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general management plan

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ALLEGHENY PORTAGE RAILROAD

NATIONAL HISTORIC SITE

JOHNSTOWN FLOOD

NATIONAL MEMORIAL



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GENERAL MANAGEMENT PLAN

ALLEGHENY PORTAGE RAILROAD
NATIONAL HISTORIC SITE

and JOHNSTOWN FLOOD
NATIONAL MEMORIAL

PENNSYLVANIA

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INTRODUCTION

The General Management Plan for Allegheny Portage Railroad National Historic Site and Johnstown Flood National Memorial was prepared to provide a definitive guide for management to follow in implementing the authorizing legislation. It sets forth the purpose of each of the two areas, states the objectives to be sought by area management, and specifies the acquisition, development, and management actions required to meet the objectives and realize the park's purposes.

ALLEGHENY PORTAGE RAILROAD NATIONAL HISTORIC SITE

Purpose

The purpose of Allegheny Portage Railroad National Historic Site is to illustrate the significant role in the nation's history of the Allegheny Portage Railroad and the Pennsylvania Mainline Canal. The Pennsylvania Mainline Canal was undertaken by the commonwealth of Pennsylvania to provide for efficient movement of goods and people between Philadelphia and Pittsburgh. When completed, the canal consisted of four sections: a railroad linking Philadelphia with Columbia on the Susquehanna; a river/canal system linking Columbia with Hollidaysburg on the Juniata; the Allegheny Portage Railroad surmounting the steep Allegheny Front and linking Hollidaysburg with Johnstown; and a river/canal system linking Johnstown and Pittsburgh. (See Historic Region and Profile maps.) This remarkable feat of civil engineering allowed a traveler or a package of goods to travel between Philadelphia and Pittsburgh without changing conveyance.

Management Goals

The Statement for Management for Allegheny Portage Railroad National Historic Site contains the following management goals.

Management, Administration, and Support. To manage all park resources, including staff, to achieve the purposes of the park and the National Park Service

- To administer the resources to achieve the greatest efficiency of utilization and to maximize individual potential based upon accepted practices and encouraged innovation

- To provide management overview and administrative support to the land acquisition program until acquisition is complete

- To stimulate public involvement in the planning operation of the park to ensure that the public and park management are aware of the problems, alternative solutions, and constraints to provide mutual respect and understanding

Interpretation and Visitor Services. To interpret the significance of the Allegheny Portage Railroad and the Pennsylvania Canal in the nation's economic, social, and technological history and to foster an awareness of their relationship to contemporary American society

To promote environmental conservation and public awareness of the value of land use planning through interpretation of historic land use changes and activities, such as mining and logging, that have left their mark on the park's landscape

To provide limited opportunities for recreational activities that are compatible with preservation and interpretation of the park's historic resources

Visitor Protection and Safety. To provide park visitors and park employees with a safe park environment that encourages maximum enjoyment

To improve law enforcement in the park by securing concurrent jurisdiction with the commonwealth of Pennsylvania

Natural Resources Management. To perpetuate natural ecological communities in the park's natural zone and to enhance the value of these lands as aesthetic buffers around historically significant resources

To cooperate and work with the state bureau of forestry and local fire departments to provide fire protection to park lands and adjacent lands

Cultural Resources Management. To identify, evaluate, protect, maintain, and interpret the park's cultural resources, to preserve the original fabric and workmanship, and where necessary, to stabilize and rehabilitate them in a manner consistent with legislative mandates and National Park Service policies

To preserve and maintain the cultural resources and the setting of the Allegheny Portage Railroad to approximate conditions during the 1834-57 period

To identify, preserve, and maintain a segment of the Pennsylvania Canal and its historic setting to approximate conditions during the 1826-90 period

To preserve and maintain the Blairsville section of the Pennsylvania Canal and its historic setting to approximate conditions during the 1826-65 period

To professionally catalog, store, exhibit, and preserve the park's artifact collection

To preserve and maintain the Staple Bend Tunnel to approximate the setting and conditions during the 1832-60 period

Maintenance. To maintain all park structures, grounds, roads, and trails to ensure visitor and employee safety and to ensure that the life of the facilities are at or above that of normal depreciation

To achieve and maintain an overall park environment that complements the park's historic theme and interpretability

To develop and maintain appropriate sanitary facilities that provide for adequate visitor and employee safety and comfort

Planning and Construction. To maintain current park planning documents and pursue the accomplishment of the documented inventory of park planning needs to support the purpose of the park and policies of the Park Service

To pursue the necessary construction plans and programs needed to provide for safe visitor access, resource preservation, and management efficiency

Land Acquisition. To expeditiously acquire authorized park lands as identified in the General Management Plan and Land Acquisition Plan

Visitor Transportation and Fee Collection. When needed, to develop visitor transportation systems and fees appropriate to the need and resources available so as to foster optimum resource use and interpretation

To implement an auto tour between Hollidaysburg and Johnstown to interpret to the visitor the story of the railroad

Cooperation. To help ensure through cooperation with other agencies, organizations, and groups that (1) work, community, and regional interests are fully considered in planning for community zoning; pollution abatement; transportation systems; recreational development; cultural resources identification, preservation, and interpretation; reduction of mine subsidence; elimination of landscape scars caused by mining and logging operations; and other matters of mutual concern; and that (2) regional land use and the plans and programs of other agencies and interests are compatible to the greatest possible degree with long-term perpetuation of park values.

Following completion of new U.S. Highway 22, to cooperate with the Pennsylvania Department of Transportation in restoring the historic road system within the park and in

eliminating, to the greatest extent possible, modern roads that are not essential for public use

To cooperate with the Johnstown Flood Museum Association and the historical societies of Blair, Cambria, and Westmoreland counties in providing information about the railroad, canal, and associated cultural resources to visitors, and in developing programs for preservation and interpretation to achieve complementary and balanced public programs and mutual support to further historic preservation.

To cooperate as a special effort, with Bethlehem Steel Corporation, prior to Park Service acquisition, for better management control of the Staple Bend Unit so as to ensure increased environmental control and resource preservation, so as to permit minimal visitor access, development, and periodic inspections.

To develop a cooperative relationship with the U.S. Army Corps of Engineers to protect, preserve, maintain, and interpret the remains of the Pennsylvania Canal near Blairsville.

Recommendations

To ensure effective preservation, management, and public use of the surviving elements of this system, the General Management Plan recommends the following actions.

The Summit Unit atop Cresson Mountain will continue to be the area receiving the most emphasis to tell the story of the Allegheny Portage Railroad to the visitor. The restoration of the Lemon House and a segment of the right-of-way of the railroad to their original appearance and the rehabilitation of the Skew Arch Bridge will be undertaken. New parking facilities will be built to provide safer and more appropriate access to the park, and nonhistoric roads that cross the historic trace will be eliminated or rerouted.

Incline 9 on the east side of Cresson Mountain will be added to the park, and a trail to connect the inclines on the east side of Cresson Mountain will be built from the Lemon House to the village of Foot of Ten so that visitors can hike the original route of the railroad. The access point on this trail will be at the Lemon House, Incline 8, Incline 9, and Incline 10 near the village. Visitor facilities will be built along the trails, and an expanded trail system, picnic area, and environmental study area for local schools are planned for Incline 10.

The Staple Bend Tunnel Unit near Mineral Point was originally included in the national historic site. However, the tunnel (the first railroad tunnel built in America) is owned by Bethlehem Steel Corporation and contains a pipeline that supplies their Johnstown

plant. This plan recommends a continued effort to acquire the tunnel for inclusion at the site.

To interpret the story of the Pennsylvania Mainline Transportation System and its components of canals and railroads, the Park Service will seek to find and preserve a representative segment of the Pennsylvania Mainline canal. The site, yet to be identified, should contain a diverse but representative variety of canal features in sufficient state of preservation to be readily identifiable as to function, and have sufficient adjacent land to provide for visitor access and interpretation and resource protection and be within an administrable distance of park headquarters.

Approximately 2 miles of the canal, with the towpath, is in a fair state of preservation and located near Blairsville in Westmoreland County. At present, the U.S. Army Corps of Engineers operates this area as part of the Conemaugh Dam Project. The National Park Service proposes to cooperate with the Corps in interpreting, developing, and operating the area for preservation and public use.

JOHNSTOWN FLOOD NATIONAL MEMORIAL

Purpose

The purpose of Johnstown Flood National Memorial is to commemorate the tragic Johnstown Flood of May 31, 1889.

The South Fork Dam was constructed between 1839 and 1853 by the commonwealth of Pennsylvania to supply the canal at Johnstown with water in the dry summer months. In 1879, it was purchased by a group of Pittsburgh industrialists who repaired and refilled the reservoir and formed the private resort named the South Fork Fishing and Hunting Club. Torrential rains sent the level of water beyond the capacity of the dam on May 31, 1889, causing the dam to break and engulfing Johnstown in a wall of water which resulted in the loss of over 2,200 lives--the greatest disaster up to that time in U.S. history.

Management Goals

The Statement for Management for Johnstown Flood National Memorial contains the following management goals.

Management, Administration, and Support. To manage park resources and park staff to achieve the purposes of the National Park Service and purpose of the park

To administer the resources to achieve the greatest efficiency of utilization and to maximize individual potential based upon accepted practices and encouraged innovations

To provide management overview and administrative support to the land acquisition program until acquisition is complete

To stimulate public involvement in the planning and operations of the park to ensure that the public and park management are aware of problems, alternative solutions, and constraints to provide mutual respect and understanding

Interpretation and Visitor Services. To interpret the causes and significance of the Johnstown Flood in the nation's economic, social, and technological history and to foster an awareness of its relationship to contemporary American society

To commemorate the loss of 2,200 lives and the survivors of the flood in such a manner as to permit realization of their place in history with dignity

To promote environmental conservation and public awareness of the value of land use planning through interpretation of historic land uses, changes, and activities--such as water storage, mining, and logging--that have left their mark on the park's historic resources

To provide limited opportunities for recreational activities that are compatible with preservation and interpretation of the park's historic resources

To interpret the relationship of the other floods affecting Johnstown to the 1889 flood and to the topography and human occupation of the valley

Visitor Protection and Safety. To provide park visitors and park employees with a safe park environment that encourages maximum enjoyment

To improve law enforcement in the park by securing concurrent jurisdiction with the commonwealth of Pennsylvania

Natural Resources Management. To perpetuate natural ecological communities in the park's natural zone and to enhance the value of these lands as aesthetic buffers around significant resources

To cooperate and work with the state bureau of forestry and local fire department to provide fire protection to park lands and adjacent lands

Cultural Resources Management. To identify, evaluate, protect, maintain, and interpret the park's cultural resources, to preserve their original fabric and workmanship, and where necessary, to stabilize and rehabilitate them in a manner consistent with legislative mandates and National Park Service policies

To preserve and maintain the cultural resources and the setting of the South Fork Dam to approximate conditions in 1889 ✓

To professionally catalog, store, exhibit, and preserve the park's artifact collection

Maintenance. To maintain all park structures, grounds, roads, and trails to ensure visitor and employee safety, and to ensure that the life of the facilities are at or above that of normal depreciation

To achieve and maintain an overall park environment that complements the park's historic theme and interpretability

To develop and maintain appropriate sanitary facilities that provide for adequate visitor and employee safety and comfort

Planning and Construction. To maintain current required planning documents and to pursue the accomplishment of the documented inventory of park planning needs to support the purpose of the park and policies of the Park Service

To pursue the necessary construction plans and programs needed to provide for safe visitor access, resource preservation, and management efficiency

Land Acquisition. To acquire authorized park lands as identified in the General Management Plan and Land Acquisition Plan expeditiously

Visitor Transportation and Fee Collection. When needed, to develop visitor transportation systems and fees appropriate to the need and resources available

To implement an auto tour between the park and Johnstown to interpret to the visitor the complete story of the flood

Cooperation. To help ensure, through cooperation with other agencies, organization, and groups that (1) park, community, and regional interests are fully considered in planning for community zoning; pollution abatement; transportation systems; recreational development; cultural resource identification, preservation, and interpretation; reduction of mine subsidence; elimination of landscape scars caused by mining and logging operations and other matters of mutual concern; and that (2) regional land use and plans and programs of other agencies and interests are compatible to the greatest possible degree with long-term perpetuation of park values

To ensure supportive resource management and visitor services through maintaining close cooperation with the Adams-Croyle Recreation Authority

To maintain a close cooperative relationship with the Johnstown Flood Museum Association to promote commemoration of the 1889 flood and to develop a complementary and balanced interpretive program suited to the association's museum and the park's interpretive facilities

To cooperate with Cambria County Historical Society in providing information to visitors on the Johnstown Flood and associated cultural resources

Recommendations

To ensure effective preservation management and public use and understanding of the Johnstown Flood of May 31, 1889, and South Fork Dam, the General Management Plan recommends the following actions

Acquire additional lands to preserve the historic scene surrounding the South Fork Dam

Relocate the main interpretive facilities to the vicinity of the north abutment to increase visitor appreciation of the size of the former Lake Conemaugh and to enable visitors to see the historic spillway that played a critical role in the breaking of the dam

SUMMARY

Implementation of these recommendations and the other less intensive recommendations contained in this General Management Plan will require the expenditure of \$2,743,000 for land acquisition and \$11,235,000 for development.

Development will be phased over many years. The Summit Unit of Allegheny Portage Railroad and Johnstown Flood will receive appropriate priority attention, and the remaining park units will be provided protection, preservation, and visitor facilities in a descending order to maintain the integrity of the resources and to fulfill the objectives of the National Park Service.

While all possible consideration was given to energy conservation during planning, the General Management Plan will lead to a net increase in energy consumption by making the national historic site and the national memorial more attractive to visitors and by adding dispersed units to the historic site. The additional land and mineral rights acquisition proposed will preclude recovery of a small amount of recoverable coal. Energy efficiency and alternatives will be sought in the design of all new or rehabilitated facilities to offset the increases created by the addition of new park units.

THE ENVIRONMENT

REGIONAL INFLUENCES

Land and life, along with their forms and forces, dynamically interact to create environments that vary locally in the southern Allegheny region. Nature develops and man modifies environments to produce regional landscapes consisting of various natural and cultural combinations. A region can be considered a system of certain phenomena distributed over the earth's surface in distinctive spatial groupings. These groupings include physical, biological, and cultural categories as discussed in the following paragraphs.

In the region traversed by the Allegheny Portage Railroad trace, two distinct physiographic provinces meet and shape the land. The Valley and Ridge province lies east of the summit, and the Appalachian Plateaus province is found on the west.

The Valley and Ridge province is characterized by low, open mountains that meander from northeast to southwest across the landscape. Beneath the province are layers of sandstone and quartzite that have emerged as mountains, with the valleys between being formed in more rapidly eroding limestone and shale.

The Allegheny Mountain section of the Appalachian Plateaus lies between the Allegheny Front and the Pittsburgh Plateaus. These mountains are underlain with horizontal or gently folded strata and form a series of high, open folds that surface as ridges. Chestnut Ridge, Laurel Ridge, and the smaller Ebensburg Ridge parallel those in the Valley and Ridge province with a northeast-southwest orientation. Numerous steep valleys dissect the basin between the ridges, including the Conemaugh Gap through Laurel Ridge just west of Johnstown.

The Allegheny Front is a southeast-facing escarpment more than 3,000 feet in height, and it forms one of the most prominent and striking topographic breaks in the United States. It clearly defines the boundary between the Valley and Ridge province and the Appalachian Plateaus province.

The region's vegetation reflects the fundamental differences in climate, geology, and soils in the two physiographic provinces. On the eastern slope, the low, open mountains are covered with Appalachian oak forest, consisting primarily of oak and some hickory. On the western slope, the high, open hills are clothed with the northern hardwood forest composed of the maple/beech/hemlock association. A gradation of dominant types occurs from north to south. The northern portion is over 50 percent white pine with the remainder divided between hardwoods

and hemlock; the middle portion consists of hardwoods and hemlock; and the southern portion contains hardwoods and oak with some sugar maple.

Topography strongly influenced settlement patterns and location of transportation routes. Indian paths, such as the Kittanning, followed streams along mountain gaps through the wilderness. Early settlers used these trails into the interior valleys and found readily available natural resources and suitable land for cultivation. Waterways consisting of rivers became a primary means of transportation during the first part of the 19th century. Early horse-and-wagon routes followed the trails, such as the Huntingdon, Cambria, and Indiana (or Northern) Turnpike. Engineers utilized the topography of the Allegheny Front, including the three descending geologic layers as described by Charles B. Hunt (1967), enabling them to construct a series of inclined planes joining the two sections of the Pennsylvania Mainline Canal by means of the Allegheny Portage Railroad. The New Portage Railroad bypassed the inclined planes with a series of continuous horseshoe curves. Today, Conrail and U.S. 22 cross the region east and west along routes paralleling the earlier transportation routes, thus maintaining a continuum.

Human settlements with their related economic development reflect the influence of topographic limitations and different forms of transportation. Even today most of man's activity is restricted to the valley floor, with little development on the mountain slopes and with circulation routes following gaps made by the stream courses. The location of the circulation route itself affects economic development along the wayside. Two distinct settlement patterns emerged in the past--cluster development and linear development.

An example of cluster development can be seen on the east at Frankstown, which grew along the termination point of the Frankstown Path Indian trail. Later Altoona and Tyrone developed in a wide valley paralleling the Allegheny Front and were clustered around Pennsylvania Railroad shops. Johnstown on the west was originally located on a nearly level floodplain at the bottom of a deep valley at the junction of Little Conemaugh River and Stony Creek. The city, contained by the valleys, grew around the Cambria Iron Company's mills and factories, which were served by the Pennsylvania Railroad.

Linear development is seen in the string of towns that developed along the original Pennsylvania Mainline Canal/Allegheny Portage Railroad. Newton Hamilton, Hollidaysburg, and Duncansville on the east flourished because of canal and railroad trade. On the summit of the Allegheny Mountains, Gallitzin, Summit, and Cresson developed along with the Allegheny Portage and the New Portage Railroads. Lilly, Cassandra, Jamestown, Portage, Wilmore,

Summerhill, and South Fork along the western slope depended completely on the railroad trade. Johnstown, a transfer point, blossomed as did Blairsville, farther west on the canal near Pittsburgh.

Economic development of the region encompassed several phases. In succession, land, game, timber, agricultural crops, and dairy cattle rose in prominence and then declined. The Pennsylvania Mainline Canal and Allegheny Portage Railroad provided the transportation system to export mineral resources such as bituminous coal and iron ore. Later, minerals were utilized on site to develop an iron and steel industry that manufactured products for shipping to eastern and western markets. The coal industry served by the Pennsylvania Railroad boomed in the 1920s and then declined in the 1940-1960 period because of competition from oil, gas, and electric products.

Today, the region is in transition and exhibits the effects of these past forms and forces. Altoona and Johnstown, transportation centers of the past, remain the major population centers for the future.

U.S. 22, east and west, and U.S. 220 and 219, north and south, serve as principal access routes to the region. Conrail also serves the region, but it faces economic problems. Blair County, east of the summit, primarily depends on farm products, such as milk, livestock, fruit, grain, and some timber and iron. Cambria County, west of the summit, is noted for its mineral-based industries, such as bituminous coal mining, and steel and iron manufacturing.

Poverty statistics and population decreases indicate that regions dependent on coal mining and railroads are economically depressed. However, the economy of the region may regain some of its former strength with the national reemphasis on coal as a primary energy source. Manufacturing industries plan to diversify in order to supplement the mineral base, and thermal power and stream-generating industries have great potential. Forestlands, such as Prince Gallitzin State Park to the north and Stackhouse Park to the south near Johnstown, provide outdoor recreation for the region. Recreation and tourism are becoming increasingly important, but industrial air and water pollution must be curbed. The Allegheny Portage Railroad National Historic Site can play a vital role in furthering these regional development goals.

ALLEGHENY PORTAGE RAILROAD BACKGROUND

In the past, the Allegheny Portage Railroad served as the only link between sections of the Pennsylvania Mainline transportation system

and traversed some 36 miles over the Allegheny Mountains summit between Hollidaysburg on the east and Johnstown on the west. It played a major role in affecting natural, cultural, and economic factors on a regional scale. Natural factors were affected by the mining of coal, the cutting of trees, and the altering of the landscape for the right-of-way. The overall effect was that the physical environment was impacted by the building of the railroad and by the people it brought. Cultural factors were affected by the interchange of ideas, communication, and the westward spread of culture resulting from a convenient means of transportation between the Ohio Valley and the Eastern Seaboard. Economic factors were affected by the extraction of coal, the cutting of timber, and the smelting of iron--all to be sent to the Eastern Seaboard to be made into finished products.

In its day, the Allegheny Portage Railroad was hailed as a great engineering feat. Contemporaries compared the portage favorably with the Seven Wonders of the World: What other rail system had climbed mountains such as the Alleghenies, overcoming an elevation of 1,400 feet? It was awe-inspiring to the average traveler accustomed to the tranquil rock of the canal boat or the dusty wagon ride over the mountains to the Ohio Valley. Technology had indeed arrived at a remarkable level of sophistication, revealing man's capacity to conquer nature, land, and the vast wilderness beyond the western slope of the mountains.

The movement westward had gained impetus with the completion of the Erie Canal across New York State in 1825. The commonwealth of Pennsylvania realized the drain that the Erie Canal could make on its economic status. The Pennsylvania legislature rose to the challenge and in 1824 appropriated the first funds for a canal and rail transportation system known as the Main Line of Public Works to link Philadelphia with Pittsburgh--a distance of some 394 miles. The greatest obstacle to completion of the system was the mountain barrier running diagonally across the state, especially the eastern slope, which presented a steep and formidable obstacle even for wagons. A proposal to construct a canal over the mountains through the use of a 4-mile summit tunnel had to be rejected as technically unfeasible. England boasted of a few railroads crossing the rolling countryside; occasional experimental railroads that lasted a brief time had been set up in the United States in eastern Pennsylvania, but none had attempted to surmount such heights.

The commonwealth of Pennsylvania hired the best engineers of the day to survey and propose a solution to this vital 36-mile link over the mountains. Moncure Robinson, Stephen H. Long, and John Wilson concluded that a system of 11 levels and 10 inclined planes driven by stationary engines--five on each side of the mountain--would be the best mode of transportation.

In 1831, surveys were made under arduous working conditions--snow, rain, heavy winds, rattlesnakes, and dense forests. The rough terrain, inexperienced workers, poor training, and an inadequate work force also slowed construction of the road. But at its completion in 1834, the Allegheny Portage Railroad boasted four massive stone viaducts, more than 72 stone culverts, the first railroad tunnel in the country, 10 stationary steam-powered enginehouses that demonstrated more brute strength than almost any technological product to date, and over 36 miles of railway through narrow ravines and over rivers and streams.

The portage over Blair Gap linked the towns of Hollidaysburg on the east and Johnstown on the west; both towns contained canal basins as terminal points and transfer centers on the Main Line of Public Works. Traffic over the line not only facilitated the migration of families to the West, but vastly improved the trade capacity of Pennsylvania. Bituminous coal in western Pennsylvania could be expeditiously transported to eastern markets; all types of manufactured products necessary for the growth of the West could be made available to pioneers on the frontier; and all along the line, towns and communities flourished due to the increased flow of traffic.

On the summit of the Alleghenies, a pioneer to the area prepared for the vast improvement in transportation over the mountain and the subsequent influx of people. Samuel Lemon abandoned his successful log tavern along the Northern Turnpike and moved his operation close to the head of Incline 6. Here, he built a large two-story stone structure, which stands as a landmark today. His investment in the future of the railroad made him a wealthy man. Lemon's tavern and coal mine served the travelers along the railroad, as well as the old turnpike. In the late 1840s, Lemon retired to the town of Hollidaysburg.

