

Honeywell  
301 Plainfield Road  
Suite 330  
Syracuse, NY 13212  
315-552-9700  
315-552-9780 Fax

February 26, 2014

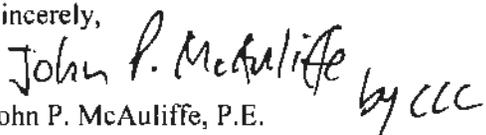
To: Diane Carlton, NYSDEC, Region 7 (1 PDF)  
Holly Sammon, Onondaga County Public Library (1 bound)  
Samuel Sage, Atlantic States Legal Foundation (1 bound)  
Joseph J. Heath, Esq., Onondaga Nation (ltr only)

Re: Letter of Transmittal – Wastebed B – Harbor Brook RI/FS Repository Addition

The below document has been approved by the New York State Department of Environmental Conservation (NYSDEC) and is enclosed for your document holdings:

- Cultural Resource Management Report Phase 1B Cultural Resource Survey Onondaga Lake Project, Upland and Shoreline Area SYW-12 dated May 2013, submitted as a revised report on December 20, 2013, and approved by the NYSDEC on February 21, 2014.

Sincerely,

  
John P. McAuliffe, P.E.  
Program Director, Syracuse

Enc.

cc: Tracy Smith – NYSDEC Manager

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation**  
**Remedial Bureau D, 12th Floor**  
625 Broadway, Albany, New York 12233-7013  
**Phone:** (518) 402-9676 • **Fax:** (518) 402-9020  
**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



February 21, 2014

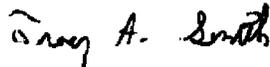
Mr. John P. McAuliffe, P.E.  
Honeywell International, Inc.  
301 Plainfield Road  
Suite 330  
Syracuse, NY 13212

**Re:** SYW-12 Phase 1B Cultural Resource Survey

Dear Mr. McAuliffe:

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the "Cultural Resource Management Report Phase 1B Cultural Resource Survey Onondaga Lake Project, Upland and Shoreline Area SYW-12" (Phase 1B CRS) dated May 7, 2013 and submitted in your letter dated December 20, 2013. Based on this review the Phase 1B CRS is approved. If you have any questions, please contact me at 518-402-9796.

Sincerely,



Tracy A. Smith  
Project Manager

ecc: J. Gregg, NYSDEC  
T. Conkline, OBG  
H. Kuhl  
T. Joyal, Esq.  
C. Waterman  
A. Lowry

R. Nunes, USEPA  
A. Cirillo, Esq., USEPA  
J. Shenandoah  
N. Herter, NYSHPO  
D. Hesler, NYSDEC  
S. Miller, Honeywell

M. Sheen, Esq., NYSDEC  
T. Gonyea  
J. Heath, Esq.  
C. Vandrei, NYSDEC  
F. Kirshner  
D. Coburn, Onondaga Cty.

Honeywell  
301 Plainfield Road  
Suite 330  
Syracuse, NY 13212  
315-552-9700  
315-552-9780 Fax

December 20, 2013

Mr. Tracy A. Smith  
New York State Department of Environmental Conservation  
Remedial Bureau D  
625 Broadway  
Albany, New York 12233-7016

**Re: SYW-12 Phase 1B Cultural Resource Survey**

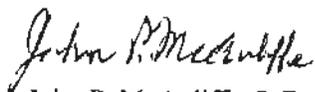
Dear Mr. Smith:

The purpose of this letter is to transmit the revised *SYW-12 Phase 1B Cultural Resource Survey* (prepared by Public Archeology Facility of Binghamton University on behalf of Honeywell) for the New York State Department of Environmental Conservation's (NYSDEC) review. The *Phase 1B Cultural Resource Survey* was performed at the direction of the NYSDEC in a March 12, 2012 email and was revised based on August 5, 2013 comments from the NYSDEC.

Detailed geomorphological analysis of soil borings and literature, review of project plans, and the archeological testing described in the *Phase 1A Cultural Resource Assessment* (approved July 26, 2013) and *Phase 1B Cultural Resource Survey* have recommended that any additional excavations be monitored to document potential findings.

Please contact Tom Conklin of O'Brien & Gere (Tom.Conklin@obg.com or 315-956-6408) or me if you have any questions regarding this report.

Sincerely,



John P. McAuliffe, P.E.  
Syracuse Program Director

Attachments (2 copies, 1 CD)

cc:	William Hague	Honeywell (ec ltr only)
	Justin Deming	NYSDOH (ltr only)
	Harry Warner	NYSDEC Region 7 (1 copy, 1 CD)
	Mark Sergott	NYSDOH (1 copy, 1 CD)
	Robert Nunes	USEPA (1 copy, 2 CDs)
	Margaret A. Sheen, Esq.	NYSDEC, Region 7 (ltr only)
	Argie Cirillo, Esq.	USEPA (ltr only)
	Brian D. Israel, Esq.	Arnold & Porter (ec or CD)
	Joseph Heath, Esq.	(ec ltr only)
	Thane Joyal, Esq.	(1 copy, CD)

Mr. Tracy Smith  
December 20, 2013  
Page 2

Fred Kirschner	AESE, Inc. (ec or CD)
Jeanne Shenandoah	Onondaga Nation (1 copy and ec ltr only)
Curtis Waterman	HETF (ec or CD)
Alma Lowry	(ec ltr only)
Michael Spera	AECOM (1 copy)
David Coburn	O.C. Office of the Environment (1 copy, 1 CD)
James O'Loughlin	Parsons (ec ltr only)
Steve Miller	Honeywell (CD/ltr only)
James R. Heckathorne	O'Brien & Gere (ec or ec ltr only)
Christopher Calkins	O'Brien & Gere (ec or ec ltr only)
Thomas Conklin	O'Brien & Gere (ec ltr only)

**CULTURAL RESOURCE MANAGEMENT REPORT  
PHASE 1B CULTURAL RESOURCE SURVEY**

**ONONDAGA LAKE PROJECT, UPLAND AND SHORELINE AREA  
SYW-12**

**CITY OF SYRACUSE  
ONONDAGA COUNTY  
NEW YORK  
MCD 06740**

*Prepared For:*

**HONEYWELL**

**301 Plainfield Road, Suite 330  
Syracuse, NY 13212**

*Prepared by:*

**CHRISTOPHER D. HOHMAN  
of  
PUBLIC ARCHAEOLOGY FACILITY**

**with contributions by  
Joseph Schuldenrein, Eva Hulse, Johnathan Garland and Chelsea Richard  
of Geoarchaeology Research Associates**

Binghamton University  
Binghamton, NY 13902-6000  
Phone: (607) 777-4786  
Fax: (607) 777-2288

**and**

**O'BRIEN AND GERE**

333 West Washington Street  
Syracuse, NY 13202  
Phone: (315) 956-6100  
Fax: (315) 463-7554

**May 7, 2013**

---

## PHASE 1B CULTURAL RESOURCE SURVEY MANAGEMENT SUMMARY

**PROJECT IDENTIFIER:** Onondaga Lake Project, SYW-12

**CULTURAL RESOURCE SURVEY TYPE:** Phase 1B Cultural Resource Survey

**LOCATION INFORMATION:**

Route:

Minor Civil Division: City of Syracuse (06740)

County: Onondaga

**SURVEY AREA:** SYW-12 Wetlands

Size of Area: Approximately 6.9 hectares (17 acres)

**SENSITIVITY ASSESSMENT:**

Prehistoric: Low

Historic: High for structural remains associated with Salina Pier pavilion, Iron Pier pavilion, and the Iron Pier Park

**CULTURAL RESOURCE SURVEY METHODOLOGY:** The survey methodology included a series of backhoe trenches across the area of SYW-12, as well as additional split spoon corings. The backhoe trenches were excavated to evaluate potential areas of contamination, and to ascertain the potential for prehistoric and/or historic resources. The additional split spoon corings were completed to assist analysis of the geomorphological stratigraphy of the soils within the project area.

