### National Register of Historic Places Multiple Property Documentation Form

Multiple Property Documentation Form (National Register Bulletin 16B). Complete each item by enter additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or complete each item by enter additional space, use continuation sheets (Form 10-900-a).	ring the requested information. For
X New Submission Amended Submission	
A. Name of Multiple Property Listing	
Historic Resources of the Tennessee Copper Basin	
B. Associated Historic Contexts	
(Name each associated historic context, identifying theme, geographical area, and chronological per	riod for each.)
Early Mining Development 1847-1878 Late Mining Development 1890-1987 Development of Communities 1850-1941	
C. Form Prepared by	
name/titleKaren L. Daniels/ Historic Preservation Planner	
organization Southeast Tennessee Development District	date February 1992
street & number 25 Cherokee Boulevard	telephone (615) 266-5781
city or town Chattanooga state Tennessee	zip code 37405
D. Certification  As the designated authority under the National Historic Preservation Act of 1966, as amended. I he meets the National Register occumentation standards and sets forth requirements for the listing of National Register criteria. This submission meets the procedural and professional requirements set Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (  comments.)  Light L	related properties consistent with the forth in 36 CFR Part 60 and the
Signature and title of certifying official  Deputy State Historic Preservation Officer/ Tennessee Historic State or Federal agency and bureau  I hereby certify that this multiple property documentation form has been approved by the National Properties for listing in the National Register.	rical Commission
Signature of the Keeper	5-/5-92 Date of Action

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#### INTRODUCTION

The Ducktown Basin, or Copper Basin, is located in the extreme southeast corner of Polk County, Tennessee. It is an area with a rich history rooted in copper mining. Three veins of copper run through the basin and each attracted several mining companies ready to exploit the resource.

The terrain of the basin is rolling hills--partly barren, denuded hills, mostly planted with pine and kudzu. The basin is drained by the Ocoee River and numerous minor creeks. To the north and west of the Basin is the Cherokee National Forest, to the south is Fannin County, Georgia, and to the east is Cherokee County, North Carolina. The Basin extends into both Georgia and North Carolina but most of its area and the mines are in Tennessee.

The early inhabitants of the Basin were Cherokee Indian farmers who did some hunting in the forests of the basin, and produced some copper in the basin. The Cherokee exploited deposits of copper located near the surface, and smelted the copper for use in trade. They did not establish large mines. By the Treaty of New Echota in 1836 they gave up many of their lands including those in the Copper Basin. Many of the Indians who remained in the Basin after the treaty were removed by the U. S. Army in 1838 during the Trail of Tears. Properties associated with the Indian occupation, if any are extant, are not included in the scope of this nomination.

#### ANGLO-AMERICAN EXPLORATION AND SETTLEMENT 1839-1850

Polk County was created in 1839 from parts of Bradley and McMinn Counties. It was named after Governor James K. Polk. The county seat of Benton had been established in 1820.

Because there were no roads into the Basin settlement was slow to occur. The first settlers came to the Basin to farm. Until 1839 there was little white settlement. That year land prices were lowered from the starting price of \$7.50 an acre, which had been established when the land was surveyed after the Indian removal, to only \$1.00 an acre. In December 1839 John Rogers purchased 40 acres, the first white to buy land in the Basin. He was followed the next year by John Davis, who purchased land near the creek which bears his name. Prices would go even lower before much

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settlement occurred.

The farming community of Pleasant Hill was founded around 1840, the first organized settlement in the Basin. The community is located east of Copperhill.

A few early prospectors came to the Basin, looking for gold and finding iron and copper. The iron, which had a very high copper content, was a low quality. An iron foundry was established on Potato Creek by B. C. Duggar in 1847 but it failed because of the poor quality of iron it produced. The copper was not to be exploited until the 1850s.

The lack of roads into the Basin increased its isolation and prevented economical shipment of goods outside the Basin and helped retain an agricultural lifestyle.

Railroads did not come into the Basin area because of a railroad convention held in Knoxville in 1836. This convention, which included railroad executives, and governments from nine states, decided to build a railroad across upper East Tennessee by way of Knoxville, but they did adopt a resolution favoring a spur line being built to the Georgia border. Many companies were formed to build the spur line, but corruption and the terrain of east Tennessee prevented the building of the line.

#### EARLY MINING DEVELOPMENT 1847-1878

The earliest recorded shipment of copper out of the Basin occurred in 1847 when A. J. Weaver shipped, by mule, ninety casks of copper to Dalton, Georgia, the nearest railroad. It was shipped north to the Revere Smelting Works near Boston.

In 1850 a rail line was completed between Dalton, Georgia and Cleveland, Bradley County, Tennessee. However, it was many years before the railroad came into the Basin. In 1850 the first permanent community, Hiwassee (later Ducktown) was founded near the site of the Hiwassee mine, which opened that year. Also in 1850 the Cocheco Mine and the Tennessee Mine opened south of Hiwassee. In 1852 the Polk County Mine opened. Hiwassee was the most important and long lasting community to be formed during this early stage of mining development.