Despite its spectacular success as a transportation system over the Alleghenies, the Allegheny Portage Railroad was troubled with constant maintenance problems because of the difficulties of keeping the rails in line during hard winters, flooding in the spring, and technical problems involved with the stationary engines. The system of pulling up and letting down cars on the inclines by endless ropes allowed for a simple pulley principle to take effect. Today, this would not present serious problems, but when the engines were operating, complications involving boiler explosions and the loss of life occurred.

More important, all maintenance ran into heavy expenses that the state legislature looked at with a critical eye. Necessary funds for renovations and reconstruction along the railroad were not provided. At the same time, the march of technology was casting a shadow over the Portage. Locomotive engines, which had been

introduced at levels between the inclined planes, were now being built with sufficient steam power to cross the mountains on a continuous track without the aid of inclined planes. In 1853, Pennsylvania accepted the inevitable and appropriated funds for a new route to bypass the inclined planes. The New Portage Railroad was completed in 1855, and parts of it are used today by Conrail, which crosses the trace of the Allegheny Portage Railroad nine times on the east side of the mountain. As a result, the continuity of America's transportation development in this area is highly visible.

JOHNSTOWN FLOOD BACKGROUND

While the southern Allegheny region experiences heavy spring rains, rainfall in the summer is often unpredictable and infrequent, with streams reduced to mere trickles and rivers reduced to a slow flow. The summer season was the busiest one on the canal east to Pittsburgh, and often the water supply for the basin and its canal dipped too low for safe passage. Fifteen miles east of Johnstown, along the low level of the western slope, the commonwealth of Pennsylvania constructed a large reservoir where the South Fork of the Little Conemaugh River and several mountain streams converged. An earthen dam to hold the water was begun in 1838 and was scheduled to be completed in 2 years. However, the reservoir took 14 years to build and was not completed until 1852. The dam was 20 feet wide at the top, 240 feet thick at the base, 72 feet high, and 930 feet long. It was made of successive layers of packed clay, and 400 acres of trees were cleared behind it. Outlet control valves were located near the bottom of the dam.

When the canal and railroad system were abandoned in 1857, the state sold the right-of-way of the old and new portages as well as the South Fork Reservoir to the Pennsylvania Railroad. The dam stood almost forgotten for over 15 years, except when a minor break in 1862 brought it to the attention of the local community. In 1879 Benjamin Ruff, a businessman from Pittsburgh, purchased the old dam and created a private sporting club for the elite among the steel magnates of Pittsburgh. By 1880, less than a year after the dam was repaired to form a 3-mile-long lake, the South Fork Fishing and Hunting Club had become one of the most lavish and exclusive resorts in the east. Andrew Carnegie, Henry Frick, Phalander Knox, and Robert Pitcairn were among its prominent members.

Down the Little Conemaugh River valley to the west, Johnstown flourished as the leading steel manufacturer in the country, followed closely by Pittsburgh. The population had swelled to 30,000 people, the majority of whom labored in the mines and mills of the Cambria Iron Company. Housing and manufacturing needs

had changed the natural balance in this narrow valley. Trees were cut from the hillsides, and the river flats were filled to make ground space for buildings. Each spring the river flooded, but never enough to cause real alarm. Every rainy season brought to the town dwellers the lingering fear that the dam might break, releasing water estimated to weigh 20 million tons into the narrow, sluice-like ravines, and destroying the communities in the valley below. For some 10 summers their fears were put aside, and steel production continued in the thriving company town.

On May 31, 1889, the dam broke after a heavy rain, causing the country's first catastrophe that attracted national attention since the Civil War--the Johnstown Flood. The collapse was a result of a combination of circumstances: The outlet control valves at the base of the dam had been removed, the height of the dam's midpoint had not been maintained at the same elevation as the ends, and a fish weir or trap had been placed in the dam spillway and was eventually blocked by debris. The colossal wall of water that swept everything in its path to destruction, including some 2,200 people, reduced Johnstown to shambles and brought the threats of typhoid, starvation, and overexposure to all survivors. Locomotives, houses, and wreckages of all types piled up against the large stone railroad bridge across the Conemaugh River on the western edge of town. During the night, the debris burst into flames, and many that were trapped in the debris burned to death. The stone bridge created, ironically but fortuitously, another dam that kept the worst of the flood waters from raging farther west down the Conemaugh River. The bridge survived the flood intact, and today it is still in daily use as part of the mainline of Conrail.

The Pennsylvania Railroad Company, the largest corporation then in existence in the United States, came to the rescue of the flood victims with special trains to bring the essential supplies sent by organizations, individuals, and quickly organized groups from across the country. Clara Barton brought her newly formed Red Cross volunteers into the valley, and they won worldwide recognition for their outstanding relief service. Newspaper reporters swarmed over the wreckage looking for stories, however distorted or exaggerated, which were to make headline news for over 2 weeks in nearly every major newspaper in the country. The country was united behind a cause for humanity, and everyone felt a spark of national pride during a period when there was still suffering from the bitterness of Reconstruction.

With the spirit and aid of thousands of well-wishers, Johnstown was rebuilt on the same site. In the wake of the flood, a disquieting lesson had been learned about man's complicity in unleashing destructive natural forces. No simple excuses could be given for the 777 graves of the unknown dead that lay as solemn reminders in the Grandview Cemetery overlooking the town. The "robber

barons," as they were later labeled, had assumed no real responsibility for the devastation of Johnstown caused by the breaking of the dam, which the South Fork Fishing and Hunting Club had failed to repair and maintain properly. Andrew Carnegie showed some concern by building a town library to replace the one that had been destroyed. Completed in 1891, the Carnegie Library still stands as a monument relating to the flood and is one of three Carnegie Libraries to have survived contemporary urban renewal. This library now serves as the Johnstown Flood Museum for the city. The river's flow in Johnstown has been channelized, but it is still subject to major flooding. Town dwellers also live under another environmental threat posed by man's activities as heavy air pollution from steel mills hangs low over the narrow valley.

In the wooded hills close to U.S. 219, two large earthen remnants of the dam's abutments stand on either side of the polluted South Fork of the Little Conemaugh River, leaving only the slightest suggestion of the immense force unleashed by the giant wall of water in May 1889. Nearby, in the small mining community of St. Michael, the South Fork Fishing and Hunting Clubhouse and 10 or 12 remaining "cottages" line a street that runs along what was once the lakeshore. All of these structures are reminders of a historic event that had far-reaching implications for subsequent generations of Americans.

T H E P L A N

VISITOR USE

Visitor use of Allegheny Portage Railroad National Historic Site and Johnstown Flood National Memorial will be principally day use, and most visitors will use public or private transportation such as buses and automobiles to reach the parks' units.

Additions are proposed to Allegheny Portage Railroad National Historic Site on the west side near Blairsville on a cooperative management basis with the U.S. Army Corps of Engineers. This addition will preserve a representative segment of the Pennsylvania Mainline Canal that is not currently included within the park boundaries.

Cooperative agreements with Hollidaysburg on the east and Johnstown on the west will allow for interpretation of canal basins, which functioned as transfer points between the canals and the Allegheny Portage Railroad, and for interpretation of the effects of the flood in Johnstown.

Information stations will be set up on an informal basis in cooperation with federal, state, and private groups to aid visitors in making tour choices based on their own interests in regional and park resources. These stations will be situated so as to provide information to visitors at an early stage, regardless of where they begin their tour. Possible locations for the stations are Hollidaysburg on the east; the Lemon House at the Summit Unit; and Johnstown, Blairsville, and the national memorial on the west.

The proposed additions, cooperative agreements, and information stations, when completed, will allow visitors to select several alternative routes of travel, ranging from a short, single-stop tour to a long, complete tour with many stops. A marked, self-guided interpretive tour route will make the possibilities obvious, following the route of the Allegheny Portage Railroad as closely as possible and interpreting the historic features.

For example, the Lemon House and the national memorial will present overviews of their respective areas so a single stop will provide a complete story of each area. On the other hand, tour options can be combined in several ways according to visitors' interests. Visitors can tour the east side or the west side separately, for a combination of sites. In addition, a trail system for hiking from Incline 10 to the Summit Unit will be developed for those wishing to view the Allegheny Portage Railroad leisurely and in more detail. Picnic facilities will be provided at Incline 10, the Summit Unit, Blairsville, and Johnstown Flood National Memorial.

Environmental study areas will be established at the Summit Unit and Incline 10 for the Allegheny Portage Railroad and at the Johnstown Flood National Memorial. Opportunities for historic research should be provided at the Lemon House for interested individuals. The evolution of the parks' areas as described will provide visitors with visible examples of the interrelationship of man and the land with the development of a wide range of transportation systems and their accompanying effects on the regional landscape.

Special efforts will be made to develop on-site and off-site services for schools to further students' understanding of natural and historic changes in the parks' environment. Also, cooperation will be extended to local and national educational organizations in relation to their programs.

Other programs of community and regional interest will be presented at the Lemon House and at the national memorial to make maximum use of the parks' resources and to be consistent with the policies governing the administration of the parks. These will include special programs appropriate to the areas' themes, including demonstrations, work reconstructions, household arts, and styles of dress.

RESOURCES MANAGEMENT

Allegheny Portage Railroad National Historic Site and Johnstown Flood National Memorial will be administered and managed consistent with the management policies of the National Park Service. Resources management will focus on historic resources, with natural resources providing a supporting role. The natural environments that formed the settings for the historic events will be redeveloped where necessary to support the primary story.

The total environment of the parks may be grouped into physical, biological, and cultural categories. The physical environment of the parks is typical of the Allegheny Mountain region, which is heavily forested with second-growth mixed hardwoods and interspersed with pines and hemlocks on low, open mountains. The biological environment is typified by deer, small mammals, birds, and reptiles, including copperheads and rattlesnakes. The cultural environment of the parks includes both historic and contemporary resources. Historic resources are those relating to the 1834-1857 operation of the Allegheny Portage Railroad and the South Fork Dam abutments at the national memorial. Contemporary resources include major and minor highways, major and minor railroad lines with support facilities, truck support facilities, strip mines and spoil piles, large and small towns, and various other developments.

The parks' natural resources have been heavily exploited by man's actions in transportation, mineral extraction, forest utilization, farming, and urban development. The natural scene must be restored where necessary to support the historic events. Incline 6, the Summit Unit, and the national memorial are the primary sites where such restoration will occur.

The parks' historic resources require preservation, restoration, and reconstruction in various degrees and locations as described specifically in the following sections of this plan. A comprehensive archaeological survey is also needed to determine the location and condition of all historic resources in the parks. Stabilization of enginehouse foundations and drainage structures at the Summit Unit is necessary. A protective structure will be built over the stone foundations of the enginehouse, and the tracks on Incline 6 will be reconstructed. Adaptive restoration must be undertaken at the Lemon House, and the interior will be refurnished in the historic period.

Each park area has a carrying capacity beyond which it cannot be utilized by visitors without causing damage--that is, there is a maximum number of visitors who can make use of the environment without causing deterioration of the physical habitat or creating severe conflicts with other visitors. The capacity is based on the consideration that there is an interrelationship between plants, animals, man, and man's facilities. It is complex and dynamic, changing with the physical base and the culture of the groups using the area.

The determination of a carrying capacity for the national historic site and the national memorial requires further study. Until such studies can be undertaken, management will continue to make decisions based on observation and evaluation. This will require that personal judgments be exercised in regards to the "health" of the historic resource in relation to the degree of use allowed.

INTERPRETATION

The interpretive theme at the Allegheny Portage Railroad National Historic Site is the inception, construction, and operations of the Allegheny Portage Railroad and the Pennsylvania Mainline Canal, as well as the importance of the system in the economic, social, and technological development of the United States.

The interpretive theme at the Johnstown Flood National Memorial is to communicate the impacts of the disastrous flood of May 31, 1889, and to interpret the social and environmental lessons that followed.

The Allegheny Portage Railroad and the South Fork Dam were constructed as parts of the Pennsylvania Mainline Canal. The construction, operation, and demise of the canal is thus an integral part of the story. Taken together, the canal, the railroad, and the flood tell a story of progress and disaster that transcend their individual time frames. The Allegheny Portage Railroad was all but forgotten when the tragedy at Johnstown reminded the nation that the water impoundment necessary for canal/railroad operations was a residue of economic growth that upset the balance sheet long after the books were closed.

The Summit Unit and the Lemon House will remain the focal point for interpretation of the Allegheny Portage Railroad, and the national memorial will be the main interpretive area for the Johnstown Flood. Given the scattered nature of the resources, special interpretive methods such as self-guided interpretive tour routes will be required to orient visitors to the units of the parks and the related sites and to unify the story. An essential part of this unity is the city of Johnstown. A cooperative agreement between the National Park Service and the city regarding interpretive signs will further assure integration of the total story.

PROPOSALS

The Canal (Eastern Division)

The enabling legislation authorizes the Secretary of the Interior, at his discretion, to establish a portion of the Pennsylvania Mainline Canal as part of the national historic site.

The Park Service should acquire, on an opportunity basis, a representative segment of the Pennsylvania Mainline Canal on the eastern slope of the Allegheny Mountains.

The Eastern Slope

Hollidaysburg, some 10 miles east of the Summit Unit, contains many historic structures that remain in excellent condition from the canal and railroad period. The central section of town retains much of its historic charm. On Juniata Street, across from the present railroad shops and switchyard, stand six buildings that faced the canal basin during historic times. As a transportation hub, this area served much the same function in the past as it does today--the transfer of goods from one transportation form to another.

The six structures on Juniata Street have been recommended to the Pennsylvania Historical and Museum Commission for review and consideration for nomination to the National Register of Historic Places. Cooperative agreements with state, county, and local highway departments will permit signing and marking of these

buildings as a stop in the self-guided interpretive tour route of the entire Allegheny Portage Railroad. Some means of directly marking the road will further identify the route.

Incline 10 provides views down toward Hollidaysburg 3 miles to the east and up toward the summit of the Allegheny Mountains, thus offering a visual connection for understanding the route of the portage trace. Acquisition of a wedge-shaped piece of land pointing to within 150 feet of the heart of the incline will prevent the possibility of any future development along Dry Run Road that would intrude on the historic scene. This acquisition will also eliminate the presently complicated boundary problems, and three houses will be acquired. (See Graphics/Illustrations.)

The stone culvert, stone sleepers, and ruins of the enginehouse should be clearly marked and identified. The New Portage Railroad, completed in 1855, runs along the western boundary of Incline 10 and should be interpreted as part of the evolution of transportation in the region. A visitor parking area and hiking trail to the portage trace will be developed along with a picnic area, comfort station, and maintenance facilities. The existing ranger residence south of the Allegheny Portage Railroad trace will be retained. An environmental study area will be established and housed in two of the newly acquired buildings along Dry Run Road.

The level between Inclines 10 and 9 has been altered considerably and is partly utilized by the New Portage Railroad; Incline 9 is privately owned. The residential property here should be acquired, and historic structures should be marked and identified. A residence, stone dam, and fish pond have been constructed near the foot of Incline 9. Blue Knob Road (Legislative Route 07043) crosses the driveway entrance, which is the portage trace. The residence will be used as a ranger station and rest facility for hikers. A stone culvert near the pond remains in good condition and should be stabilized and preserved. (See Graphics/Illustrations.)

Incline 8 was the longest and steepest on the railroad. The New Portage Railroad, with a 358-foot right-of-way, cut across the Allegheny Portage trace about one third of the way up Incline 8 on a curve called the Muleshoe. The western or upper two thirds of the incline above the Muleshoe is owned by the National Park Service. The eastern or lower portion is owned by Conrail. This stretch of the trace should be protected by means of land acquisition. (See Graphics/Illustrations.)

There is now minimum trail development and interpretation at Incline 8. The excavated and exposed enginehouse foundations remain. There are also some unidentified foundations, a steep stone retaining wall, a culvert, and a nearby pit that probably was a stone quarry. These structures require immediate stabilization, along with some recontouring of the trace.

Sections of the Huntingdon, Cambria, and Indiana (or Northern) Turnpike, which was an early horse-and-wagon route over the mountains and parts of which are now U.S. 22, are visible between Incline 8 and U.S. 22. Access and parking will remain in the form of a highway turnout near the railway bridge. The present parking facility, owned by Conrail, is unsafe and inadequate. This small 2-acre area should be acquired in order to develop adequate visitor access.

The Eastern Slope Trail

It is proposed to establish a hiking trail on the eastern slope with a minimum 50-foot right-of-way linking Inclines 10, 9, 8, 7, 6, and the Summit Unit. The original 120-foot right-of-way will be purchased where possible; where this is not possible, a minimum 50-foot right-of-way will be secured.

The proposed trail will originate at Incline 10 and will parallel the portage trace on land owned by the National Park Service. The trail along the portage trace between Inclines 10 and 9 will be established by acquiring access rights and by purchasing of private lands where necessary. The trail section between Inclines 9 and 8 will be established by obtaining access rights from Conrail.

Little remains of the level between Inclines 8 and 7, of Incline 7 itself, and of the level between Inclines 7 and 6 and the Summit Unit. Trail access rights will be developed adjacent to U.S. 22 to connect the inclines on the eastern slope and to permit pedestrian access along the proposed hiking trail. It will be necessary to obtain access rights from the state highway department and Blair Gap Water Supply Company, and to purchase lands where necessary to link trail sections between Inclines 8 and 7, Inclines 7 and 6, and the Skew Arch Bridge and the Summit Unit.

The safe crossing of U.S. 22 will be provided by two pedestrian underpasses. This will be done because over 17,000 cars a day use this highway and because the Pennsylvania Department of Transportation will not allow a crosswalk to be built here for safety reasons.

Summit Unit

The Summit Unit is the largest and most accessible portion of Allegheny Portage Railroad National Historic Site. It contains the most representative assemblage of features associated with the Allegheny Portage Railroad. Within its 462.7 acres are Incline 6, the Skew Arch Bridge which carried the Huntingdon, Cambria, and Indiana Turnpike on its diagonal crossing of Incline 6; almost all of the summit level connecting Incline 6 on the east with Incline 5 on the west; the foundations of the Incline 6 enginehouse; and the Lemon House--a tavern built to accommodate Allegheny Portage Railroad passengers.

The Summit Unit is divided by U.S. Route 22, which forks near the eastern boundary into eastbound and westbound lanes. The Skew Arch Bridge lies in this fork and is separated from the rest of the unit. Legislative Route 07068, connecting Gallitzin Borough with U.S. 22, passes between the Lemon House and the head of Incline 6. The Pennsylvania Department of Transportation has undertaken a major relocation of U.S. 22 in this vicinity. The relocation will adjoin the western boundary of the unit and should sharply reduce commercial and through auto traffic on present U.S. 22.

At present, all development lies north of U.S. 22. Development and visitor use concentrates at the head of Incline 6. Visitors enter here via the Gallitzin Road to a parking area immediately northwest of the Lemon House, which houses a visitor center and public rest rooms. From the Lemon House, the visitor can cross the road, at great risk, to view the exposed enginehouse foundations, walk Incline 6 on the summit level, or take one of three self-guided walks.

The Lemon House also houses park headquarters and an apartment. A decrepit 20th-century barn across Gallitzin Road from the Lemon House and adjacent to the enginehouse foundations is used for park maintenance and operations.

West of the Lemon House, where the summit level curves away from U.S. 22, the National Park Service has developed a picnic area, maintenance yard, and housing area. Lands south of U.S. 22 serve to protect the setting and are not developed.

Since this unit is easily accessible and contains a representative cross section of Allegheny Portage Railroad remains, it is the logical point at which to interpret for the visitor the concept and operating details of this unique form of transportation. The key to visitor understanding and visualization of how the Allegheny Portage Railroad worked is the site of the enginehouse. Here was the motive power which lifted the westbound cars up the incline and lowered the eastbound cars down the incline. The cars passed from the wood-tie mounted tracks of the inclines to the stone-tie mounted tracks of the levels, and motive power changed from the stationary steam-driven ropes at the incline to horses, and then to locomotives on the level.

The foundations of the enginehouse have been exposed and should be stabilized and interpreted to visitors. This action will require building a structure for protection from the elements. The structure will also be used to house exhibits illustrating the working of the enginehouse, plane, and level. To further assist visitors to visualize the Allegheny Portage Railroad in operation, and to illustrate the difference in trackage on the planes and the levels, sections of track on the summit level and on Incline 6 should

be reconstructed to the point at which they are no longer visible from the enginehouse site, a distance of approximately 900 yards down Incline 6 and 1,000 feet on the summit level.

Because the interpretive focus will be at the enginehouse, space in the Lemon House will be freed so that its role as a tavern can be developed. The structure should be partially restored to recapture its historic appearance while retaining the post-1860 western addition. The historic basement entrance was revealed when the modern garage was removed and the adjacent grounds regraded, and the south porch will be rebuilt above the basement entrance.

The following rooms in the Lemon House will be restored and furnished: dining room, kitchen, parlor, and bar. The two rooms on the east side, with their 19-century fabric, will be refurnished as a bar and parlor for travelers, while the two west rooms will be restored and furnished as a kitchen and dining room. Upstairs, one of the rooms, with its original fabric, will be furnished as a typical tavern bedroom of the period. The remaining rooms will accommodate National Park Service administrative offices, library, rest rooms, and information facilities. The present employee apartment will be eliminated and a new residence constructed in the development subzone.

The Gallitzin Road (L.R. 07068) crosses the Summit Unit and separates the Lemon House from the head of Incline 6 and the enginehouse vicinity. Because this road was present during the historic period, it will be retained, but the portion within the park boundaries should be closed to vehicular traffic and restored to its historic condition. An existing gravel driveway serves the present parking lot adjacent to the Lemon House and crosses the portage trace. The driveway and parking facilities will be relocated to eliminate the intrusion on the historic scene.

West of the Lemon House a new parking facility will be constructed. It will be hidden behind a newly constructed earthen berm designed to keep both the facility and automobiles from visually intruding on the historic scene. Trees will be planted on the berm for this purpose. A new 500-foot trail will be constructed from this facility to the Lemon House. Also, a new 1,500-foot access road will be constructed from the picnic area entrance road and will run south of the fire reservoir to the new parking facility.

The existing picnic area will be retained. Its parking area has direct access from U.S. 22 and consists of five parking bays for 20 cars each. There are portable comfort stations, several hiking trails, 34 picnic tables, a paved perimeter walkway, and stone walls built to hide garbage cans--all in a wooded setting. Less than 5,000 visitors use this area during the summer months, so parking is restricted to two bays. The light use of the area results from

the generally inclement weather on the Allegheny Front and at the Summit Unit. Also, similar facilities are available near water-based units in surrounding state recreation areas.

The picnic area access road also serves the proposed maintenance area. A new utility building will be built in this vicinity. Two trailer residences are located here and will continue to serve as the staff residential area. An employee residence will be constructed to provide additional on-site resource protection.

When U.S. 22 is realigned around the Summit Unit, it will provide new circulation opportunities. A new interchange is proposed in Cresson about a half mile west of the Lemon House on old U.S. 22. The new highway alignment will pass about a mile north of the Lemon House. A new interchange will serve Gallitzin and the Gallitzin Road farther north. Old U.S. 22 will function as a local bypass and recreation road, serving as the main access to the Summit Unit. Upon relocation of U.S. 22, the National Park Service should cooperate with the state to determine the location and number of lanes required for the old U.S. 22. The intent is to abandon or relocate the westbound lanes, Allegheny Township Road 7432, and the Gallitzin Road (L.R. 07068) to permit the reconstruction of Incline 6.

Incline 6 with the Skew Arch Bridge is the final link between the Summit Unit and Incline 10. The bridge, with its twisted arch or slanted stone construction, is considered structurally unique, and it was the one land bridge on the line. It is located in a wye of heavily traveled U.S. 22, with no safe pedestrian or automobile access. The top of the bridge provides a good view up and down Incline 6. The steps and walks built into the fill immediately west and under the bridge will be removed. However, the stone sleepers used in construction will be preserved for interpretation or used as replacements in reconstructing the trace. The commemorative monument southwest of the bridge will be retained. Stabilization of these historic features is urgently needed.

