Chapter IV: Landscape Analysis

Introduction

The historic landscape of the Quincy Unit of Keweenaw National Historical Park developed as a result of a world-wide demand for copper in the nineteenth and early twentieth centuries. The dense forests of the region gave way to an industrial landscape that extended along the spine of the Pewabic Lode from the shores of the Portage Lake over the crest of Quincy Hill to just beyond the northern boundary of the Mesnard company housing location. Other company housing locations were also clustered around the mining operations.

Today, the 1,120 acre Quincy Unit contains extensive evidence of Quincy Mining Company activities, including the No. 2 shaft-rockhouse, No. 2 hoist houses and many other significant mining buildings including those associated with the Quincy Smelting Works on Portage Lake, Quincy mine shafts, associated mining and industrial surface works, extant portions of several company housing locations, and remnant administrative and service buildings. This analysis will focus on the historic landscape of the Quincy Unit and evaluate the relationships of the historic resources within the existing landscape character areas and their ability to represent significant historic themes. Although the Quincy Mining Company Historic District is completely surrounded by Keweenaw National Historical Park, the majority of the land is privately owned and not protected. Incompatible development both within and adjacent to the NHL continues to threaten the integrity of the district. The privately owned land, residential properties (former company housing locations) and commercial properties have experienced incompatible alterations, additions, demolition, abandonment, deterioration and development without preservation ordinances, development incentives or local land use controls.

Land managed by the National Park Service and the Keweenaw Heritage Sites is also threatened by numerous impacts. The Quincy Mine Hoist Association struggles with deferred maintenance and deterioration of resources. Many of the shafts have been capped to address public safety. Their locations and former functions are now difficult to discern. Volunteer vegetation obscures views and historic spatial relationships between buildings, ruins and places within the unit while also threatening the integrity of historic mine buildings, patterns of circulation, and landscape features. The Quincy Smelting Works, owned by Franklin Township, had an arson fire in the Spring of 2004, as well as break-ins/theft of artifacts, vagrancy, structural collapse, water infiltration and ongoing deterioration.[1]

The project area for this Cultural Landscape Report is defined by the boundary of the Quincy Unit of Keweenaw National Historical Park as described in Chapter I. The Torch Lake area is not included within the boundary of the Quincy Unit. Chapter II: Landscape History, addresses the Torch Lake area to help readers understand the comprehensive landscape development related to the corporate history of the Quincy Mining Company. Because the Torch Lake area is not within the project area, it is not covered by the Existing Conditions, Landscape Analysis, or Recommended Treatment sections of this Cultural Landscape Report.

[1] National Historic Landmarks Program website, Quincy Mining Company Historic District, http://tps.cr.nps.gov/nhl/detail.cfm?ResourceId=2058&ResourceType=District, accessed 12 July 2006.

National Register Status

Statement of Significance

In 1987 a report prepared by Apostle Islands National Lakeshore historian Kathleen Lidfors indicated that the Keweenaw Peninsula contained historic copper mining sites that were potentially eligible as a National Historic Landmark.[2] The subsequent study and nomination listed The Quincy Mining Company Historic District as a National Register Historic District in February 1989. The district was designated a National Historic Landmark (NHL) in March of the same year as an outstanding example of the growth and development of the United States copper industry from its earliest years through 1920.[3] The statement of significance for the NHL follows:

> *Quincy Mining Company is an outstanding example of the growth and development of the United States copper industry from its earliest years through 1920. Between 1862 and 1882, Quincy ranked first nationally in copper production, making a singular contributing to the Northern effort during the Civil War. Quincy, along with the Calumet and Heckla Company, represents the major element of the copper industry: mining and mining technology; immigration and ethnic settlement; corporate paternalism and company towns; and labor organization. The Landmark includes a section of company housing.*

The nomination elaborates:

> *Of the numerous mining ventures spawned by the nation's first copper boom, Quincy alone survived. It was the first company to recognize the limits of fissure mining and shift to amygdaloid beds, which, with the conglomerate lodes, were the low mineral-content upon which the future of the copper range district of the Keweenaw Peninsula depended. The company earned the title "Old Reliable" for a fifty-four year sequence of dividends paid to its stockholders and its ability to continue mining during economically difficult times when all but the giant Calumet and Hecla had shut down.*
>
> *Situated on the Pewabic amygdaloid, the Quincy location stretches northeast to southwest along the brow of a long hill above the city of Hancock and Portage Lake. Although all of the shaft-rockhouses (headframes) except No. 2 have been removed, the shafts are still evident, fenced off for safety. Some associated surface works have been torn down, but many structures stand, while several others remain as significant ruins. Smokestacks from the boilerhouses punctuate the hillside, while abandoned railroad trestles and narrow gravel lanes are expressive of patterns of work and community life at the location. Built in 1898, the smelting works juts out from the shoreline of Portage Lake.*[4]

[2] Lidfors, *Potential National Historic Landmark Eligibility of Historic Copper Mining Sites on the Keweenaw Peninsula, Michigan*, 1987.
[3] Lidfors, *Quincy Mine Historic District, National Register Nomination,* 1988.
[4] Ibid., Item 8, 2.

National Register Boundary and Quincy Unit Boundary

The district boundary includes extant resources directly connected with the Quincy mining operations including locations of mine shafts and buildings. In addition, it includes part of Quincy Hill, which connects the mining area with the Quincy Smelting Works and the administrative and residential structures that represent the support services necessary for the mining operations. The nomination includes both a detailed written description of the boundary and a map illustrating its location (see Figure 4-1). When Keweenaw National Historical Park was established in 1992, the boundaries of the Quincy Unit of the park were defined to closely reflect the National Historic Landmark District boundary. However, the park boundaries have not yet been finalized.

The Quincy Unit and the National Historic Landmark boundary are not inclusive of the entire Quincy Mining Company historic landscape. The boundary currently includes resources related to two parts of the three part story regarding the Quincy Mining Company. Resources exist in the region, at Torch Lake, that are related to the third part of the story. The resources at Torch Lake need to be evaluated to determine their integrity. Also, as the NPS boundary for the Quincy Unit is finalized, the possibility of including these resources should be considered.

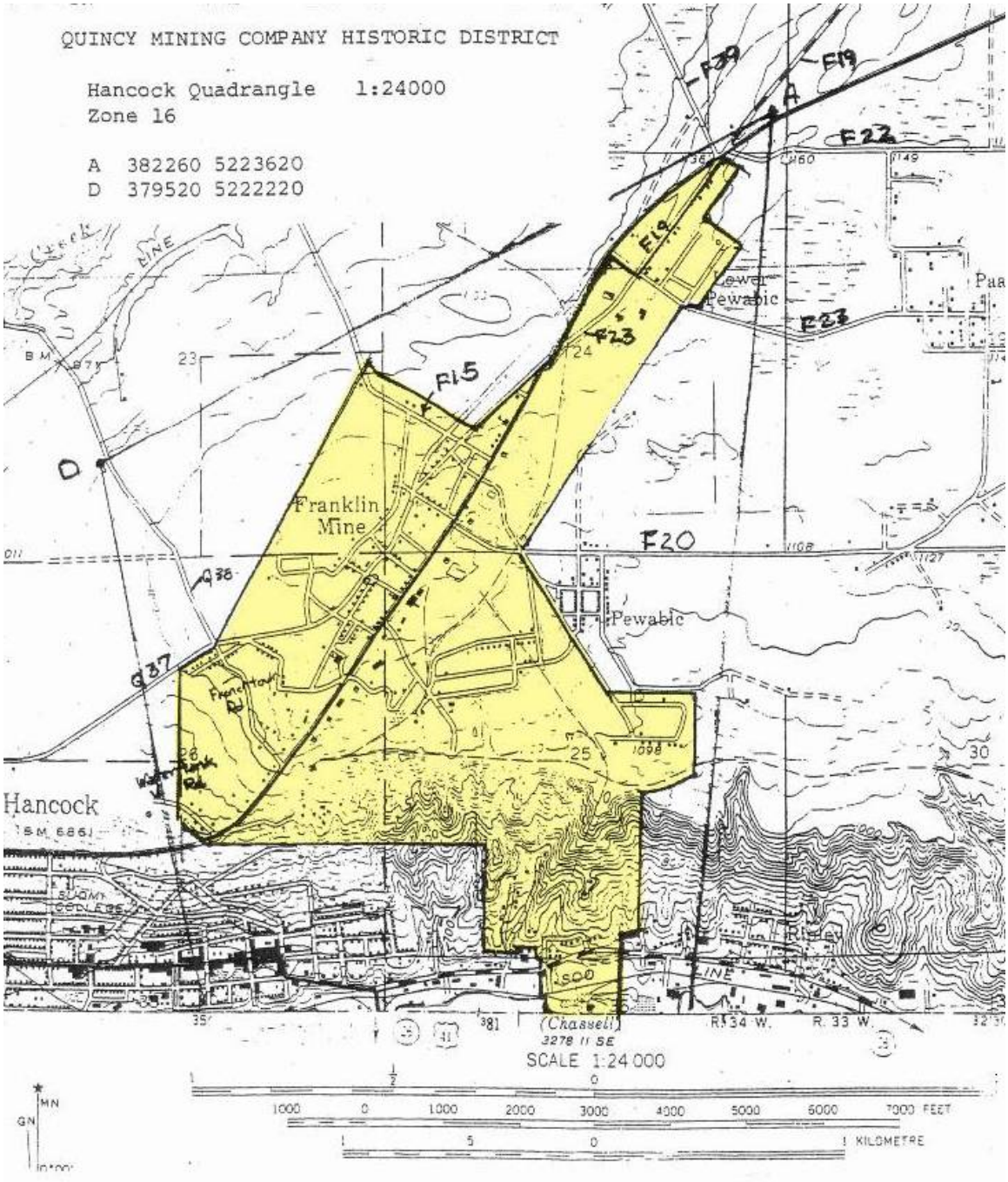

Figure 4- 1: Quincy Mining Company Historic District, NHL boundary (district highlighted in yellow by QEA)

Landscape Analysis

Land Use

During the peak mining period between 1900-1910 for the Quincy Mining Company (QMC), the majority of the Quincy Unit landscape was comprised of two distinct land uses, industrial/mine related and company housing. The industrial/mine land-use areas consisted of numerous shaft-rockhouses, hoist houses, other mine related buildings, a multitude of railroad tracks and trestles, cooling ponds, the Quincy Smelting Works, and expansive poor rock piles. The company housing consisted of several QMC housing locations on Quincy Hill and South Quincy and Ripley near the Quincy Smelting Works. Many of these housing locations were developed with uniform housing and fenced yards. Other housing locations contained less regimented layouts with varying architectural styles, lot sizes and setbacks. From 1900 to 1920 industrial/mine related and company housing land uses dominated the unit and agricultural land use was also present (see Figure 4-2). [5]

With the decline of the copper industry beginning in the late 1920s, the Quincy Mining Company progressively scaled back mining operations and eventually closed in 1945. Today, the landscapes within the Quincy Unit are used for residential, commercial, industrial, institutional and recreational purposes (see Figure 4-3).

[5] Historic agricultural land use areas were determined from an analysis of historic photographs and a 1930s aerial photograph provided by the park.