**RESULTS OF CULTURAL RESOURCE SURVEY:** A series of six backhoe trenches and nine additional split spoon corings were excavated in the area of SYW-12 Wetlands. The backhoe trenches found fill on top of marl in much of the project area. They also encountered the remains of wood pilings from the harbor wall and a possible boathouse. The pilings and the possible boathouse remnants were generally encountered from 1.8 to 3 m (6 to 10 ft) below the surface. The pilings are the remnants of a portion of the Iron Pier harbor and have been designated as the Iron Pier Harbor Site (SUBi-3037). The pilings appear to be associated with the remains identified as Anomaly 38 off the existing shoreline during the underwater survey (Kane et al. 2011). The remains of the pilings and a possible boathouse are part of the previously identified Iron Pier Marine Infrastructure, and constitute a contributing resource of the Syracuse Maritime Historic District.

**RECOMMENDATIONS:** The geomorphological analysis indicated that the project area contained lacustrine deposits prior to the 19<sup>th</sup> century, suggesting low potential for prehistoric resources within the project limits (Schuldenrein et.al. 2013, Appendix II). The Iron Pier Harbor Site (SUBi-3037) consists of the remains of pilings from the wall of the harbor, as well as the possible remnants of a boathouse and are a continuation of Anomaly 38 found during the underwater survey. As such, they are a contributing resource of the Syracuse Maritime Historic District (Kane et al. 2011). Although the pilings and the boathouse remnants have limited research individually, these components of the Iron Pier Harbor would have research potential related to the construction and use of a harbor and amusement center in the late 19<sup>th</sup> century in upstate New York. Therefore, the Iron Pier Harbor Site (SUBi-3037) is potentially eligible for the National Register of Historic Places. If additional excavations take place at the SYW-12 wetlands, we recommend additional monitoring of the excavations with mapping and photography of any features that are encountered. Because of the depth of the remains of the Iron Pier Harbor Site and the contamination within the project area, we do not recommend hand excavations of the remnants of the harbor wall or remnants of any prior structures around and adjacent to the Iron Pier Harbor.

---

**AUTHOR/INSTITUTION:** Christopher D. Hohman, Public Archaeology Facility, Binghamton University with contributions by Joseph Schuldenrein, Eva Hulse, Johnathan Garland, and Chelsea Richard of Geoarchaeology Research Associates, Yonkers, New York

**DATE OF REPORT:** May 7 2013

**SPONSOR:** Honeywell

---

## TABLE OF CONTENTS

PHASE 1B CULTURAL RESOURCE SURVEY MANAGEMENT SUMMARY. . . . .	i
I. INTRODUCTION. . . . .	1
II. PROJECT DESCRIPTION. . . . .	1
III. GENERAL PROJECT AREA. . . . .	1
IV. BACKGROUND RESEARCH. . . . .	4
4.1 Site Files Search. . . . .	4
4.2 Environmental Setting. . . . .	4
4.3 Precontact Period History. . . . .	8
4.4 Precontact Sensitivity Assessment. . . . .	8
4.5 Postcontact Period History. . . . .	8
4.6 Postcontact Sensitivity Assessment. . . . .	23
V. GEOMORPHOLOGICAL ANALYSIS. . . . .	25
VI. ARCHAEOLOGICAL METHODOLOGY. . . . .	25
VII. ARCHAEOLOGICAL RESULTS. . . . .	25
VIII. IRON PIER HARBOR SITE (SUBi-3037). . . . .	61
APPENDIX I. BIBLIOGRAPHY. . . . .	69
APPENDIX II. GEOMORPHOLOGICAL ASSESSMENT REPORT. . . . .	71

### List of Figures

Figure 1. Location of SYW-12 APE of the Onondaga Lake project on the 1978 USGS map . . . . .	2
Figure 2. SYW-12 Site Plan and delineated wetlands. . . . .	3
Figure 3. 1849 cross-section of Onondaga Lake (from Clark 1849) . . . . .	5
Figure 4. 1938 Soil Survey map, with approximate area of SYW-12 highlighted . . . . .	6
Figure 5. 1977 Soil survey map, with approximate area of SYW-12 highlighted . . . . .	7
Figure 6. Approximate APE of SYW-12 on a late 18 <sup>th</sup> century map of Onondaga Lake . . . . .	10
Figure 7. 1852 Fagan map of Onondaga Lake and approximate APE of SYW-12 highlighted . . . . .	11
Figure 8. 1859 Sweet map with approximate APE of SYW-12 highlighted. . . . .	12
Figure 9. 1874 Sweet map with approximate APE of SYW-12 highlighted. . . . .	13
Figure 10. 1892 Vose map with approximate boundaries of SYW-12 highlighted (from Thompson 2002). . . . .	14
Figure 11. 1892 Sanborn map of Iron Pier amusement area and Salina Pier, with approximate boundaries of SYW-12 highlighted. . . . .	16
Figure 12. Late 19 <sup>th</sup> century advertisement for the Iron Pier (from Onondaga County Parks 1998). . . . .	17

---

Figure 13. 1899 photograph of the Iron Pier harbor and park (from Thompson 2002).....	17
Figure 14. 1898 15 minute Syracuse East USGS quadrangle with approximate APE of SYW-12 highlighted. . . .	18
Figure 15. 1908 Hopkins map of southeastern corner of Onondaga Lake, with approximate APE of SYW-12 highlighted.. . . .	19
Figure 16. 1924 Hopkins map of southeastern corner of Onondaga Lake, with approximate APE of SYW-12 highlighted.. . . .	20
Figure 17. 1947 7.5 minute Syracuse West USGS quadrangle, with approximate APE of SYW-12 highlighted. . .	21
Figure 18. 1950 Sanborn map of area around southern end of Onondaga Lake, with approximate APE of SYW-12 highlighted.. . . .	22
Figure 19. Identified features of Anomaly 38 from Underwater Archaeological Survey (Kane et al. 2011). . . . .	24
Figure 20. Location of Trenches for the SYW-12 Testing. . . . .	60
Figure 21. Approximate location of Iron Pier Harbor and Onondaga Lake Extension based on Archaeological Findings, 1892 Sanborn map and 1908 Hopkins map. . . . .	63
Figure 22. Locations of pilings within backhoe trenches for SYW-12. . . . .	64
Figure 23. Location of Iron Pier Harbor Site on the 1978 USGS map. . . . .	67
Figure 24. Site map of piling locations and wood/metal hardware of the Iron Pier Harbor Site. . . . .	68

#### List Of Photos

Photo 1. Facing northeast, northern part of Trench TP-54, profile. . . . .	26
Photo 2. Facing northeast, overall stratigraphy of northern end of Trench TP-54. . . . .	27
Photo 3. Fragment of amber bottle glass recovered 1.8-2.1 m below the surface at 50 ft south on Trench TP-54. .	28
Photo 4. Fragment of yellow plastic bowl recovered 1.8-2.1 m below the surface at 50 ft south on Trench TP-54. .	28
Photo 5. Facing south, 140-200 ft south section of Trench TP-54. . . . .	29
Photo 6. Facing east, east wall profile of 140-200 ft section of Trench TP-54. . . . .	30
Photo 7. Facing east, east wall profile of southern end of Trench TP-54. . . . .	31
Photo 8. Facing west, west wall profile of northern end of Trench TP-55. . . . .	32
Photo 9. Facing north, northern end of Trench TP-55. . . . .	33
Photo 10. Facing east, east wall profile of Trench TP-55 between 335-385 ft south. . . . .	34
Photo 11. Facing south, wood piling in Trench TP-55 at TP-55-284.5. . . . .	35
Photo 12. Facing south, wood piling at TP-55-284.5 pulled out by backhoe operator. . . . .	36
Photo 13. Facing southeast, wood piling at TP-55-284.5. . . . .	36
Photo 14. Bottom of wood piling from TP-55-284.5. . . . .	37
Photo 15. Milled wood adjacent to wood piling at TP-55-284.5. . . . .	37
Photo 16. Facing south, milled wood and piling at TP-55-409/413. . . . .	38
Photo 17. Facing southeast, piling from TP-55-409/413 and milled wood. . . . .	39
Photo 18. Facing east, milled wood from area of TP-55-409/413. . . . .	39
Photo 19. Facing south, south wall profile of Trench TP-55A, between pilings. . . . .	40
Photo 20. Facing west, pilings at eastern end of Trench 55A and west of TP-55-284.5. . . . .	41
Photo 21. Facing south, wood piling in edge of wall at TP-55A-39. . . . .	42
Photo 22. Facing south, wood piling at TP-55A-128.5. . . . .	42
Photo 23. Facing east, wood pilings within Trench 55A to the south of Trench 54. . . . .	43
Photo 24. Facing west, wood piling at western end of Trench 55A at TP-55A-148. . . . .	44
Photo 25. Milled wood found adjacent to the wood piling at TP-55A-148. . . . .	44
Photo 26. Gasket located in vicinity of Wood piling at TP-55A-148 and recovered at depth of approximately 8 ft below the surface. . . . .	45
Photo 27. Facing northeast, piling fragments during excavation of Trench 55B. . . . .	46
Photo 28. Facing south, concrete and metal deposit in Trench 56 at 22-28 ft north of south end. . . . .	47

