

Chapter II: Landscape History

Introduction

The oldest verifiable evidence of metal working in North America is a nearly 7,000 year old spear point found in Minnesota.¹ It was made of copper from the Lake Superior region, as were many beads, awls, bracelets, fishhooks, and other items that have been found in Native American archaeological sites throughout North America. Based on the number of prehistoric mining pits on Isle Royale National Park, it has been suggested that there were as many as 3,000 on the Keweenaw Peninsula itself.² Several of those pits were located in what is now the Quincy Unit of Keweenaw National Historical Park.

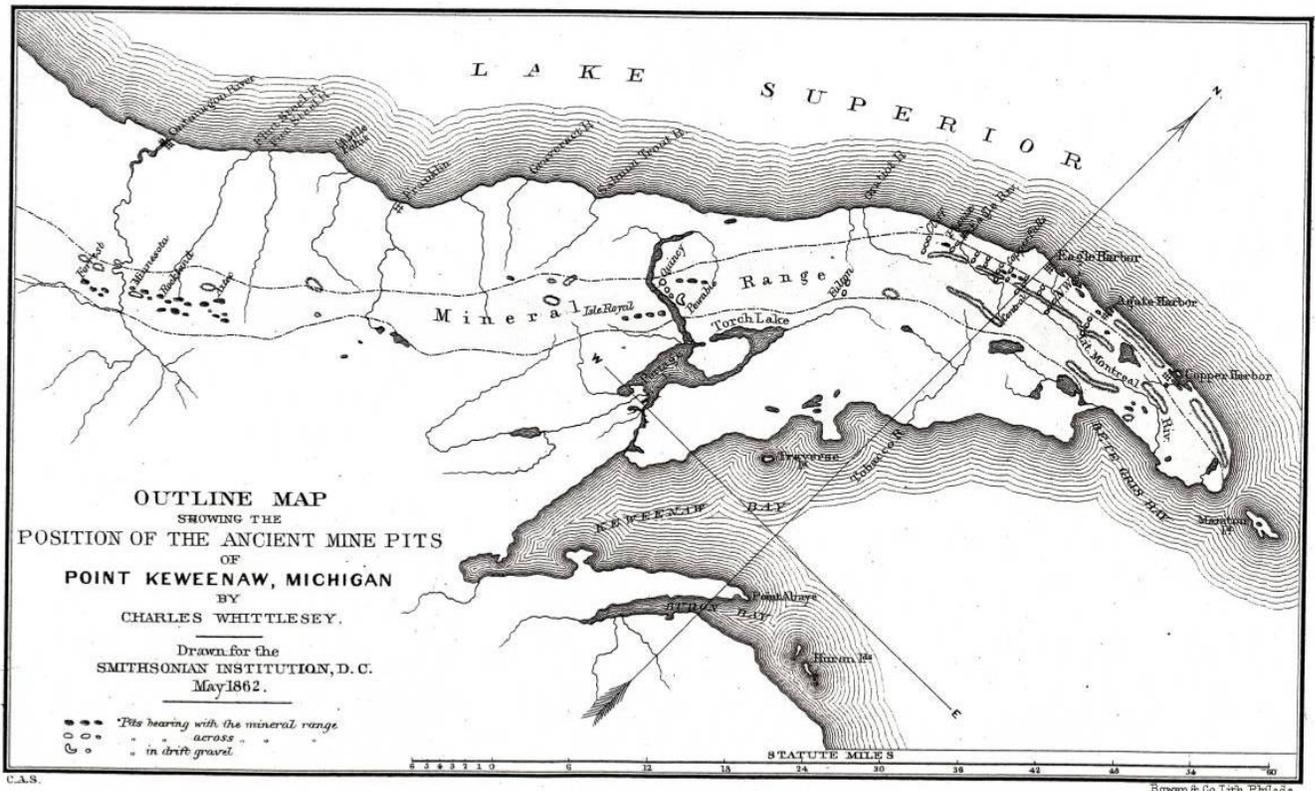


Figure 2- 1: Locations of prehistoric mines, as mapped by Charles Whittlesey (source: Whittlesey, 1863)

¹ Susan Martin, *Wonderful Power: The Story of Ancient Copper Working in the Lake Superior Basin* (Detroit: Wayne State University Press, 1999), 143.

² See page 92 of Ron Morton and Carl Gawboy's *Talking Rocks: Geology and 10,000 Years of Native American Tradition in the Lake Superior Region* (Minneapolis: University of Minnesota Press, 2000) for information about the number of prehistoric mining pits in the Keweenaw, and Charles Whittlesey, "Ancient Mining on the Shores of Lake Superior," (Washington City: Smithsonian Institution, 1863), for a description of same in the Quincy area.

Descriptions of the copper-rich peninsula led 17th and 18th century Europeans to the area. Among them was British explorer Alexander Henry, who attempted to start a mine near Ontonagon in the 1770s. Although early efforts such as his were “doomed to failure,” they drew attention to the Keweenaw’s native copper resources.³ The Ontonagon Boulder, a 3,700 pound mass of pure copper found near the banks of the Ontonagon River, further intensified interest in the Keweenaw, particularly after it was taken east in 1843. In addition to mining and trading copper, the Peninsula’s early residents played a role in the fur trade. Priests and preachers came to minister to the Ojibway and early European-American settlers. As the fur trade waned, the federal government secured title to the land, American mining efforts intensified and settlements became permanent.

Douglass Houghton, Michigan’s state geologist, wrote about the area in 1841; the following year the Treaty of LaPointe ceded Ojibway title to the Upper Peninsula (U.P.) and the copper rush began.⁴ Despite Houghton’s recommendation that people exercise caution with regard to the extent and accessibility of the metal, “explorers and speculators flocked to [the Keweenaw] from all quarters, and in 1845 the shores of Keweenaw Point were whitened with their tents.”⁵ At least 300 mining operations were launched between the 1840s and the 1860s.⁶ Individual miners and mining companies staked claims and broke ground, frequently right over prehistoric workings, obliterating them in the process. The Quincy Mining Company (Q.M.C.) was one such business.

Nearly 160 years of intense activity has predictably created some roadblocks in efforts to understand the Quincy Unit’s prehistory and archaeological record. The heavy undergrowth and maturing trees that obscure parts of the present landscape may give the impression of an undeveloped area, but in fact the opposite is true: crisscrossed by abandoned rail lines and roadways, the site is full of crumbling foundations, broken bottles and crockery, and remnants of gardens. Indeed, while they may hide the ground, rhubarb, lilacs, lilies, and other domestic plants point to the location and suggest the layout of abandoned neighborhoods. This is a rich landscape, but a difficult one for those wanting to understand the landscape’s cultural significance in prehistory.

Though difficult, and challenging to piece together, the Quincy Unit’s pre- and early history demonstrates that it was a cultural landscape long before 1846. The 19th century records that document ancient mine sites indicate that prehistoric inhabitants knew the area well. The Portage Lake waterway that provides today’s travelers with a shortcut across Lake Superior provided the same benefit thousands of years ago, albeit with a portage; it follows that people got to know the area they traveled through. As the Ojibway settled in the area in the 16th century, they too traversed and explored the area, becoming familiar with its resources.⁷ The

³ Larry Lankton, *Cradle to Grave: Life, Work, and Death and the Lake Superior Copper Mines* (New York: Oxford University Press, 1992), 7.

⁴ Some claim that the Keweenaw was in fact the site of the nation’s first mining rush. See David J. Krause, *The Making of a Mining District: Keweenaw Native Copper 1500-1870* (Detroit: Wayne State University Press, 1992), 135, and Lankton, *Cradle to Grave*, 8.

⁵ Whittelsey, 4.

⁶ Lankton, *Cradle to Grave*, 9.

⁷ While ethnographic research has been conducted with Great Lakes Ojibway, work with the Keweenaw Bay Indian Community needs to be completed to understand its history more fully.

Quincy Mining Company may have been one of the earliest mining companies to set up shop in the Keweenaw, but its paths, mining pits, and processing plants modified ones that were there before.

Prehistory

Few archaeologists have examined the Keweenaw Peninsula, and when it is mentioned in literature, descriptions are usually relegated to “peripheral commentary in general accounts of eastern North American archaeology.”⁸ That being said, Great Lakes archaeologists themselves have been accused of dismissing other sources of native copper in the United States.⁹ Academic wrangling aside, that 7,000 year old copper spear point found in Minnesota is significant for the mining industry it represents. An archaeological site in northern Keweenaw County containing copper beads, a crescent-shaped knife, awls, and a point has been dated to roughly 7,800 years before present, and demonstrates that people were here relatively soon after the last glacier retreated from the region.¹⁰ Archaeologists believe that the people occupying the Keweenaw during this time lived in small, mobile groups.¹²

A major pre-contact trade center existed at present-day Sault Ste. Marie; it peaked between 1000 and 1450 AD.¹³ Given its location at a crossroads where three Great Lakes come together, researchers have suggested that thousands of people congregated there several times a year. Copper was likely one of the many items being traded and we can assume that the Keweenaw’s residents participated in these gatherings. Raw copper changed hands, as did bracelets, beads, knives, and other finished items. Extensive trade networks facilitated the dispersal of Keweenaw copper: it has been argued that “[n]early all of the copper used by prehistoric Indians in eastern North America probably originated in the Lake Superior basin.”¹⁴

8 Martin, 16.

9 John R. Halsey, ed., *Retrieving Michigan’s Buried Past: Archeology of the Great Lakes State* (Cranbrook Institute of Science: Bloomfield Hills, Michigan, 1999), 115.

10 Martin, 142. See also Halsey, 183-184.

12 Martin, 153.

13Helen Hornbeck Tanner, Ed. *The Settling of North America: the Atlas of the Great Migrations into North America from the Ice Age to the Present* (New York: Macmillan, 1995), 28.

14 John R. Halsey, *Miskwabik – Red Metal: the Roles Played by Michigan’s Copper in Prehistoric North America* (Eagle Harbor, MI: Keweenaw County Historical Society, 1992), 2.



Figure 2- 2: Copper spear point (source: Courtesy National Park Service, Midwest Archaeological Center, EFMO 6255). Although the source of the copper is unknown, it is likely that it is from the Keweenaw area.

In the course of prospecting in 1847, the Minesota [sic] Mining Company found a six-ton mass of copper at the bottom of a twenty-six foot deep ancient shaft.¹⁵ The mass was supported by timber bracing, and had been worked extensively. The labor, tools, and technology required to extract copper from such a depth is indicative of a specialized mining system. Extraction was straightforward. Fire was used to heat copper-rich rock, and when it got hot enough, water was poured over it. This cracked the encasing rock to the point where stone tools could be used to break it away and remove the copper.¹⁶ The hammers used by prehistoric miners ranged in size from small hand-held tools to others weighing forty pounds.¹⁷ People cleared debris from work sites using wooden shovels, baskets, and leather bags. Some pits were modest in size, reaching only a few feet deep, but others were much larger, including one fifteen feet deep with a diameter of 120 feet.¹⁸ Stores of raw copper were kept in caches; one such cache was said to have led to the discovery of the Calumet conglomerate lode.¹⁹ There is evidence to suggest that caches were also located on top of Quincy Hill.²⁰

Given the purity of native copper, it was not necessary to smelt it. Rather, it was worked by one of two processes: cold hammering or annealing. Hammering made copper brittle, but annealing, a process in which metal is heated and slowly cooled, made copper stronger and much more malleable. This allowed metalworkers to fabricate a wider variety of tools and

15 Naturally, Minesota [sic] personnel removed the boulder. See Lankton, *Cradle to Grave*, 10.

16 Many sources describe these techniques. See Halsey, Martin, and Arthur Thurner's *Strangers and Sojourners: A History of Michigan's Keweenaw Peninsula* (Detroit: Wayne State Press, 1994) for a broader discussion. Whittlesey also provides location-specific details.

17 Halsey, 115.

18 Whittlesey, 6. Unfortunately, he did not provide its location.

19 Thurner, 90. Edwin Hulbert, who staked claim to the Calumet conglomerate in 1864, denied later reports that it was in fact an ancient mine, not a cache.

20 An undated map in the Quincy Mining Company Collection at Michigan Technological University Archives and Copper Country Historical Collections seems to indicate a line of three caches roughly paralleling U.S. 41. See "Map of Mesnard and Pontiac," in the folder labeled "Surface Maps - Site Layout."

decorative items.²¹ Yet the industry began to decline. One historian suggests that copper's malleability was also its downfall, "for a copper knife would not last long."²² Regardless, by the time the Ojibway arrived in the Keweenaw, North America's first metal mining industry had ended.



Figure 2- 3: Copper serpent (source: Courtesy National Park Service, Effigy Mounds National Monument, EFMO 7027) Again, the exact source of the copper used to make this piece is unknown, but it is most likely from the Keweenaw.

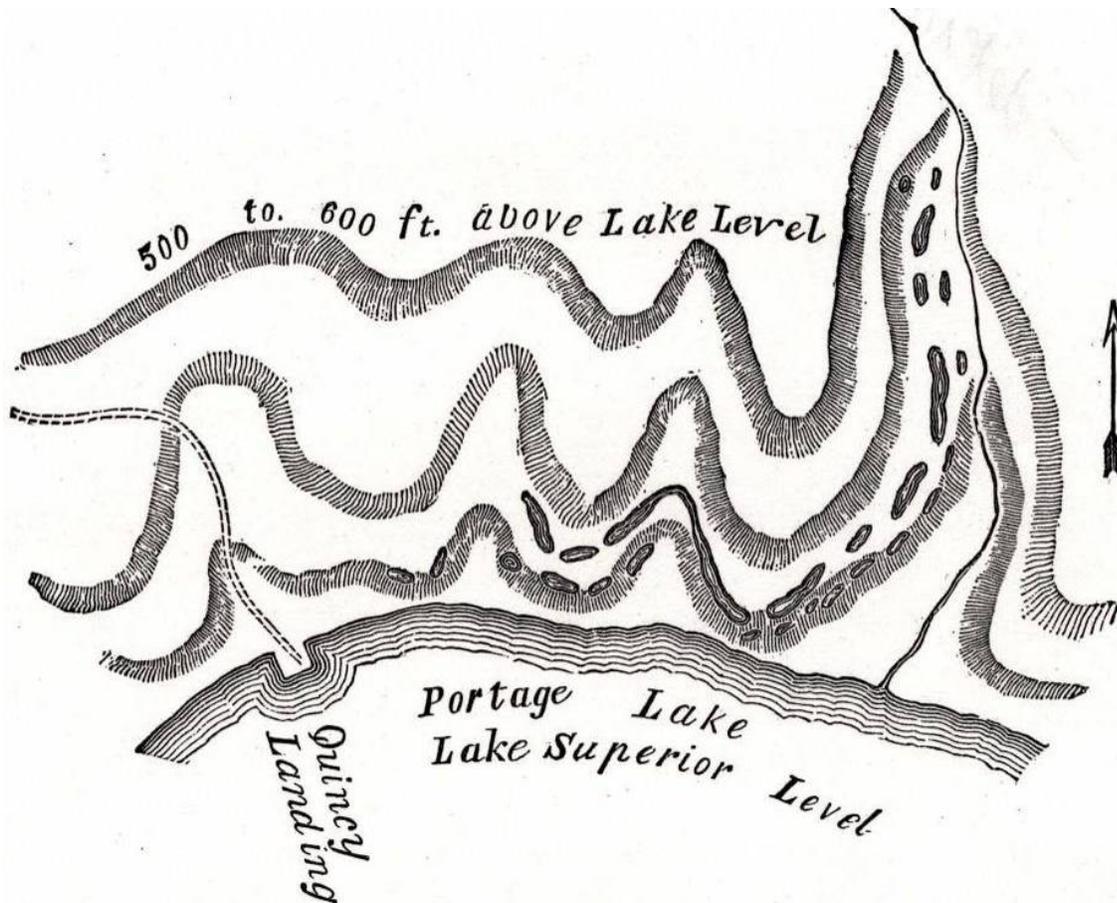
Between 1848 and 1850, descriptions of the Keweenaw's prehistoric copper workings were widely publicized and as Charles Whittlesey later observed, "[s]ince then our knowledge of the subject has been much enlarged by the prosecution of mining operations on the very sites of the ancient works."²³ His report - "Ancient Mining on the Shores of Lake Superior" - was published by the Smithsonian Institution in 1863. In it, he stated that one found evidence of prehistoric mining right by Quincy Landing on the north shore of Portage Lake. Whittlesey mapped ancient pits in the Quincy and Pewabic properties, and while stockholders profited from their discovery, today's scholars never will: as he admitted, 19th century investigations of the pits ultimately destroyed them.²⁴

21 Halsey, 115.

22 Thurner, 20.

23 Ibid.

24 It is unknown at this point if any evidence of these ancient pits actually remains, but it is doubtful. Obviously, 19th and 20th century developments have reshaped the waterfront and hillside. Determining their location by comparing Whittlesey's map with a modern one would likely yield more information.



ANCIENT PITS IN THE BOULDER DRIFT OR GRAVEL, QUINCY LOCATION.

Figure 2- 4: Prehistoric mines in the Quincy Unit (source: Whittlesey, 1863)

Early History: the Arrival of the Ojibway

The Ojibway have been identified with the Keweenaw and the Great Lakes for centuries. Before the Ojibway arrived, the Menomini controlled the Upper Peninsula of Michigan.²⁵ The Menomini's neighbors were the Ojibway to the east, Winnebago to the south, and Dakota, Fox, Kickapoo, and Mascouta to the west. The Cree dominated lands north of Lake Superior. Although each was a distinct cultural group, they had in common a semi-nomadic way of life, occupying seasonal villages as hunters, fishers, and harvesters of wild rice. By 1608, maps indicate that territories had shifted, largely in response to displacement caused by Europeans acquiring - or appropriating - land, and the impact of European diseases on Native populations. That displacement saw the Ojibway move into the U.P. in the 16th century, forcing the Menomini south.

The Ojibway are an Algonquian-speaking people who once occupied more territory than any other Native group in North America. Also known as Chippewa, the Ojibway emerged from an earlier, ancestral group called the Anishinabe ("original person"), whose homeland was

²⁵ Tanner, 31.

present-day New Brunswick, Canada.²⁶ Anishinabe and Ojibway are at times used interchangeably, but Anishinabe may also be used to refer specifically to the ancient ancestral Ojibway.²⁷ Individual bands were identified by distinct names, such as the Amikwa, Saulteur, Marameg, and others; then and now, they were united through networks of clans. The Ojibway likely arrived at the eastern end of Lake Superior some time during the late 1400s, and settled Spirit Island, Wisconsin during the 1500s. Conservative estimates date permanent Ojibway occupation of the western Great Lakes by the mid-to-late 1500s.²⁸

Historic Ojibway culture revolved around acquiring and preserving enough food during the summer to support themselves through harsh winters.²⁹ In late fall, they built up stores of wild rice, maple sugar, and dried fish and game. Bands split into family units and traveled to winter hunting camps, which passed down from father to son.³⁰ After setting up camps, men trapped and hunted large game. Women sewed, repaired fishing nets, and worked on other indoor tasks. In spring, the bands moved to maple sugar camps and made birch bark canoes before reuniting for the summer in large villages close to lakeshores and rivers. There, they fished, gathered plants, and gardened; potatoes and pumpkins were popular vegetables.³¹ Medicinal plants and berries were harvested in August, as was wild rice. In early fall, men would go duck hunting and trapping, make preparations to winter camps, and the cycle would repeat.

In the 1650s, Ojibway informants told French explorers, priests, and traders that their ancestors were not the Keweenaw's ancient copper miners.³² This is to be expected, as their arrival in the U.P. has been dated to the 16th century and mining had been occurring for thousands of years before. Yet copper had undeniable significance in Ojibway culture: 17th century Jesuit missionaries documented the Ojibway's spiritual beliefs about the metal as well as the places it was found.³³ Records also confirm the spiritual importance of copper in the 19th century. It was carried in medicine bundles, and was particularly valued and revered. Considered a sacred gift, offerings would be left when copper was removed from the ground.³⁴ Johann G. Kohl, a German traveler who lived with the Ojibway during the mid-1800s, noted that explorers and traders would ask the Ojibway for the locations of metal deposits.³⁵ Given the number of

26 M. Nieves Zedeño et al., "Final Report: Traditional Ojibway Resources in the Western Great Lakes: An Ethnographic Inventory in the States of Michigan, Minnesota, and Wisconsin," (University of Arizona in Tucson, Bureau of Applied Research in Anthropology, 2001), 27.

27 Ibid., 26-27. According to Morton and Gawboy, the form one uses depends on the subject: 'Ojibwe' when discussing cultural things, 'Chippewa' in political and formal contexts, and Anishinabe 'is what the Ojibwe call themselves, one Ojibwe to another.' See Morton and Gawboy, 67.

28 Zedeño et al., 28-29.

29 Ibid., 42-43. Unless otherwise indicated, all ethnographic information comes from the Ojibway ethnography prepared by Zedeño et al.

30 Morton and Gawboy, 73. That winter territory was inherited indicates that while land was occupied seasonally, its ownership and use was determined through longstanding sociopolitical frameworks. Therefore, it is logical to assume that the Keweenaw, as with other Ojibway-controlled territories, was associated with certain families and bands during the winter.

31 Ibid., 71.

32 Thurner, 20.

33 Zedeño et al., 66.

34 Ibid., 67.

35 Ibid. Given the spiritual importance copper had in Ojibway culture, it is not surprising that they did not always reveal locations to Europeans and Americans. In fact, the Jesuits admit to having used

artifacts that have been found in Historic Period archaeological sites, other Native groups continued to value copper for its practical and ornamental applications.³⁶ Regardless, new enterprises in the 17th century drew attention to a much different resource.

The Fur Trade

In 1621 the French explorer Samuel Champlain sent Etienne Brule on a mission to learn the Ojibway language and build trading relationships with the many independent Ojibway bands.³⁷ By the mid 1600s the Ojibway had allied themselves with the French and were well-engaged in the fur trade. The Keweenaw was certainly rich territory: in 1659, the explorers and traders Radisson and Groseilliers paddled along the south shore of Lake Superior to Keweenaw Bay, where they encountered an industrious population of beavers, pieces of native copper, and a convenient, well-established portage route that made traveling across the lake much easier.³⁸ Ten years later, Jean Talon, the man in charge of the colony of New France (French Canada, founded by Champlain), sent Louis Joliet to “find the copper mine from which pieces of pure copper had been brought.” Although he failed to locate it, his journey was one among many which opened the door for French priests to establish thriving missions around Lake Superior.³⁹

The resources of the Superior basin factored greatly in the Ojibway’s success in the fur trade. They established permanent communities, with key locations at La Pointe and Keweenaw Bay;⁴⁰ another settlement is believed to have existed on the shores of Portage Lake although its location remains unclear.⁴¹ The creation of these settlements transformed Ojibway society from “mobile bands into village-centered sociopolitical entities.”⁴² Their success initiated other changes, including challenges: the Iroquois, allies of the British, began encroaching on Ojibway

“artifice” in order to learn from the Ojibway “secret[s] which they did not wish to reveal.” See Volume LIV, Chapter XI, “Of the Copper Mines Which are Found in Lake Superior,” accessed online at <http://puffin.creighton.edu/jesuit/relations/>.

³⁶ Much like historians, who organize the past into time periods of similar cultures and events in order to aid our understanding of the past (for example, the Middle Ages, the Renaissance, and the Gilded Age), archaeologists divide prehistory into a chronology of traditions based on similarities and differences in materials found at archaeological sites. Traditions are further divided into phases. Broadly speaking, the Paleo-Indian tradition begins approximately 9500 years before present (BP), and leads into various stages of the Archaic tradition (roughly 8000 BP) and the Woodland tradition (some 2000 BP). During the Historic tradition (which began approximately 500 BP), many of the First Nations we know today were established. See Martin, 142.

³⁷ Carl O. Sauer, *Seventeenth Century North America* (Turtle Island: Berkeley, 1980), 121. See also Russell M. Magnaghi, *A Guide to the Indians of Michigan’s Upper Peninsula* (Marquette, MI: Belle Fontaine Press, 1984), 1.

³⁸ Sauer, 123. According to Radisson, the beavers had felled so many trees that there was not enough fuel to build a fire. The portage route is followed to this day, but by watercraft through the Portage Lake Shipping Canal instead of on foot via an overland trail.

³⁹ *Ibid.*, 132-133. One of the early missions included Saint-Esprit, which was established by Father Claude Allouez in 1655 for the Ottawa and Huron living at Chequamegon Bay in 1665. Father Rene Menard, another Jesuit missionary, unsuccessfully tried to establish a mission at Keweenaw Bay in 1661. See Magnaghi, 2-3.

⁴⁰ Zedeño et al., 30.

⁴¹ Burt’s survey drawing identifies “Indian clearings” on the north shore of Portage Lake, near the current day site of the Quincy Smelting Works.

⁴² Zedeño et al., 30.

territory in the mid 1600s, sparking a war which the Ojibway eventually won in 1662.⁴³ Events of the 17th and 18th century are characterized by war, threats of war, and the growing complexities of expanding trade networks.⁴⁴

Treaties and American Mining

Along with accommodating a growing population and westward expansion, copper was one of the main reasons why the U.S. government wanted to acquire Ojibway land in the Upper Peninsula. In 1822, Schoolcraft wrote of the copper-rich territory that “[w]ith respect to the practicability of extinguishing the Indian title, no difficulty is to be apprehended.”⁴⁵ The government tried to negotiate for subsurface mining rights on the Keweenaw in 1826, and ultimately succeeded in doing so with the Treaty of 1842. The Treaty of 1842 also permitted individual miners to open mines.⁴⁶ In all, the Ojibway ceded much of their land in the Lake Superior area to the U.S. government in a series of four treaties (1836, 1837, 1842, and 1854).⁴⁷ Land use in the Keweenaw changed dramatically in the 19th century, as copper became the target of prospectors, investors, and entrepreneurs.

