River Street

city, town Wilkes-Barre state Pennsylvania

6. Representation in Existing Surveys

title Pennsylvania Inventory of Historic Places has this property been determined eligible? yes no

date 7/17/79 federal state county local

depository for survey records Pennsylvania Historical and Museum Commission

city, town Harrisburg state Pennsylvania

7. Description

Condition

excellent
 good
 fair

deteriorated
 ruins
 unexposed

Check one

unaltered
 altered

Check one

original site
 moved date _____

Describe the present and original (if known) physical appearance

In Hanover and Fairview Townships, Luzerne County, running south from Ashley up through a mountain cut to the summit of Solomon Gap, lies an area rich in remains of Pennsylvania's anthracite and industrial history. Well hidden from the view of passersby on Route 309 (which goes through the site), are Pennsylvania Gas and Water Co.'s Pine Run Reservoir (built in 1888, enlarged in 1894), the Crystal Spring Water Company Filter Plant (built in 1895 and twice unsuccessfully equipped with patented filtration systems,) and traces of early transportation routes through the cut, including the Ashley Planes.

THE HISTORY AND DESIGN OF THE ASHLEY PLANES

Portions of the Planes were built at several times: 1837, when the construction of the Lehigh and Susquehanna Railroad linking the Lehigh Navigation at White Haven with the Wyoming Anthracite Field and the North Branch Canal was begun by the Lehigh Coal and Navigation Company according to the plans of acting manager Josiah White and engineer Edwin A. Douglas; 1860's when the planes' location and technology were revised; 1909, when revisions and improvements using concrete were made by the Planes' lessee, the Central Railroad of NJ.

The Ashley Planes were in use until 1948, so that they represent more than a century of continuous transportation and industrial history. They were a critical part of the passage from the third anthracite basin in the Wyoming Valley to Solomon Gap, and thence to all points south.

Three separate inclined plane railroads were used to connect Ashley with Solomon Gap. As first designed, Plane #3 rose out of Ashley along and over Solomon Creek, through a rock cut just above the coal limits and adjacent to the creek's lower falls, a distance of 4,894 feet with a rise of 5.7 % to an elevation of about 900 feet; from there were linking tracks on a slight downgrade 850 feet to an elevation of about 892 feet, where Plane #2 led southwest a distance of 3,775 feet with a rise of 8.6 % to an elevation of about 1,250 feet. From here the cars were pulled about 3,000 feet by horse or mule along level tracks east to the beginning of Plane #1, which led a distance of 4,361 feet with a rise of 9.3 % to an elevation of 1,681 at Solomon Gap. From there the cars passed over a weigh scale and onto a generally downgrade track which took them to White Haven on the Lehigh River at the southeast corner of Luzerne County.

The Lehigh and Susquehanna Railroad was completed in May, 1843 but the steam engines at the top of each plane were not in full use until 1847. It appears that about the time that the Lehigh and Susquehanna Railroad backtrack from Solomon Gap around the east end of Wilkes-Barre Mountain was built, in 1865-67 significant changes were made in the Planes. Plane #2 was moved to its later position, with adjustments to Plane #1 and construction of stone bridges over Solomon Creek and the old mountain road in this section. The new Plane #2 has a length of about 3000 feet and a rise of 14.6%.

Of special interest is old Plane 2, which was abandoned about 1869, when new 2 was opened. It is also the most intact of the planes. It leaves the right of way now belonging to the Reading Co. and crosses lands of Blue coal corp. and Pa. Power and Light Co. onto State Game Lands #207, to a glen where stone foundations of the original drum house, a water impoundment for the steam engines, of the stables and a village called Millertown, or Dogtown, remain.

These and some other areas of major interest are indicated on Map 3; the foundations of the boiler, engine and drum houses at the head of Planes #1, new 2, and 3; truck pits and latches at the base of Planes 1 and new 2; foundations for the large sheave wheel and counter weights for the steel cable "tail rope" for new 2; culverts for Solomon Creek; bridges over the old mountain road and Solomon Creek; dams along Solomon Creek that provided water to the boilers and for other uses; and mounds of red ash near the boiler house locations of all 4 planes.

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400–1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500–1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600–1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/ humanitarian
<input type="checkbox"/> 1700–1799	<input type="checkbox"/> art	<input checked="" type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> theater
<input type="checkbox"/> 1800–1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input checked="" type="checkbox"/> transportation
<input checked="" type="checkbox"/> 1900–	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> other (specify)
		<input type="checkbox"/> invention		

Specific dates _____ **Builder/Architect** *engineer: Edwin A. Douglas*
builder: Lehigh Coal & Navigation Co. Josiah White, general manager

Statement of Significance (in one paragraph)

By the early 19th century anthracite's fuel value was recognized. Before its potential could be exploited, ways had to be found to get it from its source to the population and industrial centers where it would be consumed. Until a transportation system was developed, anthracite was useless to local owners and to developing American industry. Establishing an economical transportation system for moving large amounts of extremely bulky material from the anthracite region was made especially difficult by the area's geography. The Ashley Planes were part of the solution to this difficult problem and are, therefore, an important part of the northeastern Pennsylvania's transportation history. The unusual technology developed to make the planes succeed also makes them significant in engineering history.