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In 1851 the Copper Road between Hiwassee and Cleveland, in adjacent Bradley County, began to be constructed and was completed in 1853. Now copper could be taken economically by copper haulers to Cleveland for shipment and other goods could be brought back into the basin. The road ran through the Ocoee River gorge, and for 25 miles of its 40 mile length the road was hemmed in by the river and steep mountains. Copper haulers would make this journey in two days, spending the night at a halfway house (non-extant). On the return trip from Cleveland the wagons were usually loaded with merchandise for the stores, and with mining supplies. The completed trip of the copper haulers required a minimum of four days of travel. The original road was used throughout the 1800s as the only way to ship copper out of the Basin. (The road route was later used for part of US 64).

By 1854 fourteen mining companies had been chartered These companies all concentrated on real estate development and did not save capital for operation of the mines. In 1857 only five of the mines were operating regularly—the Tennessee, Mary's, Isabella, Eureka, and Hiwassee. In 1858 the mines in the Basin began to consolidate into three large companies—the Union Consolidated Mining Company, the Burra Burra Copper Company, and the Ducktown Copper Company.

The largest of the three companies was the Union Consolidated Mining Company of Tennessee which had been chartered in 1854, but did not open until 1858. Union Consolidated controlled 2575 acres of mining lands including the following Copper Basin mines: East Tennessee, Mary's, Callaway, Maria, Isabella, McCoy, Buena Vista, Johnson, Beaver, Cherokee and Ocoee. The company employed Julius Raht as superintendent of the mines. It is largely through Raht's involvement with the mines that they prospered. Another of the three large companies was established in 1860 when the Hiwassee Mining Company and the Cocheco Mining Company were acquired by the newly chartered Burra Burra Copper Company.

The Civil War disrupted work at the mines, as the miners left to fight in the armies and the mines closed down. Many mine interests and smelting plants were owned by northern industrialists who closed the mines in late 1861. The confederacy gained control of the Basin in 1863 and sold the mines to southern capitalists to provide the south with needed copper. The mines were operated at a reduced capacity through the end of 1863 when Federal troops

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again gained control of the area. Guerrillas roamed the Basin stealing equipment and animals. After the Civil War the miners and their families returned to the mines in the Basin, the damage to the mines was repaired, the Copper Road was repaired, and mines reopened. The Burra Burra and Union Mines were reopened in 1866, the first to do so.

From 1866 to 1877 the Basin mines grew in size and production. Workers continued to come into the area and there was improvement in the number and conditions of the mines. The principal smelters were located at the town of Isabella and near the Potato Creek.

The Basin's mines are the only deep shaft copper mines east of the Mississippi River. Copper mining also occurred in Michigan but the ore there was close to the surface and could be extracted by strip mining. The Copper Basin's ore was located in three deep seams and could only be extracted by deep shaft mining. Deep shaft mining was a dangerous activity, dynamite charges used to loosen ore could cause cave-ins and many miners lost their lives in the mines. Research has not revealed major collapses in the mines which resulted in deaths.

Unfortunately in the late 1870s most of the mining companies in the Basin began to fail because of a lack of adequate transportation and decreasing quality of ore. Copper was still being hauled by wagon to Cleveland, which was increasingly expensive, because no railroads had been built into the Basin. The cost of transporting the ore would have been greatly reduced by rail. The Copper Road still required four days of travel to the market. The railroad would allow more ore to be shipped in less time. As the cost of transporting the copper went up the price received by the copper companies for copper decreased. Without rail transportation it was uneconomical to ship copper. Union Consolidated Mining Company went into receivership in 1877 and the Polk County Mining Company failed in 1878.

#### LATE MINING DEVELOPMENT 1890-1987

The copper mines in the basin were idle for over 10 years until the Marietta and North Georgia Railroad built a spur line north to the area. They established a flag stop called McCays, after its first resident Herbert McCays, on the Tennessee/Georgia state line. The arrival of the railroad ended the isolation of the Basin. It

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made transportation of people and products easier. An efficient transportation system allowed the mines to re-open.

The Georgia spur was met soon by the spur from upper Tennessee. The major obstacle in the Tennessee line was the Hiwassee River Gorge, a 426 foot difference in the height between the north and south shores of the river. George Eager, of the Knoxville Southern Railroad, designed a switchback (non-extant) to eliminate the obstacle. The switchback was located near Farner, Polk County, Tennessee. The completed rail resembled a "W" built up the river gorge.

These two lines consolidated in 1890 as the Marietta & North Georgia Railroad. It passed into receivership in 1891 and was reorganized in 1895 as the Atlantic, Knoxville, and Northern Railroad Construction Company (A K & N). In 1896 it was finally incorporated and began to run the rail line.

In 1890 the Ducktown Sulpher, Copper and Iron Company (DSC&I) of London, England reopened the Mary mine and built a furnace with a 100 ton a day smelting capacity. In 1893 they shipped 632,000 pounds of copper out of the Basin. In 1891 the Pittsburg & Tennessee Copper Company leased the Old Tennessee mine and reopened it, they then also leased the Polk County mine. Pittsburg & Tennessee Copper Company soon dropped the Pittsburg from its name and became known as the Tennessee Copper Company (TCC).

In 1891 the open roast heap smelting process of copper was begun. This process, and the high sulfur content in Polk County copper, created sulfuric acid fumes which, combined with the timber cut as fuel, destroyed vegetation in the basin.