In May 1844, the US government established Fort Wilkins near Copper Harbor, where companies A and B of the United States Fifth Infantry were posted in order to protect copper miners from “resentful natives.”⁴⁸ The Keweenaw was beginning to develop. As Whittlesey described it some years later, Keweenaw Point was white with tents – marked contrast to Keweenaw Bay, where in 1826, “[n]othing [was] heard but the roar of the waves on the shore, nor seen, but the forests that line it, the lake, and the sky.”⁴⁹ By 1845, the federal government had received over 700 requests for permits to explore.⁵⁰ Due to the lack of an accurate land survey and the absence of any kind of oversight in the lease-permitting system that had been established, speculation, corruption, and pessimism grew.⁵¹

43 Ibid., 32.

44 Magnaghi’s work offers a comprehensive chronology that will not be duplicated here.

45 Henry Schoolcraft, as cited in Magnaghi, 36.

46 Krause, 135.

47 It is important to recognize that treaties are legally binding agreements made between sovereign nations; understanding treaty history is complicated by their number, their purposes, and the territories to which they pertain. The Treaty of 1836 concerned land in the Upper and Lower peninsulas of Michigan; 1837’s ceded territory in parts of Wisconsin and Minnesota; 1842’s ceded land in northern Wisconsin and the western UP, including the Keweenaw Peninsula; and the Treaty of 1854 ceded land northeast Minnesota. Many reservations were also created by this treaty. Tribal rights to fish, hunt, and gather on ceded lands were important guarantees of many treaties, including the Treaty of 1842. See the Great Lakes Indian Fish & Wildlife Commission publication “Treaty Rights,” 2004 edition. The Keweenaw Bay Indian Community (KBIC) was established in 1936; the Keweenaw Bay Reservation was developed in 1854 following the Treaty of 1854. See “Treaty Rights” and www.coppercountry.com/KBIC.php for information about the establishment of the community and reservation.

48 Thurner, 42. The army was also ordered to remove any Ojibway who remained living in the area following the treaty.

49 Ibid., 35.

50 Krause, 138.

51 Ibid., 140.

Bela Hubbard and William A. Burt assisted Michigan's state geologist, Douglass Houghton when he began to survey the Keweenaw in 1837; their report was printed in 1846 following Houghton's untimely death in Lake Superior in 1845.⁵² They noted "scattering pines of an excellent quality" northeast of Portage Lake, and observed the occasional swamp and marsh.⁵³ Hubbard mentioned that "[t]he whole, is, in general...clothed with an abundant growth of sugar maple, birch, fir, oak, and white pine."⁵⁴ However, the bulk of their text was devoted to describing the region's geological resources and identifying the mining operations already in progress. One could argue that, as mining in the Keweenaw was even then a foregone conclusion, the surveyors felt it unnecessary to describe vegetation in detail; one is left to assume that the top of Quincy Hill was covered with a forest that stretched all the way to Copper Harbor.

By 1847 the land had been surveyed, and the ownership issue was settled.⁵⁵ The Cliff Mining Company's employees were extracting mass copper from the Cliff lode, and in 1849 became the first company on the Keweenaw to pay dividends to its stockholders. When two other mass copper mines, the Minesota and the Central, began paying, the three "became the talk of the mining world."⁵⁶ These mass mines would soon be eclipsed by operations on the vast conglomerate and amygdaloid lodes of the central Keweenaw Peninsula, including Quincy's.⁵⁷

For the most part, the prehistory of the Quincy Unit will remain unclear, as will its history prior to 1846. There is no doubt that the area was worked by prehistoric miners over a long period of time, and that copper was significant in Ojibway culture. Other questions – such as whether the Quincy Hill area contained travel corridors and culturally significant sites – still need to be answered. Despite these unknowns, it is important to recognize that the Quincy Unit holds more stories than those suggested by what is visible on the landscape today.

52 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. Unfortunately, the maps have been removed from the copy held at Michigan Technological University; they may contain more detailed descriptions of vegetation.

53 Ibid., 7.

54 Ibid., 29.

55 Krause, 182.

56 Ibid., 217.

57 Conglomerate and amygdaloid refer to two different types of copper-containing rock found in the Keweenaw. Conglomerate rock is composed of fragments of varying sizes – like sand, pebbles, and boulders – that have been cemented together. Copper is found in the spaces between the fragments. Amygdaloid rock is igneous and contains cavities (amygdules) frequently filled with pure copper.

Company Origins on the Quincy Lode: 1846-1855

Despite having a long history of human occupation, the Keweenaw Peninsula was viewed as a remote wilderness by most white settlers in 1846. As various explorers encountered this land they marveled not only at its mineral wealth, but also at the beauty and spirit of this landscape. Vast expanses of forest were interrupted by rock outcroppings and great bodies of water offering opportunity for travel along their wild, natural and scenic shores. The following excerpt offers an early explorer's view of the region as he encountered Portage Lake and its surroundings for the first time in the fall of 1846:

Next morning we breakfast at daylight, and continue our voyage along the winding shores. Our gay Canadian voyageurs sing as they row. At the helm I can observe small pines where the lake (Portage Lake) makes a bold turn to the northwest, affording a view in several directions. This is the widest part of the lake – two or three miles. Soon after, as we advance, the lake takes the form of a majestic river one half mile wide, and the wooded banks on either hand swell up to a great height. We are charmed with the beautiful scenery; often we rest on our oars to enjoy the charming effects. The native forests, almost unbroken starting from the water's edge, slope up toward the sky precipitately, presenting many pleasant shades and colors, from the soft neutral-tinted maple, the lemon colored birch and poplar, to the dark green of the hemlock and fir...The surface of the lake is perfectly smooth, and reflects like a mirror, each overhanging promontory. As we row silently along we hear no sounds except those made by dipping oars: we see no life save an occasional loon darting his anxious head above the water, uttering a shrill quavering scream and diving again: the air is balmy; the repose of nature is profound, Man with his restless spirit has as yet scarcely disturbed the scene. A little clearing (where now stands the great smelting works) has been made at one place, and a trail winds up the hill to a point where exploring for copper has been attempted.⁶⁴

The reference to the trail, and its connection to copper exploration, reinforces our understanding that the early exploration of the Keweenaw was undertaken by people with varied backgrounds, interests and missions. The Ojibway were well acquainted with the land, its abundant natural resources – including copper – and how those resources could provide subsistence and meet their societal needs. Although voyageurs explored the region over a two hundred year period prior to the U.S. Government's negotiated settlement with Ojibway leaders, they and new settlers navigated the forested environs of the Keweenaw Peninsula using pre-existing paths, and with the assistance of Ojibway guides. Copper diggings and pits

⁶⁴ As cited in Lankton and Hyde, *Old Reliable*, 6.

established by early inhabitants of the peninsula served as landmarks and revealed the mineral riches of the land.

In 1846, the newly organized Quincy Mining Company (Q.M.C., or Quincy) began efforts to make its property profitable, as well as attractive to potential workers. During these early years Quincy focused on exploring and developing their property for industrial operations, above and below ground: men cleared land and dug exploratory trenches, established shafts and constructed a basic surface plant. The company cleared land for farming and leveled early roads. Workers built log homes. Quincy Hill was beginning to change rapidly as a single company defined its purpose. Their efforts intensified in 1856 when they began to work the Pewabic lode.

Quincy's origin was initially unplanned. It resulted from the merger of two existing mining ventures – the Portage Mining Company and the Northwestern Mining Company of Flint – that had claims to mineral rights to the same property. A meeting among stakeholders, held in Marshall, Michigan on November 17th 1846, resolved the dispute between the two companies and formed a third.⁶⁵ Once formed as an association, Quincy purchased Section 26 of Township 55 North, Range 34 West on September 7th 1846 from Eurotas P. Hastings for the sum of \$1,600.⁶⁶ Hastings was the second recorded private owner of the land. He had acquired it from James A. Hick, a Portage Mining Company stockholder, who had purchased the property less than one month earlier on August 11, 1846, following issuance of a permit by the War Department.⁶⁷ The Q.M.C. was established far from the one square mile of land that would soon begin to change as a result of this speculative venture.

The Q.M.C. was not officially incorporated until 1848. However, they began exploring their property in the summer of 1847 when they hired Columbus Christopher Douglass “to visit the mines and to report the present condition of the same.”⁶⁸ Douglass had studied geology at the Massachusetts Institute of Technology, and had previously assisted his cousin, Douglass Houghton, on a land survey of Houghton County in 1844.⁶⁹

Ransom Sheldon was also closely tied to early Quincy operations. He first settled near L'Anse in 1846, where he began trading with Native Americans. He moved his family to a log dwelling at the entrance of Portage Lake one year later where he established a store with Douglass, his wife's father. Records show he worked for Quincy in 1849 “securing and putting in crops,” but he also spent time exploring and trading copper before accepting a position with Quincy and moving to a log home on the side of Quincy Hill as one of the earliest residents in 1851.⁷⁰ The following year he moved his store to the Quincy Mine location.⁷¹

65 Charles K. Hyde, “An Economic and Business History of the Quincy Mining Company,” in HAER No. MI-2, an unpublished report for the National Park Service, Historic American Engineering Record (Washington, DC: 1978), 7.

66 Larry D. Lankton and Charles K. Hyde, *Old Reliable: An Illustrated History of the Quincy Mining Company* (Hancock, MI: Quincy Mine Hoist Association, 1982), 5.

67 Hyde, “Business History,” 10.

68 Hyde, “Business History,” 11.

69 *Ibid.*, 15.

70 *Ibid.*, 16. He is listed as “R. Sheldon.”

71 Lankton and Hyde, *Old Reliable*, 6.

Despite the abundance of copper within the Keweenaw Peninsula, it proved challenging for companies to find a good place to begin profitable large scale mine operations. Large masses of copper were scattered across the landscape, left by retreating glaciers. Ancient diggings revealed veins that looked promising on the surface. Yet both of these indicators that attracted attention, and were often used to determine property value, proved unreliable.⁷² Since mass copper occurred randomly in the landscape, digging beneath it often yielded barren ground. Likewise, mass copper found in fissure veins and early diggings often proved limited in size and extent.

From October 1846 until March 1851, the company focused on locating copper bearing fissure lodes that could be profitably mined.⁷³ Quincy's early efforts concentrated on exploring the hillside up from Portage Lake rather than the hilltop itself, and workers moved rather slowly. While they found some mass copper, they failed to find it in lodes or veins rich enough to be profitably mined and warrant full production efforts.⁷⁴

During this time, Quincy employed French-Canadian lumberjacks equipped with saws and axes to clear openings in the forest.⁷⁵ They were followed by small crews of less than a dozen contracted workers. The crews would labor grubbing out vegetation and stumps. Next they dug exploratory trenches with shovels, picks, sledgehammer driven drill steels, and occasionally black powder and fuse, to help locate copper bearing rock.⁷⁶ The company later sank shafts where those preliminary excavations revealed promising ground. Exact locations of these early workings are unknown, as Douglass's drawings were lost, and no accurate documentation or physical evidence has been located.⁷⁷

Images of this newly developing mining landscape in the Lake Superior region do not exist and sketches and drawings are rare. However, excerpts from company records, journals, letters or diaries offer written accounts of the landscape at the beginning of the historic mining period. One report from 1848, when Quincy was the only active mine on Portage Lake, described a single log house occupying the side of Quincy Hill. The mine consisted of one shaft measuring four feet square by sixty-seven feet deep, and penetrated a lode running forty-three degrees northeast while dipping fifty-eight degrees to the northwest.⁷⁸

72 Hyde, "Business History," 5.

73 Ibid., 11.

74 Larry D. Lankton, "Technological Change at the Quincy Mine, c. 1846-1931," in HAER No. MI-2, an unpublished report for the National Park Service, Historic American Engineering Record (Washington, DC: 1978), 273-274.

75 Lankton and Hyde, *Old Reliable*, 8.

76 Ibid., 6.

77 Hyde, "Business History," 23

78 Lankton and Hyde, *Old Reliable*, 6.

In 1850, J.W. Foster and J.D. Whitney provided a “Report on Geology of the Lake Superior District.” They observed:

When it is considered that nearly the entire copper region is an unreclaimed wilderness, the miner’s settlements appearing like mere dots on its surface, covered with a dense growth of trees, through which the copper with difficulty forces a path; and that, except where the streams have worn their beds in the rock, or the hills terminate in bold and craggy ledges, the ground is covered with a thick carpet of mosses and lichens, effectively concealing every trace of veins, - it is surprising that such an amount of mineral wealth has been revealed in so short a time.⁷⁹

During this early exploration period, Quincy began laying the foundation for the landscape we recognize today. Paths widened and became trails under the traffic of men, horses and wagons seeking solid footing, direct travel routes, and gentle gradients that could accommodate heavy loads. Gradually, forested areas were cleared to facilitate mine operations and to build housing for workers. Log homes were built on the hillside, and favored functional relationships to the mine workings, topography and natural features over any regard for achieving a designed community aesthetic. Efforts to establish this mining community appear rough and unplanned by today’s planning practices and standards. Its vernacular forms and spatial organization were heavily influenced by the environmental conditions that settlers found in this location and the industrial exploration and settlement practices they brought with them. Features commonly found at new mine locations included “a small farm, a blacksmith shop, a carpenter’s shop or a small saw mill, a log bunkhouse or two, a store house, a rock house, and sometimes a stamp mill.”⁸⁰ This description likely fits the Quincy location prior to 1856, although the exact details and arrangements of these structures cannot be documented.⁸¹

Douglass had expanded the mining operation by 1853 and, with a workforce of thirty-three men, successfully exposed three veins and sank one shaft to a depth of 100 feet.⁸² By 1854, Douglass was credited with discovering “the first extensive vein of amygdaloid copper” on top of the Hill, approximately 600 feet above Portage Lake.⁸³ This vein was called the Quincy lode. It ran southwest to northeast, just west of a road crossing the mine site.⁸⁴ They sank another shaft by early 1855, but were eventually disappointed by the small yield of copper.⁸⁵

79 Foster & Whitney, as cited in Lankton, *Cradle to Grave*, 3.

80 Sarah McNear, “Quincy Mining Company: Housing and Community Services, c. 1860-1931,” in HAER No. MI-2, an unpublished report for the National Park Service, *Historic American Engineering Record* (Washington, DC: 1978), 516.

81 *Ibid.*

82 Hyde, “*Business History*,” 16. See also Lankton and Hyde, *Old Reliable*, 8.

83 Lankton and Hyde, *Old Reliable*, 8. See also Hyde, “*Business History*,” 24.

84 Lankton, “*Technological Change*,” 274. The road is now U.S. 41, the primary travel corridor on the peninsula.

85 Lankton, *Historic Resource Study*, 57. See also Lankton and Hyde, *Old Reliable*, 10.

As restless investors called a halt to mining operations and contemplated the money they had invested in Quincy to date, Douglass found the lode they were seeking. His 1855 exploration of ancient pits that crossed the border of Quincy and into the neighboring Pewabic mine helped locate the now famous Pewabic lode.⁸⁶ Within one year of its discovery, Quincy's neighbor, the Pewabic Mine, uncovered a promising amygdaloid deposit; Quincy traced it back to its property. The company's fortune was about to change.

Next Page: Figure 2- 6: Quincy Unit, 1846-1855 Period of Change Plan

⁸⁶ Lankton and Hyde, *Old Reliable*, 10.

Legend

- Existing Quincy Unit Boundary
- Quincy Lode
- Pewabic Lode
- Quincy Mine Surface Operations (1846-1855)
- Quincy Mining Company Ownership (1846-1855)
- Pewabic Mining Company Ownership (1846-1855)
- Conjectural Road Location
- Section Numbers
- Portage Lake Shoreline
- Chronological Order of Copper Exploration

Sources

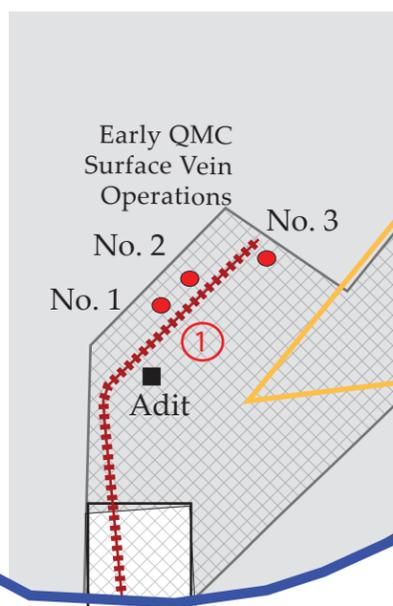
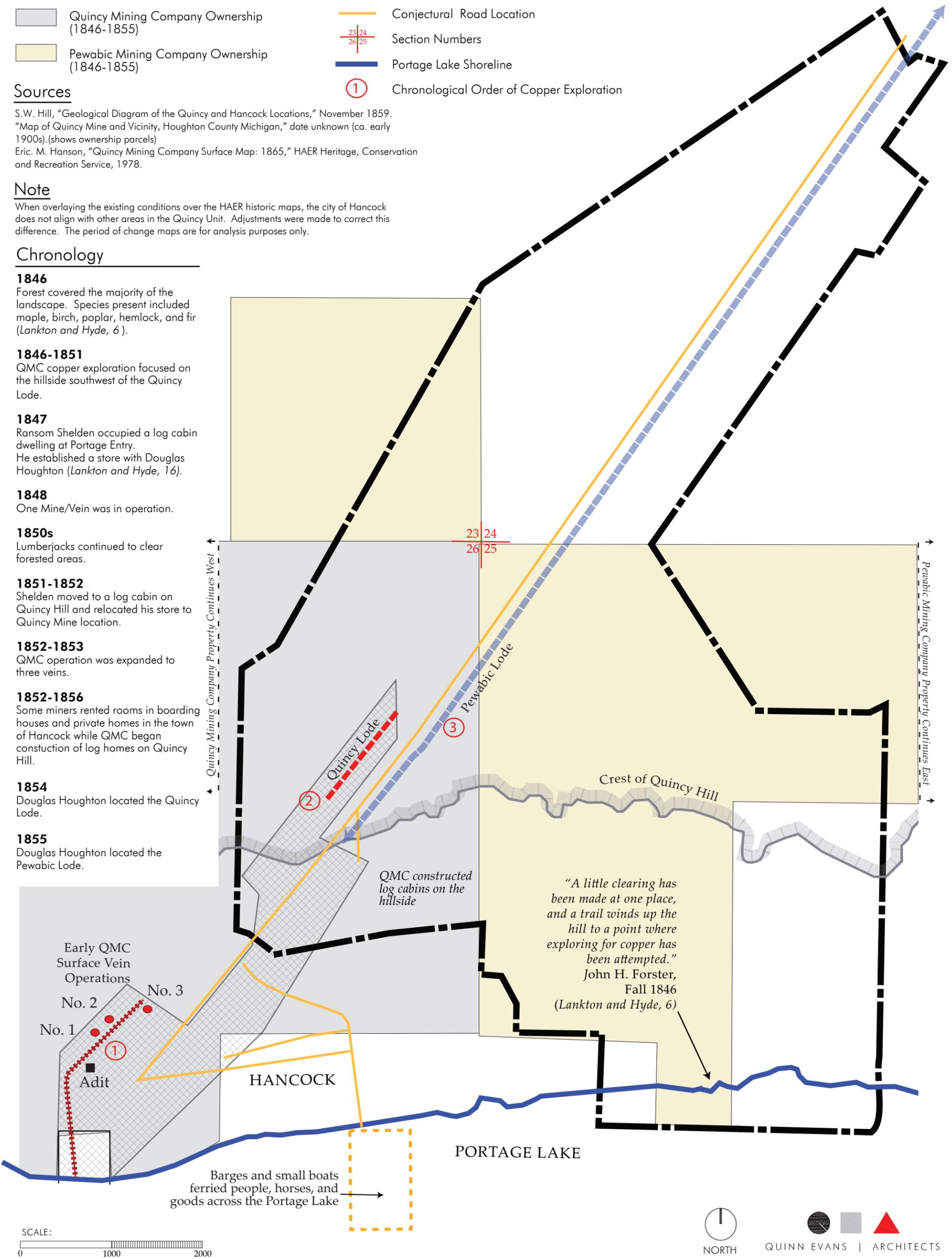
S.W. Hill, "Geological Diagram of the Quincy and Hancock Locations," November 1859.
 "Map of Quincy Mine and Vicinity, Houghton County Michigan," date unknown (ca. early 1900s). (shows ownership parcels)
 Eric. M. Hanson, "Quincy Mining Company Surface Map: 1865," HAER Heritage, Conservation and Recreation Service, 1978.

Note

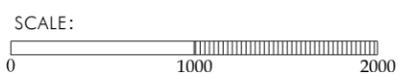
When overlaying the existing conditions over the HAER historic maps, the city of Hancock does not align with other areas in the Quincy Unit. Adjustments were made to correct this difference. The period of change maps are for analysis purposes only.

Chronology

- 1846**
Forest covered the majority of the landscape. Species present included maple, birch, poplar, hemlock, and fir (Lankton and Hyde, 6).
- 1846-1851**
QMC copper exploration focused on the hillside southwest of the Quincy Lode.
- 1847**
Ransom Sheldon occupied a log cabin dwelling at Portage Entry. He established a store with Douglas Houghton (Lankton and Hyde, 16).
- 1848**
One Mine/Vein was in operation.
- 1850s**
Lumberjacks continued to clear forested areas.
- 1851-1852**
Sheldon moved to a log cabin on Quincy Hill and relocated his store to Quincy Mine location.
- 1852-1853**
QMC operation was expanded to three veins.
- 1852-1856**
Some miners rented rooms in boarding houses and private homes in the town of Hancock while QMC began construction of log homes on Quincy Hill.
- 1854**
Douglas Houghton located the Quincy Lode.
- 1855**
Douglas Houghton located the Pewabic Lode.



"A little clearing has been made at one place, and a trail winds up the hill to a point where exploring for copper has been attempted."
 John H. Forster, Fall 1846 (Lankton and Hyde, 6)



NORTH
 QUINN EVANS | ARCHITECTS

Mine Growth on the Pewabic Lode: 1856 – 1887

Although exploratory operations on the Quincy lode continued, the discovery of the Pewabic lode pulled Quincy in a different direction. The first Pewabic shaft was sunk in November of 1856 and two more shafts were subsequently added in 1857.⁸⁷ The company worked both lodes at the same time for several years.

Like the Quincy lode, the Pewabic lode ran northeast to southwest along the top of Quincy Hill. This geologic spine provided an axis upon which subsequent shafthouses would emerge and align themselves, along with a corresponding network of roads and paths. These developments were similar to the operational patterns along the Quincy lode, but were located slightly east. Shafts at this time were simply large holes in the ground that men entered on wooden ladders fastened to the rock. They were protected by “simple board and batten shafthouses erected over the shaft collar,” and they probably housed hand-powered windlasses used to raise poor rock and copper in iron kibbles or buckets.⁸⁸

Men sorted and separated copper from rock at the top of each shafthouse. Poor rock was discarded on nearby waste or burrow piles, while mass and barrel copper were transported directly to the dock.⁸⁹ From there it was shipped to the Waterbury and Detroit plant in Detroit for smelting.⁹⁰ Large pieces of amygdaloid, or “copper rock,” needed to be refined somewhat before being shipped: this process, called calcining, involved heating the rock in large, wood-fired kilns, and cooling it rapidly to crack the rock free from the copper it contained. It was then shipped to Detroit along with the mass and barrel copper. The process of separating copper and disposing of waste rock would continue to be refined through the lifetime of Quincy’s operation.

During the exploratory years of the middle 1850s, the company built some log homes for workers and their families to attract and retain stable, qualified workers to this remote region. Housing was regarded as part of the infrastructure necessary to operate a mine, and Quincy began building homes out of necessity.⁹¹ Due to the limited number of company-owned houses, some miners rented quarters in privately owned homes and boardinghouses in the growing town of Hancock. At the same time, a national mining publication advocated for improved conditions at mine locations:

How pleasant it is to see taste and comfort consulted in the arrangement of our mining locations...We would like to see the agents, in laying out the village or location lots, leave a reasonable garden plot to each house. Every family might have from 25-125 feet for garden and yard to make their house attractive to themselves and others. We believe that stockholders, by consulting the comfort of their workmen, are consulting their own interest in the long run. Men who

87 Lankton, *Historic Resource Study*, 58. See also Lankton and Hyde, *Old Reliable*, 20.

88 Lankton, “Technological Change,” 288. See also Lankton, *Cradle to Grave*, 48.

89 Mass copper was pure copper occurring in large (mass) pieces. Barrel copper was copper brought to the surface in pieces small enough, and pure enough, to be packed directly in shipping barrels.

90 Hyde, “Business History,” 70.

91 McNear, 517.

have spent long hours several hundred feet below the reach of sunshine must have recreation. And many who now become disorderly would not frequent the bar-room if they had a garden to cultivate or a comfortable house to bring themselves about.⁹²

It took a full decade for the Q.M.C. to negotiate business and property deals, explore land holdings, recruit workers, establish a small remote community, and locate the most productive copper deposits on the hill. Stockholders grew anxious, skeptical and weary as years ticked by without a single dividend returned on their investments. Finally, through perseverance and good fortune, Quincy discovered an abundant source of copper in the Pewabic lode and moved closer to the establishment of a full scale mining operation. The company recruited workers, built homes and supported the growing community of Hancock. Collectively, these efforts transformed a steep wooded hillside into a full scale mining operation and community.

In 1858, Quincy sank a fourth shaft on the Pewabic lode and improved its surface plant. An inventory taken that year illustrates the modest size of its operation. It included three houses for mine officials, four boardinghouses, and twenty-seven log houses.⁹³ Construction of at least sixteen more log houses on the hill also began in 1858, and they would be completed over the next four years.⁹⁴ In addition to their hewn log construction, the homes were chinked and their exteriors were covered with clapboards.⁹⁵ In the next few years Quincy's surface operations grew considerably, and became readily visible upon the landscape. In all their efforts, Quincy was influenced by and relied heavily upon the Keweenaw's abundant natural resources, including vegetation, topography and water.

Hoisting copper and rock from mine shafts was difficult and strenuous labor. Workers at Quincy first performed this task by mustering enough strength to move large pieces with the aid of ropes, iron bars and animals. As they used hand powered windlasses, their strain became focused on pulling back levers repeatedly to inch heavy iron kibbles laden with rock or copper to the surface. Although Quincy used a horsewhim at shaft No. 6 for a short while, two portable steam engines arrived in 1858 and they were immediately utilized for hoisting.⁹⁶ Steam hoists made work easier, but they placed a new demand on the company and the land: fuel and water were both needed to power the engines.

Coal was not one of the Keweenaw's natural resources. As a consequence, Quincy satisfied their need for cordwood fuel, mine timbers and lumber with the vast forestlands of the Keweenaw. Men cut, split and stacked wood to fire Quincy's boilers. Steam engines had a huge appetite for wood, and no tree was spared as clear-cutting was company practice.⁹⁷ Lumberjacks left large fields of stumps as they moved to other forested lands. At the same time, Portage Lake quenched the thirst of company machinery.

