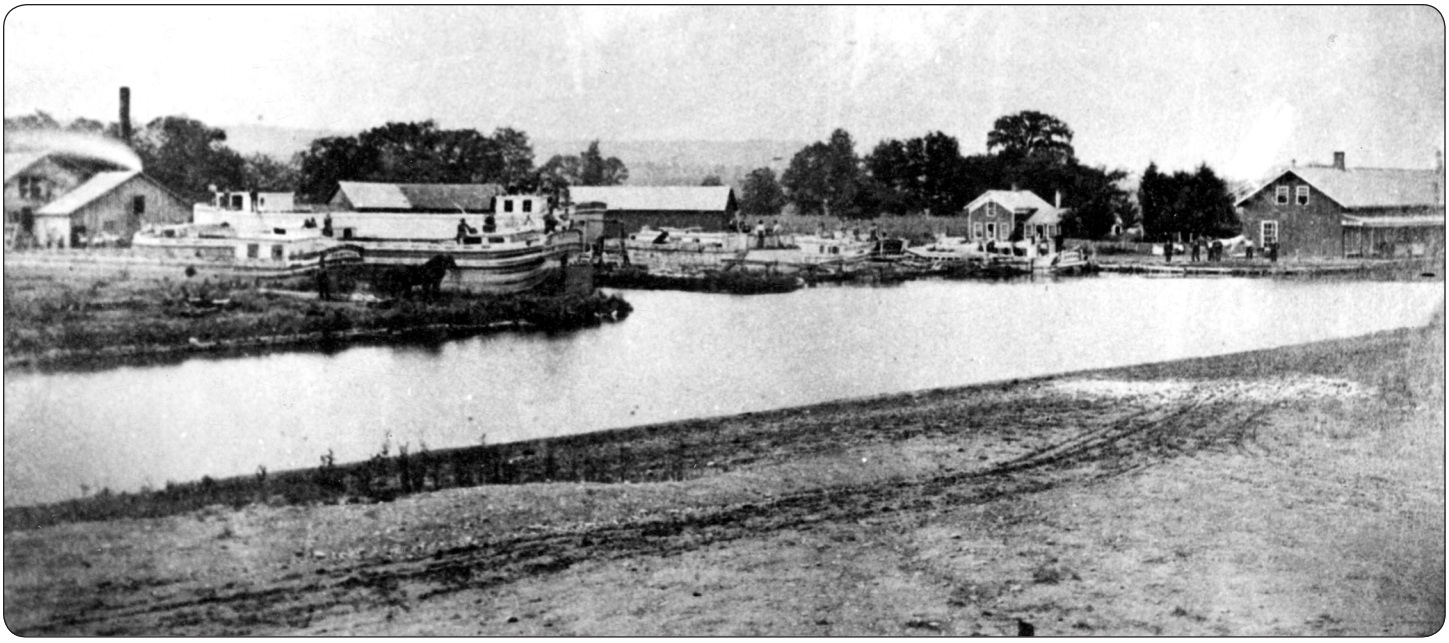


Cultural Landscape Report

Chittenango Landing Dry Dock Complex

Town of Sullivan, Madison County, New York

Prepared for:

Chitenango Landing Canal Boat Museum
717 Lakeport Road
Chittenango, NY 13037
P: 315-687-3801
www.clcbm.org

Prepared by:

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1000
Syracuse, New York 13202
P: 315.471.0688
F: 315.471.1061
www.edrdpc.com

November 2014

Cultural Landscape Report

Chittenango Landing Dry Dock Complex

Town of Sullivan, Madison County, New York

Prepared for:

Chittenango Landing Canal Boat Museum

717 Lakeport Rd.
Chittenango, NY 13037

Prepared by:

Environmental Design & Research,
Landscape Architecture, Engineering, & Environmental Services, D.P.C.
217 Montgomery Street, Suite 1000
Syracuse, New York 13202
P: 315.471.0688
F: 315.471.1061
www.edrdpc.com

November 2014

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

LIST OF DRAWINGS

LIST OF FIGURES

1.0 INTRODUCTION

The Chittenango Landing dry dock complex, comprised of a three-bay dry dock structure and associated buildings, is located approximately one mile north of the Village of Chittenango in Madison County, New York (see Figure 1.1). The three-bay structure is sited on the south side of one of the remaining flooded sections of the Enlarged Erie Canal. The dry dock bays were built in 1856 to service traffic passing along the middle section of the canal. The original buildings on site housed multiple businesses in the late nineteenth and early twentieth centuries, including a blacksmith, sawmill, canal store and warehouse, and boat building facility. Following multiple changes in ownership, the dry dock complex ceased operation in 1917 with the closure of the adjacent section of the Enlarged Erie Canal. The property surrounding the dry dock complex served as a farm and residence from 1918 until 1971, when the land was purchased by the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), which demolished the remaining buildings and structures in 1972. The site was rediscovered in 1985 by a group of volunteers, which entered into a cooperative agreement with the NYSOPRHP in 1986 to manage the property. The dry docks were excavated and partially rebuilt from 1987 to 1989, and contemporary interpretations of some original buildings were constructed between 1992 and 2010. Despite the loss of the majority of the original site features, the dry dock complex today is a rare, extant example of Enlarged Erie Canal-era (c. 1856-1917) dry docks and associated working landscape that has been repurposed into an interpretive experience.

This Cultural Landscape Report (CLR) is intended to assist the Chittenango Landing Canal Boat Museum (hereafter referred to as the CLCBM) to pursue and accomplish its mission by aiding in the interpretation, preservation, restoration, and reconstruction of the significant landscape features that help to inform the history of the site. Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services D.P.C. (EDR) prepared this CLR on behalf of the CLCBM.

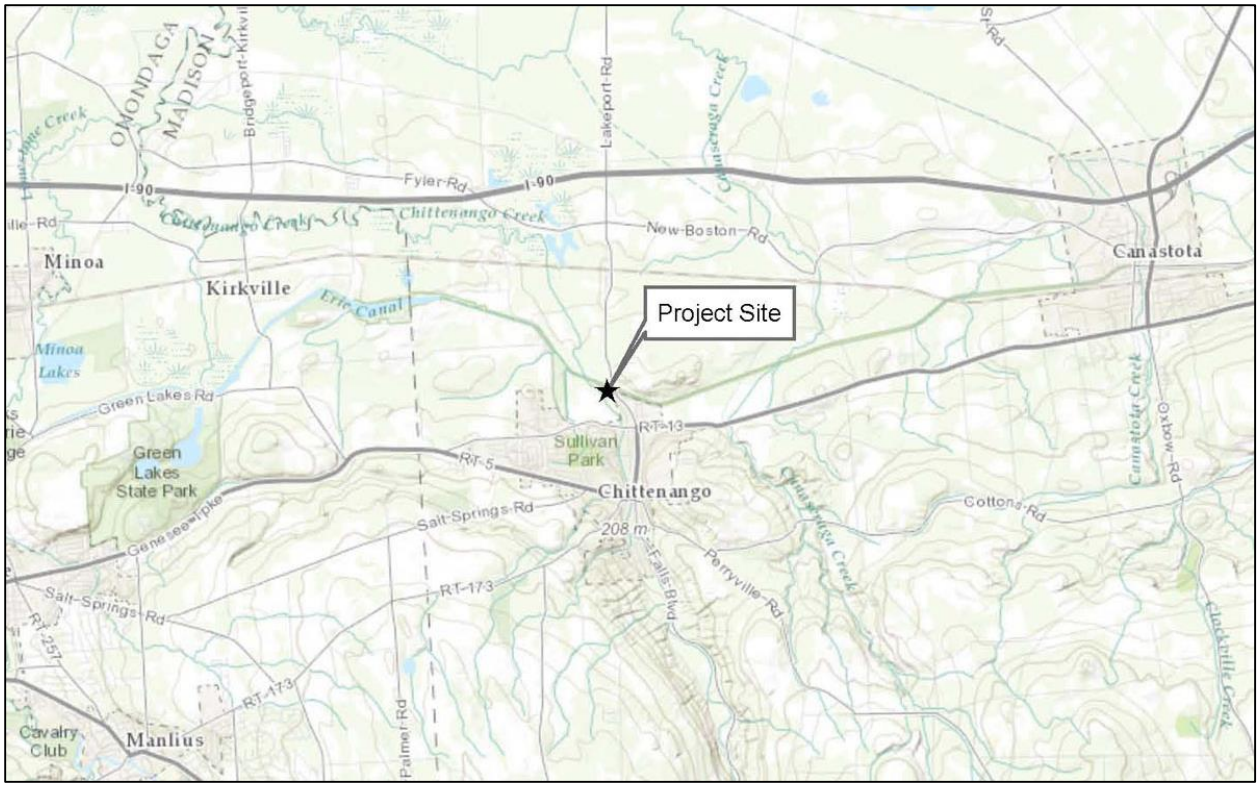


Figure 1.1. Map illustrating the regional project location north of the Village of Chittenango in Madison County, New York. (ESRI Online Aerial Imagery, annotation by EDR.)

1.1 Project Scope, Organization, and Methods

The purpose of a CLR is to identify the landscape characteristics and features that make a landscape historically significant and provide a basis for making sound decisions about the long-term management, treatment, and use of a historic landscape. The National Park Service (NPS) defines a cultural landscape as a geographic area that includes built, as well as natural resources associated with historic persons, events or activities. Cultural landscapes encompass a variety of site features, including natural landforms and vegetation, constructed roads and walks, buildings, small-scale features, and views.[1]

Guidance issued by the NYSOPRHP entitled "Generic Outline for Historic Structure/Cultural Landscape Reports"[2] specifies that CLRs are typically conducted in a staged approach. Part 1 of a CLR should include a) history, b) existing conditions, c) analysis and evaluations, and d) conclusions and recommendations. The recommendations included in Part 1 of a CLR typically include general goals and priorities related to physical improvements, management of the landscape, operational measures, and interpretation. Part 2 of a CLR typically provides more

[1] Page *et al*., 1998.
[2] NYSOPRHP, 2012.

detailed direction regarding specific treatment recommendations, which could include construction documents for physical improvements, detailed policy recommendations, or specific measures to establish and administer programs. Part 3 of a CLR is prepared after the completion of specific projects and provides the record of implemented treatment measures.

This report includes Part 1 of a CLR as defined in the NYSORPHP Guidance. The goal of this CLR is to identify the remaining historic qualities of the cultural landscape at the Chittenango Landing dry dock complex and provide the staff of the CLCBM (and partners such as the NYSOPRHP) with a document that will serve as a reference tool for future planning and programming activities at the site. The efforts of volunteers over the past three decades demonstrate commitment, and the willingness to manage, maintain and improve the site as is within their means and appropriate given the available historical information.

Previous studies have focused on the archaeological resources of the site. Much of the contemporary history of the site has been told through the excavation of below-ground features such as the dry dock bays, and the new buildings atop original building foundations. While these studies have included portions of site history pertinent to specific features, a comprehensive site history has yet to be written. This CLR will address the need for a history of the dry dock complex and surrounding landscape, from the settlement of the Town of Sullivan, to the construction of the Erie Canal and its subsequent enlargement, to contemporary stabilization and interpretation efforts, in the context of changes in usage and ownership of the site.

Following this Introduction, the CLR is organized in five additional sections: Site History (Section 2.0), Existing Conditions (Section 3.0), Analysis and Evaluation (Section 4.0), Conclusions and Recommendations (Section 5.0), and References Cited (Section 6.0). These sections are described in greater detail below. In addition, the report includes Figures (historical maps, historical photos, and site plans) that are included within the text, as well as photographs of existing conditions and landscape features at the site (included in Section 3.0) and an accompanying report entitled “Chittenango Landscape Canal Boat Museum Cultural Landscape Report: Summary of Previous Archaeological Investigations” prepared by Dr. Douglas Pippin from SUNY Oswego (Appendix A).

The Site History (Section 2.0) is organized into four sub-sections defined by marked changes in the usage of the site, based on the evolution in the usage of the Erie Canal as well as changes in the ownership of the property. Each sub-section contains an historic context, describing the periods of history that informed changes to the site and its usage, which are described in a site overview, and illustrated with historic maps where appropriate. Each section is concluded with a landscape summary that identifies the major changes to the site within the given time period.

Changes between periods are depicted on three period plans, which show the dry dock complex and surrounding landscape in 1917, 1985, and 2013.

The Existing Conditions (Section 3.0) provides a description of the landscape characteristics and features that were observed on-site during the preparation of the CLR in 2013. This description is organized by discussing the site in terms of its landscape characteristics, which serve as categories under which individual landscape features are grouped and described. The landscape characteristics were defined in accordance with the National Park Service *Guide to Cultural Landscape Reports*[3], and include:

- *Natural Systems and Features:* Natural aspects that often influence the development and resultant form of a landscape.
- *Spatial Organization:* Arrangement of elements creating the ground, vertical, and overhead planes that define and create spaces.
- *Land Use:* Organization, form, and shape of the landscape in response to land use.
- *Circulation:* Spaces, features, and materials that constitute systems of movement.
- *Topography:* Three-dimensional configuration of the landscape surface characterized by features and orientation.
- *Vegetation:* Indigenous or introduced trees, shrubs, vines, ground covers, and herbaceous materials.
- *Constructed Water Features:* The built features and elements that utilize water for aesthetic or utilitarian functions.
- *Buildings and Structures:* Three-dimensional constructs such as houses, barns, garages, stables, bridges and memorials.
- *Views and Vistas:* Features that create or allow a range of vision which can be natural or designed and controlled.
- *Small-Scale Features:* Elements that provide detail and diversity combined with function and aesthetics.
- *Archaeological Sites:* Sites containing surface and subsurface remnants related to historic or prehistoric land use.

Within each group of landscape characteristics, individual landscape features are described in terms in of their form and/or function, location, size, materials, and condition. Section 3.0 includes photographs of the existing conditions of both the site generally and individual landscape features.

[3] Page *et al*., 1998.

The Analysis and Evaluation (Section 4.0) section provides a statement of significance for the site against which individual features can be evaluated, and summarizes the historic and existing conditions of the landscape characteristics within the study area. This provides the basis for evaluating whether each characteristic contributes to the historic significance of the property.

The Conclusions and Recommendations section (Section 5.0) summarizes the current uses and programming at the museum, followed by description and evaluation of various treatment alternatives. The treatment criteria are based on the *Secretary of the Interior's Standards for the Treatment of Historic Properties* that were employed to evaluate the historical significance of landscape characteristics and features. The treatment recommendations include policies, programs, and physical projects.

1.2 Property Setting

The Chittenango Landing dry dock complex is located approximately one mile north of the Village of Chittenango, in the Town of Sullivan, Madison County, New York (see Figure 1.2). The dry dock complex is located on an approximately 5.3-acre parcel bordered by the former Enlarged Erie Canal on the north, Chittenango Canal (also known as the Chittenango Lateral Canal) to the east, and Chittenango Creek to the south and west (see Figure 1.2). The study area for this CLR includes the historical and current legal limits of the Chittenango Landing dry dock complex as shown on Figure 1.2, and described herein:

> Land under the jurisdiction of New York State Office of Parks, Recreation and Historic Preservation, known as part of the Old Erie Canal State Historic Park, consisting of approximately 5.292 acres more or less and the and the buildings and fixtures thereon, located in the Town of Sullivan, Madison County, at the intersection of the southern blue line of the Old Erie Canal and Lakeshore (sic) Road, Chittenango, a parcel of land known as the Boat Landing.[4]

The undeveloped portion of the property to the south and west is generally comprised of open fields, which terminate at a heavily vegetated riparian corridor along Chittenango Creek. The Chittenango Landing Canal Boat Museum visitor's center is located on the east side of the Chittenango Canal. Ruins of cannery walls are located north of the visitor's center on the east side of the Chittenango Canal. The dry dock bays and associated buildings are located in the Town of Sullivan, and the museum building is located in the Village of Chittenango. The CLCBM owns the museum property, and manages the dry dock complex site through a cooperative agreement with the NYSOPRHP, which is renewed every ten years. The Enlarged Erie Canal and Chittenango Canal are managed by the New York State Canal Corporation.

[4] NYSOPRHP, 2011, Attachment A: "Description of the Licensed Premises."

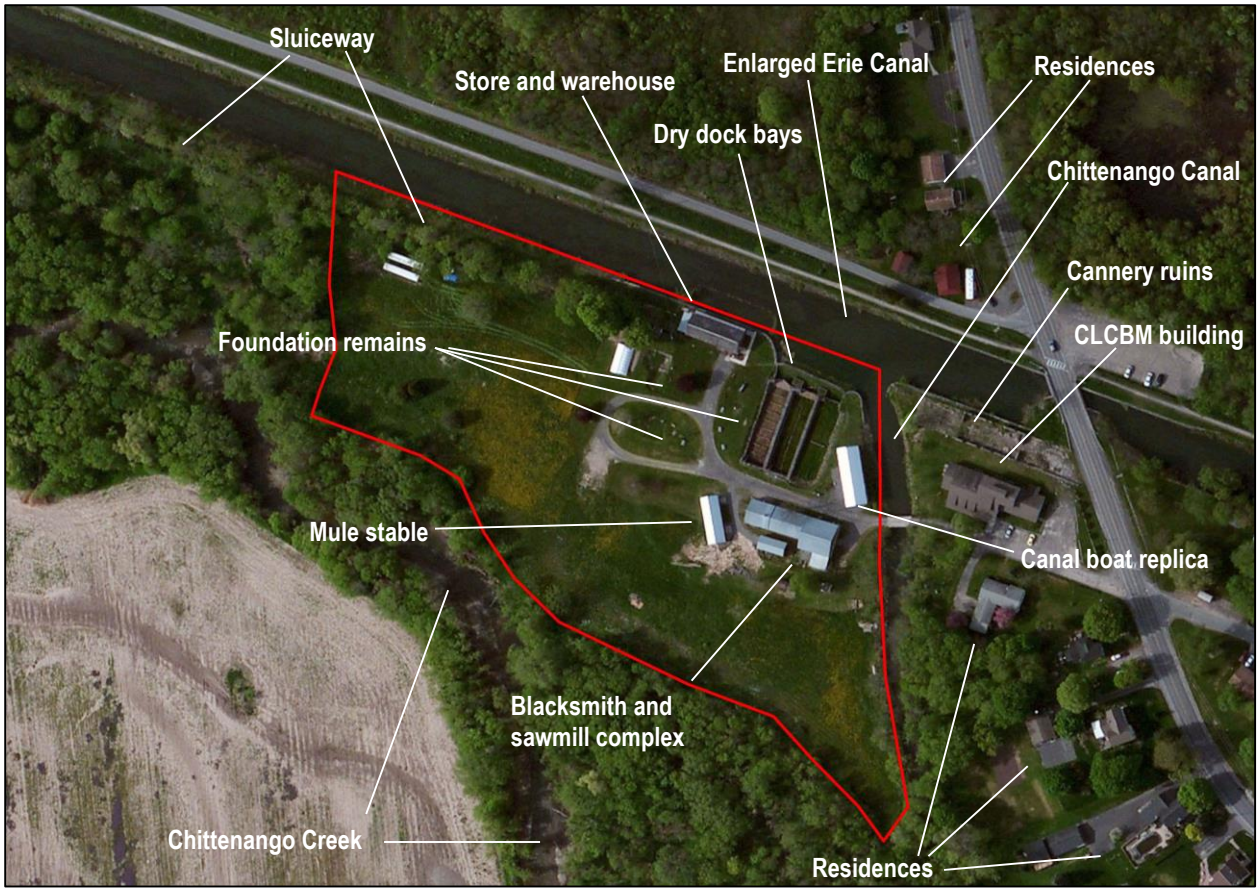


Figure 1.2. Recent aerial photograph showing the project study area outlined in red, features within and immediately adjacent to the site, and residential houses along Lakeport Road. (ESRI Online Aerial Imagery, annotation by EDR.)

The complex and visitor's center are open to the public from May to October, and are part of the Erie Canalway National Heritage Corridor, as well as the Old Erie Canal State Historic Park and Erie Canalway Trail, a 36-mile trail along a flooded portion of the Erie Canal that begins in the Town of Dewitt on the west and terminates in Rome on the east. Aqueducts and other site features are located throughout the park, connected by segments of the canal towpath that have been converted for recreational trail use. The dry dock complex property was acquired by the state in 1972, but was not developed until the late 1980s following clearing of the site and archaeological excavation of the dry docks and surrounding area by the CLCBM. The site is accessed via a driveway called Boatyard Road extending west from Lakeport Road, and crossing a bridge over a remaining portion of the Chittenango Canal.[5] Visitors park in a lot next to the museum building on the east side of the canal, and pay admission before entering the site. Tours are self-guided, but also provided by volunteers to school groups.

[5] Boatyard Road has been the historic means of access to the dry dock site throughout its existence. Deed records and land surveys up to 1972 refer to the road as a "dirt road" leading to the bridge over the Chittenango Canal, which is owned by the New York State Canal Corporation as part of the Enlarged Erie Canal that runs through this area.

The CLCBM visitor's center and cannery ruins are not part of the historic dry dock complex and therefore are not included in the study area for the CLR. However, the visitor's center provides the point of public access to the dry dock complex and is an integral part of most visitors' experience at the site, and therefore is occasionally referenced in the description of existing conditions. The cannery ruins are comprised of walls and a foundation pad that remain from cannery facilities that operated at this location in the late nineteenth and early twentieth centuries. The ruins are on the same property as the visitor's center (located immediately north), are readily visible from portions of the dry dock complex site, and contribute to the visual setting of the site.

The nearest urban area is the Village of Chittenango, located to the south of the study area. Chittenango is the most populous settled area in the Town of Sullivan, with an estimated population of 5,000.[6] Commercial activity in the village is primarily located on New York State Routes 5 and 13, which converge at the southern end of the village and continue north and then east. Older housing stock is clustered east and west of the commercial core of the village, with newer suburban developments located to the west and south.

1.3 Summary of Findings

1.3.1 Site History

Research for the history of the site has been undertaken at a "thorough" level of investigation as defined by NPS-28 *Cultural Resource Management Guideline,*[7] and focused primarily on the archives of the CLCBM, which include the extensive collections of Dr. Robert Hager, who led the effort to excavate and interpret the dry dock complex throughout the 1980s and 1990s. The archive contains primary source materials, including photographs, maps, and records of the business conducted at the site. Extensive information on other dry docks and Erie Canal sites, as well as general history texts related to the Erie Canal and local history, can also be found at the museum. Additional repositories identified include the collections of the Town of Sullivan historian and the Madison County Courthouse.

Previous archaeological research conducted by Gordon DeAngelo, Daniel Weiskotten and Douglas Pippin as part of onsite archaeological investigations from 1986 to 1994 provided guidance on construction and location of landscape features and information regarding the evolution of the site. A summary of the findings from previous archaeological investigations is included as Appendix A of this report.

[6] Estimated Town of Sullivan population in 2012 was 5,033 according to the United States Census website (USCB, 2013).
[7] *NPS-28: Cultural Resource Management* (NPS, 1998), defines a thorough level of investigation as reviewing "published and documentary sources of known or presumed relevance that are readily accessible without extensive travel and that promise expeditious extraction of relevant data, interviewing all knowledgeable persons who are readily available, and presenting findings in no greater detail than required by the task directive."

1790-1855

The origin of the Chittenango Landing dry dock complex can be traced to the construction of the Erie Canal, which led to the rapid settlement of the area surrounding the Village of Chittenango in the early nineteenth century. The idea to improve commerce through construction of a water route across New York State was suggested as early as 1724, but took nearly a full century of settlement, as well as agitation by interested parties before the complete route was built. Upon its completion in 1825, the Erie Canal spanned approximately 363 miles across New York State, connecting the Hudson River (and providing access to New York City and the Atlantic Ocean) at its eastern end to Buffalo and Lake Erie at its western terminus. It was a marvel of engineering in a recently independent America that did not have extensive engineering experience from which to draw upon. Instead, the newfound independence and ingenuity of the citizens of New York State led to innovations in land clearing, construction methods and engineering that enabled the transformation of harsh wilderness into a revolutionary transportation and commercial route.

From the beginning of excavation in 1817 to its assimilation into the New York State Barge Canal System in 1917, the Erie Canal had a profound impact on numerous cities and communities throughout the state, as crossroads settlements and hamlets, and other previously undeveloped areas that blossomed into commercial centers and bustling cities. The land on which the Village of Chittenango and Town of Sullivan is located was originally part of the Oneida Territory that spanned Central New York. Settlement by Europeans began circa 1790, leading to the creation of the Town of Sullivan in 1803, and eventually Madison County in 1806. The Village of Chittenango began to be settled circa 1812, and grew considerably once the Erie Canal was constructed north of the village.

A settlement known as Chittenango Landing took shape at the intersection of the original route of the Erie Canal (or "Clinton's Ditch" as it was known after New York Governor Dewitt Clinton) and the Chittenango Canal, which was constructed in 1818. The establishment of the Chittenango Canal Company and subsequent excavation of a 1.5-mile feeder canal from Chittenango to the Erie Canal played a major role in the commercial growth of the nascent village, which was officially incorporated in 1842. This local canal was a conceived as a business venture by John B. Yates, a prominent local merchant who owned thousands of acres in the vicinity of Chittenango (and throughout New York State). In addition to a one-bay dry dock for boat repairs, the original location of Chittenango Landing also included a hotel and canal grocery, among other small businesses.

1856-1917

The construction of the Enlarged Erie Canal led to a shift of the canal's path through the Town of Sullivan approximately 1600 feet south of the original route of the Erie Canal, leading to the relocation of Chittenango Landing. The creation of an expanded dry dock complex along the Enlarged Erie Canal was approved on December 31, 1855, and three dry dock bays were constructed and opened the following year. The re-established Chittenango

Landing grew to include numerous stores and enterprises on both sides of the Enlarged Erie and Lakeport Road (then a plank road leading to the Utica-Rome Railroad depot to the north).

The various businesses located at Chittenango Landing flourished for several decades as the Erie Canal remained a viable commercial shipping route. While competition from railroads is generally considered to be a primary reason for the decrease in usage of the Erie Canal, the transition to the New York State Barge Canal System for commercial activity led to the abandonment of large portions of the Erie, which started the slow decline of many communities, including the settlement at Chittenango Landing.

1918-1985

The dry docks at Chittenango Landing ceased operation in 1917 with the closure of the Erie Canal, and until 1971 the property served as a small farm. The houses at the site were used as residences by the property owners (the Beeman family), and later rented out. The remaining outbuildings were dismantled, with a portion of the store building relocated south of the dry dock bays, reportedly serving as a barn for several decades. In 1972 the property was purchased by the NYSOPRHP, which demolished and removed the remaining buildings on the site. Plans to include the property in the Old Erie Canal State Park did not come to fruition, and the site became overgrown with shrub and forest vegetation over the next fourteen years.

1986-2013

In 1985 a group of local volunteers and Erie Canal enthusiasts "rediscovered" the Chittenango Landing dry dock complex, and formed the Chittenango Landing Canal Boat Museum. By early 1986, officers and a Board of Trustees were elected to lead the organization, and the group had applied to the state Board of Regents for a provisional charter. In October 1986, the CLCBM group obtained permission from NYSOPRHP to clear and begin improving the site. Early work by CLCBM included archaeological excavations of the dry docks (which had been filled in after canal boat repair operations ceased at the site in 1917) and by 1988 a cooperative agreement was reached with NYSOPRHP to formally establish an arrangement with the CLCBM whereby the museum organization managed and maintained the dry dock site, which remained under state ownership. Since that time the group of volunteers and staff has grown and undertaken numerous projects interpret the site and build structures to interpret those that originally occupied the property. The mission statement of the CLCBM is as follows:

> Chittenango Landing Canal Boat Museum will interpret a nineteenth century dry dock complex on the old Erie Canal, through preservation, restoration, and reconstruction. It will provide the opportunity for visitors from near and far to learn of boat-building and repair of Erie Canal boats, and the social history of the canal era.

In 1992, the Chittenango Landing dry dock complex was listed on the National Register of Historic Places, in recognition of the site's significance as a business enterprise critical to the operation and commerce of the Erie Canal in the nineteenth century.[8] The store and warehouse building was constructed atop the foundation of the original building in 1992 using information obtained from an historic photograph (ca. 1874-1890)[9] as well as nineteenth century canal surveys and Sanborn maps of the site. The blacksmith shop and sawmill buildings were built in 1994 and the mule stable in 2010 in a similar manner and using these same sources of information. These features (and the relevant historical evidence and images) are more fully described in Section 2.0.

1.3.2 Existing Conditions

The existing conditions of the dry dock complex at Chittenango Landing and the surrounding property are documented in Section 3.0 through text, photographs, and a plan showing the site layout and existing site features. The dry dock complex is comprised of the three-bay dry docks, sluiceway, rebuilt store and warehouse, blacksmith's shop, mule stable, and sawmill buildings, an interactive replica of a canal boat (and accompanying pavilion), three exposed foundations, and various modern amenities to the west of the Chittenango Canal. The landform of the site (with the exception of the dry dock complex, and depressions formed by archaeological features) is generally flat, leading to Chittenango Creek to the south and west across open fields. The creek is lined with tall, deciduous trees that form a strong visual boundary to the parcel. The dry docks include exposed original floor timbers and rebuilt walls and gates, and are protected from the canal waters by an earthen dam with a wood walkway constructed parallel to the canal. A rebuilt canal store is located west of the dry dock bays, and rebuilt mule barn, blacksmith shop and sawmill building are located south of the dry dock bays.

1.3.3 Analysis and Evaluation

Section 4.0 addresses the historic significance of the Chittenango Landing dry dock complex, defines the historic character of the landscape, and evaluates contributing landscape features as the basis for future management. The Chittenango Landing dry dock complex was listed on the National Register of Historic Places in 1992 in recognition of its significant role in transportation, engineering, and commerce during the period 1856-1917. The dry docks remain in their original location and relationship to the Erie Canal, and are an important feature representing canal infrastructure that is relatively rare within New York State. This section provides a summary of historic and existing (2013) conditions of the landscape characteristics within the study area and an evaluation of the historic integrity of that feature. The significance evaluation of landscape features is organized according to the description of existing landscape features presented in Section 3.0.

[8] Lozner, 1992; more information on the nomination is included in Section 2.3 of this report.
[9] The date of this photograph is estimated to be as early as 1865 to as late as 1890, but is generally reported in research on the site (Weiskotten 1991 and 1998; Lozner, 1992; Pippin, 1996) to be circa 1875.

1.3.4 Conclusion and Recommendations

Section 5.0 summarizes the current uses and programming for the dry dock complex property, and provides a description and evaluation of various treatment recommendations. The treatment recommendations address the preservation, maintenance, accessibility, and usage of the site with a goal of providing alternatives for sustainable management of the cultural landscape. This section includes policy, program and project recommendations relative to the resources and landscape features located within the dry dock complex property. Recommendations included in this section are intended to inform a future Part 2 of a Cultural Landscape Report for the Chittenango Landing dry dock complex.

2.0 SITE HISTORY

The evolution of the Chittenango Landing dry dock complex site is divided into three periods. The first period is defined based on changes in the Erie Canal and its usage, as this had the greatest immediate impact on the site. The last two periods deal with the twentieth century abandonment and subsequent revitalization of the dry docks and associated landscape. Ownership of the dry docks was transferred frequently prior to the abandonment of the Erie Canal, implying that changes to the site were less influenced by individual owners as much as they were in response to the needs of boatmen on the canal, as well as fluctuation in the market for canal-related services, particularly as competition with railroads increased in the mid-to-late nineteenth century. The need to accommodate larger commercial vessels, as well as a continuing decline in canal traffic, led to the construction of the New York State Barge Canal from 1905 to 1917. Some sections of the Enlarged Erie Canal were assimilated into the Barge Canal, and much of it closed, leading to the decline of facilities such as the dry dock complex.

2.1 The Erie Canal and Chittenango Landing, 1790-1855

Native American Landscape and Early European Settlement

At the time of European contact and colonization in the seventeenth and eighteenth centuries, Central New York was located within the heartland of the Iroquois Confederacy, including the Oneida Nation. Until the late eighteenth century, the Oneidas occupied a large swath of land, with approximately 24 distinct villages in the territory now comprising Madison County. The gradual loss of Oneida territory began with the Treaty of Fort Stanwix (1784), and the creation of the 200,000-acre Oneida Indian Reservation, which was later ruled invalid by the Iroquois. Four years later, the Oneidas ceded over five million acres of tribal lands in the Treaty of Fort Schuyler (1788), in exchange for a 300,000-acre reservation, and monetary and various other provisions. However, in the 1820s the Oneidas began to leave New York in great numbers for Wisconsin and Canada, following the sale of additional large tracts of land, such as the Lincklaen Purchase of 50,000-acres (1792) that further shrank their territory.[10]

Non-Native American settlement in the area comprising Madison County is reported to have begun in 1790 with emigrants to the area arriving by the "Indian Trail" or "Great Trail," with Fort Schuyler at its eastern end, to "Three Rivers" in the territory that would become Onondaga County (Figure 2.1). The first improved road in the county was opened in 1790 on the Indian Trail by William and James Wadsworth on their way to establish a settlement in the Genesee River Valley to the west. The State of New York made appropriations for further improvement of the road in 1794 and 1795, leading to its new name of the Great Genesee South Road or State Road (and later the Seneca Turnpike).[11]

[10] Helmer, 2005; 941; Friedlander, 2005: 1576.
[11] Hammond, 1872: 127; Smith, 1899: 26-27.

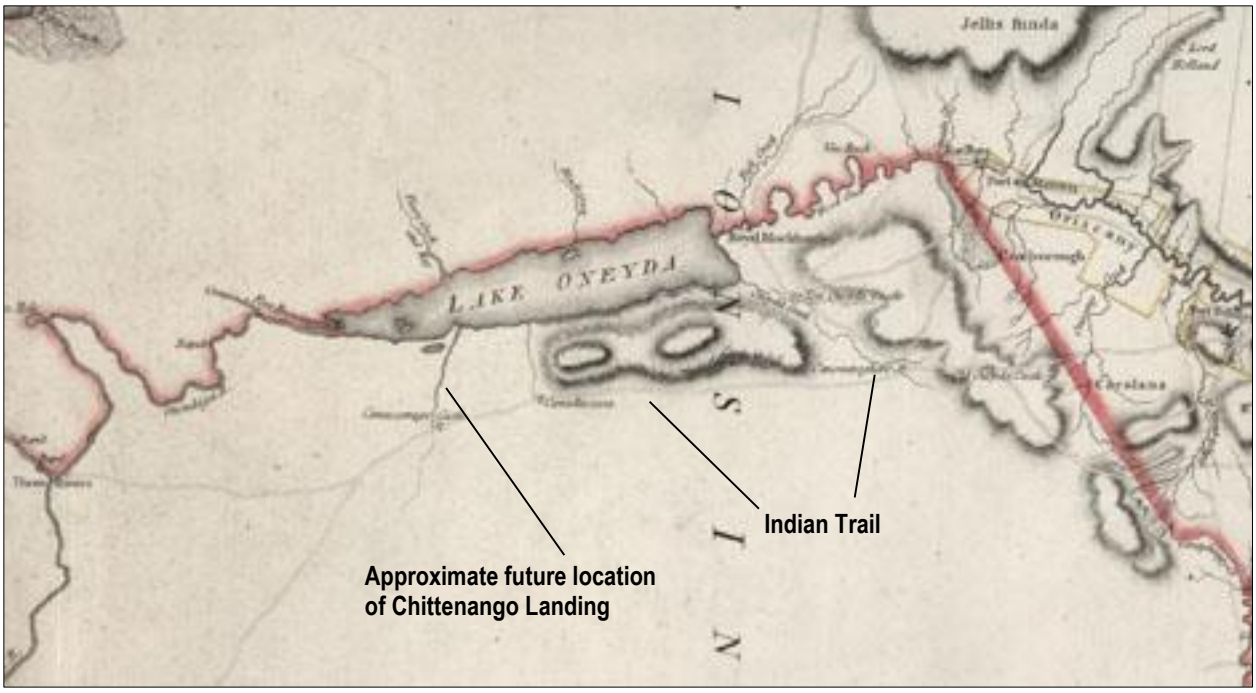
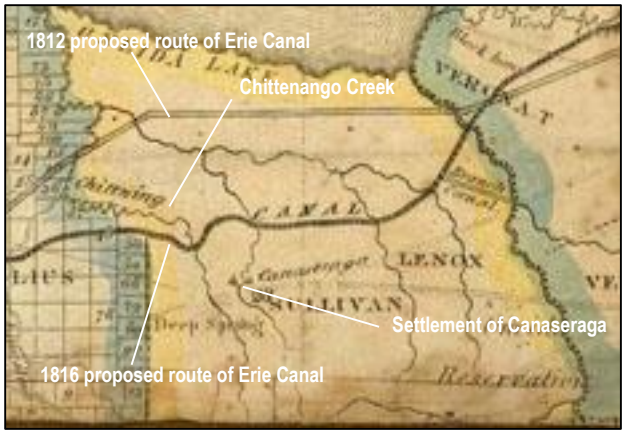


Figure 2.1. A late eighteenth century map that shows the Native American settlements and trails in the region that would become Madison, Oneida and Onondaga Counties. (Detail, Claude Joseph Sauthier *A Chorographical Map of the Province of New York* c. 1779. David Rumsey online collection, annotation by EDR).

This newly improved route through the area promised settlement that was being encouraged as a result of the New Military Tract of 1782, a 1.5 million-acre tract set aside by the state for soldiers of the Revolutionary War. Comprised of land in what is now Onondaga, Cayuga, Tompkins, Cortland and Seneca Counties (as well as portions of Oswego, Schuyler and Wayne Counties), the tract was divided into 28 townships, each containing 100 lots of 600 acres in a uniform grid pattern. As a result of treaties with Onondaga and Cayuga Indians delaying surveying of the land until 1789, the tracts did not begin to be settled until 1790. Widespread land speculation led to the sale of much of the New Military Tract to settlers from New England, New Jersey, Pennsylvania and the Hudson Valley.[12] While the land comprising Madison County was not part of the New Military Tract, some of its early settlers also were known to have come from eastern New York and Massachusetts along the State Road.

Ten families, who had first visited the area as part of the Vrooman expedition of the Revolutionary War, arrived in 1790 in the present-day Town of Sullivan and began squatting in the vicinity of the Canaseraga flats on Oneida Indian territory. The squatters were ejected and their dwellings burned the following year when the Oneidas complained to Governor George Clinton. Significant settlement did not occur in the area as swiftly as in neighboring towns, as disputes with the Oneidas were not fully resolved until 1830.[13]

[12] Schein, 1993:5-28; Schein, 2005: 1048.
[13] Smith, 1880: 741; Smith, 1899: 45.



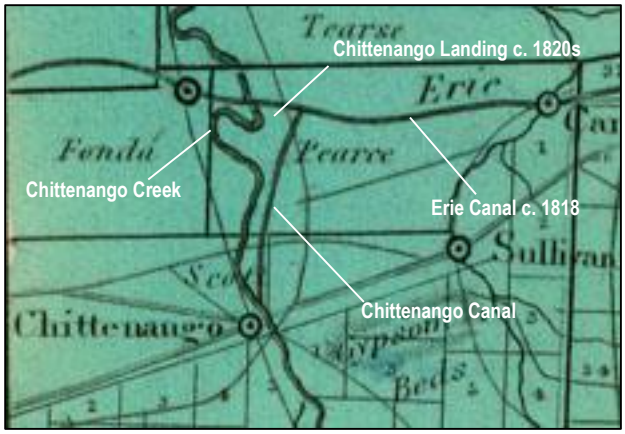


Figure 2.2 (left). An early nineteenth century map that shows two proposed routes of the original Erie Canal through New York, as well as the early settlement of Canaseraga. (Detail, Amos C. Lay *Map of the State of New York*, c. 1817. David Rumsey online collection, annotation by EDR.)

Figure 2.3 (right). This c.1829 map is the first to depict the Chittenango Canal and its relation to the village of Chittenango. (Detail, David H. Burr *Map of the County of Madison*, c. 1829. David Rumsey online collection, annotation by EDR.)

Settlement of Chittenango and Construction of the Erie Canal

Numerous settlers began to arrive in the vicinity of Canaseraga in 1800, which was the first village established in the Town of Sullivan in 1805 (Figure 2.2). The Town of Sullivan was established in 1803, formed from the Town of Cazenovia. In 1809, the Town of Lenox was formed from Sullivan, decreasing its size and population.[14] The area that would become the Village of Chittenango had begun to be settled around 1800, with the first settler in the vicinity reported to be John Smith, who came from Massachusetts and established a tavern along the State Road. Smith also purchased a 200-acre tract that included portions of Chittenango Creek that provided water power for the eventual establishment of a grist mill and cotton factory.[15] Additional settlers arrived in this area between 1800 and 1805, though not all remained to establish farms or businesses. Aside from two taverns along the State Road, historic accounts note that only three or four houses were found in the vicinity of the village of Chittenango in the first decade of the nineteenth century.[16]

In 1808, John H. Walrath and his family came from Rome, New York and settled on the west bank of Chittenango Creek, near the eventual location of the three-bay dry dock complex. Walrath had come to the area as he and his son had contracted for constructing a section of the Seneca Turnpike through the region. Following their arrival in the autumn of 1808 and through the winter, the Walrath family lived in a house on the road leading to Canaseraga, before relocating to a 100-acre tract that would become the family farm for several decades.[17]

[14] Hammond, 1872: 665-666; 645; Smith, 1899: 31-32, 317.
[15] Smith, 1899: 47.
[16] Smith, 1880, 743.
[17] Hammond, 1872: 666-667; Smith, 1899: 48, 317.

Though the Walrath family was not initially engaged in commerce in the village, they would later play a significant role in the development of Chittenango Landing and the dry dock complex site. Commercial production began in the village of Chittenango around 1812 when Judge Jedediah Sanger and Judge Youngs came from Oneida County and purchased the land along the State Road adjacent to Chittenango Creek from John Smith. A saw mill, grist mill, and cotton factory were soon established, and a tannery and hotel soon followed, which contributed to growth in the village, as well as attracted additional entrepreneurs to settle in the area.[18]

The arrival of John B. Yates had a catalytic impact on the early development of Chittenango and its industries. Yates came to Chittenango in 1816 from Utica, where he had been practicing law after a two-year term in the United States Congress. He initially spent only a year in the area before being appointed manager of the "Literature Lotteries," and relocated his residence to New York City until 1825, when he settled for the remainder of his life in Chittenango.[19] His absence from the area did not preclude his involvement in local affairs. Over the subsequent decade Yates established a large estate consisting of 2,000 acres of land containing his residence south of the Village of Chittenango, as well as flouring mills, saw mills, an oil mill, and lime and plaster mill, a woolen factory, stores, and the Yates Polytechnic school in the village, as well as a boatbuilding and repair yard with a one-bay dry dock, located at Chittenango Landing along the Erie Canal.[20] The dry dock on Yates' property was located adjacent to the Chittenango Feeder Canal (also referred to as the lateral, side-cut, or Yates canal), which connected the village with the Erie Canal to the north.

The construction of the original Erie Canal (also known as "Clinton's Ditch") north of the village of Chittenango had been made possible due to the draining of the "Vlaie," a several mile-wide swamp that spanned the north edge of the Town of Sullivan, which is identified on early nineteenth century maps as Canaseraga Lake, and Great Swamp. As a result of the efforts of Colonel Zebulon Douglass, state appropriations were obtained in 1816 to reroute the Lake waters into a ditch named after Douglass. This and similar drainage projects in the region enabled the construction of roads, as well as the further settlement of the area and increased grain farming. The sales of the wheat crop to other markets would benefit greatly from the planned Erie Canal, which broke ground in Rome, New York on July 4, 1817.[21]

Prior to the opening of the middle section of the Erie Canal, a group of businessmen in Chittenango recognized the potential in having the new shipping route linked directly to the village south of the new waterway, and began

[18] Hammond, 1872: 669.
[19] Lotteries were held with proceeds benefitting literary institutions such as the New York State Historical Society. Yates was appointed to this position to correct graft and misappropriation of funds. Hammond, 1872: 687-687; New York State Senate, 1833: 494).
[20] Hammond, 1872: 687.
[21] Pratt and Pratt, 1981: 26-27.

lobbying for the construction of the Chittenango Canal (Figure 2.3).[22] The Chittenango Canal Company was authorized March 6, 1818 under an act of the New York State Legislature, with John B. Yates and four other men listed as incorporators, to construct the canal.[23] Yates is credited as the primary supporter for the Chittenango Canal, perhaps due to his vast real estate holdings surrounding Chittenango, and various business interests that would benefit from increased traffic from the Erie Canal. With Yates named as the director of the company, the Chittenango Canal was to be completed within five years of the completion of the middle portion of the Erie Canal, at a cost not to exceed $30,000, and was to be constructed in a way that it did not interfere with the supply of water from the Chittenango Creek to the Erie Canal.[24] The Chittenango Canal originated at Chittenango Creek in the village, extended east along the Seneca Turnpike, and then north along the west side of the Chittenango-Lakeport Plank Road, before terminating at the Erie Canal (Figure 2.4). An 1825 Erie Canal travel guide noted the Chittenango "side cut" was one-and-a-half miles long and contained four locks rising six feet at each lock progressing south to the village.[25]

The 1818 law authorizing construction of the Chittenango Canal also included a provision for the construction of a basin for the turning of canal boats:

> The said president and directors shall, at their own expense…excavate and constantly keep in repair at the place where their canal connects with the great western canal, a basin of such dimensions as to admit any boats used in either of the said canals to turn around conveniently without encroaching at all on the great western canal.[26]

The full route of the Erie Canal opened on October 26, 1825, and was 40 feet wide, tapering to 28 feet wide at the bottom of the channel, and carried four feet of water.[27] In addition to the dozens of locks needed to overcome changes in water levels and topography across New York, basins set off from the thoroughfare of the canal known as dry docks were located throughout the length of the canal.

---

[22] The 1829 Burr map of Madison County (Figure 2.2) is the earliest known depiction of Chittenango Canal. While not labeled on the map, the juncture of the Erie and Chittenango Canals is located on of a large parcel of land labeled "Pearce." Since the landowner at this time is known to be John B. Yates, it is unknown why the parcels break from the labeling conventions of the rest of the map.
[23] Smith, 1899: 178.
[24] *Laws of the State of New York In Relation to the Erie and Champlain Canals, Vol. I*, 1825: 387-88; Pratt and Pratt, 2002: 20; a detailed description of the Chittenango Canal has not been located, but it is assumed to have had similar dimensions to the original Erie Canal, approximately 40 feet wide by four feet deep.
[25] Spafford, 1825: 51.
[26] *Laws of the State of New York In Relation to the Erie and Champlain Canals, Vol. I*, 1825: 387-88;
[27] Pratt and Pratt, 1981: 26.

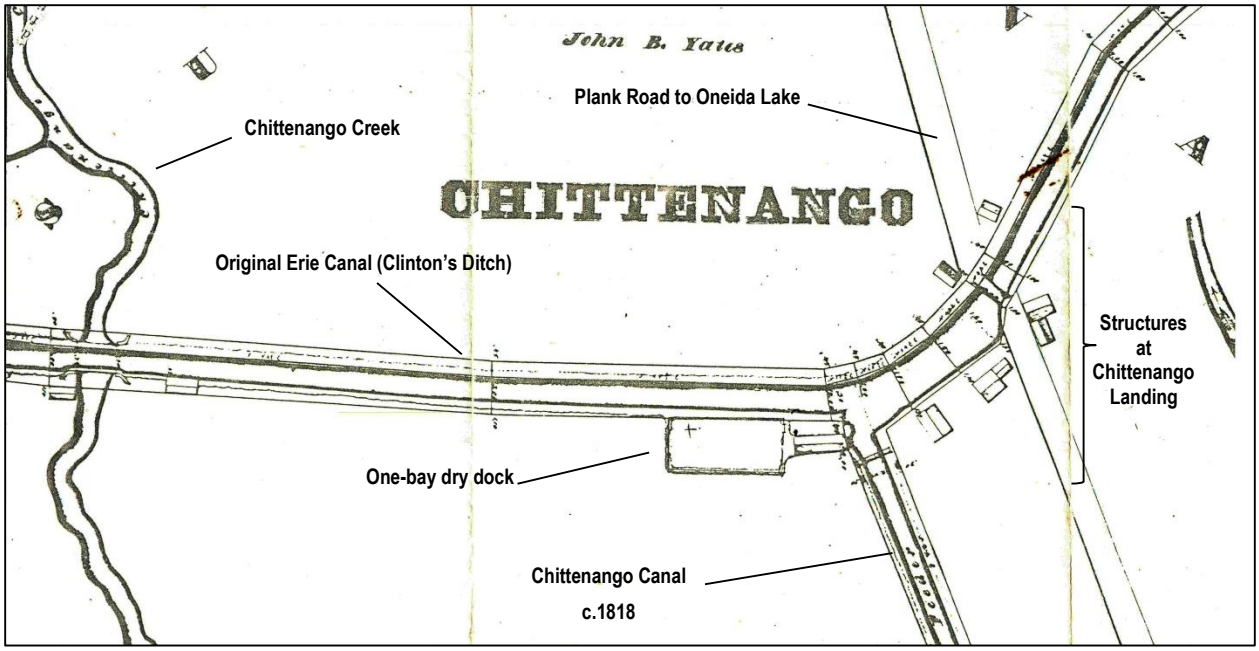


Figure 2.4. This map contains most detailed depiction of the original location of Chittenango Landing along Clinton's Ditch. A one-bay dry dock is located west of the Chittenango Canal, labeled as "Feeder." The unlabeled structures likely included the canal grocery, warehouse, tavern, and boatbuilding business referenced in historic accounts. (Detail, Holmes Hutchinson 1834 Erie Canal Map Series, Chittenango Landing plate. Collection of CLCBM, annotation by EDR.)