---

Photo 29. Metal and concrete deposit from Trench 56. . . . .	48
Photo 30. Facing north, wood fragments at Trench 56-145. . . . .	49
Photo 31. Facing northwest, wood fragments at TP-56-145. . . . .	50
Photo 32. Metal hardware recovered in Trench TP-56-145. . . . .	50
Photo 33. Closeup of Metal hardware recovered at TP-56-145. . . . .	51
Photo 34. Closeup of metal hardware recovered at TP-56-145. . . . .	51
Photo 35. Facing northwest, west wall profile of Trench 56 at TP-56-100. . . . .	52
Photo 36. Root mat from the base of Trench 56 at TP-56-508. . . . .	53
Photo 37. Facing east, east wall profile of TP 57 at TP-57-50. . . . .	54
Photo 38. Facing east, east wall profile of Trench 57 at TP-57-160. . . . .	55
Photo 39. Facing east, east wall profile in Trench 57 at TP-57-360. . . . .	56
Photo 40. Facing east, east wall profile of Trench 57 at TP57-460. . . . .	57
Photo 41. Facing north, northern end of Trench 57 at TP-560. . . . .	58
Photo 42. Shoe fragment recovered at 3-3.7 m (10-12 ft) below the surface in Trench 57 at TP57-560. . . . .	59

---

## I. INTRODUCTION

This Public Archaeology Facility (PAF) report presents the results of a Phase 1B cultural resource survey for the remediation of SYW-12, an area of land at the southeast corner of Onondaga Lake in the City of Syracuse, Onondaga County, New York (Figures 1 and 2, pp. 2-3). The Phase 1B cultural resource survey was undertaken following the recommendations of the Phase 1A assessment and following comments from the New York State Department of Environmental Conservation. This study was undertaken to evaluate the potential for cultural resources within the project area in compliance with Section 106 of the National Historic Preservation Act, the New York State Historic Preservation Act, and the professional standards of the New York Archaeological Council (NYAC 2000). The results of the research for this report do not apply to any territory outside the project area.

The project includes the excavation of a series of backhoe trenches and split spoon corings of the property identified as SYW-12 for potential cultural resources and contaminated soils which may require remediation. Honeywell is the sponsor for the project and O'Brien & Gere is performing the implementation of the project. A Health and Safety Plan (HASP) was completed by PAF in compliance with O'Brien and Gere's HASP; PAF complied with both plans during the on-site survey.

The research summarized in this document was performed under the supervision of Dr. Nina M. Versaggi, Director of the Public Archaeology Facility. Christopher D. Hohman served as the project director and is the author of this report. Background research was completed by Hohman for the Phase 1A assessment (Hohman 2012). The backhoe trenches were excavated by O'Brien and Gere, under the supervision of Nathan Kranes and others from O'Brien and Gere, Hohman from the Public Archaeology Facility, Anthony Gonyea of the Onondaga Nation, as well as others involved in the remediation and contamination aspects for the project. The soil borings were completed by NYEG under the supervision of Nathan Kranes of O'Brien and Gere. All project maps were created by Hohman and Michael Jacobson of the Public Archaeology Facility using maps from O'Brien and Gere. Geomorphological assessment was completed in the field by Eva Hulse and Johnathan Garland of Geoarchaeology Research Associates (GRA) and assisted in the office by Joseph Schuldenrein and Chelsea Richard of GRA. Maria Pezzuti and Annie Pisani performed all related administrative duties.

The cultural resource survey included in this report applies only to potential archaeological and architectural resources. PAF understands that the United States Environmental Protection Agency (USEPA) has initiated government-to-government consultations with the Onondaga Nation in compliance with 36 CFR Part 800.4 (a)(b) regarding properties of religious and cultural significance. However, at this time, USEPA has not asked Honeywell, O'Brien and Gere, or PAF to address the task of identifying religious or cultural properties. Therefore, no analysis has been performed as to whether or not the remediation of the areas included in this report may have an effect on Properties of Cultural and Religious Significance.

## II. PROJECT DESCRIPTION

The area of potential effects (APE) for this project includes the parcel identified as SYW-12 at the southeast corner of Onondaga Lake, bordered by Ley Creek to the north, Onondaga Lake to the northwest, the Barge Canal to the south and CSX Railroad to the east. This parcel covers approximately 17 acres (6.9 hectares) within the City of Syracuse. Plans call for the remediation of SYW-12, although exact plans were not available when this report was written.

## III. GENERAL PROJECT AREA

Figure 1 depicts the APE on the 1978 USGS map. Figure 2 depicts the delineated wetlands and the site plan of SYW-12.