92 The Mining Magazine (1856) as cited in Lankton, *Cradle to Grave*, 142.

93 Hyde, "Business History," 42.

94 McNear, 518.

95 Ibid.

96 Lankton, "Technological Change," 288.

97 Lankton, *Cradle to Grave*, 42.



Figure 2-7: A clear cut area, location unknown, n.d. (source: courtesy of Michigan Technological University Archives and Copper Country Historical Collections)



Figure 2-8: Unidentified lumberjack crew, location unknown, n.d. (source: courtesy of Michigan Technological University Archives and Copper Country Historical Collections)

In 1858 Quincy began construction of a 100 by 180-foot timber framed stamp mill on the shoreline of Portage Lake directly below Quincy Hill. This was a large investment for Quincy, and represented a significant advancement in their ability to process larger volumes of copper rock. The building was completed and covered in clapboards in 1860.⁹⁸ The mill's location enabled the company to use water from Portage Lake for three main purposes: in an adjacent boiler house that supplied power; in a nearby tailings wash house east of the mill; and to facilitate the disposal of crushed rock tailings directly into Portage Lake via a launder.⁹⁹ Waste disposal was an extremely important part of the milling operation, because 97 to 98 percent of the copper rock milled by Quincy proved to be waste rock.¹⁰⁰ The site also provided for the construction of a dock and warehouse for shipping mineral, mass copper and other goods.¹⁰¹

Transportation was important to all facets of Quincy's operation. The company needed to move materials and supplies to the mine, around the mine site itself, and throughout the community. It also needed to move rock and copper to process it, dispose of it, or ship it. Timber, lumber and cordwood were transported for building and heating, while water was moved for boilers and steam engines.

The earliest known map of the Quincy mine site indicates the transportation routes that served the mine location. This tracing, labeled "Geological Diagram of the Quincy and Hancock Locations," is dated November 1859 and was produced by Samuel W. Hill, Quincy's agent.¹⁰² The tracing documents early landscape conditions by depicting the primary features Quincy built. The extent of Quincy's land ownership is shown along with Hancock, newly platted by Quincy in 1859. Additionally, mine workings are displayed along with the road and tramroad routes connecting them.

Hill depicted the most prominent road between the Quincy and Pewabic lodes. It ran parallel to them, and extended down the hillside into Hancock where it connected to Quincy Street. The northernmost connection to this road traversed the hillside slope where it met Reservation Street. Hill also showed the newly constructed elevated tramroad designed to move copper and rock from the Pewabic lode to the new stamp mill. The location of the tramroad capitalized on existing hillside topography and gravity to lower one car on a cable while hoisting another on a parallel track.¹⁰³ While the tramroad serviced the movement of copper and rock, dirt roads and informal walking paths met the needs of transporting other materials and the movements of workers and residents.

98 Lankton, *Historic Resource Study*, 61. See also Charles F. O'Connell, Jr., "Quincy Mining Company: Stamp Mills and Milling Technology, c. 1860-1931," in HAER No. MI-2, an unpublished report for the National Park Service, *Historic American Engineering Record* (Washington, DC: 1978), 579.

99 O'Connell, "Stamp Mills," 579.

100 Lankton and Hyde, *Old Reliable*, 27.

101 Hyde, "Business History," 43.

102 It is included as an image in the HAER No. MI-2 report. See HAER No. MI-2-1.

103 Lankton and Hyde, *Old Reliable*, 27.

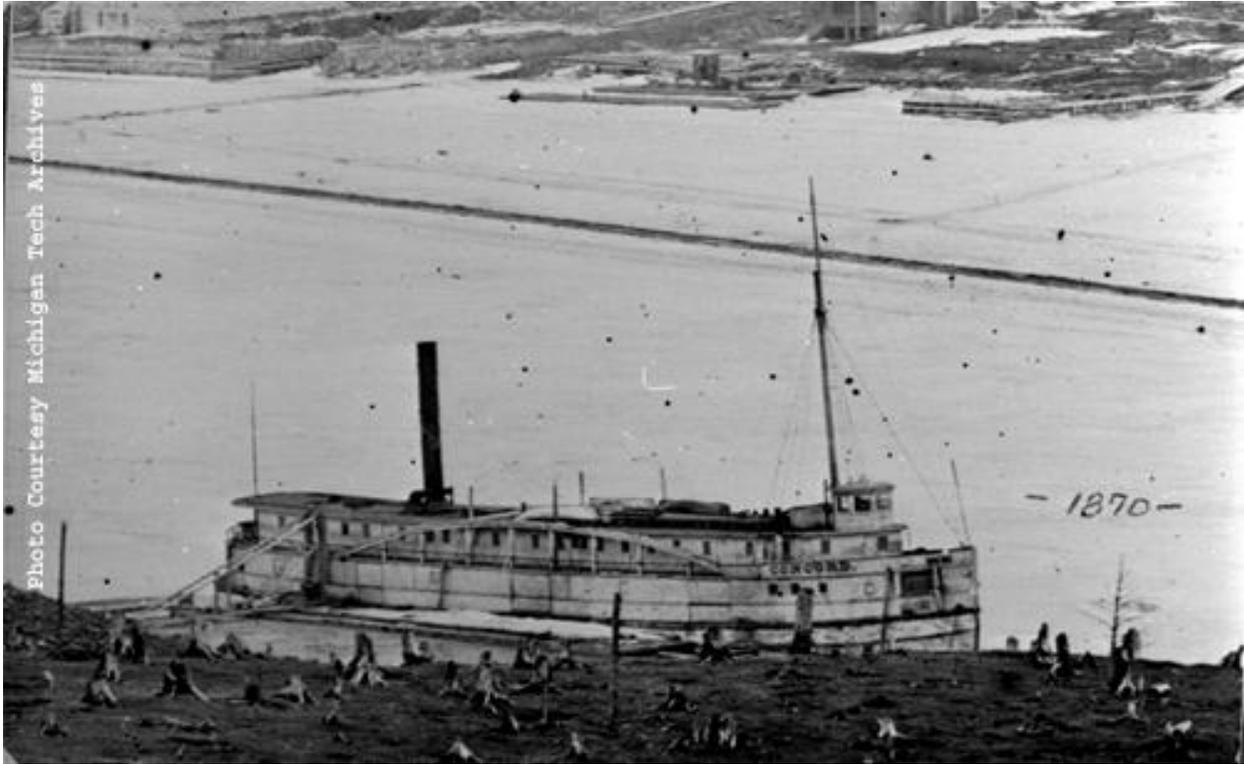


Figure 2- 9: Early Great Lakes shipping efforts by the Quincy Mining Company were handled by large sailing ships, later replaced by steam powered vessels (top) while early overland transport relied on draft animals hitched to wagons or sleighs (bottom) (source: Images are courtesy of Michigan Technological University Archives & Copper Country Historical Collections).

Hill's tracing is indicative of the company's mindset at this early stage of its development. It affords us an opportunity to view adjacent Hancock, an emerging community whose growth was influenced by early Quincy mining efforts and company philosophy regarding the services they wanted to provide for workers. The tracing shows the community developing as a grid of regularly spaced streets oriented north-south and east-west. This is consistent with community settlement patterns of the time, and a sharp contrast to the irregular spatial arrangement of structures that had occurred previously. While Hill's map does not offer great detail regarding buildings or small scale features in the landscape, it indicates that Quincy was establishing itself as a distinct entity, set apart from the community. It also reveals that the early road network and street names correspond to those still present and traveled in the landscape today. In fact, they are located at the core of the downtown Hancock community and extend up the hill to connect with present day U.S. 41.

It is curious that while Hill depicted the Pewabic shafts and abandoned workings in the area labeled Hancock, he did not illustrate the shafts established in the 1840s and 1850s on the Quincy lode. This suggests that Quincy had finished working that disappointing lode by the end of 1858, and was looking ahead to a more profitable future.

Shafts 5 and 6 on the Pewabic lode were sunk in the summer of 1859, and followed the January re-numbering of their existing shafts to Nos. 2, 3 and 4.¹⁰⁷ Multiple shafts, spaced regularly along the lode, provided miners with more places to descend into the underground workings and improved mine ventilation once shafts were connected through horizontal drifts. By this time, Quincy employed 257 men who worked to open the underground and subsequently remake the landscape.¹⁰⁸

As the labor force grew, so did Quincy's concern with housing. Between 1859 and 1861 the company constructed more than 100 wood frame houses.¹⁰⁹ Workers unable to rent a company-owned home could rent from boardinghouses, privately owned homes, or build a home on land leased from the company. Most boardinghouses were privately run in Hancock, but the company also managed a few.¹¹⁰ In addition to providing this additional housing, Quincy hired a doctor.

107 Quincy's numbering system for their shafts is confusing, as it changes based on the acquisition of other properties and their own numbering sequence of operations. See HAER maps for the various periods described, as well as Lankton, *Historic Resource Study*, 58; O'Connell, "Stamp Mills," 579; and Hyde, "Business History," 40.

108 Lankton, *Historic Resource Study*, 58.

109 *Ibid.*, 61. See also Hyde, "Business History," 44.

110 McNear, 515.

Although Quincy was concerned about improving the mine location and addressing the needs of their employees, acceptable conditions in 1859 were remarkably different than they are today. The thickly forested hillside was transformed into a coarse landscape; evidence of Quincy's past activity appeared as fields of stumps, abandoned exploration trenches and growing piles of waste rock.¹¹¹ Company buildings were tailored specifically to the function they served, with adornments and decoration often limited to the contrasting materials, colors and textures afforded by the stones and lumber used to construct them. The Keweenaw's remoteness and isolation continued to affect company operations and community life. Throughout the 1860s, mail was delivered to the region by dogsled in the winter and by boat during the shipping season.¹¹²



Figure 2- 11: Mr. Antoine LeDuc, a mail carrier between L'Anse and Houghton, pictured with his sleigh and three dogs about 1870 (source: courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

The Pewabic lode's discovery and the growing underground and surface operations coincided with another fortunate and significant event at the east end of the Upper Peninsula of Michigan. In June of 1855, the canal and locks around the St. Mary's Falls at Sault Ste. Marie opened. Shipping destinations across Lake Superior were now more easily connected to industry in the lower Great Lakes region and beyond to industries and markets on the east coast. Only a single shipping obstacle, the Portage River, remained between Houghton, Hancock and the rest of the world. Although wide, the Portage River was shallow and twisted like a serpent, and at the

111 Lankton, "Technological Change," 296.

112 Lankton and Hyde, *Old Reliable*, 42.

time, only two options existed to overcome this barrier: portage goods to another vessel in Portage Lake, or haul them by wagon to their final destination.¹¹³ To overcome this difficulty, Quincy and other mining companies in the district worked together to widen and dredge the river in 1859.¹¹⁴ The work advanced quickly, and by the following June the first large ship was able to dock at Hancock.¹¹⁵

By 1860, Quincy was devoting its full attention to the Pewabic lode on the northern end of their property and addressing the demands of a growing workforce.¹¹⁶ To help accommodate its 469 employees, the company began working toward the establishment of a company-operated farm, although its exact location and extent is unclear.¹¹⁷ Later drawings prepared by Quincy suggest that the farm had a presence north of Frenchtown.¹¹⁸ What is known about the company's farm is that, then as now, local conditions provided a challenge to farming agricultural crops: soils are often poor, the growing season is short, and the climate is cool. The company harvested hay, oats, timothy, onions, cabbages, squash, potatoes, and turnips.¹¹⁹ Other vegetables and fruit were grown in individual gardens.¹²⁰

The growth of Quincy's surface plant continued rapidly and by 1862, the work of the previous years was evident. Historian Larry Lankton offers a physical description of these conditions:

By 1862, a shaft house, 35 to 40 feet tall, stood over each of the six shafts and their timber-cribbed collars. Along the row of shaft houses Quincy had erected four sorting houses and three hoist houses, timber-framed buildings that stood on poor-rock foundations. On one side of each hoist-house a tall wrought iron chimney stood atop a masonry base, and on another stretched long rows of cordwood, taken in 1862 and thereafter, from Quincy's own woodlots.... A little east of these structures stood four kiln houses. The hoist and shaft-houses were connected by pulley stands that supported the hoisting chains; narrow gauge tramways interconnected all the shaft, sorting, and kiln houses; and a tramway running past all the sorting and kiln houses terminated at the drum house on the southwestern end of the mine which served the stamp-mill incline.

In addition to these major structures and facilities, by 1862 Quincy had its copper house for storing barrel and mass, a stone magazine for black powder, and a general-purpose warehouse. It had one change or dry house, two small blacksmith shops, plus a carpenter shop with a small steam engine for driving bench saws and a lathe. The road leading from the village of Hancock up to

113 Hyde, "Business History," 44.

114 Ibid.

115 Ibid. See also Lankton and Hyde, *Old Reliable*, 16-17.

116 Lankton, *Historic Resource Study*, 57-58.

117 The Quincy farm was established around 1859-1861. In "Business History," Hyde reports 1859 (see page 43). Lankton supports this in the *Historic Resource Study* (see page 65). However, based on references to actual expenditures on labor and supplies to support its development, McNear determines that the farm was not established until 1861.

118 See Quincy Farm drawing; Figure 2-43

119 Lankton, *Cradle to Grave*, 163.

120 McNear, 560.

Quincy Hill neatly divided the mine location into halves. Excepting the blacksmith and carpenter shops, all the technological mine structures stood on the east side of the road. On the west side stood the company office, a store, a barn and root-house, a forty-bed hospital, and numerous company-built houses.¹²¹



Figure 2-12: The earliest known photo of Quincy's shafthouses Nos. 2 - 4 on the Pewabic lode, circa 1875. (source: courtesy of Historic American Engineering Record, HAER MI-2-8)



Figure 2-13: An undated photo of blacksmiths standing outside their 1860 shop. (source: courtesy of Historic American Engineering Record, HAER MI-2-74)

¹²¹ Lankton, "Technological Change," 296-297. Quincy acquired surface rights to sections 15 and 22 in 1862. See also Hyde, "Business History," 49, and Lankton, "Technological Change," 346. Quincy built a hospital between 1862 and 1865, and some reports indicate that it had a 35 bed capacity. See also Lankton, *Cradle to Grave*, 182; Lankton and Hyde, *Old Reliable*, 36, and McNear, 542.

Narrow gauge rails transported mine products across the surface plant. Small cars were loaded and pushed to their destinations. Mass copper went directly to the new copper house. Small rock went directly to the stamp mill by way of the tramroad, while larger pieces were transported to nearby kiln-houses. There, crews of ten to twenty-five men were contracted to “burn and dress copper” in preparation for the mill.¹²²

The Quincy mine was finally paying off. 1862 marked the first year that the company returned dividends to investors.¹²³ As the company experienced financial success, it examined its operations and sought to improve living conditions for their workforce. The housing that had been constructed in the 1850s provided basic shelter, but it was relegated to land distant from valuable, workable ground; workers often preferred to live near the mine. Initially this resulted in homes scattered in an irregular manner across the steep hillside south of the mine, and situated among the stumps, rock piles and earlier attempts at prospecting for copper.¹²⁴ A report from 1862 indicates that the company also owned one large boardinghouse and ninety-five wood-framed two story tenement houses at this time.¹²⁵ Although their exact locations are unknown, irregular development patterns shown on later maps suggest that these homes may have been located near the top of the hill along the county road, and in a field to the west.¹²⁶

Workers also continued to lease lots from the company and build their own homes. It is likely that forty-one such structures were constructed in “Shantytown,” a small enclave of located on the Hill about halfway between the mine and Hancock.¹²⁷ In addition to leasing land to workers, Quincy donated land to the Congregational Church in 1862 for construction of a church in Hancock.¹²⁸ This practice continued in later years, as the company generally “encouraged the erection of churches.”¹²⁹



Figure 2-14: View of Hancock and Quincy Hill ca. 1870 (source: Koepel Collection, Keweenaw National Historical Park Archives)

122 Lankton, “Technological Change,” 294-295.

123 Lankton, Historic Resource Study, 56.

124 Lankton, Historic Resource Study, 61. See also Lankton and Hyde, *Old Reliable*, 35.

125 McNear, 518.

126 *Ibid.*

127 *Ibid.*, 515. See also Lankton and Hyde, *Old Reliable*, 35.

128 McNear, 568. See also Lankton and Hyde, *Old Reliable*, 37.

129 Lankton and Hyde, *Old Reliable*, 37.

As Quincy's need for worker housing increased, the location of company-built homes gained heightened consideration. Housing locations constructed before the early 1860s lacked order in their spatial arrangement, but this began to change as Quincy gained a more complete understanding of its resources and entrenched itself in the development of a surface plant on the Pewabic lode. After this, company housing locations were developed in a more organized manner that more closely resembles the neighborhoods seen today.

Quincy also thought about how to provide food to its workforce. Beginning in 1862, the company leased its farm to O.K. Patterson & Co., the teamsters at the mine. The teamsters cleared 250 acres of land, and used most of the harvested feed for their animals.¹³³ The following year, the company built a store along the county road near the mine office to sell goods at or near wholesale. This was to provide workers with fair-priced goods and prevent local merchants from profiteering.¹³⁴ The store did not last long in company hands, and was sold in 1866 to Seth North.¹³⁵

In the early 1860s, local mine companies again worked together in order to ensure an open shipping route. They established the Portage Lake and River Improvement Company in 1863. This company was responsible for making improvements to the channel and collecting tolls to pay for its maintenance. Within two years, Quincy held nearly 20 percent of the total stock value.¹³⁶ Quincy also purchased two wooden scows in 1863 to haul waste material to unspecified dumping sites in Portage Lake; Quincy paid the Portage Lake Towing Company through the 1863 navigation season for a "towing, dredging and dumping scow."¹³⁷

The 1860s presented another challenge: Quincy felt the impact of the Civil War as demand for copper increased and prices rose. Yet these conditions, which normally produce greater profits, had an unexpected effect on Keweenaw copper mines. High copper prices encouraged new mine ventures needing skilled workers. This, coupled with voluntary enlistments and the draft, resulted in a serious labor shortage of experienced miners in the district.¹³⁸

Another consequence of the Civil War was the government-funded construction of a military road connecting Fort Howard (near Green Bay) to Fort Wilkins (at Copper Harbor) in 1863. The road was originally intended to support the defense of the Keweenaw's copper mines, but by the time it was completed in 1869, its greatest value proved to be the improvement of overland transportation between rural communities. The meandering route of the road was directly influenced by Samuel Hill, Quincy's agent, and a team of his business partners who were seeking mineral rich lands.¹³⁹

133 McNear, 560.

134 Ibid., 522. See also Lankton, *Cradle to Grave*, 165.

135 McNear, 553. See also Lankton and Hyde, *Old Reliable*, 36.

136 Lankton and Hyde, *Old Reliable*, 16-17.

137 O'Connell, "Stamp Mills," 599.

138 Hyde, "Business History," 46. See also Lankton and Hyde, *Old Reliable*, 17.

139 "Military Road in Keweenaw Can Still Be Found in Places," *Daily Mining Gazette*, 16 January 1960.

Despite the challenges the war presented, Quincy continued to build houses and develop neighborhoods west of their surface plant. These locations included garden plots that workers could rent for a few dollars per year, which were meant to increase their appeal to families seeking a good situation in a competitive labor market.¹⁴⁰ In 1864, Hardscrabble and Limerick locations were constructed along the northern boundary of Section 26, just west of the county road. They featured wood frame T-plan homes on poor rock foundations with more than thirty dwellings per neighborhood. The Swedetown neighborhood consisted of at least thirty-seven log homes, and was located considerably further west. Built for Scandinavian immigrants recruited to work at Quincy, the location quickly proved to be a failure and was abandoned in the 1870s.¹⁴¹

Quincy initiated several other projects in 1864 that went beyond the construction of worker housing that shaped the landscape. It built a twenty-six foot diameter sand wheel at the stamp mill to assist with removing waste products.¹⁴² It began building a small two-story wooden office building, west of the county road, to replace their first mine office structure, whose location is unknown.¹⁴³ The company also established a volunteer militia of about 150 men to enforce order and then erected a drill hall on Quincy Hill.¹⁴⁴ It closed shaft No. 6, which had proved to be a disappointment, and began to use its hoisting engine to saw wood and grind grain.¹⁴⁵ Company records also indicate expenditures on the hospital and two boardinghouses.¹⁴⁶

Perhaps Quincy's most ambitious undertaking in 1864 related to its persistent exploration of the south end of their property. Initially, workers drove some exploratory shafts before opening an adit on the hillside near the tramroad, approximately halfway between the mill and the mine.¹⁵² By driving the adit into the hillside in a northwest direction, Quincy could explore several

140 Lankton, *Historic Resource Study*, 65.

141 McNear, 519. See also Lankton and Hyde, *Old Reliable*, 17; and Lankton, *Historic Resource Study*, 69. Among possible reasons for Swedetown's failure are its distance from the mine, isolation from other communities, and old fashioned or substandard log housing.

142 O'Connell, "Stamp Mills," 586.

143 McNear, 557.

144 Lankton, *Historic Resource Study*, 69. See also Lankton, *Beyond the Boundaries: Life and Landscape at the Lake Superior Copper Mines, 1840-1875* (Oxford University Press, 1999), 187; and Lankton and Hyde, *Old Reliable*, 41-42.

145 Hyde, "Business History," 80.

146 *Ibid.*, 53-54. See also Lankton, "Technological Change," 306.

152 Lankton, "Technological Change," 308. An adit is a horizontal opening driven from the surface into a mine, as through a hillside.

copper veins as they drifted through them.¹⁵³ Any lodes worth mining would be revealed by this exploration, and copper could be more easily recovered. However, more than 1,100 feet and four years later the company still had not reached the Pewabic lode or any other deposit that proved workable from the south end.¹⁵⁴



Figure 2- 15: An undated early photograph of Hardscrabble company housing and landscape. Note the fences separating agricultural use areas from other company owned land. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

Next page

Figure 2- 16: Quincy Unit, 1856-1865 Period of Change Plan

153 Ibid., 307.

154 Hyde, "Business History," 54. See also Lankton and Hyde, *Old Reliable*, 22.

Legend

- Existing Quincy Unit Boundary
- Quincy Surface Mine Operations (1856-1865)
- Quincy Mining Company Ownership (1856-1865)
- Pewabic Mining Company Ownership (1856-1865)
- Approximate Location of Pewabic Tram Road
- Approximate Location of Quincy Tram Road
- Quincy Lode
- Pewabic Lode
- QMC Mine Shaft
- Pewabic Mining Co. Mine Shaft
- Section Numbers
- Road/Path
- Portage Lake Shoreline
- Platted QMC Housing Location
- Existing QMC Housing Location
- Pewabic Mining Company Housing Location
- Mine housing not affiliated with planned company housing location
- QMC Management Area

Sources

S.W. Hill, "Geological Diagram of the Quincy and Hancock Locations," November 1859.
 "Map of Quincy Mine and Vicinity, Houghton County Michigan," date unknown (ca. early 1900s). (shows ownership parcels)
 Eric. M. Hanson, "Quincy Mining Company Surface Map: 1865," HAER Heritage, Conservation and Recreation Service, 1978.
 "Plan of the Underground Workings of Quincy Mine and a Portion of Surface Detail," date unknown ca. 1900-1907.

Note

When overlaying the existing conditions over the HAER historic maps, the city of Hancock does not align with other areas in the Quincy Unit. Adjustments were made to correct this difference. The period of change maps are for analysis purposes only.

Chronology

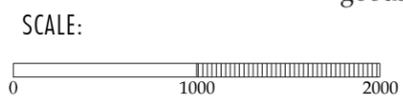
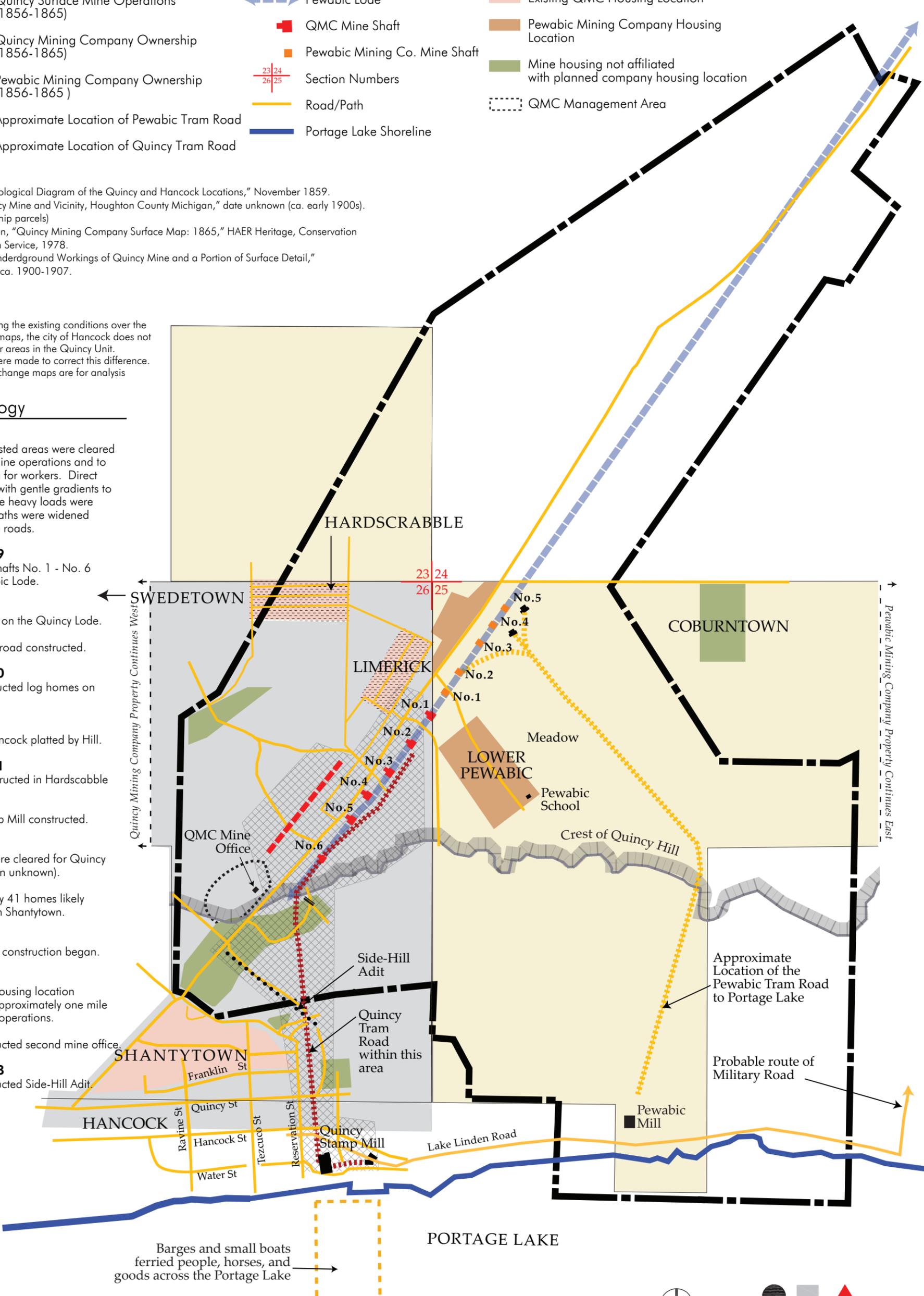
- 1856**
By 1856 forested areas were cleared to facilitate mine operations and to build housing for workers. Direct travel routes with gentle gradients to accommodate heavy loads were developed. Paths were widened and became roads.
- 1856-1859**
QMC sunk shafts No. 1 - No. 6 on the Pewabic Lode.
- 1858**
Work ceased on the Quincy Lode.