As discussed previously, a pedestrian underpass will be constructed under U.S. 22 to connect the eastern slope trail system with the Skew Arch Bridge area. Another pedestrian underpass will be constructed from Skew Arch Bridge to Incline 6 to provide continuity for the trace near the foot of Incline 6. Ultimately, the westbound lanes of U.S. 22 should be eliminated, and the eastbound lanes should be located farther south in cooperation with the state highway department. Allegheny Township Road 7432, an unpaved hunting-and-mining access road, cuts across Incline 6 above the Skew Arch Bridge and U.S. 22. It should be either abandoned or rerouted to connect with U.S. 22 farther east. This would remove another obstacle to reuniting and regrading Incline 6 into a continuous surface to resemble that of historic times.

The head of Incline 6, the Summit Unit, and the Lemon House are the heart of the Allegheny Portage Railroad National Historic Site. Ideally, this area will be redeveloped to resemble the George Storm painting of the historic period. Highest priority must be given to the restoration and redevelopment of this core area, and several phases, as determined by park managers, may be necessary.

To ensure the integrity of the core area, some additional acreage should be purchased. This includes the area immediately across U.S. 22 from the picnic area entrance road, the area between the new U.S. 22 and the park boundary west of the park, and several parcels on the hills surrounding the eastern end of the park in the vicinity of the Skew Arch Bridge. The purchase of all outstanding mineral rights immediately under the site is also proposed.

The modern frame barn, which is being used as a maintenance shed, has stone foundations that may prove to be historic. This structure will be removed, and any foundations identified as historic will be preserved. Any restoration will depend on further historic research.

Other considerations are necessary to complete the historic scene at the head of Incline 6. Lemon's Coal Mine, which provided fuel for many of the railroad's enginehouses, will be uncovered and further researched. The stone quarry, which provided material for the railroad's stone sleepers, will be further interpreted by a trail guide.

Archaeological research is needed to determine the location and layout of other associated historic structures. These sites will be marked and interpreted. Extensive reforestation will be needed to screen the Lemon House area from U.S. 22; historic vegetation types, such as hickory, oak, pine, and poplar, will serve this purpose.

Finally, toward Cresson there is a small piece of land between the western park boundary and the new highway right-of-way. This should be acquired to prevent commercial development. Where new U.S. 22 crosses the Allegheny Portage trace, another pedestrian underpass will be provided on a cooperative basis with the state highway department to maintain continuity of the portage trace.

Cresson exists as an economically depressed area at the crossroads of U.S. 22 and Pennsylvania 53. During the latter part of the 19th century, Cresson was a well-known resort, featuring mineral springs and served by the Pennsylvania Railroad. During the days of the Allegheny Portage Railroad, the Summit Mansion House in Summitville at the crossing of the railroad and Turnpike Road was an important hotel and transfer point. This historic structure still stands and should be marked, signed, and included in the self-guided interpretive tour.

The Western Slope

Most inclines and levels of the Allegheny Portage Railroad on the west side of the summit have been utilized as a roadbed for modern-day roads or railroads--testimony to the competence of the original surveyors and builders of the railroad. Historic culverts and other historic structures are visible along the road right-of-way, and marking and signing of these features is needed.

Incline 5 has a township road built on top of it.

Incline 4 extends the self-guided interpretive tour through the borough of Lilly. Midway down the incline, the township road leaves the incline and jogs west, leaving a part of the original incline intact. Conrail tracks cross the foot of the incline. The township road crosses the tracks and rejoins the portage trace beyond the foot of the incline. A culvert from the portage railroad still provides drainage for Pennsylvania 53. Marking and signing of historic features is needed here.

Incline 3 near the borough of Cassandra is now part of the Conrail mainline. The trace of the old portage has been covered by the railroad and no development or interpretation is envisioned here.

Incline 2 includes part of the state and Portage Township road system. In the past this incline marked the middle section of the Allegheny Portage Railroad. Today Portage is a tidy, picturesque town. At the foot of the plane, where the 13-mile level begins, there is an automobile junkyard. Either Conrail tracks or Pennsylvania State Route 53 now cover the trace throughout much of this level. The route winds along the north fork of the Little Conemaugh River Valley, and the original character of the countryside can still be seen. No development or interpretation is envisioned here.

The boroughs of Ehrenfeld and South Fork are situated at the junction of the north and south forks of the Little Conemaugh. Highways, bridges, and railroads also join in this area. In Ehrenfeld, there are extensive coal mine structures with a few regimented residences nestled against a backdrop of mine tailings. South Fork is a coal mining town consisting of older houses rising from the base of a hill. The effects of acid mine water drainage can be seen throughout the area. These environments are grim and stark, but provide valuable interpretive opportunities for the self-guided auto tour. The portage trace is lost here in the narrow canyon among the modern railroad tracks along the river.

Staple Bend Tunnel

The Staple Bend Tunnel, with its approach level from the east, resumes the historic Allegheny Portage Railroad trace near the mining town of Mineral Point. The area is administered through a

cooperative agreement with Bethlehem Steel Corporation, whose waterline for the Johnstown plant runs underground through the tunnel. Extensive strip mining of the area and acidic mine-drainage waters have damaged the environment. Bethlehem Steel has planted Japanese bamboo in an effort to reclaim damaged areas, and the plants have virtually taken over in spite of extremely adverse conditions. The unit faces the immense Cambria slag dump, located across the modern railroad tracks and the Little Conemaugh River.

The Staple Bend Tunnel is historic because it is the first American railroad tunnel. Built from 1828 to 1834, the tunnel portals reflect the pride and enthusiasm of its builders. The west portal is a handsome architectural work with two columns at each side of the tunnel opening that support an elaborate cornice. The tunnel's engineering and aesthetic quality support the original act establishing the park, and the Park Service should eventually acquire the structure.

The primary interpretive emphasis would be upon the tunnel's significance in the development of the nation's railroads. Secondary emphasis would be concerned with its role as part of the Pennsylvania Mainline Canal. Because the tunnel is near the western end of the transportation route, it could be appropriately developed as a site in itself.

Bethlehem Steel has indicated that condemnation will be necessary for the Park Service to acquire title and use of the railroad tunnel. Third-party deed rights-of-way for the trace of the railroad should be acquired so historic scene restoration can be accomplished.

Incline 1 originates near the west portal of the Staple Bend Tunnel. A large, concrete housing protects the water control valve for Bethlehem's waterline between the head of the incline and the tunnel. Near both entrances to the tunnel there are depressions in the earth suggesting sites of Allegheny Portage Railroad structures. Conrail tracks cut off access to the lower portion of the incline.

Johnstown was built at the confluence of the Little Conemaugh River and Stony Creek on a floodplain in a narrow sluice-like valley. As stated earlier, it served as a place on the west side of the summit for transferring goods and passengers between railroad cars and canal boats. Today the Johnstown canal basin is the site of an industrial factory and train yard. The city still depends on the steel industry. However, local interests hope to expand tourism. The Johnstown Flood Museum Association has converted the 1891 Carnegie Library into a museum that will feature the history of the development of the iron and steel industries, the Johnstown Flood, and other important events of local history.

The Park Service has signed a cooperative agreement with the city of Johnstown to mark and sign historic sites that are related to the flood and that will be included on the auto tour. One such site could be the inclined plane built in 1890 as an escape route from future floods. This incline provides public transportation today, as well as an excellent overview of the city and an opportunity for tourists to ride an operating incline. The Old Stone Bridge, which backed up a mountain of flood debris, still shows marks from the burning of the debris. Finally, the Johnstown portion of the self-guided interpretive tour will close at the Grandview Cemetery, where the graves of the 777 unknown persons who perished in the flood offer a silent testimony to the devastation wrought by uninformed human tampering with natural phenomena.

The Canal (Western Division)

The Pennsylvania Mainline Canal offers an opportunity to interpret a portion of the historic site in cooperation with the U.S. Army Corps of Engineers.

Blairsville, a small town on U.S. 22 some 45 miles west of the Allegheny Front, thrived as a community on the Western Division of the Pennsylvania Canal. The Corps now operates a flood control reservoir along the Conemaugh River immediately west, south, and east of the borough. Historic traces of the canal can be reached by a road that skirts the grounds of the Torrance State Hospital and that allows access to the south side of the river.

Traveling eastward along the towpath, remnants of the canal prism, towpath, dams, two guard locks, a bypass, and other structures are on the National Register of Historic Places and on Corps land. The two locks farthest east are on Conrail land. Cooperation with Conrail to allow visitors access to the two locks will be encouraged.

A cooperative agreement will be negotiated with the Corps of Engineers to manage and interpret these historic canal features. The Corps has expressed its interest in cooperating in the planning, design, and construction of this area. The Corps and National Park Service will seek legislation that authorizes participation, and the cooperative agreement negotiated between the National Park Service and the Corps will determine the responsibilities of each agency on an equal cost-sharing basis.

The scope of development and operation will be kept to a minimum due to the fact that these features are flooded once or twice a year. The canal prism and towpath will be cleared of vegetation, with some trees remaining as a screen along the edges. The towpath will be developed as a hiking trail. Parking space, a visitor contact station, picnic tables, rest rooms, and signs will be needed, all above the high waterline on Corps land.

Johnstown Flood National Memorial

The South Fork Dam site stands several miles south of the Allegheny Portage Railroad trace. The abutments are the only remains of the dam, with access to the south abutment by way of a U.S. 219 interchange, Pennsylvania 869 (serving the borough of St. Michael), and a paved Park Service entrance road. The north abutment is reached by Croyle Township Road 352 from St. Michael or South Fork. The South Fork of the Little Conemaugh River and Conrail tracks run between the two abutments, and a concrete highway bridge of U.S. 219 crosses the wooded valley adjacent to and parallel with the abutments.

Existing facilities at the south abutment include a paved two-level, 30-car parking loop built on a former cinder pit, an interim visitor facility, an interpretive overlook sign, a loop trail around the abutment down to the river, a hilltop picnic area served by an access road, hiking trails, and a small maintenance storage shed. The national memorial's picnic facilities serve regional visitors, and its parking area will be expanded to provide for 20 additional sites when needed. Development at the south abutment is near maximum. However, no water is available within the park, and chemical toilets are necessary. Facilities at the north abutment are minimal; they include the spillway remnants and an overlook view of the former reservoir basin with the historic South Fork Fishing and Hunting Club visible in the distance.

An interpretive facility will be located near the reconstructed spillway bridge. From this point above the north abutment, visitors will see the lake site, cottages, clubhouse, dam abutments, and spillway. This facility will be the major interpretive facility and will have minimal office space and comfort facilities; drinking water will be provided. Croyle Township Road 352, which passes through the proposed site, will be realigned to go up an adjacent run to the hilltop behind the Unger farm buildings and then rejoin the existing right-of-way. A parking facility will be constructed adjacent to the interpretive facility. A trail system will be built to connect the interpretive facility, the parking lot, the restored spillway bridge, and the north abutment. A historic structures report is needed to determine the best use of the Unger farm buildings.

The separation of the north and south abutments at the Johnstown Flood National Memorial creates a circulation impediment that will be dealt with in the following manner. Visitors will arrive at the south abutment and receive information on tour alternatives. Then, they may take an auto tour to the north abutment, which is the site of the proposed interpretive facility. The tour will wind through St. Michael, turn left across the river and railroad tracks, and follow the unpaved Croyle Township Road 352. This road will be upgraded, paved, marked, and signed to become part of the

self-guided interpretive tour and provide access to the north abutment interpretive facility. The tour will include some 16 historic buildings--including the spacious cottages and the clubhouse of the South Fork Fishing and Hunting Club. Hopefully, visitors will gain an impression of the size of the former reservoir by driving around its edges.

Finally, a low-level pedestrian bridge will be constructed in front of the dam abutments and over the stream, and an at-grade crossing of the railroad tracks will be provided to connect the trail system with the north and the south abutments. The National Park Service has cleared trees within the lake bed to graphically define the historic reservoir waterline. Some low-growing native ground cover will be encouraged on the recently cleared land and small trees will remain along the railroad tracks to provide screening.

The Adams-Croyle Recreation Authority has indicated its intention to donate to the Park Service approximately 60 acres of former reservoir land that is vital to the protection of the historic integrity of the memorial. Meanwhile, the authority plans to develop a recreation area with facilities for picnicking, baseball, and fishing in two small water impoundments on the valley floor. This development will not be incompatible with Park Service plans. Cooperation will be necessary to integrate trail systems and to coordinate resources management programs.

A portion of the 1.25-acre inholding, owned by the Christian and Missionary Alliance Gospel Tabernacle Church south of Pennsylvania State Route 869, should be acquired in fee. Purchase of the land between the church's right-of-way and the park boundary would protect the historic scene.

historic region / profile

newton hamilton

incline 10

incline 9

incline 8

incline 7

summit unit

incline 4

incline 3

incline 2

staple bend tunnel

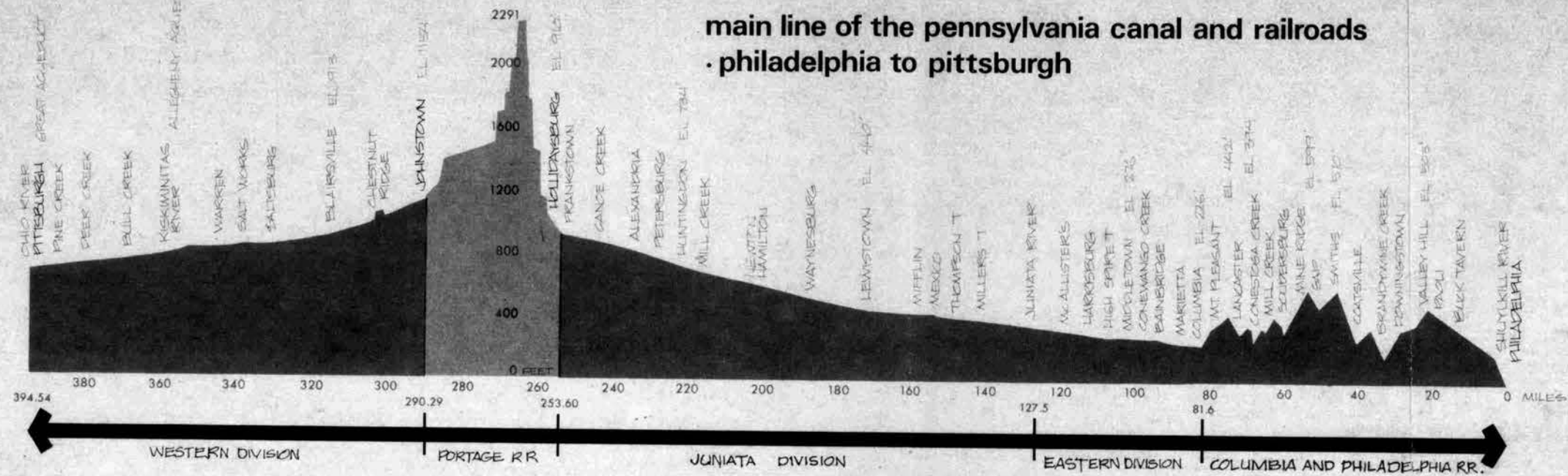
blairsville

johnstown flood

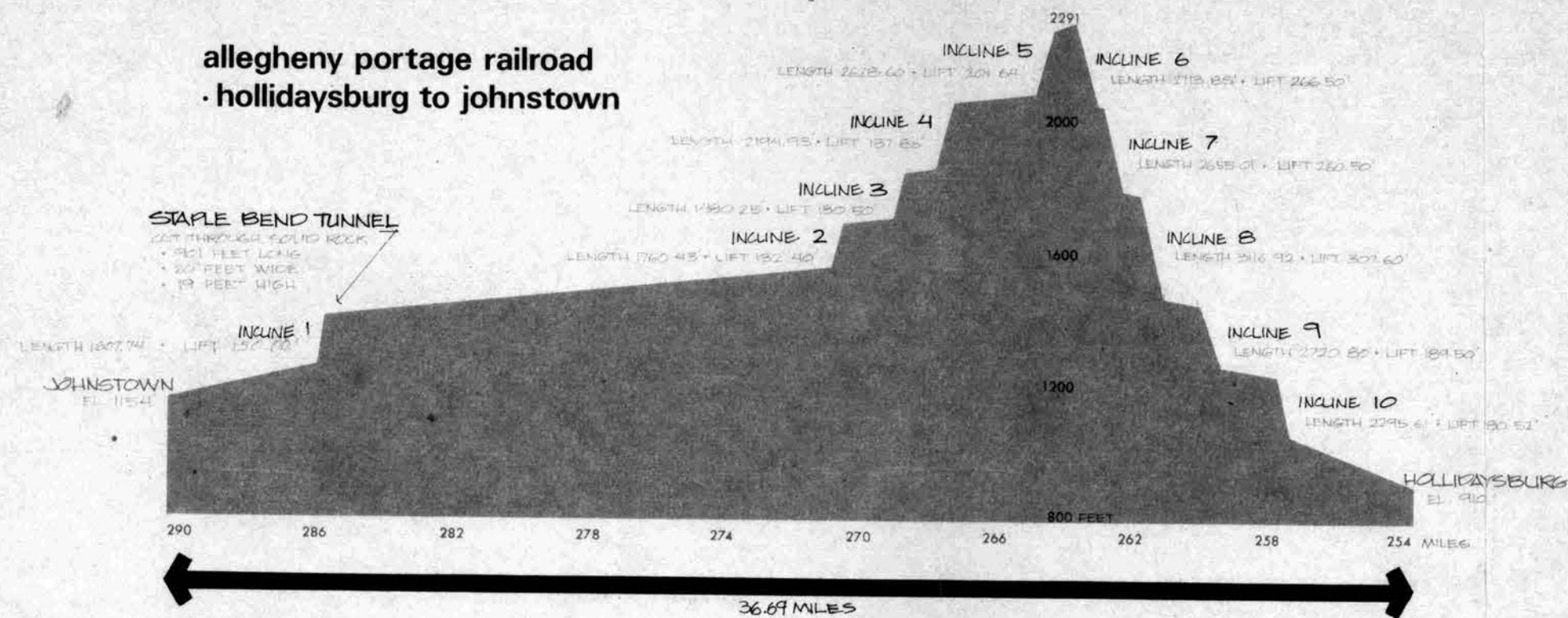
park general

graphics / illustrations

historic region / profile



**allegheny portage railroad
hollidaysburg to johnstown**

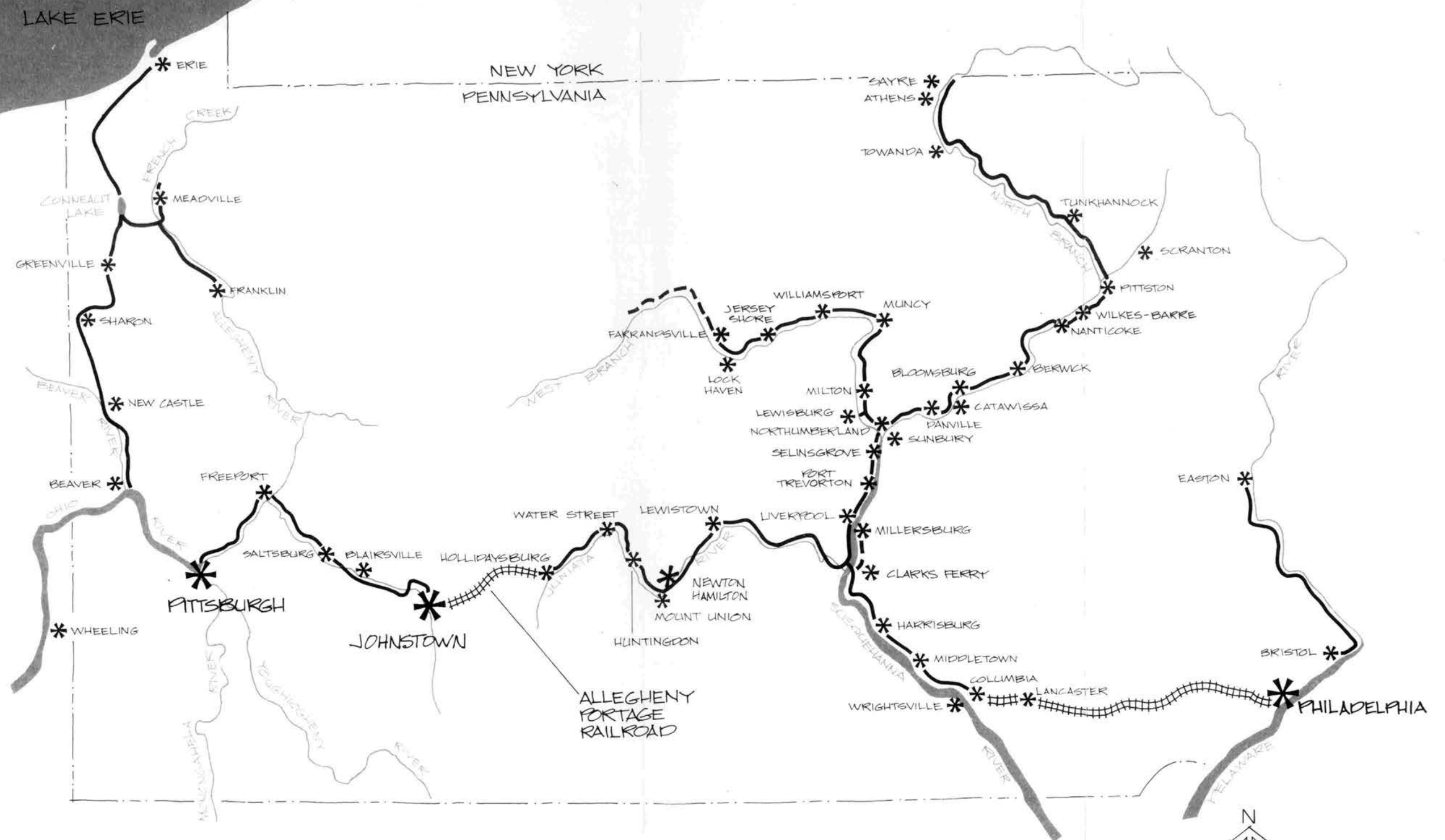


profile

ALLEGHENY PORTAGE RAILROAD NHS - JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

423 20.011A
DSC JUN 76

ON MICROFILM



historic region

ALLEGHENY PORTAGE RAILROAD NHS - JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