A K & N replaced the cumbersome switchback at the Hiwassee Gorge with a loop around Bald Mountain in the gorge (extant). The loop was necessary because a train could pull only three or four cars up the switchback, and a pusher train was needed to help get the trains up. This was very time consuming at a time when the line was getting more traffic. T. A. Aber, a civil engineer with the Louisville and Nashville Railroad, designed a loop around Bald Mountain, in the middle of the Hiwassee River, to eliminate the switchback. The loop, over 8,000 feet long, would circle the mountain one and a half times up a passable grade until it reached the plateau height near Farner north of Ducktown. Trains began

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running over the loop in 1898.

By 1899 the Tennessee Copper Company had bought or leased mines from most of the other mining companies in the Basin. They built a new smelter in McCays (renamed Copperhill) and built a railroad between Ducktown and the smelter. They began a new mine, the Burra Burra (NR 3/17/83) near the Hiwassee Mine site to combine the lodes of the Hiwassee and Cocheco mines.

In 1902 the Louisville and Nashville (L&N) Railroad acquired majority interest in A K & N. In 1906 L&N began construction of a new rail line between Etowah, McMinn County, Tennessee and Cartersville, Georgia. This new line eliminated much of the traffic on the old line around the Hiwassee Loop.

Two important lawsuits involving the Basin's industry occurred at In 1904 landowners north of the Basin sought an this time. injunction against DSC&I and TCC to make them stop using the open roast method of smelting. In Madison v. Ducktown Sulphur, Copper & Iron Co. (113 Ten 331, 1904) Tennessee courts ruled that the value of the copper companies' contributions to the county outweighed damages they caused. The courts noted that over half of Polk County's 1903 aggregate tax of \$2,585,931 was paid by the two companies (\$2,279,533), and over 12,000 people were dependent upon the industries. Before the copper industry came to the area there were only around 200 residents. The court noted that, at present, the open-roast heap method of smelting was the only known smelting method. The DSC&I had spent \$200,000 building an experimental acid reclamation plant (at Isabella) which began operation after the lawsuit was decided.

In 1906 in Georgia v. Tennessee Copper Company (206 US 236, 1906) the Supreme Court heard Georgia's claims that TCC was taking away its sovereign rights of control over its land and air. Georgia was seeking an injunction preventing TCC from using the open roast heap method. The Court found for Georgia but did not issue the injunction because by then TCC had begun construction of an acid reclamation plant near Copperhill.

Georgia v. TCC was extremely important in the beginning of the conservation effort in the Basin. The ruling ended the open roast heap method of smelting, preventing further environmental damage. Within two decades of the ruling the first efforts would be made

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to reclaim the barren landscape.

Another technological advancement which occurred in the Basin was a way to extract the iron compounds from the copper ore. This allowed the companies to retrieve iron, copper, and sulfuric acid from the Basin mines. In 1922 the DSC&I built the London flotation plant (extant), near Isabella, to recover the iron from the smelted copper. In 1927 the plant was upgraded to include recovering zinc. The TCC soon followed with flotation plants at its smelter sites.

In 1936 the last consolidation of companies occurred when the Tennessee Copper Company purchased the holdings of the Ducktown Chemical and Iron Company based in Isabella. DSC&I was nearly bankrupt, a combination of the Depression, and the innovations they researched and financed had depleted the treasury. TCC became the only copper company in the Basin.

Reforestation efforts began in the 1920s and 1930s, and concentrated efforts began in the 1940s. Early efforts were carried out by the mining companies and TVA. In 1929 the DSC&I hired C. R. Hurst, an ecologist with the U. S. Forest Service, to aid in an effort to begin test tree planting zones. A test site was established a few miles from the smelters, and was successful. Hundreds of acres of pine were planted between 1939 and 1944. Reforestation efforts have been conducted by three mining companies, the U. S. Soil Conservation Service, the U. S. Forest Service, the Civilian Conservation Corp, the Tennessee Division of Natural Resources, TVA, and the Universities of Tennessee, Georgia and North Carolina.

In 1941 the Tennessee Valley Authority established a CCC camp in the Basin to enhance their tree planting efforts. The CCC workers built dams, planted trees, and covered the ground with straw to prevent runoff. Sixteen buildings existed in 1941, all that remains are ruins of some foundations and leveled sites where the buildings stood.

#### DEVELOPMENT OF COMMUNITIES 1850-1941

Before the mining companies came into the Basin the area was largely rural with scattered agricultural communities such as Pleasant Hill, Postelle and Hiwassee. When the mining began towns

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developed around the mines. The three principal communities of Isabella, Ducktown and Copperhill were all centered around mining activities. Isabella was entirely company built. Ducktown and Copperhill each combined company owned property and an open town.

The two earliest communities of any size in the Basin were Hiwassee and Isabella. Hiwassee was a former agricultural settlement which happened to be near the area where the Hiwassee Mine was opened in 1850. The community grew, in a haphazard way, up a small hill near the mine site. It developed a main commercial street which was surrounded by residential areas. The commercial area contained hotels, dry goods stores, restaurants, and other businesses. Hiwassee, which was not owned or controlled by a mining company, grew in importance as more people came into the Basin.

Isabella grew up about three miles east of Hiwassee. It was located next to the Isabella mine which opened in 1853. The town was founded by C. A. Proctor, who founded the mine and named the mine and the town after a sister. (The Mary Mine was also founded by Proctor). Isabella grew in two segments—the mine officials lived in a knoll near the mine, while the miners lived in an adjacent knoll farther from the mine.