Quincy Tramroad constructed.
- 1858-1860**
QMC constructed log homes on Quincy Hill.
- 1859**
Village of Hancock platted by Hill.
- 1859-1861**
Houses constructed in Hardscrabble and Limerick.

Quincy Stamp Mill constructed.
- 1862**
250 acres were cleared for Quincy Farm (location unknown).

Approximately 41 homes likely constructed in Shantytown.
- 1863**
Military Road construction began.
- 1864**
Swedetown housing location established approximately one mile west of mine operations.

QMC constructed second mine office.
- 1864-1868**
QMC constructed Side-Hill Adit.



QUINCY UNIT, 1856-1865 PERIOD OF CHANGE PLAN

The company's mine had increased greatly in depth by 1866. To transport miners quickly up and down a mine shaft, and to conserve their energy for mining, Quincy installed a man engine. This device, essentially two reciprocating ladders side by side, allowed men to step back and forth between platforms to go up or down. It required its own shaft between No. 3 and No. 4 and was expensive to implement, but over time it resulted in labor savings for the company.¹⁵⁵

Quincy had learned a lot about the deposits they were working, and began to realize some disappointment with the mine. By then it was clear that the adit was unlikely to discover any workable copper deposits of consequence, and so this effort was slowed.¹⁵⁶ Like No. 6, shafts 5 and 7 appeared to be of limited value, and they were closed by 1867.¹⁵⁷ Production at shaft No. 1 also ceased around the same time. By the late 1860s, only shafts 2, 3 and 4 were working.

The slowdown allowed Quincy to turn its attention to social concerns. Public education was becoming an issue, and was first addressed in 1867 when the Quincy Township school district was created. Although schools were legally a community's responsibility, Quincy was the principal taxpayer in the township and its workers comprised the majority of the population; the company assumed the responsibility to provide an education to its workers' children by default.¹⁵⁸ It chose a site west of the county road and constructed a wood frame school large enough to accommodate 150 students, and then rented it to the school district.¹⁵⁹

Physical improvements to the surface plant also continued in 1867, which was the same year Quincy resumed paying dividends to shareholders following the Civil War.¹⁶⁰ The company initiated construction of a new hoist house, engine and boilers for shaft No. 2.¹⁶¹ Down at the mill, the problem of sand disposal in Portage Lake continued; the company built a bulkhead "to prevent our waste sand from the stamp mill from encroaching on our neighbors."¹⁶² Despite its construction, and multiple extensions afterwards, the problem remained.¹⁶³ In 1868, the company focused on reconstructing the tram road and installing improved washing machinery at the mill.¹⁶⁴

155 Ibid., 53-54. See also Lankton and Hyde, *Old Reliable*, 22; and Lankton, "Technological Change," 293.

156 Ibid., 55.

157 Lankton, "Technological Change," 306.

158 Lankton, *Cradle to Grave*, 169. See also McNear, 547.

159 Lankton and Hyde, *Old Reliable*, 37. See also Lankton, *Cradle to Grave*, 169; and McNear, 547.

160 Lankton, *Historic Resource Study*, 56

161 Lankton, "Technological Change," 293.

162 O'Connell, "Stamp Mills," 599.

163 Ibid.

164 Hyde, "Business History," 53-54;138.

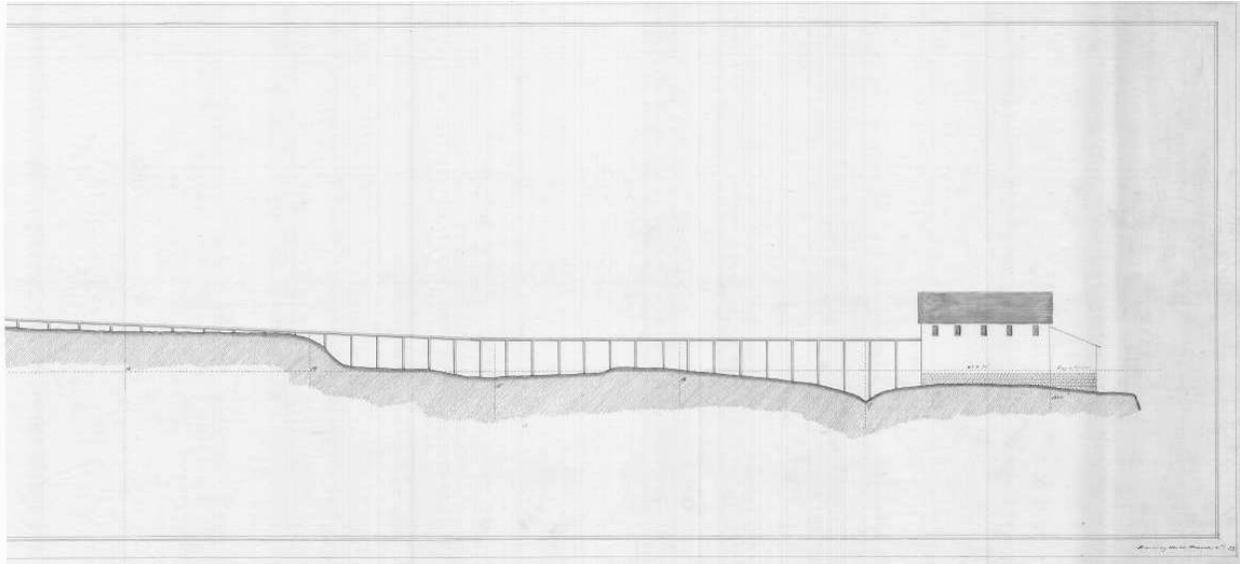


Figure 2-17: Partial drawing (QD-2596, 1 of 3) produced by Phillip Scheuermann, Quincy Mining Company engineer, in 1872 to illustrate the new tramroad and proposed rockhouse with engine house shed addition. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections).

Construction efforts in 1869 consisted of ten frame houses in Hancock built for stamp mill employees.¹⁶⁵ This development followed an April fire disaster in Hancock that devastated the community, whose population had grown to 2,000. The fire originated in the northwest corner of town, near Quincy and Ravine streets, and moved quickly. Within six hours, it had consumed 150 buildings and left more than 200 families without homes.¹⁶⁶ The impacts were felt by all who relied upon the goods, services and diversions that the commercial and cultural center offered.¹⁶⁷ Rebuilding efforts included a new telegraph system in the copper district, with the Quincy mine featured as one of the twelve office locations.¹⁶⁸



Figure 2-18: Informal housing clusters, view north from Portage Lake toward Quincy Hill, ca. 1869-1870 (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-140).

¹⁶⁵ Lankton and Hyde, *Old Reliable*, 35.

¹⁶⁶ *Ibid.*, 45.

¹⁶⁷ *Ibid.*

¹⁶⁸ *Ibid.*, 44.



Figure 2-19: Early conditions on the hillside between Hancock and the mine location, circa 1870
(source: Photo courtesy of Historic American Engineering Record, HAER MI-2-140).

A major shift in rock breaking methods was initiated when Quincy began moving toward the use of air powered drills. Using air drills meant the company needed to erect a steam powered air compressor, pump water from abandoned shafts to cisterns, and install air pipes down shafts and throughout the mine.¹⁶⁹ The Burleigh Rock Drill Company introduced their drills to several mines in the Keweenaw in 1868, and made several available for testing.¹⁷⁰ Quincy purchased seven, and put them to use in October of 1872. The investment was large and so was the disappointment: despite high interest in the machines, and the promise of increased production, the new technology did not meet the expectations of miners or managers. They were rejected by late 1873; hand drilling would remain the norm until the drills could be improved.¹⁷¹ Quincy's willingness to experiment with the drills shows the company's early, and continued, interest in new technology.

The company also decided to change the way it reduced rocks before sending them to the stamp mill. Despite closing shaft No. 3 in 1872, they decided to build a large rockhouse to break rocks mechanically. This eliminated a bottleneck in production and, ultimately, kilnhouses.¹⁷² Construction began on the three story heavy-timbered structure in 1872, which included an engine to power an endless rope tramroad extending to the shafthouses. The rockhouse was completed by 1873, and represented the company's largest investment in combined structure and machinery improvements.¹⁷³ Mine products from Quincy's two remaining operational shafts, 2 and 4, could now be loaded into cars at the shafts and moved across rails to a trestle,

169 Lankton, "Technological Change," 319, 346. Hyde discusses the need for additional cordwood to fire boilers and run steam engines as a result of air drilling. The increased need for fuel likely resulted in increased clear-cutting. See "Business History," 136.

170 Lankton, *Cradle to Grave*, 81. See also Lankton and Hyde, *Old Reliable*, 59.

171 Lankton, *Cradle to Grave*, 81-82.

172 Lankton, "Technological Change," 309, 330. See also Hyde, "Business History," 112.

173 *Ibid.*, 330.

where they entered the top of the rockhouse.¹⁷⁴ The arrival of the rockhouse spelled the end of the kilnhouse at Quincy.

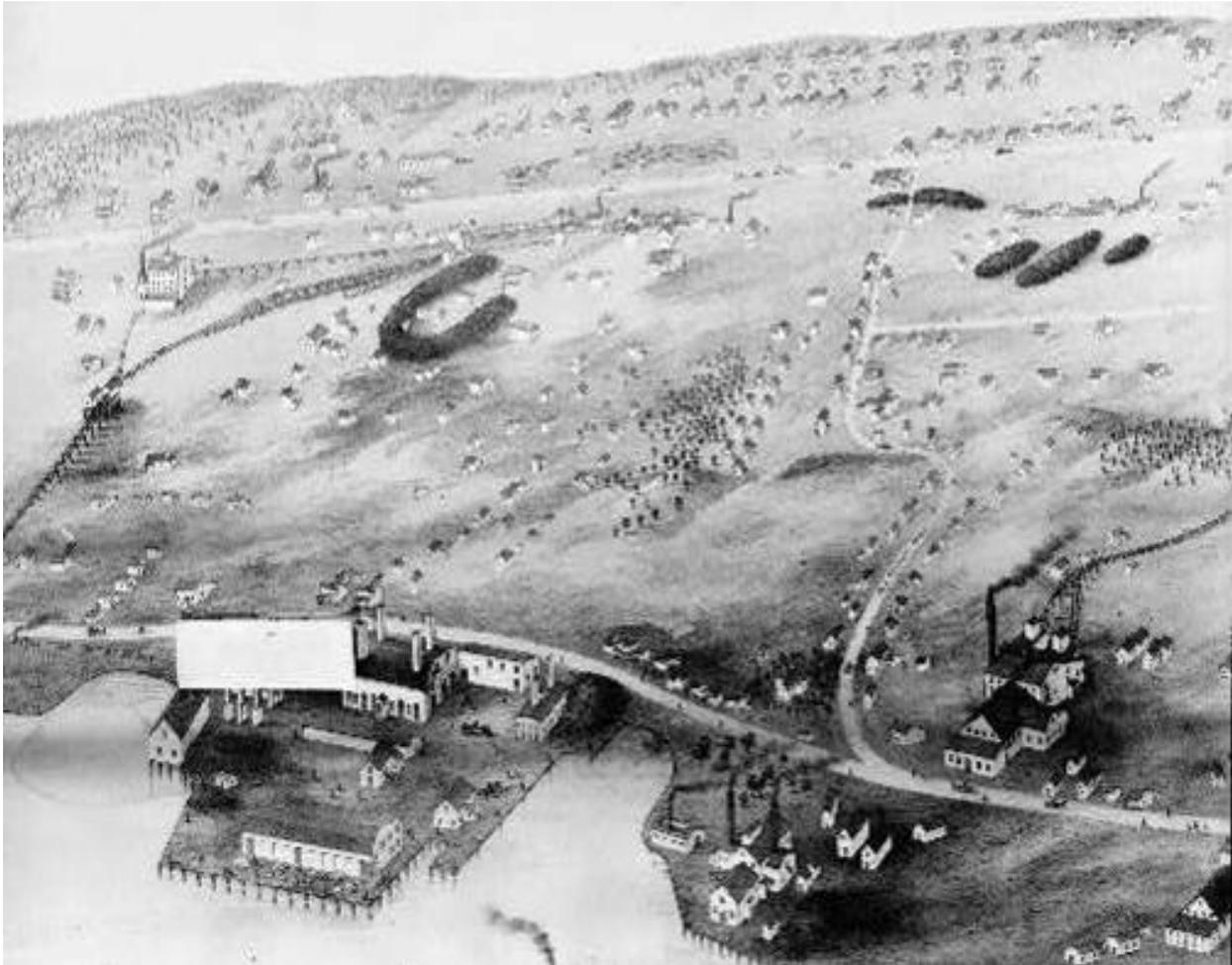


Figure 2- 20: Detail of an 1873 “Birds Eye View of Ripley, Quincy, Pewabic and Franklin” as drawn and published by A.J. Cleveland. Image shows Quincy’s tramroad, rockhouse, shaft and engine houses, roads and worker housing (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-3)

Quincy slowly but steadily implemented additional changes and improvements after the drill and rockhouse trials were completed. Fully engaged in working the Pewabic lode, these developments focused mainly on social infrastructure. The company built a two-story wood frame dispensary west of the physician’s house.¹⁷⁵ Hancock had rebuilt and expanded after the fire, providing greater housing opportunities; Quincy needed to build only nineteen additional houses between 1875 and 1876.¹⁷⁶ These included six double houses in the log home settlement

¹⁷⁴ Lankton, *Cradle to Grave*, 50. See also Lankton, “Technological Change,” 309.

¹⁷⁵ McNear, 542. McNear dates operation of the dispensary from 1874. Lankton and Hyde suggest that it was constructed “sometime around 1870.” See *Old Reliable*, 36.

¹⁷⁶ McNear, 522.

of Frenchtown, located a quarter mile west of the county road.¹⁷⁷ At nearly the same time, Quincy expanded the schoolhouse to ninety-six by twenty-six feet; by 1877 it could house 300 students.¹⁷⁸

The 1874 Michigan census provides a snapshot of Houghton County's character; the number of occupations and total population are indicative of a landscape growing in complexity. The miners, engineers and mill workers that one expects in a mining community were joined by farmers, hunters, and woodchoppers, along with a few loggers and trappers. Civil order was maintained by officers of the law, lawyers, justices of the peace and a judge. Doctors and dentists looked after the physical well being of residents, while teachers and clergymen fostered intellectual and spiritual development. There were also hotel and saloon keepers, boardinghouse operators and "80 men who worked in water or land transportation."¹⁷⁹ As a county center, Houghton was establishing itself as a viable community, albeit one based primarily on a single extractive industry. Quincy Hill, at the center of that industry, was also at the heart of change. The heavily wooded hillside of just barely 25 years before had been irrevocably altered.

Other improvements adopted by Quincy during the 1870s were principally technology-related. Nonetheless, they resulted in alterations to the landscape. The No. 4 shaft was completely re-worked and received a new shafthouse eleven feet further south with a new engine, boiler, smokestack, and cistern.¹⁸⁰ This project was followed by expanding the stamp mill to the east for equipment upgrades in 1877.¹⁸¹ Telephone lines were in use by 1879 at many of Quincy's key facilities: the dock, mill, mine office, store and supply office were all connected, and one line ran down the No. 4 shaft.¹⁸² While each of these projects may be considered minor on an individual level, they had a cumulative effect on the physical environment.

Experiments with air drills and dynamite began again between 1878 and the early 1880s.¹⁸³ Quincy first tested the "Little Giant" air drill manufactured by the Rand Drill Company in 1879 and, unlike the Burleigh, it proved to be successful in the years that followed.¹⁸⁴ The drills gave miners the ability to drill holes faster and deeper, while the dynamite blasted more rock per charge than black powder.¹⁸⁵ Together, these changes increased production dramatically. The increased quantity of rock coming out of the mine meant more copper was being processed and, ultimately, more profits for Quincy. However, as the tonnage of ore increased, so did the amount of waste product that the company needed to handle, stockpile and remove.¹⁸⁶ These promising developments were temporarily obscured in smoke when the rockhouse burned to

177 *Ibid.*, 523. See also Lankton and Hyde, *Old Reliable*, 80. The term "double house" is a local variant of "duplex."

178 McNear, 548.

179 Lankton and Hyde, *Old Reliable*, 38.

180 In "Business History," Hyde notes the new shafthouse appearing in 1875 (see page 113). In "Technological Change," Lankton indicates that it was 1877 (see page 341).

181 Hyde, "Business History," 117. See also O'Connell, "Stamp Mills," 588.

182 Lankton, "Technological Change," 339.

183 Lankton, *Cradle to Grave*, 96, 31. Refer also to Lankton, "Technological Change," 323.

184 Lankton, *Cradle to Grave*, 86. See also Lankton and Hyde, *Old Reliable*, 59.

185 Lankton, *Cradle to Grave*, 96.

186 Hyde, "Business History," 132, 114.

the ground on December 31, 1879.¹⁸⁷ It was rebuilt the following year at the same location, and was back in operation by March 10.¹⁸⁸



Figure 2- 21: A photo of the southeast elevation of the Quincy Rockhouse - likely the 1880 version rebuilt after fire. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-68).

By the 1880s, Quincy had a well established, profitable mine and the company had reasons to be optimistic about its future. It was producing twenty percent of the world's copper supply and annual production was increasing.¹⁸⁹ New air drills and an improved facility for crushing and processing copper rock promised even greater output. The surface plant was modified to streamline production and included the installation of 16 additional stamps to the mill in 1880 to handle additional mine output.¹⁹⁰

The implementation of Rand rock drills was followed by the installation of a Rand compressor in a new stone building north of No. 4 shaft.¹⁹¹ Its construction demonstrated the increasing shift toward stone buildings for important industrial functions. Once operational, the facility allowed Quincy to operate fifteen drills instead of seven.¹⁹² A corresponding improvement was addition of a pumphouse near Portage Lake in 1881. The pumphouse moved water from the lake nearly a mile uphill for the boilers and machinery at the surface plant.¹⁹³ That same year, Quincy rebuilt the No. 2 shafthouse.¹⁹⁴

187 Lankton, "Technological Change," 335.

188 Ibid.

189 Lankton, *Cradle to Grave*, 71.

190 Hyde, "Business History," 138.

191 Lankton, "Technological Change," 322.

192 Lankton and Hyde, *Old Reliable*, 59.

193 Ibid., 76. See also Lankton, "Technological Change," 346.

194 Lankton, "Technological Change," 341.

The company's success in the early 1880s, and arguably its corporate philosophy, is reflected in the construction of a grand Italianate residence for the mine superintendent. Work on the residence began in 1880 and was completed two years later. The prominent home was built west of the county road at the south end of the mine, where it was a focal point on the Hill and offered occupants dramatic views extending to the Huron Mountains. It also offered a dramatic example of the company's priorities: Quincy spent a few hundred dollars to construct a typical worker's house, but they invested approximately \$25,000 in the superintendent's home.¹⁹⁵



Figure 2- 22: Superintendent's house and landscape in winter, ca.1885 (source: Koepel Collection, Keweenaw National Historical Park Archives)

The need for additional hoisting power on the surface increased as shaft No. 2 extended deeper into the earth. To address this, in 1882, Quincy built a new stone engine house east of the No. 2 shaft and converted the former hoist house into a machine shop.¹⁹⁶ It added a stone central boiler building east of the No. 4 shaft to service the surface plant. This facility housed tubular boilers and related infrastructure. Steam pipes in stone trenches connected the facility to No. 2 and No. 4 hoists and other mine operations.¹⁹⁷

The company also made transportation improvements in 1882 when it "reduced grades on a wagon road running from Reservation Street in Hancock up to the mine in order to reduce their freight charges."¹⁹⁸ This reference to a wagon road reminds us how a common term can take on new meaning over time, as roads of this era were far less improved than even the most

¹⁹⁵ McNear, 522, states it was completed in 1882. Lankton (*Cradle to Grave*, 152) argues 1881.

¹⁹⁶ Lankton, "Technological Change," 342.

¹⁹⁷ *Ibid.*, 346.

¹⁹⁸ Hyde, "Business History," 134.

marginal gravel roads in use today, and often contained stumps, boulders and other irregularities topped with poor surfacing. The wagon road also presents an opportunity to take a closer look at how development on top of Quincy Hill fit into a broader contemporary picture of the Upper Peninsula's mining landscape.

An article published in an 1882 edition of *Harper's New Monthly Magazine* described both the iron and copper ranges. It simultaneously applauded the industrial achievements being made and enthused over the rugged north woods, cold lakes, and other natural features: "Were it not for the mineral wealth it would remain permanently a wilderness," the author opined, adding that the land was "generally valueless from the farmer's point of view." Hinting at what Quincy Hill must have looked like years earlier, he observed the vast maple forests south of Portage Lake: "Until some discoveries of copper are made in it, it will probably remain one of the finest bodies of woodland in the country."¹⁹⁹ The author observed the civilized character of both miners and managers north in Calumet; true or not, his comments indicate that this area was seen as a place where civilization - industry - and wilderness co-existed.

A railroad connection between Houghton and Marquette, with connections to Chicago, was finally established in 1883.²⁰⁰ To Quincy and the Keweenaw's other mining companies, this meant that freight transport could be extended into winter months, beyond the shipping schedule dictated by the Great Lakes. The first railroad bridge across the Portage Lake was built in the mid 1880s, and railroad service to the Keweenaw began to expand.²⁰¹

The railroad allowed Quincy to consider switching to coal as its primary fuel source. As they evaluated this option, concerns about their existing transportation network grew. Despite the recent improvements to the wagon road between the dock and the mine, the costs and transportation methods associated with hauling coal and freight were a concern. Quincy measured three main alternatives through 1884 and 1885: extending the existing tram road to the dock; constructing a new tram road from the mine to the dock; or connecting the dock to the mine via a railroad. The company chose the last alternative, and the Mineral Range Railroad constructed a branch line to the mine's boiler house in the summer of 1886.²⁰²

Even so, the shift to coal did not occur overnight. Quincy had relied on woodlots for more than twenty years, and it held significant timber resources.²⁰³ Fuel was needed to power large industrial machinery including hoists, pumps, the man-engine, rockhouse crushers, the stamp mill, air compressors and assorted tools and equipment, and consequently it was a major expense for Quincy.²⁰⁴ Only after the railroad line to the central boiler house was constructed, allowing ready delivery to the mine site, could it begin the shift in resource use to avoid serious fuel shortages.²⁰⁵ This new line went into operation just before Quincy constructed a new stone

199 F. Johnson, Jr., "The Upper Peninsula of Michigan," in *Harper's New Monthly Magazine*, 64 no. 384 (May 1882): 892-893.

200 Lankton and Hyde, *Old Reliable*, 44.

201 Lankton, *Cradle to Grave*, 53.

202 Hyde, "Business History," 134.

203 Lankton, "Technological Change," 347.

204 Hyde, "Business History," 136.

205 *Ibid.*, 137

hoist house east of No. 4 in 1885-86, and about the same time it recognized the challenges presented by their mill site.²⁰⁶

In the mid 1880s, the Portage Lake stamp mill was working near its capacity at a point when the company was capable of doubling or even tripling its output.²⁰⁷ Its gravity stamps were outdated, the site offered no room to expand, and the rapidly growing accumulation of waste sands in Portage Lake presented a significant problem for the company due to the passage of the Federal River and Harbor Act of 1886.²⁰⁸ This act established harbor lines that restricted the disposal of waste sands at its Portage Lake stamp mill location, and forced Quincy to seek a new mill site.²⁰⁹ The company selected a site encompassing more than 300 acres on Torch Lake that offered the desired room for growth, access to shipping, and a deep lake for waste disposal. It purchased the site in 1887, and began building the new mill one year later.²¹⁰ This triggered a tremendous effort to rebuild the surface plant to meet changing operational needs.

The mill was located six miles from the mine. Dissatisfied with the freight rates that had been offered in negotiations with area railroads, Quincy decided to construct their own railroad between the mine and the mill.²¹¹ This decision also required the construction of a large modern coal handling facility at the Torch Lake mill site, and resolved earlier concerns about transportation problems from the existing Portage Lake dock.²¹² This shift toward milling at a distant site speaks not only to requirements imposed on Quincy, but also to the consumptive nature of the industry and the company's sense of entitlement to the land and its resources. The balance of economic costs and benefits became the single deciding factor of landscape change. Without requirements for public input or discussion of social or environmental impacts, the company presumed that any changes it could afford were satisfactory.

As Quincy began making plans to develop the Torch Lake mill site, it was sidetracked by another natural disaster: their second rockhouse was lost to fire when lightning struck on June 7, 1887.²¹³ Quincy's response was to construct "a third rockhouse, different in appearance than the first two, several hundred feet closer to shafts No. 2 and 4."²¹⁴ Additionally, Quincy decided to rebuild its tramroad in 1887; the new stamp mill and railroad were not yet complete, and repairs were necessary to sustain operations.²¹⁵

206 Lankton, "Technological Change," 344.

207 Hyde, "Business History," 138.

208 Ibid., 139.

209 Hyde, "Business History," 139. See also O'Connell, "Stamp Mills," 603.

210 Ibid.

211 Ibid. See also Lankton and Hyde, *Old Reliable*, 77.

212 Ibid.

213 Lankton, "Technological Change," 335

214 Ibid.

215 Hyde, "Business History," 134.



Figure 2- 23: A photo, ca. 1887-1890, of Quincy's No. 4 Rockhouse and tramroad with the No. 4 shafthouse in the background. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-71).