RAILROAD
CANAL - FINISHED
CANAL - UNFINISHED

0 20 40 MILES

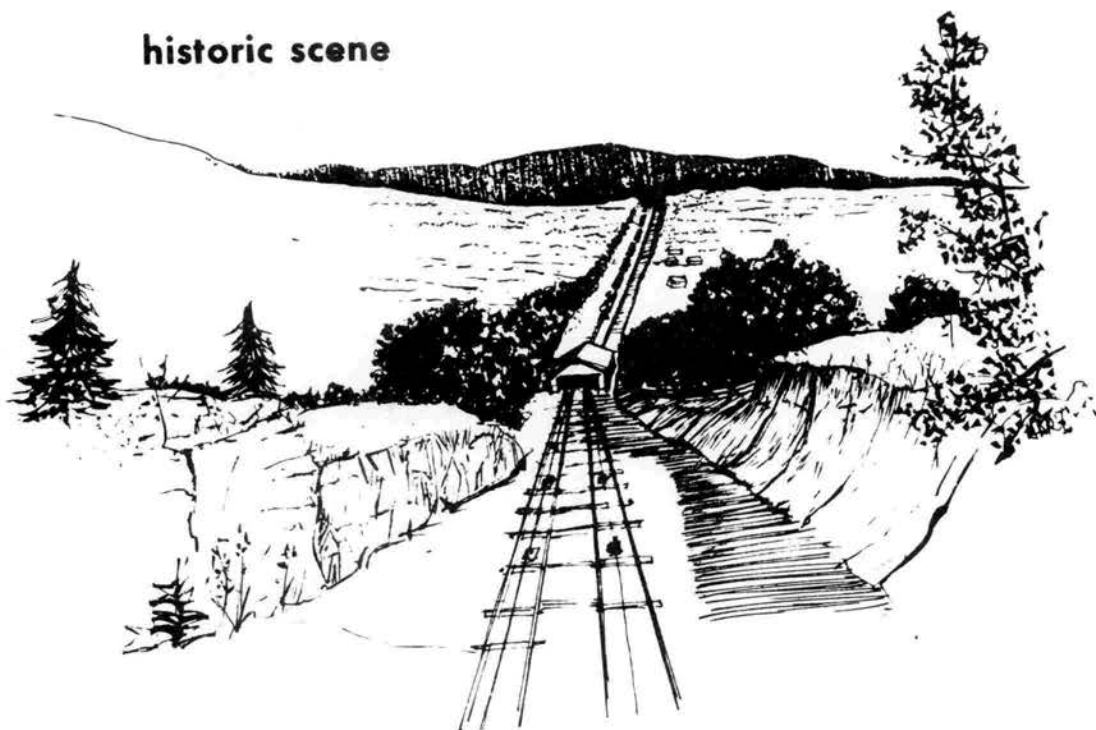
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DSC JUN 76

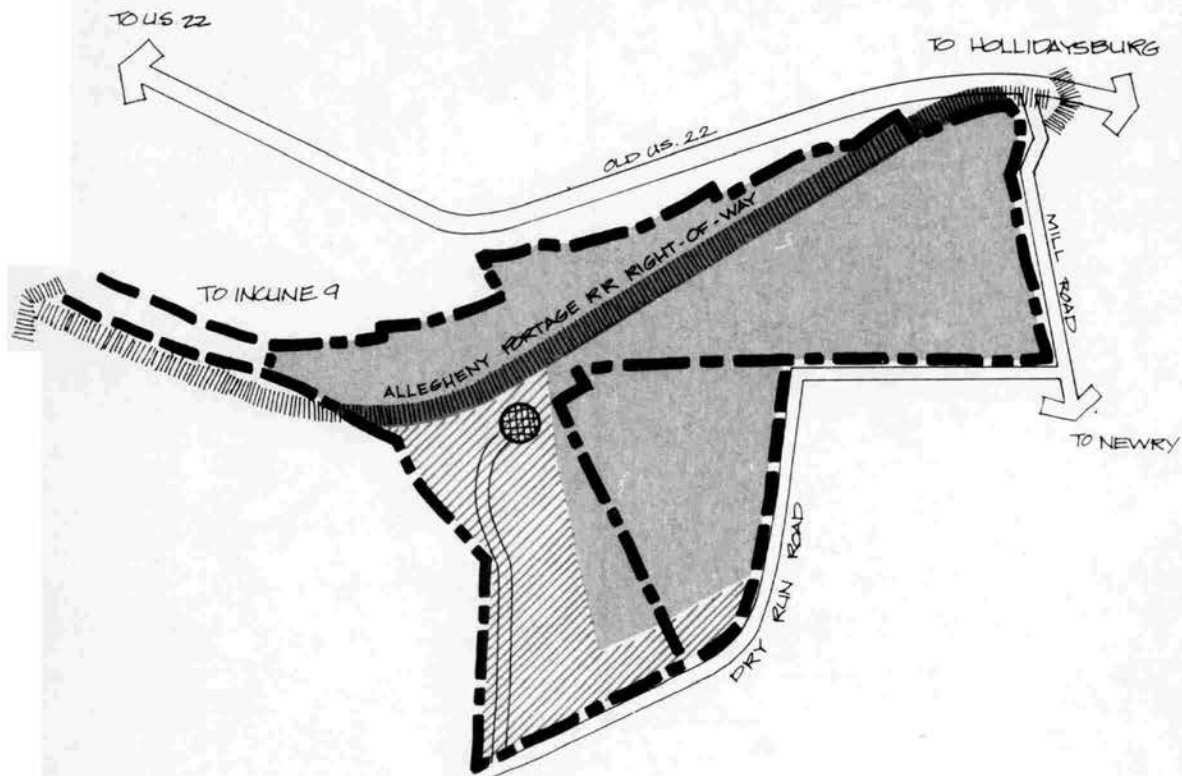
ON MICROFILM

historic scene
boundary / land classification
general development

incline 10

historic scene





--- EXISTING BOUNDARY
 --- PROPOSED BOUNDARY

/// DEVELOPMENT ZONE
 ■ NATURAL ZONE
 ■ HISTORIC ZONE
 ● PROPOSED PICNIC AREA

INCLINE 10

boundary / land classification

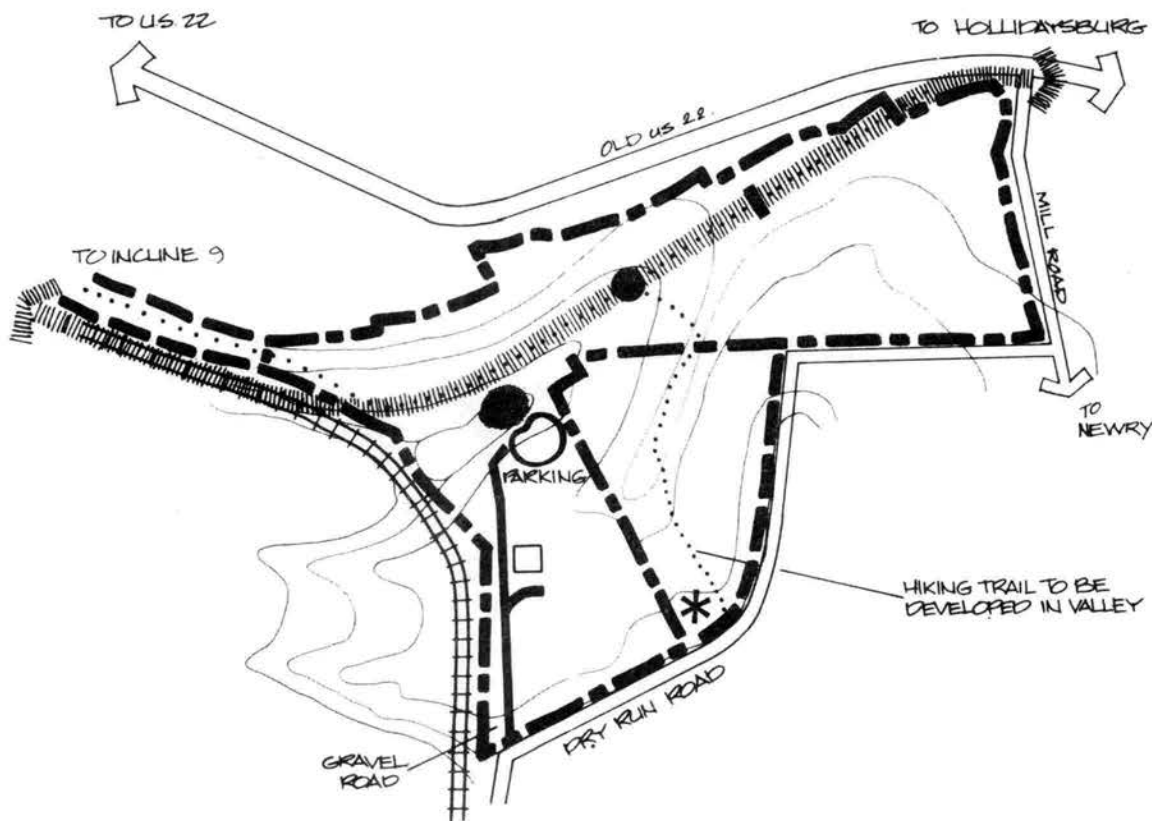
ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
 UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

423 20.006A
 DSC JUN 76

0 400 800 FEET



ON MICROFILM



- CONRAIL
- EXISTING BOUNDARY
- PROPOSED BOUNDARY
- PICNIC AREA
- RESIDENCE
- ENGINEHOUSE FOUNDATION
- STONE CULVERT
- ||||| ALLEGHENY PORTAGE RR RIGHT-OF-WAY
- HIKING TRAIL
- * ESA HEADQUARTERS

INCLINE 10

general development

ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

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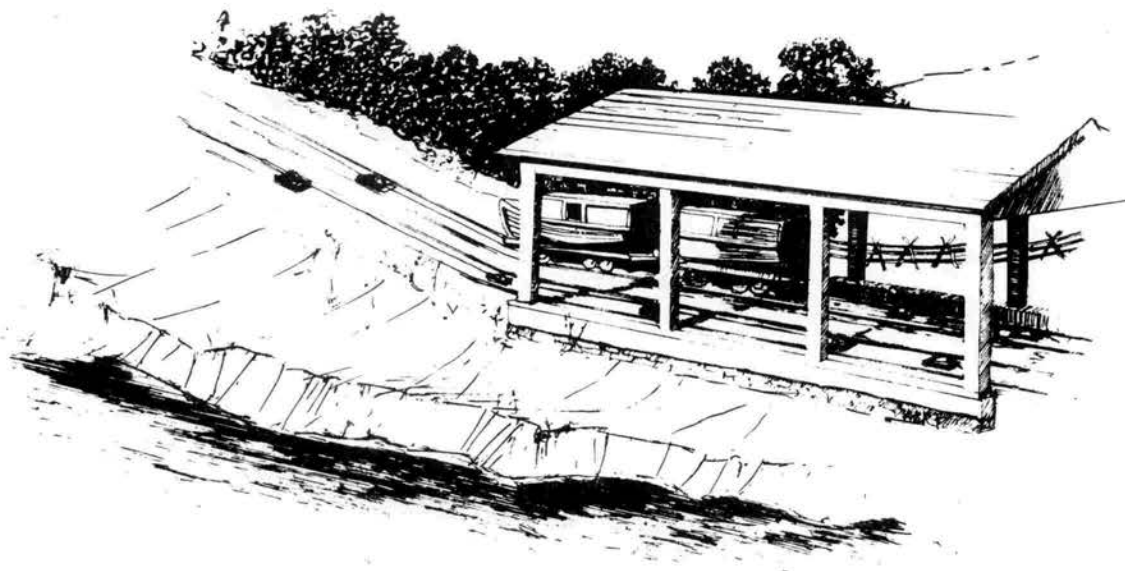
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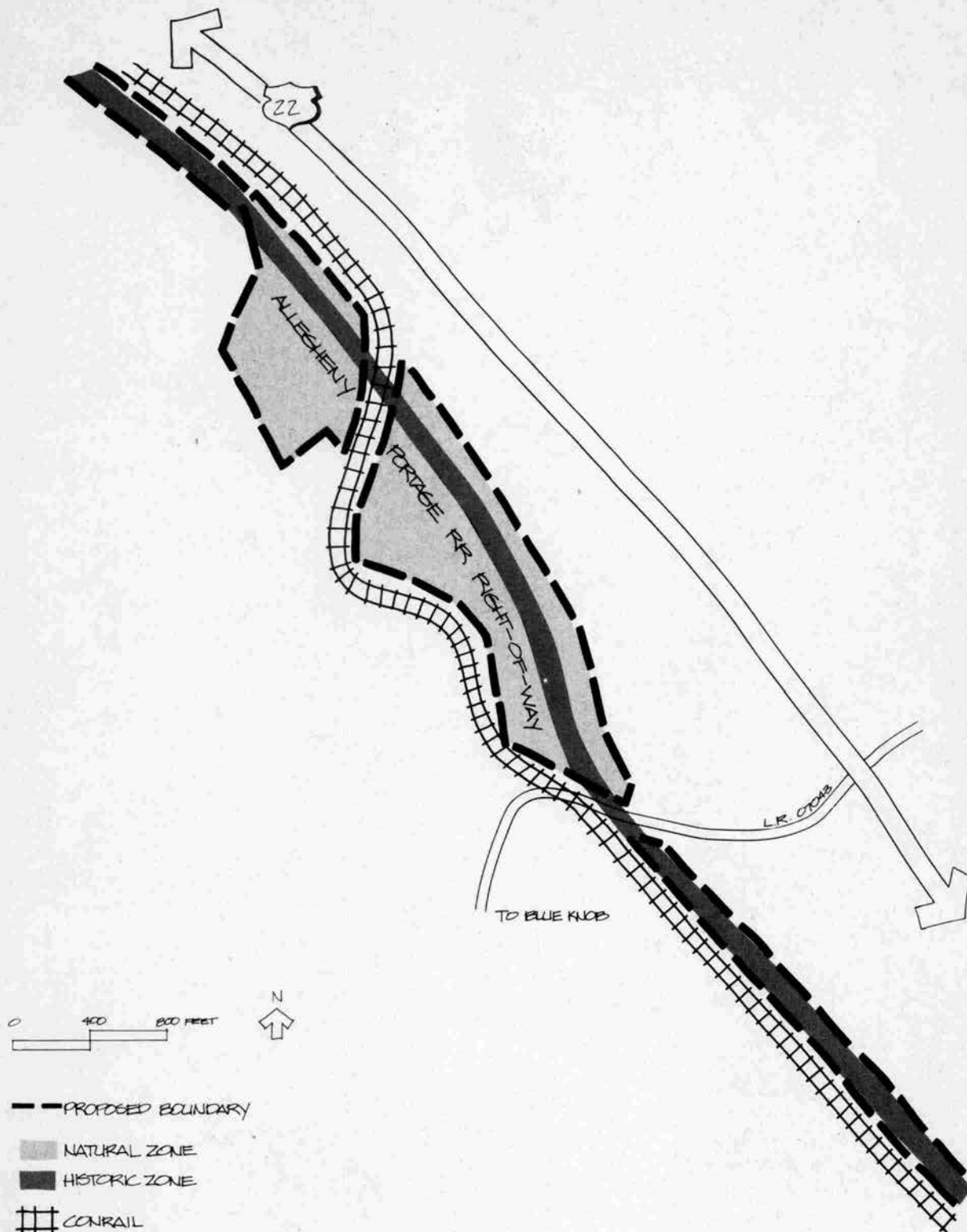
ON MICROFILM

historic scene
boundary / land classification

incline 9

historic scene





boundary / land classification

ALLEGHENY PORTAGE RAILROAD NHS-JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

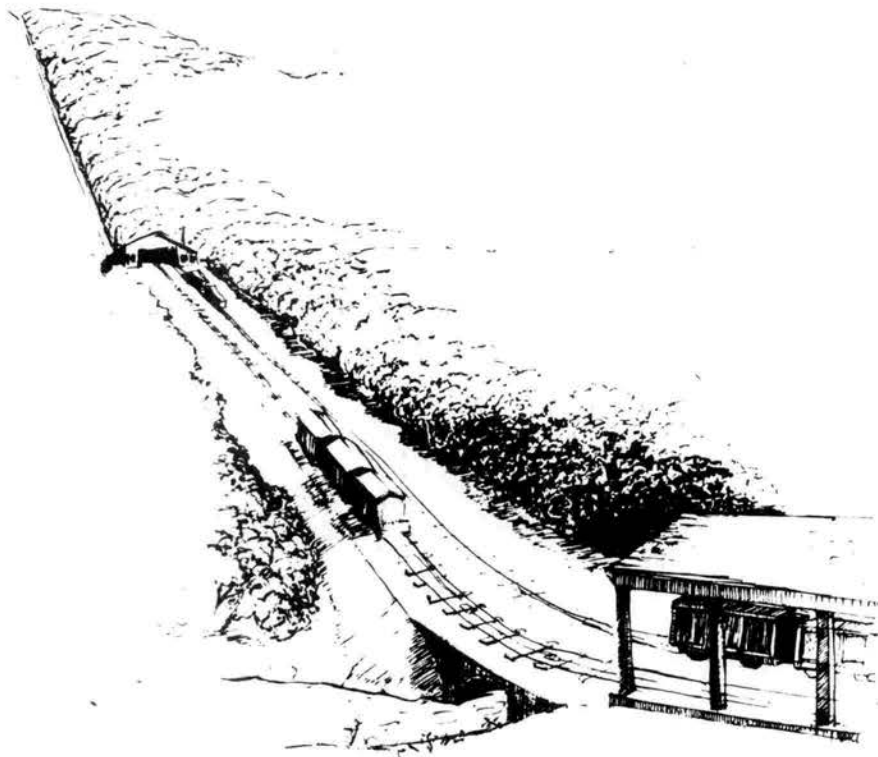
ON MICROFILM

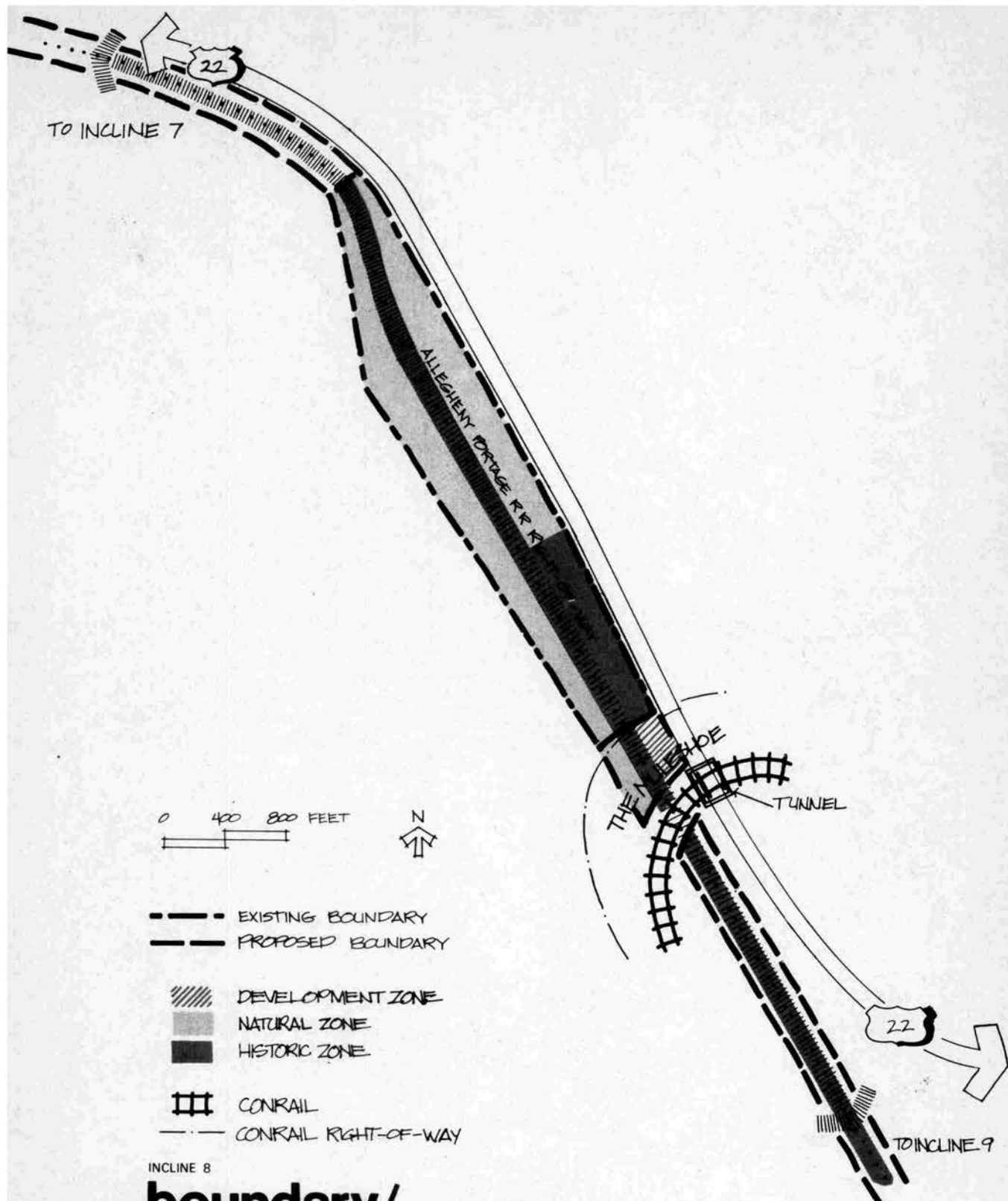
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DSC NOV 78

historic scene
boundary / land classification
general development

incline 8

historic scene





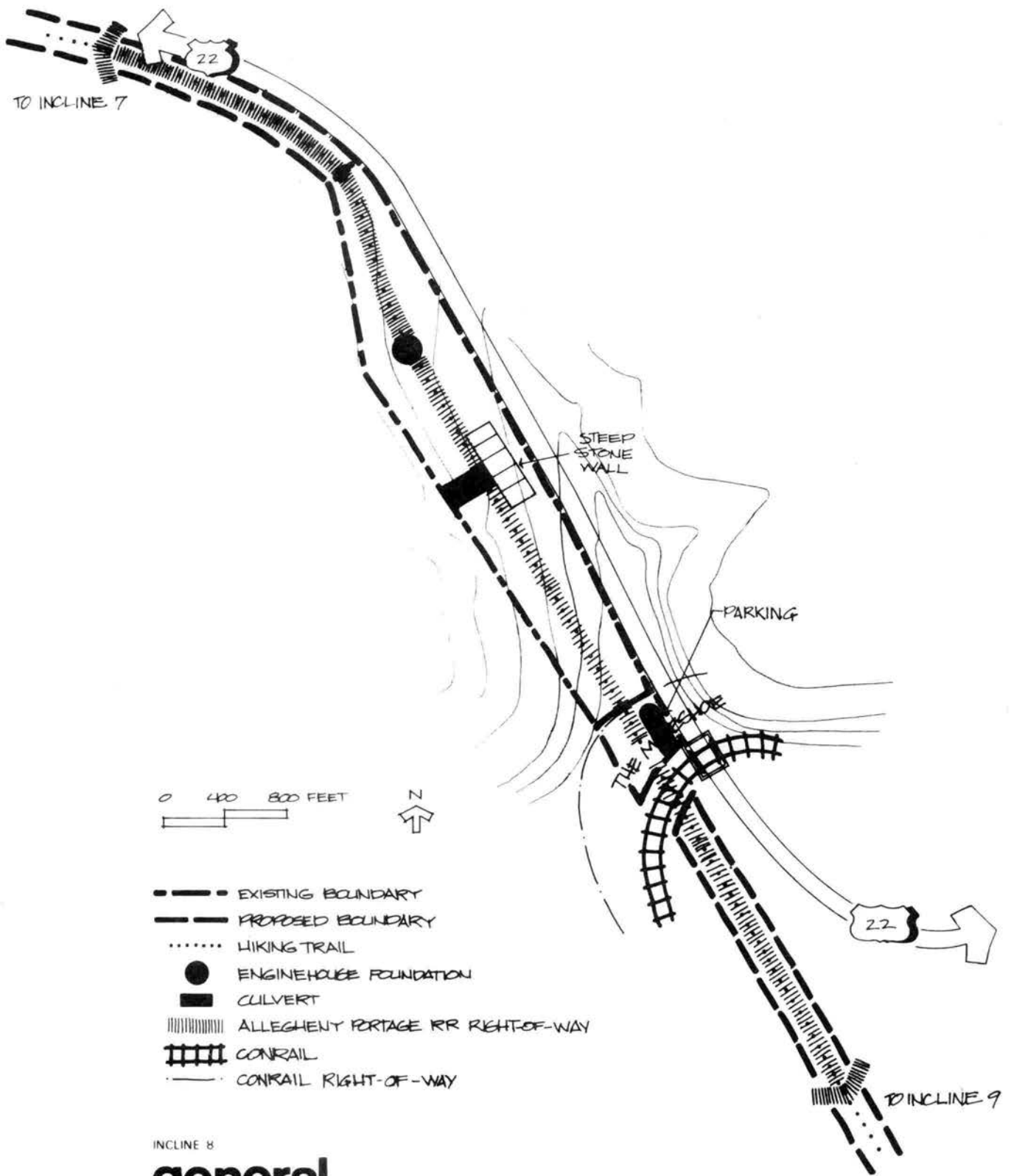
INCLINE 8

boundary/ land classification

ALLEGHENY PORTAGE RAILROAD NHS · JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