Dry docks were employed on the original route of the Erie Canal, as well as the Enlarged Erie Canal, to facilitate smoother boat traffic and allow the servicing on canal boats off the main waterway. Dry docks varied in size, construction, location, and number based on each individual site. Dry docks usually included at least one bay, and often took advantage of naturally occurring streams or adjacent waterways for boat turning or repairs. Dry docks often featured ancillary businesses such as blacksmiths, sawmills and hotels, providing a full service complex for passing canal boats, as well as residences for workers at the sites.[28] A settlement known as Chittenango Landing developed along the Erie Canal at its junction with the Chittenango Canal (Figure 2.4).[29] As traffic along the Erie increased, new enterprises located along the route of the canal soon followed. In the early 1830s, postmaster Henry H. Cobb, a former clerk under John B. Yates, had a fleet of boats traveling between Fayetteville to the west and Albany to the east, as part of his forwarding business. In 1836, businesses operating at Chittenango Landing included a canal grocery, warehouse, tavern, a large boatbuilding business, as well as a one-bay dry dock and boat-turning basin, operated by James Dewitt.[30]

[28] Weiskotten,1998a.
[29] This plate of the 1834 Holmes Hutchinson map series of the Erie Canal shows the original location of Chittenango Landing, including multiple unlabeled buildings, and the one-bay dry dock located on the south bank of the Erie and west side of the Chittenango Canal, labeled "Feeder." This configuration is similar to the layout of the future three-bay dry dock complex. The map also notes the parcel to the north of the canal as belonging to John B. Yates.
[30] Houck, 1967; Pratt and Pratt, 1981: 27.

After 30 years of commercial operations and growth, the Village of Chittenango was officially incorporated March 15, 1842.[31] At this time, business was continuing apace along the Erie Canal, though agitation for its enlargement had already begun in the early 1830s as a result of heavy traffic, the need to shorten the route and reduce the number of locks, and competition from railroads. The first enlargement of the Erie Canal occurred between 1836 and continued until 1862. The route through Chittenango was moved south, closer to the village, in the early 1850s (Figure 2.5).[32] The canal was widened to 70 feet at its surface and 52 ½ feet at the bottom, with a depth of seven feet, and stone facing was added to the banks to prevent erosion that plagued the canal and led to costly repairs. The Enlarged Erie Canal could accommodate boats with larger loads.[33] As the canal was enlarged, alterations to existing infrastructure, such as canal walls, bridges, locks, and dry docks were needed to adapt to the changes in watercraft.

The enlargement and rerouting of the Erie Canal precipitated the closure of several lateral and feeder canals throughout the state. In the Town of Sullivan these efforts shortened the length of the Chittenango Canal considerably, and usage of the lateral canal had already declined with the increase in the size of packet and freighter boats, which the canal could not accommodate. Much of the land surrounding the Chittenango and Erie Canals in the Town of Sullivan was owned by the estate of John B. Yates. Following his death in 1836, his extensive real estate and business interests were sold off by the executors of his estate in subsequent decades.[34] A sale of approximately 1800 acres, including Yates' interest in the Chittenango Canal, was held in September 1852.[35] A map was drafted that depicted the Yates Estate comprised of over 3000 lots, and included a speculative layout for the relatively unsettled land surrounding the village that included streets and parks that were not yet built (Figure 2.6). A subsequent auction was held in September 1854 to discharge all lands not yet sold, including 450 acres in the village of Chittenango (Figure 2.7). Interests in the Chittenango Canal were still available for purchase, including an oil mill and store house located along the canal.[36]

---

[31] Smith, 1880: 745.

[32] Lozner, 1992: 8; Pippin, 1996: 11; the 1852 Holmes map shows the proposed route of the Enlarged Erie Canal, which was constructed between 1853 and 1856. The map also contains the most detailed depiction of the Chittenango Canal. The map was prepared in anticipation of a September 1852 auction of the lands comprising the former estate of John B. Yates, who passed away in 1836. The 1852 map shows the lands then owned by Yates divided into lots as part of a speculative layout for a settlement called "Yatesville," including a "Yates Park," neither of which came to fruition.

[33] Whitford, 1906: 131-33; Pratt and Pratt, 1981: 29.

[34] In addition to his considerable holdings in Madison County, Yates owned land throughout New York and in other states. Announcements in an 1852 edition of the *Albany Argus* note public auctions for lands in Oswego, Saratoga, and St. Lawrence Counties in New York, as well as in Washington D.C., occurring in February 1852.

[35] "Peremptory Sale of Valuable Farms and About 3000 Village Lots," *Oswego Daily Times*, September 1, 1852.

[36] *Syracuse Daily Standard*, August 8, 1854; a map entitled *Map of the Unsold Part of the Estate of the Late John B. Yates, Esq. in Chittenango and Vicinity* (Figure 2.7) was prepared for the sale, and the future dry dock complex site is depicted as two large lots, as opposed to a series of smaller parcels, as on the previous Yates Estate auction map (Figures 2.4 and 2.7).

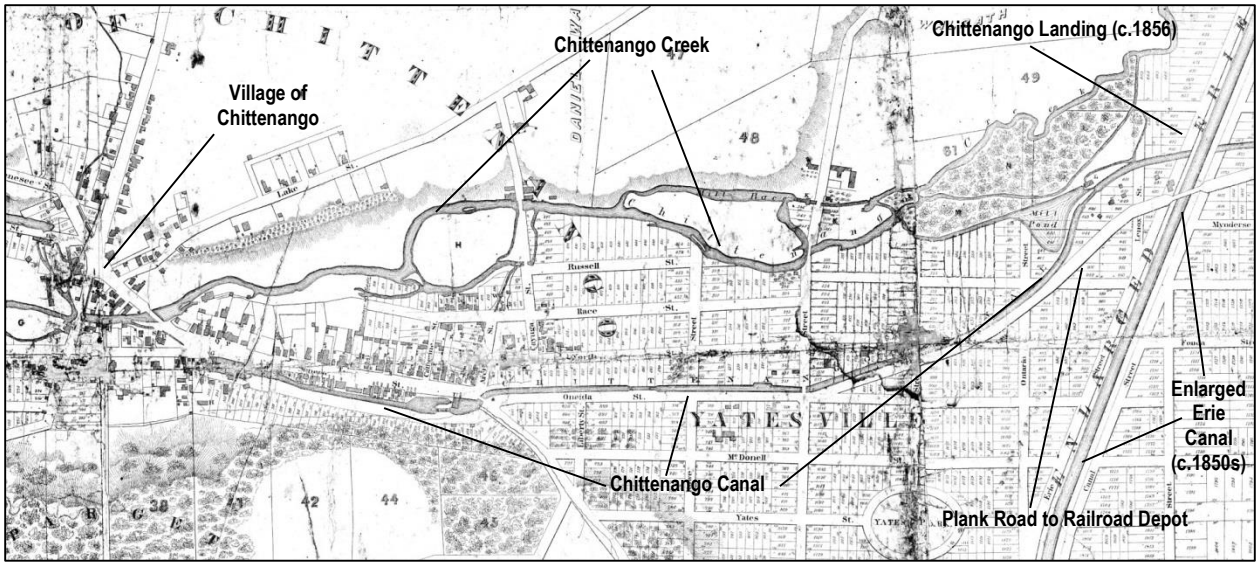


Figure 2.5. This c. 1852 map detail contains the most detailed depiction of the Chittenango Canal, as well as existing structures in the village of Chittenango and surrounding area. The map does not contain a key, and so it is assumed the vegetation depicted is not meant to be an accurate representation of number or density of trees and vegetation in the vicinity. Note also that the orientation of this map is with north to the right. (Detail, John B. Holmes c. 1852 *Map of That Part of the Estate of the Late John B. Yates at Chittenango & Vicinity*. Collection of CLCBM, annotation by EDR.)

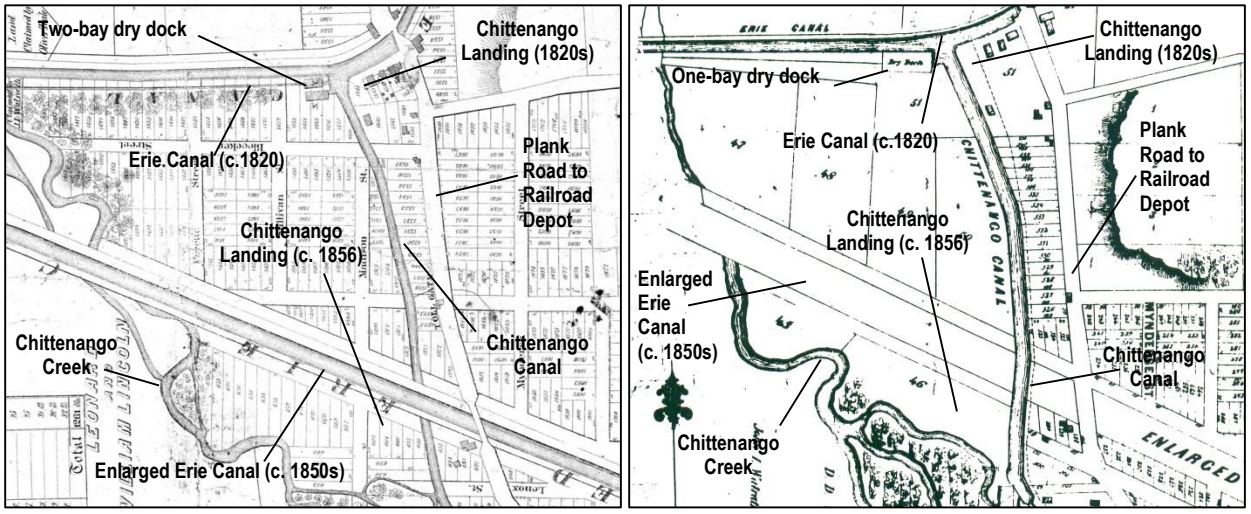


Figure 2.6 (left). This detail of the 1852 Yates estate map is the only map to show a two-bay dry dock at the original location of Chittenango Landing, but in general reflects the layout seen in the 1834 Hutchinson map. The future location of the three-bay dry dock complex is depicted as several lots for sale as part of the Yates estate auction. (Detail, John B. Holmes c. 1852 *Map of That Part of the Estate of the Late John B. Yates at Chittenango & Vicinity*. Collection of CLCBM, annotation by EDR.)

Figure 2.7 (right). This later detail of the same area shows only one dry dock bay at the original Chittenango Landing (Detail, William H. Walrath c. 1854 Map of The Unsold Part of the Estate of the Late John B. Yates, Esq. In Chittenango & Vicinity. Collection of CLCBM, annotation by EDR.)

Summary (Drawing 1)[37]

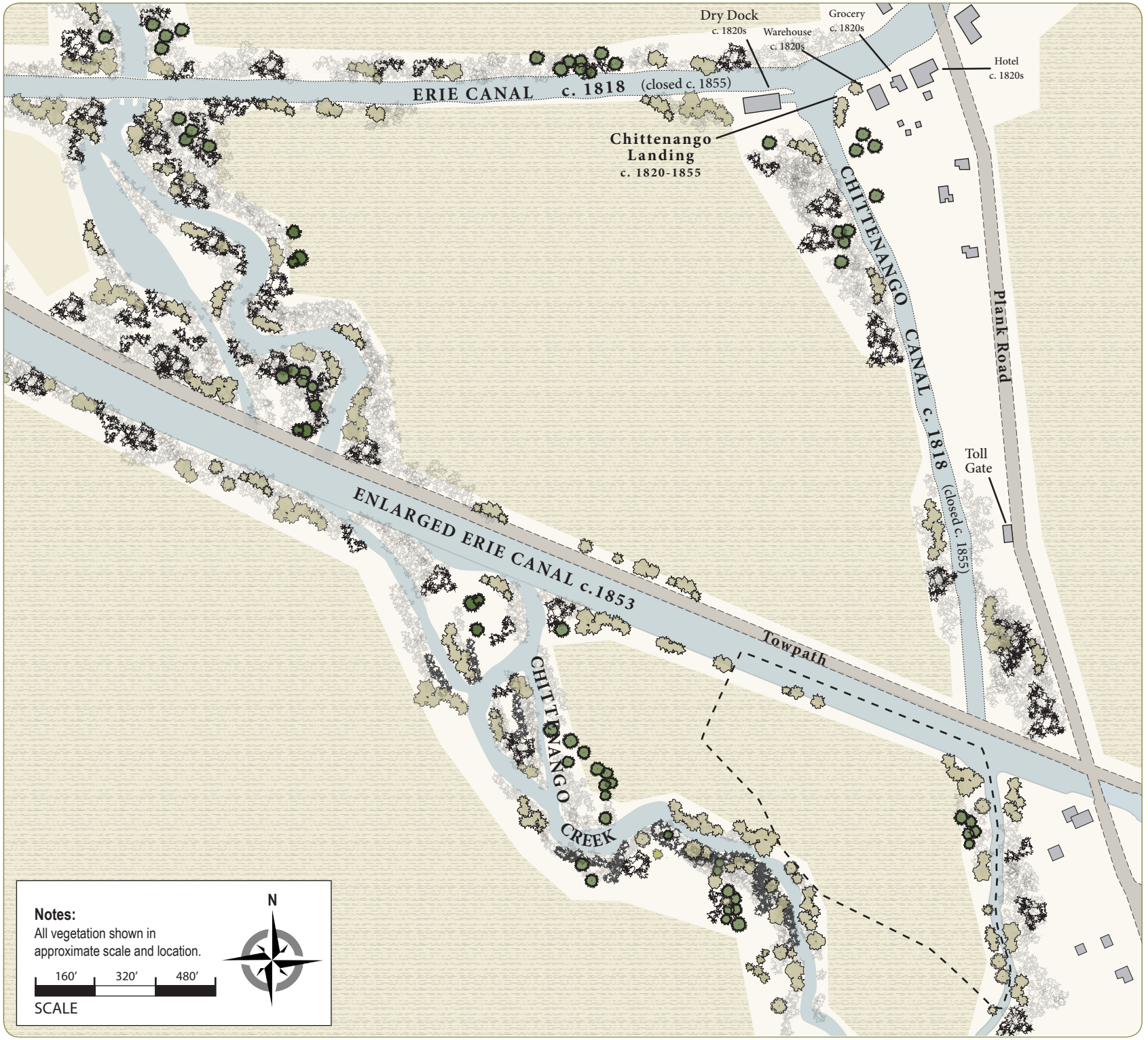
By the mid-nineteenth century, the landscape of the Town of Sullivan (including the future location of Chittenango Landing dry dock complex) had been significantly changed by the construction of the Erie Canal. Until the early nineteenth century, the area comprising Madison County had been occupied by Native Americans, who likely had little impact on the landscape. The opening of the Erie Canal (built 1818-1825) brought increased settlement and commerce to the region, leading to the rapid development of villages such as Chittenango.

Prior to 1855, the land that would comprise the Chittenango Landing dry dock complex was part of a large estate owned by John B. Yates, a wealthy lawyer, judge, and entrepreneur. As part of the Chittenango Canal Company, Yates successfully lobbied in 1818 for the construction a lateral canal to connect the Erie Canal to the nascent village of Chittenango to the south. Yates owned thousands of acres of land throughout the state, including almost two thousand in the Town of Sullivan and the land along the Chittenango Canal, much of which was undeveloped. Following his death in 1836, the undeveloped portion of his estate in the Town of Sullivan was sold off between 1852 and 1854.

A settlement called Chittenango Landing had been established at the juncture of the Chittenango Canal and original route of the Erie Canal (Figure 2.4) in the 1820s. At the time of the construction of the Enlarged Erie Canal in the 1850s, this hamlet was re-established at a new location where the Enlarged Erie and Chittenango Canals converged (south of the original hamlet's location). In 1855, the area of the Chittenango Landing dry dock complex was undeveloped, and likely forested with deciduous trees, particularly along Chittenango Creek (Figures 2.5-2.7).[38] The future site of the dry dock complex was purchased at the end of 1855 by Daniel Kellogg, who then sold it to John Walrath, an established farmer and businessman in the Town of Sullivan. Walrath's next business enterprise along the Enlarged Erie Canal would alter and redefine the landscape of the dry dock complex for the next sixty years.

[37] The period plan for 1790-1855 (Drawing 1) includes a broader regional context than subsequent drawings, and includes the first location of Chittenango Landing along the original route of the Erie Canal, as well as the Enlarged Erie Canal and then-undeveloped land that would become the Chittenango Landing dry dock complex beginning in 1856.

[38] The 1852 *Map of That Part of the Estate of the Late John B. Yates* (Figure 2.5) and 1854 Walrath *Map of the Unsold Part of the Estate of the Late John B. Yates, Esq.* (Figure 2.7) depict an area of forested vegetation south between the Chittenango Canal and Chittenango Creek, south of the Enlarged Erie Canal. No map key is provided so the type of vegetation is unknown, but it is assumed deciduous trees lined the riparian corridor.



Chittenango Landing Canal Boat Museum Cultural Landscape Report

Town of Sullivan,
Madison County, New York

DRAWING 1: 1790-1855

LEGEND

- Project Boundary
- Removed during period
- Assumed feature
- Deciduous woods
- Deciduous tree/shrub
- Conifer tree/shrub
- Riparian vegetation
- Structure
- Pole and chain fence
- Fence/gate
- Stone wall
- Stone rubble wall
- Wood feature
- Paved road/path
- Unpaved road/path
- Waterway
- Fields (assumed)

References:

1. 1834 Hutchinson Erie Canal Map Series.
2. 1852 Holmes Map of That Part of the Estate of the Late John B. Yates, Esq. at Chittenango & Vicinity.
3. 1854 Walrath Map of the Unsold Part of the Estate of the Late John B. Yates, Esq. in Chittenango and Vicinity.

November 2014

edr
www.edrdpc.com

CHITTENANGO LANDING CANAL BOAT MUSEUM

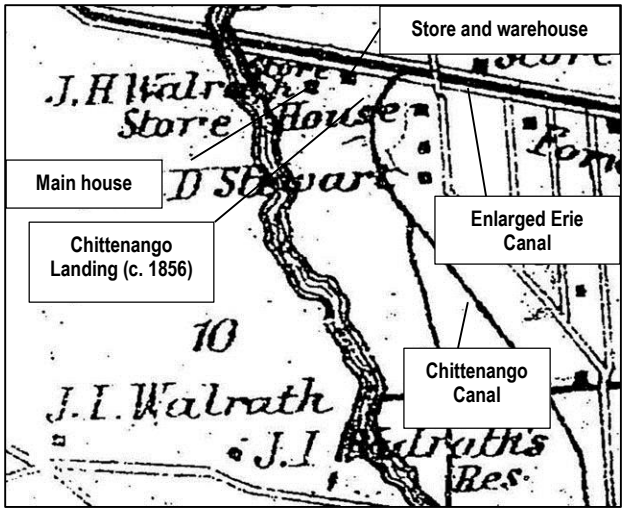
2.2 Construction and Operation of the Chittenango Landing Dry Dock Complex, 1856-1917

By the mid-nineteenth century, the village of Chittenango had grown into a bustling community due in large part to the construction of the Erie Canal, and that Chittenango Canal enabled swift transport of goods between the village and the Erie Canal to the north. The village grew primarily around the intersection of major roads, as well as those adjacent to the Chittenango Canal, while the area surrounding the village remained primarily rural. The construction of the Erie Canal had proven successful in providing an effective shipping route for goods crossing the state, as well as contributing to rapid growth of towns and villages along its route, including Chittenango. The increase in traffic along the canal in its first few decades of operation demonstrated the need for its enlargement, which required a new alignment in some parts of the state. The 1855 relocation of the Enlarged Erie Canal through Chittenango moved the waterway south of its original location and closer to the village. This change increased commercial activity between the canal and village, and eventually a large dry dock facility was constructed to accommodate the traffic.

In anticipation of the Erie Canal being rerouted, a group of citizens representing businesses located around the one-bay dry dock at Chittenango Landing petitioned the New York State Canal Board to allow them to relocate their operations to the banks of the Enlarged Erie Canal, south of the original location of the hamlet. This petition also requested the Canal Board consider enlarging the Chittenango Canal where it merged with the Enlarged Erie, and align the mouth of the feeder with the adjacent canal wall to enable easier docking and transferring of goods. The Chittenango Canal, was not able to handle the larger canal boats, and had already declined in use in the 1840s and early 1850s, and begun to be filled with trash and other debris. Control of the Chittenango Canal was assumed by the State in 1860.[39]

The hamlet of Chittenango Landing also moved south with the new, enlarged canal route, as the original Erie Canal route was no longer viable and able to support businesses at the original location.[40] Even though these businesses were private enterprises, the land immediately surrounding the Canal was within the State-owned right-of-way, and as such, and the project needed approval from the Canal Board. In addition, construction of new dry docks would also require the supervision by State canal engineers. The State granted permission for the construction of the new dry docks on December 31, 1855, and the work was undertaken during 1856 and 1857, in conjunction with the construction of the middle section of the Enlarged Erie Canal through the Town of Sullivan. The dry docks and 1700-foot sluiceway, which drained into Chittenango Creek on the west, were the first structures built onsite.

[39] Lozner, 1992: 8; Nichols, 1939: 22; Houck, 1967; according to Houck the state later encouraged residents to fill the Chittenango Canal with debris, and buildings were constructed atop the route and basin of the canal in Chittenango village.
[40] Subsequent historic maps indicate that structures were present at the original location of the hamlet of Chittenango Landing, though research by Weiskotten (1991) and Lozner (1992) indicates the businesses moved with the canal in 1855-1856, so it is likely residences remained at the earlier location, though it was no longer a named settlement.



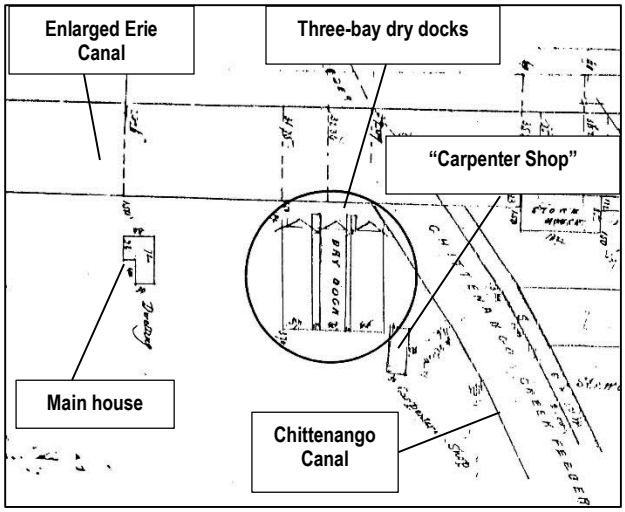


Figure 2.8 (left). First map to depict the relocated Chittenango Landing, including a canal store, and the residence of John H. Walrath. (Detail, J.H. Gillette c. 1859 *Map of Madison Co., New York*, Sullivan plate. Collection of CLCBM, annotation by EDR.)

Figure 2.9 (right). Undated canal survey map that shows a "dwelling" (likely the main house) but not the canal store, and also includes a "carpenter shop" that is not depicted on any other map. The dry dock bays are also depicted for the first time. (Detail, c. 1860 canal survey of unknown origin. Collection of CLCBM, annotation by CLCBM and EDR.)

Daniel F. Kellogg was the petitioner and landowner listed in the resolution passed by the Canal Commissioner at the end of 1855:

> That D.F. Kellogg be permitted to construct a Basin & Dry Dock on his premises, in connection with the Erie Canal, on the berm bank thereof, near the Yates Canal, in the town of Sullivan, Madison County, in conformity to map & plan this day placed on file. The work to be under the direction of Commissioner & Engineer in charge.[41]

Kellogg was a hardware merchant from Massachusetts.[42] He briefly owned a foundry on another parcel, as well as served as a village officer (1842), director of the First Bank of Chittenango (1863), and county assemblyman (1864).[43] Following the resolution allowing the construction of dry docks, Kellogg did not hold onto the land very long. The majority of the land where the dry docks were constructed was purchased by John H. Walrath (grandson of early Chittenango settler John H. Walrath) for $1,400 on January 21, 1856, and an additional parcel bordering Chittenango Creek was purchased from John I. Walrath in July of that year.[44] The latter sale was likely to enable the construction of the sluiceway west to Chittenango Creek. It is assumed that the new dry dock structure was constructed and

[41] Copy of minutes on file at Chittenango Landing Canal Boat Museum.
[42] USCB, 1850; Weiskotten, 1991, 1998b; a map that appears in the 1855 Erie Canal Structural Book shows the land where the three-bay dry dock was to be built owned by "Kellogg" (map not included due to poor quality).
[43] Smith, 1899: 323, 324, 327, 421.
[44] Weiskotten, 1991, 1998b.

opened for business by 1857, with John H. Walrath as the primary landowner and merchant.[45] By 1859, in addition to the three dry dock bays the site contained a canal store and a residence for Walrath (Figures 2.8-2.9).

The location of the dry docks along the Enlarged Erie Canal was beneficial due to its proximity to Chittenango Creek, which provided a drainage outlet necessary for the docks to operate efficiently. This feature was of considerable importance due to the size of the new dry docks, which were designed to accommodate empty, partially full and fully loaded canal boats in light, medium and heavy docks, respectively. The new dry dock structure was unusual as most other dry dock facilities along the canal had only one large bay and some only used nearby shallow streams to divert boats for repair.[46]

The dry docks at the relocated Chittenango Landing along the Enlarged Erie Canal had overall dimensions of approximately 78 feet wide by 107 feet long, with three bays parallel to one another, and perpendicular to the Enlarged Erie. Each bay was approximately 25 feet wide (with an eighteen foot wide gate), and 100 feet long. These dimensions were to accommodate newer, larger canal boats that were travelling the Enlarged Erie. When a boat entered a dry dock bay for service, wooden valves opened beneath the gates to allow water to flow into the bay. When the water level was adequate, the valves and gate were closed, with pressure from the canal waters keeping the gate in place. The dry dock bay was then drained using the sluiceway, which was connected to each of the dry dock bays, allowing the boat to rest on way timbers for repair. Once the boat was ready to return to the canal, the process was completed in reverse.

The easternmost bay, or light dock, was designed for the repair of empty canal boats. Its dimensions were 26 feet at its widest point, 105 feet at its longest point, with a depth of six feet. The south and east walls of the light dock were comprised of riprap. It was separated from the middle bay by a wall built of limestone and hydraulic cement. The middle or hundred-ton bay measured 26 feet wide at its base, and 105 feet at its maximum length. Intended for repair of partially loaded boats, it was one foot deeper than the light bay. Similar to the light bay, riprap was found on the south wall of the middle bay, and the west wall was built of limestone and hydraulic cement. Due to greater water volume and pressure in the dock to the west, the wall separating the middle and west docks was higher and wider than the wall separating the light dock from the middle dock.[47]

---

[45] While John H. Walrath owned the dry dock property, he was not the only merchant operating at the site. Walrath teamed with local businessmen Hiram Graves and Jairus French in building and repairing boats at the dry dock complex beginning in 1857. The 1860 census lists French as a canal store operator, and Graves as a carpenter and it is likely they performed these tasks at the dry dock complex. Walrath is listed as a grocer in the 1860 census, and is noted as living in the same dwelling as a boat builder, blacksmith, and clerk. The 1865 Census of Industry lists Walrath as the proprietor of "John H. Walrath & Co. Boat Building and Repairing," and in 1875 he is noted in the census as a boat builder (Weiskotten, 1991).
[46] Pippin, 1996: 11-12
[47] Lozner, 1992.

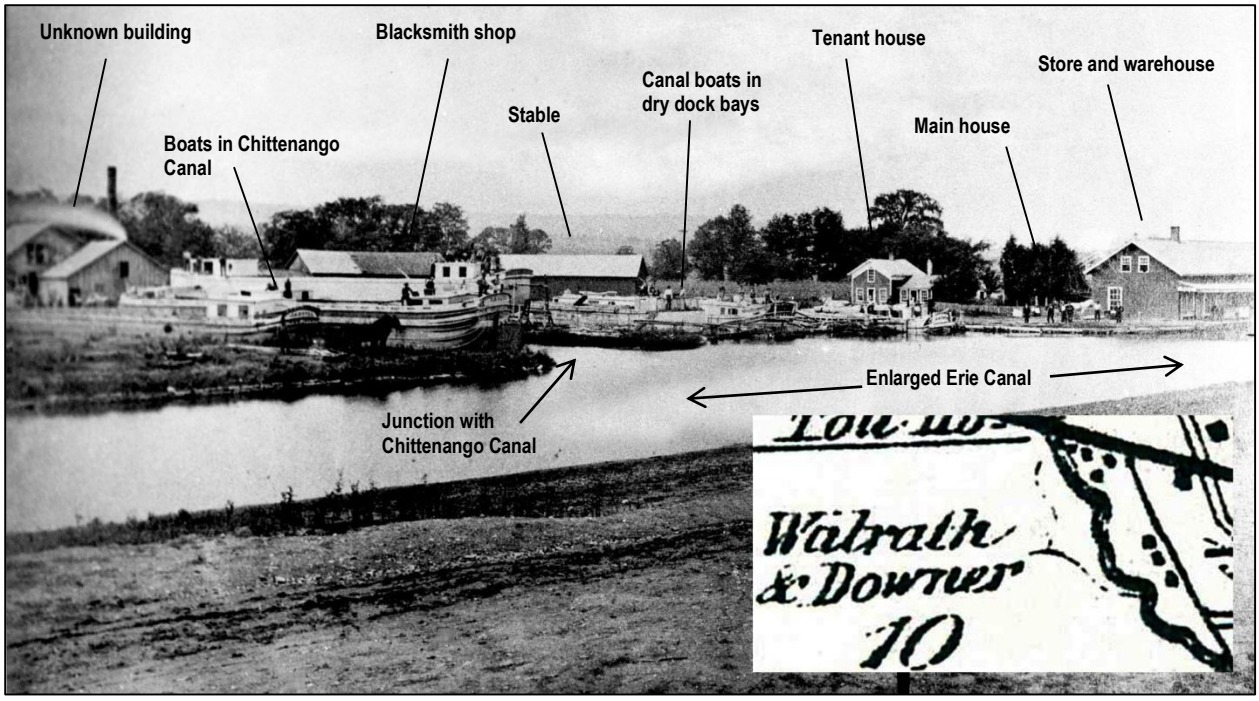


Figure 2.10. The only known nineteenth century photograph of the dry dock complex, estimated to have been taken between c.1875 and c. 1890, based on other maps that document a similar number of buildings at the site. The main house is largely obscured by trees, but five other buildings are clearly present, including an unknown building on the left side of the photo whose location is not consistent with any known map-documented structure and may be located outside the study area. The inset map from c. 1875 depicts four unlabeled structures at the site, owned by Walrath and Downer. (Photograph, c. 1875 American Panoramic View Co., Little Falls, NY. Collection of CLCBM, annotation by EDR. Inset, 1875 D.G. Beers *Atlas of Madison County, New York*)

The west heavy or loaded dock was intended for the repair of fully- loaded canal boats, and was 25 ½ feet wide at its base and 107 feet at its maximum length, with a depth of eight feet. Its south wall was constructed of limestone to withstand greater water pressure.[48]

The sales of interests in the dry dock business are not documented in detail, but the entrepreneurs involved changed several times in the first decades of its operation. The 1869 Childs' *Gazetteer and Business Directory of Madison County, NY* lists Walrath, Albert H. Downer and Benjamin D. French as proprietors of various enterprises, including boat builders, sash, blind and door manufacturers, lumber dealers and proprietors, and dry dock.[49] In 1870, Walrath and Downer were the only active boat builders at the dry dock complex.[50] By this year, the dry dock complex had grown to include a number of buildings in addition to the three dry dock bays (Figure 2.10). A one-and-a-half story store building was located to the west of the dry dock bays, along the canal. A one-and-a-half story house that

[48] Ibid.
[49] Childs, 1869: 223; though they were listed as involved in business together, this does not necessarily mean all of these activities were conducted at the dry dock site.
[50] Weiskotten, 1991; a number of *Madison County Times* articles from the 1870s note the construction of canal boats by Walrath and Downer, with one praising their "first class work" (Richardson, date unknown; on file at CLCBM).

served as a residence for the owner of the dry dock bays was located immediately south of the store, and an additional one-and-a-half story tenant house for workers was located south of the main residence.[51]

In February 1878, Walrath and Downer sold the dry dock property, as well as the parcel where the sluiceway was located, to Frank Hosley of Vernon for $6,000. Hosley had previously been involved in the dry dock business at Durhamville (east of Chittenango) as early as 1863. His purchase of the dry dock was subject to a mortgage held by Charlotte M. Stewart and Daniel D. Walrath. An October 1879 deed transaction conveyed the same premises, again subject to a mortgage held by Stewart, for $2,514.[52] Hosley remained in business until April 1885, when he deeded the dry dock property to Stewart free and clear of all liens for $3,000. Stewart, while residing in New York City, leased the property to Hiram Brown from 1885 to 1887, before selling the property in May 1888 to Robert J. Scott for $3,000. Scott conveyed the property to Robert G. Nesbitt in December 1888, who sold it to Ella A. Scott for $1.00 the same day.[53]

Operations at the Chittenango Landing dry dock complex were significant enough to be worthy of mention in popular historic literature of the late nineteenth century:

> Chittenango Landing is situated on the Erie Canal between Chittenango and Chittenango Station, near the former, is the seat of considerable business, containing the dry dock of Frank Hosley, who also keeps a small grocery for the accommodation of his men, to the number of fifteen, engaged in building and repairing therein…The dry-dock was built at the time of the canal enlargement by John H. Walrath and Hiram Graves, who carried on the business four or five years.[54]

[51] The circa 1875 photo (Figure 2.10) is the only known historic depiction of these buildings. The information on their function comes from research by Daniel Weiskotten, CLCBM staff and Sanborn maps. An additional building of unknown function was located east of the lumber shed and saw mill building, immediately west of the Chittenango Canal. An 1863 map of unattributed origin notes a "Carpenter's Shop" in this general location, but this has not been substantiated by additional sources. The 1875 Beers map (Figure 2.10 inset) depicts four unlabeled structures on the west side of the feeder canal at the dry docks site, and attributes the property to "Walrath & Downer."

[52] Weiskotten, 1998a.

[53] *Fayetteville Weekly Record*, May 28, 1885; *Madison County Times*, March 3, 1887; Weiskotten, 1991; Ella Scott was likely the wife of Robert J. Scott, who is identified as the owner (or at least the operator) of the dry dock property on the 1890 and 1895 Sanborn Fire Insurance Maps (Figures 2.11-2.12).

[54] Smith, 1880: 756.

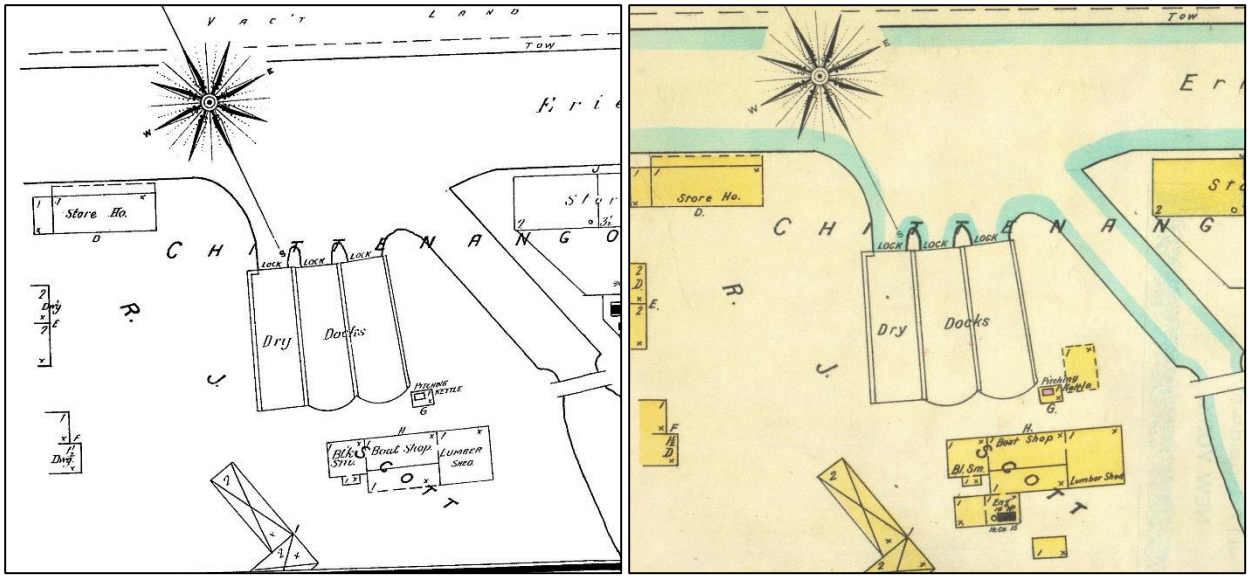


Figure 2.11 (left). Sanborn Fire Insurance map of Chittenango Landing c. 1890. The first Sanborn map to depict the site detailed the functions of the structures onsite. The houses are not fully shown. The building west of the blacksmith shop is unlabeled, but it believed to have been a stable. (Detail, c. 1890 Sanborn Fire Insurance Co. map, Chittenango Landing plate. Collection of CLCBM.)

Figure 2.12 (right). Sanborn Fire Insurance map of Chittenango Landing c. 1895. By 1895 an engine room was added to the blacksmith and boat shop complex. (Detail, c. 1895 Sanborn Fire Insurance Co. map, Chittenango Landing plate. Collection of CLCBM.)

By 1890, a blacksmith, boat shop, lumber shed and saw mill were located south of the dry docks, and were three separate blocks of varying heights between one and one-and-a-half stories. A two-story building was located southwest of the dry docks (Figure 2.11). Few changes had taken place to the dry dock complex by 1895 (Figure 2.12). A one-story, wood frame engine room was added to the rear of the blacksmith and boat shop, extending to the south and west of the central block. A pitching kettle, used to hold tar for sealing the bottom of canal boats, was located immediately south of the light bay. A one-story wood frame building was constructed east of and immediately adjacent to the pitching kettle.

The Enlarged Erie Canal underwent a second period of improvements and enlargement between 1895 and 1899. Commercial traffic had begun to stagnate in 1894 following increased competition of railroads, which often ran in close proximity to the Erie Canal, and offered quicker movement of goods at lower prices, and unlike the canal did not experience extensive periods of inactivity in the winter. Improvements to canal infrastructure during this time included repair or replacement of bridges and locks, the deepening of portions of the canal to accommodate even larger and heavier boats, and other repairs as needed.[55] Enhancements to the portion of the Enlarged Erie passing

[55] Whitford, 1906: 360-68.

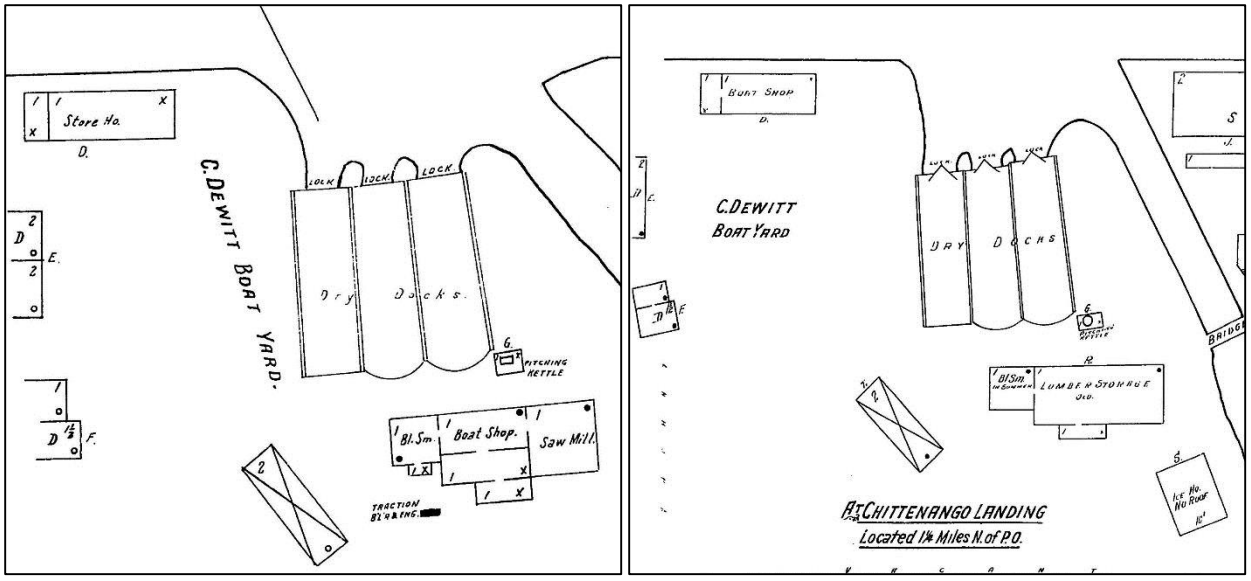


Figure 2.13 (left). Sanborn Fire Insurance map of Chittenango Landing c. 1906. Part of the stable, and the engine room and one story shed behind the blacksmith and boat shop buildings are absent, having been destroyed in an April 1906 explosion. (Detail, Sanborn Fire Insurance Co. map, Chittenango Landing plate, c. 1906. Collection of CLCBM.)

Figure 2.14 (right). Sanborn Fire Insurance map of Chittenango Landing c. 1911. The boat shop and saw mill adjacent to the blacksmith shop have been consolidated to "lumber storage," and an ice house is now located southeast of this building. The store and warehouse is identified as a boat shop. The gates of the dry docks are depicted as mitre gates as opposed to drop gates as in previous maps. (Detail, Sanborn Fire Insurance Co. map, Chittenango Landing plate, c. 1911. Collection of CLCBM.)

by the Chittenango Landing dry dock complex included lining the canal walls as well as the mouth of the Chittenango Canal with limestone, forming a "bullnose" protecting the banks of the canals from erosion.[56]

In an 1899 county history, R.J. Scott was noted as the property owner of the dry dock, though it is also noted that Chittenango Landing was "important only" for the presence of the Chittenango Pottery Company, and a vinegar factory owned by George Walrath, which were located east of the dry dock complex across Lakeport Road.[57] Scott was active on site as a boat builder until his death in 1905.[58] A significant event occurred on the dry dock property in 1906 when an explosion in the saw mill building killed two men and injured two others. The accident occurred on April 2 when a boiler and engine suddenly exploded. Edward Devendorf, Jr. and Patrick Baker were killed instantly in what was described by local newspapers as "Chittenango's most frightful and fatal accident in its history."[59] Portions of multiple buildings were destroyed in the explosion (Figure 2.13).[60]

[56] Lozner, 1992: 4.
[57] Smith, 1899: 331.
[58] *Madison County Times*, November 24, 1905.
[59] *Madison County Times*, April 6, 1906.
[60] The 1906 Sanborn map shows the engine room and detached building are absent from the blacksmith and boat shop, presumably destroyed in the explosion that year. The southern portion of the stable is no longer present, and the structure previously adjacent to the pitching kettle is now absent. Subsequent maps do not show these features.

The widow of R.J. Scott sold the dry dock property to Harlow M. LeRoy in July 1909, who owned it for less than a year before selling it to George W. Dewitt of Chittenango in April 1910. A *Madison County Times* article noted Dewitt intended to fix up the dry docks so that the building and repairing of boats could occur on site.[61] In addition to the dry docks, the property at this time consisted of the main house and tenant house, store and warehouse building, wood-working shop, and blacksmith shop (Figure 2.14).

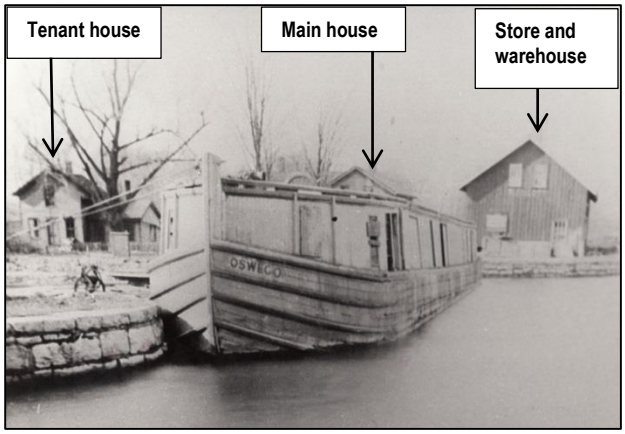
Agitation for a third enlargement of the Erie Canal to accommodate larger commercial barges began in the late nineteenth century. A widened and improved "Barge Canal" was authorized by the New York State Legislature in 1903. The Barge Canal consisted of the Enlarged Erie Canal as the main line, with the Champlain, Oswego, and Cayuga and Seneca Canals as the chief branches. Construction of the New York State Barge Canal began in 1905 and was completed in 1918.[62] The proposed route of the Barge Canal through Madison County was located north of the Enlarged Erie Canal and utilized Oneida Lake, bypassing Chittenango and ending commercial canal traffic past the dry docks.

Summary (Drawing 2)[63]

The construction of the Enlarged Erie Canal through the Town of Sullivan in the 1850s moved the route of the canal closer to the village of Chittenango, and led to the relocation of the settlement known as Chittenango Landing, which had been located at the juncture of the original route of the Erie Canal and Chittenango Canal since the 1820s. The new location of Chittenango Landing was defined by three dry dock bays (versus only one dry dock bay at the c. 1820s location), and an associated complex of buildings that were built to support canal boats visiting the landing. Following the construction of the dry dock bays in 1856, the landscape was transformed from vacant, probably agricultural land to a working landscape in a matter of months.

In addition to the dry dock bays, a store and warehouse building was constructed along the Enlarged Erie Canal, northwest of the dry dock bays, around 1860. A house occupied by the landowner was built south of the store and warehouse around that time (see Figures 2.8 and 2.9), with a tenant residence for workers at the dry dock complex built soon after. By 1875, a blacksmith and sawmill were operating south of the dry dock bays, and another building

[61] Weiskotten, 1991; *Madison County Times,* April 22, 1910; the property is noted as the "C. Dewitt Boat Yard" on the 1906 and 1911 Sanborn maps (Figures 2.13-2.14).
[62] Finch, 1925, 11; Whitford, 1906: 84, 269.
[63] The period plan for 1856-1917 (Drawing 2) includes the project area as defined in Figure 2, bordered on the north by the Enlarged Erie Canal, the south and west by Chittenango Creek and Chittenango Canal on the east.



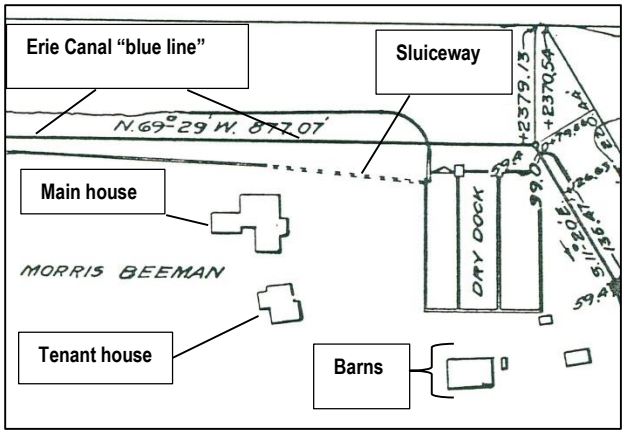


Figure 2.15 (left). The dry docks were believed to have been closed by the time this c. 1920 photograph was taken. A canal boat blocks the entrance to the bays. The store and warehouse appears to be boarded up. The roof of the main house is visible above the canal boat. The tenant house is clearly visible on the left side of the photograph. The "yard" surrounding the dry dock bays and houses appears to be dirt with some grass. A large tree is evident immediately adjacent to the tenant house, and additional trees appear to be in close proximity to the main house. (Photograph, origin unknown c. 1920s. Collection of CLCBM, annotation by EDR.)