Next Page:

Figure 2- 24: Quincy Unit, 1866-1887 Period of Change Plan

Legend

- Existing Quincy Unit Boundary
- ▨ Quincy Mine Surface Operations (1866-1887)
- Quincy Mining Company Ownership (1866-1887)
- Pewabic Mining Company Ownership (1866-1887)
- ⋯ Approximate Location of Pewabic Tram Road
- ⋯ Approximate Former Location of Quincy Tram Road
- ⋯ Approximate Location of Franklin Tram Road
- ← Pewabic Lode
- QMC Mine Shaft
- QMC Mine Shaft (inactive this period)
- Pewabic Mine Shaft (activity level unknown this period)
- Road
- ⋯ Railroad
- ⋯ Adit
- Portage Lake Shoreline
- ▨ Platted QMC Housing Location
- Existing QMC Housing Location
- Pewabic Mining Company Housing Location
- Housing not affiliated with a planned company housing location
- ▨ Stamp Mill Sand Deposits
- Section Numbers

Sources

"Map of Quincy Mine and Vicinity, Houghton County Michigan," date unknown (ca. early 1900s). (shows ownership parcels)
 Eric. M. Hanson, "Quincy Mining Company Surface Map: 1892," HAER Heritage, Conservation and Recreation Service, 1978.
 "Plan of the Underground Workings of Quincy Mine and a Portion of Surface Detail," date unknown ca. 1900-1907.
 Birds-eye Aerials: "Hancock Mich., 1881" and "Hancock Mich, 1890 (provided conjectural information in relation to period roads and housing locations).
 Dr. Patrick Martin and Gianfranco Archimede, "The Quincy Mining Company Smelting Works, 1898 Historical Land Use Survey Project," MTU, 2002.

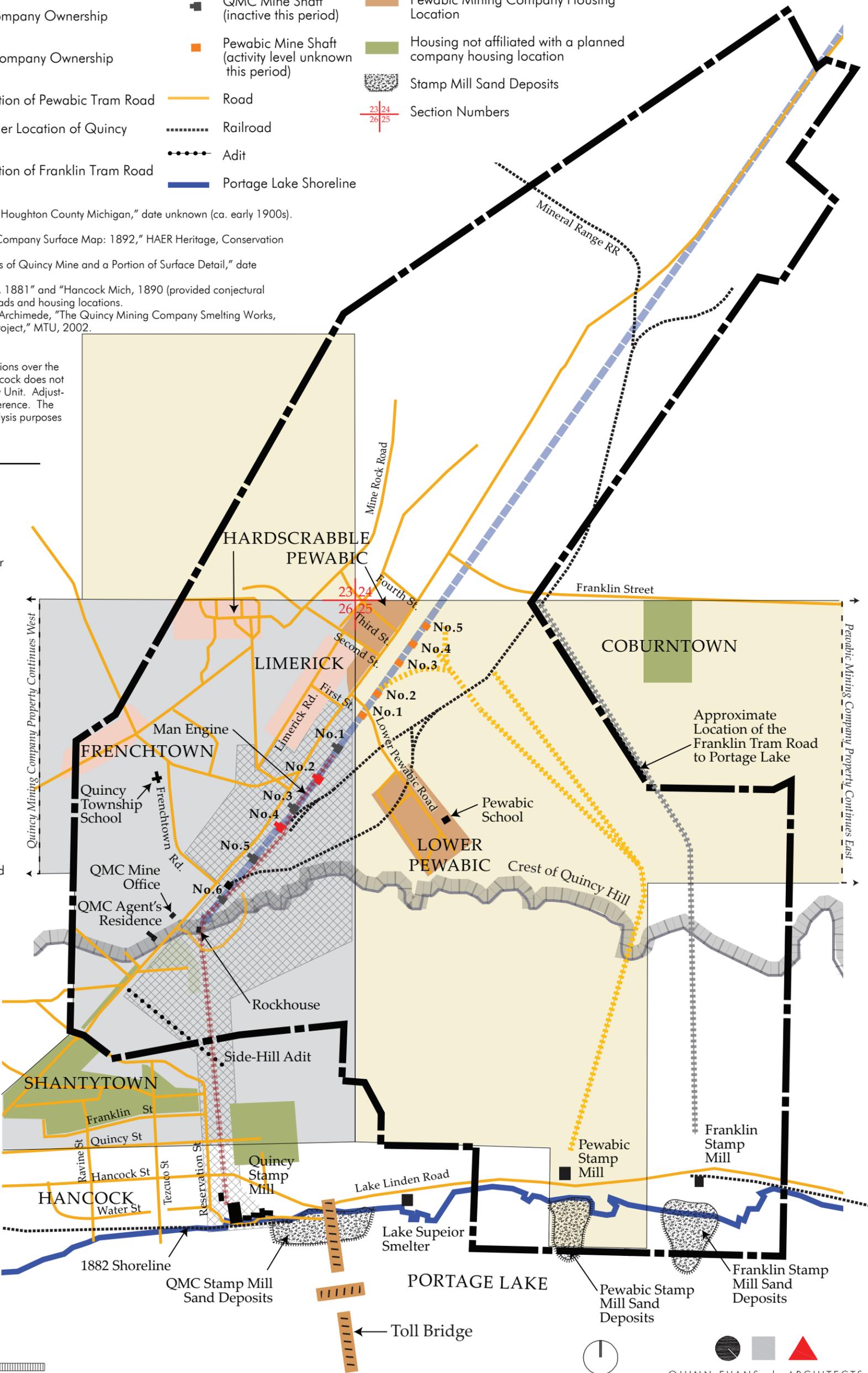
Note

When overlaying the existing conditions over the HAER historic maps, the city of Hancock does not align with other areas in the Quincy Unit. Adjustments were made to reflect this difference. The period of change maps are for analysis purposes only.

Chronology

- 1866**
QMC constructed man engine.
- 1867**
QMC constructed Quincy Township School (with addition in 1875-76), new No. 2 hoist house, engine house, and boiler house.
- 1868**
Quincy Tramroad re-constructed.
- 1869**
Fire in Hancock, destroyed 150 buildings. Quincy built 10 new houses.
- 1870**
Swedetown abandoned
- 1872-1873**
QMC constructed rockhouse No. 1.
- 1874**
QMC constructed dispensary
- 1875-1876**
QMC constructed six double house dwellings in Frenchtown. Wooden, two lane toll bridge with a swing center section was constructed over Portage Lake, linking the cities of Hancock and Houghton.
- 1877**
QMC expanded schoolhouse and Stamp Mill; No. 4 shafthouse was rebuilt.
- 1879**
Telephone lines appeared.
- 1880**
QMC rebuilt rockhouse No. 2.
- 1880s**
Railroad bridge constructed.
- 1880-1881**
QMC Agent's residence was constructed.
- 1881**
Pumphouse was constructed at Quincy Stamp Mill site and No. 2 shafthouse was rebuilt.
- 1882**
Wagon Road was realigned.
- 1883**
RR connection from Houghton to Marquette completed.
- 1886**
Mineral Range RR built branch line to the Quincy Mine site.
- 1887**
New Quincy Stamp Mill site purchased on Torch Lake (see regional context drawing for location) and rockhouse No. 3 was rebuilt.

SCALE:



QUINN EVANS | ARCHITECTS

QUINCY UNIT, 1866-1887 PERIOD OF CHANGE PLAN

Cultural Landscape Report

Keweenaw National Historical Park

Rebuilding the Mine Surface Plant: 1888-1907

Quincy's first step in constructing the Torch Lake mill was to build a boardinghouse for construction workers, whose final job would be converting it to a blacksmith, carpenter, and cooper shop.²¹⁶ The massive, sprawling mill that housed modern steam stamps stood partway up the hillside west of and across the road from the stone pumphouse, boilerhouse, oilhouse and warehouse. A large dock and coal handling facility improved the shipping and distribution of coal, while water was moved from the lake to the pumphouse via an adit with a stone cistern at the end.²¹⁷ A hoist and tram connected the dock and boilerhouse and fed fresh coal to the furnaces, while launders connected to two small creeks some 1,800 feet behind the mill and brought water to the boilers.²¹⁸ An elevated waste launder and an adjacent water and steam pipe conduit functioned as a covered bridge by supporting the infrastructure above the road while accommodating pedestrian traffic below.²¹⁹ The Torch Lake mill featured many of the facilities offered at the Portage Lake site, but its design incorporated the latest materials and technology, and resulted in a grander, more organized site.



Figure 2- 25: View of Quincy's mill on Torch Lake with boilerhouse and pumphouse and cordwood fuel in the foreground. Note the utility trestle above the road and the railroad trestle at the rear of the mill building, ca.1890. (source: Koepel Collection, Keweenaw National Historical Park Archives)

216 O'Connell, "Stamp Mills," 607.

217 Ibid., 609.

218 Ibid., 607.

219 Ibid., 609.



Figure 2- 26: An opposing view (to 2-25), ca. 1890, from the ravine offers a detailed look at landscape conditions near the trestle entering the mill with Torch Lake and support facilities in the distance. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-150)



Figure 2- 27: Quincy Mill, ca 1890s, as viewed from a launder used to deposit waste tailings directly into Torch Lake. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-149).

The new mill operation relied on a single critical link to the mine – the Quincy and Torch Lake Railroad. As with the mill site, construction began in 1888. The track was completed in 1890, with six miles of new narrow gauge rail waiting for locomotives burdened by the weight of copper rock to polish its surface.²²⁰ The new railroad opened in time to service the newly completed mill, and featured fifty-foot diameter iron turntables on each end, coupled with water tanks, and a stone engine house at the mine site.²²¹ Later in the year, the railroad would extend a telephone line between the mine and the mill.²²²



Figure 2-28: An undated photo showing the Engine House and turntable (1889) with the No. 4 Rockhouse (1887) in the background. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-72)

Recognizing the distance of its newly created operation from its neighborhood locations and other residential communities, Quincy quickly established quarters for the mill’s workforce. The village of Mason emerged near the mill site, first as six “substantial frame dwelling houses” on Bunker Hill, north of the mill, followed by forty-eight single family dwellings and one boardinghouse located even closer to and south of the worksite.²²³ Following this, the company built a twenty-six by thirty foot schoolhouse that seated the nearly thirty children of the workers who occupied the homes.²²⁴ Closer to the mine, the company began speculating on property development by platting some of its lands bordering Hancock and selling residential lots. In 1890 it platted the Quincy Addition to Hancock just outside the eastern edge of the village, where today it is known as East Hancock.²²⁵ This location proved desirable to early residents, as many stately and elaborate homes were constructed there.

220 Ibid., 650, 654, 659.

221 Ibid., 660.

222 Ibid., 664.

223 Ibid., 607. See also Lankton and Hyde, *Old Reliable*, 85.

224 McNear, 547-548.

225 Ibid., 522. See also Lankton and Hyde, *Old Reliable*, 92.



Figure 2- 29: A photo, ca. 1890, showing the landscape associated with the Carpenter Shop, Blacksmith Shop, Boarding house and Bunker Hill residences resulting from the Torch Lake mill development.
(source: Photo courtesy of Historic American Engineering Record, HAER MI-2-171)

Quincy introduced balanced hoisting at shaft Nos. 2 and 4 shortly after the mill and railroad began operation in March of 1890.²²⁶ This method of hoisting allowed counterbalanced skips to retrieve nearly double the output of copper rock at the surface and the increased waste required a second dump at both shaft houses.²²⁷ Balanced hoisting also introduced man cars, which were able to take workers much deeper than man engines.²²⁸

Quincy was poised for rapid growth and expansion after building the new mill, the Quincy and Torch Lake Railroad, and the move toward balanced hoisting on double skip tracks. The company turned its attention to the mine's surface plant, which, although functional, was showing its age even after operating only two shaft houses for the last twenty years.²²⁹ The successful growth of a large electrical industry would soon create demands for new products and the copper necessary to produce them.²³⁰ This copper boom would lead to more changes

²²⁶ Lankton, "Technological Change," 341. See also O'Connell, "A History of the Quincy and Torch Lake Rail Road Company," in HAER No. MI-2, an unpublished report for the National Park Service, Historic American Engineering Record (Washington, DC: 1978), 663.

²²⁷ Lankton, "Technological Change," 341.

²²⁸ Lankton and Hyde, *Old Reliable*, 64. See also Lankton, *Cradle to Grave*, 35.

²²⁹ Lankton, "Technological Change," 362.

²³⁰ Lankton, *Cradle to Grave*, 23.

on the landscape, as Quincy worked to modernize its surface plant and increase copper production.

Quincy had begun assessing the lands of the Pewabic Mine, its northern neighbor, in 1884 for the purposes of expanding the mine and improving its surface operations.²³¹ The purchase transaction resulted in a legal dispute that was not settled until 1891, when they legally gained control of the Pewabic Mine property.²³² The acquisition of Pewabic's surface plant included a combination shaft-rockhouse, several shops, mine buildings and additional worker's homes, many in poor condition.²³³ Buildings were rehabilitated, given new uses, or torn down to make way for other improvements.²³⁴ One of the improvements was the extension of railroad tracks to service this newly acquired property.²³⁵



Figure 2-30: Undated view of South Pewabic rockhouse and tramroad. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

Quincy began construction of a new No. 6 shaft-rockhouse and associated rail lines by removing approximately 40,000 cubic yards of waste rock that Pewabic had generated.²³⁶ This illustrates the tremendous amount of waste material the mines produced, as well as the company's matter-of-fact attitude toward overcoming huge industrial obstacles by expending great amounts of physical labor. The shaft-rockhouse was an architectural adaptation unique to

231 Hyde, "Business History," 143.

232 Ibid., 145.

233 Lankton, "Technological Change," 361. See also Lankton and Hyde, *Old Reliable*, 85.

234 Hyde, "Business History," 145. Refer also to Lankton and Hyde, *Old Reliable*, 52; and Lankton, "Technological Change," 351 and 361.

235 O'Connell, "Rail Road," 664.

236 Lankton, "Technological Change," 363.

the Keweenaw. It combined the workings of a shafthouse with those of a rockhouse.²³⁷ By hoisting copper rock high enough, it could be dropped into a series of crushing equipment and sorting bins above railroad sidings.²³⁸ Once crushed and sorted, the rock was directed into waiting rail cars below via a number of chutes. This process averted the bottlenecks that occurred if one rockhouse tried to process copper rock from multiple shafts.²³⁹ It also eliminated labor and handling, because crushed and sorted material no longer needed to be transported to a stand-alone rockhouse for processing.²⁴⁰



Figure 2- 31: An undated photo of the Quincy No. 6 shaft-rockhouse front elevation taken by Earl Gagnon. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

The resulting No. 6 shaft-rockhouse was consequently much larger than the shafthouses before it. Monumental in scale and standing more than 100 feet high, it became a multi-gabled wooden landmark on Quincy Hill when it began operating in 1892. No. 6 was linked by pulley stands that guided cables to a new masonry hoist house constructed of red Portage entry sandstone.²⁴¹ To support its operation, Quincy also erected a stone boiler house and stone compressor building to the southeast.²⁴²

²³⁷ Research by Scott See indicates that shaft-rockhouses are unique to the Keweenaw, designed in response to the demands of the Keweenaw's particular climate, geology, and mining methods. Ongoing personal communication; formal presentation at MTU Archival Speaker Series, January 23, 2006.

²³⁸ Lankton, "Technological Change," 365.

²³⁹ Lankton and Hyde, *Old Reliable*, 68.

²⁴⁰ Lankton, *Cradle to Grave*, 51.

²⁴¹ *Ibid.* See also "Technological Change," 360, 363, and 365.

²⁴² Lankton, "Technological Change," 368.



Figure 2- 32: A photo showing the No. 6 Boiler House, No. 6 Compressor House and No.6 shaft-rockhouse. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-84)

Quincy was already increasing the capacity of its new mill in 1891, and implemented several improvements. The mill was expanded to house additional steam stamps; pump and boiler houses also increased in size and capability.²⁴³ The mill site also gained 400 feet of dock.²⁴⁴ Quincy extended its side hill adit 200 feet, and reached the seventh level of the mine in 1892. It added a launder to intercept groundwater seeping into the mine and redirect it out through the adit.²⁴⁵

In 1893 Quincy further improved the Torch Lake mill site by relocating steam and water lines from a trestle to a tunnel. This tunnel was constructed between the mill and the boiler house “thus lessening the fire risk and saving many other annoyances.”²⁴⁶ By August of 1893, Quincy was disassembling their mill on Portage Lake.²⁴⁷ In its place it constructed a sandstone pump and boilerhouse to provide water to the mine site. At the mine site itself, Quincy erected a new carpenter shop, supply office and oil house for lubricants, all in the vicinity of the No. 2 shaft.²⁴⁸

With the Pewabic acquisition complete, Quincy recognized a need to purchase additional acreage. Their two northernmost shafts, 2 and 6, were already near company boundaries, and unless it obtained title to the adjacent property, Quincy would be unable to extend the shafts deeper.²⁴⁹ The purchase gave Quincy ownership of the western half and northeast quarter of Section 23; the mineral rights to the northwest quarter of section 24 (Franklin owned the surface rights); and the surface rights on the southeast quarter of Section 23 (Quincy owned the mineral

243 O’Connell, “Stamp Mills,” 612.

244 Ibid., 611.

245 Lankton, “Technological Change,” 369.

246 O’Connell, “Stamp Mills,” 612.

247 Ibid., 601.

248 Lankton, *Historic Resource Study*, 151.

249 Lankton and Hyde, *Old Reliable*, 54.

rights).²⁵⁰ With land secured, the company was able to make a large investment in No. 2 in 1894-95 by building a new shaft-rockhouse that mirrored the design of No. 6.²⁵¹ Late in 1894, it also installed a new switch at the No. 2 shaft and added a stall to the roundhouse to accommodate a new engine.²⁵²

Anticipating even greater production, the company began seeking a site for a second mill in 1894, ultimately choosing to locate it approximately 630 feet north of the Torch Lake mill. It was planned to be of similar design and construction to the neighboring mill, but with three heads of stamps with room for expansion.²⁵³ To service the mill and aid in its construction, the railroad was extended 1,300 feet and included a 122-foot steel bridge spanning North Creek between the buildings. This work, along with replacement of wooden trestles and construction of a new 281 by 385-foot coal storage shed, was completed in 1895.²⁵⁴

Once the new mill was operational, Quincy turned its attention back to the mine site. Like No. 6, shaft No. 2 was remodeled into a shaft-rockhouse and began operating in 1895, with the addition of a new sandstone hoist house to the southeast.²⁵⁵ The new structure accommodated double skip tracks and man cars, which allowed miners to quickly descend even deeper into the mine – an important consideration as Quincy’s shafts were by that time among the deepest in the world.

Upgrades at the mine site continued through 1895. More support buildings were constructed, including a paint shop and a pipe house located northeast of the No. 2 shaft.²⁵⁶ Across the county road, Quincy built an addition on the school to provide two more rooms and a connection to an outhouse wing.²⁵⁷ The company’s surface improvements also included expanding its real estate holdings, particularly as the difficulties of extracting rich copper ore from the depths of the Pewabic lode increased. Neighboring properties offered additional workable deposits; Quincy bought the Mesnard and Pontiac mining companies at a sheriff’s sale in July 1896 for \$34,050. Included in the purchase were two quarter sections on the Pewabic lode adjacent to existing holdings, and 901 acres in Osceola Township that included Torch Lake frontage.²⁵⁸ This purchase gave Quincy exclusive ownership of the Pewabic lode at the surface, minus one parcel still owned by the Franklin Mining Company.²⁵⁹

250 Hyde, “Business History,” 169.

251 Ibid., 158. See also Lankton, “Technological Change,” 371.

252 O’Connell, “Rail Road,” 666.

253 O’Connell, “Stamp Mills,” 613.

254 O’Connell, “Rail Road,” 667-668.

255 Lankton, “Technological Change,” 372.

256 Lankton, Historic Resource Study, 151.

257 McNear, 548.

258 Lankton and Hyde, Old Reliable, 54. See also Hyde, “Business History,” 171.

259 Ibid. See also Lankton, “Technological Change,” 360.



Figure 2- 33: An undated photo of the Quincy schoolhouse near Frenchtown shows a landscape that included lawn and trees, unlike barren areas associated with the mine location. (source: Image 275 courtesy of HAER)

At the same time it was acquiring those properties, Quincy decided to invest in a new mine office.²⁶⁰ It chose to build it next door to their old mine office, in the spot where North's store was located. The store was relocated further up the hill into a larger stone building, and the site was cleared.²⁶¹ This approach allowed the office to keep its prominent location on Quincy Hill, and for the existing wood frame office building to remain in use as the new building was being built.²⁶² When the project was completed in 1897, the front lawn was separated from the public road by a wood fence and sandstone curb.²⁶³

Crafted of Portage Entry sandstone and topped by a slate roof, the new office symbolized Quincy's corporate success and confidence. While improvements to mining and surface operations were justifiable expenses aimed directly at increasing productivity, a new and expensive office building did not afford the same return. Instead of addressing their need for improved office conditions pragmatically, as they did with other issues directly affecting their surface plant, Quincy's leaders used the new, elegant mine office to proclaim their corporate self esteem. In doing so, they were imitating their neighbor, the Calumet and Hecla Mining Company (C&H), located only twelve miles north; C&H had long expressed its corporate success and strength through impressive construction efforts.

²⁶⁰ McNear, 557.

²⁶¹ Ibid., 553.

²⁶² Ibid., 557.

²⁶³ Lankton, "Technological Change," 369. See also McNear, 557.

²⁶⁵ Ibid.



Figure 2- 34: View of Quincy Mine Office and landscape ca.1920. Note how Quincy retained wooded areas and trees near the management buildings and houses. (source: Koepel Collection, Keweenaw National Historical Park Archives)



Figure 2- 35: The old mine office (left) waiting to be removed as construction of the new mine office (right) is completed. (source: Photo MI-2-217 courtesy of Historic American Engineering Record)



Figure 2- 36: View looking north from front of mine office at the time of construction. (source: Photo MI-2-77 courtesy of Historic American Engineering Record)

Quincy's economic success was further demonstrated by additional building projects in 1897. They built an assay office on Quincy Hill, and began work on shaft-rockhouse No. 7 and its associated facilities.²⁶⁵ This steel shaft-rockhouse was serviced by a nearby stone boiler house and sandstone hoist house.²⁶⁶ When the company that was smelting their material closed in 1887, Quincy was forced to rely on the smelting capabilities of the Lake Superior Smelting Company and C&H until 1898, when they finally completed the construction of their own smelting facility on Portage Lake.²⁶⁷ The smelter was also a response to the increased volume of rock mined by Quincy: even just ten years earlier they did not produce enough to justify the expense of building their own.²⁶⁸ They located their smelter on the stamp sand-covered grounds of Pewabic's former stamp mill.²⁶⁹

The site's construction began with dredging the shoreline and inserting pilings for the loading dock. Then, foundations were laid for the two main buildings of the works, the reverberatory furnace building and the cupola furnace building, along with the blacksmith shop and engine room. These buildings were soon joined by three reverberatory furnaces and their 75-foot smokestacks. The smelting operation's complexity is reflected in the number of buildings that were then built to support its operation: a dockside warehouse; cooper shop; cooperstock building; coal shed; charcoal house; sand house; assay office; coal dock; oil house; scale house; and a barn were all completed by the end of 1898. The main office building, ice house and iron house were completed the following year.²⁷⁰

²⁶⁶ Ibid., 374, 376.

²⁶⁷ Hyde, "Business History," 172, Yarbough, Comments provided by Quincy Mine Hoist Association Manager.

²⁶⁸ Lankton and Hyde, *Old Reliable*, 79.

²⁶⁹ Lankton, *Historic Resource Study*, 155. See also Hyde, "Business History," 174.

²⁷⁰ Patrick Martin and Gianfranco Archimede, *The Quincy Mining Company Smelting Works, 1898 - Historical Land Use Survey Project*, (Industrial Archaeology Program, Michigan Technological University, June 2002) 5.



Figure 2- 37: The Quincy Smelting Works, with Quincy Hill in the background, as viewed from Houghton in the early 20th century. (source: Photo MI-2-174 courtesy of Historic American Engineering Record)

By 1898, company housing at Quincy had changed greatly. The acquisition of other mining companies and their assets contributed to the increase in the number of worker's houses that Quincy owned. The Pewabic purchase alone added three entire neighborhoods to Quincy's collection, including Newtown, Lower Pewabic, and one quarter mile of frontage along the west side of the county road.²⁷¹ Private home construction on leased company land, like the fifteen homes in the small enclave of Sing-Sing, also altered the Quincy landscape.²⁷² By 1898, Quincy managed several neighborhoods of worker housing, and owned more than 300 homes.²⁷³ This was also the year that Quincy stopped leasing their farm, the location of which remains unclear.²⁷⁴

271 McNear, 525. Coburntown also figured in this transaction. In 1859, Augustus Coburn purchased a quarter section of land which he later sold to the Pewabic Mining Company, except for 5 acres that he platted in order to sell lots. This community was called the Village of Pewabic, but was informally known as Coburntown. When Quincy purchased the Pewabic properties, they platted East Quincy immediately adjacent to Coburntown, which remained an independent community. As Coburntown residents were beyond the reach of company control with regard to housing, the neighborhood became, in one researcher's words, a "safe haven" for employees who wished to discuss work conditions outside of company property. Coburntown became known as "Helltown," a nickname earned perhaps due to its two saloons - businesses notably missing from company-owned locations - and possibly because of its acceptance of dissenting opinions and activities. See Rachael Herzberg, National Register of Historic Places Registration Form: East Quincy (2004).

272 Ibid., 522.

273 Ibid., 526.

274 Ibid., 560. An uncataloged collection of maps at MTU indicated several possible locations of Quincy's farm, which appears to have been divided into several small workable areas or plots.