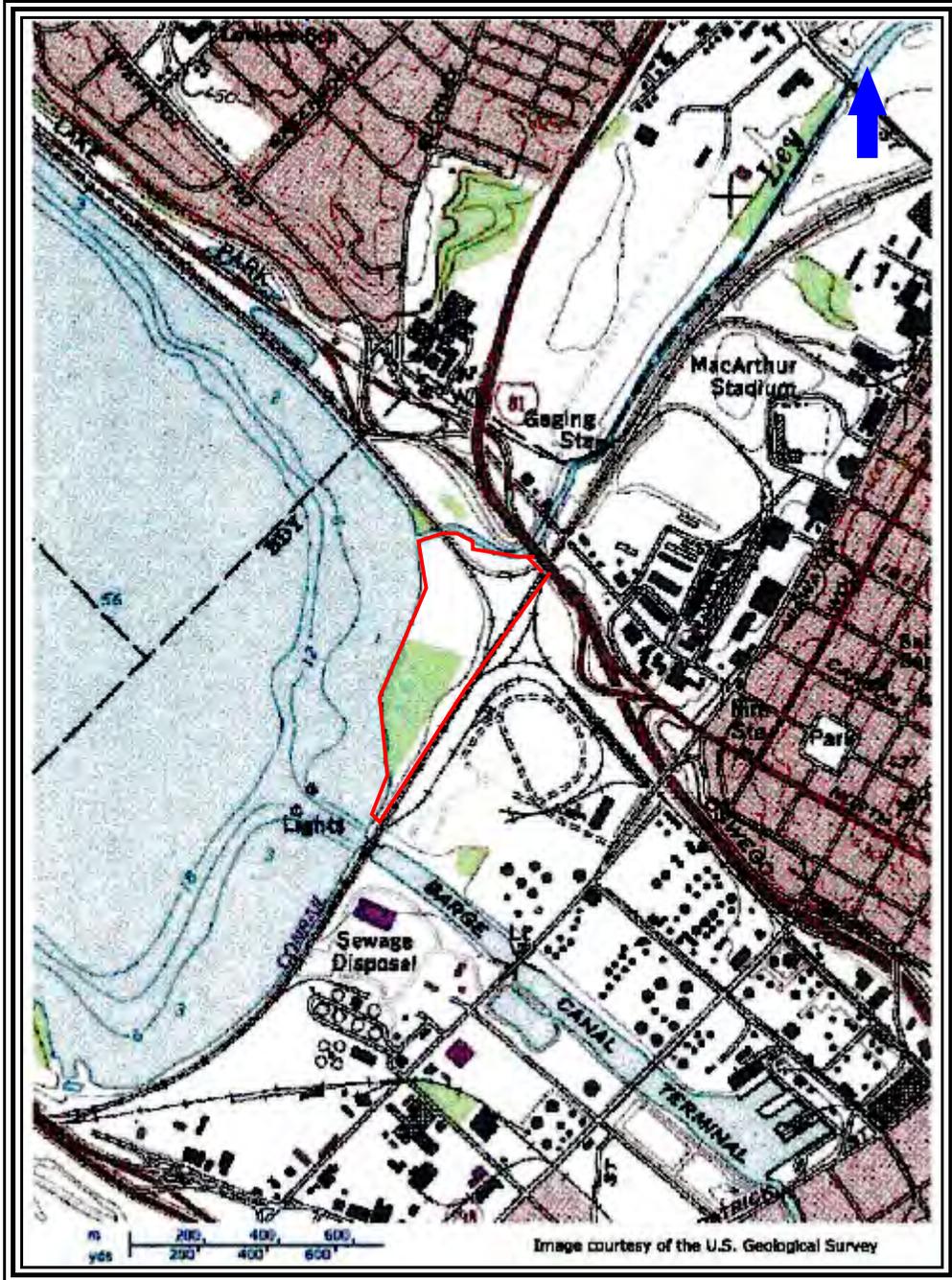


Figure 1. Location of SYW-12 APE (in red) of the Onondaga Lake project on the 1978 USGS map.



Figure 2. SYW-12 Site Plan and delineated wetlands.

---

#### IV. BACKGROUND RESEARCH (from Hohman 2012)

Background historical and archaeological research was completed in 2004 for portions of the Onondaga Lake project as part of the original Phase 1A assessment (Hohman 2004) and supplemental information was gathered for the area of SYW-12 in 2012 (Hohman 2012).

##### 4.1 Site Files Search

Site files searches completed by Hartgen Archaeological Associates (2004) and Public Archaeology Facility indicated that there are four precontact sites and one contact period site within the vicinity of the south end of Onondaga Lake. These sites were all initially identified by Arthur Parker in the early 20<sup>th</sup> century (1922) and include two sites with artifacts from an unknown temporal period (Parker #86 and #87), site traces within the Syracuse City limits at the southern end of Onondaga Lake, and a small site with some lithics on an elevated area near a marsh on the west side of Onondaga Creek. The one contact period site is Kaneenda, a Native American village dating from the early 17<sup>th</sup> century located within the city limits at the southern end of Onondaga Lake. Kaneenda was on a creek and south of the lake and may have been on an elevated spot near the marsh west of the creek. Based on the 1898 USGS map, this may place the location of Kaneenda approximately 1200 m (3900 ft) to the southwest of the SYW-12 project area. None of the known sites are located within the present boundaries of SYW-12.

##### 4.2 Environmental Setting

###### *Onondaga Lake*

The level of Onondaga Lake is presently 110.6 m (362.8 ft) ASL (Figure 2) with the recorded levels of the lake varying between 361 and 369.2 ft ASL. The level of the lake at 363 ft ASL is within 0.6 to 1 m (2-3 ft) of the level of the lake prior to 1822. Prior to the 19<sup>th</sup> century and through the present times, the lake has experienced seasonal and yearly variations, especially during times of spring run-off and dry summers. The original shoreline of the lake was composed of soft spongy bog (Clark 1849) that flooded easily when the water table was high. In 1822, a channel was dredged and a reef was dynamited at the north end of the lake to provide a navigable connection to the Seneca River. This lowered the lake level by approximately 0.6 m (2 ft) and exposed large stretches of salt marsh (Clark 1849; Thompson 2002). This may have reduced the elevation of the lake to 364 ft ASL, which was the height of the lake in 1898 (USGS, Figure 14). However, these elevation recordings may have been taken during a wet season, as the present elevation of the lake (after being raised in 1915) is less than this (approximately 363 ft ASL). Following the silting-in of the Seneca channel, another cut was made in the 1840s, aligning the shore nearly to its position today. In the 1870s, the construction of the Syracuse Northern Railroad along the southeast edge of the lake resulted in a shoreline closely resembling the present shore.

The 1852 Fagan map (Figure 7, p. 11), shows that an area approximately 915 m (3000 ft) to the south of the lake is still noted as wetlands. The 19<sup>th</sup> century maps (1859, 1874 and 1892; Figures 8-10, pp. 12-14) indicate that reclaimed land is located on the southern shore of Onondaga Lake. The 1908 Hopkins map (Figure 15, p. 19) identifies the approximate original shoreline of Onondaga Lake as cutting through the middle of what is presently regarded as SYW-12 Wetlands. However, much of that area is also identified as soda ash and refuse filling, suggesting that it had been wetlands that had been filled in to create a more stable surface. In 1915, following the construction of the New York State Barge Canal dam in Phoenix, the water levels rose within the lake. This moved much of the shoreline in its present elevation, with the exception of areas affected by dumping episodes and road construction. By the early 20<sup>th</sup> Century, soda ash, the largest amount of waste produced, was no longer being pumped into the lake but was being deposited along the south shoreline (Thompson 2002).

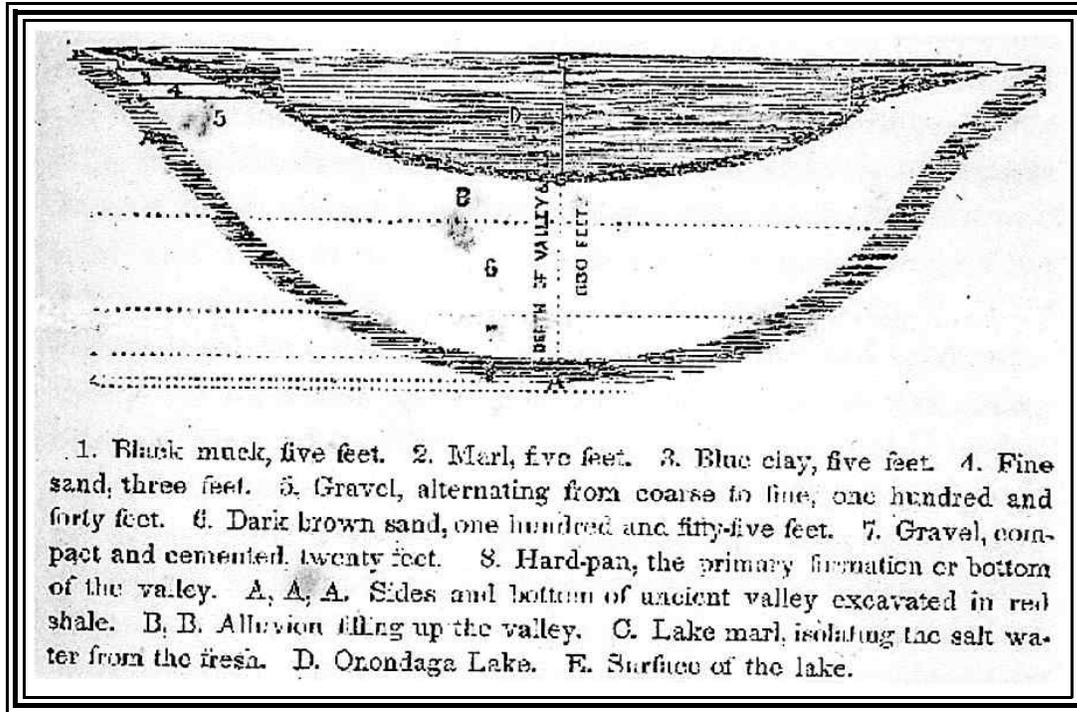


Figure 3. 1849 cross-section of Onondaga Lake (from Clark 1849).

