

The
Quincy Mining Company
Smelting Works, 1898

Historical Land Use Survey Project

by

Dr. Patrick Martin and Gianfranco Archimede

Industrial Archaeology Program
Michigan Technological University
June 2002

for

The Keweenaw National Historical Park

National Park Service
Calumet, Michigan

Financial assistance provided by the Coastal Zone Management Act administered by the National Oceanic and Atmospheric Administration and the Michigan Coastal Management Program, administered by the Department of Environmental Quality, Land and Water Management Division.

TABLE OF CONTENTS

Part I: Historical Perspective of the Quincy Smelting Works

<i>A. Introduction & location</i>	1
<i>B. The Quincy Mining Company's turn of the century boom & expansion</i>	1
<i>C. The Keweenaw mining district's historic copper smelting in context</i>	2
<i>D. Phase 1: Establishment of the Quincy Smelting Works, 1898</i>	
1. Choosing the site location	4
2. Initial construction & the basic smelting process: structures, layout & technologies of the works.....	5
<i>E. Phase 2: Early technological & structural change at the Quincy Smelting Works, 1907-1918</i>	
1. Expanding production capacity: the Number 5 furnace.....	8
2. Other changes and additional smelting technology: the briquetting plant.....	8
<i>F. Phase 3: Major technological & structural change at the Quincy Smelting Works, 1919-1921</i>	
1. Tram electrification & materials handling efficiency	9
2. The casting shed & the Walker Automatic Casting Machine	10
3. Addition of power plants & steam boilers	10
<i>G. Phase 4: Post war decline & mine closing, 1922-1931</i>	10
<i>H. Phase 5: Smelter reopening & reclamation period, 1945-1971</i>	
1. Changes in production capacity: refining & remelting	11
<i>I. Phase 6: Final closing of the Quincy Smelting Works & establishment of the Quincy Mine Hoist Association, 1971-present</i>	
1. Status of the smelter after closing.....	12
2. Transfer of ownership to Franklin Township, 1999.....	12

Part II: Archaeological Resources of the Quincy Smelting Works

A. Introduction	13
B. Landscape features	
1. Rail Grades & Trestles	14
2. Slag Piles	16
3. Open Spaces.....	17
4. Description Of Possible Soil Deposits & Composition Of Site	18
C. Shoreline features	
1. Overview & Current Remains	20
2. Coal Dock.....	23
3. Loading Dock.....	23
4. Reverberatory Slag Trestle	24
D. Currently standing structures & artifact overview	
1. Reverberatory Furnace Building, No. 3 Furnace & 300 h.p. Boiler, No. 5 Furnace Building & the By-Pass Smoke Stack	26
2. Cupola Furnace Building	28
3. Engine Room.....	29
4. Blacksmith Shop.....	30
5. Dock Side Warehouse	30
6. Assay Office.....	31
7. Charcoal House.....	32
8. Carpenter Shop.....	33
9. Parts & Supplies Storage Barn	33
10. Maintenance Barns & Garage	34
11. Main Office Building	34
12. Iron House & Time Office	35
13. Oil House.....	36
14. Ice House.....	36
15. Railroad Storage Shed (collapsed).....	37
16. Mineral Building	37
17. Cook Boiler House	38
18. Briquetting Building & Crushing Plant	39
19. Limestone Bins	40
20. Pump Room	41
21. Machine Shop	41
22. Scale Houses	42
23. Lumber Shed	43
24. Casting Shed	43
25. Badenhausem Boiler House	45
26. Steel Trestles & Tramway Remnants	45
27. Steam Locomotives No. 29 & No. 175	45
28. Pump House	46

E. Ephemeral historic structures & areas of sub surface archeological sensitivity	
1. Franklin Stamp Mill Launderers, Trestles, & Features	47
2. Mould Shed	47
3. Coal Dock	48
4. Sand House	49
5. Cooper, Cooper Stock & Carpenter Shops Original Locations	49
6. Slag Shed	50
7. Water Pumping Adits	51
8. Clay Shed	51
9. Tram Lines & Covered Gangways	52
10. Unknown Structures	53

Part III: Recommendations for Further Archaeological Research and Resource Management

A. Introduction	54
B. General Suggestions.....	54
C. Specific Archaeological Suggestions.....	55

Part IV: Bibliographic References Overview

A. Introduction	57
B. Document collections overview	
1. The Quincy Mining Company collection, MTU Copper Country Archives	58
a) Record Series 1: Corporate Records, 1848-1970 and Annual Reports	
b) Record Series 2: Correspondence, 1872–1986	
c) Record Series 3: Financial Records, 1852–1988	
d) Record Series 4: Operational Records, 1861–1971	
e) Record Series 6: Employment and Medical Records, 1851–1988	
C. Maps, drawings & photographs collections overview	
1. Quincy Drawings Collection, MTU Copper Country Archives	59
2. Quincy Smelter Vertical File: Historic Photographs, MTU Copper Country Archives,	60
3. Historic American Engineering Record (HAER) QMC Documentation Project, 1978, MTU Copper Country Archives & Library of Congress	60
4. The Quincy Mine Hoist Collection, MTU Copper Country Archives	60
5. QMC Maps & Maps Collection, MTU Copper Country Archives	61

6. The Quincy Smelting Works Photographic Documentation Project 2001, Keweenaw National Historic Park (KEWE) archives61

D. *Secondary sources overview*

1. Contemporary texts, treaties, and reports on copper smelting and its technology, 61
2. Later histories and student papers.....62
3. Houghton County Deed Records Office, Houghton County Municipal Building, Houghton.....63

End Notes, 64–68

Appendix A : Bibliographies

A. *Bibliography of primary sources*

1. Cited primary sources
2. Additional primary sources

B. *Bibliography of secondary sources*

1. Cited secondary sources
2. Additional secondary sources

C. *Bibliography of Quincy Smelting Works drawings*

1. Cited drawings
2. Additional drawings

D. *Bibliography of historic maps*

1. Cited maps
2. Additional maps

E. *Bibliography of historic and current photographs*

1. Cited photographs
2. Additional photographs

Appendix B : Photographs

Appendix C : Historic Maps

Appendix D : HAER Maps (1978)

Appendix E : Project Description