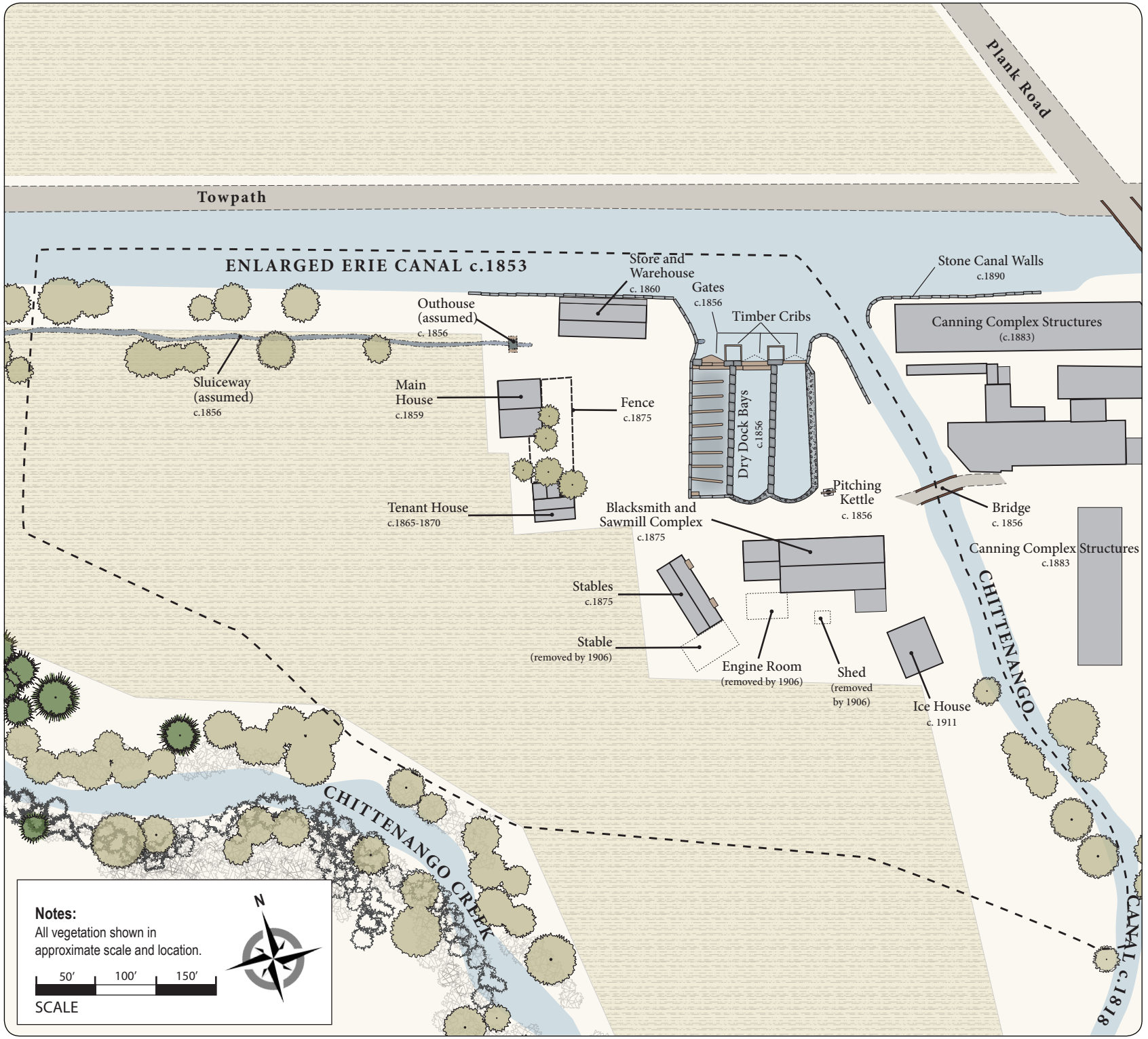
Figure 2.16 (right). This map shows that the store and warehouse building had been removed by 1927, and a series of small buildings were located south of the dry dock bays. The state canal right-of-way or "blue line" is shown where it runs through the site. (Detail, NYSDPW Waterways map c. 1927. Collection of CLCBM, annotation by EDR.)

serving as a stable was located to the south of the tenant residence (see Figure 2.10). The main and tenant houses are located behind a low, simple fence, likely constructed of wood.[64]

By 1895 the blacksmith building also included a boat shop, engine room and lumber shed (see Figure 2.12). The engine room and a portion of the stable were destroyed in a 1906 explosion (see Figure 2.13). An ice house was built by 1911, and was the last building constructed on the site prior to the closure of the Enlarged Erie Canal in 1917 (see Figure 2.14).

The yard immediately surrounding the dry dock bays and buildings onsite was likely a rough dirt surface with grassy areas possible near the houses. Mature trees provided some shade to the houses, and trees still lined the riparian corridor surrounding Chittenango Creek to the house (Figure 2.15). Little other vegetation was likely to be found at the working landscape of the dry dock complex during this period. The lands to the south and west of the dry dock complex were probably open, undeveloped fields leading to the Chittenango Creek.[65]

[64] This fence is not depicted on previous or subsequent historic maps, and its dates of construction and removal are not known. However it is included on Drawing 2 as it is clearly discernible in the c. 1875 photograph.
[65] The 1890, 1895, 1906 and 1911 Sanborn maps (Figures 2.11-2.14) identify these areas as "Vacant."



Chittenango Landing Canal Boat Museum Cultural Landscape Report

Town of Sullivan,
Madison County, New York

DRAWING 2: 1856-1917

LEGEND

- Project Boundary
- Removed during period
- Assumed feature
- Deciduous woods
- Deciduous tree/shrub
- Conifer tree/shrub
- Riparian vegetation
- Structure
- Pole and chain fence
- Fence/gate
- Stone wall
- Stone rubble wall
- Wood feature
- Paved road/path
- Unpaved road/path
- Waterway
- Fields (assumed)

References:

1. 1890, 1895, 1906, 1911 Sanborn Fire Insurance Maps

2. c. 1875 photograph of dry dock complex

November 2014

edr
www.edrdpc.com

CHITTENANGO LANDING CANAL BOAT MUSEUM

2.3 Decline of the Chittenango Landing Dry Dock Complex, 1918-1985

The Village of Chittenango had grown rapidly through the mid-nineteenth century due in large part to the increased traffic of the Enlarged Erie Canal, completed through the area in 1856. However, the increasing use of railroads for shipping of goods, as well as the construction of new railroads lines, led to a decline in usage of the Enlarged Erie Canal across New York State. This in turn limited the growth of towns and villages that were not directly located on railroad lines. Chittenango had continued to attract residents throughout the late nineteenth and early twentieth centuries, but commercial and industrial growth had stagnated, owing partially to the closure of the Enlarged Erie Canal in 1918.[66]

Closure of the Erie Canal and Decline of the Dry Dock Complex

Following the closure of the Enlarged Erie Canal, those stretches of the waterway not subsumed by the New York State Barge Canal System became dormant. Many portions were eventually filled in, while some parts of the canal, including the route through Chittenango, remaining open but unused. With no business to sustain the dry docks, the function of the site changed dramatically.

Business at the dry docks is believed to have ceased with the closure of the Erie Canal, which coincided with the death of the property owner at that time, George W. Dewitt, in August 1918. Under his management the dry docks did "an extensive business, and was one of the best on the canal."[67] Following the death of Dewitt, ownership in the dry docks was transferred to his wife Mary E. Dewitt in September 1918, who only held onto the dry docks for less than a year.[68]

Morris Beeman purchased the dry docks from Mary Dewitt in May 1919, and resided there for over five decades.[69] He already owned the surrounding property, which was deeded to him by his father Albert in 1913.[70] Morris Beeman had previously been employed by the Merrell-Soule Cannery located on the east side of the Chittenango Canal across from the dry dock complex in the early twentieth century.[71] Other members of the Beeman family had reportedly been involved in boatbuilding and other activities at the dry dock complex since the 1860s.[72]

---

[66] Based on review of historic Sanborn and USGS maps not reproduced for this report.
[67] *Madison County Times*, August 16, 1918.
[68] *Madison County Times*, October 25, 1918; Weiskotten, 1998b.
[69] *Madison County Times*, May 25, 1919; the *Madison County Times* obituary for Morris Beeman's mother Elizabeth on April 7, 1939 notes that she had lived in one of the houses at Chittenango Landing owned by Morris for twenty years.
[70] Van Swall, 1970: 9.
[71] *Madison County Times*, January 6, 1936.
[72] According to Weiskotten (1991), the 1860 census shows that 26 year old Edward Beeman was a boat builder, and subsequent censuses list the occupations of members of the Beeman family as involved in boat building or repair as late as 1915.

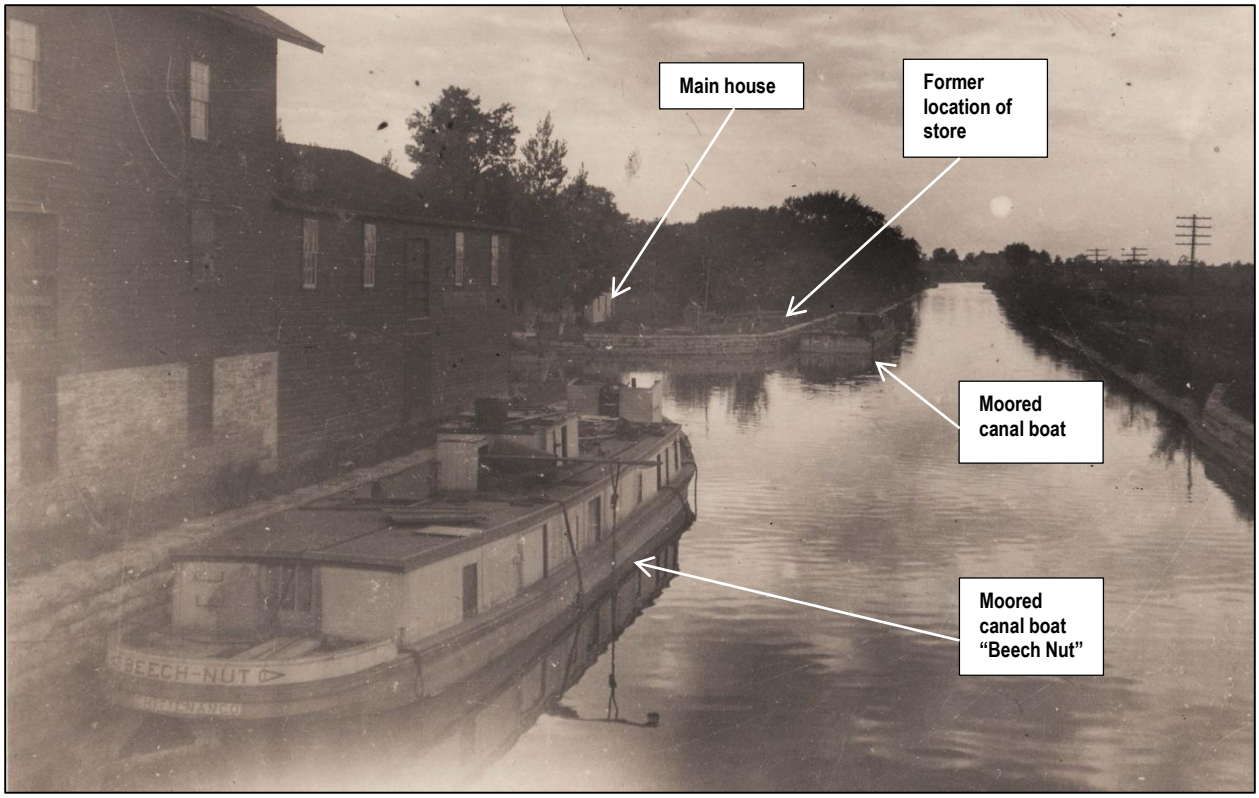


Figure 2.17. The store and warehouse is absent in this c. 1920s photograph looking west along the Enlarged Erie Canal. The building on the left was part of the canning complex that was located on the east side of the Chittenango Canal from the late nineteenth to mid-twentieth century. The boats moored along the canal would later sink in place. (Photograph, origin unknown c. 1920s. Collection of CLCBM, annotation by EDR.)

With the Erie Canal closed, the dry docks had lost their original purpose, and the function of the site changed from a working landscape to a residential and agricultural character. By the 1920s, the main and tenant houses, a frame barn, and a small shed were the only buildings remaining at the site (Figure 2.16). The store and warehouse building was no longer located along the canal.[73] A canal boat was moored to the canal wall west of the heavy bay and eventually sank into the canal (Figure 2.17).[74] The dry docks were slowly filled with earth and debris (Figure 2.18), and reportedly became used as a community dump throughout the 1920s and 1930s.[75] A fire sometime in the 1930s reportedly burned the oak gates of the dry docks. Stone from the dry docks was alleged to have been sold to the New York State Thruway Authority for use as riprap in construction of the Thruway in the 1950s.[76]

[73] Oral history collected by CLCBM staff indicates half the building was moved south of the dry dock bays and converted into a barn.
[74] The circa 1920s photo of the canal (Figure 2.16) shows a second boat, believed to be the *Beech Nut*, moored along the canal wall north of the cannery complex. It would eventually sink into the canal as well, and some of its remains are still evident.
[75] A hand drawn map in the CLCBM archives (Figure 2.17) depicting the site in 1940 indicates a "lower barns for wagons" with stalls for cows and pigs was located south of the dry dock bays, and a shed located east of this barn.
[76] CLCBM, 1992; Lozner, 1992; Rainbow, 2013.

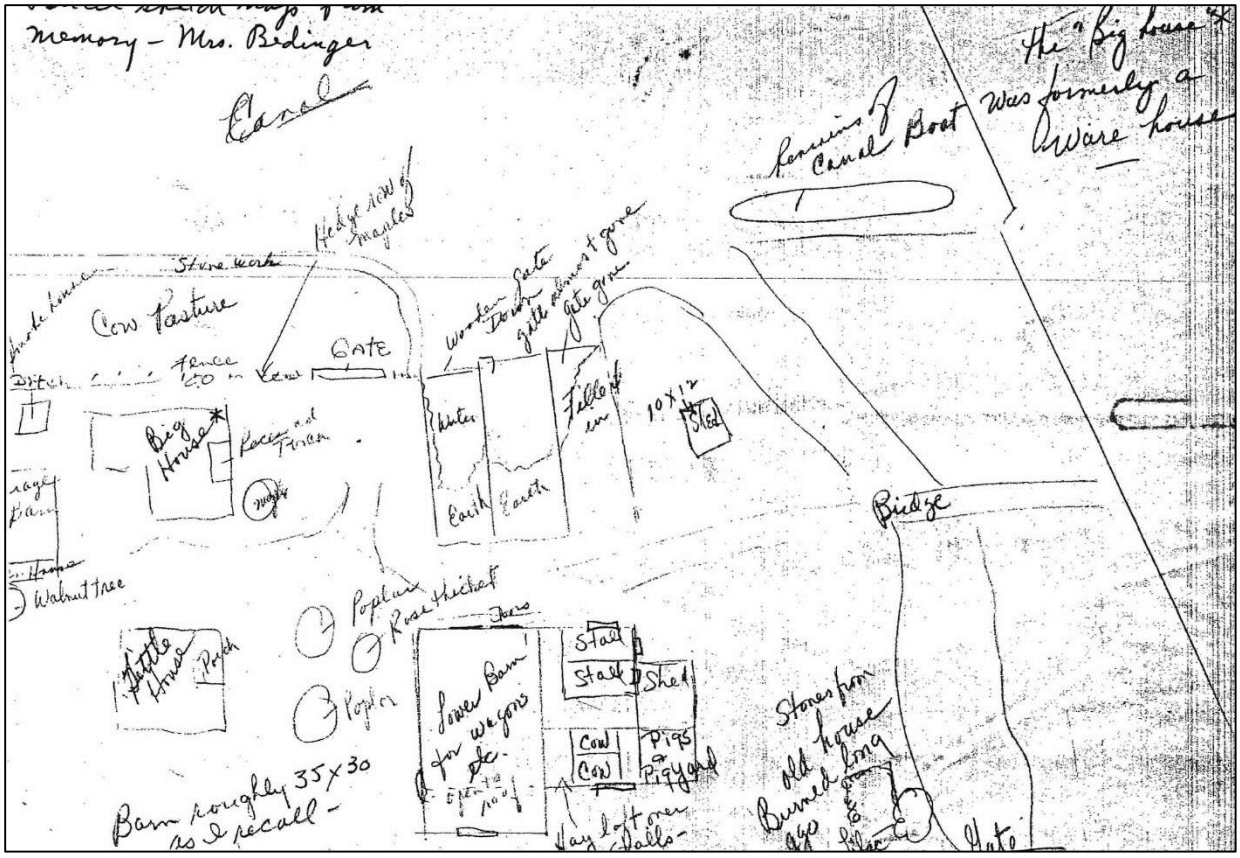
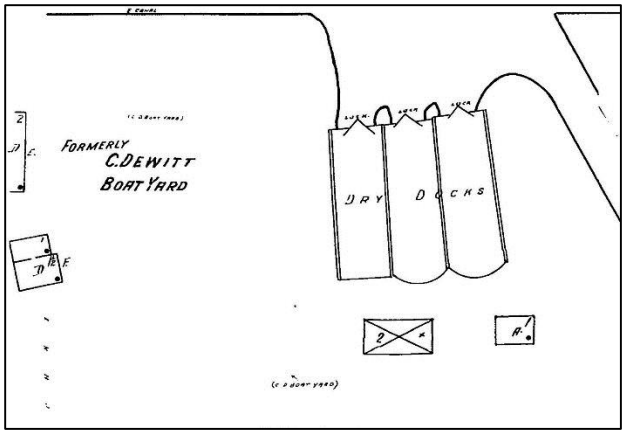


Figure 2.18. A "pencil sketch map from memory" drawn by a former resident of the tenant house named Mrs. Bedinger shows considerable detail with regard to the functions of buildings at the dry dock complex in the 1930s and 1940s. The dry dock bays are depicted as partially filled with "earth," and the gate of the light bay is noted to be "gone." The barn is noted to be used for wagons, with cow and horse stalls and a pig yard on the east side of the structure. Poplars and a rose thicket are noted between the barn and "little house" (tenant house) and a maple is noted east of the "big house" (main house). The "remains of a canal boat" are noted in the location where the Beech Nut is depicted in the 1920s photograph The map documents multiple features not included in any other sources, including a storage barn west of the main house, and stone remnants of an "old house burned long ago" between the barn and feeder canal. No other documentation of these features has been located. (Detail, copy of hand-drawn map by "Mrs. Bedinger," former resident of tenant house at Chittenango Landing. Collection of CLCBM.)



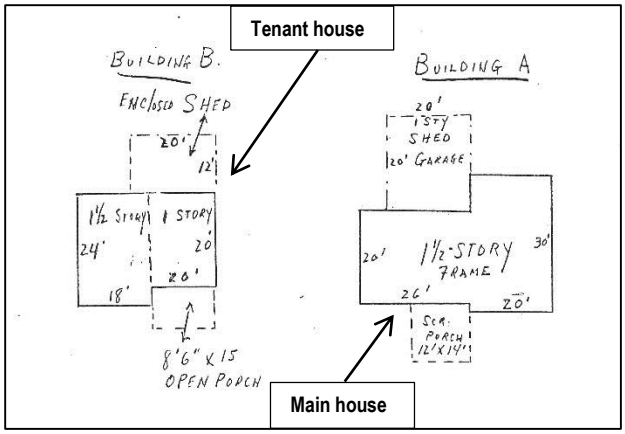


Figure 2.19 (left). By 1951 the site around the dry dock bays included only the two dwellings, and two structures south of the dry dock bays that were probably a barn and shed. (Detail, 1951 Sanborn Fire Insurance Co. map, Chittenango Landing plate. Collection of CLCBM.)

Figure 2.20 (right). This 1970 land survey provided dimensions for the buildings remaining at the site prior to their demolition. The location of the houses is not accurately depicted. (Detail, VanSwall survey map, c. 1970. Collection of CLCBM, annotation by EDR.)

By 1951, only the houses, a two-story barn, and one-story shed remained on the property (Figure 2.19). The houses at the site continued to be occupied into the early 1970s, while the western portion of the dry dock property served as a farm for the Beeman family.[77] In 1966, the Central New York State Parks Commission initiated plans for an Old Erie Canal State Park along 36 miles of the canal between Dewitt and Rome. The Old Erie Canal Study Committee evaluated the potential to connect existing state, county, and town parks with a proposed Erie Canal State Park along this route of the canal. The feasibility study recommended a 170-acre park northeast of the intersection of the canal and Lakeport Road. As part of this effort, lands not already owned by the state would need to be acquired for the establishment of the park, based on availability as well as access to the canal and Chittenango Creek aqueduct. Appropriation of lands for the park was authorized under Section 676a of the Conservation Law of New York State.[78] The dry dock complex property was not initially included in this proposal, but would later be considered for acquisition by the state.

The Beeman property was surveyed by the state on February 27, 1970 as part of what was labeled "Project No. 69" of the Old Erie Canal State Park (Figure 2.20). An additional survey was undertaken in July 1970 as part of an appraisal to "estimate the fair market value of the property affected and the legally compensable damages resulting from the appropriation herein described as determined by the laws of the State of New York."[79]

[77] Morris Beeman's obituary from 1978 (*Chittenango-Bridgeport* Times, August 2, 1978) indicates he had been a custodian for the Chittenango Central School, so it is unclear to what extent the land was farmed by the family.
[78] Based on deeds and notes in the CLCBM archives.
[79] VanSwall, 1970: 5.

Two appraisals were undertaken for contiguous properties: one for the 5.292-acre property containing the buildings, owned by Morris Beeman and another for a 0.493-acre vacant property owned by Ronald and Jane Bixby (Figure 2.21).[80] The main house and tenant house were still intact at the site, with only one barn remaining.

The 1970 survey noted the main house or Building A was in fair condition for its age:

> This structure is a one and one-half story frame dwelling with full basement. It has a ground area of 1120+ sq. ft. The original portions of the structure are over 100 years. The basement has an earth floor with stone foundation. The timbers are native hand hewn. The exterior has a wood siding. The roof is covered with asphalt shingles. The first floor contains a hallway, living room, kitchen, bath, and three bedrooms. The upper floor has five rooms. The flooring is softwood and the walls and ceiling are plaster. The kitchen has a metal cabinet sink with upper cupboards and there is a bottle gas stove. The bath has three standard fixtures. The basement contains an oil-fired hot air furnace, a water pump for a 35 ft. drilled well and a hot water heater. There is a 12' x 14' screen porch at the front of the house and a 20' x 20' attached shed-garage at the rear. The structure is in fair repair for one that has had hard usage for its 100 plus years of existence.

The tenant house, also known as Building B or "tenant residence," was determined to be in poor condition in the 1970 survey:

> This structure is a one and one-half story frame building with a one story extension having a partial crawl space basement. There is a 12' x 20' one story enclosed shed at the rear and a 8.5' x 15' open porch at the front. The exterior has a clapboard siding and the roof is covered with asphalt shingles. The first floor contains a living room, dining room, kitchen, two bedrooms, and a bath. There are two bedrooms on the second floor. The floors are softwood and the walls and ceilings are plaster. The kitchen has a metal cabinet sink and some cupboards. The bath has three standard fixtures and a 30 gallon hot water heater. Heat is generated by an oil-fired hot air furnace. There is an 18 ft. dug well with pump. The structure is in excess of 70 years of age and evidences exceptional wear and tear.

The barn was a "loft-type structure covering a ground area of 960+ square feet," and was in poor to fair condition. Four acres of the adjacent land was under cultivation and used by a neighboring farmer for crops.[81]

[80] The Bixby family resided at the site, possibly in the tenant house, beginning in the late 1940s. Photographs in the CLCBM archive allegedly depict children of the Beeman and Bixby families near the tenant house. The 0.493-acre parcel was likely subdivided for the purpose of agriculture or gardening in the latter half of the twentieth century.
[81] VanSwall, 1970: 5-9; the highest and best use of the property was concluded to be for continued use as a residence, with the extra land recommended for gardening or use as a recreation area.

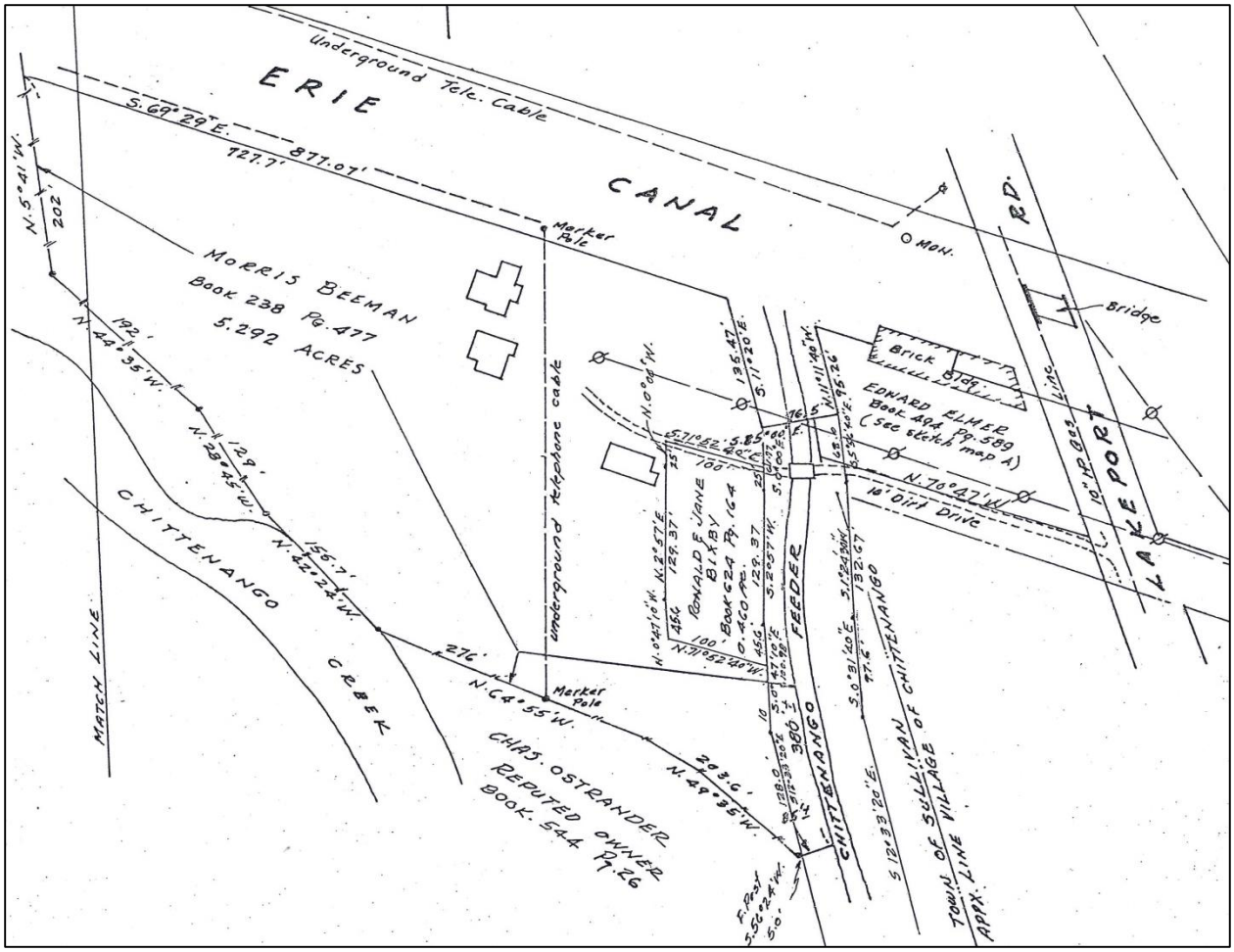


Figure 2.21. c. 1970 New York State Parks survey map of Beeman property and surrounding lands. The dry dock bays are not depicted, indicating they were likely to have been completely filled in by this time (NYSOPRHP, 1970).

Sale of the Dry Dock Complex and Surrounding Lands

The property containing the dry dock complex was sold to New York State by Morris and Lulu Beeman in 1972, for the purposes of developing it as part of the Old Erie Canal State Park. Appropriation papers were filed with the State on January 10, 1972, and recorded in the Madison County clerk's office on January 14, 1972.[82] Following the acquisition of the site by the State, the remaining structures were bulldozed and the land graded; however the property was not further developed as part of the Old Erie Canal State Park as originally planned, and the site laid dormant for over a decade.[83]

[82] Deed records of the Madison County Clerk's Office; copies on file in CLCBM Archives.
[83] Pippin, 1996: 30-31, 55.

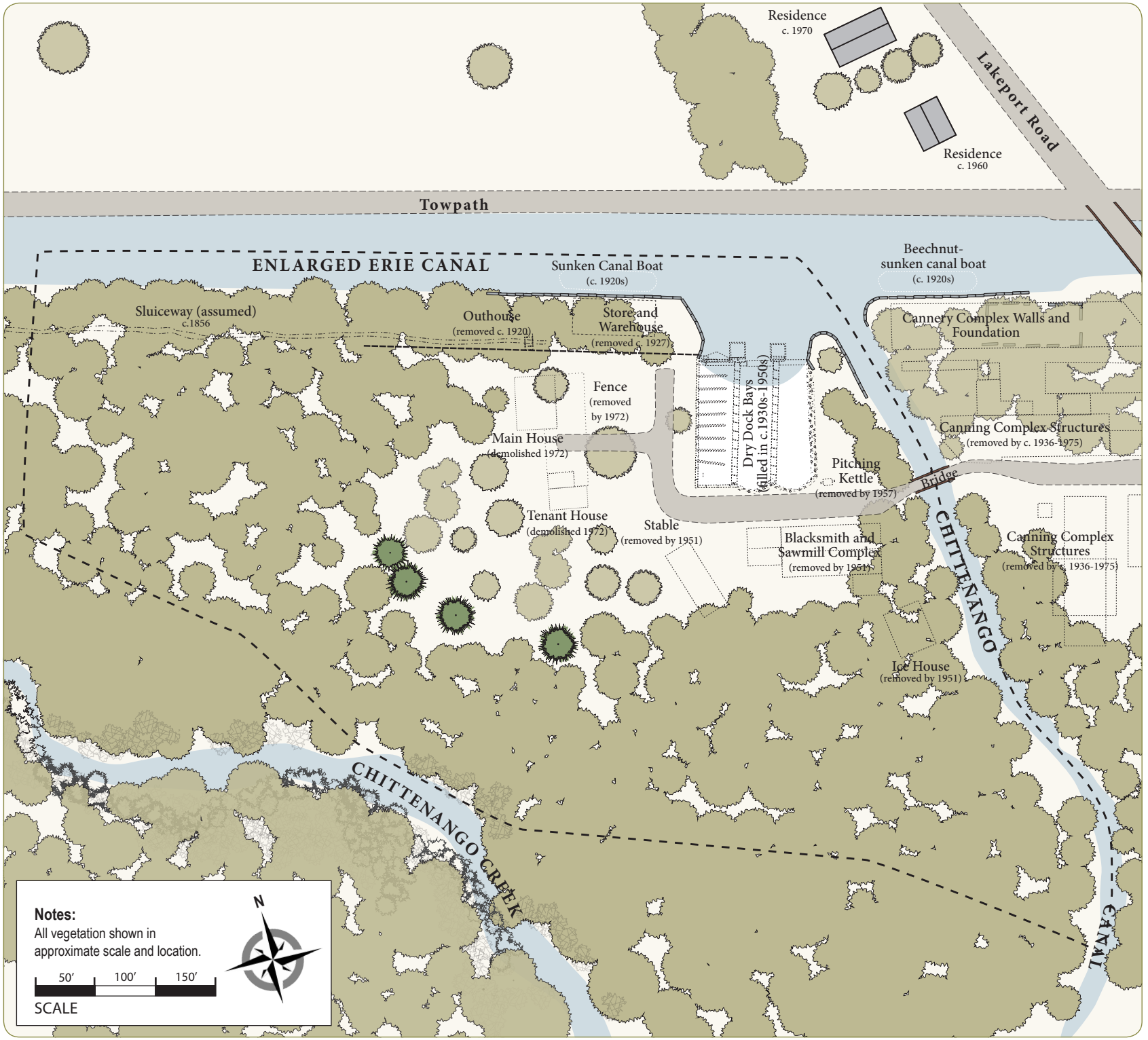
Summary (Drawing 3)

Following the closure of the Enlarged Erie Canal in 1917, the dry dock complex began its transformation from a working landscape into an agricultural and residential landscape. The property was sold to Morris Beeman in 1919, whose family remained at the site until selling the property to New York State in 1972. Under Beeman family ownership, the use of the property changed dramatically, and a number of the remaining buildings were removed. By 1927, the blacksmith buildings, and stable had been demolished. The store and warehouse building was removed from its original location, with half of the building relocated south of the dry dock bays and used as a barn, and the other half moved across the Chittenango Canal to the cannery complex property (see Figures 2.16 and 2.17).[84] The barn and houses remained at the site until they were demolished in 1972 (see Figure 2.18).

With the Enlarged Erie Canal closed to commercial traffic, the dry dock bays were filled with debris and reportedly were used as a town dump. Canal boats that were moored along the south wall of the canal deteriorated and sank (see Figure 2.15). The sluiceway likely became filled with debris as the site west of the houses became overgrown with deciduous trees and shrubs.

By 1985, the landscape of the dry dock complex had been completely obliterated. Following the sale of the property to New York State in 1972, all remaining buildings were bulldozed and the land was graded. The dry dock bays, which were already likely to have been partially filled with debris, were filled in with earth from the surrounding site. The property became overgrown with box elder and other trees and shrubs, and remained dormant until 1985, when the site was rediscovered, and clearing efforts began.

[84] Oral history from multiple sources collected by CLCBM staff in the 1980s indicated that the store and warehouse building was cut in half and a portion used for the Beeman barn. Historic maps from this time period (Figures 2.16, 2.18, 2.19) depict a barn located south of the dry dock bays, and the 1970 Van Swall survey of the property confirmed this, though its exact origins are undefined.



Chittenango Landing Canal Boat Museum Cultural Landscape Report

Town of Sullivan,
Madison County, New York

DRAWING 3: 1918-1985

LEGEND

- Project Boundary
- Removed during period
- Assumed feature
- Deciduous woods
- Deciduous tree/shrub
- Conifer tree/shrub
- Riparian vegetation
- Structure
- Pole and chain fence
- Fence/gate
- Stone wall
- Stone rubble wall
- Wood feature
- Paved road/path
- Unpaved road/path
- Waterway

References:

1. 1927 NYSDPW map of Erie Canal

2. 1951 Sanborn Fire Insurance map

November 2014

edr
www.edrdpc.com

CHITTENANGO LANDING
CANAL BOAT MUSEUM

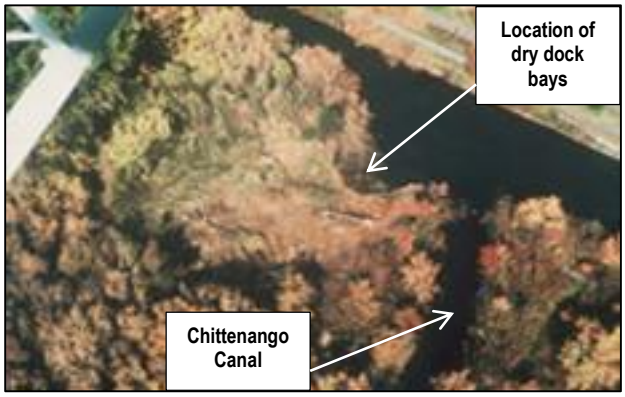
2.4 Chittenango Landing Canal Boat Museum Stewardship, 1986-2014

From the early 1970s to the mid-1980s, plans to develop the site into part of the Old Erie Canal State Park did not come to fruition, and the dry dock complex site underwent a period of neglect and abandonment. The volunteer effort to clear the site began in 1986, and continued throughout the 1980s and 1990s with extensive excavation of archaeological features and eventual reconstruction of multiple buildings.

Discovery and Excavation of the Dry Dock Bays

From 1972 to 1985, the site of the dry dock complex lay dormant and became overgrown. In 1985, the site was "re-discovered" by Chittenango-area residents, and by November 1985, the first organizational meeting of the group that would become the Chittenango Landing Canal Boat Museum (CLCBM) was held. The intent of the group was to begin clearing the site in anticipation of uncovering features associated with the dry dock complex, and interpreting them for the public.

The museum applied to the New York State Board of Regents for a provisional charter, which was granted on September 26, 1986. On October 9, 1986, the museum received permission from NYSOPRHP to enter the dry dock site and begin clearing the land. The site was cleared of a heavy cover of box elder and other growth in the fall of 1986, to prepare for excavation of the dry docks the following year (Figures 2.22-2.23). The site was surveyed in April 1987 to document site features and topography prior to excavation (Figure 2.24).[85]



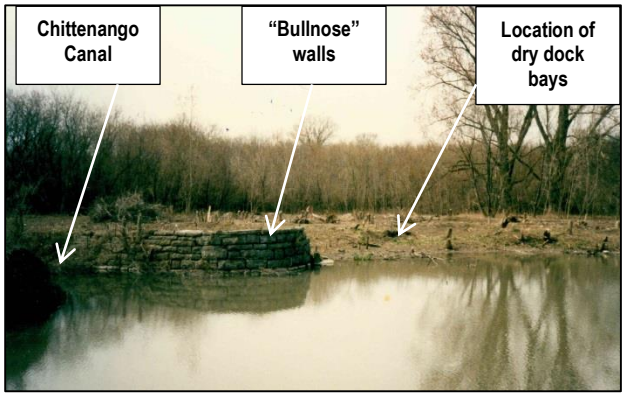


Figure 2.22 (left). An aerial photograph from late 1986 shows the clearing that had begun at the site, as well as the forested condition prior to clearing. (Aerial photograph of cleared dry dock site c. 1986. Collection of CLCBM, annotation by EDR.)

Figure 2.23 (right). View southwest to cleared dry dock site prior to excavation in April 1987. The bullnose walls are the only evident site feature. (Photograph of cleared dry dock site, April 15, 1987. Collection of CLCBM, annotation by EDR.)

[85] CLCBM, 1992.

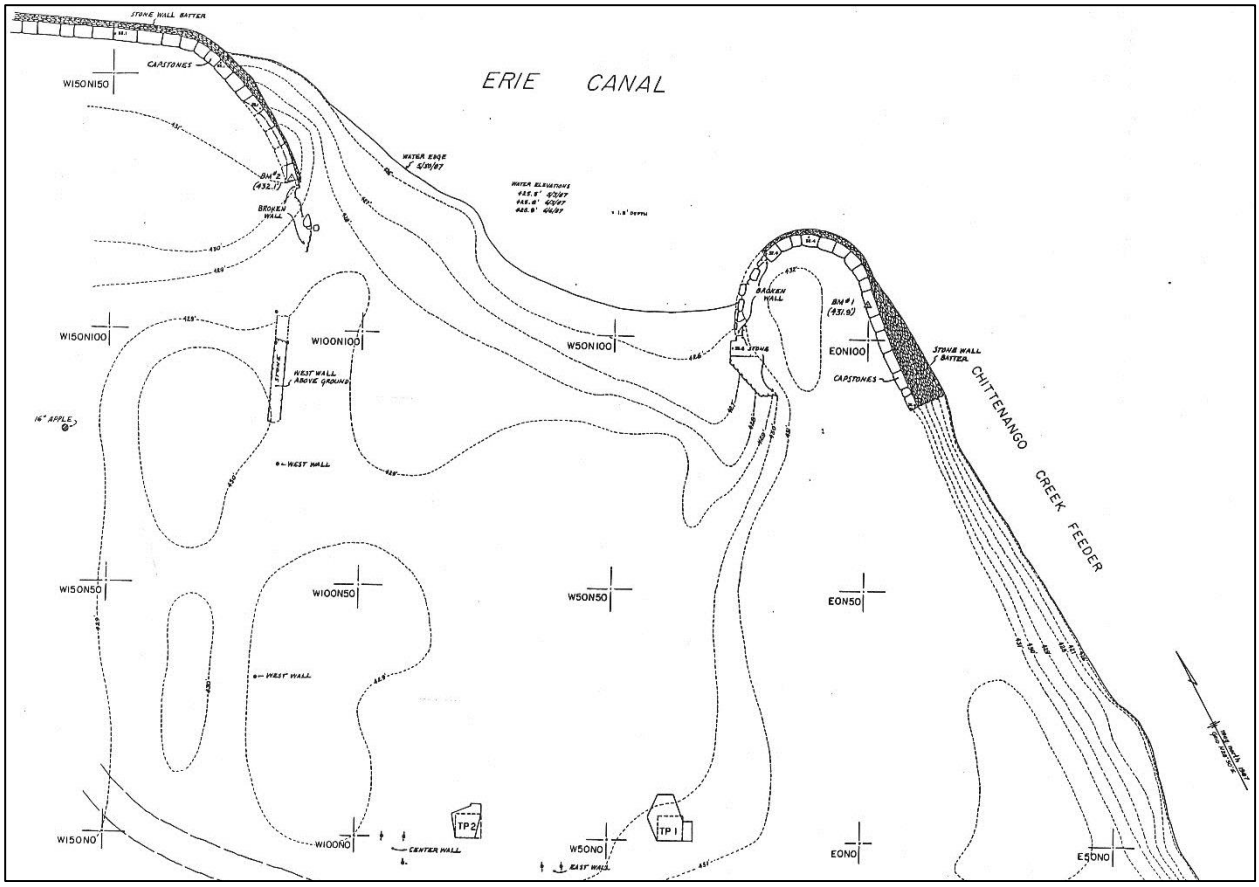
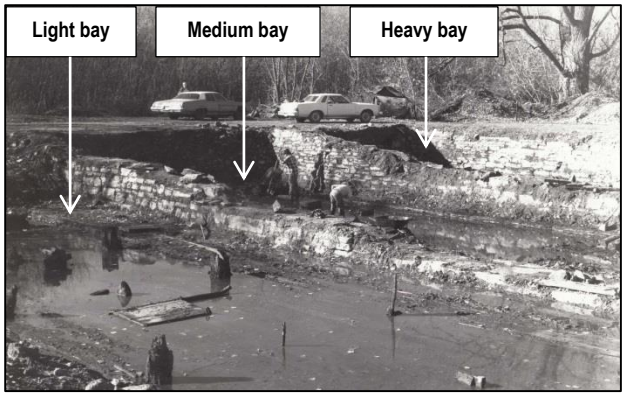


Figure 2.24. Cursory archaeological investigations in 1986 and 1987 helped determine the extent of the dry dock bay walls prior to excavation. (Archaeological survey map of dry dock bays, R. Joseph Murphy, c. 1987. Collection of CLCBM.)

Excavation of the site commenced in the summer of 1987 and continued throughout the year, revealing much of the dry dock bays (Figure 2.24). By October 1987 all three dry dock bays had been excavated, the bases to the three gates to the bays had been exposed, revealing a different type of gate (drop gate) than had been documented in historic maps and photos (lock-style miter gates).[86] The remaining excavation on the dry docks occurred in the summer of 1988, uncovering a number of features including the riprap slope in the light bay and wood flooring and weigh timbers in all three bays (Figure 2.25). To prevent flooding of the dry docks during excavation, an earthen dam was constructed across the northern entrance to the bays, and the sluiceway was opened to enable drainage. The medium bay was excavated first, followed by the light dock and the heavy dock. Excavation started along the exposed wall shared by the middle and heavy bays, from the edge of the canal proceeding south then east and north to determine the extent of the bay. Wood flooring was discovered in the middle bay running east and west with weigh timbers were mortised into the flooring, and a u-shaped drain in the center that ran north toward the canal (Figure 2.26).[87]

[86] CLCBM, 1992; Rainbow, 2013.
[87] Pippin, 2013: 4-5; Rainbow, 2013.



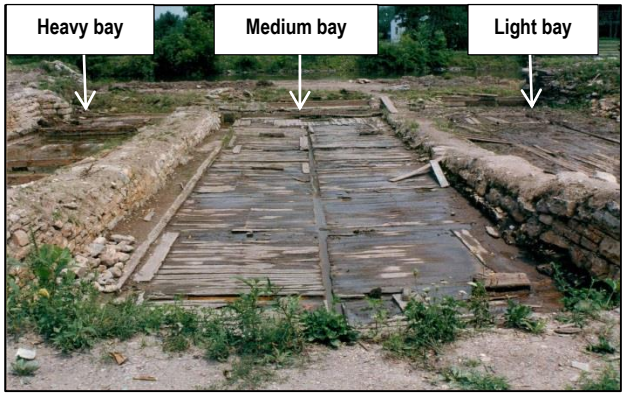


Figure 2.25 (left). View southwest of excavation to the dry dock bays in 1987 and 1988 revealed original wood flooring, drains and way timbers, as well as greatly diminished stone walls. (Photograph, CLCBM, c.1988. Collection of CLCBM, annotation by EDR.)

Figure 2.26 (right). View north-northeast of the cleared middle bay, exposed wood flooring and u-shaped drain. Note the different direction of the wood flooring in the light and medium bays. (Photograph, CLCBM, c. 1989. Collection of CLCBM, annotation by EDR.)

The light bay was excavated second. Original wood flooring was also discovered in the light bay, running north and south, with a drain in the middle. The south and east walls of the bays were found to be comprised of cobblestone, and sloped.[88] The heavy bay was excavated last. Flooring in the heavy bay was found to be comprised of wood, concrete and gravel. Rudder post holes were also discovered in the heavy and middle bays, near the gates. The sluiceway, which had been sealed with concrete at the juncture with the heavy bay, was also excavated. Original wood flooring and stone walls were uncovered. Collapsed and damaged wood from the original drains was replaced with plastic pipe to facilitate the drainage of water into the sluiceway from the heavy bay during excavation.

During the excavation of the dry dock bays, over half of the stone walls were estimated to be missing, allegedly removed during the 1950s and used in the construction of the New York State Thruway (see section 2.2). Over 1,900 cubic yards of debris were removed from the dry dock bays during the excavation. Several artifacts related to boat building, including rudders, a boiler, and a wheel, were recovered from the excavated overburden. A caulking mallet, nineteenth century bottles, a large number of boat spikes, and multiple car frames were also recovered.[89]

Documentation of the condition of the dry dock bays, including the walls and wood structural elements, was undertaken following excavations. Scaled drawings were made by CLCBM personnel were made to document the general dimensions and relationships of the exposed dry dock walls and bays (Figure 2.27).

[88] According to Rainbow, the walls were slanted to allow for boats built on site and immediately adjacent to the light bay to launched into it when it was flooded.
[89] Rainbow, 2013; Rainbow indicated that Malcolm Beeman, brother of former property owner Morris Beeman, had provided the information regarding the removal of the stones by E.J. Button Construction Company; the car frames were reportedly dumped in the dry dock bays following a fire at a local auto dealership but this has not been verified.