A cross-section of Onondaga Lake from 1849 (Clark 1849) shows that the base of the lake was covered by gravel and sand (Figure 3). These deposits covered a hardpan base, which was the primary formation, or bottom, of the valley. Adjacent to the sides of the lake were layers of black muck, marl, blue clay, and fine sand. These layers were each between 0.9-1.5 m (3-5 ft) in thickness and represented the marshlands that were adjacent to the lake in the precontact and postcontact periods.

The 1938 soil survey map of Onondaga Lake (Figure 4, p. 6) shows that the majority of the soils around the lake was either made land, muck, or Warner's loam (low phase). Both the muck and Warner's loam (low phase) suggest wet environments (Figure 4). In the vicinity of SYW-12, the soils are identified as made land, suggesting that the area had been filled in with refuse and soda ash (per the 1908 Hopkins map). The 1977 soil survey map of Onondaga Lake indicates that the majority of the soils around Onondaga Lake were made land, cut and fill land, and Edwards muck (Figure 5, p. 7). Again, the area of SYW-12 is noted as made land.

O'Brien and Gere completed a wetland delineation in SYW-12 in 2004 and 2008 (Figure 2, p. 3). The 17 acre wetland is located south of Ley Creek and south and west of the CSX railroad tracks along the southeastern shoreline of Onondaga Lake. The railroad berm defines the eastern border. This wetlands portion of SYW-12 consists of a stand of phragmites as well as a forested floodplain. The area, delineated as a wetland, consists of a gravel-cobble shoreline and Solvay waste shoreline.

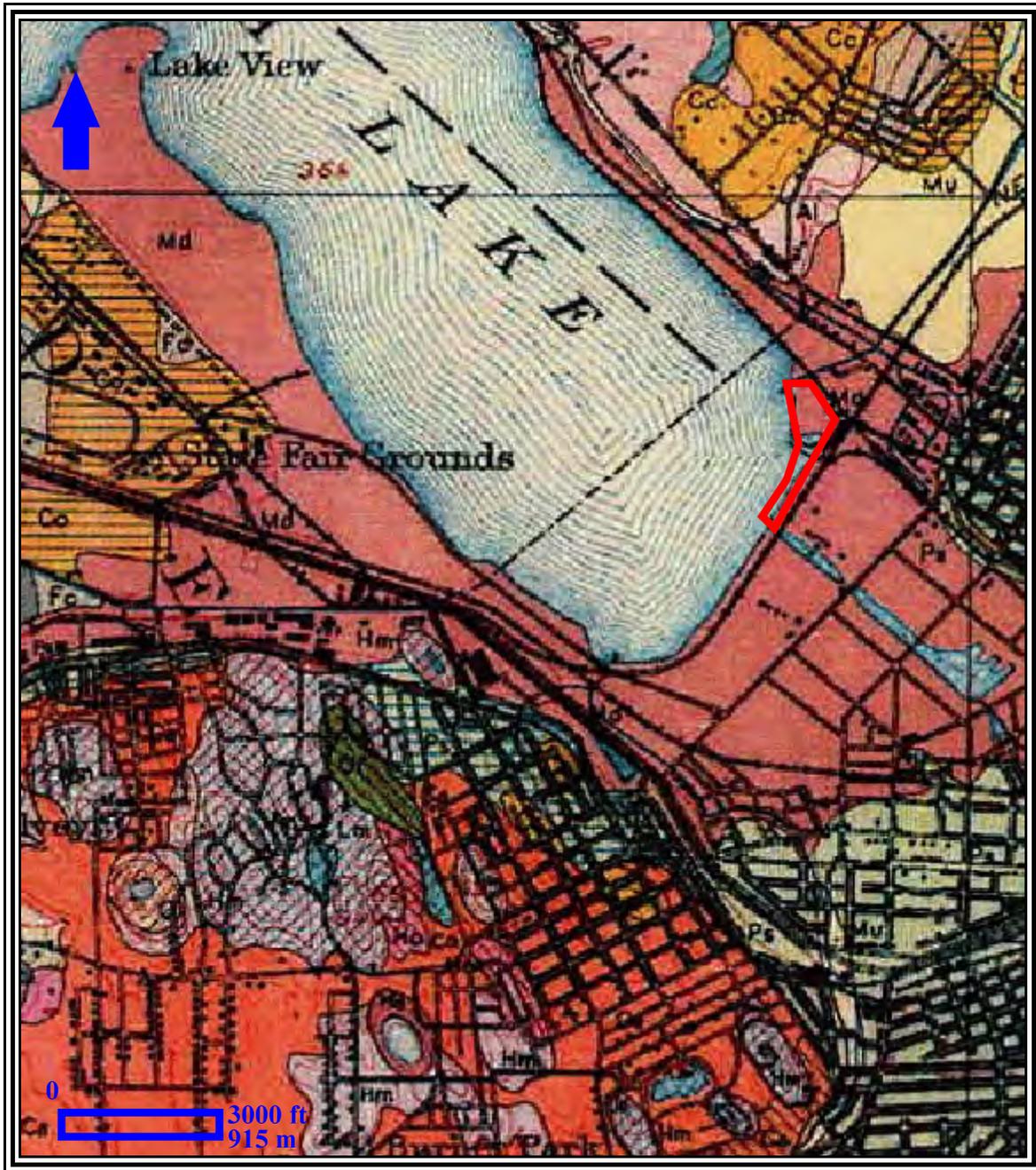


Figure 4. 1938 Soil Survey Map, with approximate area of SYW-12 highlighted.



---

### **4.3 Precontact Period History**

Much of the area in central New York has been populated by the Native Americans since the arrival of highly mobile groups during the Paleo-Indian and the Early-Middle Archaic periods around 12,000 to 10,000 B.P. The detailed context of the precontact period was discussed in the original assessment of Onondaga Lake (Hohman 2004). Within 1.6 km (1 mi) of the south end of Onondaga Lake, there are four known precontact sites. These sites were all initially identified by Arthur Parker in the early 20<sup>th</sup> century (Parker 1922) and include a site on the southern end of Onondaga Lake and a small site with some lithics on an elevated area near a marsh on the west side of Onondaga Creek. None of the known sites is located within the present APE of SYW-12 Wetlands.

### **4.4 Precontact Sensitivity Assessment (from Hohman 2012)**

The late 18<sup>th</sup>/early 19<sup>th</sup> century map (Figure 6, p. 10) shows the area of SYW-12 in the vicinity of the Great Cedar Swamp to the east of the Onondaga River (noted later as Onondaga Creek).

The archaeological record suggests that the area around Onondaga Lake was important for the resources (e.g., potable water, edible plants, medicinal plants, wood, bark, animals, fish, etc.) found within and adjacent to the lake, as well as for the location of villages, and special use areas. The APE of SYW-12 appears to have been under the water table of Onondaga Lake or was swamp/marsh adjacent to Onondaga Creek during the precontact period.

It is likely that the perimeter of the lake included low-lying wetlands composed of water-saturated muck soils, and grasses, ferns, and reed-like vegetation. While wetlands are important natural water features that attract wildlife, and promote the growth of certain types of edible and non-edible plants of importance, it was the higher, dry land nearby that would have contained camps, larger residential sites, and even the short-term stations where the resources collected from these water features would be processed. As is the case today, wetlands are fragile environments that suffer from disturbance to their ecosystems. It is unlikely that evidence of precontact landuse would be found within wetlands, but is highly likely nearby on elevated, well-drained natural soils.