Other investments in 1898 included railroad improvements, the construction of several utility trenches, and a new sandstone blacksmith shop between No. 6 and No. 2.²⁷⁵ Efforts to improve their infrastructure continued into the following year with the completion of a machine shop right next to the blacksmith's, powered by electricity. Quincy also built a boiler house for No. 2 adjacent to the No. 6 facility, and a compressor building.²⁷⁶

Quincy's preoccupation with real estate continued through 1899, when they platted the Quincy Hillside Addition north of Hancock.²⁷⁷ The company directed this effort across Shantytown, a part of their property established in the 1860s and already settled through land leases. They exercised control of the built environment by platting lots in a manner they viewed as appropriate, regardless of the location of previously established dwellings. Residents that held land leases were offered discounts to purchase their lot, or were displaced by the development of roads. Those who inhabited homes that Quincy determined were of unacceptable appearance, size, or that were positioned at a poor angle to the street were subsequently reimbursed for the cost of their home and relocated to other company housing.²⁷⁸ Residents had little agency in determining their surroundings, as the company made these decisions for them. Naturally, these actions were consistently in the company's best interest and driven by the pursuit of profit.

Eighteen homes were added at Mason and thirty six at Lower Pewabic in 1899.²⁷⁹ Further up the Hill, Quincy began operations at an abandoned Mesnard mine they called No. 8.²⁸⁰ Here, they built twelve more homes, presumably to meet the needs of workers at this location.²⁸¹ The company also constructed generous accommodations for the superintendent of the smelting works near Ripley, and for a mining captain on Quincy Hill.²⁸²

Quincy clearly paid a lot of attention to housing in 1899, but their single largest development effort remained industrial: they built a second mill at their Torch Lake site. This new mill was made of steel and featured a corrugated metal exterior that was built to last and be easier to maintain than their 1891 mill.²⁸³ A new steel building served as the boiler house, while the pumphouse was made of brick and steel. Both buildings were connected to the mill by a masonry tunnel.²⁸⁴ Rock was delivered to receiving bins at the rear of the mill by railroad, while coal was delivered to the site at a 216 by 40-foot wooden dock.²⁸⁵ The new mill was operational by 1900. It had three stamps crushing rock, which met the needs of Quincy's larger mine operation which by October of that year again included shaft No. 7.²⁸⁶

275 Hyde, "Business History," 175.

276 Lankton, "Technological Change," 380.

277 Lankton and Hyde, *Old Reliable*, 92.

278 McNear, 522.

279 *Ibid.*, 525. See also Lankton and Hyde, *Old Reliable*, 85.

280 Lankton, "Technological Change," 360.

281 McNear, 525.

282 *Ibid.*, 523.

283 O'Connell, "Stamp Mills," 614.

284 *Ibid.*, 615.

285 *Ibid.*, 616 and 618.

286 Lankton and Hyde, *Old Reliable*, 78. See also Lankton, "Technological Change," 374.



Figure 2- 38: “Scheme for Shantytown,” October 1899 (source: MS012-QD2176, image courtesy of Michigan Technological University Archives & Copper Country Historical Collections).

Quincy observed the turn of a new century amidst favorable reports of improvements and progress, which were noted in the Copper Mining Handbook of 1900. Specifically, the handbook mentioned that “streets have the appearance of having been swept every morning.” It described the “tidiness” of the landscape at the mine and mill site, with “everything in its place.”²⁹⁵ The improvements were acknowledged as “giant strides” regarding “machinery and surface works improvements,” on what they referred to as a “truly colossal scale.”²⁹⁶ In 1900, Quincy’s surface operation extended across 7,500 feet of the Pewabic lode. It included three working shafts - 2, 4, and 7 - on their original property, while No. 6 operated on the former Pewabic Mine site and No. 8 at Mesnard.²⁹⁷

295 Lankton, “Technological Change,” 360.

296 Ibid., 359.

297 Ibid., 360.

The growing prosperity and community development throughout the copper mining district presented an opportunity for the community to address public transportation. By 1900, the Houghton County Traction Company was organized and began constructing a rail line dedicated to streetcars and public transportation. Welcomed by some and resisted by others, the company established a line between Houghton and Red Jacket within a few years. It extended operations north to Mohawk and established a link to Lake Linden and Hubbell by 1910.²⁹⁹ The tracks ran directly through several of Quincy's residential neighborhoods on top of Quincy Hill.



Figure 2- 39: This view of Lower Pewabic from No.2, ca. 1905-1915, shows the regular arrangement of streets, homes, yards and gardens and other landscape features that present an image of organization and tidiness amidst a larger industrial landscape. (source: Image is courtesy of the Koepel Collection, Keweenaw National Historical Park Archives)

Quincy continued its real estate development efforts into the 20th century, and in 1901 the company platted the Lake Shore Addition in West Hancock. Located between Portage Lake and the cemeteries, much of this area was donated to the Sisters of St. Joseph Hospital.³⁰¹ Furthermore, in 1901 Quincy began to resurvey the Quincy Addition to Hancock with an eye toward improving lots for development. The process of resurveying would not be complete until 1905, when the Dakota Heights Real Estate Company began filling an existing ravine to accommodate the proposed development. It would take more than ten years to complete the residential project that ultimately altered the appearance of Hancock, but provided no new housing options for Quincy's workers.³⁰² That occurred in 1903, when Quincy platted South Quincy between East Hancock and neighboring Ripley, in order to provide a residential area suited for the smelter workers. This was followed in the same year by the Second Hillside Addition, just north of the original Hillside Addition of 1900.³⁰³

299 Lankton, *Cradle to Grave*, 217.

301 McNear, 526.

302 Ibid.

303 Ibid.

Back at the mine location, Quincy was quick to migrate to electric locomotives to load and move rock underground. This change had occurred a few years earlier on the Marquette Iron Range; presumably, as the locomotives were manufactured by General Electric, the switch resulted in an increased presence of electric utility poles and wires to service the mine. Power to the site was provided by the Peninsula Electric Light and Power Company, a local utility.³⁰⁴ Power was also an issue at the milling facilities on Torch Lake: expanding mill operations required additional fuel. With operations depending heavily on coal, Quincy initiated construction of an efficient coal unloading and storage facility in 1901. The facility included three steel towers, a 385 by 301-foot steel coal storage shed, and all the necessary railroad service connections.³⁰⁵ It began operating in July of 1902.³⁰⁶ Later, in 1904, a mineral house was constructed at the west end of Quincy's No. 1 mill site on Torch Lake.³⁰⁷



Figure 2- 40: Coal handling equipment and the adjacent coal shed at the Torch Lake mills. (source: Photo courtesy of Historic American Engineering Record, HAER MI-2-169)

1904 brought about changes with the railroad, but they were administrative in nature and do not seem to have resulted in immediate changes to the landscape. In June of that year, the Quincy and Torch Lake Railroad stockholders had authorized the sale of the railroad to the Quincy Mining Company. For \$190,811.23 Quincy purchased the rolling stock, one turntable, the engine house and all of the switches and trestles owned by the railroad. The primary six mile rail line and right of way were retained by the railroad, and leased to Quincy for \$850 a month. The deal was completed on April 4, 1905.³⁰⁸

304 Lankton and Hyde, *Old Reliable*, 61.

305 O'Connell, "Stamp Mills," 623.

306 O'Connell, "Rail Road," 670.

307 O'Connell, "Stamp Mills," 624.

308 O'Connell, "Rail Road," 677.

By that time, Quincy had grown accustomed to success. The company had endured difficulties and overcome many challenges during its nearly sixty years of operation. It had modernized and increased its footprint on the surface in a monumental fashion. Its success and prosperity were demonstrated in several ways, including: physical plant and technological improvements that reconstructed the landscape in which they operated; land and mine acquisitions; increased production that yielded twelve times more rock, at twice the depth, than in 1887; higher profits and payment of reliable dividends to stockholders; and a substantially larger workforce.³⁰⁹ In fewer than twenty years, Quincy had grown demonstrably larger and more complex.³¹⁰ Acknowledgement of their achievements came at the St. Louis World's Fair in 1904, where they received international recognition and a gold medal for their copper mining exhibit.³¹¹

If one compares Quincy's operational history with climbing a mountain, then in 1905 the company was approaching the summit. However, Quincy was unaware that it was reaching the pinnacle of their success. The money required to sustain a mining operation of its magnitude and satisfy its appetite for mineral resources and wealth were demanding, and tied to variables beyond the company's control. Changing copper markets and mining practices, competition from other mines, and labor demands would soon require Quincy's managers to alter their practices radically, but they did not. Seemingly blind to changing circumstances, the company continued forward in much the same the manner that had brought it so much success in the past.

Following its major construction and rehabilitation efforts, Quincy's focus and expenditures shifted toward maintaining mine support facilities, where typically only minor modifications were needed to sustain operations.³¹² Exceptions to this did occur and large projects still ensued but at a notably more modest pace and scale than the company's previous endeavors. For instance, in 1905-1906 Quincy modified the No. 8 shaft-rockhouse by rebuilding the wooden rockhouse portion, using steel-frame construction to increase its height. This action was repeated two years later at No. 7 when new rock sorting equipment was installed.³¹³ Also in 1905, Quincy enlarged the dispensary to provide additional office space.³¹⁴

Land ownership remained an important issue for the company during the early part of the 20th century. Although new construction activities slowed, Quincy continued to acquire land strategically in order to expand its underground operations. The shaft at No. 8 would be limited to 2,500 feet if the company did not acquire property or mineral rights from the Arcadian Mine. Therefore, in 1906 Quincy spent \$765,000 in 1906 to secure Section 13, and the north half of Section 18, Range 33 from the Arcadian Mine.³¹⁶ This is where the Pewabic vein saw the light of day as a rock outcrop.³¹⁷

309 Hyde, "Business History," 180. Quincy had reached a depth of 5,000 by 1905.

310 Ibid.

311 Ibid., 185.

312 Lankton and Hyde, *Old Reliable*, 113. See also Hyde, "Business History," 213.

313 Lankton, "Technological Change," 452.

314 McNear, 542.

316 Ibid., 221 and 216.

317 Ibid.,

Events below the surface in 1906 also demanded the company's attention. That year, Quincy began to experience a series of troubling collapses within the mine.³¹⁸ These events, known as "air blasts," occurred when unstable overhead rock would fall, compressing air and forcing it rapidly through the existing drifts and shafts. The size and severity of these events varied greatly, but the outcome was never positive. October 13 saw a surface collapse between the No.6 dryhouse and a captain's office that claimed the life of John Shea, a forty-year employee. His years of experience laboring at the mine did not prevent him from being swallowed alive by a hole that extended 400 feet deep into the earth.³¹⁹ Even when no personal injuries resulted from collapse, flying rock and debris damaged equipment, interrupted work, created access problems, increased production costs, and likely lowered morale.³²⁰ The blasts continued to plague Quincy intermittently through the late 1920s.³²¹

The more reserved investment strategy exercised by Quincy can be seen in the 1907 construction report. Projects remained focused on installing new equipment within older structures, and rehabilitating older structures to accept new uses or improvements.³²² Yet the company continued to build where needed. A new compressor house at No. 8 and a new machine shop at the smelter were added at this time.³²³ Quincy also built seven double and seven single saltbox style houses in Mesnard, in addition to repairing many others in 1907-1908.³²⁴ These homes were arranged in rows parallel to the County Road, similar to the pattern in Limerick.³²⁵

318 Lankton and Hyde, *Old Reliable*, 107.

319 Lankton, *Cradle to Grave*, 128.

320 Lankton and Hyde, *Old Reliable*, 99.

321 *Ibid.*, 107.

322 Hyde, "Business History," 213.

323 *Ibid.*

324 McNear, 529.

325 *Ibid.*



Figure 2- 41: An undated view from No. 6 north along County Road toward No. 8 with Mesnard beyond. (Source: Koepel Collection, Keweenaw National Historical Park Archives)



Figure 2- 42: View of Limerick from No. 2, ca.1920, (source: Koepel Collection, Keweenaw National Historical Park Archives)

Next Page: Figure 2- 43: Quincy Unit, 1888-1907 Period of Change Plan

Legend

- Existing Quincy Unit Boundary
- Quincy Mine Surface Operations (1888-1907)
- Quincy Mining Company Ownership (1888-1907)
- Mining Company Acquisitions (1888-1907)
- Streetcar Route
- Portage Lake Shoreline
- Pewabic Lode
- QMC Mine Shaft
- Pewabic Mine Shaft (no longer active)
- Former Location Pewabic Tram Road
- Former Location Quincy Tram Road
- Franklin Tram Road
- Platted QMC Housing Location
- Existing QMC Housing Location
- Housing not affiliated with planned company housing location
- Adit
- Railroad
- Road
- Stamp Mill Sand Deposits
- Section Numbers

Sources

"Map of Quincy Mine and Vicinity, Houghton County Michigan," date unknown (ca. early 1900s) (shows ownership parcels)
 Eric. M. Hanson, "Quincy Mining Company Surface Map: 1892," HAER Heritage, Conservation and Recreation Service, 1978.
 "Plan of the Underground Workings of Quincy Mine and a Portion of Surface Detail," date unknown ca. 1900-1907.
 Birds-eye Aerials: "Hancock Mich., 1881" and "Hancock Mich, 1890 (provided conjectural information in relation to period roads and housing locations.
 Dr. Patrick Martin and Gianfranco Archimede, "The Quincy Mining Company Smelting Works, 1898 Historical Land Use Survey Project," MTU, 2002.

Note

When overlaying the existing conditions over the HAER historic maps, the city of Hancock does not align with other areas in the Quincy Unit. Adjustments were made to correct this difference. The period of change maps are for analysis purposes only.

Chronology

1888-1890

Construction of Quincy and Torch Lake Railroad.

1890

New Quincy Stamp Mill at Torch Lake opened with housing constructed on Bunker Hill followed by new homes in Mason. QMC platted the Quincy Addition to the city of Hancock.

1891

Pewabic Mining Company purchased by QMC; renovations began.

1892

QMC extended side-hill adit, expanded mill with seven boilers, reconstructed No. 6 as a shaft-rockhouse.

1893

QMC began disassembly of Stamp Mill on Portage Lake, new pump and boilerhouse constructed. A new carpenter shop, supply office, and oil house were added to No. 2.

1895

No. 2 reconstructed as a shaft-rockhouse.

1896

Mesnard and Pontiac Mining Companies acquired by QMC.

1897

QMC platted the Lake View Addition to the city of Hancock. Wood bridge across Portage Lake was replaced with iron bridge with a two lane roadway and railroad crossing underneath. QMC completed new sandstone office building and assay office on Quincy Hill.

1898

QMC constructed smelter on Portage Lake at the former site of the Pewabic Mill.

1899

Captain Whittles' house constructed. QMC platted Hillside Addition. QMC constructed 18 homes in Mason and 12 homes in Mesnard.

1900

Construction of Streetcar Line began.

1899-1900

QMC constructed 18 additional homes in Hardscrabble and Limerick. QMC constructed 36 homes in Lower Pewabic.

1901

QMC platted South Quincy.

1903

QMC platted Second Hillside Addition in the city of Hancock.

1905

The dispensary was enlarged, Dakota Heights real estate began filling Quincy Addition Ravine.

1905-1906

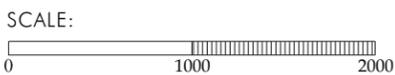
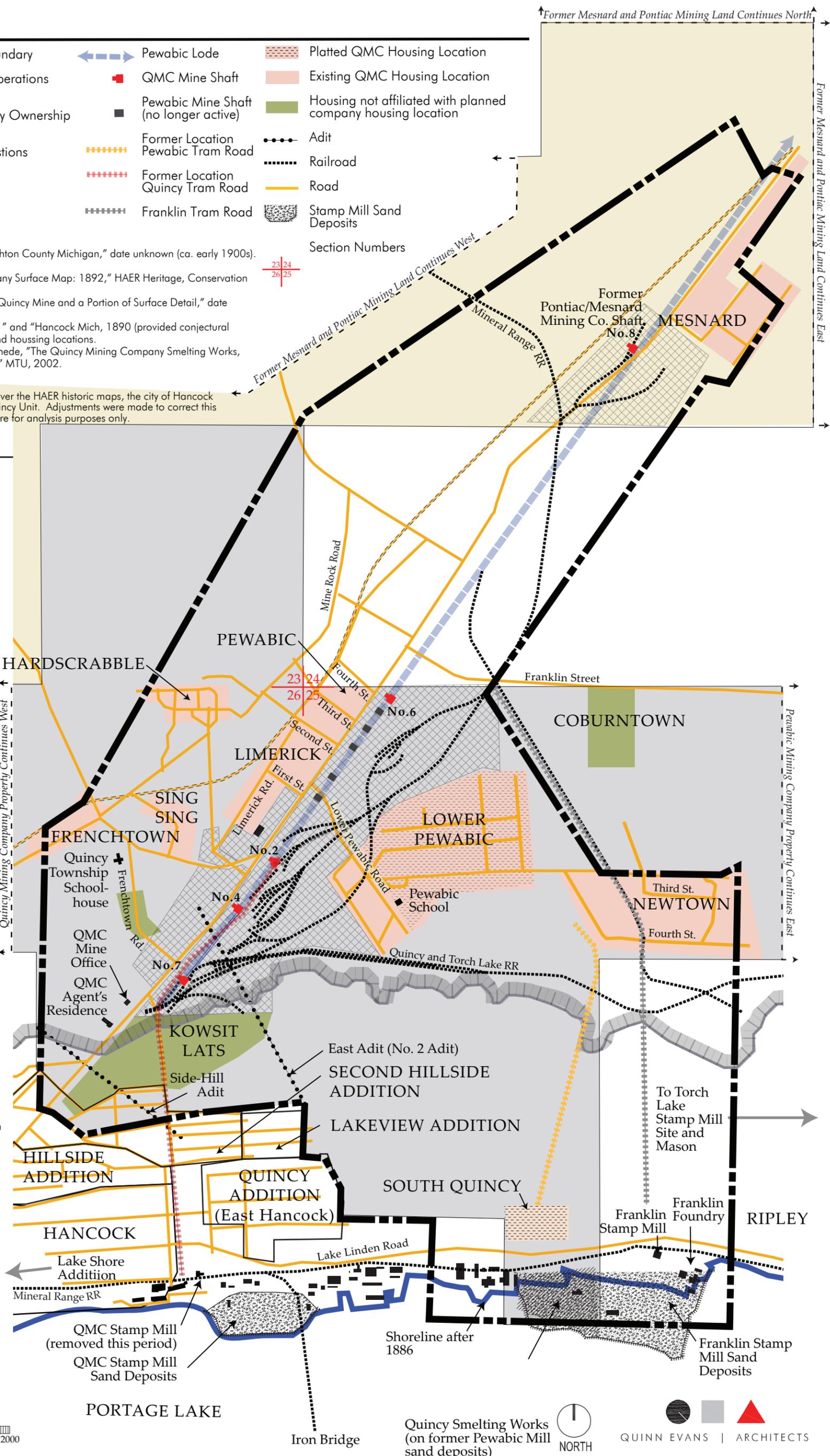
QMC rebuilt No. 8 shaft-rockhouse.

1907

QMC constructed 7 double and 7 single houses in Mesnard.

1907-1908

QMC rebuilt No. 7 shaft-rockhouse.



QUINCY UNIT, 1888-1907 PERIOD OF CHANGE PLAN

Cultural Landscape Report

Keweenaw National Historical Park

20th Century Operations: 1908-1945

Quincy relied on strategic management and its financial resources to expand its operation and overpower many local competitors. By purchasing mineral lands west of the Franklin Mine in 1893, Quincy effectively boxed that company in and limited the extent of their operation. The maneuver meant that “Franklin could no longer function as a mine,” and eventually forced a negotiated sale in 1908.³²⁶ When the deal was inked, the purchase price of \$170,000 included a valuable strip of Section 25 connecting Quincy’s hilltop operations to Portage Lake, which provided the land needed to expand the smelter.³²⁷ The acquisition of the Franklin Mine also meant the addition of no less than fifty company houses for Quincy. Most of these dated to 1890 or earlier, and were located in the Backstreet neighborhood, with the balance found in Franklin.³²⁸

Backstreet and Franklin were the latest additions to an eclectic collection of distinct neighborhood settlements on top of the Hill. The neighborhoods varied in many ways, including geographic location, spatial arrangement, circulation patterns, scale, orientation and architectural plans and styles. The increasing number of homes under Quincy’s ownership reflected a growing population throughout the mining district. According to the 1904 state census, 6,029 people lived in the combined area of Quincy and Franklin Townships. Hancock was home to another 6,037.³²⁹ By 1910, more than one hundred thousand people would populate the copper district within Keweenaw, Houghton and Ontonagon counties, with the vast majority – over 88,000 – living in Houghton County.³³⁰ Whether in Quincy’s oldest neighborhoods or its newest, residents petitioned mine managers for home improvements like electricity, indoor plumbing and painting.³³¹

Quincy invested in several shaft-rockhouse projects in 1908. They raised the height of the No. 8 shaft-rockhouse by eight feet to provide increased rock storage capacity.³³² They began to disassemble the No. 2 shaft-rockhouse, and at the same time built a 150-foot tall steel replacement.³³³ Construction of a new No. 9 shaft (Pontiac) 2,700 feet north of No. 8 proved to be a large financial undertaking, and it featured a much smaller timber shaft-rockhouse than those Quincy had previously built.³³⁴

326 Hyde, “Business History,” 216.

327 Ibid., 217-218.

328 Backstreet was the larger community. McNear attributes 50 houses to Backstreet; Lankton and Hyde identify 60 houses in Backstreet and Franklin. See McNear, 529, and Lankton and Hyde, *Old Reliable*, 132.

329 Lankton and Hyde, *Old Reliable*, 92.

330 Lankton, *Cradle to Grave*, 22. See

<http://fisher.lib.virginia.edu/collections/stats/histcensus/php/newlong3.php> for county-level population statistics.

331 Ibid., 153.

332 Lankton, “Technological Change,” 453.

333 Ibid., 454. See also Lankton and Hyde, *Old Reliable*, 68.

334 Hyde, “Business History,” 213. See also Lankton, “Technological Change,” 445.

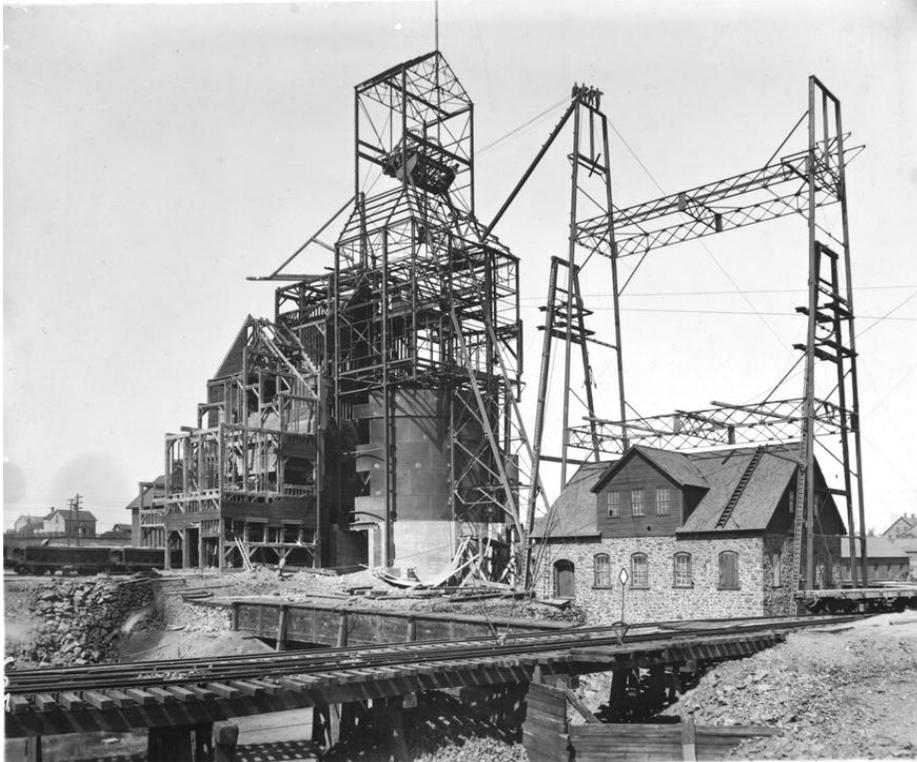


Figure 2- 44: The steel frame of the No.2 shaft-rockhouse is seen next to the wood structure it replaced (source: Photo MI-2-15 courtesy of Historic American Engineering Record)

About the same time that No. 9 began operations in 1909, Quincy's No. 4 was taken out of service. The shaft was closed and its rockhouse taken down, while support facilities like the boiler and compressor houses remained.³³⁵ The closure of a single mine shaft meant others faced increased pressure to assume additional hoisting duties. It is also likely to have influenced the distribution of waste material on the surface. Poor rock removal was a necessary part of mining but it did not yield profits. The movement of this material was limited to keep costs low and to use labor for more important tasks. Limiting the number of shafts from which it was hoisted and removed may have concentrated large volumes of the poor rock around operational shafts and the railroad lines that serviced them.

In 1910, Quincy purchased 800 acres that included all of Section 14 as well as the northeast quarter of Section 22 from the St. Mary's Canal Mineral Land Company. The acquisition secured land with mineral rights which allowed for the extension of shafts Nos. 2, 6, 8, and 9.³³⁶ As Quincy looked to the future, they explored further north along the Pewabic vein. These efforts "reflected the faith that Quincy's managers and stockholders placed in the...vein."³³⁷ In fact, the company's success has been credited to its "unprecedented depths and sufficient richness."³³⁸ Its extent could not be predicted, but the fortunes of the company, and the future

³³⁵ Lankton, "Technological Change," 445.

³³⁶ Hyde, "Business History," 217-18.

³³⁷ Ibid.

³³⁸ Ibid., 231.