These two communities were both built during the early stage of mining development and grew rapidly through the period. Large numbers of residences and commercial buildings were constructed, as well as religious institutions. Schools were founded in the 1870s in Hiwassee in an effort to improve the lives of the young.

Between the two stages of mining development the towns stagnated and lost population. With the mines not working people returned to farming traditions. Many buildings constructed during the first phase of mining were left vacant and deteriorated during this period. Due to this neglect few buildings constructed before 1890 are extant.

In 1890, when the railroad came to the Basin, a new community was founded. McCays was founded by the A K & N railroad as a railroad stop. Instead of locating in the larger towns of Hiwassee (which was renamed Ducktown) or Isabella, the railroad went to McCays so it could meet the North Georgia railroad at the Tennessee/Georgia border. The community was named after Herbert McCays who operated a ferry across the Ocoee River at the site. The importance of the

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town was quickly established because the mines shipped their ore to McCays to be transported to various markets. TCC built a smelter at McCays in 1899 and chose to make McCays their corporate headquarters in 1904. McCays was renamed Copperhill after the primary product of the area and the terrain of the city. TCC did not own residential property in Copperhill. The company left residential development to private businessmen until 1904 when it constructed houses in Newtown and Smelter Hill. These two areas provided housing for the mine managers and many of the workers. During this time Hiwassee was renamed Ducktown, and it grew as well.

With the copper industry growing there was a demand for adequate housing in Ducktown and Copperhill. In response to this demand the Tennessee Copper Company built houses for its workers in both cities. In Ducktown it constructed the Buzzard's Roost addition on property it owned south of town. Near Copperhill it developed two areas. Smelter Hill was constructed on the hill behind the smelter. In this area the managers and officials of the Tennessee Copper Company lived. They built large houses, the smallest being seven rooms and built with decorative detailing. Connected to Smelter Hill, but designed for smelter workers, was Newtown. Buzzard's Roost and Newtown contained simple, stock plan houses in basic forms. These areas were owned and controlled by TCC.

In December of 1910 Copperhill experienced two devastating fires. On the evening of December 2 a fire destroyed about 1/2 of the town and left only 4 commercial buildings standing. The next night a second fire destroyed all the buildings along the riverfront. The community rebuilt, but experienced fires again in 1925 and 1926.

By 1913, within 25 years of its founding, Copperhill had grown enough to incorporate as a city. It was the first city to incorporate in the Basin, Ducktown would follow in 1954. Isabella would never incorporate, largely because the company owned the community.

One important event to occur in the Basin was the construction of the Kimsey Junior College. In 1932 Dr. Lucius E. Kimsey purchased 160 acres to construct a combination junior college and high school. Dr. Kimsey wanted the youth in the Basin to receive an education which would provide them with good jobs. The construction of the college was financed privately, and the mining

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companies were not involved in raising the funds for the college. The site was located just north of Ducktown near a natural spring which would provide water to the school. Constructed on the site were a water tower, pumping station, and the college building. Chattanooga architect R. H. Hunt designed the Collegiate Gothic building to be entirely fireproof. Although Kimsey Junior college was never accepted into the Junior college system the building has been used for education since its completion.

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#### I. Residential Historic Districts

#### II. Description--Residential Historic Districts

This property type is Residential Historic Districts that can be divided into two subtypes: unplanned and planned. Residential districts developed without direct company influence over many years; planned districts were built by the company in a short time period. Residential Historic Districts cannot be a combination of planned and unplanned communities, unless the plan evolved out of existing settlement patterns.

Houses in residential districts will display various architectural styles from the late 19th century to the mid 20th century. in the planned neighborhoods were constructed between 1904 and 1906 by the Tennessee Copper Company, possibly from plans provided by the Lewis Manufactured Homes Company, and follow 3 basic styles: the pyramid cottage, the catslide cottage, and the hall and parlor (see floor plans on page F.5-7). The pyramid cottage is a square 1 family house with a pyramid roof with a central chimney. pyramid cottage can have a full width front porch, and will often have a central door with a window on each side. The catslide cottage is a rectangular plan with a gable roof. These buildings can front on the gable end, or have the long side with the entry door facing the street. They have central chimneys and front 2/3 porches with gable roofs. The hall and parlor is a rectangular plan house with a gable roof perpendicular to the entry, a central door with windows on each side and a central chimney. Most hall and parlor houses have full length front porches. All types of houses were originally built on pier foundations, almost all of which have been filled in.

In the Buzzards Roost area there are also a few two story manager's houses using a four-square plan. They appear as two story pyramid cottages and have full width front porches. These houses were built near the north end of Main Street in the area just south of College Street.

Especially popular in residential districts throughout the Basin is the Bungalow form of house. In Copperhill, due to fires in 1910 and the 1920s, most dwellings reflect a Bungalow or Colonial Revival influence. Most of Ducktown's houses are primarily 19th century forms with Queen Anne or Colonial Revival influence.

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Residential districts are usually located near the commercial district of the town. In Ducktown the few commercial buildings are in the center of a larger residential area. In Copperhill the residential area is located to the northeast of the commercial district, and is separated from the Ocoee River by the commercial district.

Almost all dwellings in the Basin are of frame construction, with predominantly asphalt shingle roofs. Houses originally had metal, pressed metal, or wood shingle roofs; few of these original roof materials remain.