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ON MICROFILM



INCLINE 8

general development

ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

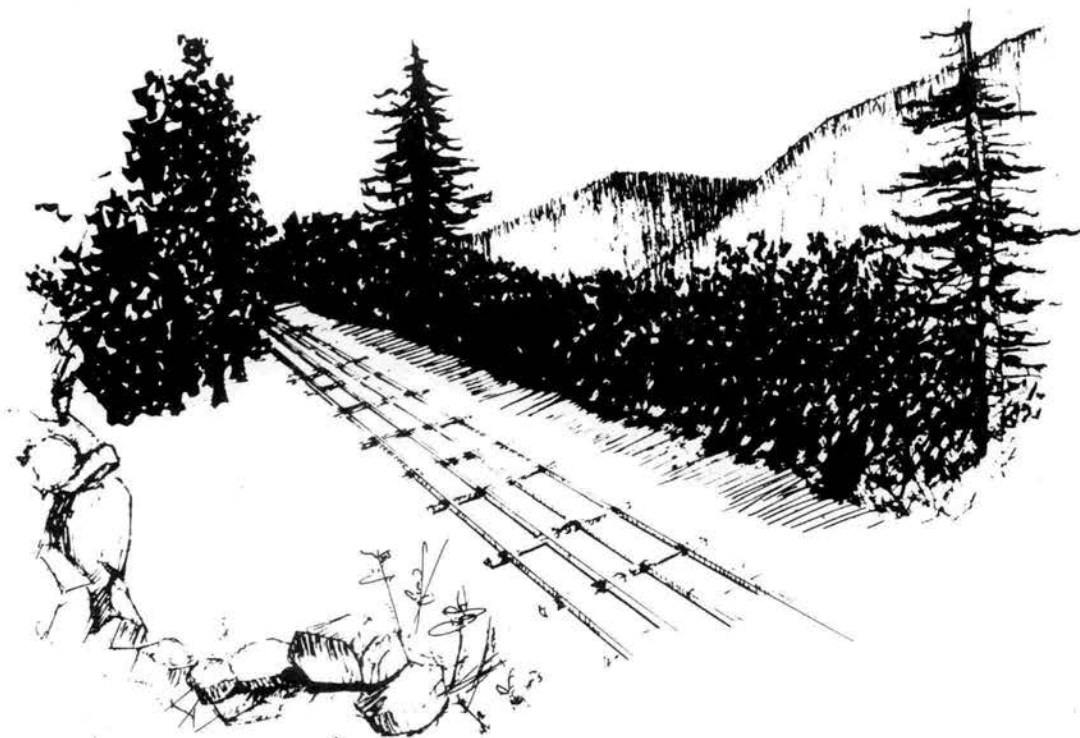
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ON MICROFILM

historic scene

incline 7

historic scene

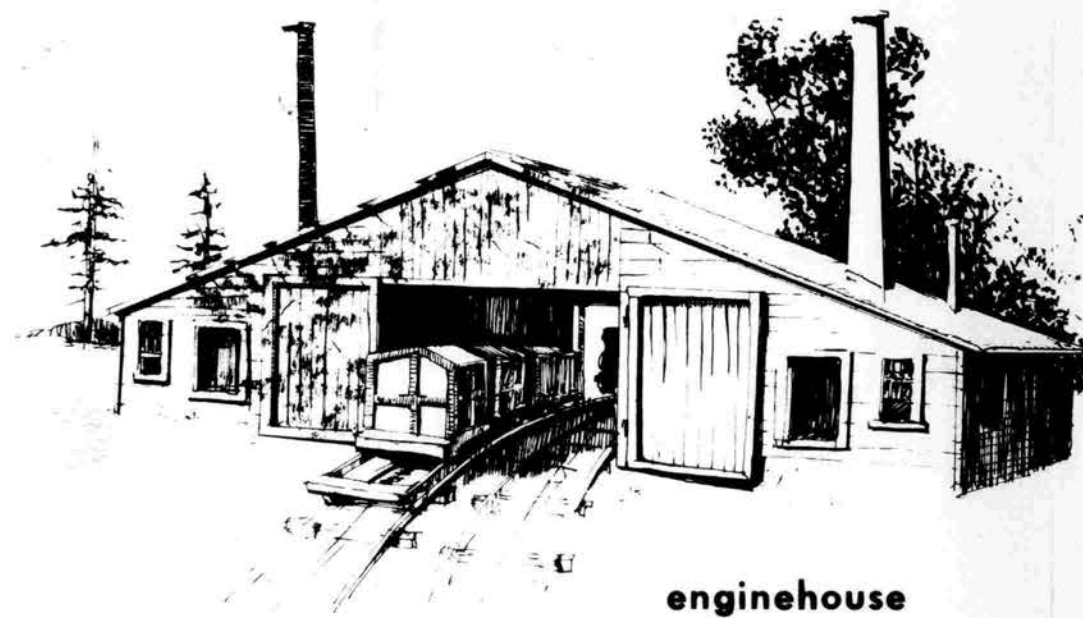


summit unit

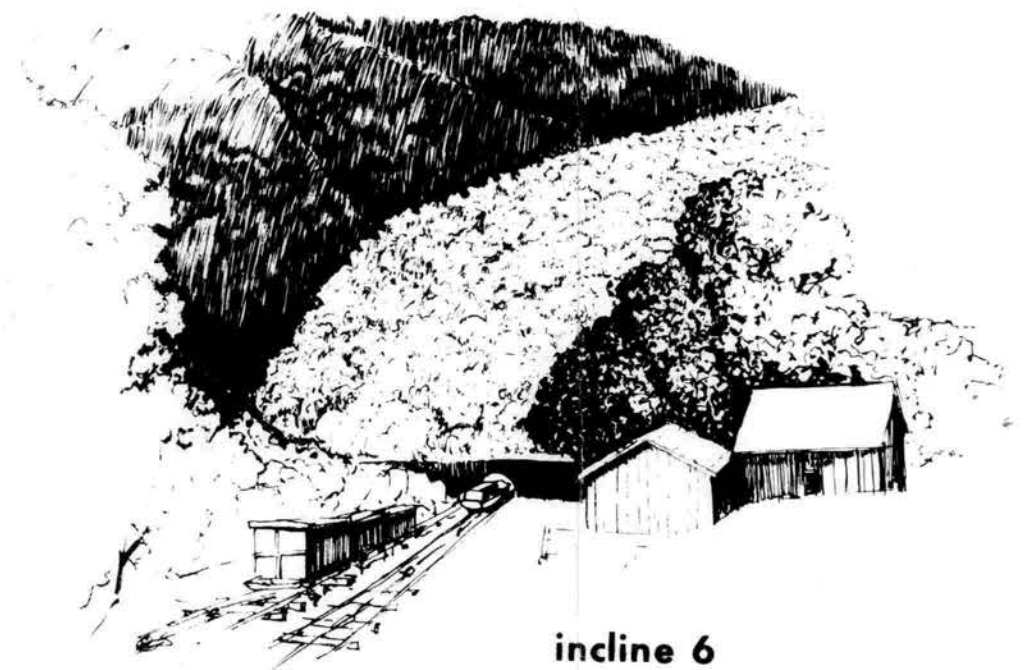
historic scenes
boundary / land classification
general development
mineral interests



sketch of george storm's painting

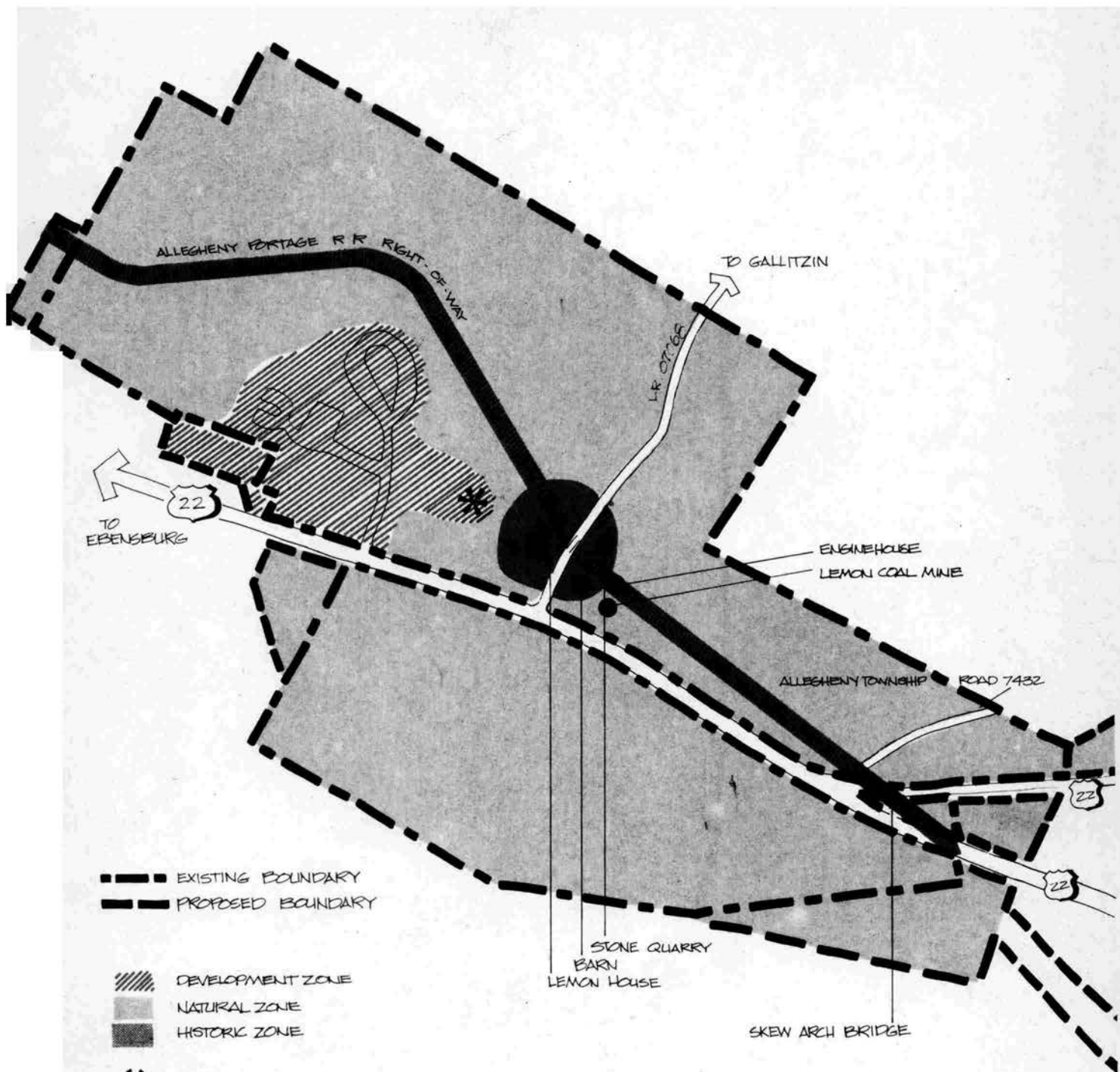


enginehouse



incline 6

historic scenes



SUMMIT UNIT

boundary/ land classification

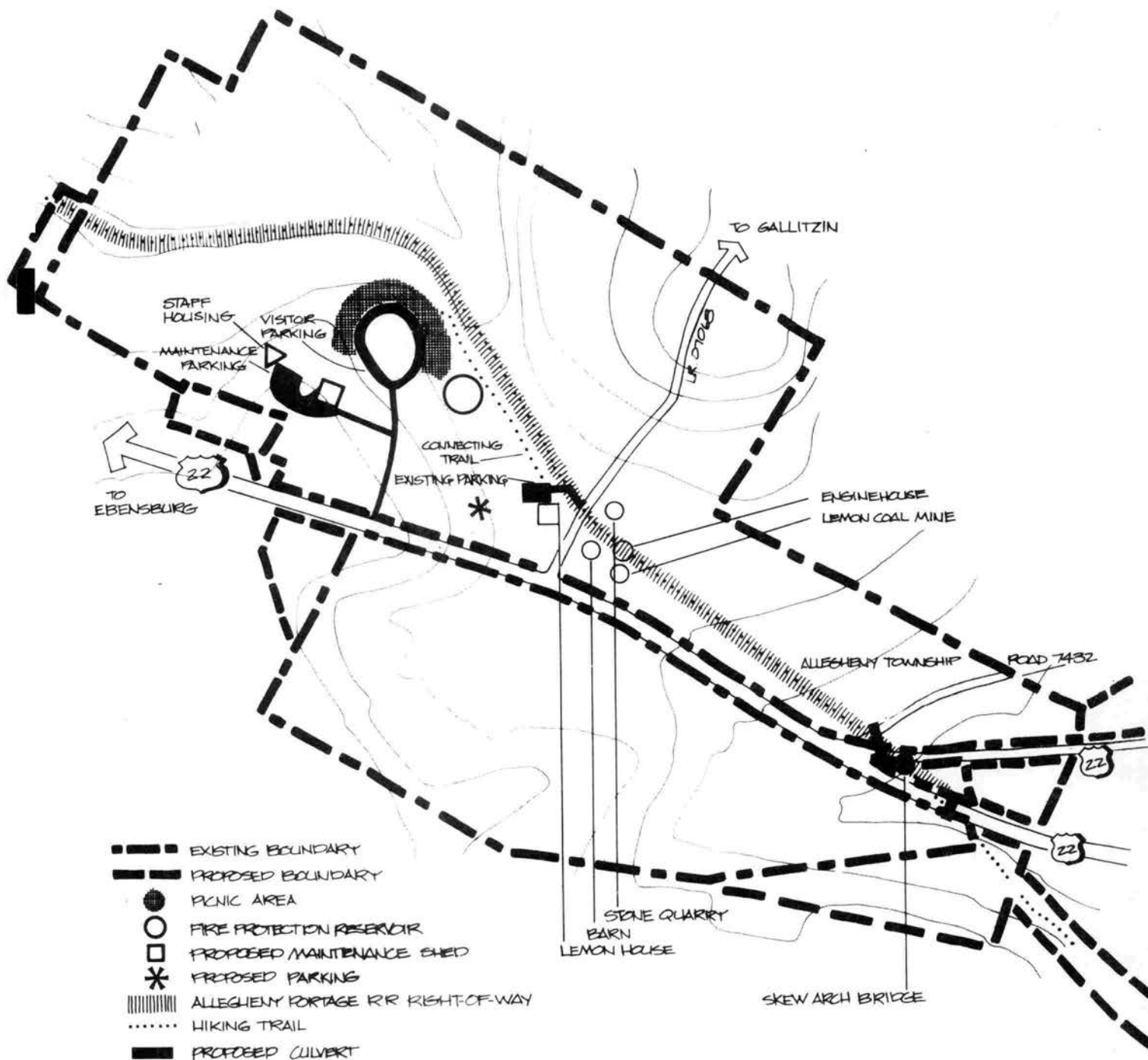
ALLEGHENY PORTAGE RAILROAD NHS - JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

0 400 800 FEET



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DSC JUN 78

ON MICROFILM



SUMMIT UNIT

general development

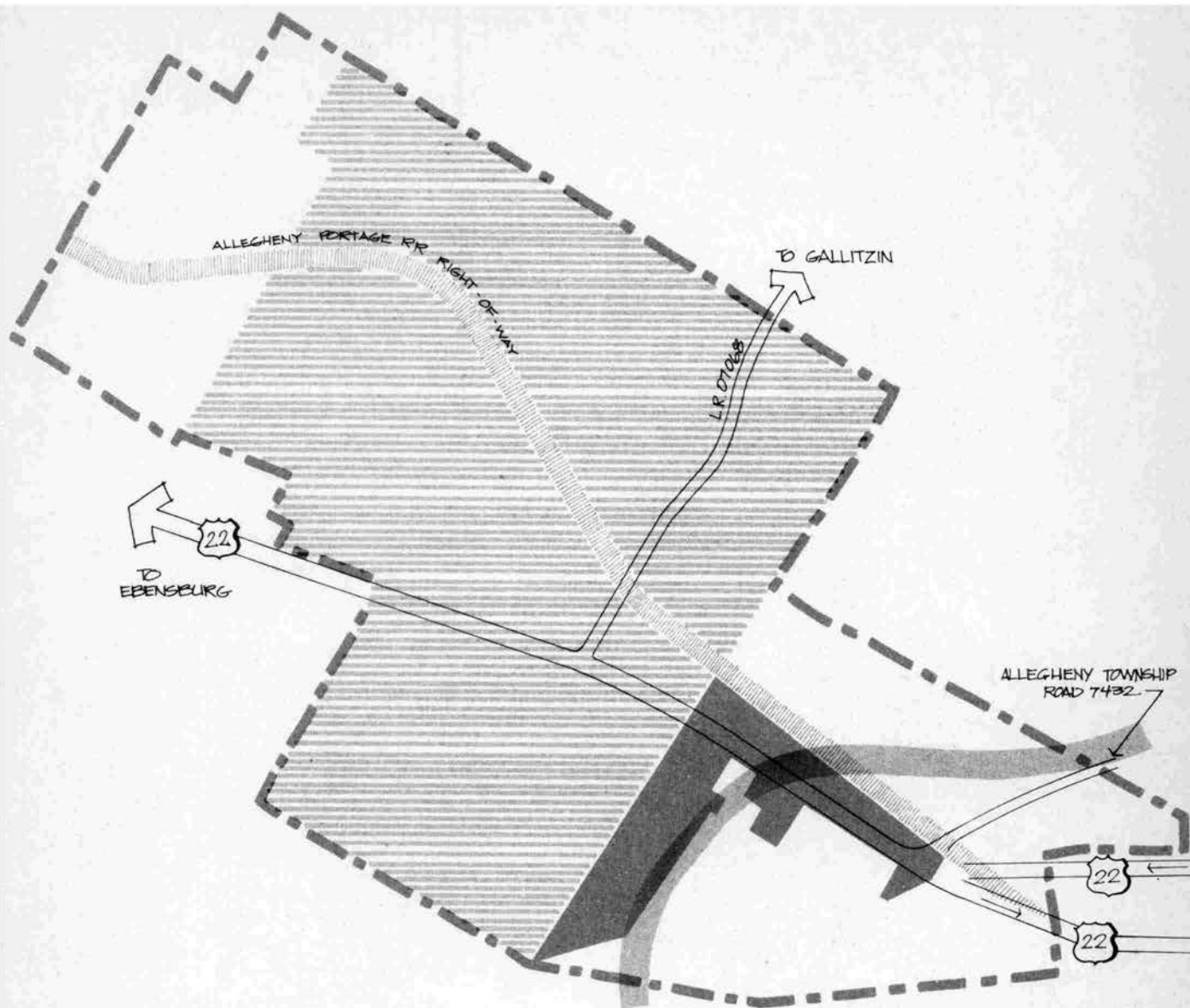
ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