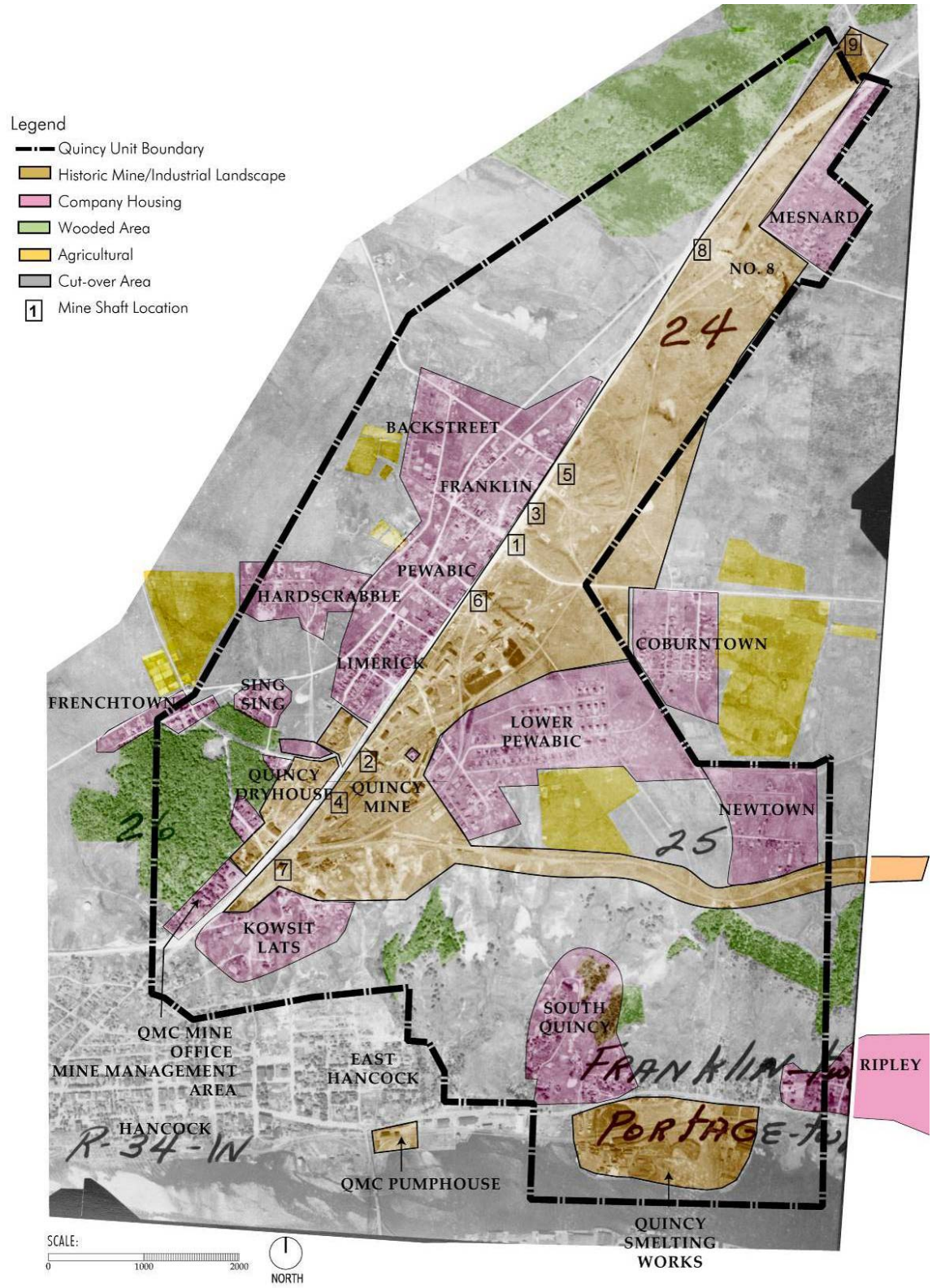

Figure 4- 2: Quincy Unit Land Use, Peak Mining Period 1900-1910

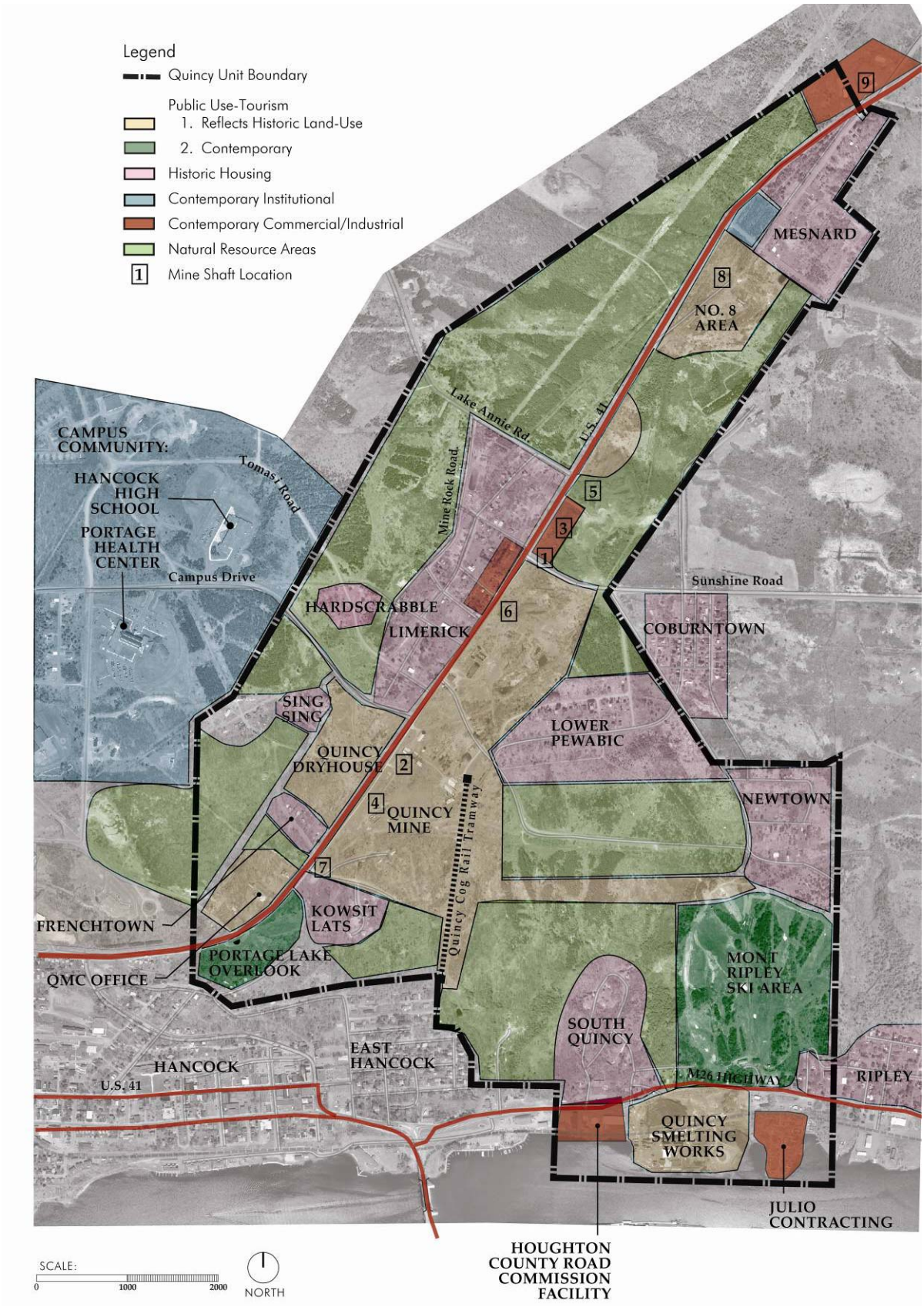

Figure 4- 3: Quincy Unit, Existing Land Use

Tourism is a significant land use that reflects both historic and contemporary experiences. Heritage tourism sites include the Quincy Mine Site owned by the Quincy Mine Hoist Association, the A.E. Seaman Mineral Museum, operated by Michigan Technological University, the Dryhouse Area and the Quincy Mine Office, owned by the National Park Service. Other sites that contribute to the cultural landscape of the Quincy Unit and provide opportunities for tourism in the future include the Quincy Smelting Works at Portage Lake owned by Franklin Township, sporadic privately owned industrial mine remnants along U.S. 41 that include remnant poor rock piles and the No. 8 shaft-rockhouse area in Mesnard, owned by the Quincy Mine Hoist Association.

Other contemporary tourist attractions include the Mont Ripley Ski Area, owned by Michigan Technological University and the Portage Lake Overlook, owned by the Michigan Department of Transportation (MDOT). The ski area is on former cut-over land that was once bisected by tram roads (see Figure 4-4). There is some potential for historic interpretation of site history through comparison of the existing open character of the ski area and the existing linear t-bar and chair lift configuration that bisects the hill, to the cleared hillside and tram road that historically extended from the Franklin mine to the foundry on Portage Lake. The overlook is contemporary in character and does not reflect its former industrial/mine land use despite affording key views toward historic resources that include the No.2 shaft-rockhouse, rock piles, and Portage Lake.

Residential land use maintains a presence in the unit. Remnant company housing locations display a variety of conditions. These include the locations on Quincy Hill: Lower Pewabic, Sing Sing, Coburntown, Ripley, and the historic housing locations of Limerick, Pewabic, Franklin, and Backstreet, herein described as a singular residential area. Some former company housing locations or portions of them have been abandoned and are in varying stages of succession to woodland. These include Frenchtown, Mesnard, a portion of Lower Pewabic (section constructed prior to 1864), and Hardscrabble. The historic land use of these former housing locations is represented by landscape remnants that include building foundations, domestic vegetation, and remnant road traces (see Figures 4-5 through 4-8). Raasio Road, a small enclave of contemporary housing, has supplanted a section of the historic Frenchtown neighborhood. Historic vernacular housing locations are also present. These include Kowsit Lats and the residences on Frenchtown Road. Shantytown, another hillside neighborhood, was absorbed into the city of Hancock by the early 1900s.

Since the decline in mining activities, other institutional, commercial, and industrial activities have gradually become established. These include the institutional Campus Drive complex west of the Quincy Mine that includes the Portage Health Center and Hancock High School. While not entirely within the unit, the scale and functions of Campus Drive have altered historic circulation patterns, bisected the open space in the industrial core of the mining landscape, and introduced modern signage on U.S. 41. These developed areas and associated infrastructure impact the historic character of the industrial mine and the company housing locations.

Contemporary commercial/industrial land uses are interspersed throughout the Quincy Unit. Commercial developments along the portion of U.S. 41 that cuts through the Quincy Unit include several new commercial developments, numerous billboards, a firehouse, and a

religious building. At Portage Lake contemporary industrial land uses border the historic Quincy Smelting Works. To the east, the Julio Contracting salvage yard, is on land once associated with the former Franklin Foundry and to the west, the Houghton County Road Commission Service Facility occupies land formerly used to support industrial/mine related operations that included the Michigan Smelter.

Natural resources within the unit are mainly associated with former cut-over land and sites that were used either by the historic mining operations or served as housing locations. Currently, natural resource areas include a variety of landscapes: wetlands, successional lands that vary from open meadows with shrubs and trees, open wooded areas, areas of a mix of deciduous trees, shrubs, and conifers, and dense wooded areas. Although the plant communities do not represent the historic conditions, they help to buffer views and relationships between contemporary additions and historic character areas. Also, in some cases they reflect the passage of time since the historic period.

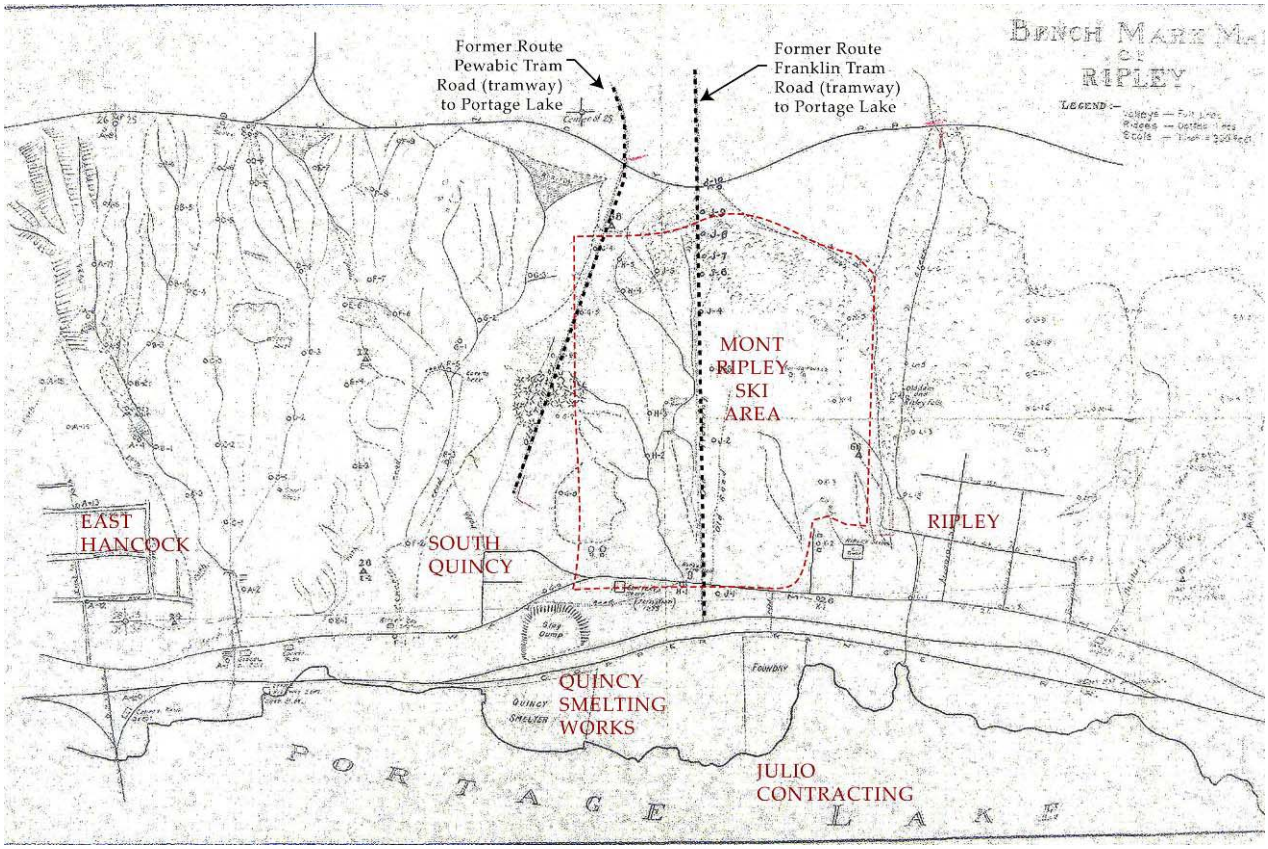

Figure 4- 4: Map titled, "Bench Mark Map of Ripley 1932," with text and graphics added by QEA, 2007. The current location of the Mont Ripley Ski Area is outlined in red (source: KEWE archives)