³⁴⁰ Ibid.

of those who built their lives around it, depended upon the continued, profitable extraction of this finite resource – copper.³⁴⁰

By 1911, Quincy needed to address the condition of its railroad. Locomotive No. 2 had worn out, was removed from service, and scrapped a few years later.³⁴¹ In the following year they replaced their two turntables with “Y’s” in the track section; the turntables were removed, the pits filled, and tracks were installed to allow the locomotives to turn around.³⁴² Steel trestles received additional care as they were repainted at the same time.³⁴³ Improvements continued into 1912, and included installing new crushing equipment and raising the No. 6 shaft-rockhouse to accommodate a greater volume of rock.³⁴⁴

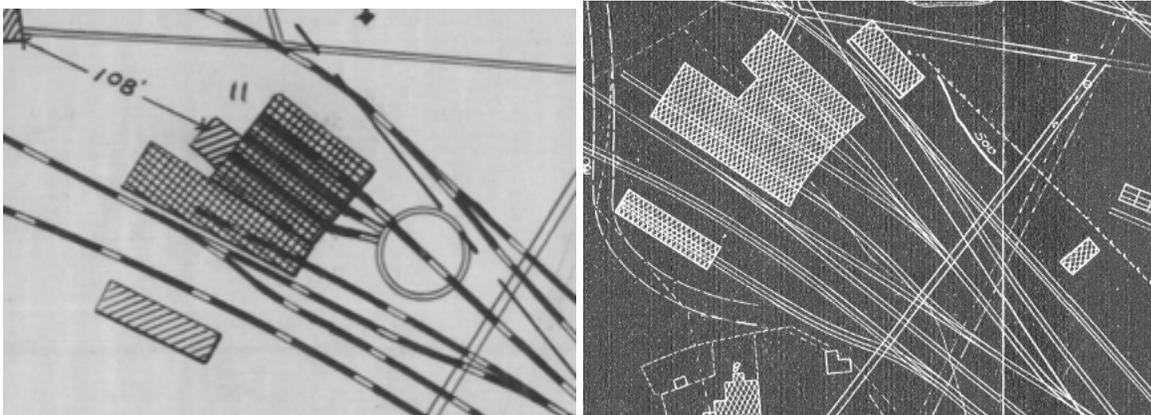


Figure 2- 45: Partial plan view dated October 1902 (left) and an undated partial plan (right) show the removal of a turntable and changes in railroad track layout. (Images courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

Quincy invested in a significant timbering operation at No. 9 and demolished the No. 4 shafthouse in 1913 before they were affected by a bitter and lengthy worker’s strike that was called at every copper mine in the district.³⁴⁵ An indication of changing circumstances locally, regionally, and nationally, the strike was spurred by long work days, low pay, and unsafe work conditions; no doubt the air blasts that rocked Quincy’s shafts heightened the concerns of underground workers. The strike began in July and lasted until March of 1914. During this time, Quincy stopped operations at No. 9; the shaft would never be re-opened.³⁴⁶ Likewise, No. 7 was closed and essentially mothballed as a consequence of the strike.³⁴⁷ The closures meant that Quincy relied exclusively on shafts 2, 6, and 8.³⁴⁸

In spite of the disruption, Quincy still managed to earn large profits during the strike, and continued to plan ahead. It acquired an additional 440 acres west of the stamp mills on Torch

341 O’Connell, “Rail Road,” 662.

342 Ibid., 679

343 Ibid.

344 Lankton, “Technological Change,” 453.

345 Ibid., 445-446.

346 Ibid., 447.

347 Ibid., 446 and 448.

348 Ibid., 449.

Lake in Sections 27 and 28 of Township 55, Range 33.³⁴⁹ It continued to secure essential goods and supplies. The company also continued to rent houses to workers. By 1914 Quincy had weathered the strike, and normal operations resumed in the mine and at the surface plants. The company did not realize that the turbulence of the strike was but a glimpse of difficulties ahead, most unrelated to labor issues. Quincy was relieved to be operating successfully. With an eye toward securing future profits – and buoyed by the First World War’s effect on copper prices – Quincy once again purchased additional land and mineral rights. The acquisition of eighty acres in the southeast quarter of Section 22 provided Quincy with additional property to be worked for the No. 2 and No. 7 shafts.³⁵⁰

Quincy continued to extend their paternalistic role in the community between 1915 and 1918 by attending to various social needs and desires. They added to the dispensary, built a new boardinghouse and remodeled three others, and initiated the construction of fifty houses. They also built a two-story brick community club house (also known as the bathhouse, because of the bathing facilities it offered) across the road from No. 2 and installed a new water system.³⁵¹ The construction of the bathhouse was an attempt to provide workers the same amenities offered by C&H, their northern competitor; C&H had constructed a bathhouse a few years earlier, and their facility served as a model for Quincy’s. The company constructed a water system to supply service to the club house and nearby residences with running water.³⁵²



Figure 2- 46: The front elevation of the Quincy Club House ca. 1916-17. (source: Photo MI-2-264 courtesy of Historic American Engineering Record).

In 1916 an assay office was built at the smelter, while the mill site benefited from renovations to coal handling facilities and the erection of a 175-foot tall smokestack at the No. 1 boilerhouse.³⁵³ In the mine, Quincy changed its dewatering method from bailing skips to electric pumps. The amount of water to remove was greatly reduced when the company installed a concrete gutter to intercept surface storm water and redirect it out of the mine via the sidehill adit. Quincy’s

349 Hyde, “Business History,” 218.

350 Ibid., 254. Quincy acquired this land from the Hancock Consolidated Mining Company.

351 McNear, 528 and 542. See also Lankton and Hyde, *Old Reliable*, 125 and 132; and Lankton, *Cradle to Grave*, 172.

352 McNear, 562.

353 O’Connell, “Stamp Mills,” 630.

calculations claim that the gutter intercepted 45 million gallons annually that previously required bailing.³⁵⁴

Housing improvements focused not on the creation of new areas, but on infill and additions to existing locations. Of the homes built in 1917, “three...were built in Frenchtown, one in Sing-Sing, three behind the assay office, seven at a new location east of Hardscrabble, two in Limerick, eleven at Mesnard, and twenty four at Lower Pewabic.” In addition, Quincy constructed six additional saltbox dwellings at its mill site in 1917-1918. This effort was spearheaded by Mine Superintendent Charles Lawton, and was the last housing constructed by the company.³⁵⁵ Lawton recommended the project “so that we can have a steadier crew about the mine, fewer transient men, and more of the better families.”³⁵⁶ His interest in housing and neighborhood conditions suggest that the mine no longer conveyed its once tidy appearance. His specific concerns suggest that the workforce had become temporary, less stable, and beneath his standards – moral, educational, cultural, or otherwise.

Quincy must have been quite confident about their future to move ahead with its investments in company housing, not to mention a new schoolhouse in the Lake Annie District. Not surprisingly, industrial improvements were also initiated.³⁵⁷ At the mine they began to construct a grand hoist house for No. 2. It featured classic geometry, cast-in-place concrete, red brick walls and a green tile roof.³⁵⁸ It was located adjacent to the 1894 hoist house for the same shaft, and was designed to accommodate their 1917 order for the largest steam hoist in the world.³⁵⁹ The hoist house was finished in 1918, but remained empty until late 1919, due to restrictions on heavy machinery production during the First World War.³⁶⁰ In addition to the hoist house project, Quincy increased its stretch in 1919 when it purchased 140 acres in Section 22, again from the Hancock Consolidated Mining Company. This gave them additional land to be worked by shaft No. 2.³⁶¹

With the No. 2 hoist house complete, Quincy again focused attention on the welfare of its workforce. Only two years after the clubhouse was completed, the company began to oblige workers with the toilets and bathing facilities they requested for their homes.³⁶² To understand Quincy’s efforts to meet the needs of their workforce, it is helpful to note that workers desired company housing, but the company never fully met the demand. As an example, the company employed between 1,646 and 1,801 men at the mine in 1919.³⁶³ At the same time, they owned approximately 419 houses.³⁶⁴ Even in the absence of precise numbers, one can still observe that the number of company homes fell far short of the number of workers. As during Quincy’s

354 Lankton, “Technological Change,” 438.

355 McNear, 530.

356 Ibid., 529.

357 Ibid., 548.

358 Lankton, “Technological Change,” 464.

359 Ibid., 461.

360 Ibid., 462. See also Lankton and Hyde, *Old Reliable*, 101.

361 Hyde, “An Economic and Business History,” 254. See also Lankton, “Technological Change,” 449.

362 McNear, 531 and 562.

363 Reports on the number of actual workers vary. Sarah McNear counts 1,646 employees, while Lankton and Hyde identify 1,801 at the end of 1919. See McNear, 532, and Lankton and Hyde, *Old Reliable*, 132.

364 Electronic correspondence with A.K. Hoagland, MTU, November 6, 2006.

early developmental stage, workers without company homes relied on boardinghouses or private housing to meet their needs.

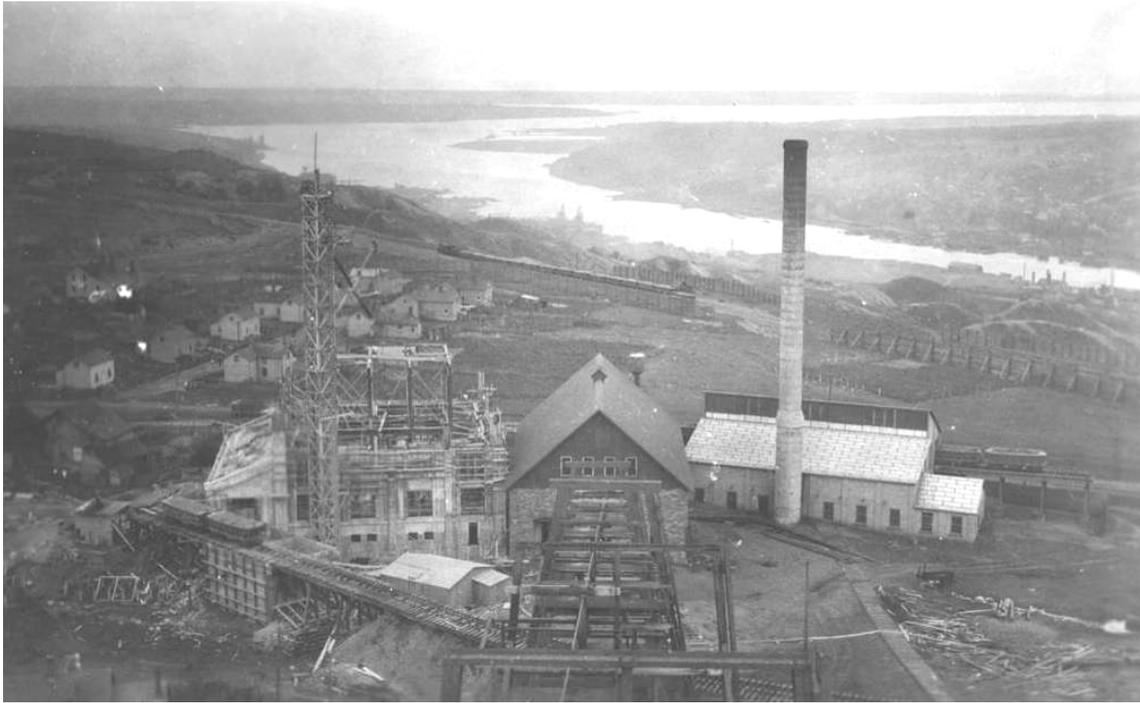


Figure 2- 47: A southeast view from No. 2 taken August 13, 1918 shows the construction of the new hoist house and the surrounding landscape. Note the close proximity of worker homes and areas defined by vegetation. Other notable landscape features include snow fencing, a steam launder and a small bridge. (source: courtesy of the Koepel Collection, Keweenaw National Historical Park Archives)

The company was also concerned with the physical setting, or landscape, of company homes. Mine superintendent Lawton even suggested in a July 1918 letter to Parsons Todd, Quincy's vice president, that it was "essential to the general morale of the labor force" that the company build fences around the employees' "little gardens."³⁶⁸ Gardens played an important role in the lives of miners and their families, although the relationship of the company farm, garden plots and family gardens is not fully understood. Records indicate that 250 bushels of potatoes were harvested from the farm in 1919, and that employees were able to "lease potato plots and garden lots at three locations, Frenchtown, Backstreet and Klondike 'farms,' for a ground rent of five dollars apiece."³⁶⁹

368 McNear, 513.

369 Ibid., 560. Another feature that remains unclear is Kowsit Lats. Not much is known about the area. However, we do know that the company provided this space for pasturing employees' cows. The name "Kowsit Lats" reflects a local Finnish pronunciation of the colorful English nickname that the pasture had earned. Wimppi Salmi, a local resident, successfully petitioned to have the nickname formally recognized when Houghton County assumed responsibility for the maintenance of the road. Personal communication with Kathryn Remlinger, Grand Valley State University, June 26, 2007; personal communication with Ed Yarbrough, Quincy Mine Hoist Association, June 28, 2007.

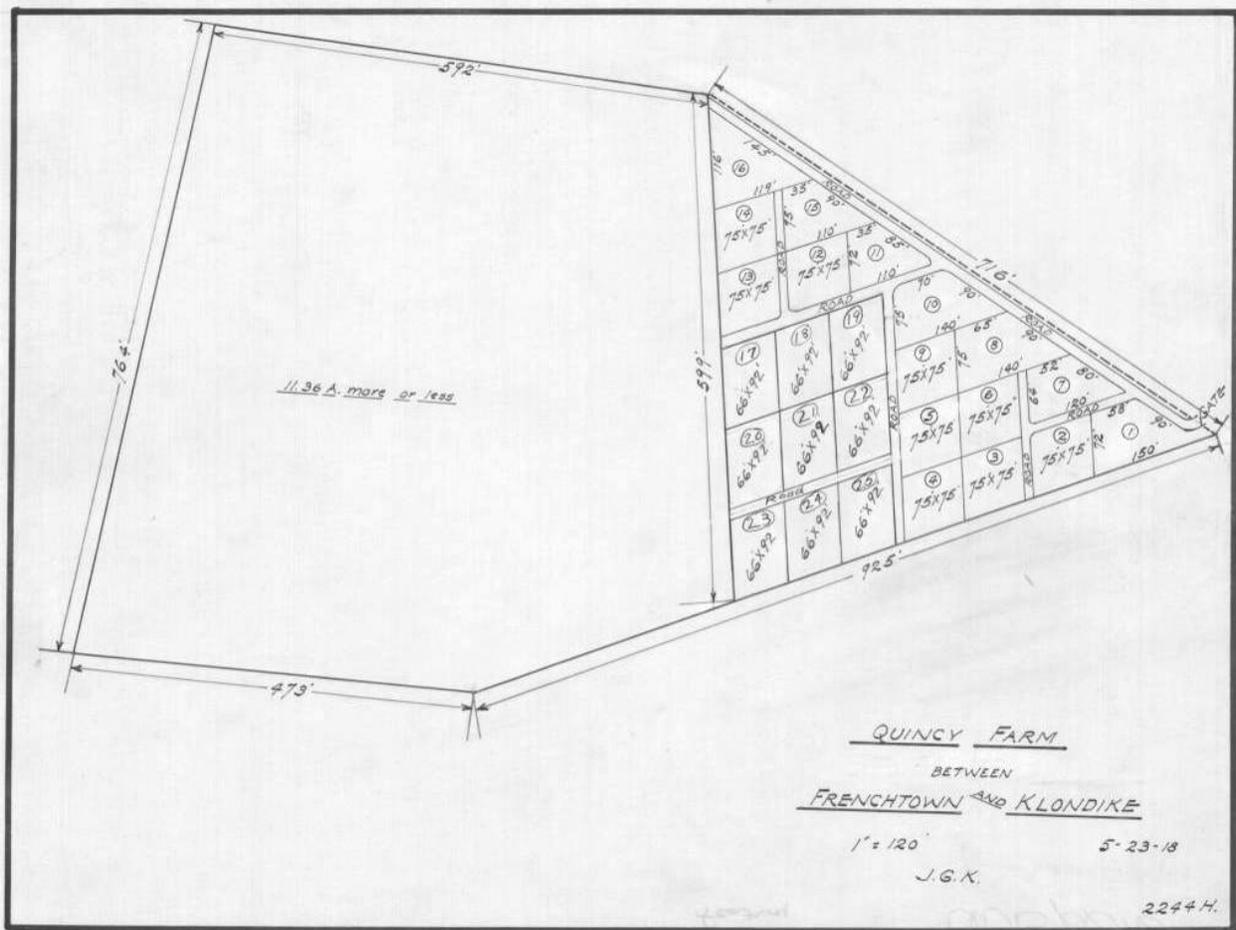


Figure 2- 48: A plan drawing showing garden plots on part of the Quincy Farm between Frenchtown and Klondike, 5-23-18. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

The First World War had increased demand for copper, which pushed its price higher . As a result, Quincy decided to expand their mills on Torch Lake to make room for more equipment. By 1919, the reinforced concrete and red brick additions to both mills were finished. They featured large windows to provide natural light in work areas.³⁷⁰ Quincy also began filling a ravine between the mills to make room for a building to house a “low pressure steam turbine to utilize the exhaust steam from the stamp heads to furnish electric power to operate the ball mills, crushing rolls, etc.”³⁷¹

370 O’Connell, “Stamp Mills,” 631-632.

371 Ibid., 633.



Figure 2-49: A view of the trestle spanning the ravine immediately north of Torch Lake Mill No.1 (left) and south of Torch Lake Mill No.2 (right). (source: Image is courtesy of the Koepel Collection, Keweenaw National Historical Park Archives)

By 1920, the high wartime copper prices had dropped. Quincy, which had been nicknamed “Old Reliable” for its reputation of paying dividends regularly, could no longer provide dividends to stockholders.³⁷² In the decade to come, Quincy would struggle to produce copper at lower costs and with greater efficiency. Changes to the landscape would begin to reflect these efforts, and also see the land begin to reclaim itself as Quincy struggled to earn a profit against market forces larger than itself.³⁷³

The population continued to dwindle in the Keweenaw as Quincy and other mining companies struggled against unfavorable economic conditions. The discovery and development of deposits in Montana and Arizona, coupled with advancements in technology, allowed mines in the west to produce copper at lower costs than Quincy could. The rise of automobile factories in Detroit, and the growth of other industries with good paying jobs, lured many workers from the Copper Country, and made it increasingly difficult to retain skilled labor and experience. In 1910, Houghton County had boasted 88,000 residents, but 16,000 had left by 1920.³⁷⁴ Quincy did not face these harsh times alone.

Downsizing for Quincy occurred over a long period of time, but even small, initial reactions could be seen and felt across the landscape. By September of 1920, Quincy closed all four of its boardinghouses.³⁷⁵ Within four months, they mothballed their newest mill on Torch Lake in favor of the older mill that housed more stamps.³⁷⁶ On top of Quincy Hill, 113 houses – one quarter of their housing stock – stood vacant by the fall of 1921.³⁷⁷ The company took notice of its need to retain workers during this difficult time, as Lawton explained to the company’s vice president:

Range miners are offered clean houses, and clean yards, paint, paper and muresco as an inducement whereas at Quincy there has been lower wages, a natural pessimistic atmosphere, and operating only two-thirds time, and for the

³⁷² Lankton and Hyde, *Old Reliable*, 99. See also Hyde, “Business History,” 249.

³⁷³ *Ibid.*

³⁷⁴ Lankton, *Cradle to Grave*, 246.

³⁷⁵ Lankton and Hyde, *Old Reliable*, 132.

³⁷⁶ Dates of closure vary. Lankton and Hyde cite the event in January of 1920, while O’Connell notes it occurred in January of 1921. See Lankton and Hyde, *Old Reliable*, 125, and O’Connell, “Stamp Mills,” 632.

³⁷⁷ Lankton and Hyde, *Old Reliable*, 135.

first time in many years we have not been cleaning up the yards and locations. Only recently have we been hauling away refuse that has been accumulating in the yards.³⁷⁸

These observations seem to echo Lawton's earlier observations and concerns about workforce stability and its connection to the built environment.

Quincy resolved to meet the challenges of the economic downturn, but it faced tremendous financial obstacles. In 1922, they were forced to add No. 8 to the growing list of facilities that they hoped would someday reopen.³⁷⁹ During this same period of economic despair, the Quincy and Torch Lake Railroad virtually disappeared from the corporate priority list. An absence of records and silent annual reports offer few clues to its operation after 1920.³⁸⁰

Notwithstanding the bleak outlook, Quincy completed the building to house its new power generation unit located between the mills. The 36 by 38 by 45-foot building was constructed of materials similar to the mill additions and housed a General Electric 2000 kW steam turbine. This plant began operating in 1923 and reduced operating costs by generating power from exhaust steam expended by the stamps.³⁸¹ The availability of less costly electricity resulted in a greater use of electric motors and the installation of a power transmission line up Quincy Hill.³⁸²

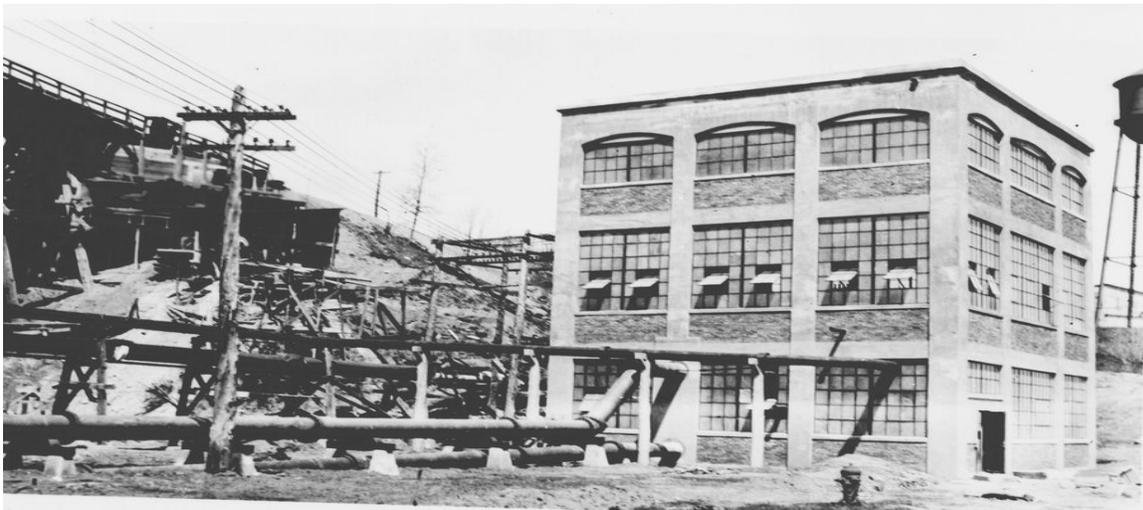


Figure 2- 50: Quincy's steam turbine facility, ca. 1925, constructed to generate electricity from exhaust steam. (source: Photo MI-2-164 courtesy of Historic American Engineering Record)

378 Ibid.

379 Lankton, "Technological Change," 475.

380 O'Connell, "Rail Road," 679.

381 Ibid., 633.

382 Lankton and Hyde, *Old Reliable*, 125.

Even with these cost-cutting measures, by 1926 the international price of copper was below Quincy's production cost. Financial losses for the company continued to mount at a staggering pace.³⁸³ Fire added to Quincy's problems. It destroyed the Quincy School in 1927, and classes were moved to the company clubhouse.³⁸⁴ Furthermore, a fire in the No. 2 shaft occurred in July, and it remained closed until August 10th.³⁸⁵ Just as repairs began, several air blasts further damaged the mine, and it remained closed to normal operations until early 1929.³⁸⁶ Damage to the No. 2 shaft transferred hoisting and production duties to No. 6.³⁸⁷



Figure 2- 51: Bureau of Mines railroad car number 8 parked in front of No. 2. Car number 8 transported an emergency team to Quincy to help fight an underground fire. (source: Photo MI-2-130 courtesy of Historic American Engineering Record)

Quincy faced serious financial difficulties, but the company spent money to insure that their infrastructure remained viable.³⁸⁸ Facilities and machinery were mothballed and cared for so that they could be placed back in service as economic conditions improved. The Quincy and Torch Lake Railroad dissolved on February 1st, 1927, following the sale of its track to the mine company. However, the rail line continued in service under mining company ownership.³⁸⁹

383 Hyde, "Business History," 257.

384 Lankton and Hyde, *Old Reliable*, 125.

385 Hyde, "Business History," 259. See also Lankton, "Technological Change," 476.

386 Re-opening dates differ slightly. Hyde cites January 1929; Lankton, March 1929. See Hyde, "Business History," 259, and Lankton, "Technological Change," 492.

387 Lankton, "Technological Change," 489.

388 Lankton and Hyde, *Old Reliable*, 129.

389 O'Connell, "Rail Road," 681.

No. 8 was reopened in 1928 and a new Dorr thickener was installed at the mill to assist with reclaiming more copper from waste materials in 1929.³⁹⁰

Houghton County lost more residents between 1920 and 1930 – 19,000 people – and this affected several mines, including local giant C&H. Out-migration occurred in such large numbers that it left a county population of only 53,000.³⁹¹ Undeterred, and with failure as their only alternative, Quincy positioned itself to return to full production by repairing damages to No. 2 and mitigating wear and tear at the mine site. The sale of additional stock between 1929 and 1931 suggests that perhaps the company was actually optimistic about its future.³⁹² Unfortunately, their efforts coincided with two reversals: a drastic drop in copper prices, tied to a market that no longer valued the product they offered; and the onset of the Great Depression.³⁹³



Figure 2- 52: View of No. 7 shaft-rockhouse with housing in the foreground. Note the deteriorated conditions depicted by missing sheet metal, missing windows and mismatched, unpainted siding. (source: Koepel Collection, Keweenaw National Historical Park Archives)

390 Lankton, "Technological Change," 475. See also O'Connell, "Stamp Mills," 636.

391 Lankton, *Cradle to Grave*, 246.

392 Hyde, "Business History," 260.

393 *Ibid.*, 261.