0 400 800 FEET



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OSC | DEC 77

ON MICROFILM



- EXISTING BOUNDARY
- C-PRIME OUTCROP
- ALL COAL SEAMS
- C-PRIME COAL SEAM ONLY

SUMMIT UNIT

mineral interests

ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

0 400 800 FEET



423 20.006A
DSC JUN 76

ON MICROFILM

incline 4

historic scene

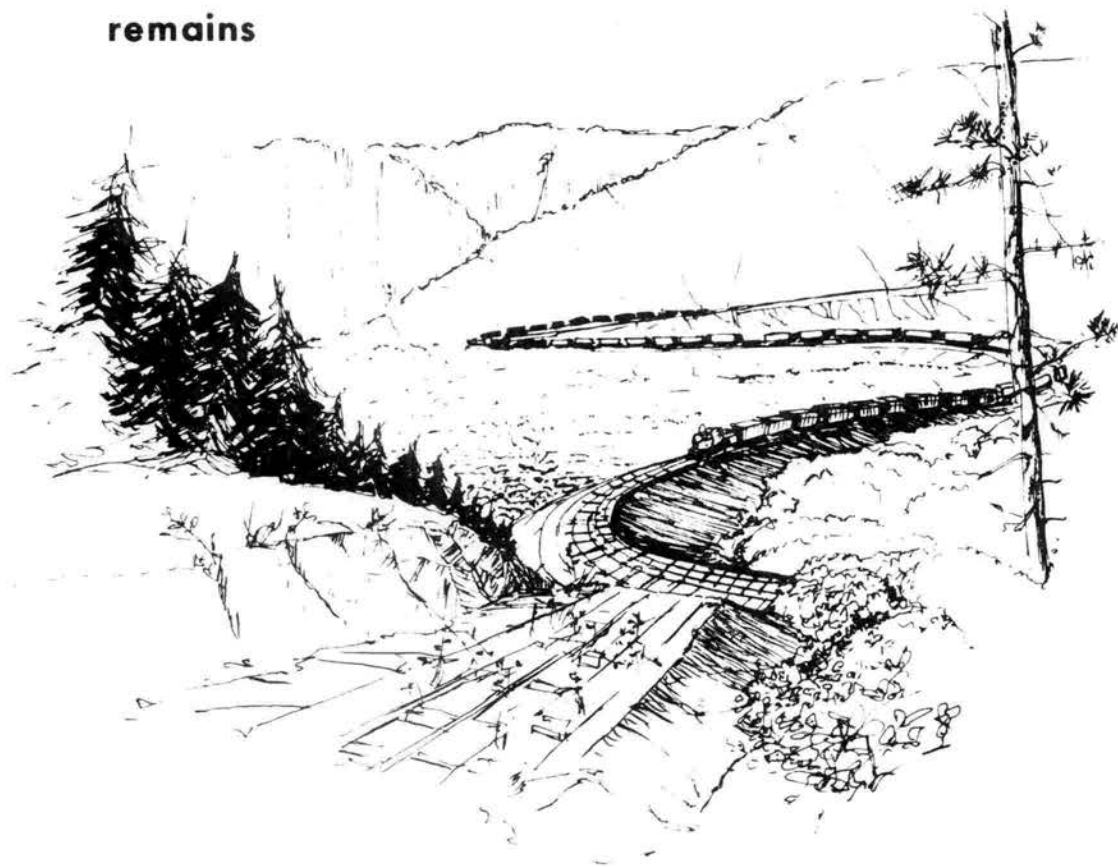
historic scene



incline 3

remains

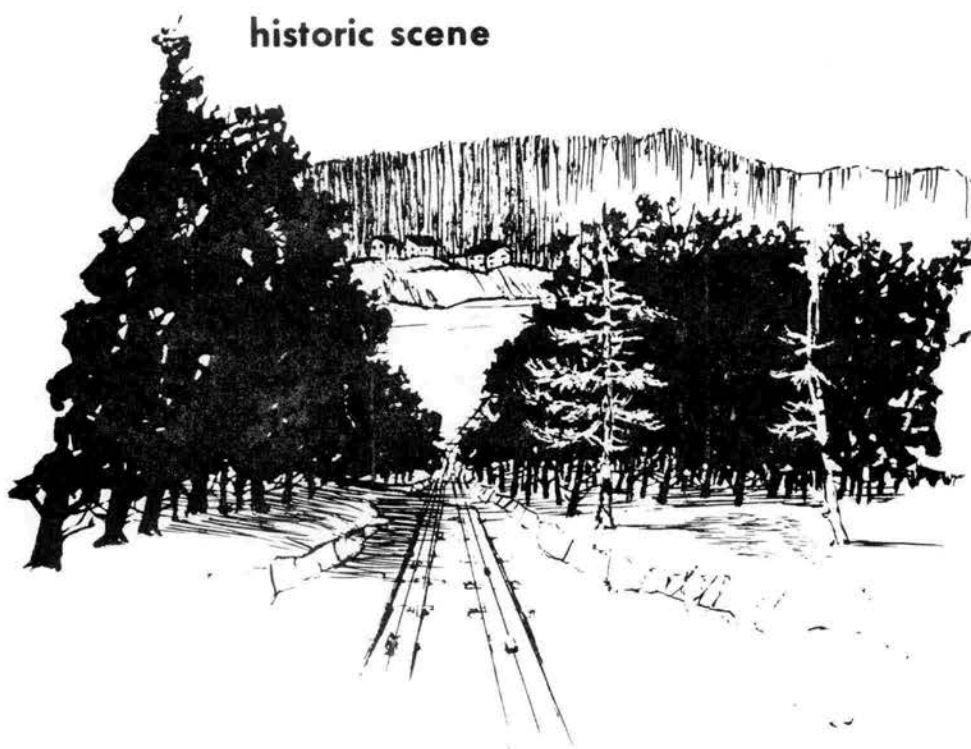
remains



historic scene

incline 2

historic scene

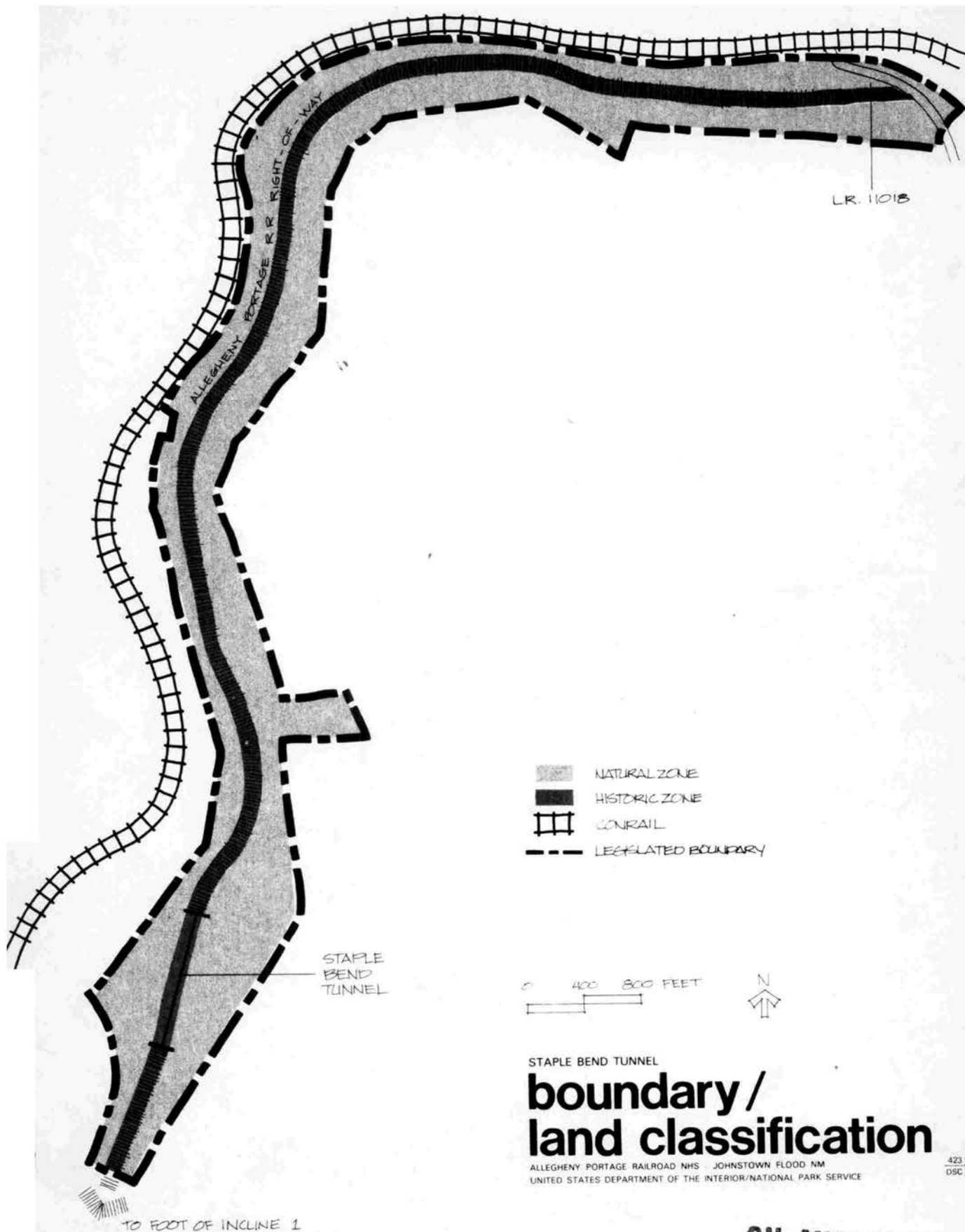


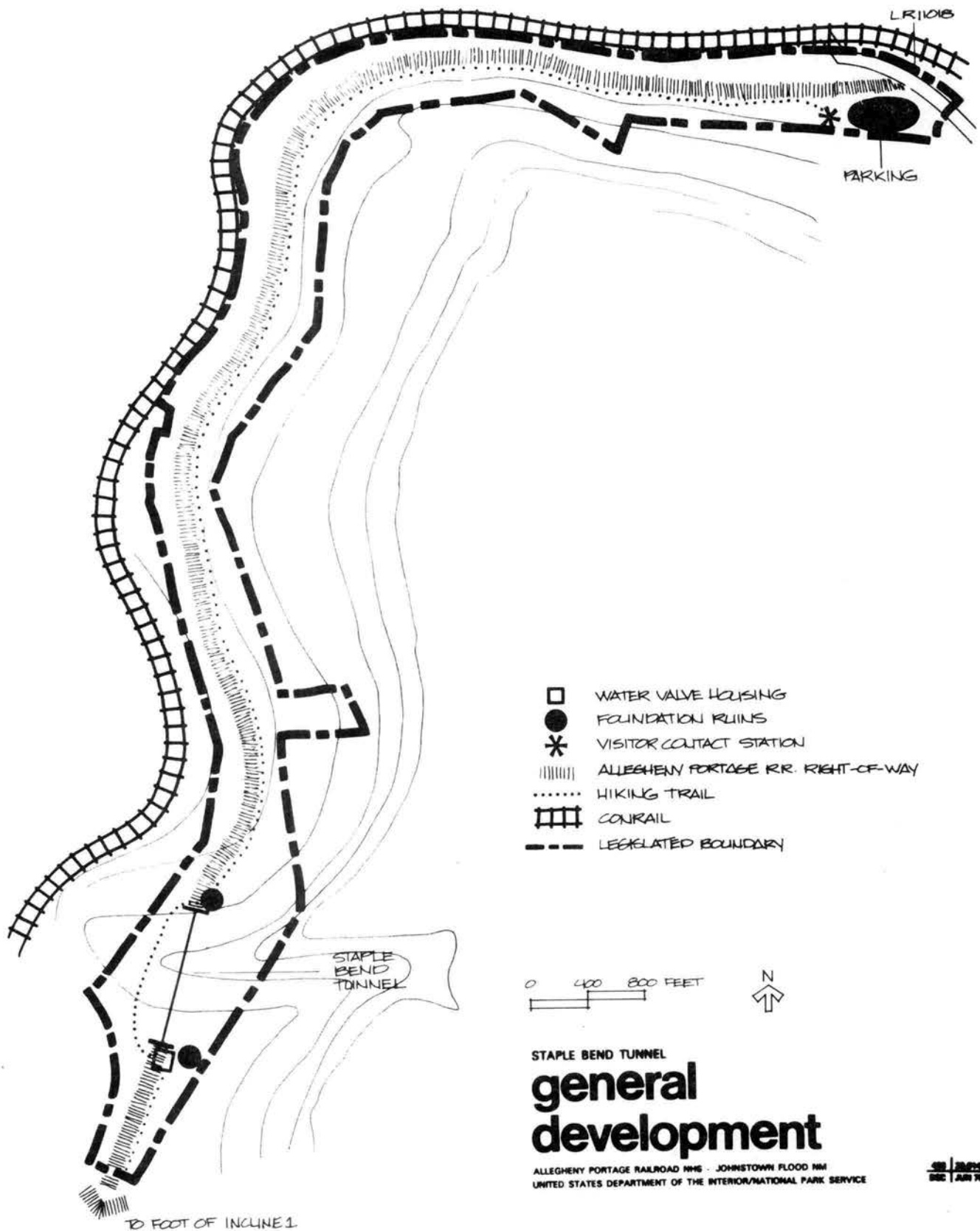
remains
boundary / land classification
general development

staple bend tunnel

remains



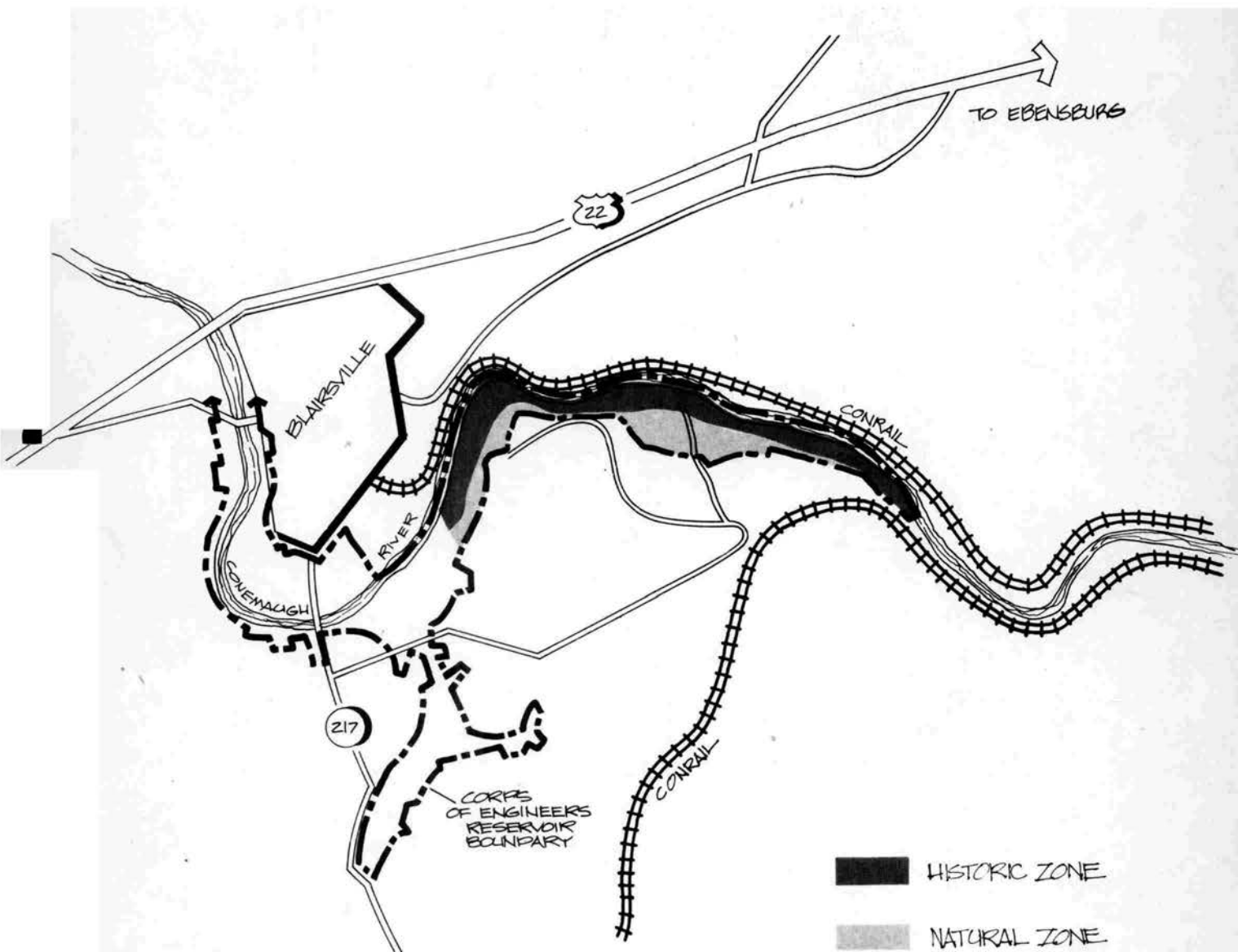




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boundary / land classification
general development

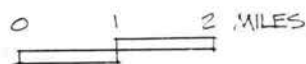
blairsville



BLAIRSVILLE

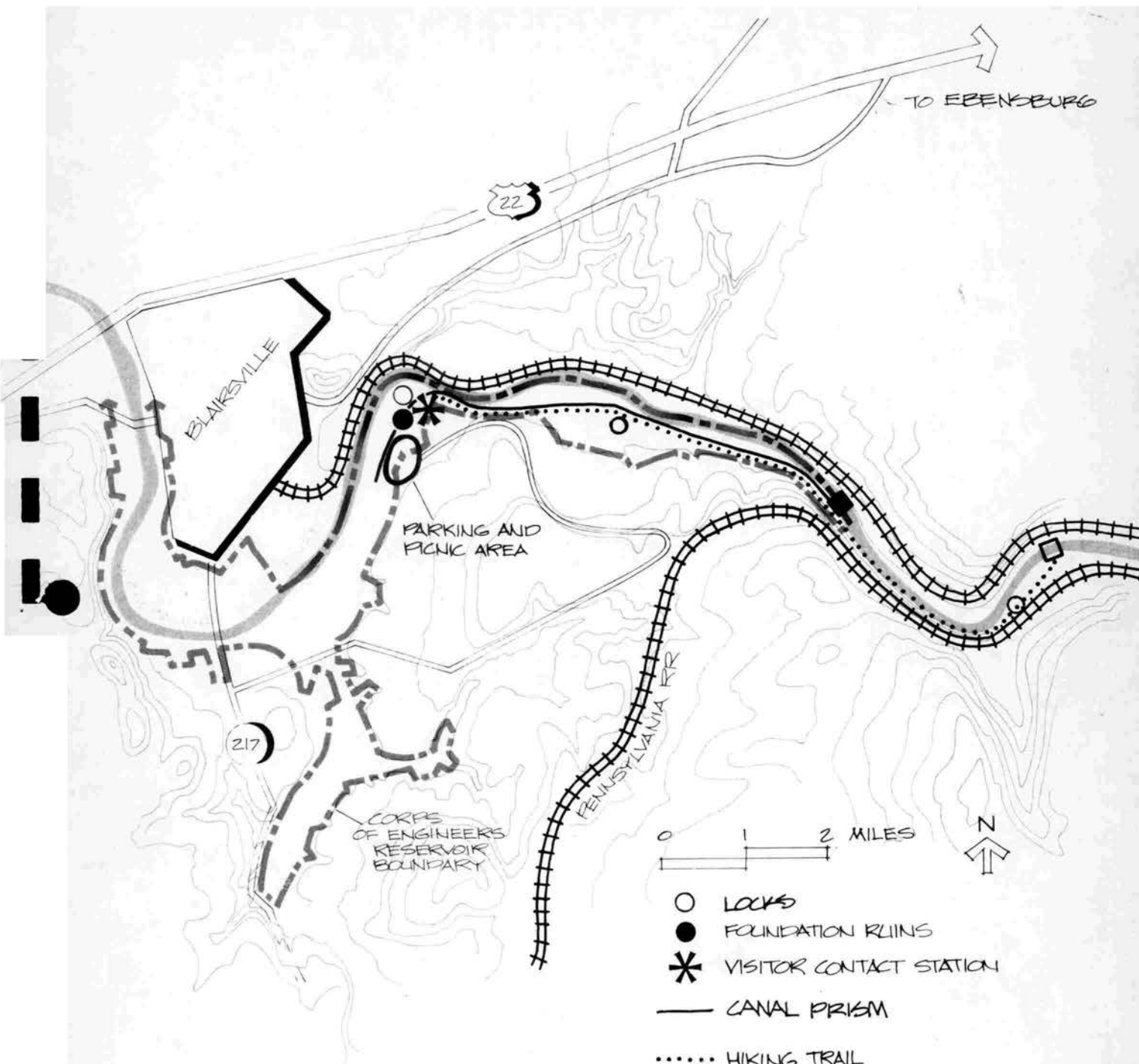
boundary land classification

ALLEGHENY PORTAGE RAILROAD NHS - JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE



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DSC | JUN 76

ON MICROFILM



BLAIRSVILLE

general development

ALLEGHENY PORTAGE RAILROAD NHS — JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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DEC 74 | DSC

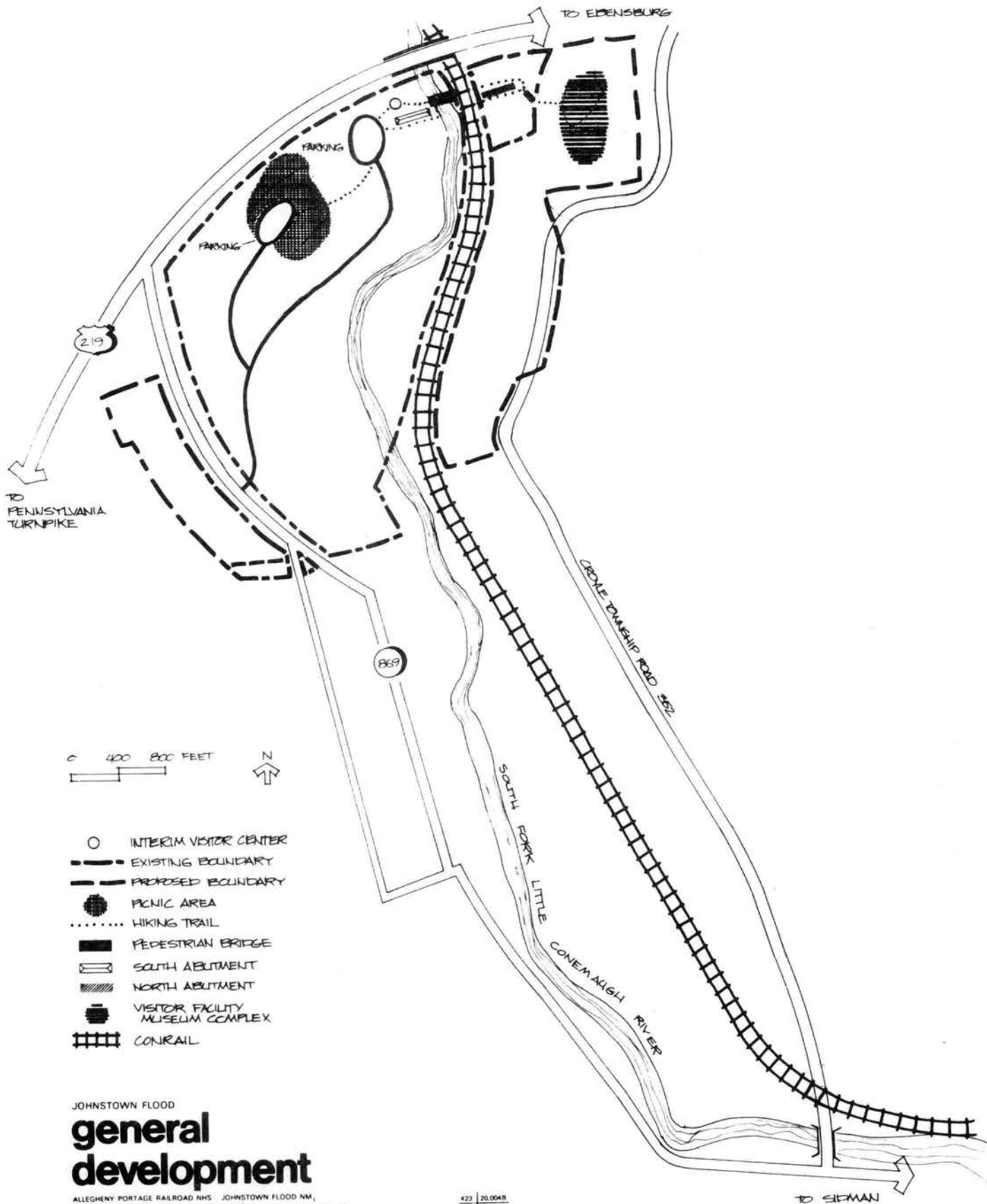
ON MICROFILM

historic scene - dam site after flood of 1889
boundary / land classification
general development