Figure 4- 5: Historic view north toward Limerick, from No. 2 shaft-rockhouse, ca. 1920s; the Backstreet neighborhood is in the background to the left of the water tower. Possible agricultural land use can be seen on the upper left portion of the photograph (source: KEWE Archives, photo 1-6)

Figure 4- 6: Contemporary oblique view of Coburntown (source: Rob Wood, Wood Ronsaville Harlin, Inc., August 2005)

Figure 4- 7: Historic view of Lower Pewabic from the No.2 shaft-rockhouse, facing east/northeast, ca.1910-1930 (source: Keweenaw National Historical Park archives)

Figure 4- 8: Contemporary oblique view of Lower Pewabic, facing southwest (source: Rob Wood, Wood Ronsaville Harlin, Inc., August 2005)

Spatial Organization

Historically, the underground resources of the Pewabic, Franklin, and Quincy mining companies determined the broad-scale aboveground spatial organization of landscape features related to the mining operations. Belowground the Pewabic Lode extended from shaft-rockhouse No. 7 at the crest of Quincy Hill, northward to shaft-rockhouse No. 9 in Mesnard. Shafts led to drifts that extended a network of horizontal tunnels parallel to U.S. 41 amidst the Pewabic lode and beneath the extensive company housing locations to the west. The intense network of rock crushing shaft-rockhouses, hoist houses, multitude of railroad tracks and trestles, cooling ponds, and expansive poor rock piles were located east of the spine of the Pewabic Lode (see Figure 4-9).

Today, the relationship of the below ground mining operations with the above ground spatial organization has been somewhat obscured, but upon consideration the general relationships remain intact (compare Figures 4-9 and 4-10). U.S. 41 cuts through the Quincy Unit marking the early circulation route and indicating the location of the Pewabic Lode. Institutional land use, including the Campus Community of the Portage Health Center and Hancock High School straddle the underground copper veins historically associated with the Quincy No. 2 and No. 4 mine shafts. However the existing mine related landscape and the remnant company housing locations still maintain their historic spatial relationship with the historic locations of the underground mine. At present, mining tours conducted by the Quincy Mine Hoist Association, take visitors on the Quincy Cog Tramway near the No. 2 hoist house down to the No. 2 (East) adit. The adit provides access to the underground tour through a horizontal tunnel that intersects the 1860-era diggings on the seventh level of the mine under the Dryhouse. The adit also is used for Michigan Technological University to educate students about subjects related to the technical field of mining, the origin of the university. The historic relationship of the belowground mining operation with the spatial organization of surface cultural resources maintains integrity and is a significant narrative worth exploring in any future interpretation of copper mining in the region.

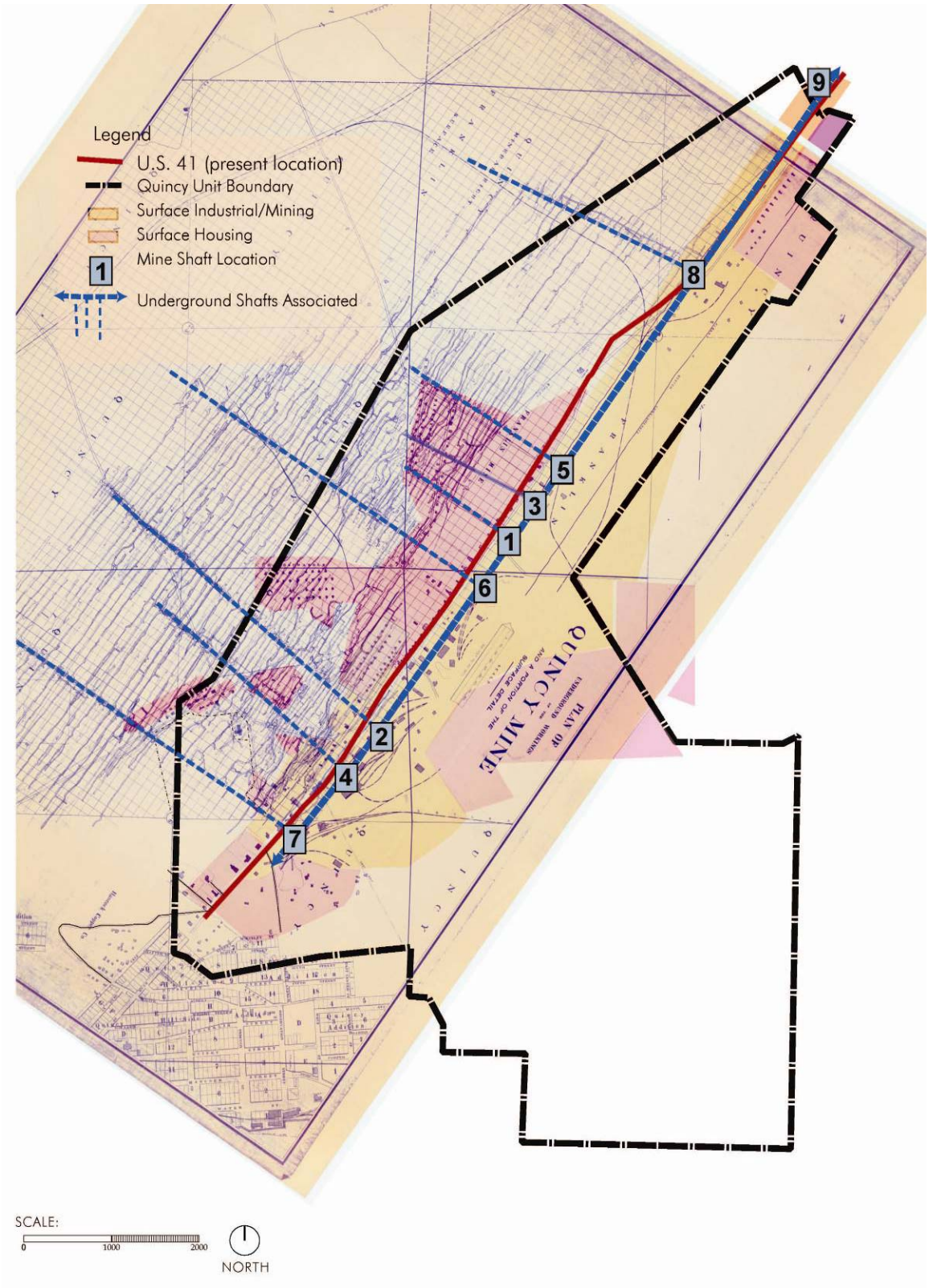

Figure 4- 9: Quincy Unit 1920 land use overlaid on "The Underground Workings of the Quincy Mine and a Portion of the Surface Detail," ca. 1900s (added graphics by QEA 2007).

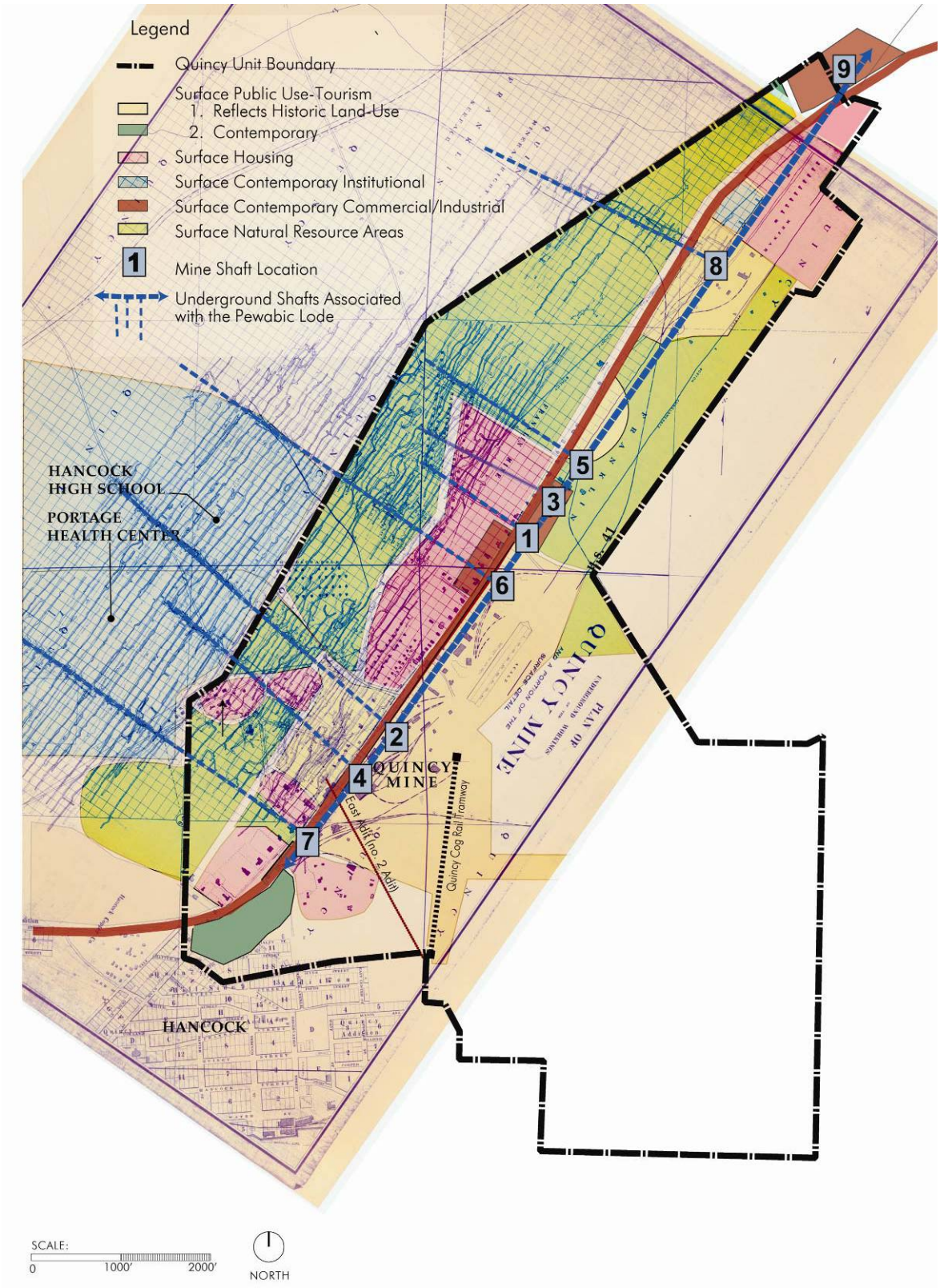

Figure 4- 10: Quincy Unit, Spatial Organization Analysis, Existing Land Use overlaid on "The Underground Workings of the Quincy Mine and a Portion of the Surface Detail," ca. 1900s (additional graphics by QEA 2006)**.**

Vegetation

When Hubbard and Burt surveyed the Keweenaw in 1845, they indicated the presence of an abundant growth of sugar maple, birch, fir, oak and white pine as well as some swamp or marshland. Although their notes regarding vegetation are not detailed, one can gather from the survey drawing notations that the area now within the Quincy Unit included the general vegetative features described (see Figure 4-11).

Large portions of native vegetation were gradually removed with the spread of mining operations and development of housing locations on Quincy Hill. Trees were cut to clear land for development and to provide building materials and fuel.[6] By the peak of the mining period, only small clusters of woodland remained. These were surrounded by an industrial landscape which included practically no vegetation, and residential areas that included small amounts of ornamental plants, fruit trees, and vegetable gardens. Although areas were set aside for agriculture, it is not clear how much of the Quincy farm was located within the current Quincy Unit. Nevertheless, agricultural uses occurred in the close vicinity. These included small orchards, pasture and cultivated fields. Analysis of an aerial photograph taken in ca. 1920s-1930s shows the approximate extent of wooded and agricultural vegetation during that period (see Figure 4-12).

Within the Quincy Unit today vegetation is much more prevalent than it was during the height of mining activities (compare Figure 4-12 to Figure 4-13). Abandoned industrial and company housing sites are overgrown with volunteer herbaceous and woody plants that can obscure cultural patterns on the landscape including ruins of buildings, poor rock piles, views, small scale features, and patterns of circulation. The second-growth woodlands are sometimes read as undeveloped wild areas by those who do not understand the history of the region or do not investigate closely enough to notice the crumbling foundations, crisscrossing abandoned rail lines, broken bottles, and remnants of gardens.