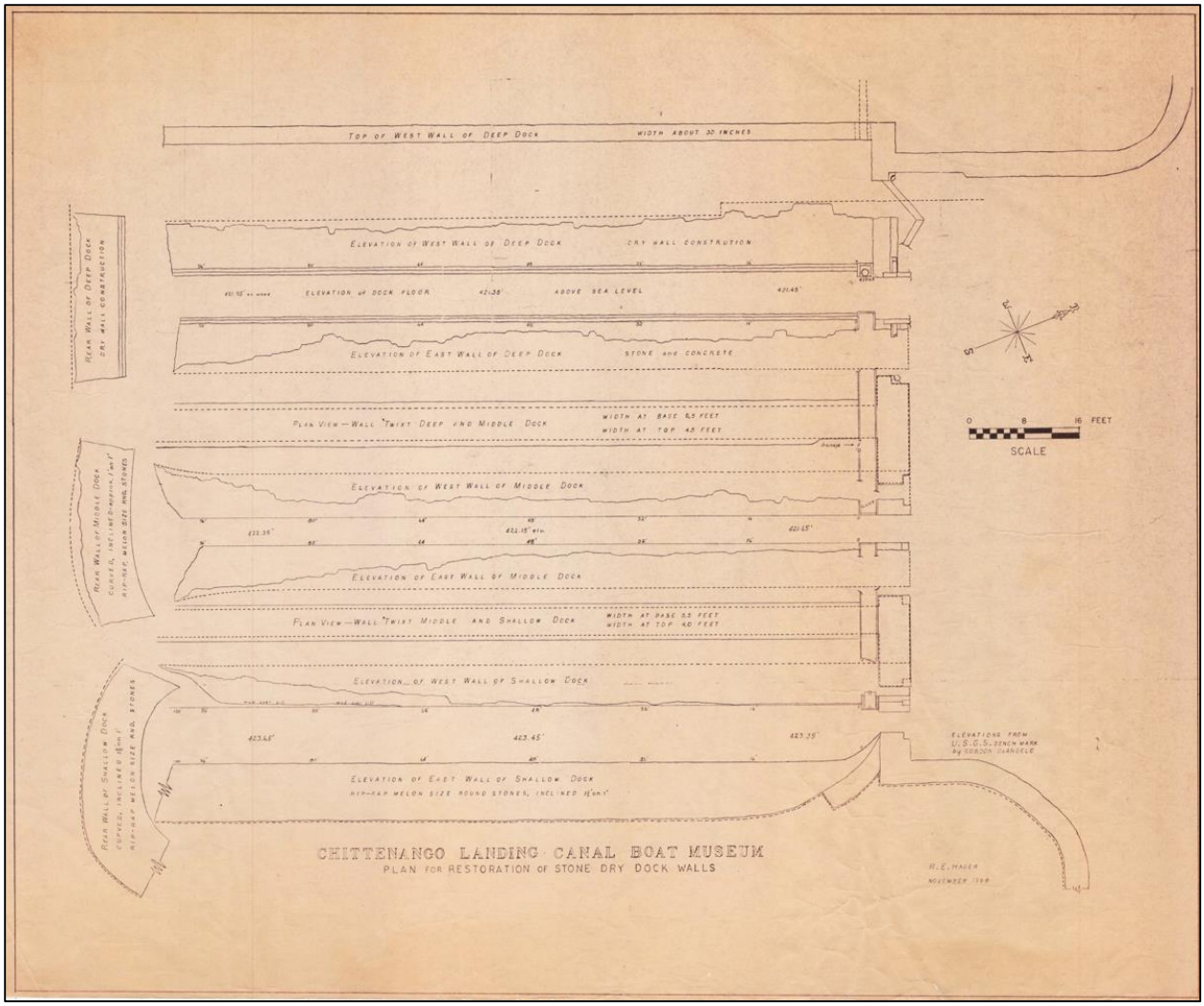


Figure 2.27. Plans for restoration of stone dry dock walls as drawn by Dr. Robert Hager. These plans notes the height and width of the dry dock bay walls, as well as noting the inact portions of the gates, and the contours of the rear (south) walls of each of the bays. (Plan, R.E. Hager, c. November 1988. Collection of CLCBM.)

Additional onsite archaeological excavations that occurred between 1987 and 1990 uncovered foundational remains and other features that further contributed to the understanding of the dry dock complex. The location of the main house was first discovered in the fall of 1987, and the area was gridded and test pitted in the spring and fall of 1988 to determine the extent of the foundation. A five-foot test trench was laid out south of the main house to determine the location of the tenant house foundation in May 1988, but no further archaeological investigations were undertaken at this location until 1991, when it began to be used for a training area for onsite educational programs held by CLCBM.[90]

Excavations in the area directly south of the three dry dock bays starting in April 1988 uncovered evidence of foundations. By the following year the foundation of a 107 foot-long building had been revealed, as well as a mortared brick pad that was determined to be part of the engine room that was destroyed in 1906. Foundational remains of the store and warehouse building were initially uncovered northwest of the heavy bay in June 1988, though much of the foundation had been obliterated by the installation of underground telephone cables. Excavation continued throughout the year, with survey plans completed by February 1989. A sixteen foot-square foundation referred to as the "mystery foundation" was unearthed west of the heavy bay in 1990 and 1991, and several artifacts uncovered.[91] The remains of a canal boat that sank in the canal next to the store and warehouse building were documented and protected by a cofferdam that was erected when the canal was drained for repairs in March 1991.[92]

On September 26, 1988, NYSOPRHP entered into an agreement with the CLCBM to develop a public historic site and educational museum center at the dry dock complex. Ownership of the site was retained by NYSOPRHP, with the CLCBM operating the site under a cooperative agreement with the State. The CLCBM was charged with developing a master plan subject to approval by OPRHP, and bearing all costs for development, operation and maintenance. Any archaeological artifacts recovered were required to be inventoried, marked, bagged and placed in storage at Lorenzo State Historic Site.[93]

[90] CLCBM, 1992.
[91] CLCBM, 1992; no structure of any kind is noted in this location on any map, and its historic function is unknown. See summary in Appendix A: Summary of Previous Archaeological Investigations (Pippin, 2013).
[92] DeAngelo, 1994; Pippin, 2013.
[93] NYSOPRHP, 1988; CLCBM, 1992; according to Pippin (2013) materials were later moved to the NYSOPRHP storage facility at Peebles Island, NY.

Figure 2.28. Circa 1990 photograph of the reproduced dry dock gates, including exposed dry dock floors and bays. Note the differences in remaining original wall materials prior to the walls being rebuilt. (Photo, CLCBM, c. 1990. Collection of CLCBM).

Rebuilding of Site Features

Several components of the dry dock bays were rebuilt between 1989 and 1996. Replacement gates to the dry docks were rebuilt in 1989 and 1990 (Figure 2.28). A site map was prepared showing the locations of foundational remains and other site elements in relation to the dry dock bays to help guide future decisions at the site (Figure 2.29). The heavy bay was rebuilt as a miter gate, and the light and medium bay gates were constructed as tumble gates. A replica wooden box sluiceway within the dry dock bays was built in 1989. To facilitate drainage of the heavy bay, between the heavy bay and the open portion of the sluiceway to the west, collapsed wood was replaced by a four-foot plastic pipe. New cribbing was built between the docks on the original bases, using discarded timber from a railroad bridge. The dry dock walls were rebuilt between 1995 and 1996, using stones from a nearby quarry. Since the dry dock bays were no longer flooded, hydraulic cement was not used when rebuilding the walls.[94]

[94] Rainbow, 2013; the cribbing was rebuilt using timber from a railroad bridge in East Syracuse, New York. The local quarry used for the replacement stones is alleged to have been in business in the nineteenth century and used for the 1890s Enlarged Erie Canal improvements. The stones available were smaller than the original stones used in the dry dock walls, so it is easier to discern historic material from newer material.

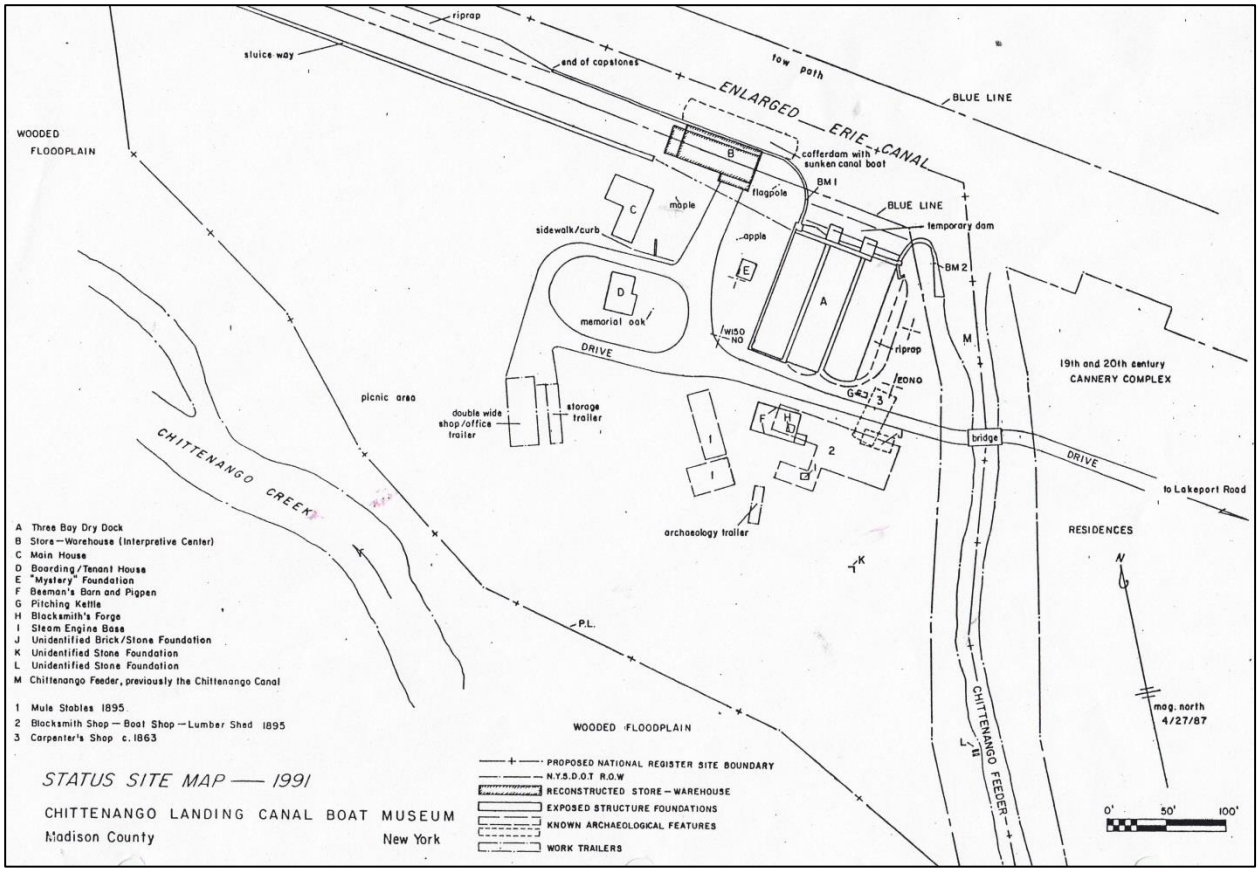


Figure 2.29. This 1991 site map depicts the extent of archaeological site features that had been determined or excavated, as well as the rebuilt store and warehouse building. The speculated location of additional features such as the Carpenter's Shop is also noted (Archaeological status site map, Gordon DeAngelo, c. 1991. Collection of CLCBM.)

Schematic plan and section drawings were drafted by a local historic preservation architecture firm in 1995 in order to guide the repair and rebuilding of the walls (Figures 2.30-2.31). Drawings specified approximate wall dimensions, disposition of original wall materials, and notes for construction.[95]

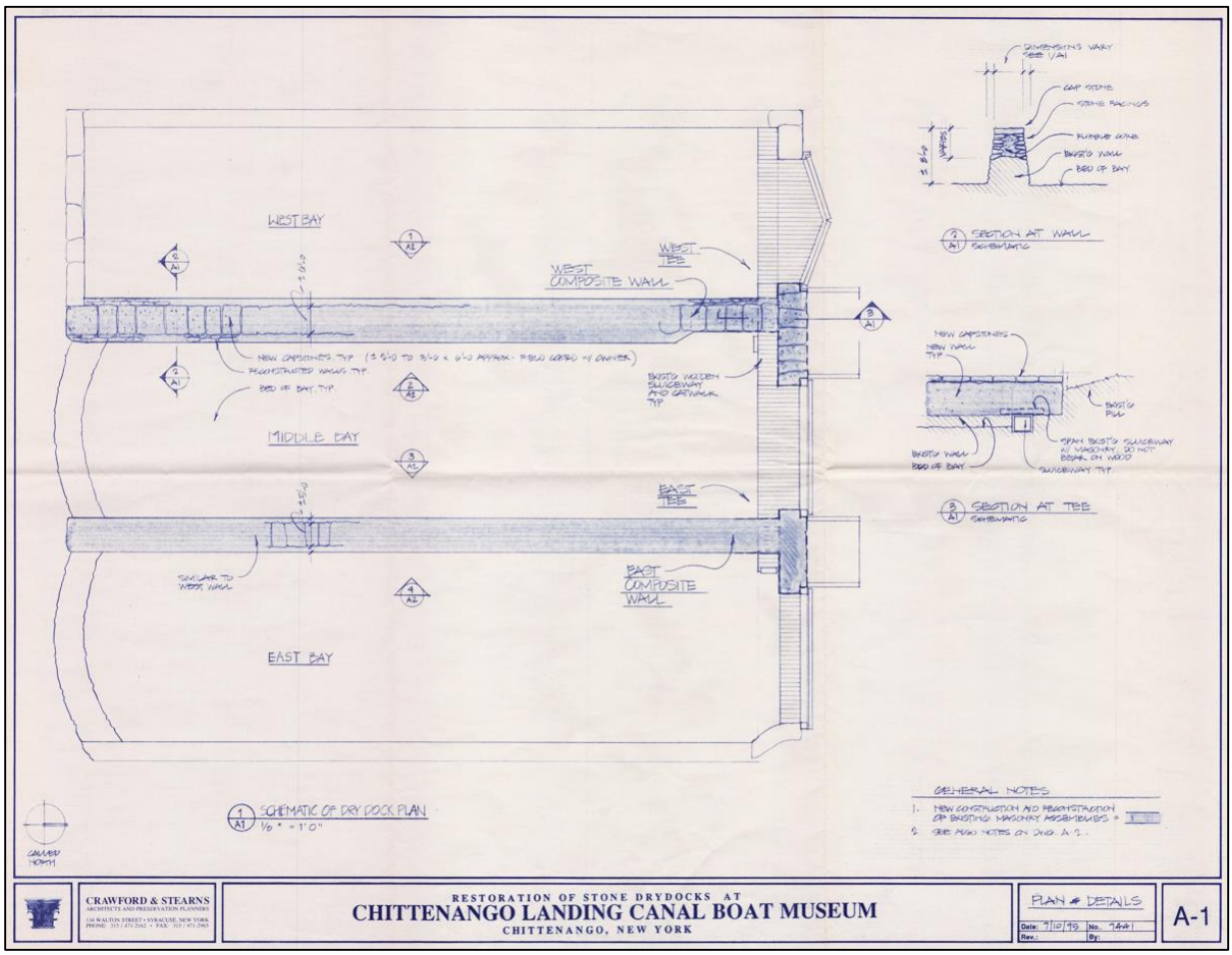


Figure 2.30. Plan and details for restoration of stone dry docks at Chittenango Landing Canal Boat Museum. This schematic plan included sections of wall details to note the difference in original materials versus proposed new construction, as well as general dimensions of the walls and bays. (Crawford & Stearns, c. July 1995. Collection of CLCBM.)

[95] Drawing A-2 (Figure 2.31) included a general note to "reconstruct walls to finished heights shown approximately in section elevations," and to "field coordinate final heights to match existing construction." Although these drawings are not to scale, they provide an excellent record of the general condition and disposition of the original stone walls prior to being rebuilt.

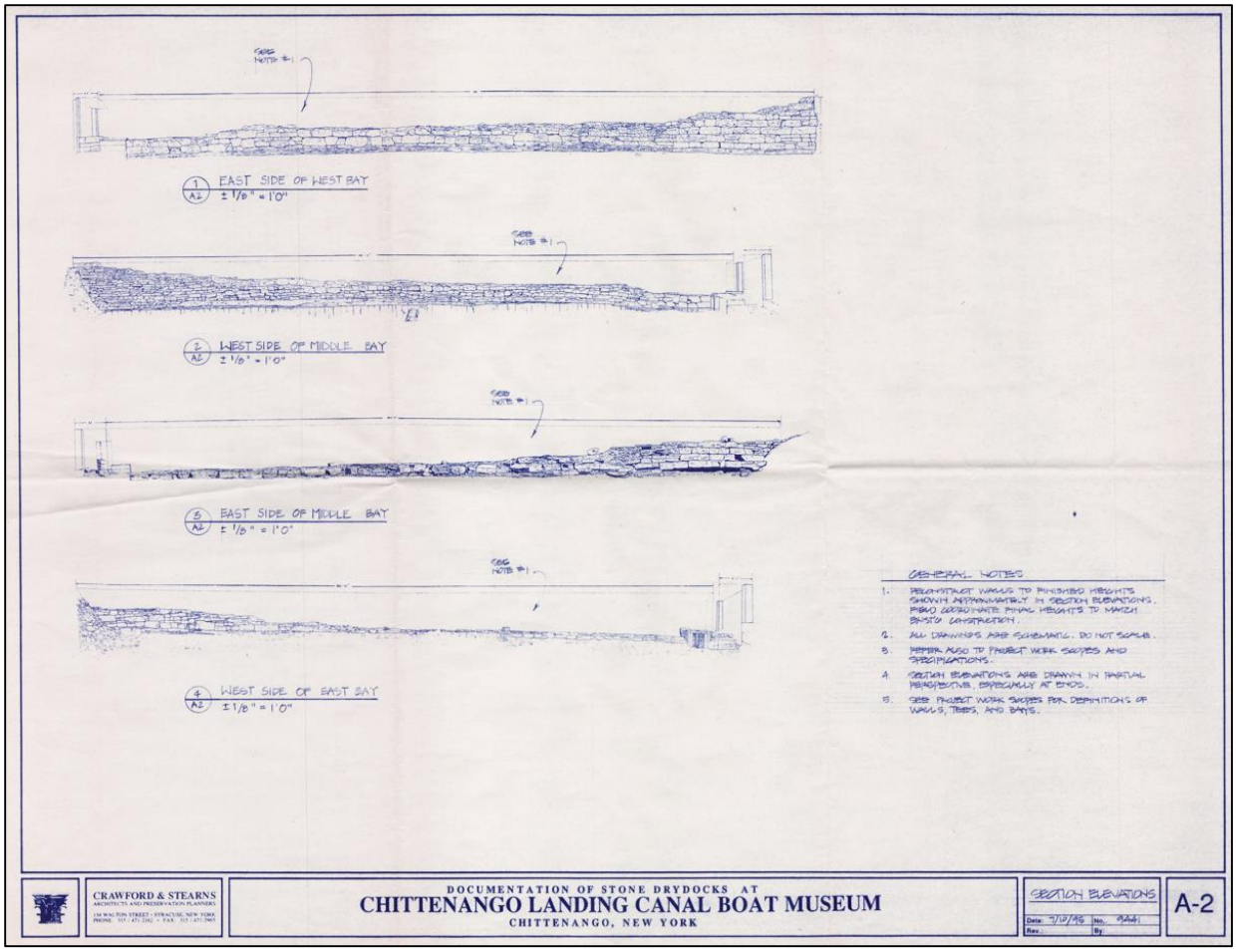
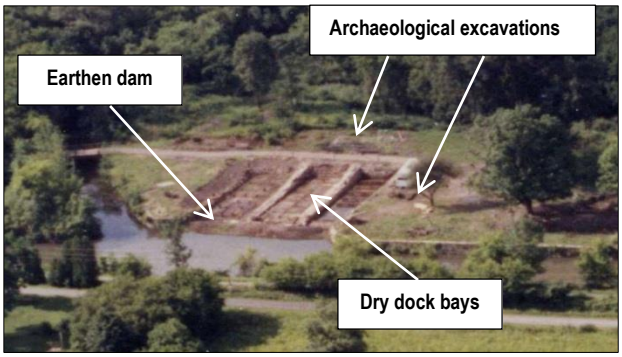


Figure 2.31. Section elevations, documentation of stone dry docks at Chittenango Landing Canal Boat Museum. These elevations provide an excellent record of the general disposition of the original wall stones prior to the walls being rebuilt. (Crawford & Stearns, c. July 1995. Collection of CLCBM.)

Plans and profiles for a replica store and warehouse were completed in fall of 1988. The new store and warehouse building was designed primarily to provide the site with an interpretive center that served several purposes: space for displays related to canal boat construction and operation, as well as the history of the dry docks; a place to permanently display archaeological artifacts uncovered at the site or donated to the museum; an indoor space for educational lectures and presentations; and library and archive space for reference materials related to the Erie Canal, Chittenango Landing and regional history. Plans were approved by NYSOPRHP and NYSDOT in late 1989, and construction commenced in 1990. The first floor and exterior were completed in 1991, and the entire building was completed and dedicated on July 4, 1992 (Figure 2.32).[96]

[96] CLCBM, 1992; approval was needed from NYSDOT due to the Canal "blue line" being located on the site, running east and west through the building. NYSOPRHP approval was related to architectural plans, use of appropriate materials based on photographic evidence, and representing the building as a contemporary structure and not an exact reconstruction.



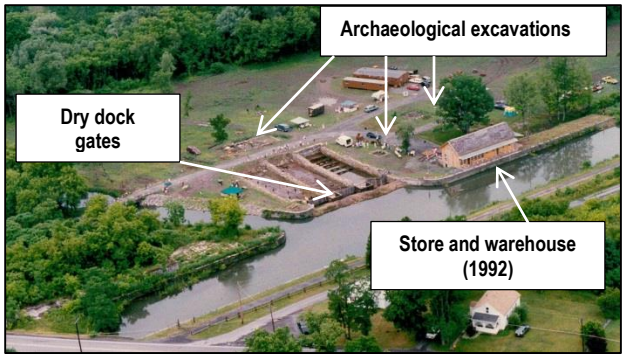
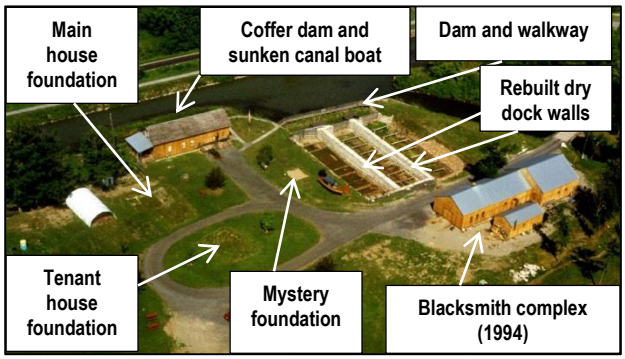


Figure 2.32 (left). An aerial photograph looking south c. 1989 shows the fully excavated dry dock bays, earthen dam constructed to prevent flooding, and evidence of archaeological testing and excavation around the bays. (Photograph c. 1989. Collection of CLCBM, annotation by EDR.)

Figure 2.33 (right). An aerial photograph looking southwest c. 1992 shows the rebuilt gates, and store and warehouse. Foundational remains of the blacksmith complex, tenant residence and mystery foundation are also evident. (Photograph c. 1992. Collection of CLCBM, annotation by EDR.)

Plans for a new blacksmith and sawmill complex were prepared in 1992. The building was intended to house machinery and items related to the assumed historic functions of blacksmith and sawmill operations, to educate the public on the construction and repair of canal boats on site. Three years of archaeological investigations and site research had uncovered much of the original building foundations, as well as the original blacksmith forge base. The new building was designed slightly larger to avoid physically disturbing the original foundations. Construction began in 1993, and was completed the following year and dedicated on July 4, 1994 (Figure 2.34).[97]



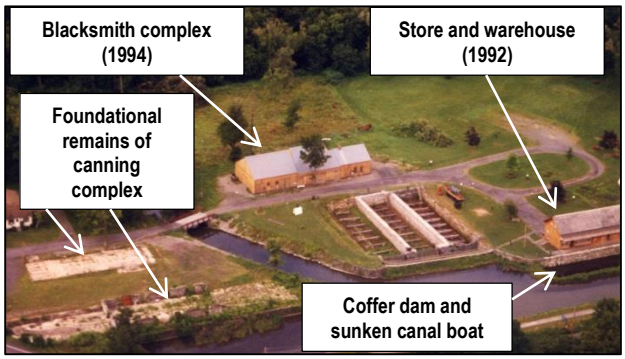


Figure 2.34 (left). An aerial photograph looking northeast c. 1996 now shows the rebuilt dry dock bay walls and blacksmith complex. A walkway is located atop the earthen dam, and the cofferdam is evident in the Enlarged Erie Canal, north of the store and warehouse. (Photograph c. 1996. Collection of CLCBM, annotation by EDR.)

Figure 2.35 (right). An aerial photograph looking southwest c. 2000 shows the site east of the Chittenango Canal has been cleared, revealing foundational remains of the former canning complex. (Photograph c. 2000. Collection of CLCBM, annotation by EDR.)

[97] CLCBM, 1992; due to available historic evidence a period of interpretation of 1890-1910 was chosen for these buildings.

No new buildings were constructed at the dry dock site for another decade. Plans for the construction of the replica stable were drawn up in 1997, but construction did not start until 2010. In order to aid interpretation, miscellaneous objects such as a capstan, cleat and a winch were placed around the dry dock bays based on information provided to CLCBM staff.[98] The former cannery property across the feeder canal was acquired by the museum in December 1996, and cleared in 1997 (Figure 2.35). The site was chosen as the location for a new visitor and education center to provide space for new educational programs, gatherings, and staff headquarters, as well as to relocate the materials from the store and warehouse, which the museum had outgrown. Construction of a new visitor and education center began in 2002, with a design inspired by the cannery complex that was previously located on the east side of the Chittenango Canal. The new visitor and education center was completed and opened in 2003.[99]

The stable building was reconstructed in 2010. Though original plans by the museum called for additional structures to be rebuilt, no further construction has taken place.[100] Educational programs have continued onsite, but have changed considerably. Until 1994, students were able to participate in ongoing archaeological projects, but were uncovering materials faster than they could be cleaned, analyzed and stored. Since 1995, students have conducted excavations in a tent west of the main house foundation. Nineteenth-century materials are "seeded" in dirt beneath the tent, and students sift soil, and then record, sort, clean and store artifacts, and are encouraged to discuss the significance of their findings as well as the role of archaeology in site interpretation and preservation.[101]

Summary (Drawing 4)

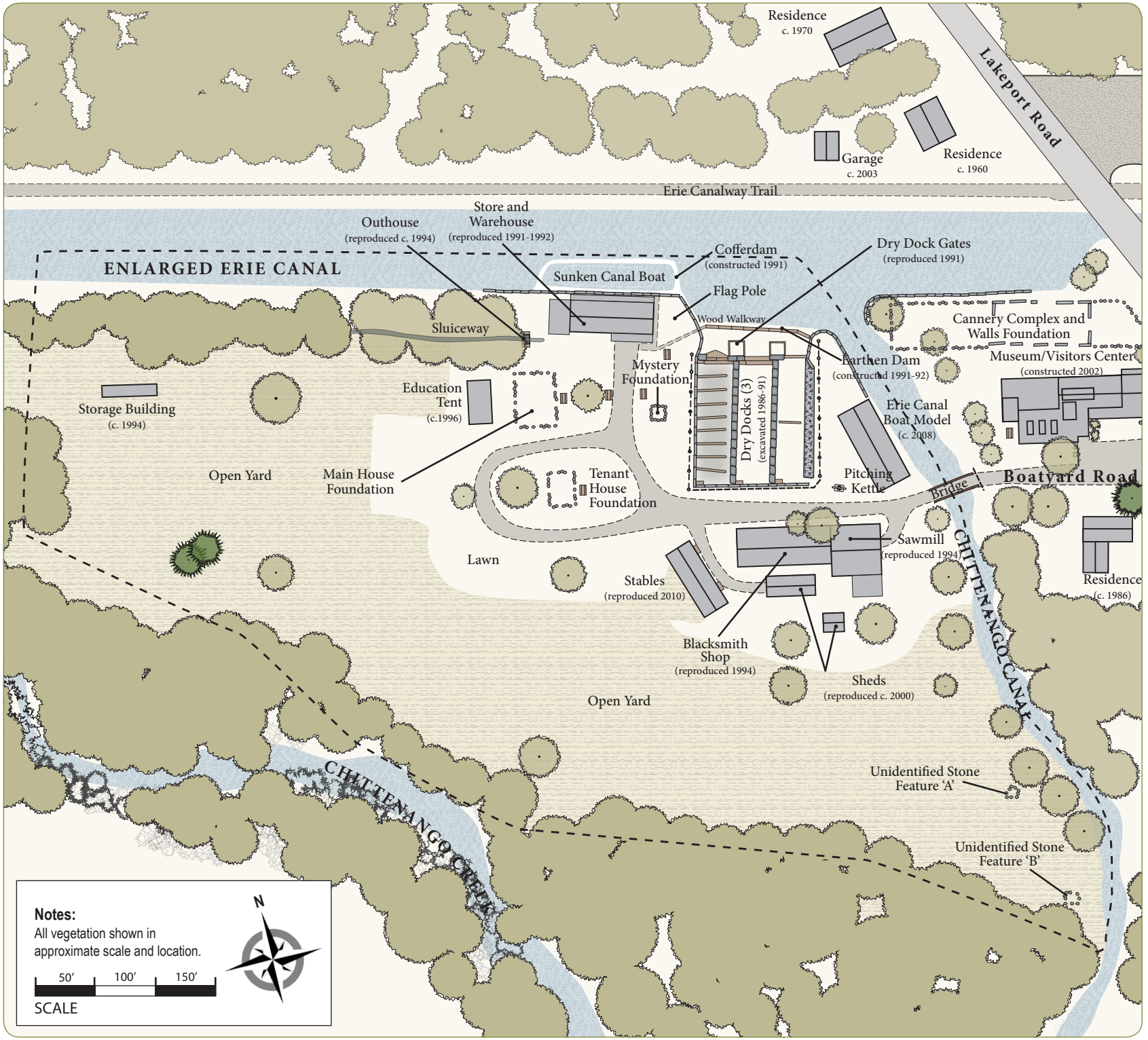
Following the rediscovery of the dry dock bays in 1985, the landscape experienced the most significant development since the construction of the Enlarged Erie Canal. The site was cleared of brush and trees beginning in 1986 (see Figure 2.19). By 1987, additional clearing had occurred (see Figure 2.21) and limited archaeological testing had revealed the extent of the dry dock walls, as well as a sampling of materials buried in the dry dock bays (see Figure 2.22 and 2.29). Excavation of the dry dock bays between 1987 and 1989 revealed much of the stone walls had been removed, but some original wood flooring remained intact (see Figures 2.27 and 2.28). Between 1989 and 1992, archaeological investigations around the dry dock bays had revealed the full extent of the dry dock bays, as well as partial or full foundational remains of the store and warehouse, main house, tenant house, stable, blacksmith and sawmill complex, and mystery foundation (see Figure 2.25 and 2.26). A sunken canal boat north of the store and warehouse foundation had also been partially excavated, and a cofferdam constructed for protection.

[98] Rainbow (2013) indicated the capstan and cleat came from boats on Oneida Lake, and the winch was from the Chittenango Pottery building located across Lakeport Road.
[99] Pratt and Pratt, 2002: 27; Pippin, 2013; foundational remains and stone walls from one of the cannery buildings are still evident between the Erie Canal and the museum building.
[100] O'Neil, 2013; Rainbow, 2013.
[101] CLCBM, 1992; Pippin, 2013: 12-13.

By 1992 the store and warehouse building had been replicated near its original location along the Enlarged Erie Canal, and was used as an interpretive center by museum staff (see Figure 2.33). Additional trees south and west of the dry dock bays had been cleared, giving the site a more open appearance. An earthen dam had been constructed to protect the dry dock bays from flooding. The gates of the dry dock bays and timber cribs had been rebuilt by 1992, with a walkway built on top of the earthen dam by 1996.

The blacksmith and sawmill complex was reproduced in 1994, built around the original foundations to avoid damage (see Figure 2.32). The main house and tenant house foundation were covered by grass, which now covered much of the site around the dry dock bays and buildings. An educational tent for conducting student archaeological excavations was set up west of the main house foundation. Temporary furniture such as picnic tables was located west of the tenant house foundation, and south of the store and warehouse building, adjacent to trees planted by CLCBM staff (see Figures 2.34 and 2.35). A replica canal boat beneath a wood pavilion was built east of the light bay in 2008. The reproduced stable building was constructed in 2010.

The Chittenango Landing dry dock complex landscape in 2014 includes two buildings constructed to reflect their conjectured appearance c. 1875-1890, based on a historic photograph and historic maps of the site. The dry dock bays are the center of interpretive efforts of the Chittenango Landing Canal Boat Museum, whose facility was constructed on the east side of the Chittenango Canal in 2002. Interpretive signage and interactive displays inside the rebuilt store and warehouse, stable, and blacksmith and sawmill complex augment the interpretation of the dry dock bays as the focal point of the site, and explore the significance and contribution of the Enlarged Erie Canal to the history of the Village of Chittenango and Town of Sullivan.



Chittenango Landing Canal Boat Museum Cultural Landscape Report

Town of Sullivan,
Madison County, New York

DRAWING 4: 1986-2014

LEGEND

- Project Boundary
- Removed during period
- Assumed feature
- Deciduous woods
- Deciduous tree/shrub
- Conifer tree/shrub
- Riparian vegetation
- Structure
- Pole and chain fence
- Fence/gate
- Stone wall
- Stone rubble wall
- Wood feature
- Paved road/path
- Unpaved road/path
- Waterway
- Archeological Feature
- Fields
- Permanent Bench (6)

References:

1. 1986, 1992, 1996, 2000 aerial photographs of Chittenango Landing
2. 1991 DeAngelo Archeology Status Site Map
3. EDR Site Visits (2013 -2014)

November 2014

edr
www.edrdpc.com

CHITTENANGO LANDING
CANAL BOAT MUSEUM

3.0 EXISTING CONDITIONS

3.1 Introduction

Existing conditions at the Chittenango Landing dry dock complex were observed through multiple site visits, as well as interviews with current staff. Site visits were conducted on January 14, March 28 and May 3, 2013 and site features were observed and photographed by EDR staff. In addition, an interview was conducted with CLCBM executive director Christine Hall O'Neil at the museum on March 28, 2013 regarding current site uses and plans.

Existing conditions within the study area are largely the result of the work of a group of volunteers who formed the CLCBM in 1985 and have led the effort to unearth and interpret as much of the dry dock complex and associated features as possible over the past three decades. Though there had been a significant loss of historic features prior to the rediscovery of the site, the dry dock complex was listed on the National Register of Historic Places in 1992, with the three dry dock bays, sluiceway, and limestone retaining walls identified as contributing resources. Since that listing (between 1992 and 2014), the walls of the dry docks, as well as several buildings, have been reconstructed based on available historical sources and assumptions regarding the construction of those site features. Subsequent archaeology has revealed additional foundations and other remains throughout the site that add to the understanding of the historic dry dock complex and related buildings (see Section 3.2.10 and Appendix A).

3.2 Inventory of Landscape Features

The National Park Service Guide to Cultural Landscape Reports[102] defines landscape characteristics in the following manner:

> Landscape characteristics include tangible and intangible aspects of a landscape… (which) individually and collectively give a landscape its historic character…(and) range from large-scale patterns and relationships to site details and materials. Landscape characteristics are categories under which individual landscape features can be grouped.

The following ten landscape characteristics are found in the Chittenango Landing dry dock complex, all but two of which have associated landscape features:

- *Natural Systems and Features:* Natural aspects that often influence the development and resultant form of a landscape.

[102] Page *et al*., 1998.

- *Topography*: Three-dimensional condition of the landscape surface due to natural and man-made processes.
- *Spatial Organization:* Arrangement of elements creating the ground, vertical, and overhead planes that define and create spaces.
- *Land Use:* Organization, form, and shape of the landscape in response to land use.
- *Circulation:* Spaces, features, and materials that constitute systems of movement.
- *Constructed Water Features:* The built features and elements that utilize water for aesthetic or utilitarian functions.
- *Buildings and Structures:* Three-dimensional constructs such as houses, barns, garages, stables, bridges and memorials.
- *Views and Vistas:* Features that create or allow a range of vision which can be natural or designed and controlled.
- *Vegetation:* Indigenous or introduced trees, shrubs, vines, ground covers, and herbaceous materials.
- *Small-Scale Features:* Elements that provide detail and diversity combined with function and aesthetics.
- *Archaeological Sites:* Sites containing surface and subsurface remnants of historic or prehistoric land use.

Within each group of landscape characteristics, individual landscape features are described in terms in of their form and/or function, location, size, materials, and condition.

3.2.1 Natural Systems and Features

Geology

The site is located on the edge of two different areas of surficial geology. The Surficial Geologic Map of New York State, Finger Lakes Sheet indicates that the area of the site surrounding Chittenango Creek is "recent deposits" of oxidized, non-calcareous, fine sand to gravel that is subject to frequent flooding. The second geologic area mapped on the eastern portion of the site is "lacustrine silt and clay," which is generally laminated clay and silt deposited in proglacial lakes, generally calcareous and given to potential land instability.[103]

The Soil Survey of Madison County states that the County is underlain by bedrock of the Silurian and Devonian periods (440 to 360 million years ago).[104] The older formations of the Middle Silurian to Devonian periods underlie the Oneida plain in the northern part of the county. The bedrock lies nearly flat except for a slight regional dip to the south of about 50 feet per mile.

[103] Muller and Cadwell, 1986.
[104] SCS, 1981.

Soils within the study area are classified as alluvial land, Phelps gravelly silt loam (0-3% slopes), Teel silt loam, and Wayland silt loam. These soil types range from poorly drained to moderately well-drained. The poorly drained soils, Alluvial land and Wayland silt loam, are primarily found near Chittenango Creek. The moderately well-drained soils, Phelps gravelly silt loam and Teel silt loam, are found in the developed areas of the site near the museum building and the dry dock complex.[105]

Hydrology

The dry dock complex site is located in the Chittenango Creek watershed within the Oswego River Drainage Basin, which eventually drains into the Lake Ontario Drainage Basin. The site is bordered by natural and engineered hydrologic features.

Chittenango Creek, with portions located in Madison and Onondaga Counties, flows northward from Nelson Swamp (north of the Village of Cazenovia) to Oneida Lake. The creek is 30-65' wide in the vicinity of the site, partially open, and swift flowing. The waterway is a popular (and prime) location for trout fishing along other parts of the creek path.

Ecology

The site is located in the Ontario Lowlands portion of the Eastern Great Lakes Lowlands Ecoregion.[106] The U.S. Environmental Protection Agency describes the distinguishing characteristics of this ecoregion in the following way:

> This glaciated region of irregular plains bordered by hills generally contains less surface irregularity and more agricultural activity and population density than the adjacent Northeastern Highlands and Northern Allegheny Plateau. Although orchards, vineyards, and vegetable farming are important locally, a large percentage of the agriculture is associated with dairy operations. The portion of this ecoregion that is in close proximity to the Great Lakes experiences an increased growing season, more winter cloudiness, and greater snowfall.[107]

Most of the site is maintained lawn, with a few shade trees scattered around the property. Riparian vegetation has grown along the Chittenango Creek corridor, the Erie Canal, and the Chittenango Canal.

Climate

The climate of Chittenango, which has generally been constant throughout the history of the site, belongs to the Great Lakes climatological division of New York. The climate can range from hot and often humid summers to very

[105] NRCS, 2013.
[106] EPA, 2011.
[107] EPA 2010.

cold winters. The prevailing wind is generally from the west in New York State. The average rainfall is approximately 40 inches per year, with total snowfall between 110 and 130 inches. The annual average temperature is 47 degrees Fahrenheit (F). Summer temperatures tend to be in the 70s, with highs in the 90's; and winter temperatures tend to be in the 20s. Chittenango is in USDA hardiness zone 5, with an average annual minimum temperature of -20 to -10 degrees Fahrenheit.

Natural Features

Natural features present at the site include:

Chittenango Creek – The creek flows in a northwesterly direction, and forms the sinuous southwestern boundary of the site. The creek is enclosed in riparian vegetation, providing a substantial wooded edge and visual boundary along the property. The width of the creek ranges from 30 to 65 feet in the vicinity of the site. Just west of the site, the Enlarged Erie Canal passes over Chittenango Creek via an aqueduct. Just south of the intersection between the creek and the Erie Canal, the reconstructed sluiceway from the dry dock complex drains into the creek (see Figures 3.1 and 3.2).

Figure 3.1 (left). Chittenango Creek (southwest corner of Project Boundary) - View to the east. (Photo by EDR, 2013)
Figure 3.2 (right). Chittenango Creek (southwest corner of Project Boundary) - View to the west. (Photo by EDR, 2013)

3.2.2 Topography

The site is located in the northern tier of Madison County surrounding Oneida Lake. The property is generally flat, with a gentle slope in the southwest direction towards Chittenango Creek. Elevations range between 420 and 430 feet above mean sea level (AMSL). The general lack of natural topographic variation contributes to the presence of standing water on the site at certain times of the year.

3.2.3 Spatial Organization

The existing spatial organization of the property displays the layering of historical occupation and land use. The dry dock complex is located across a bridge, west of the Chittenango Canal. Most of the historic features of this landscape have been lost over time, although some have been rebuilt using excavated foundation remains and historic maps and photographs for guidance. The original locations of these features and buildings contribute to a second layer that provides the historical basis for the spatial organization of the site.

The existing condition of the site mimics the ca. 1856-1917 configuration of the property as a working landscape. The spatial organization relates to the water features that were constructed to repair, build, and navigate canal boats. The constructed water features are arranged with an efficient relationship to one another, as the movement of water through the site is critical to the functioning of the landscape: the dry dock bays are located in close proximity to both of the canals, the sluiceway drains to Chittenango Creek, and the remaining structures were built to provide service or functions that tied into boat building or other activities at the site.

There are four distinct areas associated with the dry dock complex site: the Boatyard, the Open Field, the Heel Path, and the Enlarged Erie and Chittenango Canals. Each area has a unique environment and contributes to the layered land use and although connected, each space has a clear, defined perimeter.

Boatyard – The Boatyard is the active space located south of the Enlarged Erie Canal, west of the Chittenango Canal, and bordered on the west and south by the Open Field. The entrance to the dry dock complex along Boatyard Road over the Chittenango Canal is constricted on the west end of the bridge by the boat model and the sawmill complex (Figures 3.4 and 3.5). The full extent of the Boatyard expands as the angle of these two buildings directs people and views into the space. The Boatyard is generally comprised of open lawn and paved (stone dust or gravel) roadways and pathways. This area is adjacent to the Open Field, however, there is a distinct perimeter to the Boatyard comprised of the Blacksmith/Sawmill Complex (south), mature specimen trees and house foundations (west), the Store and Warehouse building (northwest), the Erie Canal (north), and the boat model (east). The arrangement of these structures provides a sense of enclosure and focused activity to the Boatyard. The dry dock bays, which are large, rectangular, stone-lined excavations, provide a focal point in the center of this space and are bounded by perimeter fencing. Vantage points along the perimeter fence and adjacent lawn areas provide opportunities for views into the bays of the dry docks.

Figure 3.4. Constricted entry on Boatyard Road to the Dry Dock Complex space from the east side of the bridge. (Photo by EDR, 2013)

Figure 3.5. View into the Boatyard – from the west side of the bridge. (Photo by EDR, 2013)

Figure 3.6. Open Field meadow. (Photo by EDR, 2013)

Open Field – The Open Field is a flat, four-acre (approximate) maintained meadow area forming the southern and western edge of the study area (Figure 3.6). The field is a narrow, irregular shape, bordered by the Chittenango Canal (east); dense, mature vegetation and Chittenango Creek (south); dense, mature vegetation (west); and the Erie Canal and the Boatyard (north). Although open to visitors, the Field does not have a path system or any interactive features. Boatyard Road, an informal gravel-paved road, separates the Open Field from the Boatyard. Several specimen trees and a white storage trailer in the northwest corner are the only features that populate this landscape.

Heel Path – The heel path is the area located between the sluiceway and Enlarged Erie Canal, immediately west of the reproduced Store and Warehouse Building (Figure 3.7). It is comprised of a flat, grassed lawn, bordered on the south by trees lining the sluiceway, on the north by the Enlarged Erie Canal, terminating on the west at aqueduct over the Chittenango Creek (located outside the property boundary and CLR study area). A wood utility pole with attached metal utility box is located along the heel path. Telephone wires run from the utility box into the ground.

Figure 3.7. Heel path along Enlarged Erie Canal. (Photo by EDR, 2013)

Enlarged Erie and Chittenango Canals – The Enlarged Erie Canal serves as the northern boundary of the study area (Figure 3.8), and the Chittenango Canal serves as the eastern boundary, with the dry dock bays located at the confluence of the two canals (Figure 3.9). The routes of these two canals exist in a similar configuration to how they would have appeared during the period of operation for the dry dock bays and surrounding businesses. Visitors can appreciate the narrow, linear canal design and construction of the Enlarged Erie from the Store and Warehouse Building deck as the canal extends west into dense vegetation. Steep banks and masonry walls define the prism of the canal while mature trees and shrubs soften this edge. This landscape creates a protected and enclosed condition as the trees form an organic wall along the narrow canal space. Visitors to the site must cross the bridge over and engage the Chittenango Canal as the eastern boundary of the site, and can visually experience the direct connection to the Enlarged Erie and the dry dock bays located immediately adjacent to these two canals.

Figure 3.8. The Enlarged Erie Canal – view to the west from the towpath on the north side of the canal. (Photo by EDR, 2013)

Figure 3.9. Confluence of Enlarged Erie and Chittenango Canals, looking south. (Photo by EDR, 2013)

3.2.4 Land Use

The current and principal land use at the site is the interpretation of a nineteenth century dry dock complex and associated buildings on the Enlarged Erie Canal. Visitors have the opportunity to learn about the repair and construction of canal boats, the history of the canal era, and the historical development of the region through educational programs, site visits, and special events at the museum property. This is accomplished through programs such as tours, visits by school groups, and archaeological workshops that use the site to actively engage visitors. The historic features of the property have been interpreted through the preservation, restoration, and reconstruction of the ca. 1856-1917 working landscape. Secondary land uses include special events and programs that utilize the property but are not focused on the historic aspects of the site: recreational bicycle tours, concerts, and private gatherings, such as weddings, showers, and parties.

3.2.5 Circulation

Visitors enter the site via the bridge over the Chittenango Canal, which connects to the parking lot of the Chittenango Landing Canal Boat Museum visitor's center along the eastern edge of the property.[108] Lakeport Road, also known as County Road 3, is a two-lane, double-yellow line asphalt roadway classified by the NYS Department of Transportation as a major rural collector. In the vicinity of the site, Lakeport Road has gravel shoulders and no sidewalks. Boatyard Road, a compacted gravel/crushed-stone driveway or single-lane road (approximately 10-12 feet wide) that runs east-west, is the primary access road through the dry dock complex and serves as the entrance to CLCBM visitor's center.

The Erie Canalway Trail, a four-foot-wide stone dust path, runs parallel to the north side of the Enlarged Erie Canal. The recreational trail connecting Buffalo and Albany is a corridor for bicyclists and pedestrians, some of whom venture across the canal to visit the site. Visitors to the museum and dry dock complex often utilize the trail as a part of their visit. The only route to the museum from the trail is along Lakeport Road, across the bridge that spans the Enlarged Erie Canal. For pedestrians and bicyclists this involves walking or bicycling along the road shoulder. There are two painted cross-walks across Lakeport Road in this vicinity; one allows for the trail to cross Lakeport Road and the other provides a pedestrian crossing from the museum across Lakeport Road to a parking lot to the east.

Pedestrian access to the dry dock complex utilizes the same main corridors as vehicles. However, pedestrians can venture off these access roads into other areas of the site that are not accessible to vehicles. There are five site features related to pedestrian circulation: the bridge, Boatyard Road, the walkway over the earthen dam, the concrete sidewalk around the store and warehouse building, and wood staircases into the dry dock bays. One

[108] Although the CLCBM Visitor's Center, Lakeport Road and the Erie Canalway Trail are located outside the study area of the cultural landscape, they are important for how visitors access and experience the site visually from outside the site. They are summarized briefly but not included as site features related to circulation within the dry dock complex property.

method of circulation, the bridge, is currently shared with vehicles, although motorized vehicles are not intended to enter the dry dock complex site except for occasional special event overflow parking. Watercraft circulation is limited to recreational usage of the Enlarged Erie Canal by canoes, kayaks and other personal watercraft.

Bridge – Pedestrian flow through the site generally occurs with visitors starting at the bridge over the Chittenango Canal and proceeding west (Figure 3.10). The bridge features a concrete deck and is approximately 29 feet long by 14 feet wide with weathered steel barriers spanning the length of the bridge on its north and south sides. The barriers are attached to I-beam posts and there is a 3'-6" high galvanized steel pipe rail on the top to serve as a handrail for pedestrians.