On September 22, 1931, after seventy-five years of mining the Pewabic lode, the Quincy Mining Company succumbed to economic forces and closed what was then the deepest mine in the United States.³⁹⁴ They had held on longer than most Michigan mines, a small consolation for those facing not just the economic realities of unemployment but also the larger social issues related to a complete loss of lifestyle, identity and purpose.³⁹⁵ The mine manager penned a letter to the company president the morning of the mine closure, and reflected upon it this way:

The day opens very bright and clear for the morning of the suspension of operations. It has been cold and rainy during the past few days. Everybody in the immediate vicinity naturally is very much depressed, and we are doing everything we can to maintain the proper spirits and to look forward with interest to the future.³⁹⁶

The company retained only a minimum number of employees on staff to board up facilities at their mine, mill and smelter, and barely managed to escape bankruptcy in the process.³⁹⁷

The mine remained closed between 1931 and 1936, and the company published no annual reports. Aside from minor repairs, and guarding facilities, little is known about the activities of the small staff employed by the company during this time.³⁹⁸ However, it is clear that Quincy continued to look after its former employees. It allowed those without incomes to stay in their homes rent free. It did not charge Quincy Hill residents for firewood cut on company lands. The company even plowed seven acres and allowed it to be used as garden areas.³⁹⁹ While these efforts demonstrated compassion, it was not enough to retain residents who desired better conditions. Quincy Hill was transformed into neighborhoods of vacant homes when its residents left. By 1935, 183 of the 433 homes owned by Quincy on the hill were vacant.⁴⁰⁰ Without income, Quincy was unable to pay its property taxes. This resulted in the loss of some of its less important lands to tax sales, as the company struggled to retain core assets.⁴⁰¹

394 Lankton and Hyde, *Old Reliable*, 99, 106, and 129. See also Lankton, "Technological Change," 507.

395 Lankton, "Technological Change," 507.

396 Lankton, *Cradle to Grave*, 253.

397 *Ibid.*

398 Hyde, "An Economic and Business History," 262.

399 Lankton, *Cradle to Grave*, 254. See also Lankton and Hyde, *Old Reliable*, 142.

400 Lankton and Hyde, *Old Reliable*, 142.

401 Hyde, "Business History," 263.



Figure 2- 53: View of an abandoned Lower Pewabic following mine closure showing deteriorated housing and unkempt landscape conditions. (source: Image is courtesy of the FSA-OWI photographic collection, Library of Congress)

In 1937, a spike in copper prices encouraged the company to re-open the mine.⁴⁰² It levied an assessment on shareholders to gather the capital required to de-water the mine and make extensive repairs. The mine reopened on a limited basis, using No. 6 and No. 8 for underground production.⁴⁰³ The spike was maintained by the onset of the Second World War, which increased the demand for copper and created stable, elevated prices guaranteed by the federal government. Quincy responded by securing a loan from the Metals Reserve Company in June of 1942 to construct a copper reclamation plant on Torch Lake, near the site of its stamp mills.⁴⁰⁴ The reclamation plant allowed Quincy to further process their vast quantity of waste tailings from Torch Lake and recover copper from them. The plant opened in November 1943, and began production immediately. At the same time that it was providing copper for the war, Quincy and other mines in the Keweenaw began to sell excess steel for scrap to support the war effort. Approximately 40,000 tons were collectively contributed by the middle of 1943.⁴⁰⁵

The reclamation operation was very successful; by the end of the war in 1945 it had produced more copper than the mine.⁴⁰⁶ When the war ended, so did the purchase agreement with the Metals Reserve Company.⁴⁰⁷ With copper prices again in serious decline, the machinery and men of the mine stopped work for good. On September 1, 1945 the mine closed permanently

402 Lankton, *Cradle to Grave*, 256.

403 Hyde, "Business History," 264.

404 Lankton and Hyde, *Old Reliable*, 141. See also Hyde, "Business History," 265.

405 Lankton, *Cradle to Grave*, 257.

406 Hyde, "Business History," 265.

407 Lankton and Hyde, *Old Reliable*, 144.

and the rhythm of copper mining on the Keweenaw was changed forever.⁴⁰⁸ Quincy's miners, trammers, oilers, skilled craftsmen, laborers and workers of all types went home and did not return to work. Locomotive No. 1 made its last haul after serving the mine through the entire history of the railroad.⁴⁰⁹ Its bell was rung and its last breath spent on a mournful release of steam.

Shut Down

By Ruth Malgren

*We miss the sounds of the Quincy Mine;
The sounds of the hoist wheels singing;
The bellow's blow and the blast below
And the locomotive ringing.*

*We don't catch sight of the carbide light
Some busy miner carries;
There're no more trips in the shaft house skips
For Toms or Dicks or Harrys.
No more dashing for the "dry"
With joking miners tangling;
No whistle's roar;
No falling ore;
No 'lectric signals jangling.*

*We miss the sounds of the Quincy Mine;
Old sounds, oft repeated.
Can such a long, tenacious life
Really be completed?⁴¹⁰*

Next Page:

Figure 2- 54: Quincy Unit, 1908-1945 Period of Change Plan

408 Ibid. See also Hyde, "Business History," 265.

409 O'Connell, "Rail Road," 662.

410 Bill Finlan and Margaret Gilbert, as cited in Lankton and Hyde, Old Reliable, 146.

Legend

- Existing Quincy Unit Boundary
- Quincy Mine Surface Operations (1908-1931)
- Quincy Mining Company Ownership (1908-1931)
- Franklin Mining Company (purchased by QMC 1908)
- Streetcar Route
- Mine Adit
- Portage Lake Shoreline
- Pewabic Lode
- QMC Mine Shaft (closes this period)
- Former Franklin Mine Shaft
- Railroad
- Former Location of Pewabic Tram Road
- Former Location of Franklin Tram Road
- Platted QMC Company Housing Location
- Existing QMC Housing Location
- Housing not affiliated with planned company housing location
- Road
- Section Numbers

Sources

"Map of Quincy Mine and Vicinity, Houghton County Michigan," date unknown (ca. early 1900s). (shows ownership parcels)
 Durward W. Potter Jr., "Quincy Mine Locations, Housing and Community Structures, C. 1920," HAER Heritage, Conservation and Recreation Service, 1978.
 "Plan of the Underground Workings of Quincy Mine and a Portion of Surface Detail," date unknown ca. 1900-1907.

Note

When overlaying the existing conditions over the HAER historic maps, the city of Hancock does not align with other areas in the Quincy Unit. Adjustments were made to correct this difference. The period of change maps are for analysis purposes only.

Chronology

1908

QMC Purchased Franklin and Pontiac Mining companies.

QMC Partially reconstructed shaft/rockhouses No. 6, 7 and 8 using steel frame construction.

The American Bridge Company completely rebuilt No. 2 shaft-rockhouse using steel frame construction.

QMC began construction of No. 9.

1909

QMC abandoned No. 4 shafthouse and demolished its rockhouse.

1910

QMC acquired 800 acres to the west to extend shafts 2,6,8, and 9.

1913

No. 4 shafthouse was demolished, No. 7 and No. 9 were closed.

1917

QMC built 50 houses in Frenchtown and Sing-Sing locations, as well as behind the assay office, east of Hardscrabble, Limerick, Mesnard and Lower Pewabic.

QMC began construction of new hoist and hoisthouse at No. 2 shaft, and ordered the largest steam hoist in the world.

1919

QMC purchased 140 acres in Section 22 from the Hancock Consolidated Mining Company for additional ground to be worked from No. 2 and No. 7.

QMC closed No. 7.

1920

QMC completed construction of new hoist and hoisthouse at No. 2 shafthouse.

1921

113 vacant homes on Quincy Hill.

1922

QMC closed No. 8.

1927

Quincy Schoolhouse burnt down.

1928

QMC re-opened No. 8.

1929-1931

Copper market collapsed.

1931

QMC closed operations.

1935

183 homes vacant on Quincy Hill.

1937

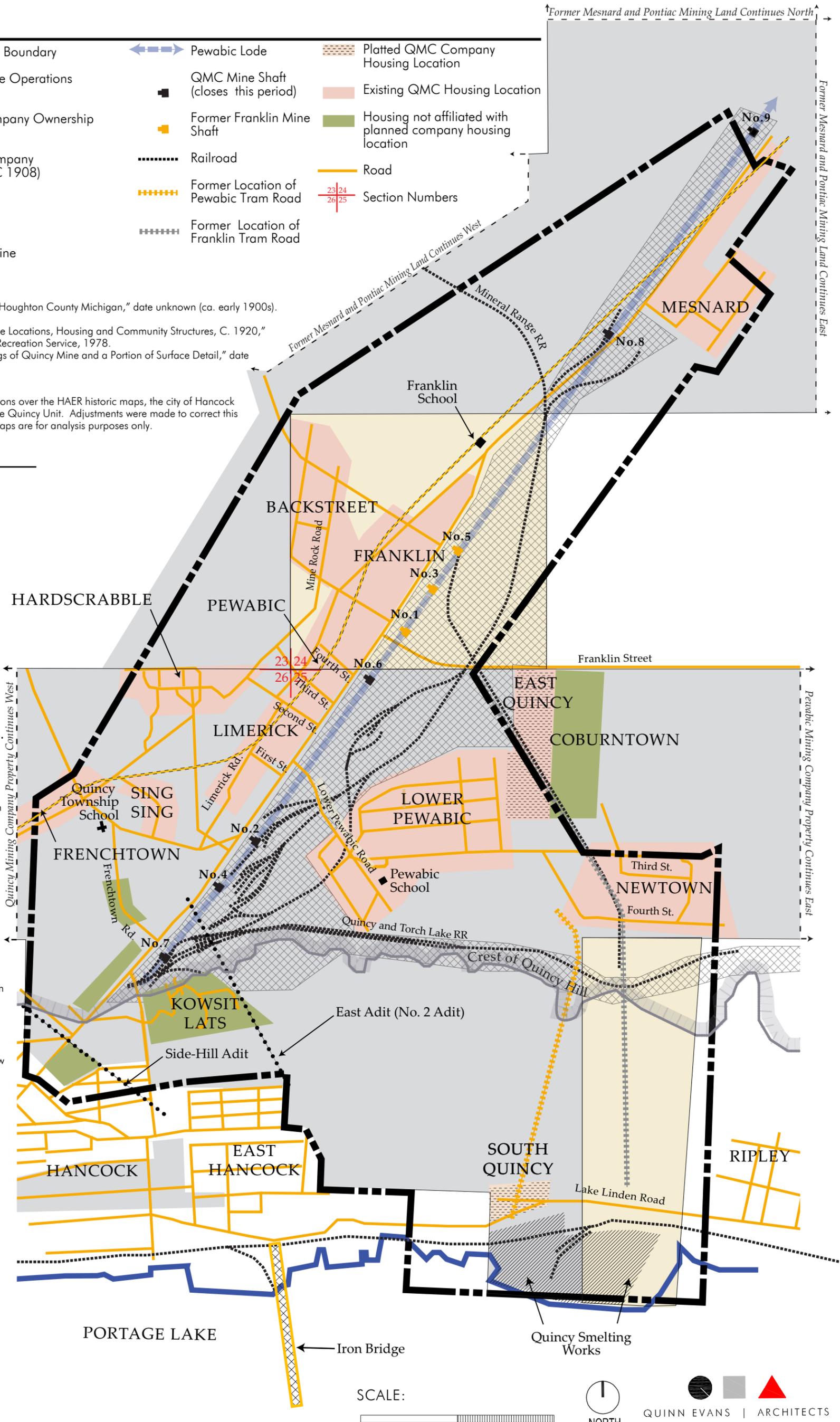
No. 6 and No. 8 reopened.

1942-1943

QMC constructed and opened reclamation plant.

1945

Quincy Mine permanently closed.



SCALE:



QUINN EVANS | ARCHITECTS

QUINCY UNIT, 1908-1945 PERIOD OF CHANGE PLAN

Cultural Landscape Report

Keweenaw National Historical Park

Reclamation: 1946-1967

Although Quincy was finished with underground mining, reclamation operations continued. Reclamation was a less expensive operation than mining, and it yielded large amounts of cast copper.⁴¹¹ Subsequently, Quincy was able to repay its Metals Reserve Company loan in the form of copper and profits by 1947, far ahead of schedule.⁴¹²

Quincy's previous mining and milling efforts had deposited an enormous volume of waste rock material in Torch Lake over a fifty year period. This had a great impact on Torch Lake. In fact, some residents estimate that the lake's volume was reduced by as much as thirty percent from the fill material.⁴¹³ These actions changed the shoreline and its associated upland and aquatic habitats. The reclamation process continued to sculpt the shoreline. The operation relied upon a floating dredge that vacuumed tailings from the lake, which passed them through a long floating pipe to the reclamation plant on shore. At the plant, the tailings were processed and copper was retrieved. Finally, the mineral was transported to the smelter by truck where the copper was cast into ingots.

In June 1948, Quincy re-opened the Quincy Smelting Works, which had been dormant since 1931. C&H had been providing Quincy with smelting services during the lean operating years, but the success of the reclamation project meant that C&H was no longer able to meet Quincy's needs. Quincy operated the reclamation plant and smelter until May of 1967. Work stopped briefly when their dredge was lost to a January storm in 1956, and again for a ten-month shutdown in 1958. Another dredge, purchased previously from C&H, was able to assume its duties until the end of the operation.⁴¹⁴

As the company focused its attention on reclamation, a diverse group interested in preserving the legacy of Quincy's mining operations on the Hill formed. The Quincy Mine Hoist Association, with leadership from Quincy's Board of Directors, Cleveland Cliffs, Michigan Technological University and local business leaders, was founded as a non-profit organization in 1958, and received 501c3 status in May of 1961. This group was narrowly focused on preserving the No. 2 Nordberg steam hoist. Over time, the idea to preserve a much larger industrial site would grow.

411 Lankton, *Cradle to Grave*, 259.

412 Lankton and Hyde, *Old Reliable*, 144.

413 Local observations are in the ballpark of the Environmental Protection Agency's estimate. According to the EPA, 200 million tons of copper ore tailings were deposited in Torch Lake, displacing about 20 percent of the lake's original volume. See www.epa.gov/glnpo/aoc/trchlke.html, accessed April 16, 2007.

414 Lankton and Hyde, *Old Reliable*, 144.

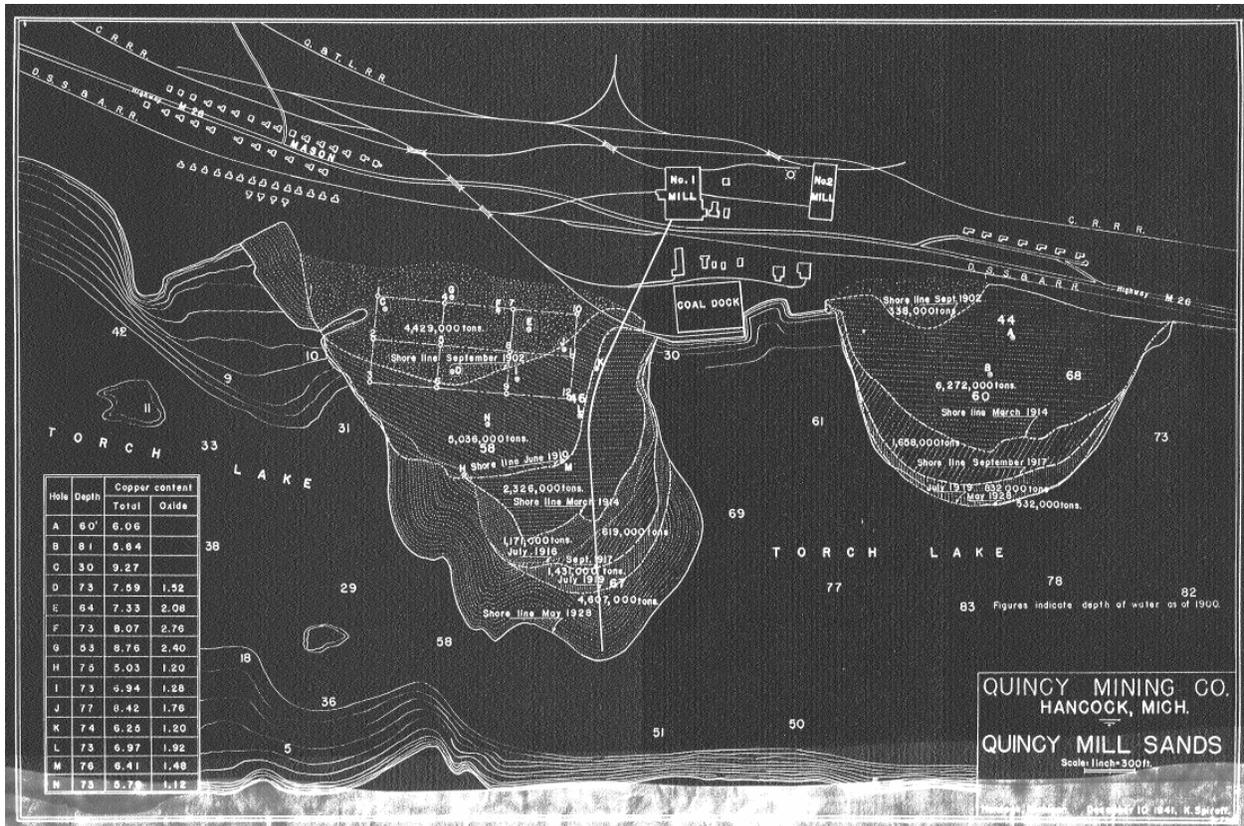


Figure 2- 55: Drawing (QD-0084) produced by Quincy Mining Company to depict areas and volumes of stamp mill sands affected by their reclamation efforts. (source: Image courtesy of Michigan Technological University Archives & Copper Country Historical Collections)

Post-Operation: 1968 – Present

Quincy remained closed until 1976, when it financed a joint venture with Homestake International as a partner. Quincy provided working capital for three main efforts: to erect a new hoist and headframe at No. 8; clear the shaft twenty levels deep; and provide exploratory diamond drilling in pursuit of copper deposits. Concurrently Michigan Technological University conducted diesel fuel emissions testing underground and trained students in rock dynamics, drilling, explosives and rock removal with heavy equipment in the east adit, at the south end of the Pewabic lode.⁴¹⁶ MTU’s Mining Engineering program led to the expansion of the adit from a 3 by 5 foot passage to a 15 by 15 foot tunnel. Since 1992, MTU has maintained a limited access agreement with the Quincy Mine Hoist Association for infrequent use as a learning environment. Although the partnership with Homestake did not create a new mining venture, it demonstrated the difficulty that people had in accepting the extensive changes imposed upon their lifeways and heritage.

The resolve to rekindle a bygone industry was strong, but it was not enough to withstand economic forces. Many industrial structures and machines that were once integral parts of the

⁴¹⁶ Ibid.,147.

Quincy landscape were sold for scrap. Partial buildings, ruins and fragments of a bygone industry dot a landscape that nature has tried to reclaim through weather and the establishment of volunteer vegetation. Corporate actions to dismantle what Quincy had worked so diligently to achieve were resented by some; their efforts refocused on new goals aimed at correcting environmental damage and developing a strong heritage tourism industry for the area. In 1978 the Historic American Engineering Record (HAER) undertook a study to document what remained from the Quincy Mining Company. HAER staff conducted research, took photographs, and carefully measured structures and ruins to record and document the remaining Quincy mine properties. Their work remains as an important reference. In 1984 the Quincy No. 2 mine hoist, owned and preserved by Quincy Mine Hoist Association, was recognized as a National Historical Mechanical Engineering Landmark.



Figure 2- 56: A 1978 photo by Jet Lowe shows the No. 7 hoist house ruin constructed of locally quarried Jacobsville sandstone. Prized for its appearance and value as a local construction material, this structure is among many that have disappeared from the Quincy landscape. (source: Image 2-63 courtesy of HAER)

In 1986, parts of the former Quincy Mining Company property were placed on the National Priorities List by the U.S. Environmental Protection Agency (EPA), creating the Torch Lake Area Superfund Site. Areas near the former mills, reclamation plant and smelter site, in addition to several other sites on the Keweenaw Peninsula, were determined to pose an environmental threat. This was largely due to the presence of high metal concentrations found within the stamp sands and byproducts present at both the mill and smelter complex. Exposure to wind and water provided erosive forces capable of moving the materials into the adjacent water bodies and damaging their benthic layer. By 1988, the EPA began investigation and remediation activities at Torch Lake, including in the tailings area known as the Mason Sands. In 1992, the EPA issued a Record of Decision to address the remediation of the Torch Lake Area Superfund Site. The remedy required covering several sites with soil and vegetation and long-term monitoring of mitigated areas. Remediation of the mill site sands involved grading and covering the 225-acre Mason sands site.



Figure 2- 57: Diagram indicating the Torch Lake Area of Concern. (source: courtesy of EPA website: <http://www.epa.gov/glnpo/aoc/trchlke.html>)



Figure 2- 58: Mason Sands Area before remediation. (source: courtesy of EPA
<http://www.epa.gov/glnpo/aoc/trchlke.html>)



Figure 2- 59 Mason Sands Area after EPA remediation. (source: courtesy of EPA
<http://www.epa.gov/glnpo/aoc/trchlke.html>)

The Quincy Smelting Works remained undisturbed until 2004. That year, the EPA removed abandoned laboratory chemicals from inside smelter buildings and performed asbestos testing, followed by limited asbestos abatement. An eight-foot high chain link fence was built around the core smelter buildings. The EPA also installed a geotextile fabric and rip-rap to stabilize the shoreline at the smelter. Additionally, they installed culverts beneath the former railroad grade to re-direct storm water away from the site and to improve site drainage. Michigan's Department of Natural Resources subsequently capped the former railroad grade, presently used as a snowmobile recreation trail, with a gravel surface to contain any metals or asbestos and prevent public exposure to these substances.



Figure 2- 60: Fence and sign at Quincy Smelter, 2007. (source: Image courtesy of NPS)

In 2008, the EPA abated the remainder of asbestos from within the built complex. In 2009, as a result of concerns raised by the Michigan Department of Environmental Quality (DEQ), the EPA took steps to amend the Record of Decision (ROD) to propose capping contaminated stamp soils outside the fence, except for two slag piles, but preserving the existing stamp sand surface inside the fence in anticipation of use of the site for historic interpretation purposes.



Figure 2- 61: Rock armoring / rip-rap placed along shoreline as part of EPA and MDNR remediation work, 2007. (source: Image courtesy of NPS)



Figure 2- 62: Gravel placed over the former railroad grade as part of EPA and MDNR remediation work, 2007. (source: Image courtesy of NPS)

As environmental issues related to mining were identified and remediation options evaluated, the cultural values associated with this industry were also being identified and examined. In 1989, the National Park Service established two National Historic Landmark (NHL) districts in the Keweenaw. One of them, the Quincy Mining Company National Historic Landmark District, encompasses the rich mining landscape and workers' housing areas found on Quincy Hill, and extends down the hillside to include the Quincy Smelting Works. The second NHL district was centered on Calumet and Hecla's industrial core and the Village of Calumet's civic presence that grew as a direct result of the copper mining industry.

In 1992 a new and unique national park was established. Keweenaw National Historical Park encompasses landscapes that offer distinct geology and abundant natural resources interconnected with the people who lived there, past and present. The area's copper mining heritage was seen and understood not through any one place, but through an array of historic landscapes, buildings and ruins - all of them associated with the culture found there today. The heritage tourism industry in the Keweenaw evolved as a grassroots community effort, and was literally built on the grounds and foundations that remain from the copper mining industry it honors. The park's enabling legislation reflects this community involvement by promoting partnerships, limiting federal ownership, and establishing a permanent park advisory commission.

Since the park was founded the Quincy Mine Hoist Association (QMHA) has expanded their mission beyond the No. 2 Nordberg steam hoist to include the mine, the landscape and artifacts; other actions have occurred to facilitate the interpretation of historic mining activities. In 1996 the QMHA installed a cog rail tram to transport visitors between the No.2 hoist house and the side hill adit. At the adit entrance visitors can enter the mine for an interpreted tour to experience the historic mine environment.

The QMHA sold the Blacksmith Shop and Machine Shop property on Quincy Hill to Michigan Technological University to serve as the new home to the A.E. Seaman Mineral Museum. The development of the Museum property provides new opportunities for cooperation between the Quincy Mine Hoist Association, A.E. Seaman Mineral Museum, and National Park Service.

Passing time and a lack of maintenance have reshaped the Quincy Mining Company landscape since the mine was operational. All but one of the many shaft-rockhouses, once visible for miles on the horizon, have been scrapped - torn down for the value of their steel. The capping of mine shafts to address public safety has consequently left many indistinguishable from the surrounding terrain. As the structural integrity of the extant smokestacks decline, they become expensive maintenance dilemmas and safety hazards. One smokestack at the Quincy Smelting Works was removed in 2008 when it was determined hazardous. The smokestack between the No. 2 Hoist Houses and the No. 5 Boiler Plant was also evaluated and removed. Weathered industrial buildings, crumbling masonry ruins, and rotting timber continue to erode beneath the immense weight of heavy annual snowfalls. Unsecured structures sometimes meet alternative fates, including fire and vandalism. Broken windows and decayed building shells are a common sight. Historic company housing locations, where they remain, are often a fragment of their former selves. Monumental poor rock piles that once dotted the land have been consumed, the rock crushed for use in construction activities elsewhere in the region.



Figure 2- 63: The remains of an historic rock pile are juxtaposed against a pile of crushed gravel. (source: Image courtesy of NPS)



Figure 2- 64: Smokestacks and ruins near the No. 6 dry are engulfed in volunteer vegetation. (source: Images are courtesy of the NPS)

New ventures continue to alter Quincy Hill. Former company homes are freely modified to meet the changing needs of today's occupants. Modern ranch homes, signs, and billboards located along U.S. 41 now represent new commercial endeavors while new roads bisect former housing locations. Quincy has been marked by modern industry as well, as communication towers blink into the night from strategic points on the hilltop. Volunteer vegetation now grows on once-barren mining lands, where it hides views, buildings, ruins, and landscape features. Foundation walls sometimes find roots deeply seated within cracks in their masonry.



Figure 2- 65: Billboards and signs along U.S. 41 compete for the attention of visitors, 2007. (source: Image courtesy of NPS)



Figure 2- 66: The historic view of the No. 2 hoist houses and beyond is obscured by volunteer woody vegetation , 2007. (source: Image courtesy of NPS)

At the same time that vegetation obscures the signs of industry, it also provides clues to settlement patterns and building locations. In many places, apple trees, lilacs and lilies indicate the location of orchards and yards. They lead the eye toward ruins and small-scale features, like fences and paths. Like tributaries, these features can be traced back to their source, often company-built roads and houses still in use. These subtle features offer glimpses of an earlier time, despite the layers of vernacular additions that have been made to both the landscape and its structures. Although time and neglect have taken their toll, much of Quincy is still visible on the landscape today. What remains is the most complete mining company landscape on the Keweenaw Peninsula.



Figure 2- 67: A poor rock house foundation in Lower Pewabic is marked by an apple tree in the foreground. The stacks in the background once served Quincy’s boilerhouses. (source: Image courtesy of the NPS)

Copper mining, milling, and smelting were once the driving forces behind landscape change in the Keweenaw. Several hundred companies left their mark on the Keweenaw Peninsula, and they represent an important part of our nation’s past. The Quincy Mining Company contributed greatly to this history. Part of their industrial landscape is now a National Historic Landmark District, which recognizes its national significance. The Quincy Unit of Keweenaw National Historical Park includes this exceptional property, and the park is charged with preserving and interpreting it. This provides a new opportunity for people whose lives were shaped and influenced by the Quincy Mining Company to honor their rich heritage and share their stories with the world.