Although the plant growth hides cultural features in some cases, in others it can be used as a guide to identify historic sites. Some of the domestic plants that were introduced to the area by residents have survived and spread, including rhubarb, lilacs, lilies, apple trees, and Lombardy poplar trees. These plants provide hints of former activities and help to identify historic company housing sites.

Agricultural lands have diminished in the area as their functional relationship to the company housing locations was no longer necessary. While not in the unit, historic agricultural lands north and south of Sunshine Road near Coburntown are extant.

[6] Jacob Houghton, Jr., *Reports of William A. Burt and Bela Hubbard, esqs., on the Geography, Topography, and Geology of the U.S. Surveys of the Mineral Region of the South Shore of Lake Superior, for 1845; accompanied by a List of Working and Organized Mining Companies; a List of Mineral Location; and a Correct Map of the Mineral Region, also a Chart of Lake Superior, reduced from the British Admiralty Survey*. Detroit: C. Wilcox, 1846, 29.

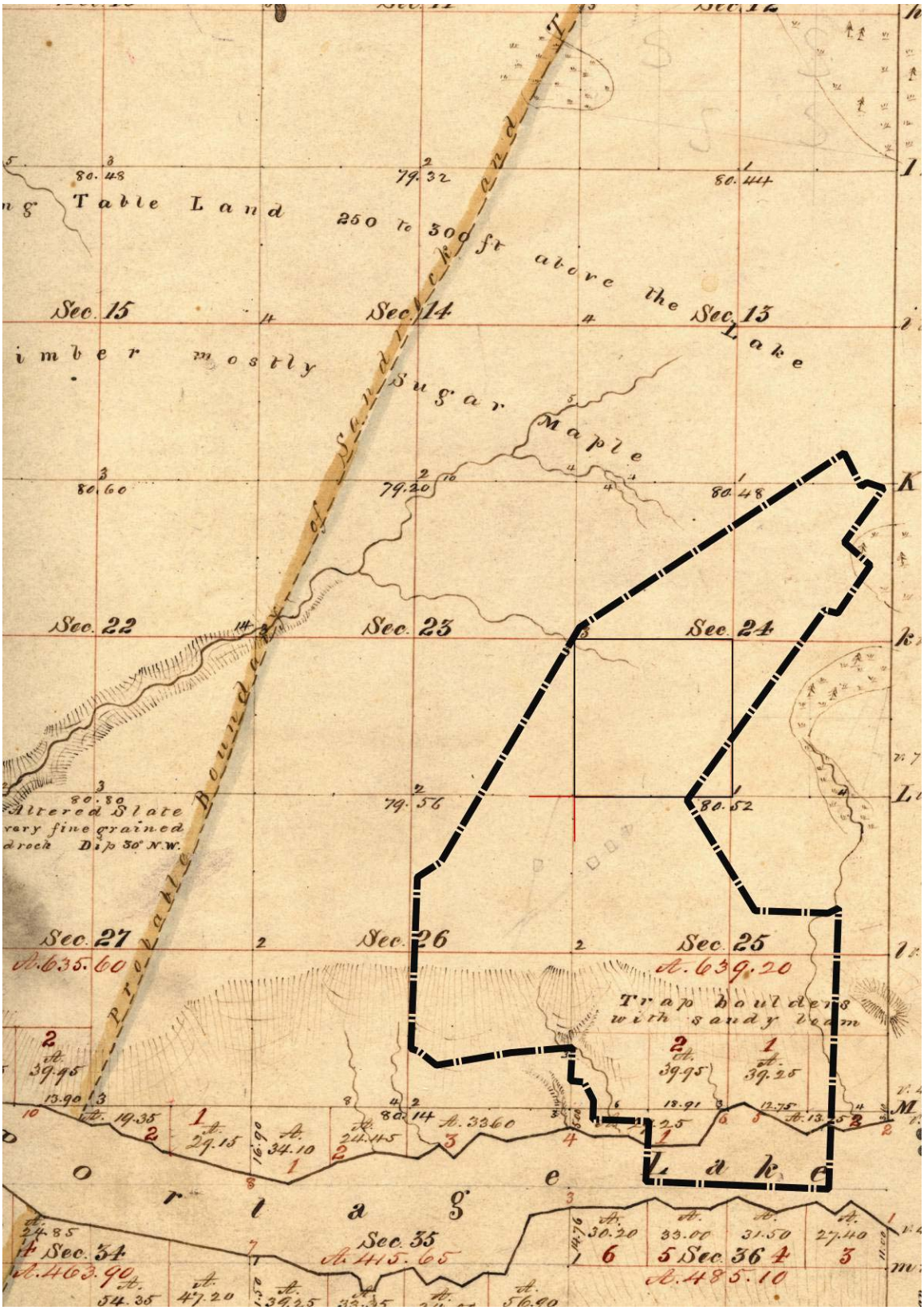

Figure 4- 11: Portion of the William A. Burt and Bela Hubbard survey drawing (1845) with the existing Quincy Unit boundary added by QEA 2007 (source for map: KEWE archives)

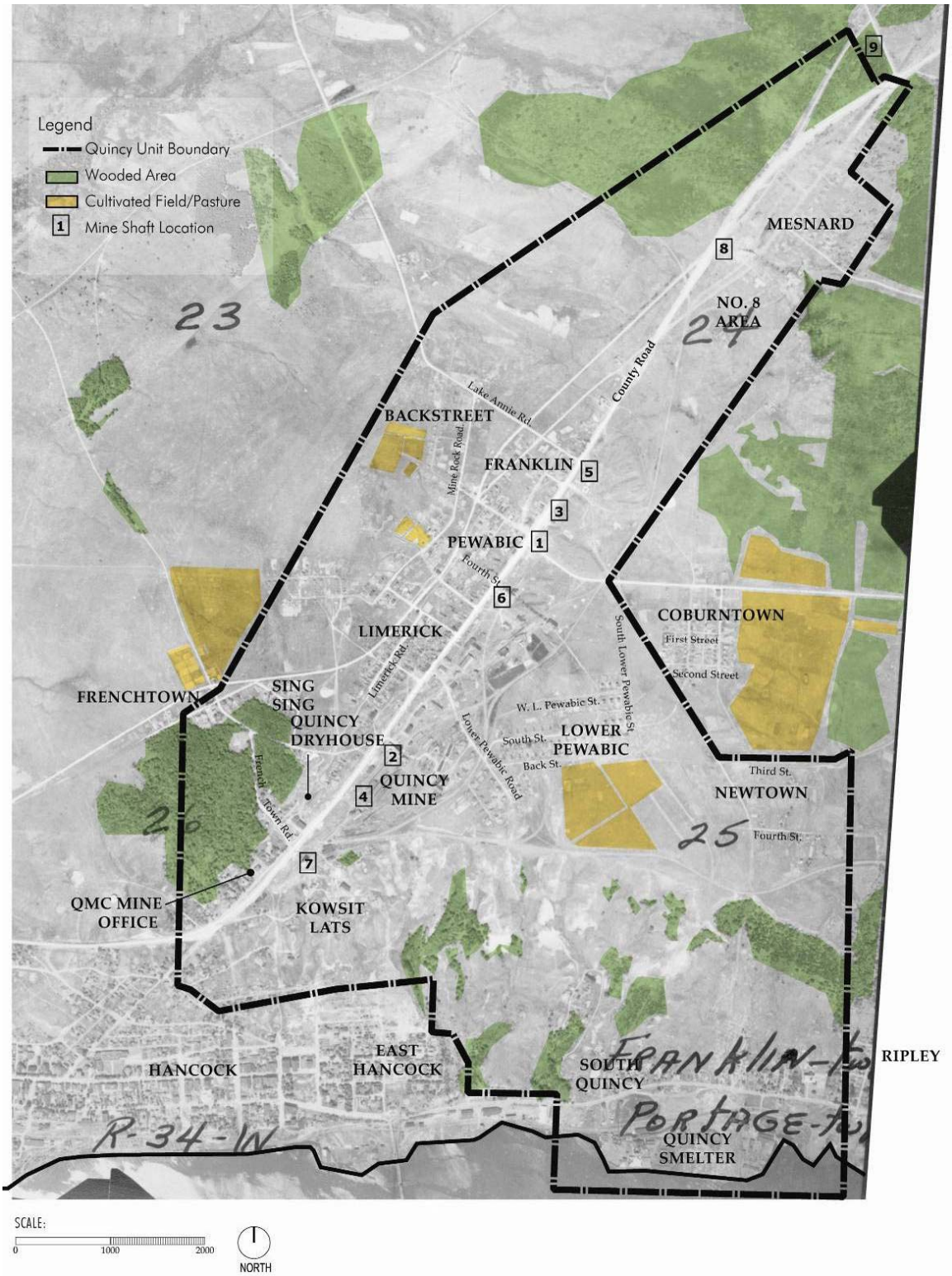

Figure 4- 12: Quincy Unit, Vegetation 1920s-1930s

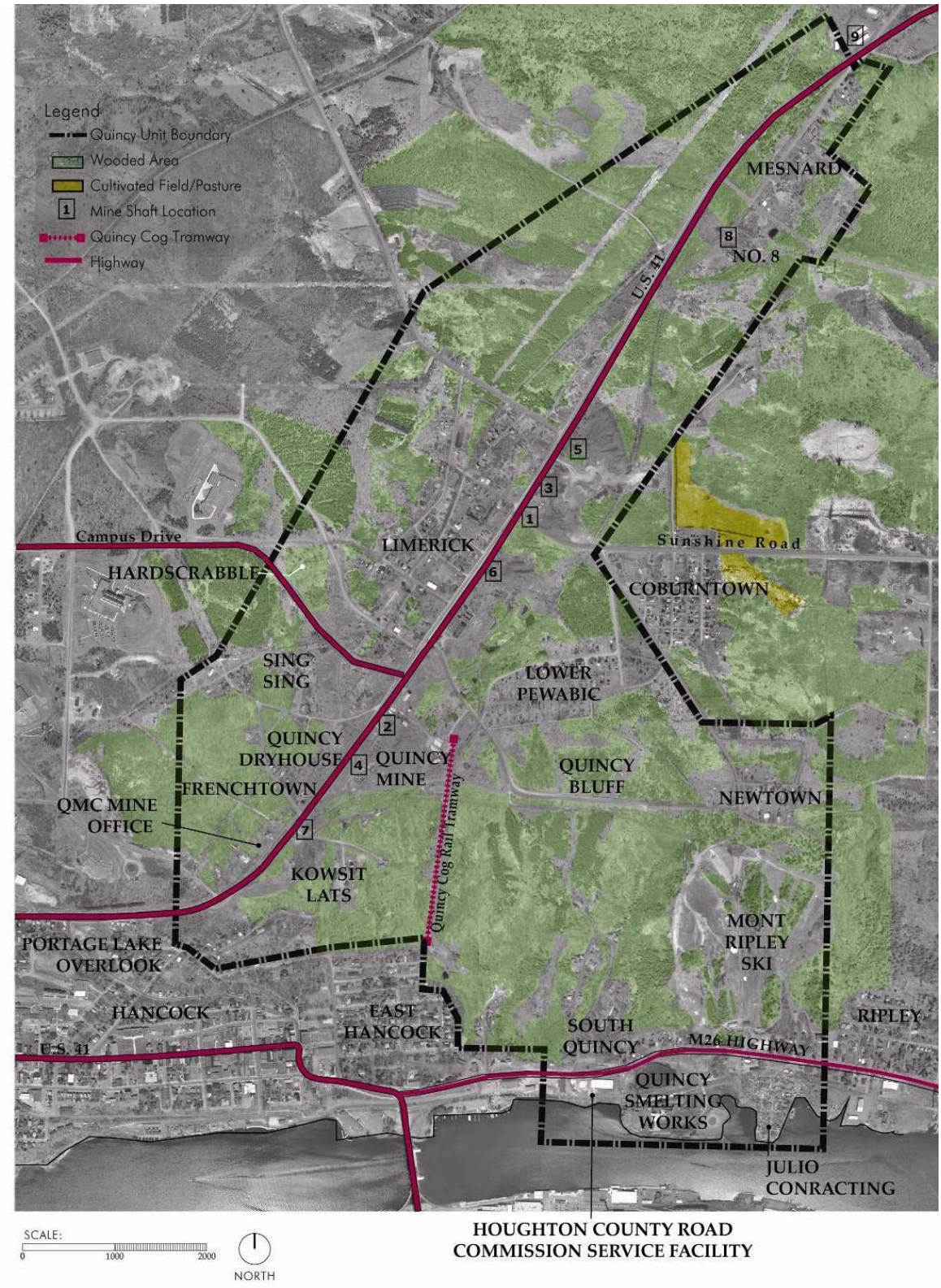

Figure 4- 13: Quincy Unit Current Vegetation

Topography and Views

The topography of the unit, including the dramatic six hundred foot descent from the crest of Quincy Hill to Portage Lake, afforded a commanding visual setting for mining operations. From the late 1860s onward, a progression of photographs captured these views, providing historic documentation of the mining operations, vegetation, housing, and development along Portage Lake. At present, these views offer visitors a broad visual overview of the region and communicate the historic spatial relationships between the lake, the hill, the mining operations, and the mining housing locations. Specifically they include the view north from the city of Houghton toward Quincy Hill and the panoramic views from the Portage Lake Overlook, Kowsit Lats, and Quincy Hill south and east toward Portage Lake and the city of Houghton (see Figure 4-14). During the peak mining era a series of shaft-rockhouses visually dominated mining operations on Quincy Hill. Today the No. 2 shaft-rockhouse is the dominant visual legacy of this previous mining era (see Figures 4-15 and 4-16). In particular, the No.2 shaft-rockhouse provides an identifiable visual landmark from as far away as Chassell when traveling on U.S. 41 and the from the South Range when traveling on M-26.