Boatyard Road – Boatyard Road is a single-lane road, paved with gravel or crushed-stone (Figure 3.11). The road width varies: 8'-0" between the two house foundations, 13'-0" south of the store and warehouse building, 17'-0" between the dry dock and stable, and 13'-0" between the blacksmith complex and the boat model. Boatyard Road extends west from the bridge over Chittenango Canal and continues west past the reproduced Blacksmith and Sawmill Complex and Stable, ending in a loop around a specimen tree located south of the Tenant House foundation. Motorists occasionally drive on Boatyard Road over the single-lane, concrete slab bridge with steel guide rails that spans the Chittenango Canal. However, private vehicles are prohibited from crossing the bridge to avoid conflicts with safe pedestrian circulation.

Walkway over dam – The walkway over the earthen dam between the dry dock bays and Enlarged Erie Canal allows pedestrians to observe the reproduced dry dock gates and relationship with the Enlarged the Erie Canal. The narrow wood walkway extends east and west, parallel to the route of the Enlarged Erie Canal, and features a wood railing extending its entire length (Figure 3.12-3.13).

Wood staircases – Wood staircases are present in the southwestern corner of each of the dry dock bays (Figures 3.14-3.16). They are not currently available for public use due to safety issues. The light bay stair measures 2' wide and has nine risers; this stair does not have a railing. The medium bay stair measures 3'-2" wide and has 11 risers with a 34" high railing on the east side. The heavy bay stair measures 2'-11" wide and has 13 risers with a 34" railing on the east side.

Concrete sidewalk – A concrete sidewalk connects the dust path on the south side of the Store and Warehouse Building to the wood deck on the north side. The sidewalk begins at a 6' square concrete pad at the base of the stairs. The walk is 4'-0" wide and extends 20'-6" east from the pad, then turns 90 degrees

to the north and extends 43'-0", then turns 90 degrees west and extends 8'-6" to the wood deck (Figure 3.17).

Enlarged Erie Canal –The extant portion of the Enlarged Erie Canal that runs past the dry dock complex currently accommodates traffic from non-motorized personal watercraft such as canoes and kayaks. The Chittenango Canal is not an active waterway for watercraft.


Figure 3.10 (left). Bridge across Chittenango Canal. (Photo by EDR, 2013)
Figure 3.11 (right). Boatyard Road looking east. (Photo by EDR, 2013)


Figure 3.12 (left). Elevated wood walkway over earthen dam; view to the west. (Photo by EDR, 2013)
Figure 3.13 (right). Elevated wood walkway over earthen dam; view to the east. (Photo by EDR, 2013)



Figure 3.14 (left). Wood staircase – southwest corner of light bay. (Photo by EDR, 2013)
Figure 3.15 (center). Wood staircase with wood railing – southwest corner of medium bay. (Photo by EDR, 2013)
Figure 3.16 (right). Thirteen riser wood staircase with wood railing – southwest corner of heavy bay. (Photo by EDR, 2013)

Figure 3.17. Sidewalk along the east face of the Store and Warehouse Building. (Photo by EDR, 2013)

Pedestrians can meander and experience the various site features at their leisure once on the dry dock site. While some interpretive signage is present (Figure 3.18), there is little directional signage to guide visitors through the property. Many of the site features are labeled with letters and numbers (Figure 3.19) that correspond to information in the "Guide to the Boatyard" brochure produced by the CLCBM. This brief guide and map are designed to help visitors find their way around the exhibits.

Accessibility is an issue throughout the property. Most of the buildings, the model canal boat, and many of the surfaces are not ADA compliant. The buildings and site are difficult to access and navigate due to changes in grade, narrow door widths, and uneven surfaces. The Store and Warehouse building is the only handicap-accessible building surrounding the dry dock bays. There is a dirt ramp on the west side of the Blacksmith Complex (Figure 3.20). However, there is a gap to allow the door to close, making the ramp ineffective for wheelchair accessibility. The CLCBM has tried to address ADA accessibility in some areas although the improvements have deteriorated or were not adequately completed.

Figure 3.18. (left). Typical interpretive signage. (Photo by EDR, 2013)
Figure 3.19. (right). Features are linked by numbers to the CLCBM brochure. (Photo by EDR, 2013)

Figure 3.20. Dirt and grass ramp with poor accessibility, Blacksmith and Sawmill Complex (Photo by EDR, 2013)

3.2.6 Constructed Water Features

Constructed water features were the central components of the working landscape at the historic Chittenango Landing dry dock complex and continue as important landscape elements for the museum and interpretive center. The dry docks and boatyard relied upon a system of canals and mechanisms designed to accommodate boat docking and repair. While all of the historic elements are present, the system does not currently function as it once did. This is primarily due to the presence of an earthen dam between the Erie Canal and the dry docks, which prevents the dry docks from filling with water. The Chittenango Canal provided a connection from the Village of Chittenango to the original route of the Erie Canal. Both of these canals are in their historic locations. However, both canals have been truncated off the site and do not span to their original extents. The three-bay dry docks have been excavated and rebuilt in their original location. The sluiceway has been excavated, reconstructed, and left partially exposed at its eastern end to show its construction. The sluiceway is partially functioning; however, because the dry docks are no longer filled with water, the sluiceway is typically dry or carries very low levels of water. Limestone bullnose and retaining walls are present at the junction of the Chittenango Canal and the Enlarged Erie Canal, and display some deterioration.

Chittenango Canal – The Chittenango Canal runs in a north-south direction along the eastern side of the dry dock complex. The prism of the Chittenango Canal is approximately 35 feet across at its northern terminus where it flows into with the Enlarged Erie Canal. The Chittenango Canal is traversed by a concrete slab bridge that carries Boatyard Road over the feeder canal, approximately 160 feet south of the Enlarged Erie Canal. North of the bridge, the steep sloping banks of the canal are covered with grass that is mowed or trimmed on a regular basis (Figures 3.21 and 3.22). On the western side of the canal, the grass is interspersed with stone riprap, while on the eastern side areas of eroding soil are visible along the banks. South of the bridge, the canal transitions to a narrower, overgrown waterway, with naturalized riparian vegetation and scattered stone along the stream banks.

Figure 3.21. (left). Chittenango Canal – view south. (Photo by EDR, 2013
Figure 3.22. (right). Chittenango Canal – view north. (Photo by EDR, 2013)

Enlarged Erie Canal – The Erie Canal runs in a northwesterly to southeasterly direction and forms the northern boundary of the site (Figure 3.23). The water in the canal is maintained at a depth of approximately three feet and the prism ranges in width from 65 to 90 feet (widest at the dry docks) in the vicinity of the site. The southern edge of the canal has limestone retaining walls in select locations; measuring approximately seven feet high along the northern perimeter of the study area.

Figure 3.23. Enlarged Erie Canal at the dry dock complex. (Photo by EDR, 2013)

Figure 3.24. (left). Southern wall of the Erie Canal within the western portion of the study area. (Photo by EDR, 2013)
Figure 3.25. (right). Southern wall at the confluence of the Erie Canal and the Chittenango Canal. (Photo by EDR, 2013)

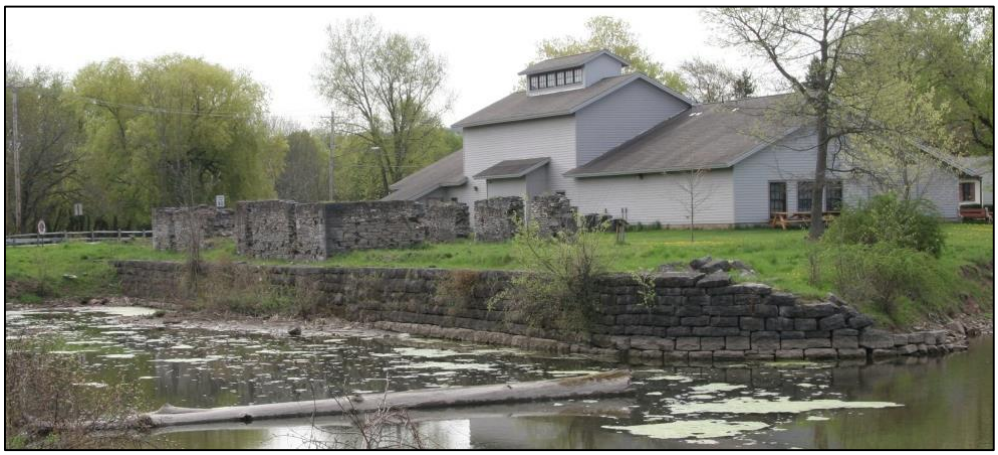


Figure 3.26. Southern wall east of the confluence of the Erie Canal and the Chittenango Canal. (Photo by EDR, 2013)

Figure 3.27. Northern wall of the Erie Canal opposite the dry dock complex. (Photo by EDR, 2013)

The west wall of the Enlarged Erie Canal begins at the earthen dam at the northwest corner of the dry docks, curves to the west and extends along the south edge of the Canal (Figure 3.24). The total length of this wall within the study area measures 250 linear feet. There are additional limestone retaining walls to the east along the southern edge of the Canal. These walls flank the intersection of the Chittenango Canal with the Erie Canal (Figures 3.25 and 3.26). A limestone bullnose wall begins at the northeast corner of the dry docks, curves to the east and extends south along the western edge of the Chittenango Canal. The total length of this wall measures 55 feet. The southern wall of the Erie Canal continues east of the intersection of the two canals, curves east and continues to the east. The northern side of the Erie Canal prism is primarily composed of steep sloping banks with stone riprap (or partially dislodged limestone blocks) overgrown with low herbaceous vegetation (Figure 3.27).

Three-Bay Dry Docks – The dry docks are comprised of three self-contained bays that are located south of the Enlarged Erie Canal and west of the Chittenango Canal. With overall dimensions of approximately 80 feet by 100 feet, the bays lie parallel and immediately adjacent to one another, and are oriented, as a whole, perpendicular to the Erie Canal. Each bay is approximately 25 feet wide and 100 feet long with a gate opening (at the northern end) 18 feet across. Two rectangular timber cribs, filled with earth, are located in between the three sets of gates. The dry docks are protected from the canal waters by an earthen dam. Each bay has different features:

- The east (or light) bay (Figures 3.28 and 3.29) has gently sloping southern and eastern side walls (rebuilt in 1995), covered with vegetated melon-sized riprap. The west wall (uncovered in 1986) was rebuilt in 1995 on top of the remaining stones from the original wall. The new stones are irregular pieces of rough cut limestone laid in an ashlar pattern. Thick limestone capstones top the wall. The dimensions of the bay are 26 feet at its widest point, 105 feet at its longest point, with a depth of six feet. The western wall of this bay is a masonry wall constructed of limestone blocks, measuring five and a half feet wide at the base and four feet wide at the top. The floor of the bay is covered by grass and other low, volunteer vegetation. Eight vertical wood timbers on the ground surface (or partially buried) are visible in the grass running in a straight line north/south along the eastern edge of the bay. One east/west wood beam, two feet tall on three vertical wood posts is located in the middle of the bay. All existing wood elements above the ground are non-original and display significant deterioration.

Figure 3.28. Light bay of the dry dock – view north. (Photo by EDR, 2013)

Figure 3.29. Light bay of the dry dock – view south. (Photo by EDR, 2013)

Figure 3.30. Middle bay of the dry dock – view south. (Photo by EDR, 2013)

A wood (Red Oak) tumble gate is located along the northern edge of the bay, flanked by rough stone walls on either side of the gate. The gate is attached to a double winch-and-pulley system mounted to a stone wall, shared between the light and middle bays. This hardware was added sometime after the rebuilding of the walls. The gate has two rectangular slide gates located near the middle and a wooden case filled with stone at the top.

- The middle, or hundred-ton bay (Figures 3.30 and 3.31), measures 26 feet wide at its base105 feet at its maximum length, and seven feet deep. The south, east, and west walls of the bay are constructed of limestone and hydraulic cement. Due to greater water volume and pressure in the west (heavy) bay, the wall separating the middle and west bays is higher and wider than the wall separating the light (eastern) bay from the middle bay. The middle bay also has a wood (Red Oak) tumble gate at its northern edge adjacent to the dam. The gate (similar to the light dock) is attached to a double winch-and-pulley system mounted to a stone wall, shared between the light and middle bays. The gate has two rectangular slide gates at the bottom and a wooden case filled with stone at the top. The wood apron south of the fate was rebuilt over the sluiceway. Six original oak cradle beam posts are present in the floor of the bay, and covered in vegetation. The floor of the bay often displays minor flooding following rain or in wet conditions.

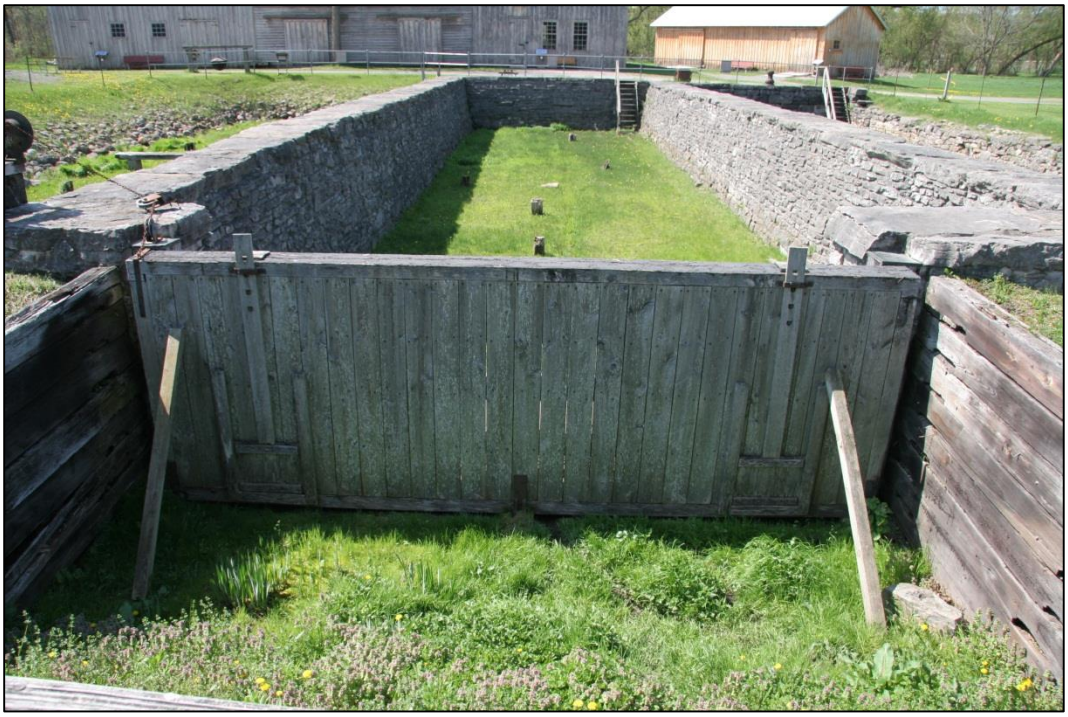


Figure 3.31. Middle bay of the dry dock – view north. (Photo by EDR, 2013)

The west wall of the middle bay was rebuilt in 1995 with new rough-cut limestone laid in an ashlar pattern over the remaining limestone from the original wall construction, uncovered in 1986.

- The west, heavy or loaded bay (Figures 3.32. and 3.33) was intended for the repair of fully-loaded canal boats and measures 25 ½ feet wide at its base, 107 feet at its maximum length with a depth of eight feet. The south, east, and west walls of the bay are constructed of limestone and hydraulic cement. All of the walls of the loaded bay needed to be of heavier construction to withstand the increased water pressure resulting from the greater depth and corresponding greater volume of water in the bay (when it was full). Eight original oak cradle beams are present at the bottom of the heavy dock, with some original oak and concrete flooring present beneath the beams. The west wall of the heavy bay is largely composed of original masonry and appears largely as it was when uncovered in 1986, as it had not experienced as much loss of original material as the stone walls of the light and middle bays. Capstones are absent from most of the top of the west wall of the heavy bay. The wood apron at the north end of the bay has been rebuilt atop the sluiceway. The heavy bay displays a miter style wood (Red Oak) gate at its northern edge adjacent to the dam and walkway. The wood gate has two rectangular slide gates (one on each gate panel) located at the bottom.

Figure 3.32. Heavy bay of the dry dock – view south. (Photo by EDR, 2013)

Figure 3.33. Heavy bay of the dry dock – view north. (Photo by EDR, 2013)

Figure 3.34. (left). Sluiceway – view west. (Photo by EDR, 2013)
Figure 3.35. (right). Sluiceway – stacked stone walls. (Photo by EDR, 2013)

Sluiceway – The sluiceway runs parallel to the Enlarged Erie Canal, traversing approximately 1,700 feet from the northwestern corner of the west (heavy) bay of the dry dock and terminating at Chittenango Creek. For the first 150 feet (130 of which are underground), the sluiceway is a four foot-by-four foot box tunnel with dry-laid limestone walls rebuilt by museum volunteers in 1989. The sluiceway, between the end of the tunnel and Chittenango Creek, is a narrow, vegetated, open ditch with steep sloping sides reinforced with dry-laid fieldstone retaining walls (Figures 3.34 and 3.35).

3.2.7 Buildings and Structures

Numerous buildings and structures were constructed to supplement activities at the dry docks during its period of operation between 1856 and 1917. The buildings ranged in function: a canal store and warehouse, residences, lumber production facilities, and a blacksmith. Some of these structures have been reproduced on top of their original foundations that were exposed as part of archaeological work on site beginning in 1986. New structures like the CLCBM Visitor's Center and interactive canal boat replica have been built to assist in the interpretation of the dry dock complex, associated buildings, and commerce and traffic on the Erie Canal.

Store and Warehouse – The store and warehouse building is located just south of the Enlarged Erie Canal, northwest of the dry docks. The store and warehouse was reproduced in 1991 on top of a portion of its original foundation and served as the museum and visitor's center until the current visitor's center was built in 2002. The store and warehouse was reconstructed using the historic photographs to inform the design of the new building. The reconstructed building measures 24 feet wide by 65.5 feet long, with a porch on the western façade extending another ten feet. The covered walkway along the north side is seven feet wide (Figures 3.36 and 3.37).

Figure 3.36. Store and warehouse building – north and east facades. (Photo by EDR, 2013)

Figure 3.37. Store and warehouse building – south and west facades. (Photo by EDR, 2013)

Similar to the original building, the new store and warehouse is a one-and-a-half story, rectangular structure with a side gable roof and vertical natural wood board-and-batten siding. The roof is clad in wood shingles. The north façade faces the Enlarged Erie Canal and is punctuated by a variety of openings. There is one door at each end of the façade, with a three-light transom located above each door. The east door has two, six-over-six double-hung sash windows located on the east side of the doorway and four, six-over-six double-hung sash windows on the west side of the doorway. The west door has a pair of smaller, six-over-six double-hung sash windows located on either side of the door, spaced farther apart than the windows on either side of the east door. A pent roof clad in corrugated metal covers the north porch and runs the entire length of the façade. The west side of the north porch ends with a 3'-10" wide by 8'-6" long wood ramp leading to the heel path on the south side of the Erie Canal.

The west façade has a windowless door in the first story and two six-over-six double-hung sash windows in the upper story. A pent roof clad in corrugated metal roof covers the first story porch, a wood deck with wood posts and railing. The east façade has the same upper story windows as the west façade. A large, six-over-six, double hung sash window is located on the first story, on the south end of the façade. A wood door bulkhead entry measuring 8' long, 7'-8" wide, and 2'-6" high is located beneath the window on the first story. The door slopes down to grade toward the east where there is a 3'-4" (varying height) wood railing.

The south façade displays a portion of the foundation, comprised of rough, irregular stone. There is an elevated, open-air porch along the eastern half of the façade. A 5'-0" wide, four-riser staircase ascends to the porch, leading to the primary entry door. There is a single, six-over-six double hung sash window located east of the entry and a sliding stable door located west of the entry. A 3'-4" high wood railing surrounds the porch with a gap in the rail to provide access to the stable door. Three, six-over-six windows are located to the west of the stable door. There is a 2'-11" wide, five-riser staircase on the west end of the façade leading to the covered porch on the west façade.

Outhouse – The outhouse, located near the southwest corner of the Store and Warehouse Building, is a 5'-6" square wood structure on a wood bridge spanning the sluiceway. The outhouse has a man-door on the south façade, white painted wood siding, and a wood shingle gable roof. There are two 3' tall wood railings at the entrance, fastened to the outhouse and the 5'-8" wide by 5'-8" long bridge comprised of steel beam supports clad in wood (Figure 3.38).

Figure 3.38. Outhouse, south and east facades. (Photo by EDR, 2013)

Stable – The reproduced stable is a one-story rectangular structure measuring 18.5' wide and 57.5' long with board-and-batten siding and a side-gable roof clad in corrugated metal. The east (entry) façade contains two, sliding barn-style doors at either end of the façade. The northwestern door has a man-door cut into it measuring 2'-6" wide by 6'-8" high. A single, four-light fixed sash window is located on the north façade. There are five similar windows located on the west façade. The south façade contains a single, modern steel entry door with no windows (Figures 3.39 - 3.41).

Figure 3.39 (left). Reconstructed stable – north and east facades. (Photo by EDR, 2013)
Figure 3.40 (right). Reconstructed stable – south and east facades. (Photo by EDR, 2013)

Figure 3.41. Reconstructed stable – north and west facades. (Photo by EDR, 2013)

Figure 3.42. Primary building at the Blacksmith Complex. (Photo by EDR, 2013)

Blacksmith and Sawmill Complex – The blacksmith and sawmill complex was reproduced in 1993-1994. The reproduced buildings were constructed slightly larger than the original buildings to avoid disturbance to the original foundations that had been exposed during archaeological excavations. The plans for reproduction were based on the 1890-1906 Sanborn maps (completed prior to the explosion that destroyed part of the complex), and included three sections for the main building, and a smaller, detached building meant to replicate an unlabeled structure on the 1895, 1900, and 1906 Sanborn maps. This unlabeled structure was destroyed in the 1906 explosion. All of the reconstructed buildings were designed with simulated post and beam construction with diagonal bracing.[109]

The primary building contains three distinct sections all with side gable roofs clad in corrugated metal. The east wing of the main block measures 40 feet wide by 41 feet deep. The southern shed roof addition to the east wing is 19 feet wide by 14 feet deep. The center section measures 42 feet wide by 30.5 feet deep and the west wing is 30 feet wide by 30.5 feet deep. The east and west sections display board-and-batten siding, while the center block is clad in horizontal wood clapboard (Figure 3.42).

[109] CLCBM, 1992.

Figure 3.43. Detached buildings and shed roof south of the Blacksmith Complex. (Photo by EDR, 2013)

The north façade of the main block of buildings displays the most openings of any façade. The east wing of the north façade contains two, nine-light, fixed sash windows with a single wood entry door to the east, and dual wood entry doors to the west. The center block contains two, large sliding wood barn doors on tracks. The west block contains a single, wood entry door, and two, nine-over-nine double-hung wood sash windows. The roof of the west block (the reconstructed blacksmith shop) contains a brick chimney. The east and west facades of the larger building are nearly identical, both displaying dual wood entry doors. The upper half-story of the east façade displays wood paneling simulating a hay loft door. The south façade of the west block contains three, nine-over-nine, double-hung wood sash windows. The center block contains two nine-light, fixed sash wood windows, and wood entry door. The east block contains a shed-roofed storage area on its eastern end.

Two detached buildings are located to the south of the main block (Figure 3.43). The larger detached building, located immediately south of the main block, is a one story, rectangular building with board-and-batten siding and a gable roof clad in corrugated metal. A single, nine-light fixed sash wood window is located on the south façade. This building measures 34.5 feet long by 16.75 feet wide. A smaller storage shed is located south of the detached building and is 24.5 feet long by 8.25 feet wide. It is comprised of two sections with board-and-batten siding and side-gabled roofs clad in asphalt shingles. The west section is slightly taller than the east section and displays a set of dual, windowless wood doors on the north façade. The east section contains a similar set of doors on the east façade.

Figure 3.44. Bridge crossing Chittenango Canal and connecting the Visitor's Center to the dry dock complex. (Photo by EDR, 2013)

Bridge – The bridge carries Boatyard Road over the Chittenango Canal and is part of the entry road to the site and is wide enough to accommodate automobile traffic. The bridge was rebuilt in late 1997 following a collapse in spring of that year. It has a concrete deck and measures 29 feet long by 14 feet wide with weathered steel barriers spanning the length of the bridge on its north and south sides. The barriers are attached to I-beam posts and there is a 3'-6" high galvanized steel pipe rail on the top to serve as a handrail for pedestrians. (Figure 3.44).

Canal Boat Model – A ¾-scale model canal boat was constructed at the site between 2004 and 2012. The boat is divided into three sections and is used as a teaching tool for visitors to the site. It is housed under a rectangular wood pavilion with a corrugated metal covered gable roof. The materials and construction are intended to replicate those of the reconstructed buildings located elsewhere on site. The concrete foundation measures 65' long and 23' wide; the roof is approximately 20' high at the peak, supported by natural wood 8"x8" posts spaced 10'-6" apart on the east and west sides of the foundation (Figures 3.45 and 3.46).

Figure 3.45. Erie Canal boat model. (Photo by EDR, 2013)

Figure 3.46. Erie Canal boat model. (Photo by EDR, 2013)

Figure 3.47. Earthen dam separating the dry dock complex from the Erie Canal. (Photo by EDR, 2013)

Earthen Dam – A compacted earthen dam runs parallel to the Erie Canal along the north edge of the dry docks, separating the canal water from the excavated and reconstructed dry dock bays. The dam is 92' long, 3' wide, and extends between the limestone walls on either side of the dry docks meeting existing grade at each side. The dam has steep slopes and is covered with low volunteer vegetation and loose rocks (Figure 3.47). The footbridge over the earthen dam is constructed of unfinished wood. The wood deck boards of the bridge display noticeable warping due to exposure to the elements.

Figure 3.48. Semi-trailer storage building. (Photo by EDR, 2013)

Storage Trailer – A white semi-trailer is located in the open space at the northwest corner of the site. The trailer measures 9'-6" tall, 8'-0" wide, and 53'-0" long. The trailer rests on concrete blocks (the wheels have been removed) and has two doors: a roll-up door on the back (east) and a man-door on the north-facing side (Figure 3.48).

3.2.8 Views and Vistas

While the views to or from the dry docks are not historically designed views, they are important to how visitors experience the site as well as the areas immediately surrounding the vernacular landscape of the dry dock complex.

Views from Erie Canalway Trail to Site – When standing due north of the dry dock bays, views from the Erie Canalway Trail to the dry dock complex are expansive and unobstructed (see Figure 3.47). From portions of the trail located west of the site, views of the interior of the dry dock complex are screened by mature vegetation. When viewed from portions of the towpath located northeast of the site, the cannery ruins located on the east side of the Chittenango Canal and the Store and Warehouse Building frame the view of the dry dock complex (see Figure 3.23).

View of Dry Dock Complex (west side of bridge over Chittenango Canal) – This is the first full view of the dry dock bays and Boatyard (see Figure 3.5), framed by the boat model (right), the Store and Warehouse Building (background), the Blacksmith/Sawmill Complex (left), and the Pitching Kettle (foreground). The Open Yard extends west beyond the Store and Warehouse Building to a line of mature vegetation along

the Chittenango Creek. Turning to the north on the bridge presents a view of the curved stone retaining walls at the confluence of the Chittenango Canal and the Erie Canal (Figure 3.22). The vegetated north slope of the Erie Canal shortens the view to the towpath and mature trees beyond. The view south on the bridge is dominated by riparian vegetation on the slopes of the Chittenango Canal (Figure 3.21).

View from Site along Canal – The view looking out of the dry dock site along the Enlarged Erie Canal (see Figures 3.7 and 3.23) would historically have included views of canal boats and other aspects of the working landscape of the canal. Today the view is limited to pedestrian activity on the towpath across the canal, passing vehicular traffic on the adjacent overpass to the east and the open canal to the west. The view today across the Chittenango Canal to the east includes the Visitor's Center and the remaining foundation walls from the cannery building (see Figure 3.26).

3.2.9 Vegetation

Vegetation at the site includes corridors of riparian vegetation, crop fields, the open yard, and specimen trees.

Riparian Vegetation – Chittenango Creek and the Chittenango Canal comprise the southern and eastern borders of the dry dock complex and flow within corridors of well-established riparian vegetation. This vegetation (mature hardwood trees and shrubs) includes but is not limited to: willows, elms, box elders, honeysuckle, and multi-flora rose. The vegetation along Chittenango Creek includes dense, mature deciduous trees while the riparian corridor along the Chittenango Canal has a dense, shrub character. Thinner rows of mixed hardwoods (sugar maples, box elders, elms, and ash) line the sluiceway berm, along the southern edge of the Enlarged Erie Canal and west of the reconstructed store and warehouse. The banks of the Canal feature shrubs and clumps of vines and brambles: honey suckle, box elder, wild grape, and Virginia Creeper. The trees along the sluiceway match the characteristics of the riparian vegetation along the Chittenango Creek and the Chittenango Canal (Figures 3.49 - 3.51).

Figure 3.49. Chittenango Canal vegetation – south of bridge. (Photo by EDR, 2013)

Figure 3.50. Chittenango Creek vegetation – southeast corner of property. (Photo by EDR, 2013)

Figure 3.51. Chittenango Creek vegetation – south of open field. (Photo by EDR, 2013)

Open Yard – The dry dock complex and associated (reproduced) structures are located within an open yard area. The yard has areas of maintained grass and an informal, utilitarian character that lacks significant ornamental vegetation (Figures 3.52 and 3.53).

Specimen Trees – Individual specimen trees (Norway maples, sugar maples, spruce, and sycamores) are located around the open yard area and adjacent to structures within the site. These trees provide ornamentation and shade; however, tree placement does not reflect intentional plantings or a formal landscape plan (Figures 3.54 and 3.55).

Figure 3.52. Open yard at dry dock complex. (Photo by EDR)

Figure 3.53. Open yard at dry dock complex. (Photo by EDR)

Figure 3.54. Individual trees in the open yard. (Photo by EDR, 2013)

Figure 3.55. Individual trees in the open yard. (Photo by EDR, 2013)

3.2.10 Small-Scale Features

The study area contains numerous small scale features. Some of these features have direct connections to the historic function of the dry docks, while others have been placed at the site for their association to boating or other canal-related activities. Several modern amenities, such as railings and benches, have been added to enhance visitor experience and ensure safety.

Pitching Kettle – The pitching kettle is located southeast and immediately adjacent to the light bay. Its foundation was uncovered in 1987; however, it was not fully exposed until 1994. The kettle is suspended by heavy metal chains from an unfinished wood structure measuring 9'-10" wide by 4'-6" high and hangs over a layer of new brick pavers. A layer of original brick pavers is concealed beneath the modern brick. The foundation measures 2'-6" wide by 9' long (Figure 3.56). The wood support frame was replaced in 2014.

Figure 3.56. The Pitching Kettle. (Photo by EDR, 2013)

Boiler – A large, black metal boiler is located on the south side of the central block of the blacksmith and sawmill complex (Figure 3.57). The boiler is approximately 8' high, 12' long and 4'6" wide. It was transported to the site in the early 1990s due to the known presence of a boiler on site in this general location (based on Sanborn maps).

Cleat – A large horn cleat is fastened to a movable wooden stand located at the south end of the middle dry dock bay. The cleat is 2'-5" long, 5" high, and 6" wide; the wood stand is 3' long, 1'-3" high, and 11" wide (Figure 3.58).

Capstan – A 2'-2" tall by 1'-9" round (base) rusted metal capstan is located on the limestone wall at the south end of the heavy bay (Figure 3.59).

Unidentified Item 'A' – There is a scoop shaped object located between the bollard and the cleat at the south end of the heavy dock. The "scoop" is approximately 2' tall, 2' wide, and has a curved metal handle (Figure 3.60).

Anchor – A yellow-painted boat anchor is attached to a wood post at the southwest corner of the heavy dock. The anchor and wood post measure approximately 3' high (Figure 3.61).

Wagon – A wood wagon is located west of the rope-fenced tenant house foundation. The wagon has four red-painted wheels and measures 3' wide, 3'-6" high, and 12' long (Figure 3.62).

Winch – A metal winch is mounted on the limestone wall at the north end of the wall separating the light and middle bays (Figure 3.63). It was transported to the site from the Chittenango Pottery complex located across Lakeport Road.

Figure 3.57. Boiler. (Photo by EDR, 2014)

Figure 3.58 (left). Horn cleat on wood stand. (Photo by EDR, 2013)

Figure 3.59 (right). Capstan. (Photo by EDR, 2013)

Figure 3.60 (left). Unidentified Item 'A' - Scoop. (Photo by EDR, 2013)

Figure 3.61 (right). Anchor. (Photo by EDR, 2013)

Figure 3.62. Wagon. (Photo by EDR, 2013)

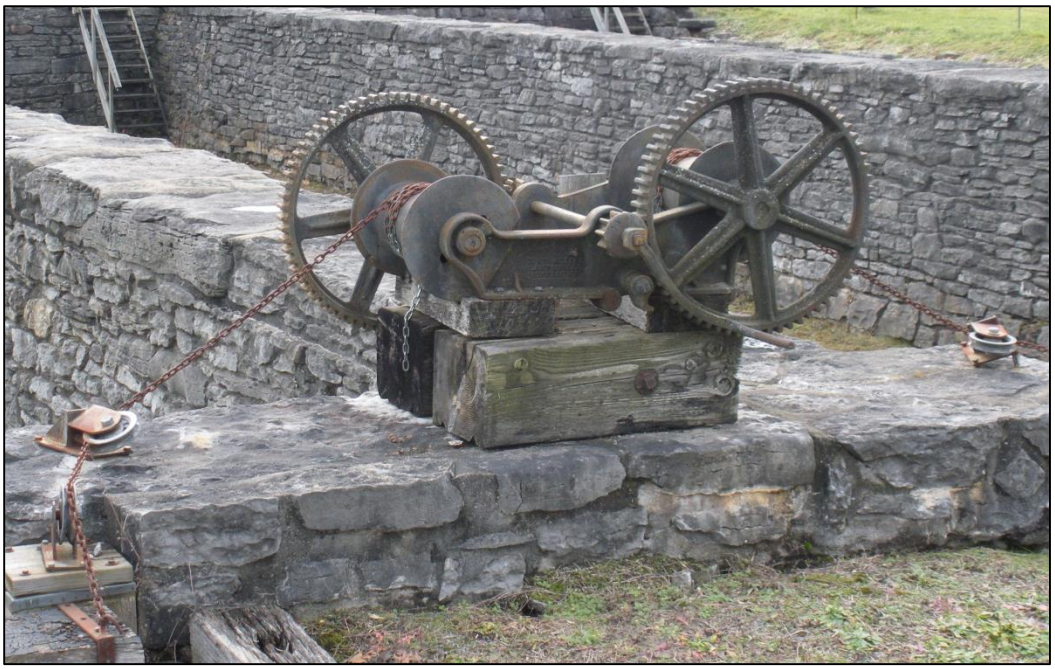


Figure 3.63. Winch. (Photo by EDR, 2013)

Figure 3.64. Typical permanent bench. (Photo by EDR, 2013)

Permanent Benches – There are five permanent benches at the site: five located west of the dry docks and one located adjacent to the Visitor's Center. Each bench has a similar design: red-orange painted wood slats, concrete legs, and measure 4'-6" long, 2'-9" wide, and 2'-6" high (Figure 3.64). Bench locations include the following:

- East of the Tenant House, facing north,
- Due east of the Main House, facing east,
- East of the Main House, facing east,
- West of the heavy dock, facing west,
- Southeast corner of the store and warehouse building, facing east, and

Movable Furniture – Non-permanent wood picnic tables and benches are often located on site, which are positioned around the site depending on need and functions.

Picnic tables include the following:

- Natural wood: 8' long, 2'-6" high, and 5' wide. (3)
- Natural wood with metal legs: 6' long, 2'-6" high, and 5' wide. (10)

Benches include the following:

- Red painted wood with plastic legs: 8' long, 2'-9" high, and 2' wide. (4)
- Red painted wood: 6' long, 1'-4" high, and 11" wide. (4)
- Red painted wood: 5' long, 1'-3" high, and 11" wide. (1)
- Red painted wood: 8' long, 1'-3" high, and 11" wide. (2)

Flagpole – A flagpole approximately 25' tall is located east of the store and warehouse building. A small brass memorial plaque is mounted on a wood post at the base of the flagpole (Figure 3.65).

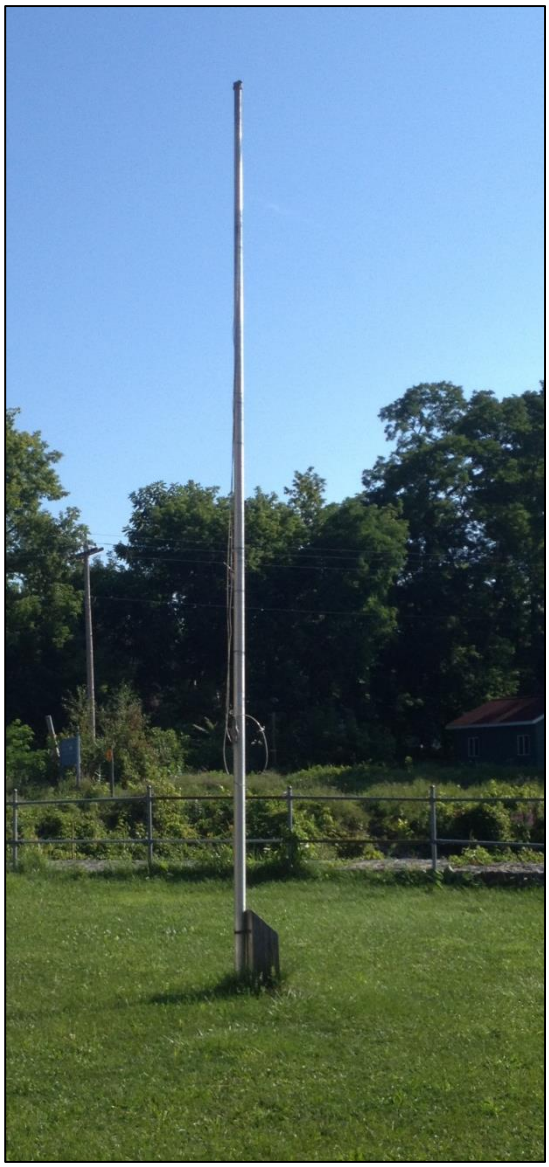


Figure 3.65. Flagpole with plaque. (Photo by EDR, 2013)

Modern Amenities – Several modern amenities have been added to the site surrounding the dry dock complex. Wood and rope fences surround the house foundations and dry docks. Continuous 3'-4" high aluminum railings are located along the south end of the dry docks, as well as along the canal wall north of the store and warehouse building, and a small section located northeast of the light bay. Simple chain fences are located on the east and west sides of the dry docks and connect to the aluminum railings on the north and south ends. Post distances are approximately 8'-9" on center although this varies. The aluminum railings display some wear and frequently separate, providing a safety hazard. Wood staircases are located at the southwestern corner of each dry dock bay, though they are made inaccessible to the public by the aluminum railings.

Figure 3.66. Garden bench, built-in benches, and pipe rail – north side of the Store and Warehouse Building. (Photo by EDR, 2013)

Built-in timber benches flank the eastern door on the north façade of the Store and Warehouse building. The benches block the lowest level of the six windows. The bench east of the door measures 7'-8" long, 1'-9" wide, 1'-8" high at the seat and 3'-1" high at the back. The bench west of the door measures 16' long, 1'-9" wide, 1'-8" high at the seat and 3'-1" high at the back. There is also a small garden bench located west of the west door: green painted wood slats with ornate metal arms and legs. The bench measures 4' long, 14" wide, and 2'-4" high. A galvanized steel pipe rail runs the full length of the northern façade, separating the wooden deck along the north façade from the retaining wall of the canal. The rail is 3' high with 8' on-center (measurement varies) posts and a mid and top rail (Figure 3.66).

3.2.11 Archaeological Features

Excavation of the various features and areas within the dry dock complex revealed key details of materials related to the construction and operation of the dry docks (see also Appendix A). A number of archaeological features remain on site, which assist in the interpretation of the story of the dry dock complex.

Main House Foundation – The main house foundation is located southwest of the reproduced store and warehouse. The foundation is 32 feet wide on the north and 45 feet wide on the east. The southern portion is 18 feet wide, with two offset portions on the west measuring 21 feet and 24 feet. The location of the main house was gridded and shovel-tested in 1988 to determine the extent of the foundation. Excavation revealed the structure had collapsed and been compacted into the foundation by its demolition in 1972. Subsequent excavation by the Syracuse University Field School in 1994 recovered numerous artifacts within the foundation as well as in areas west of the foundation that may have been deposited by grading following the demolition of the house. The main house foundation has been excavated to reveal the remains of the north wall, part of the western wall, and a cistern at the northwest corner. The area is surrounded by a rope fence with wood posts measuring 8' to 12' on center. (Figure 3.67).

Figure 3.67. Main House foundation. (Photo by EDR, 2013)

Figure 3.68. Tenant House foundation. (Photo by EDR, 2013)

Tenant House Foundation – The tenant house foundation is located 35' south of the main house foundation, and is primarily a large depression with only scattered stones visible in the soil. The foundation measures 22 feet by 32 feet. Similar to the main house, the tenant house location was gridded and shovel-tested in 1988 to determine the extent of the foundation and later excavated as part of the Syracuse University Field School. There are additional deposits to the west of the foundation, indicating the potential for a large dump site. The area is surrounded by a rope fence with wood posts measuring 8' to 12' on center (Figure 3.68).

Figure 3.69. The "Mystery" foundation. (Photo by EDR, 2013)

*"Mystery" Foundat*ion – The "mystery" foundation is located 25' west of the heavy bay. It measures 16' long, 16' wide, and is approximately 2.5' feet deep. No historical reference to a structure in this area is known, nor does any photographic evidence reveal its purpose. The proximity to the heavy bay has prompted speculation that it may be a base for a crane or some other type of construction or boat building equipment, or possibly an office for the dry docks. Later site residents recall that it might have been a chicken coop or tool shed. Archaeology conducted by DeAngelo and Weiskotten was inconclusive as to its function.[110] Subsequent to the archaeological excavations, the mystery foundation was filled to protect the foundation walls and only the top of the foundation is exposed (Figure 3.69).

[110] Weiskotten, 1991: Pippin, 2013.

Unidentified Stone Feature 'A' – This unidentified stone feature is located approximately 220 feet southeast of the reproduced blacksmith and sawmill complex, along the Chittenango Canal. It is comprised of a wall of dry-laid stones approximately three feet wide by eight feet deep, and is oriented generally perpendicular to the Chittenango Canal (Figure 3.70). The location of this feature is inconclusive with regard to any known historic structures. In notes accompanying the 1991 archaeological status site map (Figure 2.26), Gordon Deangelo indicated that the size and depth of the feature (which he identified as a foundation) suggests a bridge rather than a house.[111]

Unidentified Stone Feature 'B' – This unidentified stone feature is located approximately 120 feet south of Unidentified Stone Feature 'A.' The stone feature is comprised of a low, dry-laid stone wall with stone wings nearly flush to the ground (Figure 3.71). The feature is noticeably disturbed. The location of this feature is not consistent with any known historic structures.

Sunken Canal Boat – A sunken canal boat is located in the Erie Canal, immediately north of and adjacent to the Store and Warehouse Building. Drift pins were visible above the water line when clearing efforts began at the dry dock site in the mid-1980s. The boat remains include a 96' long by 17.5' wide "solid side" scow (Figures 3.72-3.73).

Archaeological Excavation Tent – School visitations often include an archaeological dig where 19th century materials are "seeded" for excavation. The dig takes place under and adjacent to a white plastic tent structure resembling a Quonset hut. The tent measures 20.5' wide, 36' long, and 10' high at the top of the arch (Figure 3.74).

[111] Deangelo indicates that an 1895 survey and photograph show three house and a bridge over the Chittenango Canal in this location, but the survey and photograph have not been located to confirm these assertions.

Figure 3.70 (left). Unidentified Stone Feature 'A.' (Photo by EDR, 2014)

Figure 3.71 (right). Unidentified Stone Feature 'B.' (Photo by EDR, 2014)

Figure 3.72. Sunken canal boat site – north of the Store and Warehouse building. (Photo by EDR, 2013)

Figure 3.73. Sunken canal boat site – drift pins. (Photo by EDR, 2013)

Figure 3.74. Archaeological dig tent. (Photo by EDR, 2013)

4.0 ANALYSIS AND EVALUATION

The Chittenango Landing dry dock complex cultural landscape today is a result of several changes that have occurred in the past three decades as part of the effort to uncover and interpret the site, with the dry dock bays as the focal point. The discovery of the dry dock bays in 1985 led to a considerable effort to excavate the bays, which had been filled in with earth and debris, and were revealed to have lost a significant portion of the original stone walls. Subsequently archaeological excavations around the bays revealed foundations of several buildings formerly located on site. The loss of these buildings and incomplete nature of the dry dock walls detracted considerably from the historic character of the cultural landscape. Efforts at rebuilding the dry dock walls and gates, as well as the reproduction of some of the buildings based on a c. 1875 photograph have complicated the historic integrity of the cultural landscape, though they do contribute to understanding and interpreting the historic function of the site.

This chapter evaluates the historic significance and character of the cultural landscape within the Chittenango Landing dry dock site. The evaluation is intended as a comparison of documented historic conditions to existing conditions on site to inform future management of the cultural landscape. It is important to note that although features that are less than fifty years old do not contribute to the historic significance of the property per NRHP criteria, they do not necessarily detract from the historic significance of the property. Several features are identified as non-contributing due to a lack of historic significance per National Register of Historic Places (NRHP) criteria despite having very high interpretive value to the site and the ongoing mission of the CLCBM.

4.1 National Register of Historic Places (NRHP) Documentation

The Chittenango Landing dry dock complex was listed on the National Register of Historic Places in 1992, under Criteria A and C, with its period of significance identified as 1856-1917, and transportation, engineering and commerce listed as areas of significance. The statement of significance narrative identified the following areas of significance regarding the site and its relationship to the surrounding environment:

> Begun in 1856 and utilized and modified over a 61-year period, the Chittenango Landing Dry Dock Complex is historically significant for its association with a business enterprise critical to the operation and commerce of the Erie Canal in the nineteenth century. Dry Docks provided repair services and winter storage for canal boats of all types; many dry docks also offered boatbuilding services. Efficient operation depended upon availability of these services at convenient intervals along the full length of the canal. While most of the 1825 Erie and 1850s Enlarged Canal has been drained and in some areas buried, the thirty-five mile stretch of the Enlarged Canal from Dewitt to New London carries water and maintains its original route. Within the historically important section of the 1850s Canal, the Chittenango Landing Dry Dock is the only extant dry dock retaining sufficient integrity to reflect its operation. The Erie Canal, more than any other single factor,

> produced growth and prosperity in New York State and the country as a whole in the mid-nineteenth century.[112]

The dry dock bays retain their original location and relationship to the Enlarged Erie Canal, and are an important feature representing canal infrastructure that has largely disappeared over the past century. Due to the importance of the Erie Canal to settlement and commerce throughout New York State, the site was listed on the NRHP with statewide significance. The dry dock complex is also a locally significant resource for its connection to the local businessmen, who used local materials and labor to build the considerable engineering features and control mechanisms by hand, without the benefit of a standard dry dock design to follow.

In several respects, the three dry dock bays at Chittenango Landing are unique among Erie Canal dry docks. The requirement of an unusually long sluiceway draining to Chittenango Creek 1700 feet to the west was due to the location of the dry dock bays on flat ground. However, the location was chosen along the route of the Enlarged Erie Canal to take advantage of the Chittenango Canal, constructed in 1818 by a group of prominent local businessmen (most notably John B. Yates) to connect the original Erie Canal to the nascent village forming in Chittenango to the south. The Chittenango Landing dry dock complex, with the inclusion of three bays, the use of a complex drainage system, and the presence of several manufacturing concerns and other commercial operations on site, is comparable to few other dry docks along the Erie Canal.[113]

At the time of the nomination over twenty years ago, six features were identified as contributing resources: the ruins of the three dry dock bays, an intact sluiceway, masonry retaining walls lining the Enlarged Erie Canal and the Chittenango Canal, and unevaluated archaeological remains associated with the canal and boatbuilding and repair activities at the site. In addition, four buildings were identified as non-contributing resources: the replacement store and warehouse building and three temporary storage/office trailers.

