Form No. 10-300 (Rev. 10-74)

P#0670766

DATA SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

# NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED NOV 23 1976
DATE ENTERED AUG 22 1977

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

## 1 NAME

HISTORIC **

Cumberland Mountain Tunnel

AND/OR COMMON

Cowan Tunnel

## LOCATION

STREET & NUMBER

SE of Cowan

__NOT FOR PUBLICATION

CITY, TOWN

Cowan

X VICINITY OF

CONGRESSIONAL DISTRICT

Fourth

| STATE | CODE | COUNTY | CODE |
|---|---|---|---|
| Tennessee | 47 | Franklin | 51 |

## CLASSIFICATION

| CATEGORY | OWNERSHIP | STATUS | PRESENT USE | |
|---|---|---|---|---|
| __DISTRICT | __PUBLIC | __OCCUPIED | __AGRICULTURE | __MUSEUM |
| __BUILDING(S) | X PRIVATE | X UNOCCUPIED | __COMMERCIAL | __PARK |
| X STRUCTURE | __BOTH | __WORK IN PROGRESS | __EDUCATIONAL | __PRIVATE RESIDENCE |
| __SITE | **PUBLIC ACQUISITION** | **ACCESSIBLE** | __ENTERTAINMENT | __RELIGIOUS |
| __OBJECT | __IN PROCESS | X YES: RESTRICTED | __GOVERNMENT | __SCIENTIFIC |
| | __BEING CONSIDERED | __YES: UNRESTRICTED | __INDUSTRIAL | X TRANSPORTATION |
| | | __NO | __MILITARY | __OTHER: |

## OWNER OF PROPERTY

NAME

Louisville & Nashville Railroad Company

STREET & NUMBER

1590 Marietta Boulevard, N.W.

CITY, TOWN

Atlanta

__ VICINITY OF

STATE

Georgia

## LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.

Franklin County Courthouse

STREET & NUMBER

Court Square

CITY, TOWN

Winchester

STATE

Tennessee

## 6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Franklin County Survey

DATE

October 1974

__FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS

Tennessee Historical Commission

CITY, TOWN

Nashville

STATE

TN

## 7 DESCRIPTION

| CONDITION | | CHECK ONE | CHECK ONE |
|---|---|---|---|
| __EXCELLENT | __DETERIORATED | __UNALTERED | X ORIGINAL SITE |
| -x-GOOD | __RUINS | x ALTERED | __MOVED DATE_____ |
| __FAIR | __UNEXPOSED | | |

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Eighty-seven miles south of Nashville, between the Franklin County communities of Cowan and Sherwood, the Nashville and Chattanooga Railroad bored a tunnel through Cumberland Mountain. Work on the Cumberland Mountain Tunnel started early in 1849, before a single mile of track was laid along the 150-mile route connecting Chattanooga and the capital. Civil engineer John Edgar Thompson (later president of the Pennsylvania Railroad) surveyed the entire route and selected the tunnel site. N & C President V. K. Stevenson appointed James H. Grant chief engineer, and Grant was assisted by E. D. Sanford and Minor Merriweather. Thomas C. Bates contracted for the project.

The construction crews, comprised of English and Irish immigrant laborers, slaves, and local residents, cut three vertical shafts through limestone and shale from the summit to track level; these measured 7 by 11 feet, reached to an average depth of 170 feet, and were left open for ventilation of the tunnel. This configuration provided eight working faces--two at the base of each shaft plus at both of the main portals. Employing only rudimentary hand tools and black powder, the crews worked around the clock and broke through in February 1852. On February 22 the citizens of Cowan and Winchester celebrated the completion of the project with a grand ball and a candlelight procession through the tunnel.

Early in 1853 the 2,228-foot tunnel was completed, the tracks laid, and the trains began operating. The tunnel cross section measured 17 feet high and 12 feet wide, and the center point of the cut, the high point of the entire route, was 1,147.3 feet above sea level. The cost of the 150-mile line, including the tunnel, totaled $3,255, 189.

That the northern approach to the tunnel rose 179 feet in two miles and had five sharp turns and because the southern approach had a descent of 477 feet in 4½ miles with eleven hazardous curves, innovative methods were required to move passengers and freight safely and efficiently over the mountain and through the tunnel. To alleviate the danger of slippery tracks and faulty brakes, a runaway track was constructed on the south grade. Since service locomotives lacked sufficient power to haul heavy payloads up the steep approaches to the tunnel, and "doubling" or "reducing," that is, breaking the train into sections, proved impractical, a pusher service between Cowan and Tantallon (later Sherwood) was instituted in 1853. The first pusher engine employed was the 23-ton, 0-8-0 "Cumberland," manufactured by the Baldwin Locomotive Works; gradually larger, more powerful engines assumed the pusher duties. The present system consisting of three heavy diesel locomotives--two GP-9s and one GP-7 hooked in tandem--provides 5,000 horsepower to move the heavier loads of today.