Views within the Quincy Unit are also significant. They create visual connections between historic landscape character areas within the Historic Industrial Core (see Figure 4-17a). The view west from South Street in Lower Pewabic toward the No. 2 shaft-rockhouse communicates the symbolic visual and physical association of mining operations with company housing locations. The view eastward from the dryhouse landscape character area toward former mining operations east of U.S. 41 and beyond visually connects mining operations on the hill. These views have potential significance as interpretative resources for the park.

Views of the Quincy Smelting Works on Portage Lake from Houghton provide a dramatic overview of the resources present in this character area (see Figure 4-17b). Within the Quincy Smelting Works, significant views include striking vantage points from the top of the north slag pile facing the buildings to the south. Views into the building complex from the southwest open space, east shoreline slag pile, salt storage area, and central open space all provide glimpses of historic features that illustrate aspects of the historic functions of the facility.

While historic views present opportunities for preserving and interpreting the historic character of the industrial landscape, contemporary intrusions and successional woodland detract from historic character and visual impact. On Quincy Hill, the radio tower competes with the No. 2 shaft-rockhouse for visual prominence in the area. At the Portage Lake Overlook, the contemporary signs and overall interpretation of the area detract from the historic character of the panoramic experience. Throughout the unit volunteer and successional vegetation obscure significant views.

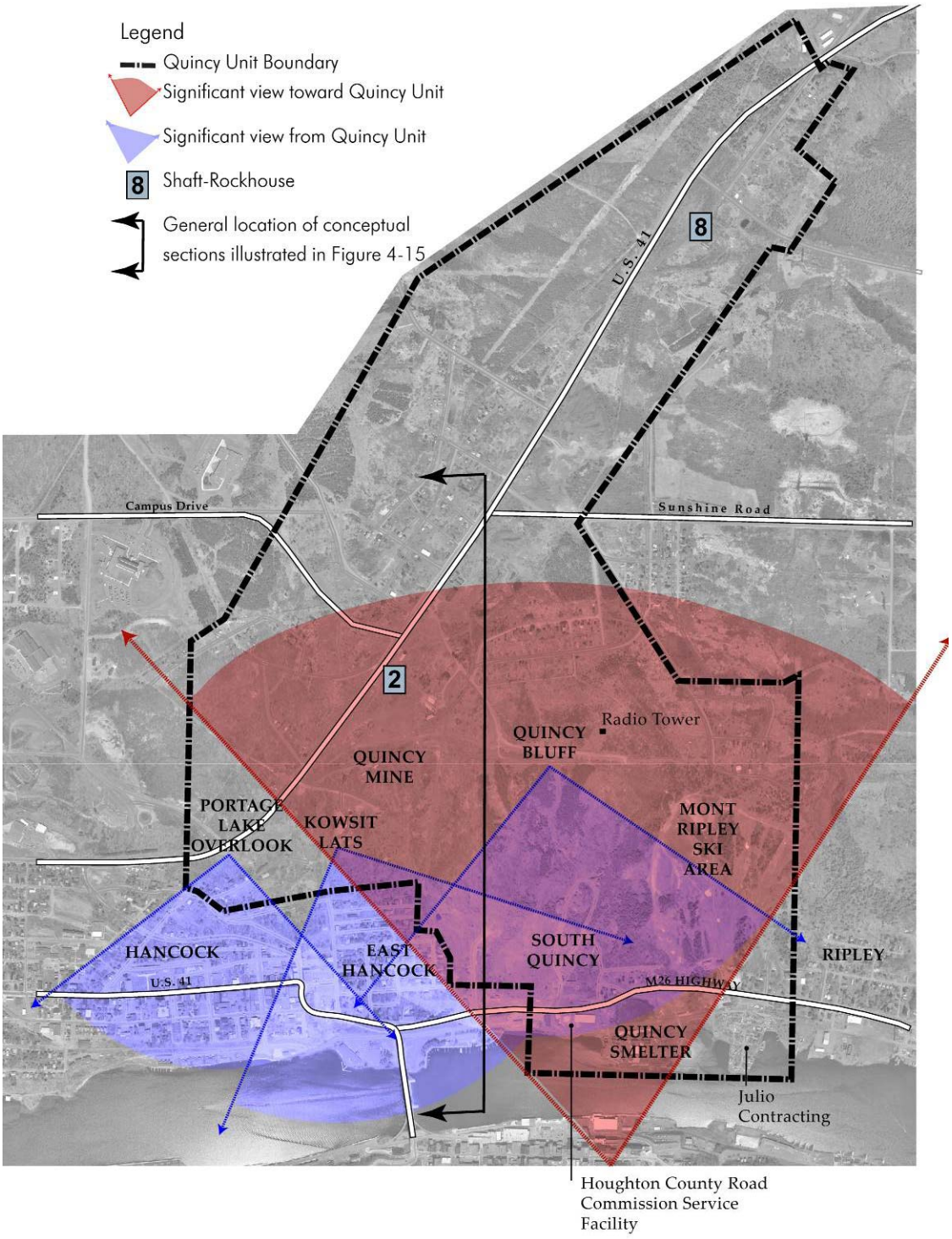

Figure 4- 14: Quincy Unit, Significant Views

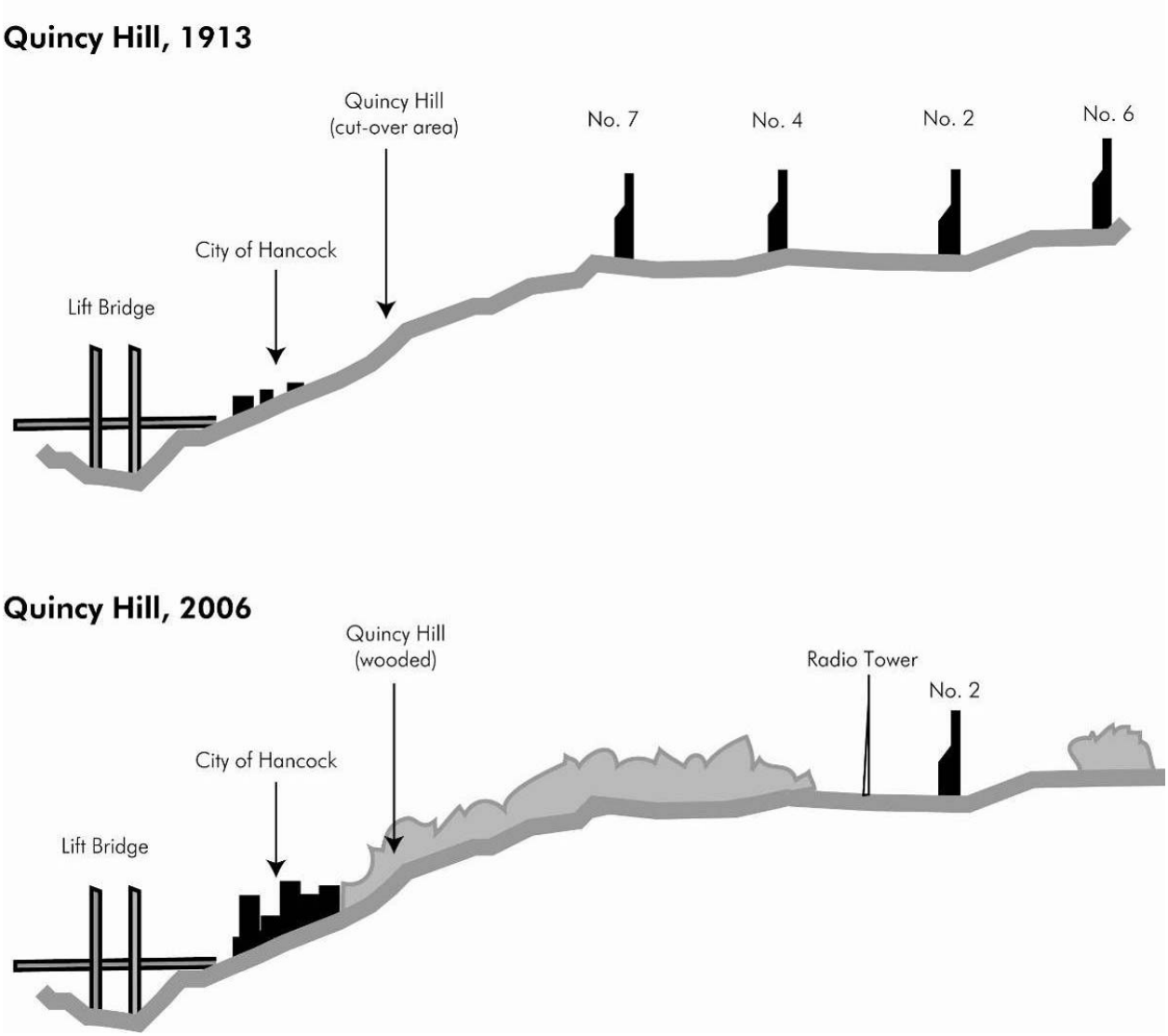

Figure 4- 15: Conceptual Section/Elevation of Quincy Hill, Topography and Views (the general location of the section is illustrated in Figure 4-14)