4.2 NRHP Significance Criteria

Analysis and evaluation of a cultural landscape consists of defining the significance of the landscape and its features, and assessing their historic integrity, implementing the criteria defined by the National Register of Historic Places (NRHP). The 1998 *Guide to Cultural Landscape Reports* notes:

> The analysis and evaluation compares findings from the site history and existing conditions to identify which landscape characteristics and associated features have historical significance. Each landscape characteristic is analyzed in an objective manner based on what was present historically and what currently

[112] Lozner, 1992: 7.
[113] Weiskotten, 1998a.

remains in the landscape. The historic integrity and significance of each landscape characteristic and associated feature are then evaluated in the context of the landscape as a whole.[114]

For a cultural landscape to be eligible for the National Register, it must be demonstrated to be significant in at least one of the major Criteria for Evaluation:

A. Associated with events that made a significant contribution to the broad patterns of our history, or;
B. Associated with the lives of persons significant in our past, or;
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. Have yielded, or may be likely to yield, information important in prehistory or history.[115]

The historic integrity of a cultural landscape is assessed based on the ability of the landscape to convey significance through seven aspects of integrity as defined by National Register criteria: location, design, setting, materials, workmanship, feeling, and association.

Location

Location refers to the physical place where a cultural landscape was constructed or a historically significant event occurred. All existing property within the Chittenango Landing dry dock complex was part of the historic cultural landscape. The reconstructed buildings and features on the site have been rebuilt in their historical locations, in most cases on the foundations of the original building or feature.

Evaluation: The site does retain integrity of location per NRHP significance criteria.

Design

Design refers to the collection of site features that comprise the form, plan, style and space of a cultural landscape. Though the dry dock bays remain the focal point of the site, the historic landscape design of the Chittenango Landing dry dock complex has been compromised by the addition of replica buildings and non-original site features (such as reproduction dry dock gates, the canal boat model). The Enlarged Erie Canal is no longer fully flooded and the dry dock bays are not operational.

Evaluation: Does not retain historic integrity of design per NRHP significance criteria.

Setting

Setting pertains to the immediate and surrounding physical environment of the cultural landscape. Though the Enlarged Erie Canal and Chittenango Canal are no longer in operation, they exist in their historic location and

[114] Page, et al., 1998: 69.
[115] Ibid, 71.

alignment relative to the dry dock bays and surrounding site. The reproduced buildings, while not historically precise, provide a sense of the working character of the landscape during the period of significance. The area east of the Chittenango Canal is no longer industrial in nature and contains contemporary houses and a museum and visitor's center. However, the portion of the property south and west of the dry dock bays and reproduced buildings retains the rural character it likely possessed during the period of significance. Modern site features such as the earthen dam and walkway between the dry dock bays and Enlarged Erie Canal, railings, benches, and signage detract from the historic setting of the site, but do not compromised the overall historic character.

Evaluation: Retains overall integrity of setting per NRHP significance criteria.

Materials

Materials are the natural and constructed elements of a feature that exist or have existed within a given cultural landscape. While the dry dock bays retain some of their original stone walls and deteriorated wood weigh timbers and flooring, the introduction of non-original stones and mortar have compromised the historic materials of the walls. The reproduced dry dock gates are constructed of non-original materials. Several new site features built of non-historic materials have been constructed that do not correspond to the period of significance.

Evaluation: Does not retain historic integrity of materials per NRHP significance criteria.

Workmanship

Workmanship refers to the physical manifestation of craftwork in the construction and usage of a historic landscape. The dry dock bays retain some evidence of the original workmanship in the construction of the walls. However, the walls were rebuilt using non-historic stones and materials that do not exhibit workmanship consistent with the period of significance. The loss of all original buildings on site detracts from the historic integrity of workmanship.

Evaluation: Does not retain historic integrity of workmanship per NRHP significance criteria.

Feeling

Feeling relates to the sense of a specific time or event that occurred within a cultural landscape. The presence of the exposed dry dock bays along the Enlarged Erie and Chittenango Canals contributes to the historic feeling of the landscape, but the reproduced buildings and introduction of non-original site features significantly detracts from the historic feeling of a nineteenth century working landscape.

Evaluation: Does not retain historic integrity of feeling per NRHP significance criteria.

Association

Association refers to the direct and obvious connection to the significant historic events or persons and the cultural landscape. The Chittenango Landing dry dock complex retains the key features of the dry dock bays in direct

proximity to the Enlarged Erie Canal and Chittenango Canal that clearly provide an association to canal traffic and boat maintenance. The presence of reproduced buildings, while not historically significant, also adds to the character and association of the site as a working landscape.

Evaluation: Does retain integrity of association per NRHP significance criteria.

4.3 Significance Evaluation of Landscape Characteristics and Features

This section provides a summary of historic and existing (2014) conditions of the landscape characteristics within the study area and an evaluation of whether each characteristic retains historic character from the period of significance (c. 1856-1917) and contributes to the historic significance of the property. The analysis process consists of a comparison of historic and existing (2014) conditions for each landscape feature, and an evaluation of the historic integrity of that feature. Landscape features correspond to the existing conditions described in Chapter 3. Landscape characteristics and features discussed in this chapter include: natural systems and features, spatial organization, land use, topography, vegetation, circulation, buildings and structures, views and vistas, small-scale features, and archaeological features. The following is the format used for the analysis and evaluation of each landscape feature discussed:

Historic Condition: A brief synopsis of the feature's history (if present in the historic period) as documented in Chapter 2 (Site History) during the period of significance.

Existing Condition: An overview of the existing physical condition and use of the feature as described in Chapter 3 (Existing Conditions).

Evaluation: Feature evaluations include a determination of whether the feature contributes to the historic significance of the property, as well as an assessment of historic integrity, as it pertains to the significance of the feature.

Landscape features and characteristics are evaluated on the basis of whether they are contributing or non-contributing to the historic character of the cultural landscape during its period of significance. Landscape features evaluated in this chapter are summarized in Table 1 (located at the end of this section) and labeled on Drawing 4.

Contributing features are those that were present during the historic period, retain historic character, and are associated with or add to the historic qualities of the site. Non-contributing features are those that were not present during the period of significance of the cultural landscape, or those which are incompatible with the character of the historic landscape.

It is important to note that although features that are less than fifty years old do not contribute to the historic significance of the property per NRHP criteria, they do not necessarily detract from the historic significance of the property. Several features are identified as non-contributing due to a lack of historic significance per NRHP criteria despite having very high interpretive value to the site and the ongoing mission of the CLCBM.

4.3.1 Natural Systems and Features

Only one natural system and feature is present at the Chittenango Landing dry dock complex. The Chittenango Creek has served as the south-southwestern boundary of the site since the construction of the dry dock bays in 1856. The creek had a direct relationship to the dry dock bays during their operation (via the sluiceway), and continues to provide a visual boundary in the present day.

Chittenango Creek

Historic Condition:

The Chittenango Creek existed in the historic period. Historic maps reviewed as part of the CLR indicate that Chittenango Creek has retained its general location and has served as the approximate southern/southwestern boundary of the site throughout the site's history. The creek was connected to the historic function of the dry dock bays. A sluiceway was constructed as part of the dry docks in 1856 that drained into Chittenango Creek, approximately 1700 feet to the west of the heavy bay.

Existing Condition:

The creek exists in its historic location running along the southwestern border of the dry dock complex property. The forested vegetation along the riparian corridor provides a visual boundary to the site and screens views of off-site areas to the south and southwest.

Evaluation: *Contributing*

The creek retains its overall integrity and is a significant landscape feature due to its historical and contemporary role as a physical and visual boundary for the site.

4.3.2 Topography

Topography is the three-dimensional condition of the surface of the landscape due to natural and man-made processes. The three dry dock bays are the most significant topographic feature on the site. The majority of the

property has not experienced significant change since the historic era, except for the grading of land following the demolition of the main and tenant houses in 1972.

Dry Dock Bays

Historic Condition: The dry dock bays were constructed c. 1856, and are believed to have remained flooded and operational throughout the historic period. Following the closure of the Enlarged Erie Canal in 1918 they were gradually filled in with earth and debris.

Existing Condition: The dry dock bays were excavated and revealed in the late 1980s, and currently served as the main site feature for interpretation by CLCBM staff.

Evaluation: *Contributing*

The dry dock bays were the focus of the site during the historic period. All boat building and repair and related activities on site during the historic period were in support of the dry dock bays. The excavated dry dock bays are the focal point of the current interpretive landscape. The dry dock bays as a topographic feature contribute to the historic significance of the site.

4.3.3 Spatial Organization

The spatial organization of the dry dock complex refers to the spatial relationships between the site features, their usage, and contribution to the historic significance of the cultural landscape.

Boatyard

Historic Condition: The Boatyard comprised the most active part of the working landscape during the historic period. Operation of the dry dock bays was the focus of the Boatyard, and the most intense activity occurred within and immediately surrounding the bays. The c. 1875 photograph of the dry dock complex (Figure 2.10) indicates boatbuilding occurred immediately east of the light bay, and subsequent Sanborn maps of the site (Figures 2.11-2.14) indicate that the buildings to the south provided carpentry and blacksmithing, possibly in support of boatbuilding and repair that occurred on site.

Existing Condition: The Boatyard is the focus of the interpretive landscape. The reproduced buildings to the south and west of the dry dock bays provide walls to the interpretive space of the dry dock bay and

surrounding yard. A variety of small-scale features and modern amenities are located within the Boatyard to aid in the interpretive program.

Evaluation: *Contributing*

The Boatyard contributes to the historic significance of the site. The Boatyard has historically been the most active portion of the dry dock complex site, both as a working landscape during the historic period and currently as the main focus of site interpretation. The reproduced buildings, while not historic reconstructions, do not significantly detract from the historic integrity of the Boatyard and serve to define its boundaries. The small-scale features present in the Boatyard detract from the historic integrity.

Open Field

Historic Condition: The open field to the south and west of the Boatyard was likely rural and at least partially agricultural in character during the historic period. Although structures are indicated in the vicinity of the canal on at least one historic map, conclusive documentation has not been located that specifically documents condition or usage of the field at this time.[116] It was likely comprised of tall grass and or shrubs or successional vegetation. The open field was farmed in the mid-twentieth century until the property was sold in 1972.

Existing Condition: The open field space is a narrow, irregular shaped area bordered by the Chittenango Canal (east); dense, mature vegetation and Chittenango Creek (south); dense, mature vegetation (west); and the Enlarged Erie Canal and the Boatyard (north). The lawn is maintained by the CLCBM staff, and contains a white storage trailer near the northwest corner of the parcel. Portions of the open field located south and west of the boat yard and buildings routinely flood during the spring thaw and heavy rainstorms.

Evaluation: *Contributing*

The open field to the south and west exists in a similar condition and configuration to this same area in the historic period. Although its usage would likely have been for agriculture at that time, the open, rural character of the field between the Boatyard and Chittenango Creek contributes to the historic integrity of the cultural landscape. The presence of non-original but impermanent site features such as the storage trailer detracts from the historic character.

[116] The 1852 Yates map (Figure 2.5) indicates a saw mill between the Chittenango Canal and Chittenango Creek. Due to the hand-drawn nature of this map and inaccuracy of the location of other depicted features, it is unclear if this mill was located within the existing dry dock complex property, and it is not depicted on any other map. The 1991 DeAngelo Status Site Map (Figure 2.27) indicates a few unidentified stone features which may relate to historic features located in this vicinity.

Heel Path

Historic Condition: The heel path existed during the historic period, but its usage and condition is not documented by historic maps or photographs during this time. An undated c. 1920s photograph of the Enlarged Erie Canal looking west (Figure 2.17) appears to show the heel path as somewhat overgrown by trees and vegetation.

Existing Condition: The heel path comprised of a flat, grassed lawn, bordered on the south by trees lining the sluiceway, on the north by the Enlarged Erie Canal, terminating on the west at aqueduct over the Chittenango Creek. It is currently used for recreational walking and tours as part of the dry dock complex site interpretation.

Evaluation: *Non-contributing*
The heel path does not contribute to the historic significance of the site. While it provides a way to observe the relationship of the full-length of the sluiceway between the dry dock bays and Chittenango Creek, its usage during the historic period is not sufficiently documented.

Enlarged Erie and Chittenango Canals

Historic Condition: From 1818-1856, only the Chittenango Canal was located through the site of the dry dock complex. The dry docks were constructed in 1856 along the Enlarged Erie Canal, in part to take advantage of the confluence of the Erie and Chittenango Canals. The retaining walls along the Erie and bullnose at the northeastern edge of the Chittenango Canal were built in 1897-98. The Chittenango Canal between the Village of Chittenango and the dry dock complex site fell into disuse by 1860, while the portion between Chittenango Creek and the Enlarged Erie Canal remained a feeder canal until the closure of the Enlarged Erie Canal in 1918.

Existing Condition: The route and confluence of these two canals exists in a similar form to its late nineteenth-to-early twentieth century condition. The locations of the two canals and their intersection have remained the same since the end of the historic period. The bullnose and retaining walls were repaired as part of the volunteer effort to reinterpret the site and reconstruct several of the previous landscape features.

Evaluation: *Contributing*

The spatial relationship between the dry dock complex and the Chittenango Canal and Erie Canals is crucial to the history of the site when it was in operation, and contributes to its historic significance. The confluence of the Enlarged Erie and Chittenango Canals has existed for over 150 years, and retains its original location and setting, late nineteenth century materials, and association with the dry dock complex.

4.3.4 Land Use

Land uses at the dry dock complex have ranged from boat building and repair (the use for which it was original constructed), to blacksmithing and lumber processing, to residential, to the later interpretive landscape that has developed over the past thirty years. Boat building and repair was the primary land use at the dry docks during the historic period of operation from 1856-1918. Due to a reduction in canal traffic, as well as some known idle years at the dry docks, boat building may have ceased in the early twentieth century prior to the closure of the Enlarged Erie Canal. Following the closure of the canal in 1918, all commercial activities at the dry dock complex are believed to have ceased.

From 1918-1972, the dry dock bays were filled with earth and debris (partially due to its use as an informal "dump"), and a number of buildings were removed. Land usage shifted to residential and agricultural. The main and tenant houses were used for residences and the store and warehouse cut in half with a portion relocated south of the dry dock bays to serve as a barn. The western portion of the site was used for agriculture. Stones from the dry dock bays were allegedly removed and used as fill in the construction of the New York State Thruway. The property was sold to New York State in 1972, and all buildings were demolished and the site became overgrown and disused.

Clearing efforts on site began in 1986. The dry dock bays were excavated and the walls partially rebuilt. Subsequent archaeological exploration revealed the foundations of several buildings that once stood at the site. Multiple buildings were reproduced on site between 1992 and 2010.

The current and principal land use at the site is the interpretation of a nineteenth century dry dock complex and associated buildings on the Enlarged Erie Canal. The historic features of the property have been interpreted through the preservation, restoration, and reconstruction of the ca. 1856-1917 working landscape. The interpretive landscape includes the property west of the Chittenango Canal and north of Chittenango Creek that comprised the working Enlarged Erie Canal landscape. The interpretive efforts by the museum have focused on late nineteenth century boatbuilding and repair activities on site, and achieve this through programs including self-guided and guided tours of the site, interpretive signage, and live reenactments of activities (such as blacksmithing) that once took place on site.

4.3.5 Circulation

Current circulation systems at the Chittenango Landing dry dock complex include pedestrian, vehicular, and watercraft circulation systems. Pedestrian circulation is the most active method of circulation throughout the site. The site is accessed via the bridge over the Chittenango Canal, and pathways lead pedestrians throughout the site and over the earthen dam, so that the dry dock bays may be experienced from multiple vantage points. Vehicular circulation is intended to be limited, but is achieved via the entry bridge over Chittenango Canal. Watercraft circulation is strictly recreational on the Enlarged Erie Canal.

Pedestrian circulation in the historic active landscape comprising the dry dock complex would have centered on the south, east and west sides of the dry dock bays to service canal boats, as well as entrance and exit from the buildings located at the site. Pedestrian access to the site would have been accomplished via the bridge over the Chittenango Canal, which was likely constructed c. 1856. The paths of circulation would likely have been covered in dirt or gravel. Pedestrian access is currently achieved using the bridge over the Chittenango Canal. Pedestrians are encouraged to circulate throughout the site on established paths running between the dry dock bays and various structures on the site. A bridge and walkway over the dam between the dry docks and Erie Canal enables pedestrians to experience the dry docks in a way not possible during the Canal era.

Vehicular (non-watercraft) circulation would historically have been limited to wagons and other vehicles hauling equipment and supplies to and from the site via the bridge over Chittenango Canal. Vehicular access to structures such as the Main House and Tenant House would have been achieved using the same pathways between the dry docks and structures that enabled pedestrian circulation. The paths of circulation would likely have been covered in dirt or gravel. The site can currently be accessed via vehicle using the bridge over the Chittenango Canal. Vehicles are not encouraged to enter the site, as it is meant for pedestrian access and circulation.

Watercraft circulation at the dry dock complex would historically have occurred with canal boats accessing the dry docks via the Erie Canal. In the absence of a turning basin, the Chittenango Canal would have been used for boats to maneuver in and out of the dry docks as needed. The Chittenango Canal would also have provided access to the Village of Chittenango from the Erie Canal, though the portion between Chittenango Creek and the village fell into disuse in 1860. The Enlarged Erie Canal closed in 1918, leading to the effective closure of the dry docks. No watercrafts have accessed the dry docks in nearly a century, and the only use of this portion of the canal is by canoes and other small personal watercraft.

Bridge (pedestrian/vehicular circulation)

Historic Condition:

A bridge is documented on historic maps (Figures 2.11-2.14) in this general location during the historic period. It was most likely constructed of wood, and built wide enough to handle loaded wagons traveling in and out of the dry dock complex. The bridge was likely rebuilt during the twentieth century to accommodate automobile traffic during the residential period of the site.

Existing Condition:

The bridge is comprised of a concrete deck with steel railings. It was rebuilt in 1997 following a collapse. The bridge enables pedestrian and occasional automobile traffic into the site.

Evaluation: *Non-contributing*

Although a bridge has historically been located across Chittenango Creek to enable entry into the site, the current bridge does not contribute to the historic significance of the site due to a lack of integrity of materials and form. The bridge was likely historically narrower and constructed of wood during the historic period.

Boatyard Road

Historic Condition:

Boatyard Road did not exist as a formalized road in the historic period. It is assumed a rough path or dirt road existed around the dry dock bays during its years of operation, but no map or photographic documentation has been located to verify the condition of any roads or paths in a similar configuration during the historic period.

Existing Condition:

Boatyard Road is a stone and dust path that extends west from the bridge over Chittenango Canal and allows pedestrian access to the reproduced buildings located around the dry dock bays.

Evaluation: *Non-contributing*

The current path and configuration of Boatyard Road does not contribute to the historic significance of the site. Although a path likely existed to enable pedestrian and vehicle circulation through the site during the historic period, no documentation has been located to verify its configuration or condition.

Walkway over dam

Historic Condition:

The walkway over the dam did not exist during the historic period.

Existing Condition:

A wood walkway is constructed over an earthen dam separating the Enlarged Erie Canal from the reproduced dry dock gates and exposed dry dock bays. The walkway extends east-to-west roughly parallel to the Enlarged Erie Canal.

Evaluation: *Non-contributing*

Although it provides a unique vantage point by which to circulate through the site and observe the relationship between the dry dock bays and Enlarged Erie Canal, the wood walkway did not exist during the historic period and does not contribute to the historic significance of the site.

Concrete sidewalk

Historic Condition:

The concrete sidewalk did not exist during the historic period.

Existing Condition:

A concrete sidewalk is located between the south entrance door of the reproduced Store and Warehouse Building and the north deck and walkway of the building.

Evaluation: *Non-contributing*

The concrete sidewalk does not contribute to the historic significance of the site.

Wood staircases

Historic Condition:

Although a means of access was probably present in the dry dock bays during the historic period, no documentation has been located indicating the presence of staircases in the dry dock bays.

Existing Condition:

Wood staircases are located in the southwest corner of each of the dry dock bays, allowing access into the bays for repair and observation.

Evaluation: *Non-contributing*

While they provide a close-up view of the exposed dry dock bays, their materials and construction, the existing wood staircases do not contribute to the historic significance of the site.

Enlarged Erie Canal (watercraft circulation)

Historic Condition:

The Enlarged Erie Canal was used for commercial and personal transport by canal boats during the historic period. Commercial watercraft circulation ceased with the closure of this portion of the canal in 1918.

Existing Condition:

Personal watercraft such as canoes and kayaks may use the flooded portion of the canal that bypasses the dry dock complex.

Evaluation: *Non-contributing*

The Enlarged Erie Canal has historically been used for watercraft circulation. Although it is no longer used for the commercial traffic, the use of the canal for watercraft is significant, but there is no existing relationship to the interpretive landscape of the dry dock complex.

4.3.6 Constructed Water Features

Constructed water features at Chittenango Landing include the Chittenango Canal, the Enlarged Erie Canal, the three dry dock bays, sluiceway, limestone retaining and bullnose walls, and an earthen dam. These features form a system that is the primary focus of interest and interpretation within the landscape based on their historic functions (where applicable) and significance to the site. Presently, the system does not function as it did historically, but some of the individual components are operational. Constructed water features are a key contributor to the historic significance of Chittenango Landing. The constructed water features collectively retain a high level of historic integrity.

Chittenango Canal

Historic Condition

The Chittenango Canal is a man-made waterway constructed in 1818 to link the original Erie Canal to the Village of Chittenango located just over a mile to the south. When the Enlarged Erie Canal was built in

1855-1856, use of the Chittenango Canal as a lateral canal was likely compromised. The larger boats of the Enlarged Erie Canal would not have been able to navigate the narrower, shallower side-cut canal, and would have also been impeded by the bridge across the Chittenango Canal providing entry to the dry dock complex. The construction of the dry dock bays c. 1856 took advantage of the confluence of these two waterways, using the Chittenango Canal as a turnaround for canal boats, as well as a temporary dock. In addition, the portion of the Chittenango Canal between Chittenango Creek and the Enlarged Erie Canal continued to serve as a feeder canal. The Chittenango Canal was built as a simple channel with earthen banks, and remained unimproved throughout the nineteenth century. It reportedly fell into disuse by 1860.

Existing Condition

The Chittenango Canal runs along the eastern border of the dry dock complex. The portion of the Chittenango Canal north of the bridge from the museum parking lot into the dry dock site has been improved, with a maintained lawn on both sides, young trees planted along the east bank, and riprap placed on the western bank north of the bridge in the 1990s. The portion of the Chittenango Canal south of the bridge displays considerable vegetation along its bank as well as trees providing a vegetative corridor looking south and screening adjacent houses and yards along the eastern edge of the canal.

Evaluation: *Contributing*

At one time, the Chittenango Canal linked commercial water traffic from the Village of Chittenango to the Erie Canal, but that route is no longer intact. However, the Chittenango Canal still intersects the Enlarged Erie Canal at Chittenango Landing, and water still flows through the Chittenango Canal across the site. Despite the fact that the Chittenango Canal was modified off-site and can no longer support boat traffic from the Village, the appearance of the canal contributes to the historic character of the property. The Chittenango Canal is a contributing landscape characteristic, and is critical to understanding the function and purpose of the dry dock complex.

Enlarged Erie Canal

Historic Condition

The Enlarged Erie Canal was built c. 1856, approximately a half mile south of the original location of "Clinton's Ditch." The Enlarged Erie was built at a greater width and depth than the original canal to accommodate larger canal boats as canal traffic demanded. The original wood retaining walls of the canal were replaced in 1897-1898 with limestone, which was also laid at the bullnose at the confluence of the Erie Canal and Chittenango Canal. Following the closure of the Erie in 1918, no further maintenance was likely

undertaken along the stretch of the canal that bypassed the dry docks, though it did remain flooded and open to personal watercraft.

Three sections of limestone retaining walls are located adjacent to the dry dock, the Enlarged Erie Canal, and the Chittenango Canal. These bullnose and laid stone walls were constructed in 1897-1898 when the canal in the immediate area was drained so improvements could be made. The stone walls replaced earlier vertical wood retaining walls. From west to east, the first stone retaining wall forms the south edge of the Enlarged Erie Canal and the western side of the entrance to the dry dock. A second stone wall forms the eastern side of the entrance to the dry dock and the western edge of the Chittenango Canal. A third stone wall forms the eastern edge of the Chittenango Canal and the south edge of the Enlarged Erie Canal, with some wood elements present on the northeast bank of the Chittenango Canal.

Existing Condition

The Enlarged Erie Canal that bounds the site is part of a 35-mile section of the canal that follows the original route from Dewitt to New London. This is the only sizeable section of the Enlarged Erie Canal that is still flooded. The canal is maintained at a depth of three feet rather than the original seven feet. The limestone and bullnose walls remain largely intact, but exhibit some deterioration or need of maintenance. Sections of the stone walls have been rebuilt in their original locations. Capstones have not been replaced in all sections.

Evaluation: *Contributing*

Constructed in 1855-1856, and remaining in its historic location since, the Enlarged Erie Canal is a contributing landscape characteristic to the historic significance of the dry dock complex. The appearance of the canal, with a slow moving current, contributes to the historic character of the property. Though the canal has lain dormant as a commercial waterway for almost a century, the relationship to the dry docks is critical to understanding their function, and the reason for their construction. The remaining limestone walls are contributing landscape characteristics as they retain a fair amount of integrity, and are critical parts of the dry dock infrastructure.

Three-Bay Dry Docks

Historic Condition

The three-bay dry docks were constructed in 1856-1857 at the juncture of the Enlarged Erie and Chittenango Canals. The walls of the dry docks were constructed with rubble walls on the east and south

sides of the light bay, and mortared limestone in the remaining walls. When the dry docks were originally constructed, the bays functioned entirely independently of each other in order to service three boats at one time. The easternmost bay (the light dock) was intended for the repair of empty canal boats, and is the shallowest of the three bays. The middle bay (the hundred-ton dock) was intended for the repair of partially loaded boats, and is one foot deeper than the light dock. The westernmost bay (the loaded dock) was intended for repair of fully-loaded canal boats, and is eight feet deep. This extra depth allowed maneuvering room for repairs to the bottom of loaded boats. The location of the Chittenango Canal allowed for boats to turn in and out of the dry dock bays in absence of a turning basin, as was found at other Erie Canal dry docks.

The dry docks were in near continuous operation from their construction in 1856 until the closure of the Enlarged Erie Canal in 1918 (with a brief period of dormancy around 1910 when ownership was changing). Following the closure of the canal, the dry docks were filled with debris and earth, and many of the stones from the walls reportedly were removed during the construction of the New York State Thruway to be used as fill.

Existing Condition

The three bays of the dry dock have been fully excavated and their original dimensions and configuration exposed. The dry dock bays include exposed original timbers and floors, rebuilt walls, reproduced gates, and are protected from the canal waters by an earthen dam. The remaining portions of the light and medium bay floors are constructed of wood, and the floor of the heavy bay retains some original wood and concrete sections. Portions of the walls of the dry dock bays have been repaired, but the dry docks are not functional. After the bays were excavated, the gates to all three were reproduced in 1990-1991 based on evidence discovered on the site. The light and middle bay gates were built as drop gates, which operate on three wrought iron hinges at its base, reproduced to match originals found on the site. Originally, the gate was operated with a heavy double winch. The heavy bay gate was reproduced as a miter gate, as all three gates were originally constructed as depicted in the c. 1875 photo (Figure 2.10).

The walls of the dry docks have been rebuilt with modern stone atop original stone walls that were exposed during the 1987 and 1988 excavation of the site. The west wall of the heavy bay was primarily undisturbed, except for a portion near the gate, which was repaired in the 1990s. The middle bay walls were rebuilt with rough cut limestone and mortared in place, in 1995. The riprap sloped walls of the light bay was rebuilt in 1995 using stones uncovered during excavations.

Evaluation: *Contributing*

The three-bay dry docks are a contributing landscape characteristic. Despite the fact that the dry dock bays are no longer functional, many of the essential elements are visible and contribute significantly to the historic character of the property. Though they have been rebuilt with a mix of original and non-original materials, the dry dock bays retain integrity of location, setting, feeling and association, while likely exhibiting similar materials and workmanship to when they were first built and in operation.

Sluiceway

Historic Condition

The sluiceway was constructed as part of the dry docks in 1856 in order to aid in drainage and flooding of the dry dock bays when necessary, as the site of the dry docks did not offer the natural advantage of topography for drainage. The sluiceway runs approximately 1,700 feet from Chittenango Creek on the west to the heavy bay of the dry docks, and continues under all three dry dock bays. Cast iron paddle gates were used to control the flow of water into the sluiceway in the light and middle docks, while two valve gates were used in the heavy dock.

Existing Condition

When excavation began in 1986, the underground portion of the sluiceway was plugged with concrete and earth and no longer functional. The sluiceway was excavated in 1987, with a pipe laid from the dry dock bays to the west of the store and warehouse foundation in 1988, and the wood box portion beneath the bays partially reconstructed in 1989. The walk covering the sluiceway was reproduced in red oak over a pressure-treated yellow pine framework. For the first 150 feet (130 of which are underground), the sluiceway is a four-by-four foot box, with walls of dry laid limestone. The original stone walls remain in place, but the timber floor and top were not reconstructed. Originally, the entire 150-foot length of the sluiceway was underground, but during excavation and repair, the last 20 feet of the rebuilt sluiceway were left exposed to show the construction. From the end of the dry laid walls to Chittenango Creek, the sluiceway is an open ditch with sloping sides reinforced occasionally with fieldstones. The paddle gates were discovered during excavation, and the valve gates were reproduced in red oak.

Evaluation: *Contributing*

The sluiceway (with associated gates) is historically significant and a contributing landscape characteristic. Though it has been rebuilt with non-original materials, it retains integrity of location, design, setting, feeling association, and workmanship.

4.3.7 Buildings and Structures

Numerous buildings and structures existed at the dry dock complex during the historic period. The buildings constructed at the site during the historic period reflected the functions that were operational at the dry dock complex. Some buildings (e.g. the store and warehouse, and blacksmith shop) were operational for several decades, while others were temporary or otherwise short-lived. Following the closure of the Enlarged Erie Canal in 1918, the only remaining buildings were the main and tenant houses, and a small barn that was allegedly comprised of a relocated portion of the store and warehouse building. By 1972, all structures at the site were demolished. Between 1991 and 2010, three of the former buildings from the historic era were reproduced atop their original foundations.

Store and Warehouse

Historic Condition

The store and warehouse building was historically located northwest of the dry docks, immediately south of the Erie Canal. It is believed to have been constructed between 1859 and 1875. A structure is first noted at this location on an 1859 map, and the store and warehouse is depicted in the circa 1875-1890 photograph of the dry docks as a side-gabled structure with board-and-batten siding. The store and warehouse is believed to have been divided in half in the 1920s, with a portion moved south of the dry docks and serving as a barn for the property owner (which was subsequently demolished in 1972).

Existing Condition

The current store and warehouse was rebuilt atop its original foundation in 1990-91, using the ca. 1874-1890 photograph as guidance for its appearance. The reproduced store and warehouse originally served as the interpretive center and museum building for the Chittenango Landing dry dock complex, and currently is used as part of the interpretation of the dry dock site. The uncovered porch on the south side of the building shows signs of deterioration, particularly near the walls of the building, porch stairs, and the doorsill. The porch stairs on the west façade of the building also exhibit deterioration.

Evaluation: *Non-contributing*

The store and warehouse building is a modern reproduction and does not contribute to the significance or integrity of the dry dock site. As only two facades are visible in the ca. 1874-1890 photograph, the full construction and appearance of the original building is unknown. Therefore the accuracy of the reproduced building to the original store and warehouse is unknown.

Outhouse

Historic Condition: While it is likely an outhouse was present at the dry dock site during the historic period, there is no record of any building present in this location.

Existing Condition: The outhouse is located near the southwest corner of the store and warehouse building on a wood-covered steel beam bridge spanning the sluiceway.

Evaluation: *Non-contributing*
The outhouse does not contribute to the historic significance of the cultural landscape.

Stable

Historic Condition
Stables are noted southwest of the dry docks and immediately west of the blacksmith and sawmill complex on several historic maps during the historic period. A structure is depicted in the location of the stables in the circa 1875-1890 photograph, and noted on Sanborn and other historic maps from 1890-1911. The stables were originally two buildings in an L-shaped configuration. An explosion in April 1906 at an adjacent structure damaged or destroyed the southern portion of the stables, and only a single structure is depicted on the 1906 and 1911 Sanborn maps in this location. No building is noted in this location on the hand-drawn map depicting the site from 1936-1940.

Existing Condition
The current stable is a one-story building with a rectangular plan, and was constructed in 2010, using the ca. 1874-1890 photograph as guidance for its appearance. It currently is used as part of the interpretation of the dry dock site. The building is in good condition with no obvious signs of deterioration, but does not currently provide universal access.

Evaluation: *Non-contributing*
The current stable building is a modern reconstruction and does not contribute to the significance or integrity of the dry dock site. As only two facades are visible in the ca. 1874-1890 photograph, the full construction and appearance of the original building is unknown. Therefore the accuracy of the reconstructed building to the original stables is unknown. The interpretive value of the stable is important for visitors to understand the functions of buildings that were part of the original, working landscape of the dry dock complex.

Blacksmith and Sawmill Complex

Historic Condition

The blacksmith and sawmill complex was comprised of a series of interconnected buildings located immediately south of the dry dock bays during the historic period. The buildings are first depicted on the 1890 Sanborn map as a series of three structures, with a blacksmith noted on the left, a boat shop in the middle, and a lumber shed on the right. The complex grew to include an engine room and rear shed on the 1895 and 1900 Sanborn maps, both which were destroyed in an April 1906 explosion. By the time of the 1911 Sanborn map, the building is depicted as containing the blacksmith shop on the left, and a large lumber shop comprising a single building to the right. The buildings were likely removed following the closure of the Enlarged Erie Canal and the dry dock business. A 1927 DPW map notes a structure at this location but does not label it, but it was likely the barn that is known to have been present on site at this time.

Existing Condition

The current blacksmith and sawmill complex was reconstructed atop its original foundation in 1994, using the ca. 1874-1890 photograph, as well as Sanborn maps, and a 1906 newspaper article and photograph as guidance for its appearance and layout. The discovery of the remains of an original blacksmith forge found during archaeological excavations also aided in the placement of the building and current blacksmith forge. The reproduced buildings are currently used as part of the interpretation of the dry dock site. The buildings are in generally good condition, although the base of the north façade exhibits some deterioration due to contact with the ground and frequent damp conditions. The reproduced building is not universally accessible.

Evaluation: *Non-contributing*

The current blacksmith and sawmill building is a modern reproduction and does not contribute to the significance or integrity of the dry dock site. As only the roof and one portion of a facade is visible in the ca. 1874-1890 photograph, the full construction and appearance of the original building is unknown. Therefore the accuracy of the reconstructed building to the original blacksmith and sawmill complex is unknown. The interpretive value of these buildings is important for visitors to understand the functions of buildings that were part of the original, working landscape of the dry dock complex.

Bridge

Historic Condition

A bridge has historically provided access to the dry dock complex from the east side of the Chittenango Canal for over a century. The original bridge was likely constructed around the time the dry docks were built circa 1856-57, but is not noted on a map until the 1890 Sanborn map. It is depicted in this location on many subsequent historic maps. The bridge was likely originally constructed of wood and wide enough to accommodate wagon traffic in and out of the dry dock site throughout the historic period.

Existing Condition

The current bridge was rebuilt in 1997 following a collapse that year. It has a concrete deck and measures 29 feet long by 14 feet wide with weathered steel barriers spanning the length of the bridge on its north and south sides.

Evaluation: *Non-contributing*

While the presence of a bridge is important for understanding the way the dry dock complex has historically been accessed, the current bridge does not contribute to the historic significance of the site. The bridge is constructed of modern materials and is engineered to accommodate vehicles that were not present during the historic period.

Canal Boat Model

Historic Condition

The canal boat model did not exist in the historic era.

Existing Condition

The canal boat model is a ¾-scale, sectional reproduction of an Erie Canal boat on a concrete pad beneath a pavilion. It is an interactive exhibit and teaching tool designed to allow visitors to see the construction methods and functions of a canal boat, supplemented by museum staff interpretation. The replica is sited southeast of the light bay of dry docks to emulate the presence of a boat in this location in the c. 1874-1890 photograph, that may have been built or in the process of being repaired at the site.

Evaluation: *Non-contributing*

The canal boat replica is not an historic feature and does not contribute to the significance of the site. The pavilion's construction materials are generally consistent with the materials and design of the other reconstructed buildings on site. Although the canal boat and pavilion do not contribute to the historic significance of the site, they are important interpretive exhibits that help visitors understand the range of canal boat-related activities that formerly occurred at the site. However, the pavilion detracts from the historic character of the site due to historically incompatible materials and form.

Earthen Dam

Historic Condition

The earthen dam between the dry docks and canal did not exist in the historic period.

Existing Condition

A compacted earthen dam exists in the same location as when it was constructed in 1987 to retain canal water during site excavation. The dam runs parallel to the Erie Canal between the dry docks and the canal. A wooden walkway runs over the dam, allowing for visitors to view the dry dock complex from multiple angles. The walkway exhibits warping due to exposure to the elements, and is not universally accessible. An apparent flow of water near the wall of the heavy bay north of the drop gate indicates the possibility of a leak in the earthen dam.

Evaluation: *Non-contributing*

The earthen dam is not a historically significant feature or contributing landscape characteristic. Although it was not present during the historic period, the dam helps protect and preserve the historic features of the dry dock bays.

Storage Building

Historic Condition

The storage building did not exist in the historic period.

Existing Condition

A white metal semi-trailer is located in the open space at the northwest corner of the site. It is currently used for storage.

Evaluation: *Non-contributing*

The storage building does not contribute to the historic significance of the site. The presence of the storage building detracts from the historic character of the cultural landscape.

4.3.8 Views and Vistas

As it is a vernacular landscape, views to, within and from the dry dock complex are not designed. The most important views to and within the site during the historic period would have been limited to the working landscape. Following the closure of the canal, views to and from the site would have revealed little beyond residential and agricultural activity, and from 1972-1986 would have not shown anything at the site, as it lay dormant.

View from Erie Canalway Trail to Site

Historic Condition

The towpath along the Enlarged Erie Canal was constructed in association with the canal c.1855-1856. The view from the towpath into the dry dock complex from the mid-nineteenth century to the closure of the Enlarged Erie Canal in 1917 (the historic period) would have shown the working landscape in a similar condition to the c. 1875 photograph (Figure 2.10). From 1918 to 1972 the view would have been of the primarily residential function of the site. From 1972 to 1985 the view would have been of the deterioration and overgrowth of the site with vegetation. Following the clearing and excavation of the site in 1986, the view would have included the partially exposed dry docks, and continued over subsequent years to include the reconstruction of various buildings as well as the dry dock walls.

Existing Condition

The current view from the towpath looking into the site is similar to a late-nineteenth-century photograph into the site (see Figure 2.10). From this vantage point the arrangement of buildings and their relationship to the Enlarged Erie Canal is readily apparent.

Evaluation: *Contributing*

The view from the Erie Canalway Trail and towpath contributes to understanding the site's relationship with Enlarged Erie Canal and therefore contributes to its historic significance. The late-nineteenth-century photograph of the site from the towpath (Figure 2.10) provides one of the most complete and detailed images of the site during the period of the dry dock complex's operation (i.e., 1856-1917). This photograph has served as the inspiration and one of the primary sources to guide the reconstruction of the buildings associated with the dry dock complex. The contemporary view from the towpath provides an opportunity for

visitors to consider the existing location, arrangement, and appearance of reconstructed and historic features on the site relative to their historical condition.

View from Dry Dock Complex Entrance (west side of bridge over Chittenango Canal)

Historic Condition

The view from the entrance bridge into the dry dock complex would have been of the working landscape from 1855 to 1918, focusing around the blacksmith and sawmill complex, which is the closest building to the entrance. Views of the stable, houses and dry docks would also have been available, and the site would have been very active during these years, prior to the closure of the Enlarged Erie Canal. From 1918 to 1972 the view would have limited to the residential functions of the site, as buildings were demolished following the closure of the dry docks and associated structures. The view prior to the clearing of the site in 1986 would have been limited to trees and shrubs. Following the clearing and excavation of the site in 1986, the view would have included the partially exposed dry docks, and continued over subsequent years to include the reconstruction of various buildings as well as the dry dock walls.

Existing Condition

The current view from the entranceway is similar to the historic view into the site, in that the viewer is allowed visual access to the activities surrounding the dry docks, although the site does not function in the same way.

Evaluation: *Non-contributing*

Though the view from the entranceway adds to understanding of the site, it does not contribute to its historic significance due to the introduction of reproduced buildings and non-original site features (such as the canal boat model and modern amenities) that compromise the integrity of the historic view.

View from Site along Enlarged Erie Canal

Historic Condition

The view along the Enlarged Erie Canal from its construction in 1855 to its closure in 1918 would have included canal traffic passing the dry docks, or canal boats coming to the dry docks for repair. The view along the canal following its closure would have been limited, due to the lack of boat traffic in the canal. Between 1972 and 1985 the site became overgrown with successional shrub vegetation, which would have screened outward views from within the site towards the canal. With the rise of personal watercraft such as

canoes and kayaks in the late twentieth century, some recreational use of the canal waters and adjacent towpath would likely have been available in the late twentieth century, with a view of the Lakeport Road bridge over the canal immediately to the east.

Existing Condition

The current view along the canal is limited to the towpath on the north side of the canal, which is used as a pedestrian and bicycle path, and of the Lakeport Road bridge over the canal to the east. A twentieth century residence is located on the north side of the canal immediately adjacent to Lakeport Road.

Evaluation: *Non-contributing*

This view does not contribute to the historic significance of the site. While a view of the Enlarged Erie Canal was available during the historic period, the view would likely have consisted of the towpath and woods land north of the canal. The introduction of a twentieth century residence compromises the historic integrity of the view.

4.3.9 Vegetation

There is no evidence to suggest that vegetation at the site ever followed a formal planting plan or other intentional scheme. The available historic maps and photographs (to the extent they provide information concerning vegetation) suggest that vegetation reflected vernacular and/or utilitarian patterns according to the land use at the site during various periods. That said, specific aspects of existing vegetation patterns at the site do appear to follow or mimic characteristics of earlier periods and help to define the spatial organization of the site.

No documentation exists of vegetation at the dry dock complex site prior to the mid-to-late nineteenth century. The ca. 1875-1890 photograph from the towpath (see Figure 2.10) shows large trees behind the dry docks and adjacent buildings, which are likely located along Chittenango Creek. Trees are also visible to the north of the tenant house and east of the main house, though they cannot be identified from the photo. Some small, unidentifiable vegetation is visible near the water's edge, and taller vegetation (possibly hay) is visible south of the tenant house. The early twentieth century photograph (Figure 44) shows a large, defoliated tree immediately adjacent to the tenant house, and the tops of two defoliated trees southeast of the main house. An undated photograph (Figure 46) looking west from the Lakeport Road bridge over the canal shows tall trees in front of the main house, with other vegetation visible to the north of the house.

A vegetation survey was conducted from 1987 to 1990 by Museum staff. A total of 79 plants were identified, with 39% of the plants determined to be native to North America (e.g. box elder, black walnut, poison ivy, white ash) and

59% the plants determined to have been introduced to the area (e.g. catnip, dandelion, garlic mustard, red maple). The remaining plants were identified as ornamental (e.g. poppy) or rare (e.g. day lily, guelder rose).

As noted in Section 2.4, an extensive overgrowth of box elder was removed the site was cleared in 1987. A photograph from April 1987 (Figure 2.22) shows the site following the clearing of the box elder, with two, large trees remaining. The 1987 archaeology base map (Figure 2.23) identifies a sixteen foot apple tree west of the heavy bay. The 1991 Archaeology Status Site Map (Figure 2.26) notes the apple tree, as well as a maple tree northeast of the main house, and a memorial oak east of the tenant house. The maple tree is visible in a 1992 photograph of the partially restored dry docks and reconstructed store house. A smaller tree is visible to the east of the maple. None of these trees remain on site in 2013.

Riparian Vegetation

Historic Condition

The presence of shrub or forested vegetation along Chittenango Creek during the historic period is suggested on early cartographic depictions of the site (e.g., the 1852 Holmes and 1854 Walrath maps; Figures 2.6 and 2.7). A tree-lined corridor along the course of the creek, composed of what appear to be mixed hardwood species, serves as a backdrop to the dry-dock complex in the ca. 1875-1890 photograph from the towpath (Figure 2.10). Maps, aerial photographs, and photographs from the mid-to-late twentieth-century all consistently show forest vegetation along the riparian corridors associated with Chittenango Creek, Chittenango Canal, and sluiceway.

Existing Condition

The riparian corridors along Chittenango Creek, the Chittenango Canal, and sluiceway/south side of the Enlarged Erie Canal (within the western part of the site) are all presently in either forested condition or are defined by hedgerows of mature, well-established deciduous trees and shrubs.

Evaluation: *Contributing*

The well-established riparian corridors around the boundaries of the site are significant contributing features to the landscape. Mature trees and shrub vegetation along the riparian corridors have historically (and currently) served to define the spatial and visual boundaries of the site. The mature vegetation along these corridors provide a visual backdrop and block outward views from the site towards the south, east, and west/southwest. This contributes to the interpretive experience by screening views of off-site, unrelated, modern features that would otherwise interrupt visitors' ability to experience the historic character of the site.

Open Yard

Historic Condition

The ca. 1875-1890 photograph of the dry-dock complex from the towpath (Figure 2.10) depicts open yard, possibly with low scrubby grass and/or bare earth, in the work spaces around the dry docks and adjacent buildings. It is reasonable to assume that this open yard condition persisted throughout the historic period. Based on aerial photographs and other historic documentation, the open character of the yard area around the docks appears to have persisted through the mid-1960s. During the period between 1972 and 1985 the formerly open character of the yard was replaced by successional shrub and forest vegetation.

Existing Condition

Most portions of the site, including the area around the dry dock complex, are presently located within a maintained open yard, includes areas of mowed grasses as well as driveways and paths surfaced with crushed-stone and/or bare earth.

Evaluation: *Contributing*

The open yard around the dry dock complex and associated reproduced buildings is consistent with the condition of the site during the period of dry dock operations (c. 1856-1917) and subsequent residential occupation of the property (c. 1918-1971) and contributes to the significance of the site. The informal, utilitarian character of the yard, pathways, and driveways is appropriate to the interpretation of the site as a historic working landscape. While the open yard was used for agriculture in the mid-to-late twentieth century, its integrity is not compromised by maintenance of the yard as this was not a known condition during the historic period.

Specimen Trees

Historic Condition

Various specimen trees and other plantings are shown in late-nineteenth and early-twentieth-century photographs of the site (Figures 2.10, 2.15 and 2.17). These show trees generally planted in yard areas adjacent to the houses and other buildings located on site. There are no maps, plans, or other sources that indicate specimen trees and/or other plantings at the site followed a formal plan or were placed in an intentional manner during the historic period.

Existing Condition

Individual specimen trees (including Norway maples, sugar maples, spruce, and sycamores) are located around the open yard area and adjacent to structures within the site. The selection of species and placement of trees is generally appropriate given that there is no formal historic planting plan that would inform the location or types of plantings around the site.

Evaluation: *Non-contributing*

Specimen trees do not contribute to the historic significance of the site. While specimen trees are noted to have been present adjacent to the main and tenant houses during the historic period, their type and spatial arrangement is not documented, and they are no longer extant. Elder trees possibly dating to the historic period that were present on site following the clearing of the site in the 1980s have been removed. The current specimen trees on site not follow any planting plan that is historically significant.

4.3.10 Small-Scale Features

Throughout the history of the dry dock complex, numerous small-scale features have been located throughout the site. Most of these features were likely temporary or existed to serve a specific purpose related to the functions of the site at the time, and were later removed. Some of these historic features have been restored, and additional amenities have been added to reflect the current, interpretive use of the site.

While they are valuable for the interpretive mission of the site in helping convey the usage of the dry docks for boat repair, the miscellaneous objects at the dry dock complex do not contribute to the historic significance of the site due to their later addition. Locations of small-scale features are indicated on Drawing 4.

Pitching Kettle

Historic Condition

The pitching kettle first appears on the 1890 Sanborn map, though it was likely present at the dry docks prior to this date, and used in the repair of canal boats. It appears on subsequent Sanborn maps through 1911, but is absent from the 1951 Sanborn map.