9. Major Bibliographical References

SEE CONTINUATION SHEET

10. Geographical Data

UTM NOT VERIFIED

Acreeage of nominated property 160.25

Quadrangle name _____

Quadrangle scale 1:24,000

UMT References

SEE CONTINUATION SHEET

A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Zone	Easting		Northing			
C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Zone	Easting		Northing			
D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Verbal boundary description and justification

SEE CONTINUATION SHEET

List all states and counties for properties overlapping state or county boundaries

state	code	county	code

11. Form Prepared By

name/title Annie Bohlin

organization Wyoming Historical & Geological Society

date May 24, 1979

street & number 175 North Franklin Street

telephone 822-6085

city or town Wilkes-Barre

state Pennsylvania

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

title Ed Weintraub, Office of Historic Preservation

date 9/25/79

For HCRC use only

I hereby certify that this property is included in the National Register.

date 1-25-80

Keeper of the National Register

Attest: Lynn A. Decker

date Jan 24, 1980

Chief of Registration

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NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

ASHLEY PLANES

CONTINUATION SHEET

ITEM NUMBER 4 PAGE 1

The Reading Company:

*Eastern Real Estate Company
One Plymouth Meeting
Plymouth Meeting, PA 19462 -*

Pa. Power and Light Company:

*Two North Ninth Street
Allentown, PA 18101 ✓*

Blue Coal Corporation:

*101 South Main Street ✓
Ashley, PA 18706*

Pa. Game Commission:

*Box 1567 ✓
Harrisburg, PA 17120 ✓*

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**NATIONAL REGISTER OF HISTORIC PLACES
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CONTINUATION SHEET Ashley Planes ITEM NUMBER 9 PAGE 1

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CONTINUATION SHEET Ashley Planes ITEM NUMBER 9 PAGE 2

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Map showing land of the Lehigh Coal and Navigation Company in
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Map showing property, streams, dams, building, etc., of the Spring
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Map showing land lines and pipe lines, Pine Run Filter to Empire
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CONTINUATION SHEET Ashley Planes ITEM NUMBER 9 PAGE 3

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**NATIONAL REGISTER OF HISTORIC PLACES
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CONTINUATION SHEET Ashley Plane ITEM NUMBER 9 PAGE 4

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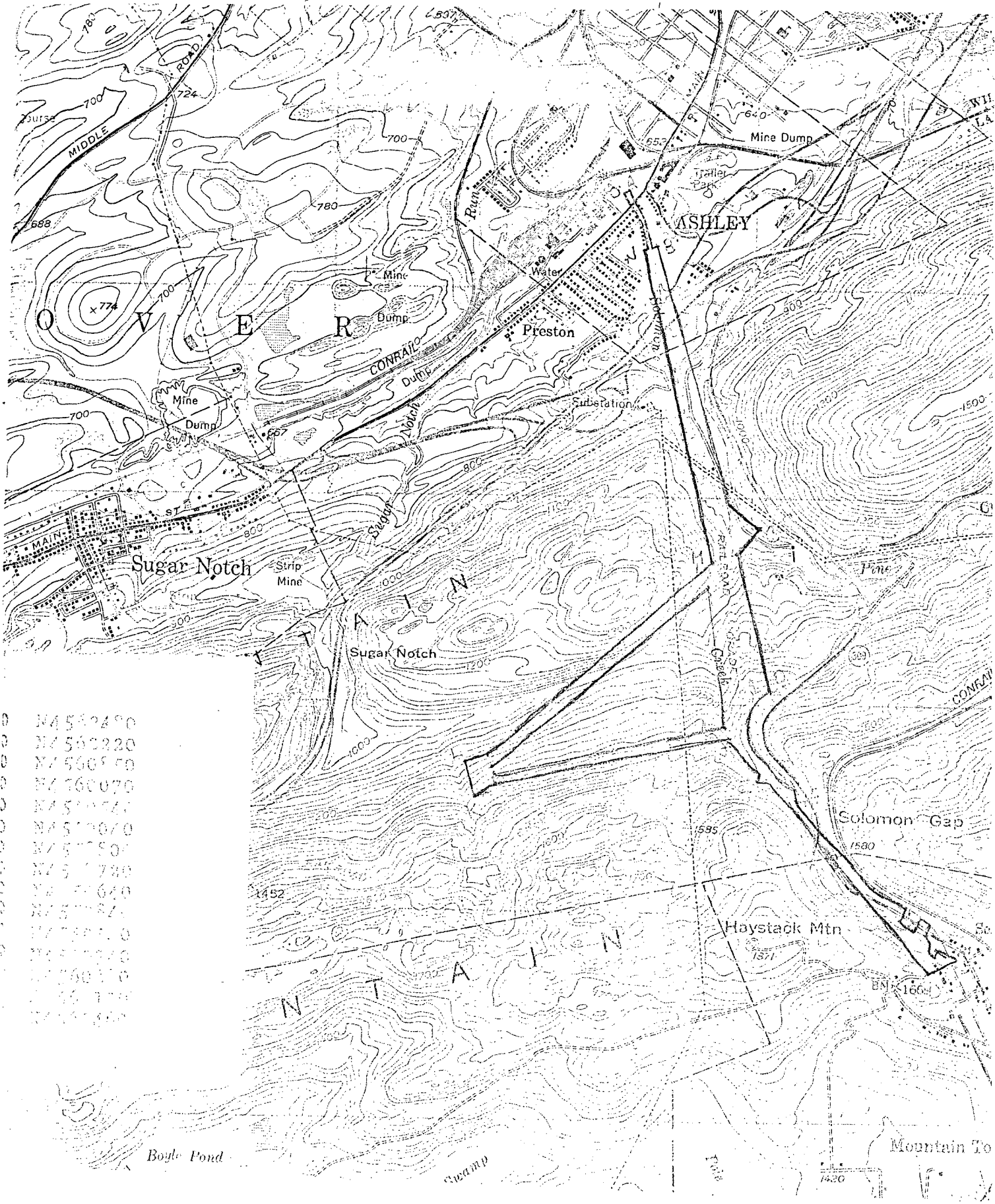
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