### **4.5 Postcontact Period History**

The site files identified one postcontact Native American site within 1.6 km (1 mi) of the project area: the village of Kaneenda. The village was occupied in the early 17<sup>th</sup> century for at least 25 years (Bradley 1987) and was within the city limits at the southern end of Onondaga Lake. Kaneenda was on a creek and south of the lake and may have been on an elevated spot near the marsh west of the creek. Based on the 1898 USGS map, this may place the location of Kaneenda approximately 1200 m (3900 ft) to the southwest of the SYW-12 project area. In addition, a number of Native American cabins were noted along the west bank of Onondaga Creek (Bruce 1896). Although much of the long-term settlement was not around Onondaga Lake, the area adjacent to the lake margins continued to be used by the Onondaga for purposes of everyday activities, including short-term settlement, the procurement of various resources, and for ceremonies.

During the postcontact period, the area of SYW-12 was either under the water level of Onondaga Lake or was marsh/swamp into the 1850s. By the late 1850s and through the 1870s, the area was identified on historic maps as reclaimed land. By the late 19<sup>th</sup> century, a portion of the area of SYW-12 had been developed as the Iron Pier Resort and Park. The Salina Pier is also shown extending out into Onondaga Lake. Remnants of the dock or piers from the Iron Pier Resort, and pier remains of the Salina Pier were identified during the underwater survey of Onondaga Lake (Kane et al. 2011). Salina Pier and the Iron Pier Resort and Park are described further on page 15.

---

***Onondaga Nation's Spiritual and Cultural History of Onondaga Lake***<sup>1</sup>

*The region of Onondaga Lake and the Onondaga Lake watershed has been our homeland since the dawn of time. We have been a steward of Onondaga Lake since time immemorial and will continue to do so forever, as that is what has been mandated from the Gayanashagowa, the Great Law of Peace. In the 1794 Treaty of Canandaigua the United States government recognized Onondaga Lake as part of our aboriginal territory.*

*The Lake is the spiritual, cultural and historic center of the Haudenosaunee Confederacy. Over one thousand years ago, the Peacemaker brought the Mohawk, Oneida, Onondaga, Cayuga, and Seneca Nations together on the shores of Onondaga Lake. At the lakeshore, these Nations accepted the message of peace, laid down their arms, and formed the Haudenosaunee Confederacy. The Confederacy was the first representative democracy in the West.*

*To symbolize the Confederacy, the Peacemaker planted a white pine, the Tree of Peace, on the shore of Onondaga Lake. It is understood that the Peacemaker chose the white pine because the white pine's needles are clustered in groups of five, just as the five founding Nations of the Confederacy clustered together for strength. The boughs of the white pine represent the laws that protect all the people. An eagle was placed at the top of the tree to watch for danger from without and within. Four white roots of peace reach out in the four directions towards anyone or any Nation who wishes to come under this tree of peace.*

*As the birth place of the Confederacy and democracy, the Lake is sacred to the Haudenosaunee. The Onondaga Nation has resided on the Lake and throughout its watershed since time immemorial, building homes and communities, fishing, hunting, trapping, collecting plants and medicine, planting agricultural crops, performing ceremonies with the natural world dependent on the Lake, and burying our ancestors - the mothers, fathers and children of the Onondaga Nation. The Onondaga Nation views its relationship to this area as a place where we will forever come from and will return to.*

*It brings great sadness to the people of the Onondaga Nation that despite our long stewardship of the Lake and its watershed, it took only one hundred years of abuse to wreak havoc to the Lake, its tributaries and all the plants, animals and marine life that depend on the Lake and its watershed. Industry interfered with the Onondaga Nations's relationship to the land and disturbed the ancestors that were interred throughout the watershed - either by direct excavation or contamination, or indirect efforts such as construction on top of grave sites. We wish to bring about a healing between us and all others who live within our homelands around the lake. We must in order to protect the future generations "whose faces are looking up from the earth."*

*We are one with this land and this Lake. It is our duty to work for a healing of this land, and all of its waters and living things, to protect them, and to pass on a healthy environment to future generations - yours and ours.*

<sup>1</sup>The Onondaga Nation requested that the oral tradition concerning the significance of Onondaga Lake to the Onondaga and Haudenosaunee Confederacy be included in this report. The Onondaga Nation's statement may not necessarily reflect the views of the Public Archaeology Facility, O'Brien and Gere, or Honeywell International Inc. Further, the inclusion of the Onondaga Nation's oral tradition shall not constitute an admission of any fact or law in any judicial or administrative proceeding. In addition, the statements and findings made in this report by Honeywell, O'Brien and Gere, and the Public Archaeology Facility may not reflect the opinions and views of the Onondaga Nation, and do not constitute an admission by the Onondaga Nation of fact or law in any legal or other proceeding.

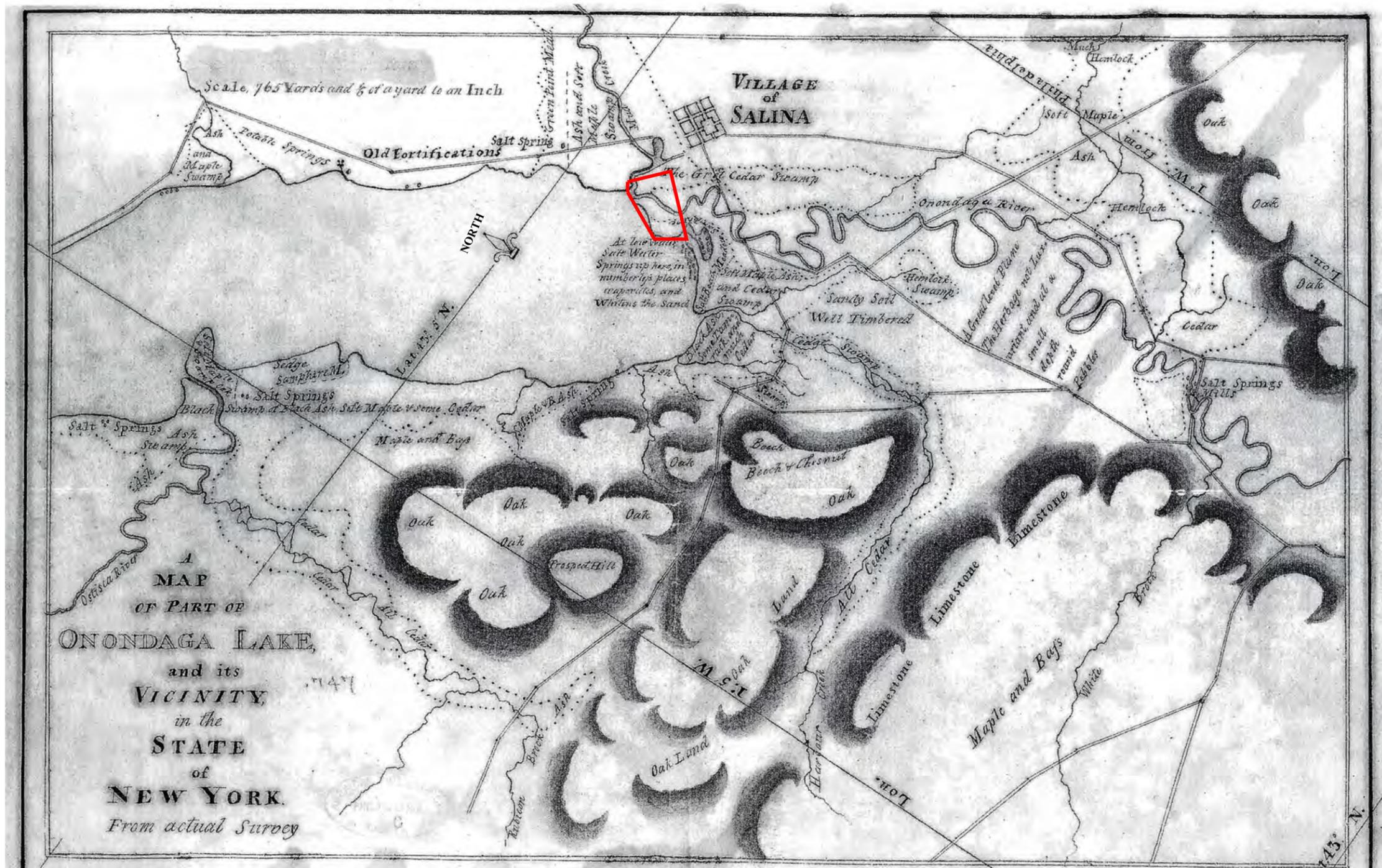


Figure 6. Approximate APE of SYW-12 on a late 18<sup>th</sup> century map of Onondaga Lake.