Existing Condition

The pitching kettle was exposed in 1987 but not excavated until 1994. The pitching kettle is currently located south of the light bay, suspended by chains attached to a wood frame above a brick floor. Although the original materials and method of hanging the pitching kettle are unknown, it is located in its historically

correct location according to the Sanborn maps, as well as evidence of pitch found during archaeological excavations in the early 1990s.

Evaluation: *Contributing*
The pitching kettle is an original site feature that aids in the interpretation and understanding of the site, and contributes to the historic significance of the site.

Boiler

Historic Condition: The boiler was not present at the site in the historic period.

Existing Condition: The boiler is located on the south side of the main volume of the reproduced blacksmith and sawmill complex. It was relocated to the site in the mid-1990s based on the location of a boiler in this vicinity on historic maps.

Evaluation: *Non-contributing*
The boiler does not contribute to the historic significance of the site. While a boiler was known to have existed on site during the historic period (and was involved in a catastrophic accident in 1906), the boiler currently located at the site is not an original feature.

Cleat

Historic Condition: The cleat was not present at the site in the historic period.

Existing Condition: The large horn cleat is fastened to a movable wooden stand located at the south end of the middle dry dock bay.
Evaluation: *Non-contributing*
The cleat does not contribute to the historic significance of the site.

Capstan

Historic Condition: The capstan was not present at the site during the historic period.

Existing Condition: A two-foot-tall rusted metal capstan is located on the limestone wall at the south end of the heavy bay.

Evaluation: *Non-contributing*
The capstan does not contribute to the historic significance of the site.

Unidentified Item 'A'

Historic Condition: Unidentified item 'A' was not present at the site during the historic period.

Existing Condition: A two-foot-tall by two-foot-wide scoop-shaped object with curved metal handle s located between the bollard and the cleat at the south end of the heavy dock.

Evaluation: *Non-contributing*
The unidentified item does not contribute to the historic significance of the site.

Anchor

Historic Condition: The anchor was not present at the site during the historic period.

Existing Condition: A yellow-painted boat anchor is attached to a wood post at the southwest corner of the heavy dock. The anchor and wood post measure approximately three feet high.

Evaluation: *Non-contributing*
The anchor does not contribute to the historic significance of the site.

Wagon

Historic Condition: The wagon was not present in the historic period.

Existing Condition: A wood wagon is located west of the rope-fenced tenant house foundation. The wagon has four red-painted wheels and measures three feet wide, three-feet six inches high, and twelve feet long.

Evaluation: *Non-contributing*

The wagon does not contribute to the historic significance of the site.

Winch

Historic Condition: The winch was not present at the site during the historic period.

Existing Condition: A metal winch is mounted on the limestone wall at the north end of the wall separating the light and middle bays. It was transported to the site from the Chittenango Pottery complex located across Lakeport Road.

Evaluation: *Non-contributing*

The winch does not contribute to the historic significance of the site.

Permanent Benches

Historic Condition: Permanent benches were not present at the site during the historic period.

Existing Condition: Five permanent benches with red-orange painted wood slats and concrete legs are located at the site.

Evaluation: *Non-contributing*

The permanent benches do not contribute to the historic significance of the site.

Movable Furniture

Historic Condition: Movable furniture was present at the site during the historic period.

Existing Condition: Non-permanent wood picnic tables and benches are often located on site, which are positioned around the site depending on need and functions.

Evaluation: *Non-contributing*

Movable furniture present on site does not contribute to the historic significance of the cultural landscape.

Flagpole

Historic Condition: The flagpole was not present at the site during the historic period.

Existing Condition: A flagpole approximately twenty-five feet tall is located east of the store and warehouse building. A small brass memorial plaque is mounted on a wood post at the base of the flagpole.

Evaluation: *Non-contributing*
The flagpole does not contribute to the historic significance of the site.

Modern Amenities

Historic Condition: Modern amenities were not present at the site during the historic period.

Existing Condition: Several modern amenities have been added to the site surrounding the dry dock complex: wood and rope fences surround the house foundations and dry docks and benches and wooden picnic tables are also distributed around the site. Aluminum railings are located along the south end of the dry docks, as well as along the canal wall north of the store and warehouse building, and a small section located northeast of the light bay, while simple chain fences are located on the east and west sides of the dry docks and connect to the aluminum railings on the north and south ends. Wood staircases are located at the southwestern corner of each dry dock bay, though they are made inaccessible to the public by the aluminum railings.

Evaluation: *Non-contributing*
Modern amenities present on site do not contribute to the historic significance of the cultural landscape.

4.3.11 Archaeological Features

Since the "rediscovery" of the dry dock complex in 1986, much of the understanding of the site layout and relationship between buildings, as well as their functions, has been revealed and verified through an extensive archaeological program. A summary of previous archaeological investigations at the site is included in Appendix B. While three buildings have been reconstructed atop or in the vicinity of foundational remains, some archaeological features remain exposed at the site to serve as teaching and interpretive tools for visitors to understand the site.

Main House Foundation

Historic Condition

The main house foundation served as the foundation of the main house from its mid-nineteenth century construction throughout the historic period, until being demolished in 1972.

Existing Condition

The main house foundation is located south of the reconstructed store and warehouse building, and is surrounded by rope barriers strung through wood posts. Portions of the foundation, including a well, are exposed, though not stabilized. The foundation is not fully excavated, and grass is growing between the exposed walls.

Evaluation: *Contributing*

The main house foundation is all that remains of a house that stood at the dry dock complex for over a century before its demolition in 1972. The feature retains integrity of location, setting, context, and materials, and contributes to the historic significance of the site.

Tenant House Foundation

Historic Condition

The tenant house foundation served as the foundation of the tenant house from its mid-nineteenth century construction until being demolished in 1972.

Existing Condition

The tenant house foundation is located south of the main house foundation, and is surrounded by rope barriers strung through wood posts. Only a few stones are exposed, and the foundation is primarily covered by earth and grass.

Evaluation: *Contributing*

The tenant house foundation is all that remains of a house that stood adjacent to the dry dock complex for over a century before its demolition in 1972. The feature retains integrity of location, setting context, and materials, and contributes to the historic significance of the site.

"Mystery" Foundation

Historic Condition

While it is likely that the foundation dates to the historic period of the site, previous archaeological investigations of this feature were inconclusive as to its original function, and no structures are indicated in this location on historic maps.

Existing Condition

The mystery foundation is located immediately west of the heavy bay of the dry dock. It is comprised of several partially buried stones tracing the outline of the foundation. The foundation has been filled in with earth and is covered with grass.

Evaluation: *Contributing*

Though the function of the structure once located atop the mystery foundation is unknown, the artifacts that have been excavated from the foundation have provided valuable information into the habits of the occupants and users of the dry dock complex. Additional historical research and/or archaeological investigation could determine the function and age of this feature. The mystery foundation retains integrity of location, setting context, and materials, and contributes to the significance of the dry dock complex.

Unidentified Stone Feature 'A'

Historic Condition

While it is likely that Unidentified Stone Feature 'A' existed during the historic period, its historic purpose and relationship to the dry dock complex is currently unknown. Historic maps are inconclusive as to the presence of a structure at this location.

Existing Condition

The stone feature is comprised of a partially disturbed approximately three-foot-wide by eight-feet-deep dry-laid stone wall, located in a heavily vegetated area on the west side of the Chittenango Canal, approximately 220 feet southeast of the reproduced blacksmith and sawmill complex.

Evaluation: *Potentially contributing*

Further archaeological exploration is required to potentially identify the relationship of Unidentified Stone Feature 'A' to the dry dock complex and surrounding site. The feature has the potential to yield information significant to our understanding of the site and is therefore potentially contributing feature.

Unidentified Stone Feature 'B'

Historic Condition

While it is likely that Unidentified Stone Feature 'B' existed during the historic period, its historic purpose and relationship to the dry dock complex is currently unknown.

Existing Condition

The stone feature is comprised of a dry-laid stone wall with dislodged stones around it, located in a depression on the west side of the Chittenango Canal approximately 340 feet southeast of the reproduced blacksmith and sawmill complex.

Evaluation: *Potentially contributing*

Further archaeological exploration is required to potentially identify the relationship of Unidentified Stone Feature 'A' to the dry dock complex and surrounding site. The feature has the potential to yield information significant to our understanding of the site and is therefore potentially contributing feature.

Sunken Canal Boat

Historic Condition

The sunken canal boat adjacent to the store and warehouse may have been present during the historic period as canal traffic decreased. This boat was likely left tied in place following the closure of the Erie Canal in 1918, and slowly deteriorated over time.

Existing Condition

The sunken canal boat is submerged in the Enlarged Erie Canal north and immediately adjacent to the reproduced former store and warehouse building. It is partially protected by a cofferdam constructed in 1991 to protect the boat from further deterioration and promote its further study and interpretation.

Evaluation: *Contributing*

The sunken canal boat adjacent to the reconstructed store and warehouse contributes to the significance of the dry dock complex for allowing an understanding of the function of canal boats and their relationship to the dry dock bays.

Archaeological Excavation Tent

Historic Condition

The archaeological excavation tent was not extant during the historic period.

Existing Condition

Staged archaeological excavations occur beneath a steel-framed tent located north of the main house foundation and reproduced store and warehouse. The tent protects a series of benches and archaeological equipment that is used by school groups and other visitors to the site to understand the archaeological process through which much of the site has been revealed and interpreted.

Evaluation: *Non-contributing*

The archaeological excavation tent does not contribute to the historic significance of the cultural landscape.

A summary of cultural landscape features and an evaluation of their historic significance are included in Table 1.

Table 1. Cultural Landscape Evaluation Summary

FEATURE NAME	EVALUATION
Natural Systems and Features	
Chittenango Creek	Contributing
Topography	
Dry Dock Bays	Contributing
Spatial Organization	
Boatyard	Contributing
Open Field	Contributing
Heel Path	Non-contributing
Enlarged Erie and Chittenango Canals	Contributing
Land Use	
No associated features	
Circulation	
Bridge (pedestrian/vehicular circulation)	Non-contributing
Boatyard Road	Non-contributing
Walkway over dam	Non-contributing
Concrete sidewalk	Non-contributing
Wood staircases	Non-contributing
Constructed Water Features	
Chittenango Canal	Contributing
Enlarged Erie Canal	Contributing
Three-Bay Dry Docks	Contributing
Sluiceway	Contributing
Buildings and Structures	
Store and Warehouse	Non-contributing
Outhouse	Non-contributing
Stable	Non-contributing
Blacksmith and Sawmill Complex	Non-contributing
Bridge	Non-contributing
Canal Boat Model	Non-contributing
Earthen Dam	Non-contributing
Storage Building	Non-contributing

FEATURE NAME	EVALUATION
Views and Vistas	
View from Erie Canalway Trail to Site	Contributing
View from Dry Dock Complex Entrance	Non-contributing
View from Site along Enlarged Erie Canal	Non-contributing
Vegetation	
Riparian vegetation	Contributing
Open Yard	Contributing
Specimen Trees	Non-contributing
Small-Scale Features	
Pitching Kettle	Non-contributing
Boiler	Non-contributing
Cleat	Non-contributing
Capstan	Non-contributing
Unidentified Item 'A'	Non-contributing
Anchor	Non-contributing
Wagon	Non-contributing
Winch	Non-contributing
Permanent Benches	Non-contributing
Movable Furniture	Non-contributing
Flagpole	Non-contributing
Modern Amenities	Non-contributing
Archaeological Features	
Main House Foundation	Contributing
Tenant House Foundation	Contributing
"Mystery" Foundation	Contributing
Sunken Canal Boat	Contributing
Unidentified Stone Feature 'A'	Potentially contributing
Unidentified Stone Feature 'B'	Potentially contributing
Archaeological Excavation Tent	Non-contributing

5.0 CONCLUSION AND RECOMMENDATIONS

The Chittenango Landing dry dock complex is an interpretive site that educates the public about mid-to-late-nineteenth century commercial activities focused on the repair of canal boats and the historical importance of the Erie Canal as a primary artery for communication and commerce across New York State. The primary landscape features that support interpretation at the site are the excavated and rebuilt[117] dry dock bays, the Enlarged Erie and Chittenango Canals, and the suite of reproduced buildings that define the Boatyard. Although the introduction of reproduced buildings and non-historic small-scale features somewhat comprises the historic integrity of the site, the landscape retains and evokes a general rural, working character that would have been experienced in its years of operation.

The CLCBM serves as the primary management entity for the Chittenango Landing dry dock complex. The mission statement of the CLCBM is as follows:

> The Chittenango Landing Canal Boat Museum will interpret a nineteenth-century dry dock complex on the old Erie Canal, through preservation, restoration and reconstruction. It will provide the opportunity for visitors from near and far to learn of boat-building and repair of Erie Canal boats, and the social history of the canal era (CLCBM, 2013b).

Educational interpretive programming at the site is a key component of the museum's mission and activities. The CLCBM received approximately 6,500 visitors in 2013, including approximately 1,700 elementary and middle school (primarily 4th grades) students who visited the site as part of school field trips. In addition, the CLCBM hosts a series of special events that attract visitors to the site, including Canal Fest, music events, history talks, a living history re-enactment day, a Kids Camp, Tent and Tag Sale, Holiday Sale, Blacksmith Workshop, an adult Fall Fundraiser, and hosting bicycle rides as part of the "Tuesdays on the Towpath" series featuring a new bike rental program. These programs and events provide opportunities for the public to experience the historic landscape at the dry dock complex.

The conclusions and recommendations presented herein are based on the site history and evaluation of significant (and non-contributing) landscape features as described in this report, as well as the ongoing goals of the CLCBM

[117] The terms "reproduced" and "rebuilt" are used to describe the buildings located within the dry dock complex to avoid confusion with "reconstruction", which is formally defined as a treatment option for historic properties (see Section 5.1). Per *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (National Park Service, 1995), reconstruction is defined as "the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location" and must follow defined standards for research, documentation, and construction. The reproduced buildings in the dry dock complex were generally not rebuilt in accordance with those standards.

staff and volunteers in their role as stewards and interpreters of the site. This discussion includes a general introduction to treatment options for historic landscapes, followed by a series of treatment recommendations, organized according to general policies, programming suggestions, and physical projects that could be implemented at the site.

5.1 Treatment of Historic Landscapes

Treatment recommendations for historic landscapes are based on the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, as well as *A Guide to Cultural Landscape Reports: Contents, Process and Techniques* (Page, et al., 1998) and *NPS-28: National Park Service Cultural Resource Management Guidelines* (NPS, 1998). The four general treatment approaches recognized by the *Standards* are: preservation, rehabilitation, restoration, and reconstruction. These are described as follows[118]:

> **Preservation**: the act or process of applying measures necessary to sustain the existing form, integrity, and material of a historic property. Includes initial stabilization work, where necessary, as well as ongoing preservation maintenance and repair of historic materials and features.
>
> **Rehabilitation**: the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.
>
> **Restoration**: the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by removing features from other periods in its history and reconstructing missing features from the restoration period.
>
> **Reconstruction**: the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

To date, a significant focus of landscape treatment activities at the Chittenango Landing dry dock complex have focused on the reproduction of landscape features and/or structures at the site. These reproductions were based on the locations of structural remains (foundations) as determined by archeological excavation, historic maps, and period photographs, but the research, documentation, and construction methods used for these reproductions were not strictly in accordance with the Secretary of Interior's *Standards*. In general, the rebuilt features on the site have been built with materials that are sympathetic to their original historical condition (e.g., cut limestone ashlar, rough cut lumber) and mimic nineteenth-century vernacular architectural forms. These efforts have been commendable, as they were largely completed with volunteer efforts and made use of the most suitable materials and/or techniques that were available. The site includes both original historic fabric and rebuilt features, so differing approaches to treatment are appropriate depending on the features, circumstances, or objectives involved. The appropriate

[118] From *The Secretary of the Interior's Standards for the Treatment of Historic Properties,* National Park Service, 1995.

circumstances under which each of these approaches apply are described in the following policy recommendations. Because the site includes numerous non-contributing features, including reproductions of the buildings that formerly stood on the site which do not include any original historic fabric, treatment recommendations consistent with the *Standards* are not necessarily applicable for many of the landscape concerns at the site.

5.2 Recommendations

5.2.1 Policy Recommendations

The following policy recommendations provide an overall set of principles and framework for decision making relative to programming and physical treatments (or projects) options that could be considered for the site:

Preserve Original Landscape Features

The recommended primary treatment policy for the Chittenango Landing dry dock complex landscape is preservation of original, significant landscape features. The goal of preservation as a treatment is not to recreate or introduce incompatible features which compromise the historic significance and integrity of a landscape, but to conserve existing site features that convey the significant historical, cultural, architectural, and landscape characteristics of the site. Preservation treatment standards acknowledge the need to retain the historic character of a landscape by protecting historically significant site features and characteristics, and minimizing or eliminating the intrusion of non-historic site features where applicable or feasible. Original, intact landscape features that retain integrity and contribute to the significance of the site include:

- The configuration and original (i.e., not reproduced) portions of the dry dock bays, including the remaining timber cribbing in the floors of all three bays, the base of the masonry walls in all three bays, and most of the western wall in the heavy bay.
- The spatial organization of the site, including the arrangement of buildings (and spaces defined by those buildings), the organization of the Boatyard as the focal point of the site, and the large Open Yard south and southwest of the Boatyard.
- The site boundaries, which are well defined by Chittenango Creek, the Chittenango Canal, and the Enlarged Erie Canal, including the corridor of riparian forest vegetation along Chittenango Creek and the southern portion of the Chittenango Canal, which serve to screen views of adjacent properties and reinforce the integrity of the site's setting.
- The portions of the Chittenango and Erie Canals that define the eastern and northern boundaries of the site, including the masonry walls of the canal prisms and the stone features related to the two canals.

- The buried portions of the sluiceway located underneath the dry dock bays and the western, visible portion of the sluiceway that extends westward from the reproduced Store and Warehouse building.
- The archeological features (including building foundations and the sunken canal boat) within the site, which are readily interpretable, contribute to the overall character and feeling of the site, and have the potential (through further excavation and/or analysis) to contribute additional significant information about the history of the site.

These original, significant features of the site should be preserved and conserved. These features contribute to the integrity of the site (in terms of significance criteria) and also communicate the authenticity of the site, which is critical to visitors' experience and appreciation of the cultural landscape. Any necessary maintenance or repair of these features, or in their immediate vicinity, should be conducted in a manner that does not threaten the integrity or condition of these resources.

Maintain and/or Rehabilitate Site Features that Reinforce the Historic Character of the Site

As noted throughout this document, many of the landscape features (including buildings) on the site are contemporary reproductions of buildings or features that were located on the site during the period of significance. These features should be maintained, and when necessary replaced, in a style, choice of materials, and workmanship that is consistent with the existing features and rural, working character of the site. The extant original, historic features should be maintained (and if necessary rehabilitated) so they are readily apparent to site visitors, but in a manner that does not undermine their integrity. This would include, for example, activities such as maintaining vegetation to ensure that significant site features and spatial organization are not obscured. For non-contributing features that require repair or replacement, choices of material should be appropriate to the character and feeling of the site, and include materials such as stone-dust or crushed stone for pathways and ground surfaces (as opposed to more formal or modern paving materials), period appropriate mortar and/or cement for repair of masonry structures, and use of rough, untreated, un-painted lumber for building repairs or new construction.

Improve Accessibility

The goal for an accessibility policy is to provide consistent access to all site features and afford all visitors an opportunity to experience the dry dock complex. Site improvements should achieve accessibility while maintaining the historic character and feeling of the site, where feasible. Examples of improvement and maintenance activities could include: construction of durable and sturdy ramps, stairs, handrails, and guardrails (where applicable); maintenance of clear circulation routes free of ground plane obstructions; and installation/expansion of firm and stable pathway surfaces. Pathway materials such as stone-dust or crushed stone will need to be maintained and kept at their intended grade/elevation to ensure accessible routes remain within appropriate standards. Note that in

addition to improving site accessibility, building interiors will also need to be evaluated to ensure compliance with accessibility standards.

The National Park Service's Preservation Brief entitled *Making Historic Properties Accessible*[119] (Jester and Park, 1993) recommends a three-step approach to accessibility at historic properties:

1. Review the historical significance of the property and identify character-defining features;
2. Assess the property's existing and required level of accessibility; and
3. Evaluate accessibility options within a preservation context.

In addition, the United States Department of Agriculture and the United States Forest Service provide guidelines to integrate accessibility into outdoor spaces and trails. This document is titled: *Accessibility Guidebook for Outdoor Recreation and Trails*[120] (Zeller, *et al.*, 2006) and identifies design and implementation ideas such as: constructed features (benches and picnic tables) and trail construction techniques and technical requirements. These guidance documents should be consulted when considering future accessibility improvements at the site.

Pursue and Support Additional Research Opportunities

The CLCBM archives include a wealth of information related to the history of the site. In addition, numerous previous archeological studies have been conducted at the dry dock complex (see Appendix A). Although the history of the site is generally well understood, the historical records of the CLCBM and the archeological remains present at the site provide opportunities to support additional research regarding nineteenth-century technologies and practices of boat repair, canal-era commerce, the inhabitants of the site, and the physical structures and facilities that were formerly located at the dry dock complex. The CLCBM should continue to seek ways to improve the organization or and access to their collections, as well as continuing to support research efforts that can contribute to the collective understanding of the history and importance of the site.

In addition, there are numerous archeological features on the site that have the potential to yield additional significant information about the history of the site. Support for additional archeological investigation is an important ongoing policy priority for the CLCBM.

Enhance the Visitor Experience and Educational Opportunities at the Site

The visitor experience of the Chittenango Landing Dry Dock Complex includes both the CLCBM facility and the site itself. Site interpretation is accomplished in a variety of ways, including independent (not-guided) visits, guided tours

[119] This guidance document is available at: http://www.nps.gov/tps/how-to-preserve/preservedocs/preservation-briefs/32Preserve-Brief-Accessible.pdf.
[120] This guidance document is available at: http://www.fs.fed.us/recreation/programs/accessibility/htmlpubs/htm06232801/.

for individuals and small groups, guided tours and formal programs for large groups, and special events programming. The CLCBM's long term planning goals prioritize site development that improves the visitor experience and interpretative potential of the site (CLCBM, 2013b). Enhancing the visitor experience can include improving site accessibility for a variety of user groups, improving site amenities, increasing the number and diversity of visitors, increasing awareness of the dry dock complex, and increasing access to information about the site. These enhancements can include augmenting the current educational programming at the site, physical site improvements, and off-site programming, outreach, publications, and media aimed at increasing the public's awareness and interest in the dry dock complex.

5.2.2 Program Recommendations

The following program recommendations establish general strategies and suggest ongoing activities aimed at supporting preservation, enhancing interpretation, and increasing awareness of the dry dock complex:

Pursue and Reinforce Relationships with Local, Regional, and Statewide Stakeholders who Support Preservation and/or Improved Interpretation of the Site

The CLCBM should continue and expand its successful efforts to establish and reinforce relationships with local and regional entities that support the mission of the organization and/or provide resources that help the CLCBM to preserve, increase awareness of, and/or improve the interpretive potential of the dry dock complex. Partnering relationships provide opportunities for increased funding, networking, publicity, educational opportunities, access to material resources, and labor that may be beyond the financial and/or logistical reach of the CLCBM operating on its own. Key relationships that the CLCBM currently maintains and/or is pursuing to support preservation and interpretation of the dry dock complex include the following:

- Association of Professional Fundraisers
- Canal Town Museum (Canastota, NY)
- Central New York Community Foundation
- Central New York Regional Economic Development Council
- Daughters of the American Revolution
- Erie Canal Museum (Syracuse, NY)
- Erie Canalway National Heritage Corridor
- Gorman Foundation
- Greater Sullivan Chamber of Commerce
- John Ben Snow Foundation, Inc.
- Madison County Cultural Heritage Tourism Committee
- Museum Association of New York (MANY)
- New York State Canal Corporation
- New York Cultural Heritage Tourism Network
- New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP)
    - Historic Preservation Program
    - Lorenzo State Historic Site (Cazenovia, NY)

- Old Erie Canal Community Working Group
- Parks & Trails New York
- Retired and Senior Volunteer Program (RSVP) of Madison County
- Rosamund Gifford Foundation
- William G. Pomeroy Foundation

A key component of relationships with local non-profit and other stakeholder groups may be access to volunteer labor to support specific programming or projects. For instance, volunteer groups may be interested in participating in special or occasional events that involve various site maintenance tasks, such as vegetation clearing or minor repairs.

Continue to Pursue and Develop Funding Streams to Support Preservation and/or Improved Interpretation of the Dry Dock Complex

The CLBCM has historically been very successful in pursuing grant funding to support reconstruction efforts and interpretive programming at the site. The current CLCBM leadership is actively expanding the museum's publicity and fund-raising efforts to increase local and regional awareness of the site, increase attendance and participation with programming at the site, and increase revenues to support operation of the museum and interpretive programming, as well as physical maintenance and enhancements to the site. Some of the strategies that are being pursued to increase revenues include the following:

- Increase and expand membership, including business memberships and/or opportunities for corporate sponsorship of the CLCBM and/or specific programs or projects
- Increase attendance by regional school groups, including expansion of educational programs to reach wider age ranges
- Improve the CLCBM gift shop and expand retail capabilities
- Pursue donations from private local benefactors
- Expand mechanisms to solicit donations, including use of website and/or social media
- Connect with recreational boating community
- Interpret archeological resources for visitors to both the site and on the CLCBM-owned "Button Property" (on the north side of the Enlarged Erie Canal)
- Create educational programs that address Science, Technology, Engineering, and Math (STEM) curriculum

In addition, the CLCBM should continue and expand its successful efforts to pursue grant for programs and projects that help to preserve, increase awareness of, and/or improve the interpretive potential of the dry dock complex. Selected potential funding sources to support preservation and/or interpretation efforts are listed below in Table 2:

Table 2. Potential Funding Sources.

Funding Organization/Agency	Types of projects/programs funded	Eligible recipients	Award amounts	Schedule
Erie Canalway National Heritage Corridor http://www.eriecanalway.org/get-involved_grants-fund.htm	Projects consistent with the goals of the *Erie Canalway Preservation and Management Plan*	Not-for-profit corporations, municipality, federally recognized tribe w/in the Erie Canalway National Heritage Corridor	$2,000-$7,000, matching grants	Annual
Museum Association of New York (MANY) (formerly Museumwise) http://manyonline.org	Institutional development; institutional engagement with communities	Not-for-profit organizations, municipal agencies; museums, historical societies, their staffs and volunteers	Varies by grant type	Unspecified
National Institute for Conservation's Conservation Assessment Program http://www.heritagepreservation.org/	Assessments of artifact collections and historic structures that are open to the public	Museums, including historic houses and sites	In-kind (assessment services)	Annual
National Trust for Historic Preservation http://www.preservationnation.org/	Historic preservation (several related funds available)	Historic homes; nonprofit organizations and public agencies	Varies by grant type	Varies
New York State Archives' Documentary Heritage Program http://www.archives.nysed.gov/aindex.shtml	Collection and care of New York State's historical records	Not-for-profit organizations including archives, historical societies, museums, and other organizations	Unspecified	Unspecified
New York State Historic Preservation Office's Environmental Protection Fund (EPF) http://www.nysparks.com/shpo/preservation-assistance/	Preservation or improvement of properties on the State or National Register of Historic Places	Municipalities, state agencies, public benefit corporations, public authorities, not-for-profit corporations	Unspecified; 50% matching grants	Annual
Preservation League of New York State http://www.preservenys.org/index.html	Identifying, documenting, and preserving cultural and historic buildings, structures, and landscapes	Not-for-profit organizations; units of local government	$3,000-$11,000	Annual

Improve On-site Interpretation

Visitors experience dry dock complex in a variety of ways, including independent (not-guided) visits, guided tours for individuals and small groups, guided tours and formal programs for large groups, and during special events. As described in Chapter 2, the existing landscape at the dry dock complex reflects, but also obscures, the complicated history of the site. Many visitors, at first glance, may assume that the site is an intact, well-preserved, nineteenth-century boatyard that has been updated with a few modern amenities and practical features, such as fencing and the earthen dam between the dry docks and Erie Canal. To a large degree, the site is maintained to foster a historical feeling – accomplished via the materials and architectural forms of the reproduced features and general absence of clearly modern intrusions. It may not be readily apparent to many visitors, for instance, that none of the existing buildings on the site are actually original to the site.

The reproduction of various features at the site represents a long-term effort by a group of volunteers to recreate the historic setting of the dry dock complex. For some visitors, the story of the recreation of these features is equally (or more) interesting than the history of the dry dock complex during its period of operation. Current interpretation of the site acknowledges and celebrates both the construction and operation of the dry dock during the mid-nineteenth through early-twentieth centuries, as well as the rediscovery and recreation of the dry dock complex during the late-twentieth century. However, the relationship of individual site features to these narratives could be clarified.

As described in Chapters 2 and 4, many of the landscape features in the dry dock complex are reproductions (e.g., the dry dock bays and most of the buildings) or are period objects that are not original to the site, but are interpreted to be representative of objects that could have been present at the site (e.g., the boiler, cleat, capstan, and winch). On-site interpretive materials (including signage, maps, and brochures) should be revised to better reflect the complete history of the dry dock complex, as presented in this report. Original and reproduced features should be clearly distinguished. These materials should also identify the information that provided the basis for the reproductions, and can include images of historic maps, photographs, and other primary sources, many of which are reproduced in this report. These revisions to the interpretive materials will allow visitors to better understand the history of the site, identify original site features, and better appreciate the effort and care with which reproductions were constructed.

Expand Use of Digital Technology to Support Site Interpretation

Digital technologies provide opportunities to increase awareness of the site and create interpretive exhibits that would otherwise not be feasible or affordable. Use of digital media, such as interactive animations, for on-site displays could provide a creative and cost-effective means to develop new interpretive exhibits at the site. The CLCBM's website and social media already provide opportunities for potential visitors to learn about the site, as well as stay informed about programming and special events. Additional information that highlights the history and landscape of the dry dock complex, such as videos, animations, or an interactive map, would provide opportunities to describe and interpret the site to remote audiences and could generate increased awareness or interest that may encourage visitation.

Expand Use of Digital Technology to Improve Organization and Access to Historical Materials

The CLCBM archives include a wealth of information about the dry dock complex, nineteenth-century boatyards, the Erie Canal, and local history. These materials provide an invaluable resource for future researchers interested not only in the site itself but also the various activities and canal-related commerce that historically occurred at the site. Historical documents, photographs, maps, and other items are inventoried and cataloged in a variety of systems and indexes. In addition, most of the historical materials in the archives are available only in hardcopy, and many items

are original (i.e., other copies may not be readily available). The CLCBM has initiated digitizing (scanning) their archival collections, which will be an important ongoing effort. In addition, creation of a digital catalog/searchable database (available via the internet to remote researchers) would increase awareness of the collection and make this unique archive more available to interested researchers.

Support Ongoing Research and Documentation of the History of the Site

The narrative presented in Chapter 2 of this report is a comprehensive summary of the history of the site. However, the physical remains and historical collections at the site provide opportunity for future historical research into a variety of questions and topics, including more detailed aspects of the site's history, the engineering of nineteenth-century canals and related features, and boat construction and repair. The CLCBM should continue to encourage and support opportunities for researchers to access the museum's collections and archives.

In addition, as summarized in Appendix A of this report, numerous previous archaeological investigations have been undertaken at the site. Archaeological excavation has been a key component in identifying historic landscape features and informing the reproduction of buildings and other features on the site. Previously investigated archeological features, such as the dry docks, main house foundation, and tenant house foundation (see Figures 3.67 and 3.68) are significant landscape features that contribute to the integrity and interpretation of the site. As described in Chapters 3 and 4 of this report, there are other archaeological features within the dry dock complex (such as the Mystery Foundation and Archaeological Stone Features A and B) that have not been formally investigated and/or the purpose and function of these features has not been conclusively determined. The CLCBM has also expressed interest in conducting an archaeological study on CLCBM-owned property located on the north side of the Enlarged Erie Canal to relocate the Original (ca. 1825) Erie Canal, the earlier site of Chittenango Landing on the Original Canal, and the portion of the original Chittenango Feeder Canal that extended north from the Enlarged Erie Canal to the Original Erie Canal.

The CLCBM should support and coordinate additional archaeological research, both within the site and to investigate related features (such as the Chittenango Feeder Canal). Archaeology is time consuming, labor intensive, and generates quantities of material (artifacts) that must be properly curated. As a result, archaeological investigations present logistical and financial challenges for small organizations such as the CLCBM. To accomplish additional archaeological research in a manner that is affordable, practical, supportive of the CLBCM's mission, and in accordance with professional archaeological standards and practice, the CLCBM should pursue partnering relationships with regional academic institutions and/or public entities that provide mechanisms for educational archaeology (e.g., field schools) and/or pro bono support of research projects. Potential regional partners for archaeological investigations at the site include the following:

State University of New York at Oswego
Department of Anthropology
Contact: Dr. James Pippin[121]
310 Mahar Hall, SUNY Oswego
Oswego, NY 13126
Douglas.pippin@oswego.edu

Fort Drum Cultural Resources Program
Contact: Dr. Duane Quates[122]
P4836 Delehanty Avenue
Fort Drum, NY 13602
Duane.quates@us.army.mil

Expand Programming to Include Events and Workshops Focused on the Landscape of the Site

The CLCBCM regularly hosts special events. Recent special events and programs that have attracted new and renewed interest in the site include a Blacksmith Workshop and the "Tuesdays on the Towpath" bicycle series. Special events and workshops provide opportunities to engage interest groups with specialized interests and/or skills. Additional interpretive events could include demonstrations of nineteenth-century crafts and skills that would have occurred at the dry dock complex (such as carpentry), as well as re-enactments or dramatizations appropriate to the period, association with the Erie Canal, and/or commercial activities that took place at the site.

In addition, hosting events that emphasize maintenance or improvement of the landscape, including the historic features of the landscape, may be a way to mobilize available labor and/or specialized skills to support maintenance of the site. This could include activities ranging from clean up days, vegetation maintenance/removal workshops, repainting and/or repairs, or construction events (similar to a "barn raising"). "Hands on" experiences provide a strong sense of connection and can foster individual commitment to the site and provide a meaningful experience with historic preservation.

5.2.3 Project Recommendations

The following project recommendations suggest individual tasks or physical improvements that support both the mission of the CLCBM and serve to implement the policy and program recommendations presented in this report:

[121] Dr. Pippin's Master's Thesis, entitled *Working Along the Erie Canal: Archaeological Investigations at a Nineteenth Century Dry Dock Complex* (Pippin, 1996) was prepared in association with the excavation of the land surrounding the owner's and tenant houses, and was an important reference for this report. In addition, Dr. Pippin prepared the *Summary of Previous Archaeological Investigations* included as Appendix A of this report.

[122] Dr. Quates conducts geophysical investigations, including use of technologies such as ground penetrating radar, which is a non-invasive methods often used to identify potential features in advance of archaeological testing or excavation. The Fort Drum Cultural Resources Program may be able to provide support services to non-profit organizations and municipalities. http://www.drum.army.mil/PublicWorks/Pages/CulturalResources.aspx.

Assess and Monitor the Condition of Vulnerable Significant Landscape Features

The wooden floors in the bottoms of the dry dock bays (see Figures 3.28 and 3.30) are significant (and fragile) remains directly associated with the boat repair activities that occurred at the site during the period of significance. These features are untreated timber that are exposed to the elements and experience the full effects of seasonal variation, including cycles of freeze/thaw, snow-cover, ice, inundation, flooding, summer heat, direct sunlight, and growing vegetation.

- A formal assessment by a professional conservator trained to evaluate organic materials and/or wooden structures in this climate and circumstances is recommended. It is anticipated that ongoing monitoring and evaluation of the condition of these significant features will be necessary. The National Institute for Conservation's Conservation Assessment Program (included in list of potential funding sources included in Section 5.2.2) may serve as a good resource to help implement this recommendation.
  Priority: High. *Timeframe*: Ongoing/Annual.

The masonry wall on the western side of the heavy bay is for the most part original (see Figures 2.25, 2.27 and 3.32). There is some bulging and dislocation of masonry blocks apparent along portions of the wall, and the upper portions of the wall (where they intersect the adjacent ground surface) are subject to erosion and loss of fabric.

- A formal assessment by a structural engineer and/or professional conservator trained to evaluate masonry structures is recommended. It is anticipated that ongoing monitoring and evaluation of the condition of these significant features will be necessary.
  Priority: High. *Timeframe*: Ongoing/Annual.

Maintain On-site Vegetation to Preserve Significant Landscape Features

As described in Chapter 4, some of the vegetation at the site contributes to the significant spatial organization of the landscape. However, left unchecked, vegetation on the site also has the potential to obscure significant landscape features and diminish visitors' appreciation of the historic features of the site. Ongoing maintenance of vegetation at the site should include clearing overgrown volunteer vegetation from the walls of the canal prisms, trimming and management of grasses and other vegetation in the floors of the dry dock bays, maintaining the open feeling of the boatyard and open field, and management (preservation) of forested buffers along the southern and eastern boundaries of the site.

- Clearing and trimming of overgrown vegetation from the canal prism walls and within the dry dock bays should be conducted with hand tools in a manner that does not disturb or compromise the condition of historic features. Along masonry walls, vegetation should be cut back to maintain and improve visibility of the historic features. Roots or vines that are established between masonry blocks or growing through mortar should not be forcibly ripped out so as to not compromise the integrity of wall features.
  Priority: High. *Timeframe*: Ongoing.

- Care should also be taken when trimming grass and vegetation within the dry dock bays to ensure that the original floor boards are not damaged.
  Priority: High. *Timeframe*: Ongoing.

Note that portions of the open field appear to be mowed on a regular basis. This area is not presently used for on-site programming (but is used for overflow parking during special events). Maintaining its open character does contribute to the historic spatial organization of the site.

- Allowing the open lawn to revert from maintained lawn to meadow would reduce maintenance and labor costs without compromising the integrity of the landscape. Meadows typically only need one cutting per year instead of weekly mowing for six months per year. Most lawn areas can easily be transformed into meadow simply by ceasing regular mowing and allowing natural plant growth.
  Priority: Low. *Timeframe*: Ongoing.

Maintain Original and Reproduced Features within the Dry Dock Bays

The CLCBM reports that flooding in the dry dock bays periodically occurs and is an ongoing concern. As described in Chapter 3, the dry docks are drained through a miter style wood (Red Oak) gate in the northwest corner of the heavy bay (see Figure 3.32), which connects to the sluiceway via a 130-foot-long, four foot -by-four foot box tunnel with dry-laid limestone walls (rebuilt by museum volunteers in 1989). The tunnel outlets to a narrow, vegetated, open ditch west of the store (see Figures 3.34 and 3.35). When the tunnel was excavated and rebuilt in 1989, it is reported that a four-foot-diameter plastic pipe was installed to serve as a drain for the dry docks[123].

- To ensure that this drain is functioning properly, a remote-controlled close-circuit television (CCTV) camera should be run through the culvert on an annual basis to determine if sediment or other debris is obstructing the drain. An appropriate method for removing blockages from the pipe would be to use a high-pressure water jet to flush out obstructions.
  Priority: High. *Timeframe*: Ongoing/Annual.

- If regular maintenance via use of a high-pressure water jet is not effective, then CLCM may need to consider re-excavating and relaying the pipe (if appropriate) to approve pitch or slope, and/or replacing the drain with an appropriately-sized pipe. Because this drain was excavated and rebuilt in 1989, these actions will not affect original or intact historic or archaeological features, and therefore are not in conflict with the recommended policy to "Preserve Original Landscape Features".
  Priority: To be determined based on inspections. *Timeframe*: Ongoing.

- The weigh timbers and their upright wooden supports in the bases (i.e., on the floors) of the dry docks bays are railroad ties that were installed in 2006 following a flooding event that destroyed the remains of the original wooden weight timbers and supports. The railroad ties, which represent the weigh timbers and therefore aid in the interpretation of the function of the dry dock bays, are in poor condition due to exposure to the elements and should be replaced (in kind; see also recommendations below regarding interpretation of the dry dock bays).
  Priority: High. *Timeframe*: 1-3 Years.

[123] Rainbow, 2013.

Improve Interpretation of the Operation of the Dry Dock Bays

Some CLCBM members and volunteers have expressed a desire to restore the dry dock bays to working order, including operation of the gates at the north ends of the bays to allow for exchange of water with the Enlarged Erie Canal. This could also include reconstruction of the wooden timbers and cribbing installed in the floors of the dry dock bays that formerly provided support to canal boats while they were being repaired. Implementation of this concept would require extensive agency consultation and permitting and would be logistically challenging, including removal of the earthen dam, repair and/or improvement of the reproduced gates, and ongoing maintenance to ensure the gates remained in working order. The cost of this project would likely be considerable. In addition, implementation of this project would introduce preservation concerns regarding disturbance or damage to the remaining original features associated with the dry docks, including the (partially buried) wooden floors, remnants of the original support timbers, and bases of the stone walls of the dry dock bays. However, the goal of a project, to interpret and display the dry docks in working order, would be a worthwhile addition to interpretive exhibits at the site.

- Consistent with the program recommendation to "Expand Use of Digital Technology to Support Site Interpretation", interactive digital media projects present cost-effective and creative opportunities to accomplish this goal. The CLCBM should consider retaining a qualified visualization and/or interactive media specialist to prepare an interactive, 3-D, digital model of the dry dock complex. This model would be an interpretation of the dry dock complex during its period of operation, and should include the canals, towpath, canal boats, dry docks, buildings, and other landscape features documented in this report. The model could allow users to open and close the dry dock gates, observe how the dry dock bays were filled and drained, select the appropriate bay based on the load being carried by canal boats, maneuver boats into the bays, observe the various timber support structures designed to support differential weights in the three bays, and possibly include activities or animations related to boat repair. Such an exhibit would allow for effective interpretation of the function and operation of the dry docks, without incurring the expense, logistical challenges, and preservation concerns associated with restoring them to full operation.
  Priority: Moderate. *Timeframe*: 3-5 Years.

- Alternately (or in addition), a hands-on, to-scale, interactive physical model of the working dry dock complex would also provide an opportunity to interpret the physical operation of the dry docks. The CLCBM exhibits already include a diorama model of the dry dock complex, which is an effective exhibit to display the original configuration of the site during its period of operation. However, the existing model is not interactive and does not allow for a user to explore the function and relationship between different features within the complex.
  Priority: Moderate. *Timeframe*: 3-5 Years.

Revise or Replace On-site Interpretive Signage

A significant component of on-site interpretation is provided by signage (see Figure 3.18) that identifies various feature around the site. In general, these signs identify a given feature and describe that feature's relationship or function within the boatyard. As described above in the program recommendation "Improve On-site Interpretation", current signage at the site does not clearly distinguish between original and reproduced landscape features and therefore does not present a clear history of the development of the site.

- As opportunities to update signage and other interpretive materials (such as maps, and brochures) arise, these materials should be revised to better reflect the complete history of the dry dock complex, as presented in this report. Original and reproduced features should be clearly distinguished, including the year that features were "rediscovered" (excavated) and/or rebuilt.
  Priority: Moderate. *Timeframe*: 3-5 Years.

- Interpretive materials should also identify the information that provided the basis for the placement, size, style, choice of materials, and appearance of reproduced features. This could include images of historic maps, photographs, and other primary sources (including drawings or photographs from archaeological excavations), numerous examples of which are in the CLCBM archives and many of which are reproduced in this report. These revisions to the interpretive materials will allow visitors to better understand the history of the site, identify original site features, and better appreciate the effort and care with which reproductions were constructed.
  Priority: Moderate. *Timeframe*: 3-5 Years.

Remove or Replace Modern, Non-Contributing Site Features

The presence of modern landscape features within the site detracts from the historic feeling, character, and association of the landscape. Consistent with the overall interpretive mission of the CLCBM, features that distract or re-orient visitors' perception and understanding of the working historic landscape should be removed, and if necessary replaced with features or materials that are sympathetic (in terms of style, material and form) to the character of original, historic features and period reproductions at the site. This includes the following:

- The metal pipe and chain fences that surround portions of the dry dock bays and line walkways adjacent to the canal are inconsistent with the historical feeling of the site (see Figures 3.5, 3.13-3.16). In addition, the metal pipe and chain fences occasional break or become attached and may be in danger of failing. These fences should be replaced with a single, uniform style of fencing that is consistent with other site elements and more sympathetic to the site's character. Simple wooden post and rope fencing provide a perimeter around archaeological remains of the main house and tenant house (see Figures 3.67 and 3.68). These rope fences convey an impermanent and in-obtrusive feeling, and do not conflict with the site's character. The wooden fencing along the walkway over the dam (see Figure 3.13) also feels more in keeping with the historic character of the site, and would provide safety benefits superior to the rope fencing.
  Priority: High. *Timeframe*: 1-3 Years.

- The archaeological excavation tent hosts educational activities that are an important element of programming at the site. In 2014, the program was honored with a Central New York Council for Social Studies Outstanding Education Program award. The archeological excavation program is located in an area that was previously professional excavated during the 1980s, so the staged archeological experience does not disturb or adversely affect any intact archeological features or deposits within the site. In addition, the location of the archeological excavation exhibit is important in the sequence of educational programming at the site, where school groups are oriented to the site at the CLCBM and then receive a site tour, which ends at the archeological excavation tent. However, the tent is a modern, non-contributing landscape feature and the visual character of the tent detracts from the historical feeling of the site. The CLCBM has expressed an interest in replacing the tent with a structure more in keeping with the feel of the site. If a permanent structure is constructed, this should be designed to be consistent in terms of materials and style with both the original features, reproduced buildings, and general character of the dry dock complex. An open sided

pavilion built with exposed timbers and simple hardware, similar to the structure that is built over the Erie Canal Boat Model, may be an appropriate design for this exhibit.
Priority: High. *Timeframe*: 1-3 Years.

- The semi-trailer storage building should be removed from the dry dock complex. If necessary to retain storage capabilities, the trailer should be sited on the east side of Chittenango Creek, adjacent to the museum, in a location where it will not be included in the visual setting of the dry dock complex.
  Priority: High. *Timeframe*: 1-3 Years.

- As described in Chapters 3 and 4, there are a number of non-contributing small features that are not original to the site but that have been placed or staged around the dry dock complex to augment interpretation because of their association with the types of activities that formerly occurred during the period of operation for the dry dock complex. These include the boiler, cleat, capstan, unidentified item 'A', anchor, wagon, and winch. These objects would be more appropriate if presented in association with other artifacts within the reproduced buildings around the site, where their meaning and relationship to the site could be better explained. If these objects are retained as features of the landscape at the site, their origin and history should be clearly articulated in signage and other interpretive materials, as described above.
  Priority: Moderate. *Timeframe*: 3-5 Years.

- When the need arises to replace the concrete and painted-wood permanent benches (see Figure 3.64), these should be replaced with impermanent, simple, wooden benches that are more sympathetic to the character of the site.
  Priority: Moderate. *Timeframe*: 3-5 Years.

- Although not located within the dry dock complex, the existing chain-link gate on Boatyard Road (located on the east side of the bridge over the Chittenango Feeder Canal; see Figure 3.4) defines the physical and visual entrance to the Boat Yard for most visitors. The gate should be replaced with a more aesthetically appealing wooden gate that is sympathetic to the historic character and feeling of the site.
  Priority: Moderate. *Timeframe*: 3-5 Years.

In general, when modern features are replaced or new amenities added to the site, the choice of form, style, material, and placement of these features should be selected in a manner that is sympathetic and does not conflict with the historic character of the site.

Accessibility Improvements

Improving accessibility around the site will ensure an enjoyable experience for all visitors to the dry dock complex. Improvements may require construction, repair, and/or maintenance of site features. The selection of materials, form, style, and placement of accessibility features should be sympathetic to the existing features and historic character of the site, while also meeting accessibility standards. Potential improvements to address accessibility issues include:

- The existing pathway and roadway system at the site consists of compacted gravel/stone-dust surfaces that provide a stable circulation route throughout the site. Areas where these surfaces transition to other materials require monitoring and maintenance in order to provide a smooth change in material. An example of this type of transition is from the gravel roadway to the concrete surface of the bridge over the Chittenango Canal. The bridge provides a sound and level entrance to the dry dock complex, while the gravel in the roadway may migrate due to foot and vehicular traffic, which could result in a lip condition at

the edge of the concrete. These types of transition areas should be regularly monitored and maintained. *Priority*: High. *Timeframe*: Ongoing.