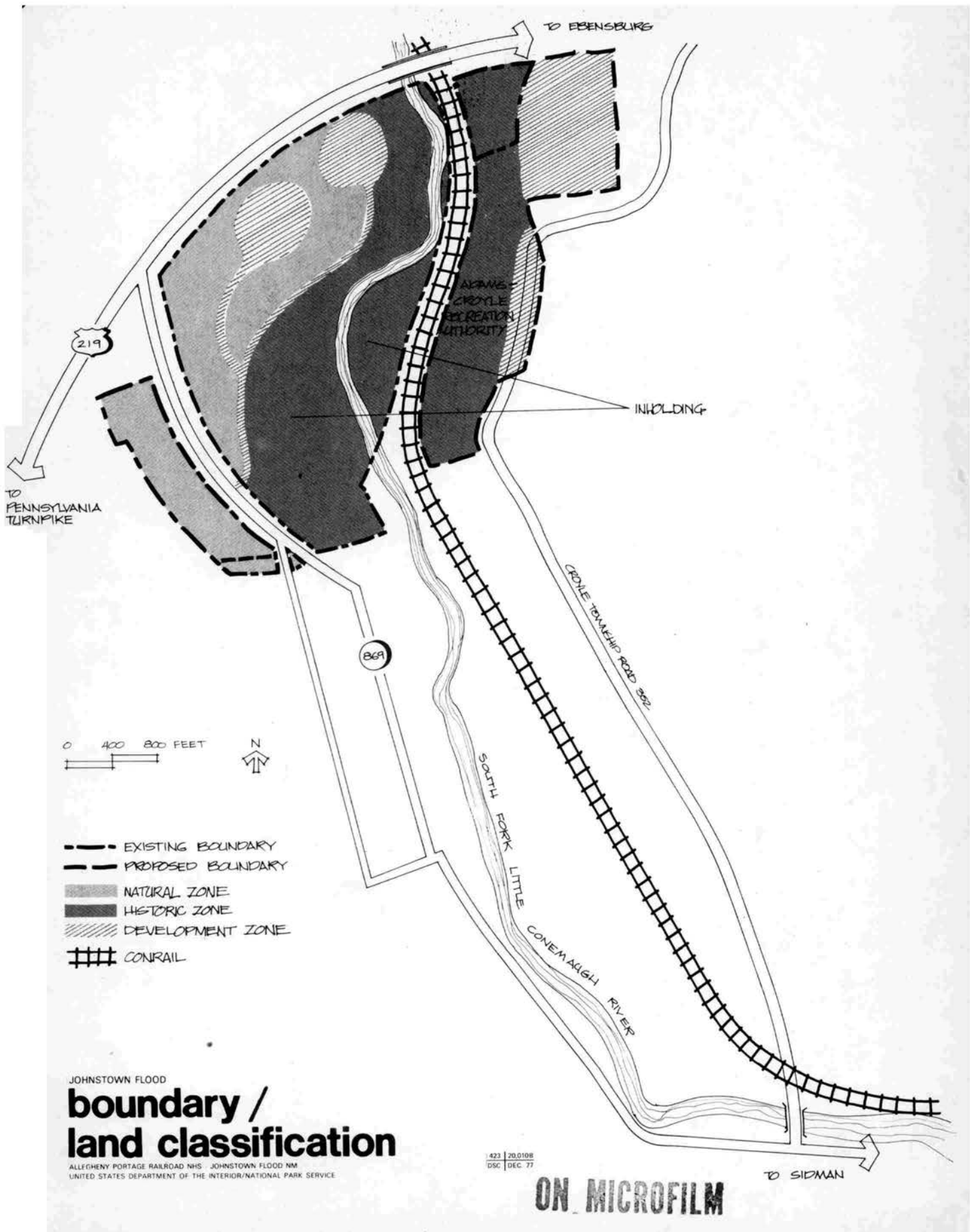
Johnstown flood



historic scene - dam site after flood of 1889



ON MICROFILM



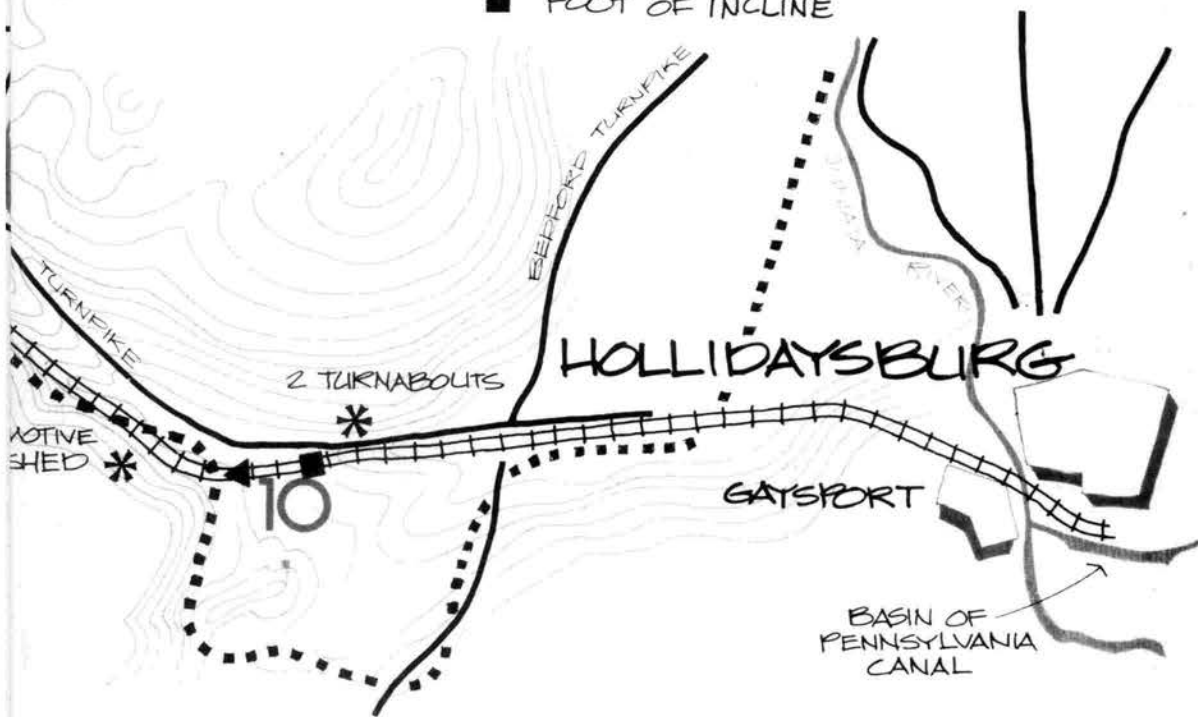
~~XXX~~ ALLEGHENY PORTAGE RAILROAD

◆◆◆ NEW PORTAGE RAILROAD

1-10 INCLINES

◀ HEAD OF INCLINE

■ FOOT OF INCLINE

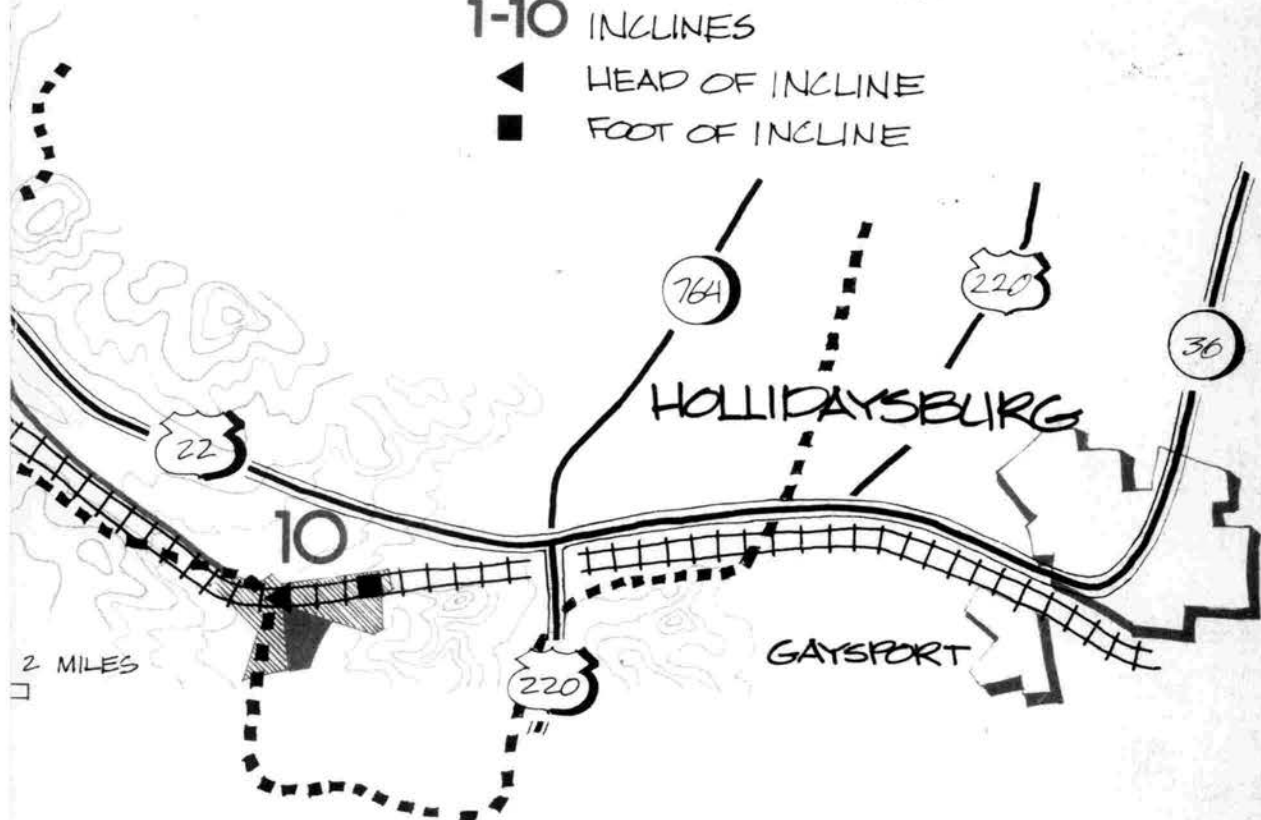


ON MICROFILM

park general
historic features
resource relationships



- ALLEGHENY PORTAGE RAILROAD
- CONRAIL
- EXISTING NPS LAND
- PROPOSED NPS LAND
- 1-10** INCLINES
- HEAD OF INCLINE
- FOOT OF INCLINE



ON MICROFILM

A P P E N D I X E S

1

- A. LEGISLATION
- B. SUMMARY OF PUBLIC INVOLVEMENT
- C. CONSTRUCTION AND DEVELOPMENT COSTS
- D. SUMMARY OF LAND ACQUISITION, STAFFING, AND
OPERATING COSTS
- E. COOPERATIVE AGREEMENTS
- F. HISTORIC TRANSPORTATION INVENTORY
- G. VISITATION AND CARRYING CAPACITY

APPENDIX A: LEGISLATION

Allegheny Portage Railroad

An Act to provide for the establishment of the Allegheny Portage Railroad National Historic Site and the Johnstown Flood National Memorial in the State of Pennsylvania, and for other purposes. (78 Stat. 752)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior is authorized to establish, as herein provided, the Allegheny Portage Railroad National Historic Site and the Johnstown Flood National Memorial in the State of Pennsylvania. For this purpose the Secretary may designate up to nine hundred and fifty acres of land that may, in his discretion, include portions of the Pennsylvania Canal, the Lemon House, the summit of the Allegheny Portage Railroad, the Skew Arch Bridge, incline planes numbered 6, 7, 8, 9, and 10 and the levels between them, the Portage Railroad tunnel, and such other land and historic features as may be necessary to illustrate the significant role of the Allegheny Portage Railroad and the Pennsylvania Canal in the Nation's history; and he may designate up to fifty-five acres in Cambria County, Pennsylvania, for use in commemorating the tragic Johnstown flood of May 31, 1889.

SEC. 2. Within the areas designated pursuant to section 1, the Secretary is authorized to acquire lands and interests in lands by purchase, donation, purchase with donated funds, or otherwise.

SEC. 3. When the Secretary of the Interior has acquired sufficient lands to form administrable park units, he shall publish notice of that fact in the Federal Register and the areas designated pursuant to section 1 shall thereafter be known as the Allegheny Portage Railroad National Historic Site and the Johnstown Flood National Memorial and shall be administered by the Secretary of the Interior pursuant to the provisions of the Act entitled "An Act to establish the National Park Service, and for other purposes," approved August 25, 1916 (39 Stat. 535), as amended and supplemented.

SEC. 4. To provide for the preservation and interpretation of the remaining portions of the Allegheny Portage Railroad route not included within the national historic site, and to further commemorate the Johnstown flood, the Secretary is authorized to enter into cooperative agreements with the State of Pennsylvania, political subdivisions thereof, corporations, associations, or individuals, and to erect and maintain tablets or markers in accordance with the provisions contained in the Act approved August 21, 1935, entitled "An Act to provide for the preservation of historic American sites, buildings,

objects, and antiquities of national significance, and for other purposes" (49 Stat. 666).

SEC. 5. There are authorized to be appropriated such sums, but not more than \$2,000,000, for land acquisition and development, as may be necessary to carry out the purposes of this Act.

Approved August 31, 1964.

Legislative History

House Report No. 970 (Committee on Interior and Insular Affairs).
Senate Report No. 1465 (Committee on Interior and Insular Affairs).
Congressional Record, Vol. 110 (1964) :

Aug. 3 : Considered and passed House.

Aug. 19 : Considered and passed Senate.



Public Law 92-272
92nd Congress, S. 2601
April 11, 1972

An Act

86 STAT. 120

To provide for increases in appropriation ceilings and boundary changes in certain units of the national park system, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—ACQUISITION CEILING INCREASES

SEC. 101. The limitation on appropriations for the acquisition of lands and interests therein within units of the national park system contained in the following Acts are amended as follows:

(1) Assateague Island National Seashore, Maryland: section 11 of the Act of September 21, 1965 (79 Stat. 824, 827) is amended by changing "\$16,250,000" to "\$21,050,000 (including such sums, together with interest, as may be necessary to satisfy final judgments rendered against the United States)";

National park
system units.
Appropriation
ceilings increases;
boundary changes.

16 USC 459f-10.

(2) Big Hole National Battlefield, Montana: section 5 of the Act of May 17, 1963 (77 Stat. 18), is amended by changing "\$20,000" to "\$42,500";

(3) Bighorn Canyon National Recreation Area, Wyoming and Montana: section 5 of the Act of October 15, 1966 (80 Stat. 913) is amended by changing "\$355,000" to "\$780,000";

16 USC 460t-4.

(4) Elligby Mounds National Monument, Iowa: section 5 of the Act of May 27, 1961 (75 Stat. 88), is amended by changing "\$2,000" to "\$14,000";

(5) Fort Donelson National Military Park, Tennessee: section 3 of the Act of September 8, 1960 (74 Stat. 875), is amended by changing "\$226,000" to "\$154,000";

16 USC 428m.

(6) Lincoln Boyhood National Memorial, Indiana: section 4 of the Act of February 19, 1962 (76 Stat. 9), is amended by changing "\$1,000,000" to "\$1,320,000" and "\$75,000" to "\$395,000";

16 USC 431
note.

(7) Ozark National Scenic Riverways, Missouri: section 8 of the Act of August 27, 1964 (78 Stat. 608), is amended by changing "\$7,000,000" to "\$10,804,000"; and

16 USC 460m-7.

(8) Shiloh National Military Park, Tennessee: section 1 of the Act of July 3, 1926 (44 Stat. 826), is amended by changing "\$57,100" to "\$150,100".

TITLE II—DEVELOPMENT CEILING INCREASES

SEC. 201. The limitations on appropriations for acquisition and development of units of the national park system contained in the following Acts are amended as follows:

(1) Herbert Hoover National Historic Site, Iowa: section 4 of the Act of August 12, 1965 (79 Stat. 510), is amended by changing "\$1,650,000" to "\$1,500,000";

16 USC 461
note.

(2) Booker T. Washington National Monument, Virginia: section 4 of the Act of April 2, 1956 (70 Stat. 86), is amended by changing "\$200,000" to "\$400,000";

16 USC 45011
note.

(3) Johnstown Flood National Memorial, Pennsylvania: section 5 of the Act of August 31, 1964 (78 Stat. 752), is amended by changing "\$2,000,000" to "\$2,244,600"; and

16 USC 431
note.

(4) Wolf Trap Farm Park, Virginia: section 3 of the Act of October 15, 1966 (80 Stat. 950), is amended by changing "\$600,000" to "\$5,473,000".

16 USC 284b.

Cost fluctuation, ceiling adjustment.

Sec. 202. The additional sums authorized to be appropriated for development in the Acts as amended in section 201 are based on March 1971 prices and may be increased or decreased in appropriation Acts by such amounts, if any, as may be justified by reason of ordinary fluctuations in construction costs as indicated by engineering cost indices applicable to the types of construction involved for each area.

TITLE III—BOUNDARY CHANGES

Sec. 301. The Secretary of the Interior is authorized to revise the boundaries of the following units of the national park system:

- (1) Adams National Historic Site, Massachusetts: to add approximately 3.68 acres;
- (2) Cowpens National Battleground Site, South Carolina: to add approximately 815 acres;
- (3) Fort Caroline National Memorial, Florida: to add approximately 12.5 acres;
- (4) George Washington Birthplace National Monument, Virginia: to add approximately 62.3 acres;
- (5) Glacier National Park, Montana: to add approximately 267.90 acres and to exclude approximately 68.47 acres;
- (6) Isle Royale National Park, Michigan: to add approximately 0.52 acre;
- (7) Johnstown Flood National Memorial, Pennsylvania: to add approximately 53.6 acres;
- (8) Lassen Volcanic National Park, California: to exclude approximately 482 acres;
- (9) Muir Woods National Monument, California: to add approximately 49.7 acres;
- (10) Ozark National Scenic Riverways, Missouri: to add approximately 1,670 acres; and
- (11) Petersburg National Battlefield, Virginia: to exclude approximately 257.53 acres.

Publication in Federal Register.

Sec. 302. The boundary revisions authorized in section 301 shall become effective upon publication in the Federal Register of a map or other description of the lands added or excluded by the Secretary of the Interior.

Land acquisition.

Sec. 303. Within the boundaries of the areas as revised in accordance with section 301, the Secretary of the Interior is authorized to acquire lands and interest therein by donation, purchase with donated or appropriated funds, exchange, or transfer from any other Federal agency. Lands and interests therein so acquired shall become part of the area to which they are added, and shall be subject to all laws, rules, and regulations applicable thereto. When acquiring any land pursuant to this Act, the Secretary (i) may tender, to the owner or owners of record on the date of enactment of this Act, a revocable permit for the continued use and occupancy of such land or any portion thereof subject to such terms and conditions as he deems necessary or (ii) may acquire any land pursuant to this Act subject to the retention of a right of use and occupancy for a term not to exceed 25 years or for the life of the owner or owners. Lands and interests therein excluded from the areas pursuant to section 301 may be exchanged for non-Federal lands within the boundaries as revised, or they may be transferred to the jurisdiction of any other Federal agency or to a State or political subdivision thereof, without monetary consideration, as the Secretary of the Interior may deem appropriate. In exercising the authority in this section with respect to lands and interests therein excluded from the areas, the Secretary of the Interior may, on behalf of the United States, retrocede to the appropriate State exclusive or concurrent legislative jurisdiction subject to such terms and conditions as he may deem

State jurisdiction, retrocession.

April 11, 1972

- 3 -

Pub. Law 92-272

86 STAT. 122

appropriate, over such lands, to be effective upon acceptance thereof by the State. Any such lands not so exchanged or transferred may be disposed of in accordance with the Federal Property and Administrative Services Act of 1949, as amended.

Disposal.

SEC. 304. For the acquisition of lands and interests in lands which are added to the areas referred to in section 301, there are authorized to be appropriated such sums as may be necessary, but not more than the following amounts:

63 Stat. 378.
40 USC 471
note.
Appropriation.

(1) Adams National Historic Site, \$122,000;

(2) George Washington Birthplace National Monument, \$57,000;

(3) Glacier National Park, \$6,000;

(4) Isle Royale National Park, \$11,500;

(5) Johnstown Flood National Memorial, \$10,000; and

(6) Muir Woods National Monument, \$950,000.

SEC. 305. The authorities in this title are supplementary to any other authorities available to the Secretary of the Interior with respect to the acquisition, development, and administration of the areas referred to in section 301.

TITLE IV—MISCELLANEOUS CHANGES

SEC. 401. The third sentence of section 2 of the Act of August 27, 1964 (78 Stat. 608) is amended to read as follows: "Lands and waters owned by the State of Missouri within such area may be acquired with the consent of the State and, notwithstanding any other provision of law, subject to provision for reversion to such State conditioned upon continued use of the property for National Scenic Riverway."

Ozark National
Scenic River-
ways.
16 USC 460a-1.

SEC. 402. For the purposes of the Cowpens National Battleground Site, which is hereby redesignated as the Cowpens National Battlefield, there are authorized to be appropriated not more than \$2,363,900 for the acquisition of lands and interests in lands and not more than \$3,104,000 for development.

Cowpens Nation-
al Battlefield,
designation.

Approved April 11, 1972.

B : S U M M A R Y O F
P U B L I C I N V O L V E M E N T

PUBLIC MEETING

On March 15, 1977, formal public meeting was held in Hollidaysburg, Pennsylvania, to present the Draft General Management and Development Plan. There were 36 people present, 7 were National Park Service personnel.

The consensus of the group was reached on the following:

The general and specific actions proposed in the plan were supported by 24 individuals, with 2 abstentions.

The following ideas were discussed, but did not receive the group's consensus:

The plan is overblown.

Tunnel Hill Road (Gallitzin Road in the plan) should not be closed.

The following items, dealing with management policies, were also mentioned at the meeting; however, they did not receive the consensus of the group:

Objection to the management policy of no snowmobiles.

Objection to the growth of trees in a natural manner as compared to man-maintained growth at Johnstown Flood.

Objection to the management policy of no hunting on parkland.

On March 16, 1977, a formal public meeting was held in Johnstown, Pennsylvania, to present the Draft General Management and Development Plan. There were 20 individuals present, 9 were National Park Service personnel.

The consensus of the group was reached on the following:

A strong support for the plan was expressed by the Greater Johnstown Chamber of Commerce, the Chamber of Commerce's Tourism and Recreation Committee, the Pennsylvania Canal Society, the American Canal Society, and the others present at the meeting.

WRITTEN RESPONSES

The Greater Johnstown Chamber of Commerce, March 16, 1977: The (board of directors) chamber's unanimously endorsed the Allegheny Portage Railroad/Johnstown Flood General Management and Development Plan and the Environmental Assessment.

Mifflin County Planning Commission, March 28, 1977: The commission expressed the hope that future funds would be available to develop the canal in the Newton Hamilton Borough area.

Commonwealth of Pennsylvania, Department of Environmental Resources, March 16, 1977: The department supported the General Management Plan as worthy and as important to the natural, historical, and recreational environments.

Department of the Army, Pittsburgh District, Corps of Engineers, March 14, 1977 (letter to Hon. John H. Dent, House of Representatives): The Corps will investigate its involvement in the 2-mile section of the Pennsylvania Mainline Canal near the Conemaugh River Lake Project on Corps land. Their response will be reported to Representative Dent.

Commonwealth of Pennsylvania, Pennsylvania Historical and Museum Commission, August 10, 1976: The commission concurred with the assessment's finding of no adverse effect.

American Canal Society, March 2, 1977 (letter to the Corps of Engineers): The society asked support of the Corps of Engineers to the recommendations made by the National Park Service in the draft plan concerning the section of the Western Division of the Mainline Canal near Blairsville, Pennsylvania.

Ms. Melissa L. McSparrin, March 21, 1977: Ms. McSparrin supported the plan due to the concepts of management.

Portage Area Jaycees, March 15, 1977: The Jaycees requested that the inclusion of Incline 2 in the park be considered. (Incline 2 has been obliterated as explained in a letter dated April 12, 1977, from the superintendent of the park.)

Blair County Planning Commission, March 31, 1977: The commission found the plan consistent with the document, An Areawide Comprehensive Plan for Blair County, Pennsylvania.

Commonwealth of Pennsylvania, Department of Transportation, March 24, 1977: The department stated that there appeared to be no conflicting issues concerning the plan's goals and objectives in regard to present and future highways. The following specific comments were included in this letter:

Draft General Management Plan

1. Page 48, 2nd full paragraph - Penn DOT agrees to study, at the proper point in time, the feasibility of changing the status of existing T.R. 22 as stated in this paragraph.
2. Pages 57 and 58 - Penn DOT agrees in principle with the statements made concerning L.R. 07068 and proposed T.R. 22, as noted in the pending Memorandum of Agreement between the National Park Service and Penn DOT.
3. Page 86 - Same comment as in No. 2 above.

Environmental Assessment

1. Page 46 - The comments above apply to the L.R. 07068 and proposed T.R. 22 discussion.
2. Page 48, 4th paragraph, last sentence - This statement is incorrect. According to the "Report on Endangered and Threatened Plant Species of The United States" (Smithsonian Institution, 1975) there are four endangered and eleven threatened plant species in Pennsylvania. Also, the Department of Interior list of endangered and threatened species of wildlife and plants has been published in the Federal Register, and includes the state of Pennsylvania. However, please note that a review of these species indicated that they are not located near your area of concern.

Acting Regional Director, Mid-Atlantic Region, National Park Service, August 17, 1976, (letter to Advisory Council on Historic Preservation): In accordance with Section 106 of the National Historic Preservation Act and Executive Order 11593, there would be no adverse effects from the specific actions in park areas. The Pennsylvania historic preservation officer has also indicated his concurrence with the findings of the region.

Commonwealth of Pennsylvania, Department of Public Welfare, December 17, 1976: The department had no objection to the transfer of land at Cresson Center. However, the General Assembly of Pennsylvania must authorize the transfer of title by a legislative act.

U.S. Department of the Army, Corps of Engineers, January 19, 1977: The Corps will cooperate with the National Park Service and discussion with the Park Service in more detail will be necessary.

CONSULTATION AND COORDINATION DURING THE PLANNING PROCESS

During planning for the Allegheny Portage/Johnstown Flood General Management and Development Plan, the park staff met with various individuals and the public. There were three stages of planning involved--preplanning, informal, and formal. At the meetings all or individual actions of the plan were discussed.