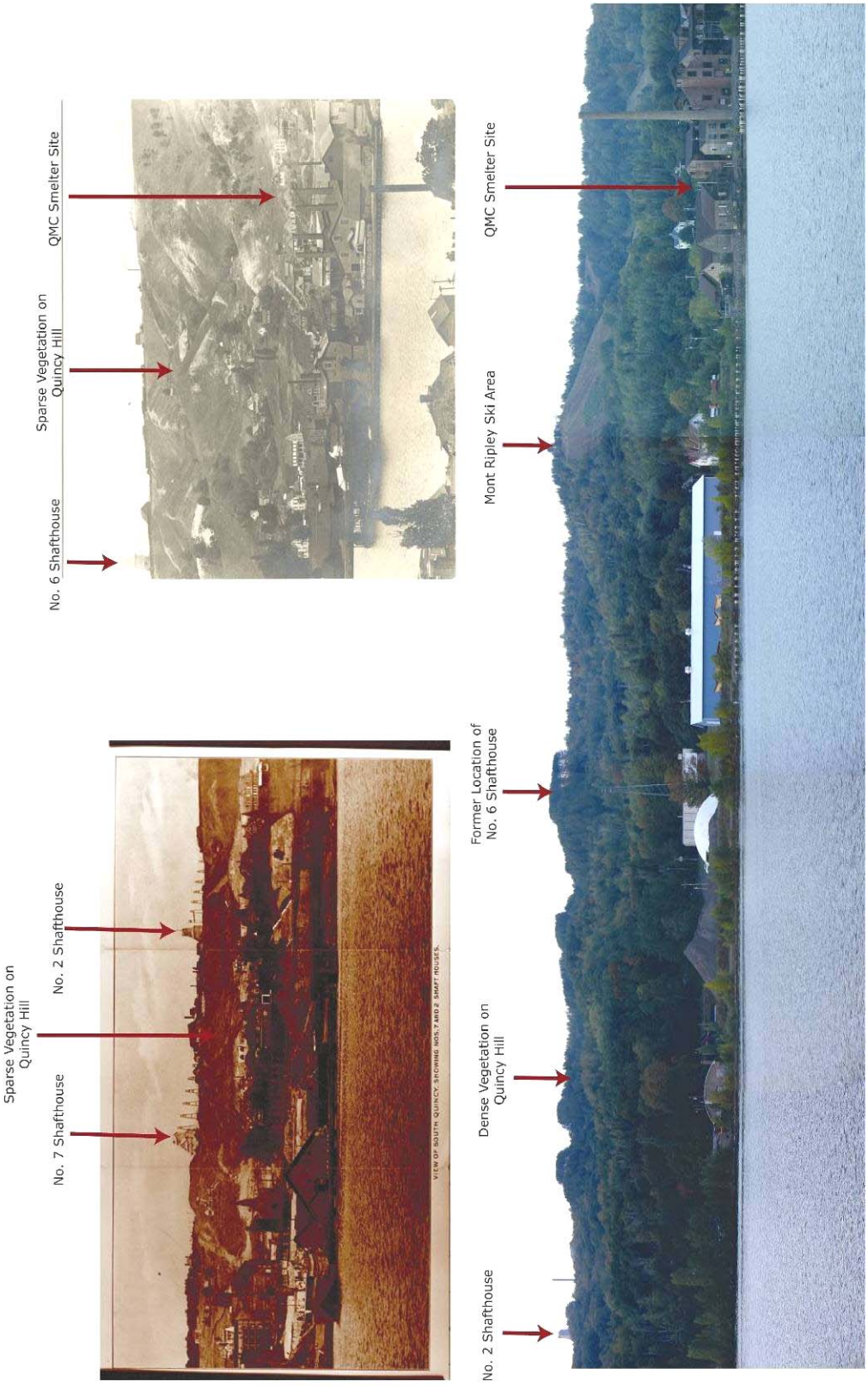

Figure 4- 16: View toward Quincy Hill from Houghton

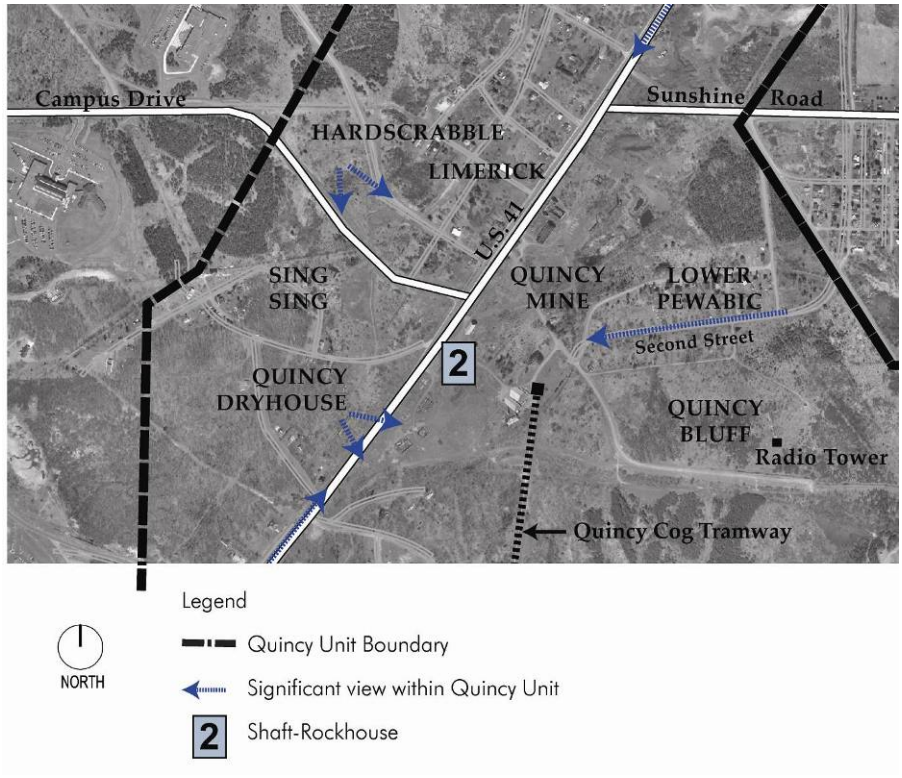

Figure 4- 17a: Significant views within the Historic Industrial Core

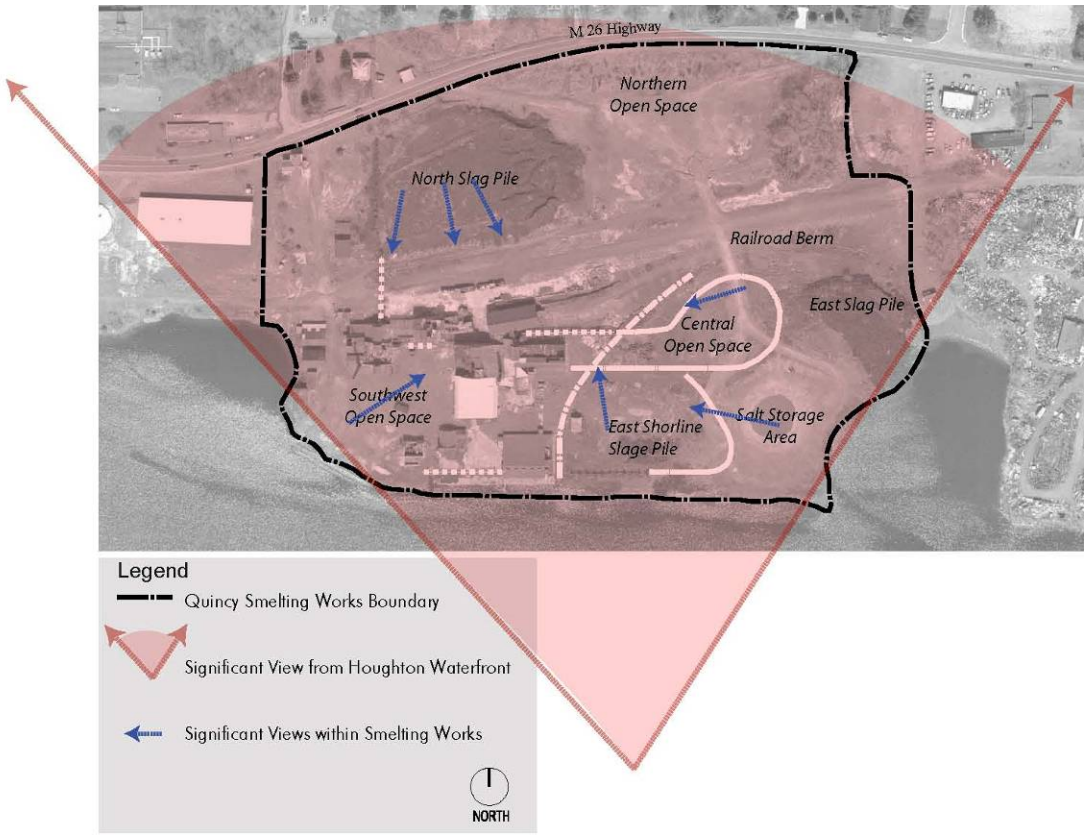

Figure 4- 17b: Significant views associated with the Quincy Smelting Works

Circulation

Over time circulation patterns and functions were altered as changes occurred to the mine operations and advancements were made in mining and transportation technology. The Quincy Mining Company depended upon vehicular and pedestrian circulation routes to transport workers and supplies to the mine site and move materials through the copper production process. Advancements in mining and transportation technology affected circulation routes and modes of transportation between mine operations.

Initially, a tram road carried counter-weighted tram cars filled with copper rock from the Quincy Mine down to the Stamp Mill at Portage Lake. The Pewabic and Franklin mining companies also had tram roads that descended from their mines on Quincy Hill to mining operations bordering Portage Lake. By 1890 the new Quincy stamp mill was constructed on Torch Lake. The Quincy and Torch Lake Railroad was built to link the Quincy Mine operations with the stamp mill. The tram roads that crossed Quincy Hill were made obsolete by developments at Torch Lake and the use of rail routes to move copper rock in the area (compare Figures 4-18 and 4-19). Although the former location of the Quincy tram road was once a visual dividing line between the city of Hancock and East Hancock, currently the route has been absorbed into the city of Hancock and is no longer a significant resource for the unit. The former Franklin and Pewabic tram roads further east, are also no longer present. The northern portion of the Franklin Tram Road is now an angled road between Coburntown and Lower Pewabic. The southern portion once bisected Quincy Hill along a ridge line that extended down toward Portage Lake, in an area now occupied by the Mont Ripley Ski Area. The Pewabic Tram Road also extended down a ridge line on Quincy Hill. Today, subtle traces of the tram road are visible as it traverses the eastern edge of Lower Pewabic down through the Mont Ripley Ski Resort. However, no significant remnant of either route is present today. The existing Cog Tramway, operated by the Quincy Mine Hoist Association, does not follow any of the historic former tram routes. It is a compatible feature because it connects two significant historic resources, the No. 2 Hoist House complex and the No. 2 adit.