Residential districts may also contain community buildings, such as religious buildings or recreational buildings, which were constructed while the districts developed. Most churches fit in well with the residential scale. They are constructed of brick in a Gothic inspired manner, or are Colonial Revival influenced. Churches are rectangular or cruciform in plan with steeply pitched roofs. Most churches have a small tower in the front, and pointed arch windows. Recreational buildings include the YMCAs constructed in Ducktown and Copperhill by the TCC. These brick buildings were constructed in the 1920s in a Colonial Revival style. Residential historic districts are comprised primarily of houses but may contain community or commercial buildings.

#### III. Significance--Residential Historic Districts

Residential historic districts are significant to the history of the Basin by reflecting the boom periods of the mining industry and reflecting the industries' recognition that it had to supply housing for its workers. Districts can be eligible under criterion A for their significance in community planning and development, as well as reflecting the role of industry in the area. Districts can also be significant in the area of industrial development if they were developed by the industry in response to housing shortages or if they reflect the industrial attitude toward housing. Under criterion C for architecture, they are good examples of planned workers' houses or collections of 19th-20th century design influences.

Planned neighborhoods are significant in the history and development of the Basin because they represent the role of industry in the development of the community. They reflect planned

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communities developed by engineers for the company, and they reflect a distinctive collection of architecture. Planned residential districts were constructed circa 1904-1906 by industry in response to a demand for more housing, due to an influx of workers. The companies responded by purchasing plans for cottages from a now unknown mail order company and having engineers plan a subdivision for Ducktown (Buzzard's Roost) and Isabella, and two for Copperhill (Smelter Hill and Newtown). The subdivisions were created using the purchased plans, a uniform setback from the street and identical materials.

Unplanned residential areas developed in both Copperhill and Ducktown, which both had workers who did not rely directly on the mines for employment. These residential areas developed near the commercial center of the community and contain a variety of architectural influences. Ducktown, Copperhill and Isabella had company planned residential areas.

Residential developments may contain a number of churches which were constructed about the same time as the neighborhood. Churches were traditionally located in residential areas of the Basin, and not in the commercial areas. Churches represent an important social outlet for the residents of the Basin, and a wide variety of congregations were available to residents. Established religions included the Methodists, Baptists, and the Church of God.

Residential areas can be significant under community planning and development as examples of industrial attitudes towards workers in the 19th and early 20th centuries. An area will be considered significant if it was planned by a copper company seeking to develop its property in response to pressures to provide housing, and if it still maintains its original scale, plan and setbacks.

#### IV. Registration Requirements--Residential Historic Districts

For properties to be eligible for the National Register under this property type districts must be significant to the physical development of the community or to the architectural development of the community. Individual components of the district must retain integrity of design, location, setting, feeling and association to be eligible. Buildings which have been altered with artificial siding will be contributing if the building retains it form and design. Buildings with additions will be considered

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contributing if the additions occurred during the period of significance or if they do not detract from the feel and design of the district.

A district can be eligible under criterion A in the area of community planning and development if the district was planned as a community or neighborhood, if it was constructed following that plan and if evidence of the plan, such as streets and uniform setbacks, still exist.

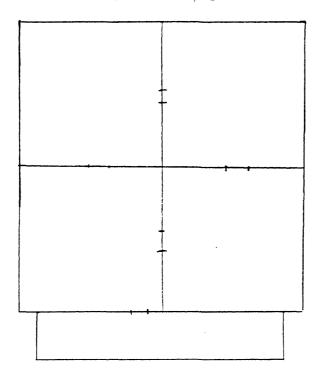
A district can be eligible under criterion C for its architectural significance if it represents a cohesive collection of buildings which reflects the architectural trends of the community. For a property to be nominated under this criterion it must retain a large collection of the buildings which were constructed historically and it must retain a sense of feeling and association. Houses in districts are considered to retain integrity even if the houses in it have had artificial siding added because the properties were maintained by the Tennessee Copper Company until 1985 and it is an example of TCC's maintenance program. The houses have been maintained by their owners with the materials present when they were purchased.

Contributing resources (c) are significant to the historical and architectural development of the district, possess compatible design elements, and maintain the scale, use and texture of the district. Noncontributing (nc) resources have little or no architectural significance because of alterations or do not fall within the period of significance for the district.

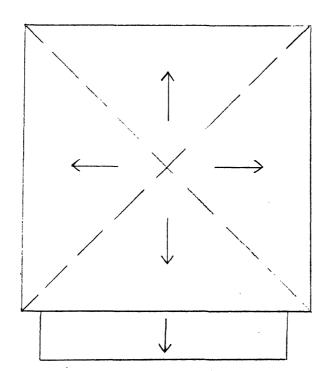
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Pyramid Cottage