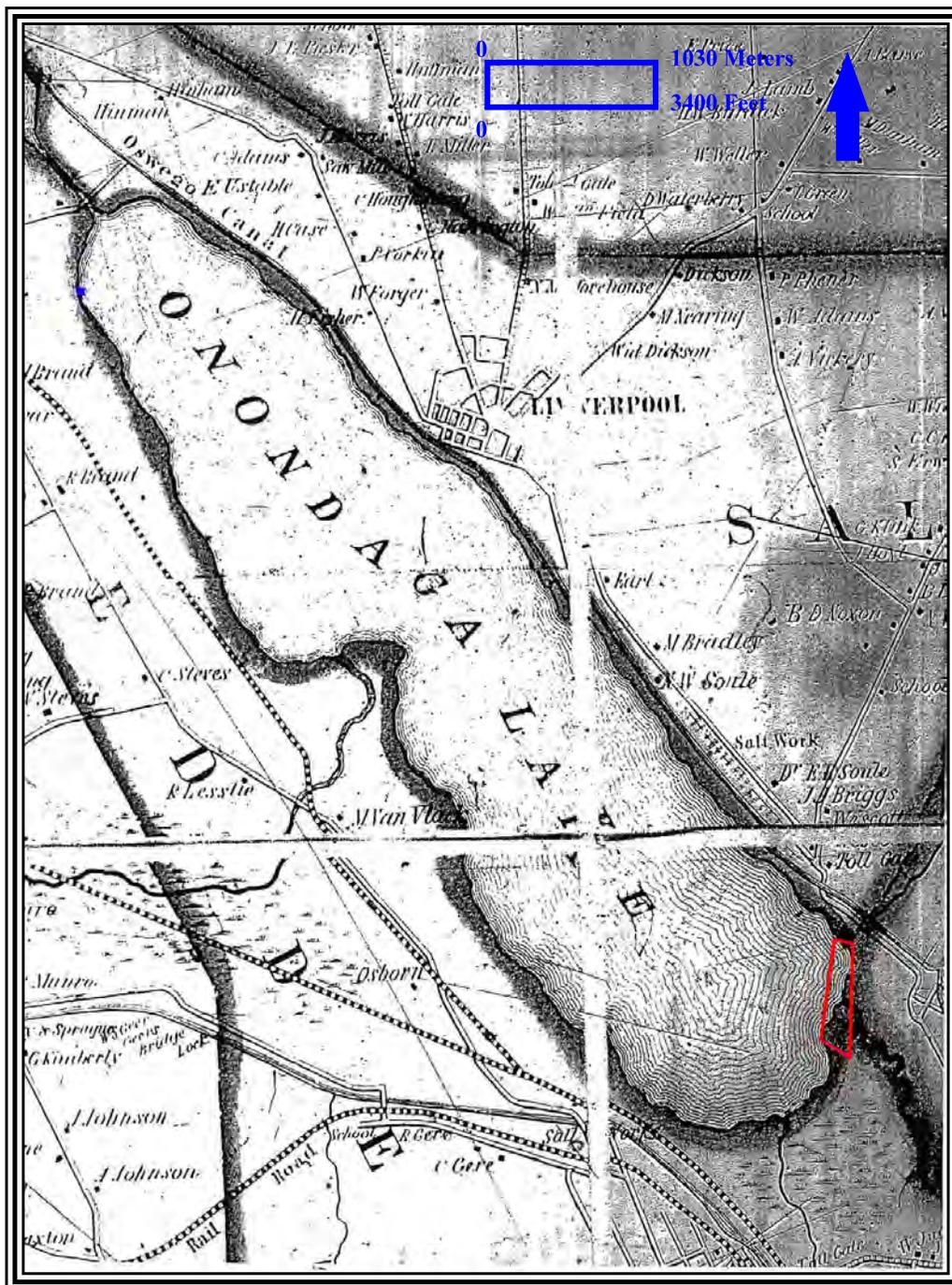


Figure 7. 1852 Fagan map of Onondaga Lake and approximate APE of SYW-12 highlighted.