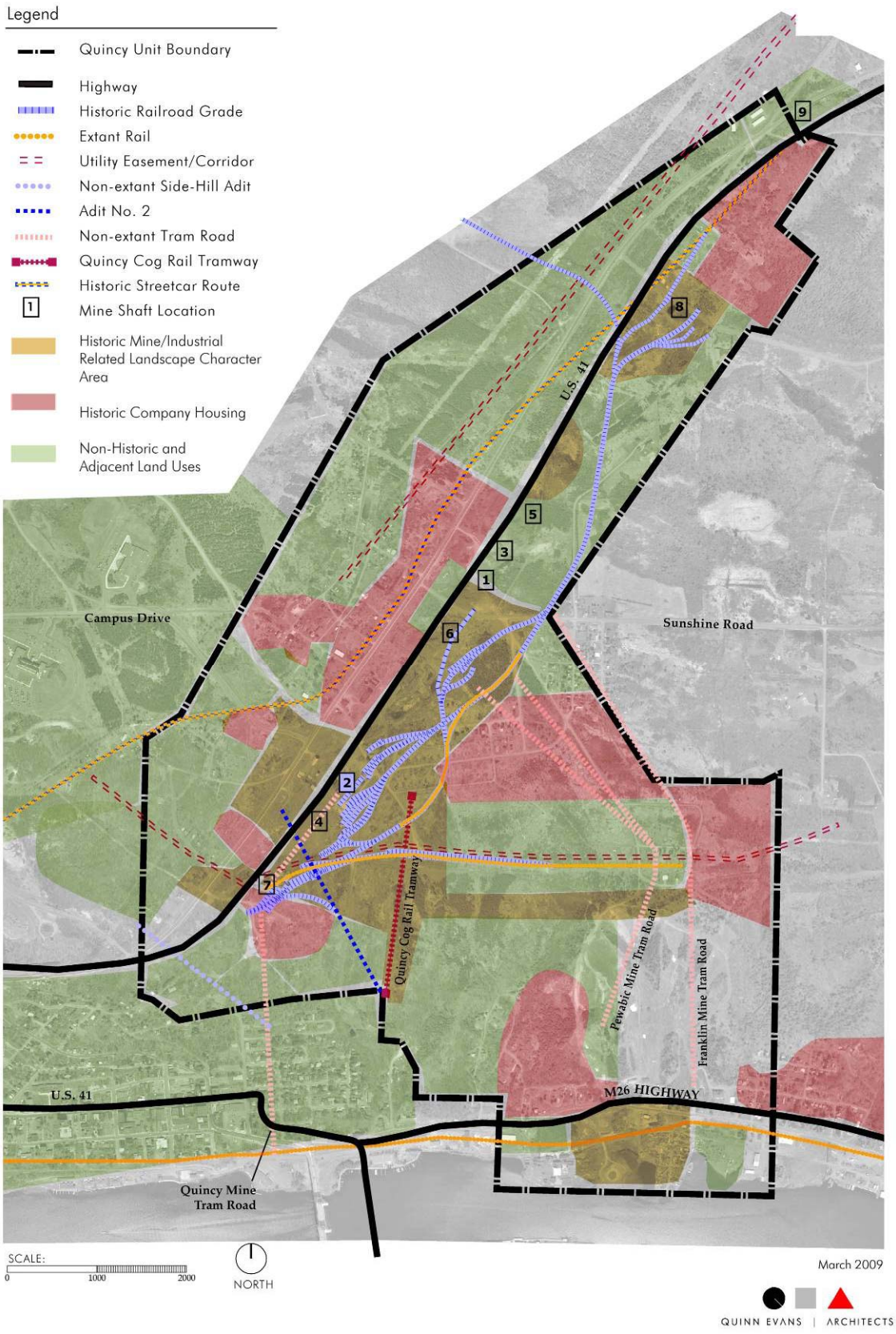

Figure 4- 18: Quincy Unit, Railway, Tram, and Streetcar Routes Analysis

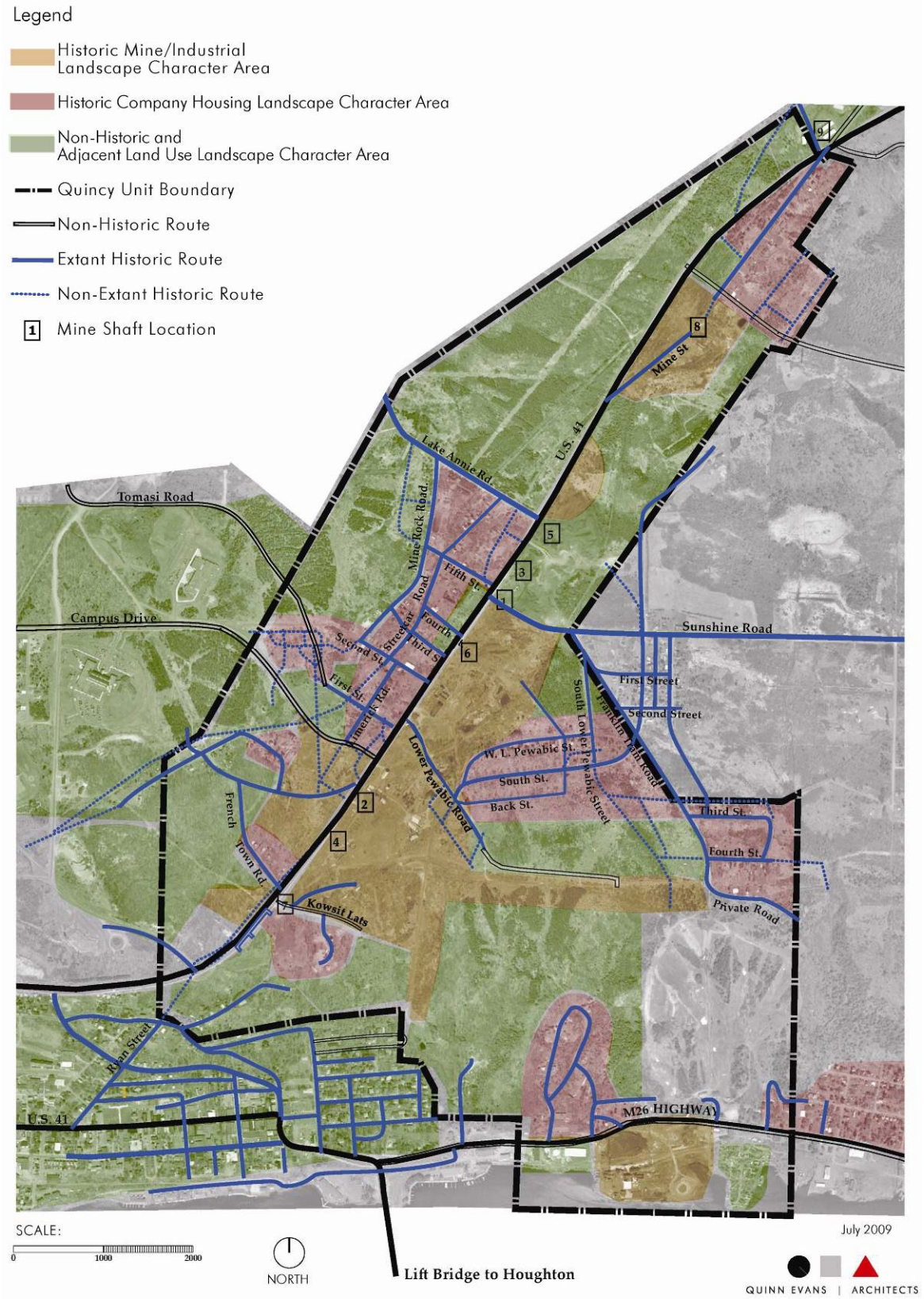

Figure 4- 19: Quincy Unit, Road Analysis

The 1880s brought the railroad to the Keweenaw Peninsula. In 1886 the Mineral Range Railroad constructed a branch line to Quincy (see 1886-1888 Period of Change Plan in Chapter II). By the 1890s a complex network of rail routes bisected the Quincy Mine, linking the various functions of the mine operations (see Figure 4-20).[7] Today only a few remnants of this network are extant. These include traces of railroad grades, the few remaining rail lines, remnants of trestles, and some rolling stock (see Figure 4-21).

In the early stages of mine development, crude wagon roads linked the city of Hancock with the mine operations on the hill. Calumet Road (U.S. 41), the major north/south vehicular connection for the Keewenaw Peninsula paralleled the Pewabic Lode. Over time roads were established to and within the company housing locations. Topography influenced road development. After the mining operations closed in 1945 several company housing locations were abandoned. Today, traces of roads in sections of Lower Pewabic, Backstreet, Hardscrabble, Frenchtown, and Mesnard orient visitors to the development pattern and sites of these housing locations. Other housing locations, including Limerick, Pewabic, and Franklin, retain many of their historic routes. Although the streetcar route that once extended from Hancock northeast to Mesnard is no longer extant, a small section is now a road within the Limerick/Pewabic housing locations. It is appropriately named Streetcar Road. The influence of the contemporary institutional land-use is apparent within the western half of the unit. New roads including Campus Drive dominate the area.

[7] Mine rock moved by the Quincy Torch Lake Railroad to the Quincy Stamp Mill, than the extracted copper was transported by the Mineral Range Railroad to the Quincy Smelter, constructed in 1898.

Figure 4- 20: View north from No. 2 shaft-rockhouse toward No. 6; the Blacksmith Shop and Machine Shed are on the left, railroad routes bisect the site, ca 1915 (source: KEWE archives**)**

Figure 4- 21: View north from No. 2 shaft-rockhouse toward the former location of No. 6, subtle railroad grades are the only remnants of a concentrated network of railroad routes that historically was present, 2006 (source: QEA)

Buildings and Landscape Features

Landscape Character Type 1 - Historic Mine/Industrial Landscapes

Quincy Mine / Historic Industrial Core landscape character area

The Quincy Mine landscape character area contains a rich assortment of historic and non-historic buildings and landscape features. Table 4-1 includes a list of the contributing and non-contributing buildings and features within the character area, and an explanation of their status.

Table 4-1: Buildings and Landscape Features in the Historic Industrial Core

Buildings and Landscape Features	Contributing or Non-Contributing	Rationale
1. Quincy blacksmith shop	contributing	Part of the historic mining operations.
2. Quincy machine shop	contributing	Part of the historic mining operations.
3. Captain's office		
4. Gift shop /supply house	contributing	Part of the historic mining operations.
5. Public Restrooms / oil house	contributing	Part of the historic mining operations.
6. No.2 shaft-rockhouse	contributing	Part of the historic mining operations.
7. No.2 hoist house (1882)	contributing	Part of the historic mining operations.
8. Martin House Site	contributing	The house and outbuildings were used as a residence during the historic mining operations.
9. No.2 hoist house (1918-20)	contributing	Part of the historic mining operations.
10. No.2 hoist house (1894-95)	contributing	Part of the historic mining operations
11. No.5 boiler plant (1912)	contributing	Part of the historic mining operations.
12. Ruin of Diamond drill core house	contributing	Part of the historic mining operations.
13. Remnant of compressor building	contributing	Part of the historic mining operations.
14. Remnant of No.4 boiler house (1882)	contributing	Part of the historic mining operations.
15. No.4 shaft-rockhouse	contributing	Part of the historic mining operations.
16. Remnant of No.4 hoist house (1885)	contributing	Part of the historic mining operations.
17. Remnant of No.7 boiler house (1898)	contributing	Part of the historic mining operations.
18. Covered water tank	contributing	Part of the historic mining operations. Quincy and Torch Lake railroad covered water tank.
19. Remnant of engine house (1889)	contributing	Part of the historic mining operations.
20. Superintendent's residence	contributing	Part of the historic mining operations.
21. Pay office/ mine office	contributing	Part of the historic mining operations.
22. Assay office	contributing	Part of the historic mining operations.
23. Dryhouse foundation	contributing	Part of the historic mining operations.
24. Remnant of Mine captain's office	contributing	Part of the historic mining operations.
25. Cog rail tramway	non-contributing compatible	Added as part of the interpretive program for the site. Although not a historic feature or route, the tram and track are compatible with the historic setting and visual environment.
26. No. 2 Adit	contributing	Part of the historic mining operations.
27. Parking area at No. 2 hoist house	non-contributing compatible	Although the parking lot does not reflect the historic land use, the gravel/dirt surface is representative of the historic surface. Also, this area served as a circulation area historically.

Buildings and Landscape Features	Contributing or Non-Contributing	Rationale
28. Large artifact display	non-contributing compatible	Although the display does not reflect the historic land use, the artifacts were part of the historic mining operations inventoried by Scott See of Michigan Technological University.
29. Parking area at gift shop / supply office	non-contributing compatible	Although the parking lot does not reflect the historic land use, the gravel/dirt surface is representative of the historic surface. Also, this area served as a circulation area historically.
30. Lawn northeast of No.2 hoist house	non-contributing	Although the mown lawn is a refreshing break from the gravel and dust around most of the site, it does not reflect the historic surface or land use.
31. Railroad track and rolling stock	Track is contributing, rolling stock is compatible	The historic railroad track was part of the historic mining operations. The rolling stock is from another region, but represents a type of train car that might have been used as part of the historic mining operations.
32. Cooling ponds	contributing	Part of the historic mining operations.
33. Area between cooling ponds and supply office	contributing	Although encroaching vegetation disguises the uneven ground surface and remnants of buildings and tracks, these elements are extant parts of the historic mining operations.
34. Area north of supply office	contributing	Although encroaching vegetation disguises the uneven ground surface and remnants of buildings and tracks, these elements are extant parts of the historic mining operations.
35. Area south of No.2 shaft-rockhouse	contributing	Although the poor rock has been mined and the buildings are ruins, their presence represents the large scale and extent of the historic mining operations on the landscape.
36. No. 5 Boiler Plant, trestle remnant, and smokestack	contributing	Part of the historic mining operations.
37. No. 6 Site: Poor rock pile north and east of A.E. Seaman Mineral Museum	contributing	Part of the historic mining operations.

Buildings and Landscape Features	Contributing or Non-Contributing	Rationale
38. Topography and vegetation east of cog tramway	non-contributing	The dense vegetation does not reflect the land use and impacts views between the No.2 location and Quincy Hill and Portage Lake.
39. Poor rock piles	contributing	Part of the historic mining operations. Many of these piles are obscured by vegetation and others are being mined for gravel.
40. Quincy Fire Hall	contributing	Constructed by Quincy Mining Company. Represents late period of operation and continuity of use over time.

Quincy Smelting Works landscape character area

Buildings and landscape features that contribute to this character area include former railroad grades, tram lines and trestles, slag piles, the loading dock, and numerous historic buildings. Locations of the features are identified in Figure 3-33: Character Defining Features – Quincy Smelting Works.

Table 4-2: Quincy Smelting Works – Landscape Features and Building Feature Analysis

Landscape Features[8]	Contributing or Non-Contributing	Rationale
1. Rail Grades & berm	contributing	Part of the historic smelting operations
2. Access Roads	contributing	Part of the historic smelting operations
3. East Slag Pile	contributing	Part of the historic smelting operations
4. East Shoreline Slag Pile	contributing	Part of the historic smelting operations
5. North Slag Pile	contributing	Part of the historic smelting operations
6. East Slag Pile	contributing	Part of the historic smelting operations
7. Northern Open Space	contributing	Part of the historic smelting operations
8. Southwest Open Space	contributing	Part of the historic smelting operations
9. Central Open Space	contributing	Part of the historic smelting operations
10. Salt Storage Open Space	contributing	Part of the historic smelting operations
11. Soil Composition	contributing	Part of the historic smelting operations
12. Coal Dock	contributing	Part of the historic smelting operations
13. Loading Dock	contributing	Part of the historic smelting operations
14. Reverberatory Slag Trestle	contributing	Part of the historic smelting operations
15. Broad view of the site from Hougton	contributing	The site remains highly visible today from Portage Lake and the Houghton shoreline, as it did historically.
16. Small scale views within the site	Not evaluated	Views between various features within the site need to be evaluated.

[8] Patrick Martin and Gianfranco Archimede, *The Quincy Mining Company Smelting Works, 1898: Historical Land Use Survey Project*, 2002. Landscape features enumerated for the Quincy Smelter correspond to those described in the report by Martin and Archimede.

17. Stormwater drain improvements	non-contributing	Compatible, modern site improvements that do not represent historic site conditions.
18. Shoreline stabilization	non-contributing	Compatible, modern site improvements that do not represent historic site conditions.
19. Chain-link Fence and Warning Signs	non-contributing	Temporary security fence erected by the EPA and kept to discourage vandalism.