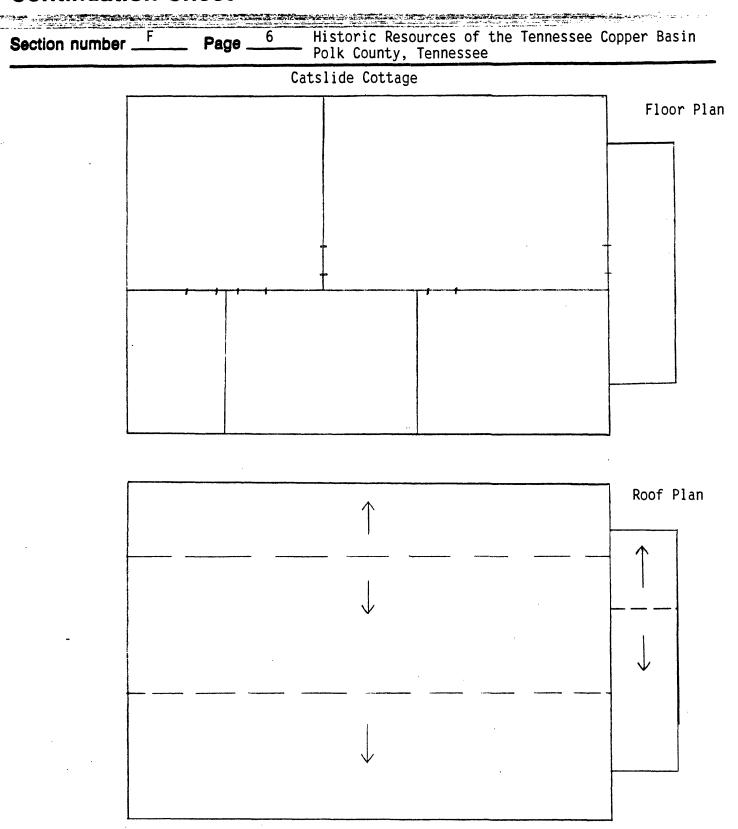


Not to scale Floor Plan



Roof Plan

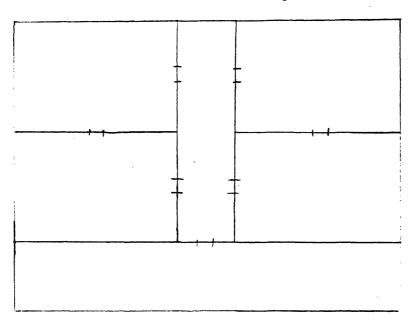
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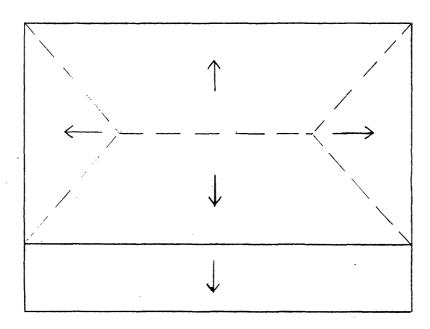
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Hall and Parlor Cottage



Floor Plan



Roof Plan

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#### I. Commercial Resources

#### II. Description--Commercial Resources

Commercial resources in the Copper Basin were located in each of the three major communities. Each community contained a commissary owned and operated by the mining companies. Although they are no longer used as such the commissaries are still extant in Ducktown and Copperhill. Both Ducktown and Copperhill also both developed with private commercial districts.

Early commercial buildings, built before circa 1910, were of 2-3 story frame construction. They frequently had balconies over the second story and provided residential living space. These buildings were largely destroyed by fires and only one is extant (110-112 Main St., Ducktown).

The two extant principal communities of Ducktown and Copperhill each passed ordinances against frame commercial construction around 1910, buildings built after that were brick or concrete block.

Masonry commercial buildings had been constructed before these ordinances, primarily for banks and large commercial buildings. These buildings had some architectural ornamentation including using stone for lintels, cornices, or decorative detailing.

Most commercial buildings constructed after 1910 are of simple commercial style. They are plain buildings with corbeled brick cornices and string courses, segmentally arched upper facade windows, and plain wood or brick storefronts.

Many storefronts were replaced or altered after circa 1950, changing the character of the commercial districts.

The company commissary was frequently located in the business district of the community and mimicked the commercial character of the district. It was frequently on of the largest public buildings in the community.

#### III. Significance--Commercial Buildings

Commercial resources are eligible for the National Register under this property type under criterion A for their significance in the

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development of commerce in the Basin; the commissaries can be eligible for their association with the mining industry. Commercial resources can also be eligible under criterion C for architectural significance if they are a good example of the commercial architecture in the basin.

Commerce began developing in the Copper Basin before the mining industry brought rapid growth to the area. These early establishments were simple general goods stores which served the surrounding agricultural community.

When the mines began to develop there was a need for more commercial activities. Hotels, boarding houses, restaurants, and taverns sprang up to serve the needs of the miners. Other businesses followed and a competitive business atmosphere developed in Ducktown. However, in Isabella the mining company owned and controlled the town and did not allow businesses in to compete with the commissary.

In Copperhill commerce developed during the late stage of mining development and served a booming population. Because Copperhill was large and more prosperous its commercial district was larger and generally the buildings were larger. Because Copperhill also served the railroad, more hotels located there.

#### IV. Registration Requirements -- Commercial Resources

Commercial resources can be eligible individually or as parts of districts. To be individually eligible a resource must retain integrity of design, materials, and workmanship, both interior and exterior, present during the period of significance.

Districts must present a unified collection of commercial resources, which may have more alterations on individual buildings, but still represent an intact commercial district. The commercial district can be included in a larger historic district containing other types of buildings. Districts must retain large degrees of design, materials, workmanship, feeling and association.