The tunnel served the railroad's needs unchanged until the late 1950s. To accommodate the taller piggy-back and automobile rack shipments, the ceiling height was raised to twenty-one feet and the width increased by three feet. H. P. Womack, a Tullahoma contractor, completed these modifications in February 1960. Seven years later the roof was lined with steel to prevent rocks from falling on to the tracks.

# 8 SIGNIFICANCE

| PERIOD | AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW | | | | |
|---|---|---|---|---|---|
| __PREHISTORIC | __ARCHEOLOGY-PREHISTORIC | __COMMUNITY PLANNING | __LANDSCAPE ARCHITECTURE | __RELIGION |
| __1400-1499 | __ARCHEOLOGY-HISTORIC | __CONSERVATION | __LAW | __SCIENCE |
| __1500-1599 | __AGRICULTURE | __ECONOMICS | __LITERATURE | __SCULPTURE |
| __1600-1699 | __ARCHITECTURE | __EDUCATION | X MILITARY | __SOCIAL/HUMANITARIAN |
| __1700-1799 | __ART | X ENGINEERING | __MUSIC | __THEATER |
| X 1800-1899 | __COMMERCE | __EXPLORATION/SETTLEMENT | __PHILOSOPHY | X TRANSPORTATION |
| __1900- | __COMMUNICATIONS | X INDUSTRY | __POLITICS/GOVERNMENT | __OTHER (SPECIFY) |
| | | __INVENTION | | |

SPECIFIC DATES 1849-52 BUILDER/ARCHITECT V. K. Stevenson, chief engineer

STATEMENT OF SIGNIFICANCE

Cumberland Mountain Tunnel was the focal point of several Civil War skirmishes. Early in the war Confederate troops controlled the railroad and transported soldiers and supplies over it until the Federal forces seized control of the strategic point after the fall of Fort Donelson in 1862. On October 9, 1863 Confederate General Joe Wheeler attacked the Union garrison protecting the tunnel and routed the troops. Later in the month a Federal supply train was blown up in the north entrance but the tunnel escaped damage.

Coal was discovered on Cumberland Mountain in the 1840s. The Sewanee Mining Company constructed a spur line up the mountain to connect the coal fields near Tracy City with the N & C at Cowan. A few yards from the north portal of the tunnel the spur crosses over the main line on a cut-stone, round-arch bridge. This branch was extended to Coalmont in 1904 and to Palmer thirteen years later. The Sewanee Mining Company later became the Tennessee Coal, Iron and Railroad Company (now a subsidiary of U.S. Steel). The N & C gained control of the spur in 1887. This line also provided access to the University of the South at Sewanee and to the popular resort in Monteagle.

Controlling interest in the N & C was acquired by the Nashville, Chattanooga and St. Louis Railroad in 1880, and the two roads merged in 1957. The N.C. & St. L. is now part of the Louisville and Nashville Railroad system.

The approaches to the tunnel have been the scene of two major wrecks and numerous derailments. On December 23, 1915 a freight and a railroad crew train collided killing eleven passengers. One crewman died and several sustained injuries when an engine's boiler exploded on March 15, 1918.

The Cumberland Mountain Tunnel, one of the earliest and longest in the state and the first built in Middle Tennessee, has served continuously as a vital communications link between Nashville and Chattanooga for more than 120 years. It is significant that the tunnel was completed in only three years considering that no heavy machinery was employed in its construction. An engineering feat of considerable importance, it is also noteworthy that Chief Engineer V. K. Stevenson used highly innovative techniques to provide a safe environment for his workers, while at the same time, expediting the project. The topography of the area created technical problems which required and were solved by equally innovative methods. Few tunnels were constructed before 1861 and even fewer antebellum tunnels have survived into the twentieth century.

## 9 MAJOR BIBLIOGRAPHICAL REFERENCES

Thomas E. Bailey. "Storm on Cumberland Mountain: The Story of the Cowan Pusher District." Tennessee Historical Quarterly, XXXIV (Fall 1975), 227-248.

Sarah Jones. "Half A Mile of History--L & N Tunnel." Franklin County Historical Review, V (June 1974), 3-9.

## 10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 42 app.

UTM REFERENCES

| | ZONE | EASTING | NORTHING |
|---|---|---|---|
| A | 16 | 593710 | 3890070 |
| B | 16 | 593590 | 3889210 |
| C | 16 | 592940 | 3890421 |
| D | 16 | 593060 | 3890591 |

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

| STATE | CODE | COUNTY | CODE |
|---|---|---|---|
| STATE | CODE | COUNTY | CODE |

## 11 FORM PREPARED BY

NAME / TITLE

Robert E. Dalton, Director of Field Services

ORGANIZATION — DATE

Tennessee Historical Commission — October 25, 1976

STREET & NUMBER — TELEPHONE

170 Second Avenue North — (615) 741-2371

CITY OR TOWN — STATE

Nashville — Tennessee

## 12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE X LOCAL ___

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

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Herbert L. Harper

TITLE Executive Director, Tennessee Historical Commission — DATE 11/17/76

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION — DATE 8/22/77

ATTEST: KEEPER OF THE NATIONAL REGISTER — DATE 8.12.77

KEEPER OF THE NATIONAL REGISTER

GPO 892-453