Building Features	**Contributing or Non-Contributing**	**Rationale**
1. Reverberatory Furnace Building, No. 3 Furnace & 300 h.p. Boiler, No. 5 Furnace Building & the By-Pass Smoke Stack	contributing	Part of the historic smelting operations
2. Cupola Furnace Building	contributing	Part of the historic smelting operations
3. Engine Room	contributing	Part of the historic smelting operations
4. Blacksmith Shop	contributing	Part of the historic smelting operations
5. Dockside Warehouse	contributing	Part of the historic smelting operations
6. Assay Office	contributing	Part of the historic smelting operations
7. Charcoal House	contributing	Part of the historic smelting operations
8. Carpenter Shop	contributing	Part of the historic smelting operations
9. Parts & Supplies Storage Barn	contributing	Part of the historic smelting operations
10. Barn & Garage	contributing	Part of the historic smelting operations
11. Office Building	contributing	Part of the historic smelting operations
12. Iron House & Time Office	contributing	Part of the historic smelting operations
13. Oil House	contributing	Part of the historic smelting operations
14. Ice house	contributing	Part of the historic smelting operations
15. Railroad Storage Shed	contributing	Part of the historic smelting operations
16. Mineral Building	contributing	Part of the historic smelting operations
17. Cook Boiler House	contributing	Part of the historic smelting operations
18. Briquetting Building & Crushing Plant	contributing	Part of the historic smelting operations
19. Limestone Bins	contributing	Part of the historic smelting operations
20. Pump Room	contributing	Part of the historic smelting operations
21. Machine Shop	contributing	Part of the historic smelting operations
22. Scale Houses	contributing	Part of the historic smelting operations
23. Lumber Shed	contributing	Part of the historic smelting operations
24. Casting Shed	contributing	Part of the historic smelting operations
25. Badenhausen Boiler House	contributing	Part of the historic smelting operations
26. Pump House	contributing	Part of the historic smelting operations

Quincy Mine Office and Superintendent's Residence landscape character area

Buildings and landscape features that contribute to this character area include the Quincy Mine Office, Quincy mine agent's house/superintendent's residence, historic road trace, concrete walks, in-ground poor rock utility trench, stone building foundation, sandstone curbwall, portions of wood fencing, lawn, woods, views and a row of trees.

Quincy Dryhouse landscape character area

Buildings and features that contribute to this character area include the foundation and remaining walls of the dryhouse, the foundation of the mine captain's office, other building foundations, the No.2 road, dirt paths and roads that reflect historic circulation patterns, and remnants of domestic vegetation. Surface archeology may also be contributing. Non-contributing elements include a radio tower, three small service buildings, and the Portage Health sign.

No.8 landscape character area

Buildings and landscape features that contribute to this character area include Mine Street, the No.8 headframe, the No.8 hoisthouse, a dryhouse/storage building and fruit trees.

Cultural Traditions

The significance of Keweenaw National Historical Park lies in the story of copper and its relation to the development of an industrialized society in the United States. The cultural traditions related to this theme are rich, especially associated to immigration, ethnic settlement, paternalism, company towns and labor organizations.

Summary of Integrity

Table 4-3 Summary of Integrity for
Landscape Character Type 1 - Historic Mine/Industrial Landscapes(continued on next page)

Landscape Character Area	Summary of Integrity
Quincy Mine landscape character area (Historic Industrial Core)	Retains integrity of location, materials and workmanship due to the extensive extant resources that continue to represent the historic mining activities. Contributing features include spatial organization, selected views, topography, buildings and small scale features. The aspects of design, setting, feeling, and association have been altered due to the removal of significant features including buildings, equipment, patterns of circulation, selected views, and the day to day working of the mine.
Quincy Smelter landscape character area	Retains integrity of location and setting as the complex is sited prominently where originally built, adjacent to the Portage Lake and in proximity to the Quincy Mine at the crest of the adjacent hill. The relationship between these entities remains clear today due to the preservation and interpretation of the large scale industrial structures that mark locations in the landscape and on the horizon. The site continues to be situated among historic company housing locations and neighboring communities that played an important role in the development of the parent mining company and the site. Retains integrity of design and materials due to the extensive extant resources that continue to represent the historic functions, activities, technology and aesthetics of the complex. This is communicated through the site layout and spatial relationships of buildings and site features that once supported the processing of mineral into copper ingots. Contributing features include the topography, circulation patterns related to the movement of materials, several primary and support buildings and small scale landscape features. All of these elements contributed to the operation of this site during its long period of use. The variety of construction materials used, including locally quarried sandstone and mine rock, and the way they were assembled, continues to provide an architectural expression unique to copper smelting in the Great Lakes region. Retains integrity of workmanship, feeling and association despite deterioration evident throughout the complex due to years of exposure to natural elements and forces. Industrial scale buildings and landscape features remain that were crafted using sandstone, poor rock, molten slag, wood, steel and concrete. Evidence of tool marks, hand rivets, historic finishes and assembly methods are all present. Artifacts found across the site provide evidence of tools and technology unique to the copper smelting practice in this region. The dense collection of historic buildings, landscape features and artifacts result in a visually rich experience that conveys the magnitude and complexity of the former copper smelting operation. The inward focus of the site, despite the presence of significant outward views, continues to provide a strong sense of a historic industrial landscape and communicate its association with the copper mining history found in this region.

Landscape Character Area	Summary of Integrity
Quincy Mine Office and Superintendent's Residence landscape character area	This area retains integrity of location, association and setting as the structures continue to occupy their respective sites on a prominent hillside overlooking the Portage Lake and adjacent to the Quincy Mine. The relationship between these entities remains clear today due to the preservation and interpretation of the large scale structures that mark locations in the landscape, the connecting link provided by U.S. 41, and the integrity of the district as a whole. Retains integrity of design, materials and workmanship due to the extant resources that represent the form, space, structure and style of the property. This is communicated through the construction materials used, including locally quarried sandstone, as well as the site layout and spatial relationships of buildings and open spaces maintained as field or lawn. These features collectively represent an architectural expression unique to the Quincy Mine management area. Integrity of feeling has been compromised due to the increased presence of road noise and traffic generated by a wide, modern U.S. 41 directly in front of the site. Contributing features include the historic buildings, circulation patterns related to the movement of people and goods, historic vegetation, small scale landscape features, significant views and archeological sites.
Quincy Dryhouse landscape character area	As a ruin, this site retains integrity of location, materials, and workmanship due to the presence of the Dryhouse foundation and portions of the walls in their historic location. Contributing features include selected views and ruins. Loss of associated landscape features and activities have resulted in the loss of integrity of design, setting, feeling, and association.
No.8 landscape character area	This site retains integrity of location, materials, and workmanship due to the presence of several structures related to the mining activites. Contributing features include buildings, selected views and ruins. Loss of associated landscape features and activities have resulted in the loss of integrity of design, setting, feeling, and association.

Table 4-4: Summary of Integrity for
Landscape Character Type 2 - Historic Company Housing Locations
(continued on following pages)

Landscape Character Area	Summary of Integrity
Limerick landscape character area	A portion of this area (mainly Limerick Road and Streetcar Road) retains integrity of location, materials and workmanship due to the extant residences, outbuildings and streets that continue to represent the historic activities. The aspects of design, setting, feeling, and association have been impacted by the removal of historic features and activities, as well as additions of new buildings and features that do not reflect the historic character of the landscape. Contributing features include land use, spatial organization, selected views, topography, patterns of circulation, buildings and small scale features. The loss of historic buildings, fences, vegetation, and views, in portions of the area have changed the character of the landscape. Impacts include incompatible alterations, additions, demolition, abandonment, deterioration and development without sensitivity to historic context.
Hardscrabble landscape character area	This area does not retain integrity as a historic company housing location. All but the most discrete traces of the residential use of this area are no longer readily apparent, resulting in a loss of integrity of design, setting, feeling, association, materials and workmanship. Nevertheless, the area retains an important visual relationship to the Quincy Mine landscape character area—in the form of views of the No. 2 shaft-rockhouse. Also, archeological resources are undoubtedly present and may be significant. The site retains integrity of location as a potential archeological site. The site can contribute as a discovery site and provide an interpretive example of the changes to the landscape that have occurred due to the passage of time. Impacts include regular use by all terrain vehicles and vandalism by artifact seekers.
Kowsit Lats landscape character area	A portion of this area retains integrity of location, materials and workmanship due to the four extant residences, the foundation of the No.7 engine house, remnants of the rock house, and Roundhouse Road that continue to represent the historic activities. Contributing features include land use, buildings, patterns of circulation and small scale features. Changes to historic buildings, fences, vegetation, and views, in the southeast portion of the area have changed the character of that portion of the landscape resulting in a loss of integrity of design, setting, feeling, and association. Impacts also include the addition of a parking lot and large storm drainage detention structure near U.S. 41.

Landscape Character Area	Summary of Integrity
Lower Pewabic landscape character area	Overall, Lower Pewabic retains integrity of design, location, materials and workmanship due to the extant residences, outbuildings, building foundations and streets that continue to represent the historic activities. In addition, the area retains an association with the Quincy Mine landscape character area due to the strong visual relationship between it and the No. 2 shaft-rockhouse. Finally, the aspects of setting and feeling are intact due to the isolated nature of this neighborhood and minimal intrusions by non-contributing elements. Contributing features include land use, spatial organization, selected views, topography, selected vegetation, buildings and small scale features. Impacts include incompatible alterations, additions, demolition, abandonment, deterioration and development without sensitivity to historic context.
Sing-Sing landscape character area	The small Sing-Sing area retains integrity of location, materials, and workmanship, due to the houses, outbuildings, ornamental plantings, road, and spatial organization that reflect historic patterns. The aspects of design, feeling and setting are somewhat impacted by intermittent woodlots that have grown up on former house sites. The loss of other nearby historic mine housing locations and lack of views of the Quincy Mine landscape character area impacts the aspect of association. Other impacts to integrity at Sing-Sing include major renovations and additions to the residences at the intersection of No. 2 and Sing Sing roads. The nearby development at Raasio Road impacts the setting of the historic neighborhood with new construction that utilizes spacing, setbacks and alignments that are not consistent with historic patterns, as well as contemporary residential forms, massing, low sloped roofs, and modern materials.
Coburntown landscape character area (adjacent to unit boundary)	Retains integrity of design, location, and feeling due to the continued residential use, arrangement of narrow paved streets in a grid, and presence of outbuildings, vegetation, and small scale features including fences that reflect the historic residential character of the neighborhood. Impacts are in the form of incompatible alterations, additions, demolition, abandonment, deterioration and development without sensitivity to historic context. These are most visible where modern construction materials and building massing join with an altered building setback disrupting the traditional development pattern. Also, modern signage impacts the historic scene.

Landscape Character Area	Summary of Integrity
Frenchtown landscape character area	Frenchtown retains integrity of location, materials, and workmanship due to the large historic residences and their associated outbuildings of similar scale, style, and setback arranged along the historic road alignment. In addition, views of the Huron Mountains beyond the Keweenaw Bay enhance the setting of the site. Finally the historic road trace of County Road is evident and massive historic deciduous trees are present in some of the yards. The aspects of design, setting and feeling are impacted by intermittent woodlots that have grown up on former house sites. The loss of other nearby historic mine housing locations and lack of views of the Quincy Mine landscape character area impacts the aspect of association. The area includes a row of three historic houses that retain high integrity with only minor impacts caused by alterations to outbuildings. At U.S. 41, impacts are in the form of incompatible alterations, additions and development without sensitivity to historic context. In particular, a building that once housed Quincy's assay office is now a residence. The exterior of this structure has been extensively altered recently.
Ripley landscape character area (adjacent to unit boundary)	Retains integrity of location, design, association, feeling, setting, materials, and workmanship, due to the intact historic street alignments, building setbacks, historic residences and school, topography, views, and small scale features including retaining walls, decorative fences, ornamental plantings, shade trees, and vegetable gardens. While the presence of some recently constructed residences and a few commercial buildings impact the feeling and setting of the housing location, the overall area is intact. Impacts are in the form of incompatible alterations, additions, demolition, abandonment, deterioration and development without sensitivity to historic context.
Mesnard landscape character area	Portions of this area retain integrity of design, location, materials, and workmanship due to the continued residential use, arrangement of streets, yards, building setbacks, and presence of outbuildings, vegetation, and small scale features including fences that reflect the historic residential character of the neighborhood. Also, a 1916 water tower is located to the east of the character area. Impacts are in the form of incompatible alterations, additions, demolition, abandonment, deterioration and development without sensitivity to historic context. The majority of the area has been heavily altered with the removal of historic structures and addition of new construction that utilizes multiple lots, breaking the spacing and arrangement displayed within the historic portions of the character area.

Landscape Character Area	Summary of Integrity
Newtown landscape character area	The south side of Fourth Street in Newtown retains integrity of design, setting, feeling, association, location, materials, and workmanship due to the presence of four historic saltbox residences, continued residential use, arrangement of streets, yards, building setbacks, and presence of outbuildings, apple trees, lilacs, Lombardy poplars, vegetable and flower gardens, and small scale features that reflect the historic residential character of the neighborhood. Impacts are in the form of one new residence that is not compatible with the scale of the historic character of the area, a garage at the end of the road, and the loss of other historic structures.
South Quincy landscape character area	The Maple Street Area retains integrity of location, design and association. The historic massing, scale, spacing and materials of buildings are extant, and the association with the smelter site is very strong. The aspect of feeling has been altered at the backs of the houses where changes have occurred to meet the needs of today's residents. The setting is quiet and orderly now, whereas historically the nearby smelter operations would have been noisy and industrial materials would have been prevalent in the view. The historic workmanship of the individual structures is no longer apparent. At the Pewabic Street Area intermittent historic residences appear to retain historic integrity, but the overall area does not retain integrity as a historic housing location. Dense vegetation, missing historic structures, and altered residences all result in a lack of representation of the previously dense historic housing location.