March 14, 1973 - Preplanning meeting at Allegheny Portage.
April 15, 1974 - Borough officials meeting at Newton Hamilton.
September 22, 1975 - Meeting with Lions Club in Gallitzin.
October 16, 1975 - Meeting with the Cambria County Planning Commission in Ebensburg.
October 29, 1975 - Meeting with local governmental officials at Newton Hamilton.
October 31, 1975 - Federal Highways and Pennsylvania Department of Transportation meeting at Harrisburg, PA.
March 11, 1976 - Meeting in Lewistown with Mifflin County Commissioners.
April 13, 1976 - Informal public meeting at Duncansville.
May 18, 1976 - Informal public meeting at Allegheny Portage.
May 19, 1976 - Informal public meeting at St. Michael.
June 3, 1976 - Meeting with Paul Davidson (nearby commercial landowner).
June 7, 1976 - Meeting with Robert Erculiami (adjacent landowner).
June 25, 1976 - Adams-Croyle Recreation Authority at St. Michael.
August 19, 1976 - Meeting with the Rotary Club at Cresson.
December 2, 1976 - Meeting with Howard Kratzer at Cresson.
December 6, 1976 - Meeting with Johnstown/Pittsburgh Express at Cresson.
January 7, 1977 - Meeting with Lions Club at Newton Hamilton.
January 24, 1977 - Meeting with Corps of Engineers at Pittsburgh.
February 4, 1977 - Congressman John H. Dent meeting at Greensburg.
February 15, 1977 - Meeting with Greater Johnstown Chamber of Commerce at Johnstown.
March 15, 1977 - Formal public meeting in Hollidaysburg in Blair County.
March 16, 1977 - Formal public meeting in Richland in Cambria County.
July 12, 1977 - American Business Club meeting in Altoona.

Copies of the Draft General Management and Development Plan and the Environmental Assessment were sent to the following groups and organizations for their review and comment:

Westmoreland Sportsmen Federation
Courthouse
Greensburg, PA 15601

Cambria County Sportsmen Federation
Courthouse
Ebensburg, PA 15931

Mayor
Borough of Summerhill
Summerhill, PA 15958

Mayor
Borough of Jamestown
Portage, PA 15946

Wayne Township Supervisors
Newton Hamilton, PA 17075

Mayor
City of Johnstown
Johnstown, PA 15901

Mayor
Borough of Sidman
Sidman, PA 15955

Mr. Paul T. Delozier
Gallitzin Township Supervisor
Coupon, PA 16629

Mr. Ronald Neff, Chairman
Juniata Township Supervisor
R.D. #2
Duncansville, PA 16635

Mr. Donald E. Hammer
Division Administrator

Federal Highway Administration
P.O. Box 1086
Harrisburg, PA 17108

Mifflin Sportsmen Federation
Courthouse
Lewistown, PA 17044

Executive Director
Pennsylvania Historical & Museum Comm.
Box 1026
Harrisburg, PA 17108

Mayor
Borough of Cassandra
Cassandra, PA 15925

Mayor
Borough of Ehrenfeld
South Fork, PA 15956

Mayor
Borough of South Fork
South Fork, PA 15956

Mayor
Borough of Blairsville
Blairsville, PA 15717

Mayor
Village of St. Michael
St. Michael, PA 15951

Mr. James E. Nickum, Secretary
Allegheny Township Supervisors
Box 1A, R.D. #2
Duncansville, PA 16635

Mr. John M. Rubal
Greater Johnstown Chamber of Commerce
219 Franklin Street
Johnstown, PA 15901

Mr. William K. Parsons
Altoona Area Chamber of Commerce
1107 - 12th Street
Altoona, PA 16601

Derry Township Supervisor
Sec. Patricia Barchesky
650 Derry Road
Derry, PA 15627

Pittsburgh Federal Exec. Board
616 Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222

Hon. Paul Yahner
House of Representatives
Harrisburg, PA 17108

Blair Gap Water Supply Company
20 Greenwood Road
Altoona, PA 16602

President
Carnegie Mellon University
Schenley Park
Pittsburgh, PA 15213

Superintendent
Prince Gallitzin State Park
R. D. #1
Patton, PA 16668

Hon. John P. Murtha
House of Representatives
431 Cannon Office Building
Washington, DC 20515

Mayor
Borough of Gallitzin
Gallitzin, PA 16641

Cambria County Planning Comm.
Cambria County Courthouse
Ebensburg, PA 15931

Mifflin County Planning Comm.
Mifflin County Courthouse
Lewistown, PA 17044

Westmoreland County Planning Comm.
Westmoreland County Courthouse
Greensburg, PA 15601

Johnstown City Planning Comm.
City Hall
Johnstown, PA 15901

Mr. Michael Stibich
The Johnstown Sierra Club
302 1st National Bank Bldg.
Johnstown, PA 15901

Hon. Harry Englehart, Sr.
House of Representatives
Harrisburg, PA 17108

Mr. Regis Michaelangelo
Gallitzin Borough Planning Commission
Jackson Street
Gallitzin, PA 16641

Mr. Alfred Danel
President
Adams-Croyle Recreation Authority
St. Michael, PA 15951

Hon. E.G. Shuster
Room 1110
Longworth House Office Bldg.
Washington, DC 20515

Hon. John H. Dent
Law and Finance Building
35 W. Pittsburgh Street
Greensburg, PA 15001

Mayor
Borough of Tunnel Hill
Gallitzin, PA 16641

Mifflin County Commissioners
Mifflin County Courthouse
Lewistown, PA 17044

Westmoreland County Commissioners
Westmoreland County Courthouse
Greensburg, PA 15601

Mayor
Borough of Newton Hamilton
Newton Hamilton, PA 17075

Mayor
Borough of Hollidaysburg
Hollidsaysburg, PA 16648

District Engineer
Conrail
Altoona, PA 16601

Mr. George Hand
General Services Department
Bethlehem Steel Corporation
Johnstown, PA 15901

Blair County Planning Commission
Highland Hall Annex
Courthouse
Hollidaysburg, PA 16648

Cambria County Soil Conservation Dist.
518 N. Lenier
Ebensburg, PA 15931

Mr. John Oliver
Western Pennsylvania Conservancy
316 Fifth Avenue
Pittsburgh, PA 15222

Pennsylvania Historical Association
311 Walnut Street
Philadelphia, PA 19106

Mr. Clarence Eger
Cresson Township Supervisor
703 Portage Road
Cresson, PA 16630

Mr. Leroy Burkhart
Conemaugh Township Supervisor
1274 Killishart Street
Johnstown, PA 15902

Blair County Tourist Council
1107 - 12th Street
Altoona, PA 16601

Mayor
Borough of Torrance
Torrance, PA 15779

Mr. Stephen Mandes, Executive Director
Southern Alleghenies Reg.
Planning Comm.
3 Penn Union Avenue
Altoona, PA 16602

Blair County Commissioners
Blair County Courthouse
Hollidaysburg, PA 16648

Cambria County Commissioners
Courthouse
Ebensburg, PA 15931

Blair County Soil Conservation Dist.
Blair County Courthouse
Hollidaysburg, PA 16648

Pennsylvania State University
Recreation & Parks Program
267 Recreation Building
University Park, PA 16802

Adams Township Supervisors
Box 41
Dunlo, PA 15930

Mr. Norman Long
Croyle Township Supervisor
R.D. #1
Sidman, PA 15955

Pennsylvania Canal Society
818 Belmont Avenue
Johnstown, PA 15904

President
Westmoreland County Historical Society
Courthouse
Greensburg, PA 15601

Mayor
Borough of Duncansville
Duncansville, PA 16635

Mayor
Borough of Lilly
Lilly, PA 15938

Mayor
City of Altoona
Altoona, PA 16601
Mayor
Borough of Cresson
Cresson, PA 16630
Mayor
Borough of Wilmore
Wilmore, PA 15962

President
Cambria County Historical Society
521 West High Street
Ebensburg, PA 15931

President
Johnstown Flood Museum Association
304 Washington Street
Johnstown, PA 15901

Superintendent
Cresson State School
Cresson, PA 16630

District Engineer, Pittsburgh District
U.S. Army Corps of Engineers
Colonel Max R. Janairo, Jr.
1000 Liberty Avenue, Federal Bldg.
Pittsburgh, PA 15222

President
Mifflin County Historical Society
Courthouse
Lewistown, PA 17044

Jackson Township Supervisor
Mineral Point, PA 15942

Cambria County Tourist Council
Incline Plane
Johnstown, PA 15901

Westmoreland County Tourist Council
Courthouse
Greensburg, PA 15601

Mayor
Borough of Ebensburg
Ebensburg, PA 15931
Mayor
Borough of Portage
Portage, PA 15946
President
Blair County Historical Society
Baker Mansion
Hollidaysburg, PA 16648

Mr. Robert Kopitnik
District Engineer - 090
Pa. Dept. of Transportation
Hollidaysburg, PA 16648

Director
Bureau of State Parks
Dept. of Environmental Resources
Harrisburg, PA 17120

East Taylor Township Supervisor
Mineral Point, PA 15942

Blair County Sportsmen Association
Courthouse
Hollidaysburg, PA 16648

Mifflin County Tourist Council
Courthouse
Lewistown, PA 17044

Derry Township Supervisor
Sec. Patricia Barchesky
650 Derry Road
Derry, PA 15627

Eastern National Park and
Monument Association
314 Market Street
Philadelphia, PA 19106

C : C O N S T R U C T I O N &
D E V E L O P M E N T C O S T S

ALLEGHENY PORTAGE NATIONAL HISTORIC SITE

	TOTAL
SUBTOTAL - Roads, Trails & Parkways	\$ 2,026
SUBTOTAL - Buildings, Utilities, Etc.	<u>6,457</u>
GRAND TOTAL	\$8,483
 LEMON HOUSE - <u>Roads and Trails</u>	
Parking Area	\$ 129
Road Obliteration	40
Construct New Road	129
Construct New Trail	9
Signing	25
Subtotal R&T	<u>\$ 332</u>
 <u>Buildings Utilities</u>	
Rehabilitate Lemon House for visitor contact, administrative offices, restore first floor, renovate basement to comfort sation	\$ 242
Restore exterior historic	65
Utilities	418
Landscaping and site development	82
Subtotal B&U	<u>\$ 807</u>
 SUMMIT - <u>Roads and Trails</u>	
Access road	\$ 36
Obliterate nonhistoric roads	482
Trail	9
Signing	\$ 65
Subtotal R&T	<u>\$ 592</u>
 <u>Buildings, Utilities</u>	
Picnic area	\$ 50
Comfort station	50
Utilities for comfort station	65
Maintenance facility	194
Employee residence	74
Utilities for maintenance facility/comfort station	50
Restore level tracks	161
Restore incline 6 tracks	314
Construct shelter for enginehouse	678
Preserve/stabilize enginehouse 6	82
Utilities at shelter	25
Site development and landscaping	161
Subtotal B&U	<u>\$ 1,904</u>

INCLINE 8 - Roads and Trails

Access Road	\$ 14
Parking	17
Trail	61
Signing	10
Benches	8
Subtotal R&T	<u>\$ 110</u>

Buildings, Utilities

Comfort Station	\$ 25
Utilities	65
Site development & landscaping	16
Subtotal B&U	<u>\$ 106</u>

INCLINE 10 - Roads and Trails

Access Road	\$ 138
Parking	74
Portage Trail	16
Nature Trail	8
Parking for E.S.A.	12
Signing	33
Subtotal R&T	<u>\$ 281</u>

Buildings, Utilities

Picnic	\$ 20
Comfort Station/maintenance unit	97
Utilities	97
Renovate 2 buildings to ESA	17
Renovate 1 building to residence	9
Landscaping and site development	17
Subtotal B&U	<u>\$ 257</u>

STAPLE BEND - Roads and Trails

Construct access road	\$ 20
Parking	25
Trace Trail	41
Signs	17
Subtotal R&T	<u>\$ 103</u>

Buildings, Utilities

Comfort facility	\$ 25
Visitor contact facility	58
Utilities	75
Stabilize historic RR and tunnel	964
Landscaping and site development	25
Subtotal B&U	<u>\$ 1,147</u>

<u>INCLINE 6 TO 10 - Roads and Trails</u>	
Clear trace and construct foot trail	\$ 145
Access trail	9
Parking area at Incline 9-10 spaces	25
Pedestrian underpass	161
Subtotal R&T	<u>\$ 340</u>
<u>Buildings, Utilities</u>	
Rehabilitate residence - 1	\$ 9
Utilities	97
Signing	33
Landscaping and site development	16
Subtotal B&U	<u>\$ 155</u>
<u>BLAIRSVILLE - Roads and Trails</u>	
Access road	\$ 17
Trail on towpath	33
Parking	97
Signs	17
Subtotal	<u>\$ 164</u>
<u>Buildings, Utilities</u>	
Stabilize PA. Canal	\$ 330
Visitor Contact Facility	66
Comfort station/maintenance facility	97
Picnic sites	30
Utilities	110
Landscaping and site development	55
Subtotal B&U	<u>\$ 688</u>
<u>PARK GENERAL - Roads and Trails</u>	
Development auto tour route on existing roadways	
signs/markers	\$ 104
Subtotal R&T	<u>\$ 104</u>
<u>Buildings, Utilities</u>	
Stabilize park historic structures	\$ 724
Upgrade radio system	97
Seal abandoned mines and restoration of strip mining areas	241
Relocate overhead electric lines underground	82
Historic structures report	84
Archeological investigations	165
Subtotal B&U	<u>\$ 1,393</u>

JOHNSTOWN FLOOD NATIONAL MEMORIAL

	TOTAL
SUBTOTAL - Roads, Trails & Parkway	\$ 1,124,000
SUBTOTAL - Buildings, Utilities, Etc.	<u>1,388,000</u>
GRAND TOTAL	\$ 2,512,000
<u>Roads, Trails and Parkways</u>	
Improve north abutment access road	438,000
Parking at north abutment	115,000
Trails	5,000
Relocate township road	117,000
maintenance area access road	3,000
Pedestrian bridge	278,000
Restore historic bridge over spillway	146,000
Trails to bridge	11,000
Park entrance signs	11,000
Subtotal - R&T	<u>\$ 1,124,000</u>
<u>Buildings & Utilities, Etc.</u>	
Picnic area improvements	\$ 7,000
Maintenance bldg.	45,000
Utilities	87,000
Restoration of historic appearances of spillway, slopes of dam and dam abutments	512,000
Visitor contact facility	234,000
Utilities for visitor contact facility	88,000
Relocate overhead power lines underground	78,000
Signs, markers	30,000
Site development	112,000
Historic structures report	20,000
Historic research	20,000
Archeological investigations	50,000
Comfort station at picnic area	45,000
Comfort station at south abutment	45,000
Subtotal - B&U	<u>\$ 1,388,000</u>

D : SUMMARY OF LAND
ACQUISITION, STAFFING, AND
OPERATING COSTS

<u>Park</u>	<u>Land Acquisition</u>	<u>Staffing Position End of 5th Year</u>	<u>Operating Cost End of 5th Year</u>
Allegheny Portage Railroad NHS	703 acres	20.6 man years	\$369,400
Johnstown Flood NM	<u>93 acres</u>	<u>3.0 man years</u>	<u>48,600</u>
Total	796 acres	23.6 man years	\$418,000

Land Cost Total \$2,755,000
 (does not include cost for
 Staple Bend Tunnel or existing
 mineral rights)

E : C O O P E R A T I V E A G R E E M E N T S

National Park Service and Bethlehem Steel Corporation - November 4, 1966: Bethlehem Steel Corporation is responsible for the maintenance of both wing walls of Staple Bend Tunnel, the level between the tunnel and Legislative Route 11018, and Incline 1 west of the tunnel. It is also responsible for controlling water drainage on its property above the tunnel, as well as fire protection.

National Park Service and Cambria County Historical Society - April 24, 1967: Cambria County Historical Society has the right to construct a museum on that land, with its location, design, size, and content subject to the approval of the National Park Service.

National Park Service and Bethlehem Steel Corporation - July 27, 1967: Bethlehem Steel Corporation is limited in its drilling rights for oil and gas within the summit portion of Allegheny Portage Railroad National Historic Site.

National Park Service and City of Johnstown CA 4150-78-02, May 15, 1978 - December 31, 1969: Significant sites will be marked relating to the portage railroad and Johnstown Flood outside the boundaries of each area.

National Park Service and Cresson Volunteer Fire Company - December 8, 1970: This agreement provides for mutual forest fire protection, prevention, and presuppression within a fire protection zone at the summit level and Incline 8 units of the Allegheny Portage Railroad for an annual fee.

National Park Service and Pennsylvania Department of Transportation CA 4130-78-06, May 1, 1978: The agreement provides for the protection of the Summit Unit of Allegheny Portage Railroad required by the relocation of U.S. 22 including pedestrian access, National Park Service maintenance of the right-of-way under new U.S. 22, closing of the Gallitzin Road (L.R. 07068), and future study of old U.S. 22.

F : H I S T O R I C T R A N S P O R T A T I O N I N V E N T O R Y

The nation's first transportation boom was based on the use of rivers and led to an era of canal building. According to Charles B. Hunt, author of Physiography of the United States, the canal system constructed in the eastern United States between 1800 and 1850 were as follows:

New England Canals

- Sebago-Portland Canal, Maine, 1830
- Middlesex Canal, Merrimac River to Boston, 1803
- Blackstone Canal, Worcester, Massachusetts, to Providence, Rhode Island, 1828
- Hampshire and Hampden Canal, Northampton, Massachusetts, to New Haven, Connecticut, along Farmington River, 1835

Erie Canal and Its Tributaries

- Erie Canal, Albany to Lake Erie, 1824
- Champlain Canal, 1819
- Black River Canal, connecting the Erie Canal and Lake Ontario, authorized 1836, completed 1855
- Oswego Canal, connecting Oneida Lake and Lake Ontario, 1828
- Genesee Valley Canal, from Lake Ontario to the Genesee Valley, authorized 1836, completed about 1850
- Cayuga and Seneca Canal, about 1828
- Chemung Canal, connecting Seneca Lake with Susquehanna River, about 1830
- Chenango Canal, authorized 1833, completed after 1863

Other Atlantic Seaboard Canals

- Delaware and Hudson Canal, 1826
- Morris Canal, from Newark Bay to Paterson and the Delaware River at Easton, 1826
- Delaware and Raritan Canal, 1834
- Lehigh Canal (1827) and Delaware Division (183), from the anthracite coal fields to Trenton
- Schuylkill Navigation Canal, from anthracite fields at Pottsville to Philadelphia, 1825; first tunnel in the United States
- Union Canal, Harrisburg to Reading, 1828, second tunnel
- North Branch Canal, along the Susquehanna River, about 1833

West Branch Canal, along West Branch of the
Susquehanna River, completed to Williamsport, 1834
Main Line Canal from Harrisburg via the Juniata River,
across the Allegheny Front by the Portage Railway,
and down the Conemaugh River to the Ohio River
at Pittsburgh, about 1829
Susquehanna and Tidewater Canal, 1840
Chesapeake and Delaware Canal, 1840
Chesapeake and Ohio Canal, Washington, D.C., to
Cumberland, begun 1828, completed 1850
James River Canal, constructed around falls at Richmond,
1795, completed to Lynchburg, 1840, extended to
Lexington and Buchanan, 1851
Dismal Swamp Canal, one of the earliest; completed for
small craft, 1794; completed for flat boats; Ches-
apeake Bay to Albemarle and Pamlico Sounds
Santee Canal, from Charleston, South Carolina, to Santee
River, 1800

Canals in the Northwest Territory

Ohio and Erie Canal, Cleveland to Portsmouth, Ohio, 1833
Hocking Valley Branch to coal fields, 1838
Ohio and Pennsylvania Canal, from the Ohio and Erie at
Akron to New Castle and Pittsburgh, 1840
Sandy and Beaver Canal, from the Ohio and Erie to
Beaver River and Pittsburgh, 1840
Walhonding Branch Canal, about 1836
Muskingum Canal to Marietta, about 1836
Miami and Erie Canal, from Cincinnati to Dayton ca. 1831,
Maumee and Toledo section completed 1843
Warren County Canal, about 1836
White Water Canal, 1846
Wabash and Erie Canal, completed from junction with
Miami and Erie to Lafayette, Indiana, 1843; to
Evansville, about 1855
Illinois and Michigan Canal, 1848

G : V I S I T A T I O N A N D C A R R Y I N G C A P A C I T Y

Annual visitation for Allegheny Portage Railroad exhibits certain trends. There was an initial monthly peak of some 9,500 visitors in 1970 - the opening year for the historic site - which leveled off to 5,500 visitors for the following 2 years followed by increasing visitation in 1974, 1975, and 1976. Monthly distributions indicate a peak period during the summer and fall (June through October), with visitation varying according to weather conditions. Weekends and holidays are the weekly highs during the peak visitation period. The overall pattern apparently shows that visitation is primarily first time.

Annual visitation for Johnstown Flood National Memorial shows similar trends. The 1971 increase in visitors appears to be related to the erection of directional signs on nearby U.S. 219. The peak visitation month was August 1974 when 14,509 persons visited the park. The peak visitation period is May to October, which is 1 month longer than the Allegheny Portage Railroad, possibly because of slightly better weather conditions. Again visitation appears to be primarily on a first-time basis.

Each area has a carrying capacity, which is the maximum number of people who can make indefinite use of the land without causing deterioration of the habitat or creating severe conflicts with other people. The capacity is based primarily on simultaneous interrelationships between vegetation, animals, man, man's facilities, and other men. It is not static, but is as dynamic as the ecosystem and the cultural system of the human groups using it. The determination of a numerical carrying capacity for each unit of the Allegheny Portage/ Johnstown Flood requires further study.

VISITATION

19000

18000

17000

16000

15000

14000

13000

12000

11000

10000

9000

8000

7000

6000

5000

4000

3000

2000

1000

0

allegheny
portage
railroad
nhs

J F M A M J J A S O N D
1970

J F M A M J J A S O N D
1971

J F M A M J J A S O N D
1972

J F M A M J J A S O N D
1973

J F M A M J J A S O N D
1974

J F M A M J J A S O N D
1975

J F M A M J J A S
1976

annual visitation

ALLEGHENY PORTAGE RAILROAD NHS JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

VISITATION

19000

18000

17000

16000

15000

14000

13000

12000

11000

10000

9000

8000

7000

6000

5000

4000

3000

2000

1000

0

J F M A M J J A S O N D
1970

J F M A M J J A S O N D
1971

J F M A M J J A S O N D
1972

J F M A M J J A S O N D
1973

J F M A M J J A S O N D
1974

J F M A M J J A S O N D
1975

J F M A M J J A S O N D
1976

johnstown
flood
nm

annual visitation

ALLEGHENY PORTAGE RAILROAD NHS - JOHNSTOWN FLOOD NM
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

TOTAL VISITATION 4387

TOTAL VISITATION 8487

TOTAL VISITATION 4800

TOTAL VISITATION 5646

TOTAL VISITATION 5430

TOTAL VISITATION 6046

TOTAL VISITATION 6570

49,400

46,030

52,389

57,400

6,900

8,500

8,100

7,200

65,700

B I B L I O G R A P H Y

APPALACHIAN REGIONAL COMMISSION

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BLAIR COUNTY PLANNING COMMISSION

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Pennsylvania.
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CAMBRIA COUNTY PLANNING COMMISSION

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 1971 Statewide Comprehensive Outdoor Recreation Plan. Harrisburg, Pennsylvania.
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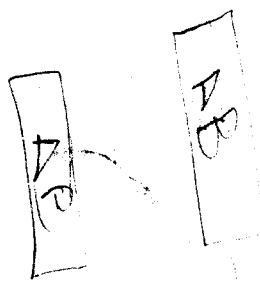
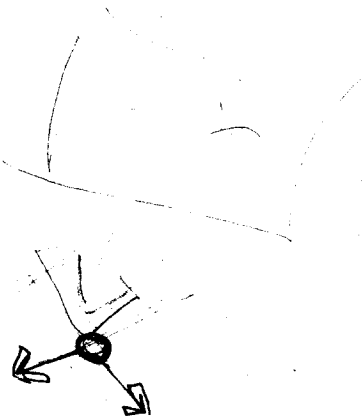
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