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#### I. Industrial Resources

#### II. Description--Industrial Resources

Properties related to the extraction and processing of copper ore are considered to be industrial resources.

The most common type of industrial resource in the Copper Basin was the mine and its associated buildings and structures. Mine complexes included a wide variety of resources including offices, storage and shower facilities, headframes, and airshafts.

At one time there were thirteen active mines in the Basin, and each had its related complex of buildings. Of these mines only two are extant, the Burra Burra Mine (NR 3/17/83) and the Isabella mine.

The buildings associated with the mines are a simple industrial vernacular style, and are functional rather then ornamental. They are frame buildings with gable roofs, (historically with metal roofing), sash windows, stone or brick foundations. They tend to be clustered around the mine entrance.

The Isabella mine complex is the oldest extant mine complex in the Basin, and was the second oldest mine, following the Hiwassee mine. The Isabella mine was sunk in 1853 and was in operation through the early and late stages of mining development.

Mine headframes were destroyed when the mines stopped operation. Because of this practice, there is only one extant mine headframe, at the Central Mine, between Ducktown and Copperhill, constructed in 1950. Headframes were large engineering works which enabled men and equipment to be lowered into the mines, which could reach depths of 1000 feet. They were constructed of wood during the first mining stage and of steel during the late mining stage.

Smelters, acid plants, and a flotation plant were built to smelt the copper. The open roast heap method of smelting copper required no buildings. Two acid plants were constructed in the Basin--the Isabella Acid Plant was constructed alongside the mine in 1904. It was an experimental plant which DSC&I was not sure would work. In 1906 TCC began construction of Acid Plant No. 1 in Copperhill. This plant was updated in the 1920s and early 1940s. These modifications replaced outdated machinery with more efficient

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machinery. The most recent modernization occurred in 1963.

TCC built an experimental flotation plant to recover iron from the ore in 1925. In 1927 they modified the plant to also recover zinc. The plant was located near the London mine site, near Isabella, and was named the London Floatation Plant.

#### III. Significance--Industrial Resources

Industrial resources are eligible for the National Register under criterion A for their significance in industry for the development of the copper industry in the Basin, and for their importance in early conservation efforts. They are also eligible for the National Register under criterion C for significance in industrial architecture and engineering.

Industrial development built the basin. The area was agricultural until the first copper ores were mined in the 1850s, and the industry grew and brought hundreds of people into the Basin that otherwise would not have settled there.

The development of the copper industry had a profound effect on the lives of the residents of the Basin, and of the surrounding areas. The mines provided employment to over 12,000 people and provided the county with a tax base that allowed it to collect over \$2 million in property taxes in 1903 alone. The mining industry also changed the landscape of the region, it went from being a fertile agricultural area to being a barren industrialized area.

The Basin's mines are the only deep shaft copper mines sunk in the eastern United States. The other copper mining region east of the Mississippi River, in Michigan, uses strip mining to recover the ore.

In the area of conservation, industrial complexes present a look at early efforts by large companies to change the effects their activities had on the surrounding area. The Basin mining companies began to experiment with ways to end the deforestation of the land by developing new ways of smelting copper. The early experiments preceded court orders to end the smelting process.

Industrial resources also have significance in architecture and engineering. The complexes present a unified picture of mid 19th

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century and turn of the century industrial development, including spacial patterns, and related functions of buildings. Industrial complexes were planned to divide activities into administration and mining activities. The engineering feats that company engineers used to update the mines, and make them more efficient are also significant.

#### IV. Registration Requirements--Industrial Resources

To be eligible for the National Register under this property type resources must have been planned and built during the early or late stages of mining development by one of the major companies operating at the time.

Industrial resources must retain integrity of location, design, feeling, and association. These resources can be eligible even if they have been abandoned and are in disrepair if they are excellent examples of that type of resource. Industrial resources usually will have had alterations over the years. Because of the needs of changing technology, industrial resources may have had new materials and/or new machinery added. As long as the basic integrity of resources is extant, it may be eligible. However, if much of the machinery is gone, the resource may not be eligible in the area of engineering although it could still be significant under criterion A for industry. (As a historic representation of an important industry).

Because of the clustered nature of industrial resources most will be considered as districts to encompass all of the buildings associated with the resource, and the landscape surrounding the resources.