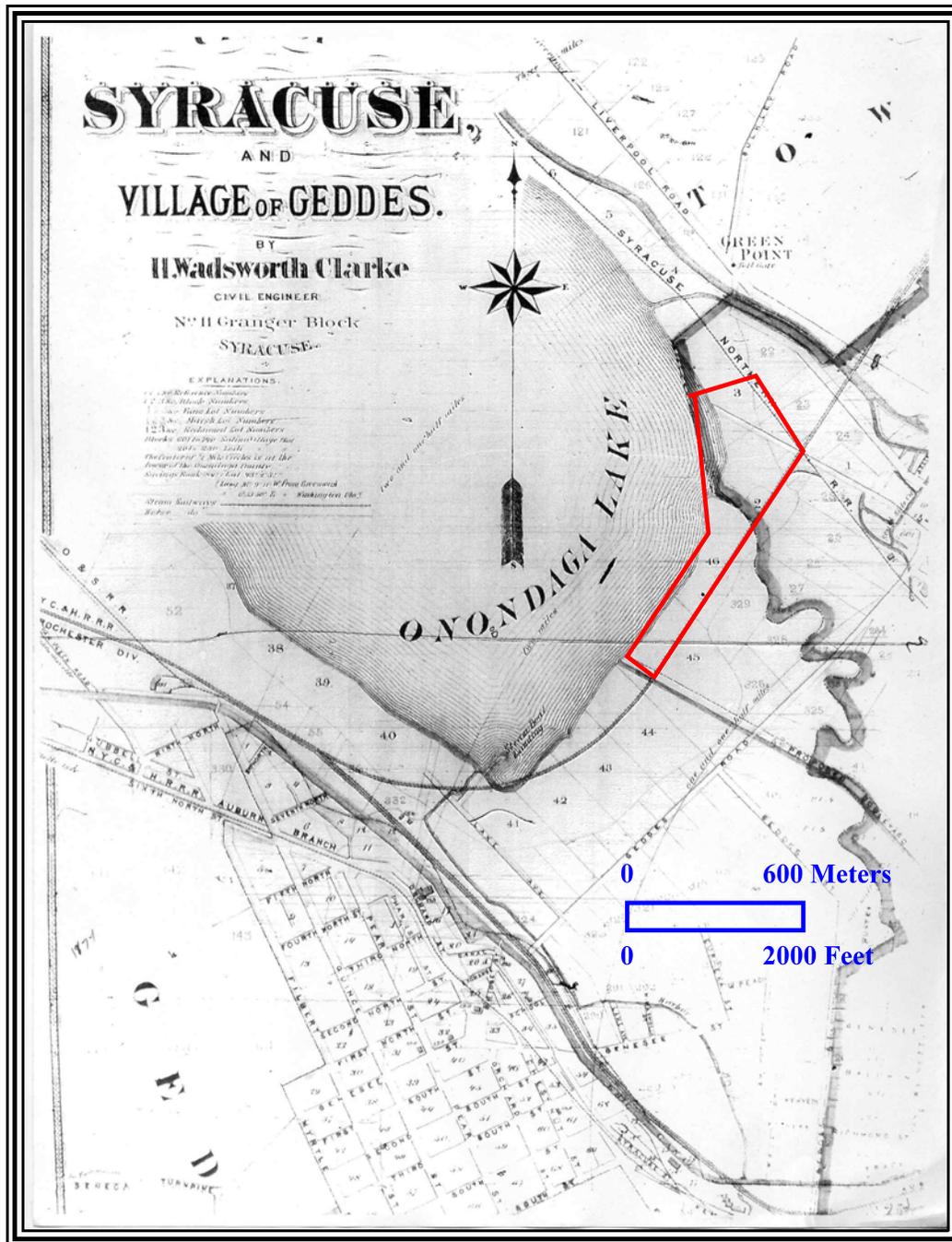
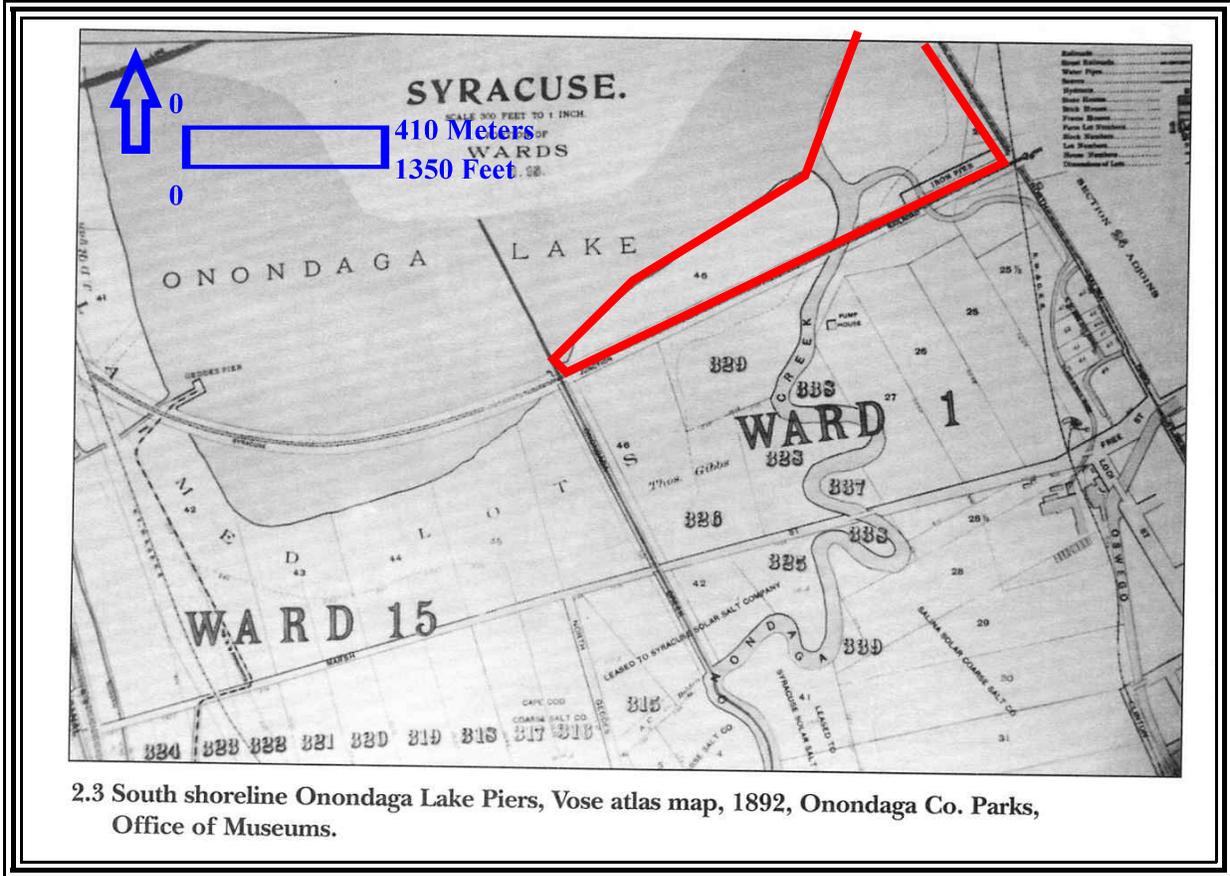


Figure 9. 1874 Sweet map with approximate APE of SYW-12 highlighted.



2.3 South shoreline Onondaga Lake Piers, Vose atlas map, 1892, Onondaga Co. Parks, Office of Museums.

Figure 10. 1892 Vose map with approximate boundaries of SYW-12 highlighted (from Thompson 2002).

---

### **Salina Pier**

As presented in Kane et al. (2011) and Hohman (2012), the Salina Pier was initially constructed in the 1870s or in 1880 (Syracuse Post Standard, April 18, 1880) at the mouth of Bear Trap Creek (now known as Ley Creek). In 1881, the Central City Street Railroad Company built a hotel and car depot on the banks of the lake on the Salina side. The structures were constructed approximately 30 m (100 ft) west of the railroad terminus. The hotel was two stories high and was 23 x 25 ft in size (Syracuse Courier, July 18, 1881). These structures do not appear to be present on any of the historic maps since a windstorm destroyed part of the Salina Pier and a saloon house at the end of it in 1890 (Syracuse Post Standard, January 2, 1890). It was noted in newspapers in the summer of 1890 that the water table was still high and that none of the piers were visible, suggesting that the pier was not being used for an extended period during that year. In an attempt to compete with the Iron Pier resort, the Salina Pier company constructed a two-story pavilion, which also contained a concert hall and dining room, in 1890 to the south of the existing pier and just to the north of the Iron Pier resort (see Figure 11, p. 16). By the late 1890s, the Salina Pier resort had closed, probably due to the greater number of attractions at the Iron Pier. In 1899, the Iron Pier resort had purchased the land of the pavilion of the Salina Pier and had Solvay soda ash refuse dumped up to 4 ft in depth in order to build up the land in front of the Iron Pier (Thompson 2002). The Salina Pier remained intact through 1898 (Figure 14) and served boats that ran regularly to all of the lakeside resorts (Syracuse Post Standard, April 14, 1957). Because of the construction of a trolley line on the west side of the lake in 1899, and the earlier construction of railroads on the east and west sides of the lake, the Salina Pier may have fallen out of use by the early 20<sup>th</sup> century. By 1908, the Salina Pier was replaced by the “Breakwater” (Figure 15, p. 19). By 1924 (Figure 16, p. 20), the Breakwater was no longer in use and may have been submerged by the raising of the lake for the Barge Canal.

### **Iron Pier Resort, Harbor, and Park**

The Iron Pier was an amusement resort with a public pavilion that was constructed in 1890 by the People’s Railway Company. The resort consisted of a long, narrow wooden pavilion that was 50 x 600 ft in size (Sanborn 1892) and extended southwest from North Salina Street to a harbor with a channel and a basin on the southeastern shore of Onondaga Lake. This was situated just to the northwest of many of the solar salt vats and workers’ housing (Thompson 2002). On the north end of the pier pavilion were bowling alleys, while on the south end was a concert hall. Besides shops, restaurants, and amusements, the Iron Pier Park hosted a variety of activities including baseball games, concerts, boat rentals, a large toboggan water slide, swimming, and fishing (Thompson 2002). That portion of the resort along the channel and basin of the harbor included a pier for boats, a building adjacent to the lake, a waterslide, and boathouses; this portion of the resort was later identified as the Iron Pier Park (Figure 15, p. 19). Alcohol was heavily consumed on the resort grounds; a temperance movement at the end of the 19<sup>th</sup> century prompted the manager in 1899 to halt the sale of liquor (Thompson 2002). In 1899, a trolley line was constructed along the west side of Onondaga Lake and that line along with the other railway lines around the lake, led to the demise of boat traffic. The rail line made access easier and cheaper for many of the local residents of Salina, Syracuse and Geddes. By the end of 1906, the Iron Pier resort closed. On March 16, 1907, the Iron Pier resort was demolished (Syracuse Post Standard March 16, 1957).

By 1908, the area of the Iron Pier pavilion and amusement area had been covered with soda ash refuse. An area was created on top of the wastes adjacent to the original mouth of Onondaga Creek and adjacent to the channel and basin. This became the Iron Pier Park (Figure 15, p. 19). Boathouses remained standing at that time along the basin and were not demolished as part of the Iron Pier resort. By 1924, the Iron Pier Park was no longer situated on the southern shore of Onondaga Lake (Figure 16 and Figure 18, p. 20 and p. 22).