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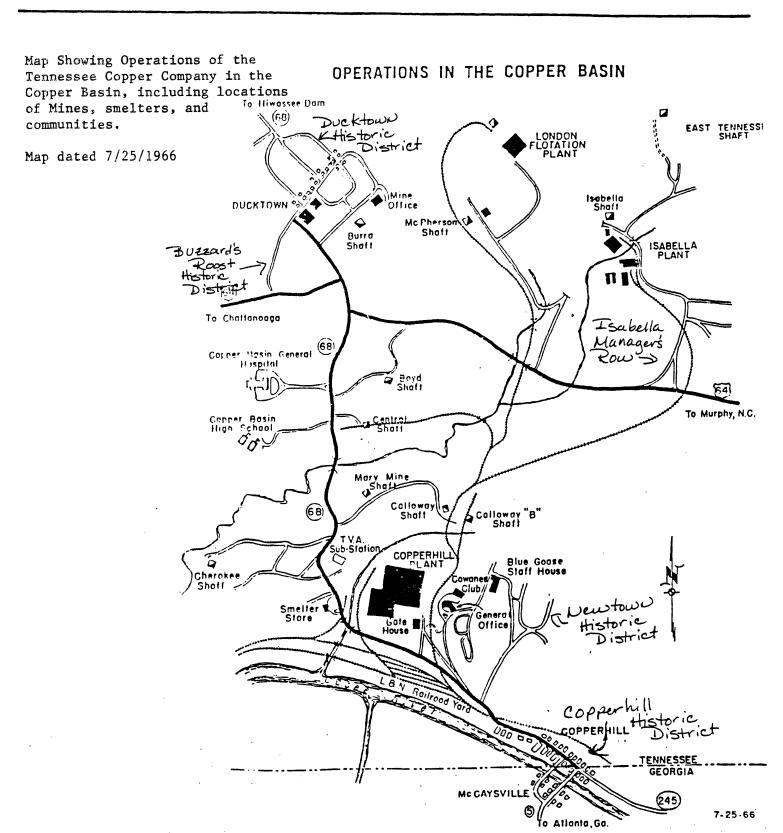
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The area covered in this Multiple Property Documentation form is located in the southeast corner of Polk County, Tennessee and is bounded on the south by the Georgia/Tennessee state line, on the east by the North Carolina/Tennessee state line, and on the north and west by the Cherokee National Forest.

The principal communities in the basin are Ducktown, Copperhill, and Isabella.

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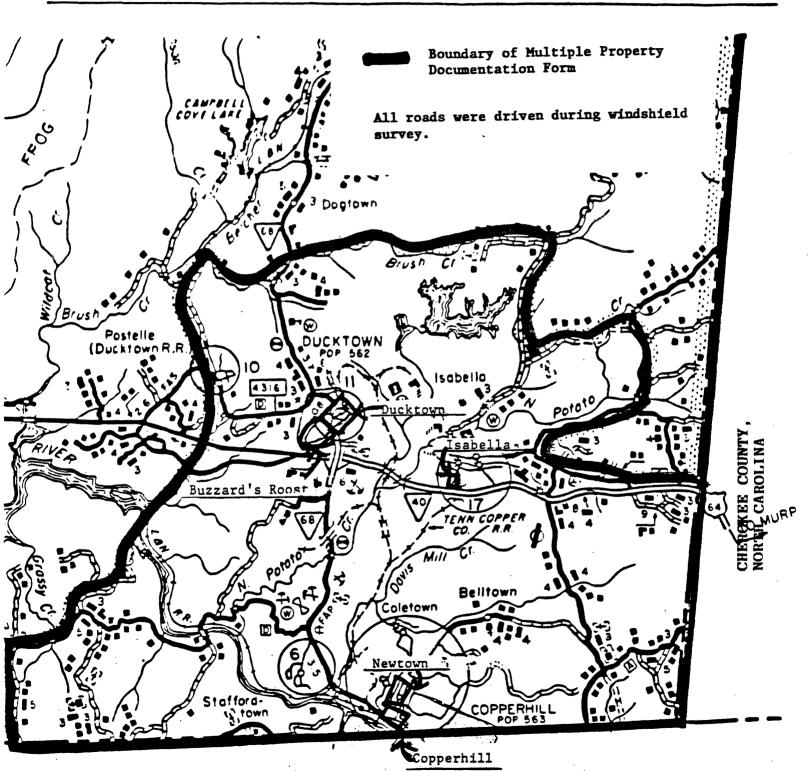


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United States Department of the Interior National Park Service

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In July 1990 residents of Copperhill requested assistance from the Southeast Tennessee Development District in placing a residence in that community on the National Register. A site visit was requested, and five other sites were visited which the residents also wanted listed. It was decided to prepare a multiple property nomination which focused on the development of the entire Copper Basin.

The Tennessee Historical Commission was consulted at the beginning of the process about the historic contexts, and again when the boundaries for historic districts were determined. Properties which had lost some integrity where discussed with the staff before the nominations were prepared. In March 1990 the Tennessee Historical Commission had determined that Buzzard's Roost section of Ducktown was eligible for the National Register for purposes of Section 106 review of a housing preservation program.

Also in 1990 the Copper Basin, as part of the Tennessee Overhill Experience, was selected to participate in the National Trust for Historic Preservation's Heritage Tourism Initiative. Historical and architectural information gathered for this nomination has been used in identifying resources for the tourism initiative, and in the development of a walking tour of Copperhill.

The assistance of the Ducktown Basin Museum in Ducktown, and BIT Manufacturing in Copperhill was vital to information about the planning of the communities. The Museum provided historical information, photographs, and maps of the Basin throughout its periods of development. BIT Manufacturing, which operates the Copperhill Acid Plant, retains many maps and drawings of the houses built in Newtown, and the plans for Ducktown, Newtown, Buzzard's Roost and Isabella, these maps were invaluable in determining how much of the original plans communities retained.

The assistance of a variety of former miners and amateur local historians was also used. Many read over drafts of the context statement looking for errors or attempting to add information to the contexts. Most of the information on activities following World War I is from stories told by interested local residents.

The Kimsey Junior College nomination was begun by the staff of the Ducktown Elementary School, and was incorporated into this cover form because it fits in with the context Development of

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Communities. The staff of the school prepared most of the information used in that nomination.

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