- Some site features are not currently accessible via the existing circulation system. These include the east and west side of the dry docks, the perimeter of the Erie Canal Boat Model exhibit, the archeological features west of the dry docks, and the Education Tent (i.e., the educational archaeological dig site). In these areas, uneven terrain may prove challenging for some visitors. Compacted gravel and stone-dust pathways would offer a simple and unobtrusive option to provide access to these site features. These materials would be consistent in terms of material, texture, and appearance with existing pathways and roadways at the site. However, installation of new pathways should be accompanied with interpretive signage (or similar) to explain that these features represent modern amenities intended to improve accessibility but do not reflect historically documented circulation systems or landscape features.
  Priority: High. *Timeframe*: 1-3 Years.

- The Erie Canal Boat Model would benefit from a smoother perimeter transition and the addition of a stable point of entry. Visitors are free to approach the model on all sides; however, the southern and western sides serve as the primary point of entry. The model is built on a concrete slab, which is surrounded by an area of loose gravel. This area has loose gravel and portions of the concrete slab present a potential tripping hazard due to an uneven gravel/concrete transition. This condition continues around the perimeter of the slab. As shown in Figure 3.46, the boat model is divided into three sections with open pathways between the sections to allow visitors to access dioramas depicting the interior spaces of the canal boat. Ramps connecting the concrete pad to a compacted gravel/stone-dust pathway around the perimeter of the slab would improve accessibility to this exhibit.
  Priority: High. *Timeframe*: 1-3 Years.

- Ramps into buildings (if feasible) need to be at an appropriate grade with a clear route upon entry. The crushed gravel ramp to the western door of the Blacksmith and Sawmill Complex provides access up to the door; however, the ramp is overgrown with weeds and a gap and step at this transition limit accessibility. The ramps at the Stable have a similar condition: the southern ramp has a lip at the downslope edge, and the ramp is warped leading to an uneven threshold. The northern ramp has a lip at the downslope edge and centers on a 2'-6" wide man-door cut into the barn door. The man-door limits accessibility (assuming the barn door is shut) as the minimum accessible route width is 3'-0". The lip at the base of each ramp should be graded and maintained to ease the transition from the adjacent gravel paths.
  Priority: High. *Timeframe*: 1-3 Years.

- The elevated walkway over the earthen dam offers an alternate viewing angle of the dry dock complex and Enlarged Erie Canal. The walkway does not have a historic precedent at the site and serves strictly as a modern amenity to provide access and circulation at the northern end of the dry docks. However, the walkway requires updating and improvement to meet accessibility and safety standards. Compacted soil presently serves as a path to the walkway, however, there is a lip condition at each entrance where the wood planks meet grade. These paths should be formalized with compacted stone-dust or gravel, with the caveats and considerations included above. Similar to the Stable ramps, each entrance should be graded and maintained to ease the transition. The walkway is approximately 36" wide and surfaced with three 2x12" plank boards that run parallel to the route of travel and are spaced at variable widths. The bridge should be resurfaced with planks oriented perpendicular to the route of travel and spaced no more than ¼" apart. The existing rail is constructed of 2x4" boards spaced approximately 6 feet apart and does not meet typical safety standards. A typical guardrail should be 42" high where there is a drop-off higher than 30" and should include pickets spaced at a distance that prohibits a 4" sphere from passing through. The plank bridge and pathway should be reconstructed to address these safety and accessibility concerns. The selection of materials and style of the replacement bridge and railing should remain consistent with the existing character of the bridge.

Priority: High. *Timeframe*: 1-3 Years.

- The existing 4' wide sidewalk at the Store and Warehouse building offers an accessible route to the building. This walk should be maintained to ensure there is no heaving or cracking that would affect circulation. To be consistent with accessibility standards, future sidewalks should be a minimum of 5' wide if possible. This width allows two wheelchairs to pass safely and comfortably. However, the concrete surface of the sidewalk detracts from the historic character of the site. Future improvements should avoid use of concrete (if practical) and similar materials, as noted above.
  Priority: Moderate. *Timeframe*: 3-5 Years.

- Accessible site amenities affect how people view, interpret, and use the site. Interpretive signage should be at a height and location that accommodates all visitors. Benches and picnic tables should be sited adjacent to pathways or otherwise in accessible locations.
  Priority: High. *Timeframe*: Ongoing.

Improve Parking and Amenities for Recreational Visitors to the Site

CLCBM has successfully expanded utilization of the site by bicyclists and other recreational users, which is an important contribution toward increasing awareness and support for the site in the local and regional community. CLCBM has expressed a need for increased and/or improved parking and circulation for vehicles and to accommodate recreational visitors to the site, as well as the need to retain use of the Open Lawn southwest of the Boatyard for overflow parking during special events

- Consistent with the Programming Goal to "Pursue and Reinforce Relationships with Local, Regional, and Statewide Stakeholders who Support Preservation and/or Improved Interpretation of the Site," the CLCBM should partner with and assist the Village of Chittenango Creek Walk Committee with the completion of the Chittenango Creek Walk to the site (on the east side of the Chittenango Feeder Canal, adjacent to the Museum).
  Priority: High. *Timeframe*: Ongoing.

- Vehicle parking for visitors to the site is currently provided on the east side of Chittenango Creek, adjacent to the museum (outside of the dry dock complex). Any expansion or re-organization of permanent parking areas for the CLBCM should be contained to this area, installation of parking facilities within the dry dock complex would diminish the historic integrity of the site.
  Priority: Moderate. *Timeframe*: Ongoing.

- Future installation of amenities to support recreational users (such as racks for bikes, kayaks, or similar storage facilities) should also be located on the east side of the creek, adjacent to the museum, so as not to introduce modern elements that would diminish the historic integrity of the site.
  Priority: Moderate. *Timeframe*: Ongoing.

- The CLBCM should continue to explore safe pedestrian and bicycle connectivity and access between the museum and the Erie Canalway Trail (on the north side of the Enlarged Erie Canal). Currently, access to the museum from the trail is afforded via Lakeshore Road on a bridge over the Enlarged Erie Canal. A separate pedestrian/bicycle footbridge would improve safety and provide direct access between the museum and the trail.
  Priority: Moderate. *Timeframe*: 3-5 Years.

6.0 REFERENCES CITED

Beers, D.G. 1875. *Atlas of Madison County, NY.* Pomeroy, Whitman, & Co., Philadelphia, PA.

Bernstein, Peter L. 2005. *Wedding of the Waters: The Erie Canal and the Making of a Great Nation*. W.W. Norton & Company, New York.

Blizard, Clifford and Rudolph Schuster. 2003. "We're Trying to Make This Picture Come Alive Again:" An Examination of How Site History is Presented to School Groups at Chittenango Landing Canal Boat Museum, Chittenango, New York. In *Proceedings of the 2003 Northeastern Recreation Research Symposium*. USDA Forest Service, Newtown Square, PA.

Burr, David H. 1829. *Map of the County of Madison*. David H. Burr, New York, NY.

Child, Hamilton. 1868. *Gazetteer and Business Directory of Madison County, NY for 1868-9.* Syracuse Journal Office, Syracuse, NY.

Chittenango-Bridgeport Times. 1978. Morris Beeman Rites Held. *Chittenango-Bridgeport Times,* August 2, 1978.

Chittenango Landing Canal Boat Museum (CLCBM). 1986. *The Chittenango Landing Canal Boat Museum*. Pamphlet. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

CLCBM. 1989. "Its History, Purpose and Goals." On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

CLCBM. 1992. *Five-Ten Year Master/Management Plan*. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

CLCBM. 2013a. Archives of the Chittenango Landing Canal Boat Museum. Chittenango, NY.

CLCBM. 2013b. *Five Year Plan 2010-2014*. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Crawford & Stearns. 1995. Documentation of Stone Dry Docks at Chittenango Landing Canal Boat Museum. Section elevations, Drawing A-2, July 10, 1995. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Crawford & Stearns. 1995. Restoration of Stone Dry Docks at Chittenango Landing Canal Boat Museum. Plan and details, Drawing A-1, July 10, 1995. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Environmental Protection Agency (EPA). 2010. *Primary Distinguishing Characteristics of Level III Ecoregions of the Continental United States*. Available online at http://www.epa.gov/wed/pages/ecoregions.htm.

EPA. 2011. *Level III and IV Ecoregions of the Coterminous United States (Map)*, Available online at http://www.epa.gov/wed/pages/ecoregions.htm.

Evans, Gurdon. 1853. *Topographical Map of Madison County, New York.* Anthony D. Byles, Philadelphia, PA.

Fayetteville Weekly Record. 1885. Chittenango Personals. November 28, 1885. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Finch, Roy G. 1925. *The Story of the New York State Canals: Historical and Commercial Information.* 1998 Reprint. New York State Canal Corporation, Albany, NY.

Friedlander, Suzan D. 2005. Treaty of Fort Schuyler (Oneida). In *The Encyclopedia of New York State*, edited by P. Eisenstadt, p.1576. Syracuse University Press, Syracuse, NY.

French, J.H. 1859. *Gillette's Map of Madison County, New York from Actual Surveys Under the Direction of J.H. French.* Jno. P. Gillette, Philadelphia, PA.

Hager, Robert E. 1988. Chittenango Landing Canal Boat Museum, Plan for Restoration of Stone Dry Dock Walls. November 1988. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Hall-O'Neil, Christine. 2013a. Correspondence. Executive Director, Chittenango Canal Boat Landing Museum. Correspondence received on April 5, 2013.

Hall-O'Neil, Christine. 2013b. Interview. Executive Director, Chittenango Canal Boat Landing Museum. Interview conducted on March 28, 2013.

Hammond, L.M. 1872. *History of Madison County, State of New York.* Truair, Smith & Co., Syracuse, NY.

Helmer, William F. 2005. Madison County. In *The Encyclopedia of New York State*, edited by P. Eisenstadt, p.941. Syracuse University Press, Syracuse, NY.

Houck, Clara. 1967. Old Erie Canal Brought Growth, Prosperity to Chittenango in 1800s. *Madison County Times*, July 27, 1967.

Hutchinson, Holmes. 1834. Erie Canal Map Series. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Holmes, John B. 1852. *Map of That Part of the Estate of the Late John B. Yates, Esq. at Chittenango & Vicinity.* John B. Holmes, New York, NY.

Jester, Thomas C. and Sharon C. Park. 1993. Making Historic Properties Accessible. Preservation Brief 32. U.S. Department of the Interior, National Park Service, Washington, D.C. Available at: http://www.nps.gov/tps/how-to-preserve/preservedocs/preservation-briefs/32Preserve-Brief-Accessible.pdf.

Koeppel, Gerard. 2009. *Bond of Union: Building the Erie Canal and the American Empire.* Da Capo Press, Cambridge, MA.

Lay, Amos. 1812. *Map of the Northern Part of the State of New York. Compiled From Actual Survey.* Amos Lay, New York, NY.

Lay, Amos. 1817. *Map of the State of New York with part of the States of Pennsylvania, New Jersey, &c.* Amos Lay, New York, NY.

Lozner, Christine. 1992. Chittenango Landing Dry Dock Complex. National Register of Historic Places Registration Form. On file, New York State Office of Parks, Recreation, and Historic Preservation, Waterford, NY.

Madison County Times. 1887. Fayetteville and Vicinity. *Madison County Times*, March 3, 1887. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Madison County Times. 1905. Obituary: Robert J. Scott. *Madison County Times*, November 24, 1905. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Madison County Times. 1906. Frightful Boiler Explosion! *Madison County Times*, April 6, 1906. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Madison County Times. 1910. Dry Dock Sold. *Madison County Times*, April 22, 1910. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Madison County Times. 1918. Obituary: George W. Dewitt. *Madison County Times*, August 16, 1918. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Madison County Times. 1918. Real Estate Transfers. *Madison County Times*, October 25, 1918.

Madison County Times. 1919. Chittenango Landing. *Madison County Times*, May 25, 1919.

Madison County Times. 1929. Obituary: Albert Beeman. *Madison County Times*, November 22, 1929.

Madison County Times. 1936. When the Canning Season Was On (Photograph). *Madison County Times*, January 6, 1936.

Madison County Times. 1939. Obituary: Elizabeth Beeman. *Madison County Times*, April 7, 1939.

Muller, E.H. and D.H. Caldwell. 1986. *Surficial Geologic Map of New York–Finger Lakes Sheet*. Geologic Survey Map and Chart Series, No. 40. 1 Sheet, Scale 1:250,000. New York State Museum, Albany, NY.

National Park Service (NPS). 1998. *NPS-28: Cultural Resource Management Guideline.* Available online at http://www.nps.gov/history/history/online_books/nps28/28contents.htm.

National Resource Conservation Service (NRCS). 2013. *Web Soil Survey*. U.S. Department of Agriculture, Washington, D.C. http://websoilsurvey.nrcs.usda.gov/.

New York State Department of Public Works. 1927. *Map of a Portion of Erie Canal Lands.* On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

New York State Department of Public Works. 1966. *NY Route 5: Onondaga, Madison & Oneida Counties.* Archives of the Chittenango Landing Canal Boat Museum. Chittenango, NY.

New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP). 1970. Map No. 16-012-2P. February 27, 1970. NYSOPRHP Central Region, Jamesville, New York.

NYSOPRHP. 1988. Agreement of Understanding Between the Chittenango Boat Landing Museum and the New York State Office of Parks, Recreation and Historic Preservation. September 26, 1988. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

NYSOPRHP. 2011. New York State Office of Parks, Recreation and Historic Preservation and Chittenango Landing Canal Boat Museum, Licensee: Cooperative Agreement at Old Erie Canal State Historic Park, Chittenango, NY. NYSOPRHP, Waterford, NY.

NYSOPRHP. 2012. Generic Outline for Historic Structure/Cultural Landscape Reports. NYSOPRHP, Waterford, NY.

New York State Senate. 1833. *Documents of the Senate of the State of New York, Fifty-Sixth Session, Volume II.* E. Croswell, Albany, NY.

Nichols, Claude, A. 1939. *Sullivan In History: Interesting People and Events contributing to the development of the Township of Sullivan, Madison County, New York*. McHenry Press, Chittenango, NY.

Oswego Daily Times. 1852. Peremptory Sale of Valuable Farms and About 3000 Village Lots. *Oswego Daily Times*, September 1, 1852.

Page, Robert R., Cathy A. Gilbert and Susan A. Dolan. 1998. *A Guide to Cultural Landscape Reports: Contents, Process and Techniques.* National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program. U.S. Department of the Interior, Washington, DC.

Pippin, Douglas J. 1996. *Working Along the Erie Canal: Archaeological Investigations at a Nineteenth Century Dry Dock Complex.* Master's thesis, Department of Anthropology, Syracuse University.

Pippin, Douglas J. 2013. Chittenango Landing Canal Boat Museum Cultural Landscape Report: Summary of Previous Archaeological Investigations. Unpublished report.

Pratt and Pratt Archaeological Consultants, Inc. 1981. *Stage 1A Cultural Resources Survey of the Facilities Plan for the Village of Chittenango, Madison County, New York.* On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Pratt and Pratt Archaeological Consultants, Inc. 2002. *Phase 1 and 2 Cultural Resources Survey, Chittenango Landing Canal Boat Museum Visitor Education Center, Town of Sullivan, Madison County, NY.* On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Rainbow, Douglas. 2013. Interview. Former president, Chittenango Landing Canal Boat Museum. Interview conducted August 16, 2013.

Sanborn Map Company. 1890. *Chittenango, New York.* Available online at http://sanborn.umi.com/.

Sanborn Map Company. 1900. *Chittenango, New York.* Available online at http://sanborn.umi.com/.

Sanborn Map Company. 1906. *Chittenango, New York.* Available online at http://sanborn.umi.com/.

Sanborn Map Company. 1911. *Chittenango, New York.* Available online at http://sanborn.umi.com/.

Sanborn Map Company. 1951. *Chittenango, New York.* Available online at http://sanborn.umi.com/.

Sauthier, Claude Joseph. 1779. *A Chorographical Map of the Province of New York in North America*. William Faden, London, United Kingdom.

Schein, R.H. 1993. Framing the Frontier: The New Military Tract Survey in Central New York. *New York History* 74:5-28.

Schein, R. 2005. New Military Tract. In *The Encyclopedia of New York State*, edited by P. Eisenstadt, p.1048. Syracuse University Press, Syracuse, NY.

Shaw, Ronald E. 1966. *Erie Water West: A History of the Erie Canal 1792-1854*. University of Kentucky Press, Lexington, KY.

Smith, James H. 1880. *History of Chenango and Madison Counties, New York.* D. Mason & Co., Syracuse, NY.

Smith, John E., ed. 1899. *Our County and Its People: A Descriptive and Biographical Record of Madison County, New York.* Boston History Company, Boston, MA.

Soil Conservation Service (SCS). 1981. *Soil Survey of Madison County, New York*. U.S. Department of Agriculture. U.S. Government Printing Office, Washington, D.C.

Spafford, Horatio Gates. 1825. *A Pocket Guide for the Tourist and Traveller Along the Line of the Canals, and the Interior Commerce of the State of New York*. William S. Parker, Troy, NY.

State of New York. 1825. *Laws of the State of New York, in Relation to the Erie and Champlain Canals, Vol. 1*. State of New York, Albany, NY.

Syracuse Daily Standard. 1854. Notices. *Syracuse Daily Standard*, August 8, 1854.

United States Census Bureau (USCB). 1850. Available online at http://search.ancestry.com/search/db.aspx?dbid=8054.

USCB. 2013. Chittenango, New York. Available online at http://quickfacts.census.gov/qfd/states/36/3615561.html

United States Geological Survey (USGS). 1957. *Canastota, NY*. U.S. Geological Survey, Washington, D.C.

VanSwall, Hawley E. 1970. Survey of Morris Beeman property. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Walrath, Wm. H. 1854. *Map of the Unsold Part of the Estate of the Late John B. Yates, Esq. in Chittenango and Vicinity.* On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Weiskotten, Daniel H. 1991. Correspondence with Christine B. Lozner, November 7-17, 1991. On file, Chittenango Landing Canal Boat Museum. Chittenango, NY.

Weiskotten, Daniel H. 1998a. Dry Docks of the Erie Canal. Available online at http://freepages.history.rootsweb.ancestry.com/~nc99usgw/clcbm.html.

Weiskotten, Daniel H. 1998b. History of Chittenango Landing Dry Dock. Available online at http://freepages.history.rootsweb.ancestry.com/~nc99usgw/clcbm.html.

Whitford, Noble E. 1906. *History of the Canal System of the State of New York, Together With Brief Histories of the Canals of the United States and Canada.* Brandow Printing Company, Albany, NY.

Wyld, Lionel D. 1998. *Canastota and Chittenango: Two Historic Canal Towns.* Arcadia Publishing, Charleston, SC.

Zeller, Janet, Ruth Doyle, and Kathleen Snodgrass. 2006. Accessibility Guidebook for Outdoor Recreation and Trails. United States Department of Agriculture, Forest Service, Washington, D.C.. Available at: http://www.fs.fed.us/recreation/programs/accessibility/htmlpubs/htm06232801/.

LIST OF REPOSITORIES CONSULTED

Archives of the Chittenango Landing Canal Boat Museum
National Register of Historic Places
New York State Office of Parks, Recreation, and Historic Preservation
Onondaga County Public Library, Local History Collection

Appendix A:
Archaeological Summary Report

Chittenango Landing Canal Boat Museum
Cultural Landscape Report, Appendix A:

Summary of Previous Archaeological Investigations

Prepared for:

Environmental Design & Research, Landscape Architecture and Engineering, P.C.
217 Montgomery Street, Suite 1000
Syracuse, NY 13202

and

Chittenango Landing Canal Boat Museum
7010 Lakeport Rd.
Chittenango, NY 13037

Prepared by:

Douglas J. Pippin
Department of Anthropology
SUNY Oswego

April, 2013

Chittenango Landing Canal Boat Museum

Cultural Landscape Report, Appendix A:

Summary of Previous Archaeological Investigations

Chittenango Landing was a dry dock and boatyard complex on the Enlarged Erie Canal that was in operation from 1856–1917. The landing is located in the Town of Sullivan, in Madison County, New York approximately 15 miles east of Syracuse and one mile north of the Village of Chittenango. Archaeological investigations over the past thirty years have uncovered various materials related to the activities at the landing: boat repair and construction, a diverse work force, and the twenty-four hour pace of a major transportation system. In addition to the dry dock complex, two facilities, a pottery and a cannery, both located within 200 yards of the landing, operated from the height of the canal's Civil War period, up until the early twentieth century, when the Enlarged Erie Canal was bypassed by the Erie Barge Canal. The site's shops, repair facilities and store served not only the boat traffic on the Erie canal. Business directories and census schedules show that the facilities were used throughout the year to serve the community.

Figure 1 shows the primary activity areas at the landing during the period that the Enlarged Erie Canal was in operation. Several developments in the years following the end of the enlarged canal had an impact on the archaeological record at Chittenango Landing. Once the Erie Barge Canal opened——the route moving farther to the north to take advantage of Oneida Lake——the flooded section of the Enlarged Erie Canal was often used as a graveyard for the mule-drawn boats that were being eclipsed by the larger,

steam powered boats. This was the case at Chittenango Landing, as a 96 foot canal boat was simply abandoned at the dock.

The dry docks themselves were used as dumping areas by the community for decades, as discovered by R. Joseph Murphy in the 1980's (Murphy and DeAngelo 1987). Many of the workplace buildings were taken down or moved. The original store/warehouse was divided and relocated, and used as a barn. This is labeled as Beeman's Barn——named after a later farmer at the site——and was partly located over the foundation of the blacksmith shop. The other half of the store was removed for use at the cannery across the road from Chittenango Landing. The two residences at the site, often referred to as the tenant house and main house, remained standing and occupied until the acquisition of the property by New York State in the 1960's. Unfortunately, the homes were bulldozed by the state by the early 1970's (DeAngelo 1994: 1; Pippin 1996: 84–92). The fill created by this action is visible in the deposits investigated at the western end of the Chittenango Landing property.

Several professional and avocational archaeological projects have been conducted at Chittenango Landing, described below. A variety of archaeological activities for the museum were conducted under the supervision of Gordon DeAngelo a former landscape architect with the New York State Department of transportation and avocational archaeologist. He was one of the founders of the Chittenango Landing Canal Boat Museum and served at different times as its director, trustee and curator.

Pratt and Pratt (1981)

The first archaeological investigation in the vicinity of the Chittenango Landing took place in 1981, during a stage 1A CRM survey by Pratt and Pratt Associates (1981). This project was undertaken in order to assess the impact of new village facilities proposed for construction on Chittenango–Lakeport Plank Road. It was performed by Pratt and Pratt on behalf of the engineers O'Brien and Gere for the Village of Chittenango.

The study area for the Pratt 1981 project was located across the Enlarged Erie Canal from the location of the Chittenango Landing Canal Boat Museum. The Pratt study area was limited to an area in between the original and second stages of the Erie Canal (see Figure 2 and Figure 3), and incorporated two potential locations for the village facilities (alternate #1 and alternate #2 on Figure 3). At the time of the study, there were no sites in the vicinity of the project that were on the National Register of Historic Places. Currently, both Chittenango Landing Dry Dock Complex (Lozner 1992) and the Chittenango Pottery (Opalka 2009) are on the register.

According to Pratt (1981: 38) there are no known prehistoric sites in the vicinity of the project area, but he acknowledges that contact period material could possibly be found adjacent to Chittenango Creek, just to the west. The historic period resources in the project area——in both alternate locations (Figure 3)——were directly related to homes and workplaces along the Original Erie Canal, including the filled-in remains of the canal itself.

There are no indications that any additional archaeological investigations took place for this facilities project.

Murphy and DeAngelo (1987)

The first archaeological work at on behalf of what would become the Chittenango Landing Canal Boat Museum took place in the late 1980's. A CRM contract was awarded to R. Joseph Murphy and Associates in 1987 for testing in the vicinity of the dry docks. A preliminary report was produced (Murphy and DeAngelo 1987) in May of that year that described the methodology and materials recovered. Additional details on the archaeological work at this stage are found in DeAngelo's (1994) summary report of the archaeology at Chittenango Landing and in his field books, now stored in the museum library.

Initially, two test units were excavated in the southwest corner of the dry dock area (Figure 2). The purpose of the testing was to examine the overburden in the dry docks. The artifact analysis by Gordon DeAngelo confirmed that all of the material within the bays was fill, and not contemporary to the occupation period of the dry docks. Most of the fill consisted of compact gravel, necessitating the use of heavy equipment in the upper levels (Murphy and DeAngelo 1987: 2).

Another goal of Murphy's testing was to examine the state of the wood flooring and supports in the dry dock. Excavation at this depth did not incorporate the heavy equipment, but inspection was hampered by the excavation areas continually filling with water. Regardless, in situ remnants of both the timbers used for the dry dock supports, as well as a wood floor, were detected. With the permission of the New York State Department of Transportation, a coffer dam was constructed to permit the further investigation of the dry docks (DeAngelo 1994: 1). Eventually, the extent of the dry

docks were determined and heavy equipment was used to remove the fill to within 12-18 inches of the bottom of the bays. The rest of the dry dock bays were excavated by hand. A sample of the artifacts from the fill were reserved and a median date of 1935 was calculated for those materials (DeAngelo 1994: 1). The materials were all transferred for curation to Lorenzo State Historic Site, in Cazenovia, NY and have now been moved to the storage facility at the New York State Office of Parks, Recreation and Historic Preservation, on Peebles Island, NY.

DeAngelo, Weiskotten, & CLCBM (1986–1994)

Among the projects overseen by Gordon DeAngelo——in addition to his work with Murphy——were those in the vicinity of the store/warehouse, the blacksmith shop, the canal boat, and the "mystery foundation." The work at Chittenango Landing was completed through a great effort by many volunteers. In addition to DeAngelo, Douglas Rainbow, Joan DiChristina, Robert Hager, all made great contributions. He was assisted by his wife Barbara DeAngelo, and Daniel Weiskotten, who was, at the time, a graduate student in anthropology at SUNY Albany. This section will, however, focus primarily on the archaeological activities, while acknowledging that a great deal of additional work continued in order to realize the museum as it exists today. DeAngelo kept detailed archaeological field books and survey notes during this time period; these records are now at the Chittenango Landing Canal Boat Museum library and are described in greater detail in the Archival Resources section.

One project undertaken early on was the opening of the sluiceway that provided for drainage of the dry docks into Chittenango Creek (DeAngelo day book 10/4/1987).

This was a necessary early project as it was important to be able to control the water level in the bays after construction of the coffer dam. In the late 1980's DeAngelo describes in his day books the processes of uncovering the remains of the pitching kettle, clearing brush and overgrowth on foundations, surveying, and plotting the visible remains. Most of the early archaeological projects were aligned with the goals of restoration and the creation of the new museum. For this reason the store/warehouse was excavated first, as the museum's first structure——an interpretive center——was built on its foundation (DeAngelo 1994: 1). The blacksmith/boat house/saw mill was the next structure reconstructed, but it was located slightly off the original foundation area. Archaeology in the area confirmed the placement of the original blacksmith forge and confirmed that the relocated Beeman's barn was placed somewhat over the former work area (DeAngelo 1194: 1–2). An 1895 canal survey recorded the position of the buildings at Chittenango Landing and was of great value in the restoration of the work buildings at the site. Gordon DeAngelo was a very skilled surveyor and draftsman, so the data from the 1895 survey was put to efficient use in determining the precise size and location of the structures (DeAngelo 1990). In a letter to Christine Lozner to provide background for the Chittenango Landing National Register of Historic Places nomination, Dan Weiskotten (1991) described his participation in the archaeological work at the landing. He was involved in multiple surveys of the property to record the physical and extant features, notably the features of the three bays. He described the recording of the following features at the landing: the boiler base, a piling for the barn, "anvil" base, the pitching kettle base, Beeman's barn, and the pigpen. He also described the processes of working

to uncover and record the foundations of the two houses and the "mystery foundation," described below.

One project undertaken by Gordon and Barbara DeAngelo and Weiskotten was the "mystery foundation," so called as no historical reference to a structure in this area is known, nor does any photographic evidence reveal its purpose. It is located adjacent to the heavy bay (noted as 'E" in Figures 1 and 2). It is a small 16' by 16' stone foundation of approximately 2 ½ feet in depth. Its proximity to the heavy bay has prompted speculation that it may be a base for a crane or some other type of construction or boat building equipment. Later site residents recall that it might have been a chicken coop or tool shed. The archaeology was inconclusive as to its function (DeAngelo 1994: 2).

In the vicinity of the main house and tenant's house (noted by C and D on the 1991 feature map in Figure 1), the primary archaeological work was to uncover the foundation and determine the extent of the structures. Some artifacts were recovered in the process, but excavation was limited. Work on the canal boat and the houses began in the early 1990's, and were continued under the direction of a Syracuse University Field School in 1994.

A draining of the Enlarged Erie Canal in 1991 allowed for a major undertaking at Chittenango Landing: the survey and measurement of the canal boat that was abandoned directly adjacent to the store/warehouse (DeAngelo 1994: 3). A malfunction at the Durhamville Aqueduct—approximately ten miles east on the canal—initiated a lowering of the water level for the flooded portions of the Enlarged Erie Canal. A coffer dam was constructed and pumps were used to lower the water level for a full inspection of the boat. The survey revealed a 96 x 17.5 foot long, "solid side" scow. It was mapped

and photographed extensively, and numerous materials were recovered from the lower levels of the boat. The plans and photographs are in the library of the museum and some of the items are still part of the museum displays, others have been transferred to Peebles Island. The area inside the coffer dam was eventually re-flooded, for the preservation of the boat remains. One task that was not completed at this time was a side plan view of the boat. This was accomplished under DeAngelo's supervision during the 1994 Syracuse University Field School, for which he provided written instructions (DeAngelo, ND).

Syracuse University Field School (1994)

In the summer of 1994, Chittenango Landing was the location for the Syracuse University Archaeological Field School. The project was a joint venture between the Syracuse University Department of Anthropology and the Chittenango Landing Canal Boat Museum. The field school was under the direction of Dr. Douglas Armstrong of Syracuse University and consisted of twenty undergraduate students and two graduate students, Douglas Pippin and Michael Hoover. Both graduate students presented papers related to Chittenango Landing (Pippin 1995 and Hoover 1995) and Pippin (1996) eventually produced a masters thesis on the results of the field program. Gordon DeAngelo provided valuable assistance to the field crew during the project. A photograph of the landing roughly as it appeared during the field school is provided in Figure 4, in comparison to that of Chittenango Landing in 2011 (Figure 5)

The main goal of the project for the museum was to determine the extent of sub-surface disturbance as a result of the bulldozing of two structures in the early 1970s. Another research question associated with the 1994 work at Chittenango Landing was

how the domestic aspect of life at the landing interacted with the workplace and how they were influenced by the Erie Canal. Because much of the boat works and dry docks at the landing had been excavated by the museum, it left the Syracuse University field school free to examine and test the west end of the complex, which was the domestic area of the landing. Pippin (1996) presents not only the archaeological results of the 1994 field school but an overview of the residents and activities of Chittenango Landing during the second half of the nineteenth century. An 1870 photograph of Chittenango Landing provides not just an overview of the works, but also the tenant house (see Figures 6 and 7).

The area of archaeological testing from the 1994 field school is indicated in Figure 2. A shovel test pit grid encompassed the areas to the west of both houses to assess the relative concentration of artifacts in the yard areas and look for evidence of the destruction of the houses from the early 1970's. In addition to the shovel test pits, more substantial 5 x 5 foot excavation units were opened during the 1994 field season that focused on the tenant house (see Figures 8–10). Unfortunately, there was not sufficient time to complete test unit excavations on both house foundations. The archaeological analysis presented in Pippin (1996: 32–47) includes material from the both the shovel test pits and the test units completed near the tenant house foundation. In addition, distribution patterns in the test area are illustrated as well as the artifact representation by function and material type.

The shovel test pit revealed the presence of an additional foundation to the west of the tenant house. This was also confirmed by the presence of artifact distributions in the area of the foundation——referred to as foundation #3. The artifact distributions revealed

in the 1994 testing at Chittenango Landing show clear concentrations of materials around the foundation #3 area. The lack of domestic artifacts may indicate that the building had a purpose associated with the dry dock works or blacksmith's shop at the landing, as opposed to something associated only with the living areas.

Shovel tests in the vicinity of the tenant and main house areas show patterns of materials in the archaeological record to the west of the foundations. This area was likely used for the disposal of domestic items from the mid-19th century, but there is also a clear indication of architectural materials in the areas behind the houses as well. The dispersal of architectural materials to the far west of the main house, in particular, was likely part of a surface grading related to the house's destruction after the purchase by New York State. While evidence of the disturbance can be seen around the tenant house area, the larger test units showed that the domestic deposits contemporary to the dry dock were not disturbed in a significant way by the bulldozer destruction of the homes in the 1970's. As part of his masters thesis, Pippin (1996: 84–92) conducted an interview with one of the last residents of the tenant house, who was able to offer significant information on the layout of the structure.

Pippin (1996) describes several areas for future research in the areas of the two houses, and the third foundation discovered behind the tenant house. The bulk of the archaeological work conducted in the domestic areas has been relatively low-impact testing; additional work in these areas may reveal a great deal more about the domestic living conditions for those who lived and worked at Chittenango Landing.

Pratt and Pratt (2000)

Pratt and Pratt Associates were hired to conduct a phase 1 archaeological survey at Chittenango Landing to examine areas that may be impacted by the construction of electrical, water and sewer lines for a new education center (Pratt 2000). The proposed area for the survey was at the west end of the property and partly incorporated the area tested by Syracuse University in 1994.

Pratt did not find intact deposits and noted that in several places there was mixed 19th and 20th century materials, likely resulted from dumping or disturbance. The areas tested in 2000 also included that parcel that is dedicated to the museum public archaeology program for school children, described in more detail below. No recommendation for additional testing was made, and eventually the proposed location for the education center was moved to the east side of the Chittenango Feeder, to its present location closer to Lakeport road.

Pratt and Pratt (2002)

The proposed location for the Chittenango Landing Canal Boat Museum public education center to the east of the feeder canal placed it near the ruins of the Merrell-Soule Cannery near Lakeport Road. The museum acquired the property that included the cannery in 1996 (Pratt and Pratt 2002: 27). The photograph in Figure 5 shows the public education building and the extant remains of the cannery adjacent, near the intersection of the canal and Lakeport Road. The public education building is noted with the museum symbol with an "m" in this photograph.

Among the stated goals for Pratt and Pratt's phase 1 and 2 survey was to see if the remains of the cannery were eligible for inclusion on the National Register of Historic Places. The report on the 2002 survey indicates that the cannery is an eligible property for inclusion on the register (Pratt and Pratt 2002: 46). As of 2013, however, the cannery is not listed on the register. A map of the excavation and testing conducted by Pratt and Pratt is included in Figure 11. While a unique archaeological resource, interpretation of the cannery is not part of the mission of the Chittenango Landing Canal Boat Museum.

Public Archaeology at Chittenango Landing (1992—)

An extensive public archaeology program has been in place at Chittenango Landing since the early 1990's. This program was primarily the work of Joan DiChristina, a former director and trustee of the museum, and a retired teacher. At first, students were allowed to participate in several ongoing archaeological projects at the site, and to provide assistance in the lab. By 1994, it was noted that the students had the ability to uncover materials at a rate greater than the ability to clean, analyze and store the artifacts. With the assistance of Michael Hoover during the Syracuse University Field School (Hoover 1995), a plan was established wherein students would "excavate" in an area behind the main house that would be seeded with 19th century materials. This could allow for several units to be excavated over the course of the school visitations. The students could analyze the materials and they could be re-incorporated into the same units at the end of the year.

Diane Brandt is the current education coordinator of the program for 4th–6th grade students:

> …students engage in hands-on education by participating in an archaeological dig, like the one conducted at this site, and relating its importance to preservation. Students are taught about the need for a gridded area when plotting and excavating a site and how to use basic tools needed for the dig. After excavating, students sift the soil, then record, sort, clean, and store artifacts. They complete the activity by discussing the significance of their findings and the role the excavation plays in the preservation and reconstruction of this site.
>
> During the map activity, students work cooperatively with partners to learn about the industrial site setting through the use of a map, photos, text and models. Students dress canal-era dolls, play with corn cob checkers, boat puzzles and other hands-on age appropriate activities.
>
> During their visit they also view a hoggee at rest in the mule stable exhibit and explore the living quarters and cargo hold of an authentic recreation of a canal boat. (Brandt ND)

The student excavations are able to take place in a variety of weather conditions as they are conducted under a Quonset hut-like tent in the mixed debris west of the main house. This structure can be seen in Figures 4 and 5, to the left of the main house and just above the circular driveway.

Archaeological Reports, Papers and Manuscripts

Bero Associates
1994 Proposal for Restoration of the Chittenango Landing Dry Docks. Prepared by Bero Associates, Architects, for the Chittenango Landing Canal Boat Museum.

Brandt, Diane
ND Primary Source Program Information, Chittenango Landing Canal Boat Museum.

Crawford and Stearns
1995 Project Manual for Restoration of the Dry Docks. Prepared by Crawford and Stearns, Architects, for the Chittenango Landing Canal Boat Museum.

DeAngelo, Gordon
1990 *Chittenango Landing Canal Boat Museum: 1895 Survey Location Data.* Report on file, Chittenango Landing Canal Boat Museum.

1994 *A Summary of Archaeological Investigations at Chittenango Landing Canal Boat Museum to Date, January 1994.* Report on file, Chittenango Landing Canal Boat Museum.

DeAngelo, Gordon and Barbara DeAngelo,
1993 *Wood Preservation at Chittenango Landing: Past and Future.* Draft manuscript on file, Chittenango Landing Canal Boat Museum.

Hoover, Michael C.
1995 *Developing a Participatory Archaeological Component for the Chittenango Landing Canal Boat Museum Public Education Program.* Paper presented at the annual meeting of the Society for Historical Archaeology, Washington, DC.

Kellar, Elizabeth, Douglas Pippin, Mark Hauser, and LouAnn Wurst.
1996 *The Erie House at Lock #52: Archaeological Investigations in the Village of Port Byron*. Syracuse University Archaeological Research Center Monograph #10.

Lozner, Christine
1992 Chittenango Landing Dry Dock Complex, Nomination Form, National Register of Historic Places. Washington, DC: National Park Service.

Murphy, R. Joseph and Gordon C. DeAngelo
1987 *Chittenango Landing Dry Dock Preliminary Report.* R. Joseph Murphy and Associates for the Chittenango Landing Canal Boat Museum.

Opalka, Anthony

2009 Chittenango Pottery, Nomination Form, National Register of Historic Places. Washington, DC: National Park Service.

Pippin, Douglas J.
1995 *Class and Industry Along the Erie Canal*. Paper presented at the annual meeting of the Society for Historical Archaeology, Washington, DC.

1996 *Working Along the Erie Canal: Archaeological Investigations at a Nineteenth Century Dry Dock Complex*. Unpublished master's thesis, Department of Anthropology, Syracuse University.

Pratt, Peter P.
1981 *Stage 1a Cultural Resources Survey of the Facilities Plan for the Village of Chittenango, Madison County, New York*. Pratt and Pratt Archaeological Consultants on behalf of the Village of Chittenango, New York.

2000 *Phase 1 Cultural Resources Survey, Electrical, Water and Sewer Lines, Chittenango Landing Canal Boat Museum within The Old Erie Canal State Park, Town of Sullivan, Madison County, New York.* Pratt and Pratt Archaeological Consultants for the Chittenango Landing Canal Boat Museum.

Pratt, Peter P. and Marjorie K. Pratt.
2002 *Phase 1 and 2 Cultural Resources Survey, Chittenango Landing Canal Boat Museum Visitor Education Center, Town of Sullivan, Madison County, New York.* Pratt and Pratt Archaeological Consultants for the Chittenango Landing Canal Boat Museum.

Weiskotten, Daniel
1991 Letter to Christine Lozner, Re: Background for National Register nomination, dry docks along the Erie Canal and summary of archaeological work conducted at Chittenango Landing.

Archival Records and Primary Source Material

DeAngelo, Gordon

ND Photographs of CLCBM, excavations and restoration. Records on file, vertical box #10, Chittenango Landing Canal Boat Museum.

ND (c. 1990) Artifact Records. Chittenango Landing Canal Boat Museum In Service Artifact Record. Catalog on file, Chittenango Landing Canal Boat Museum.

ND (c. 1994) Suggested Field Procedures for Plotting Profile (Starboard) of Canal Boat. Document on file, Chittenango Landing Canal Boat Museum.

1987–1995 Day books and survey books. Records on file, vertical boxes #6 and #15, Chittenango Landing Canal Boat Museum

1987–1989 Archeological Findings, Dry Dock. Survey and excavation notes on file, vertical box #16, Chittenango Landing Canal Boat Museum.

1987–1992 Artifact records. Catalog on file, vertical box #17, Chittenango Landing Canal Boat Museum.

1991 Status Site Map and Remarks. Documents on file, Chittenango Landing Canal Boat Museum.

2008 Annotated archaeological survey map. On file, vertical box #15, Chittenango Landing Canal Boat Museum.

DeAngelo, Gordon and Barbara DeAngelo

2010 Individual analysis record sheets of 351 glass bottles from the site, transmitted to the New York State Office of Parks, Recreation and Historic Preservation, Peebles Island, NY. Records on file, Chittenango Landing Canal Boat Museum.

Figures

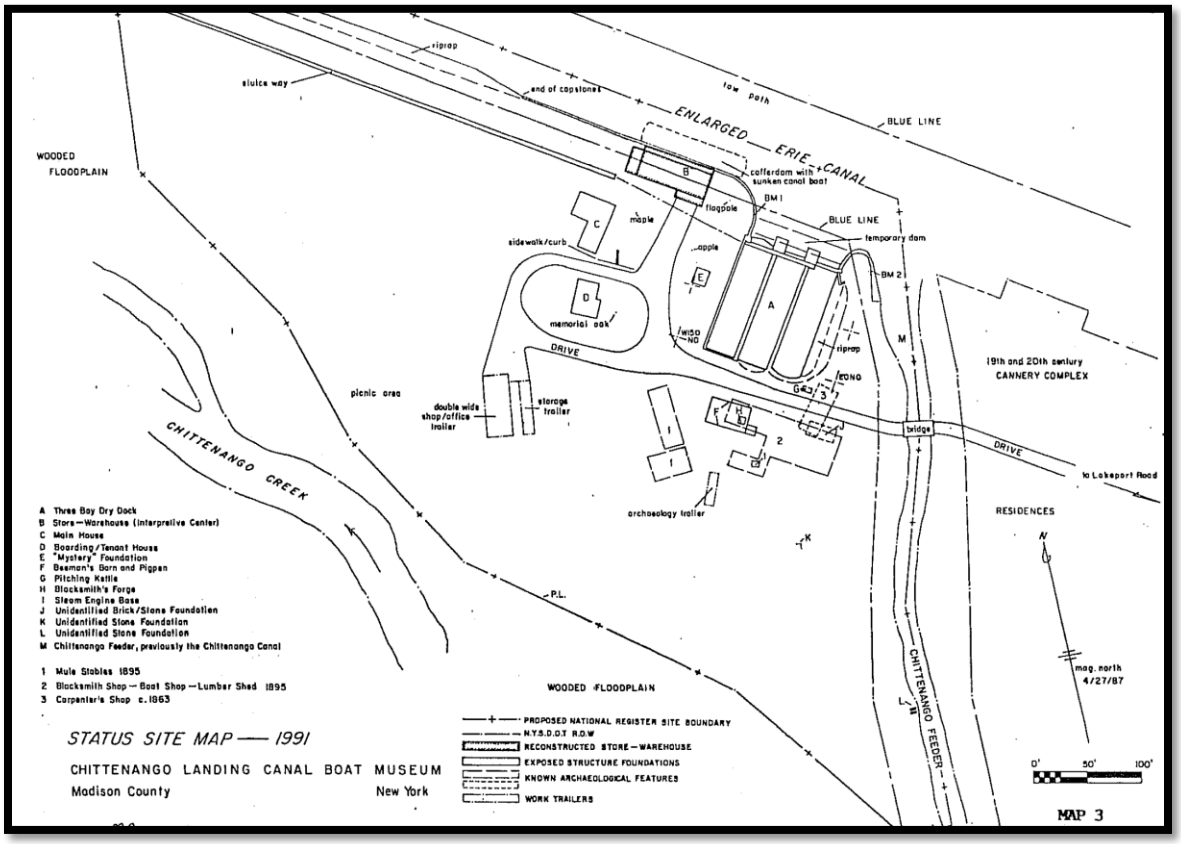


Figure 1 - Identification of activity areas identified at Chittenango Landing by Gordon DeAngelo, 1991.

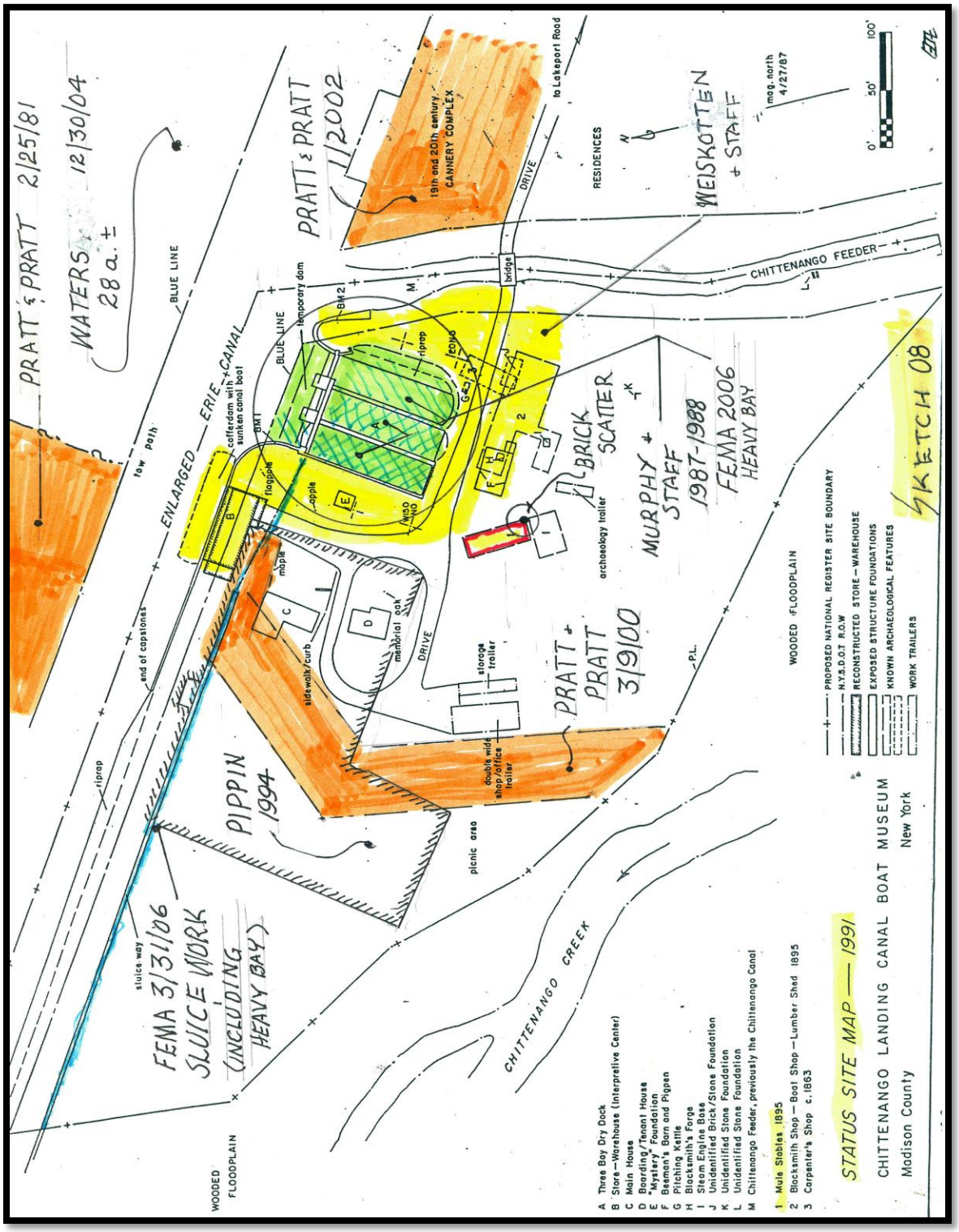


Figure 2 - Map of archaeological investigations at Chittenango Landing (DeAngelo 2008, using the base map formulated in DeAngelo 1991).

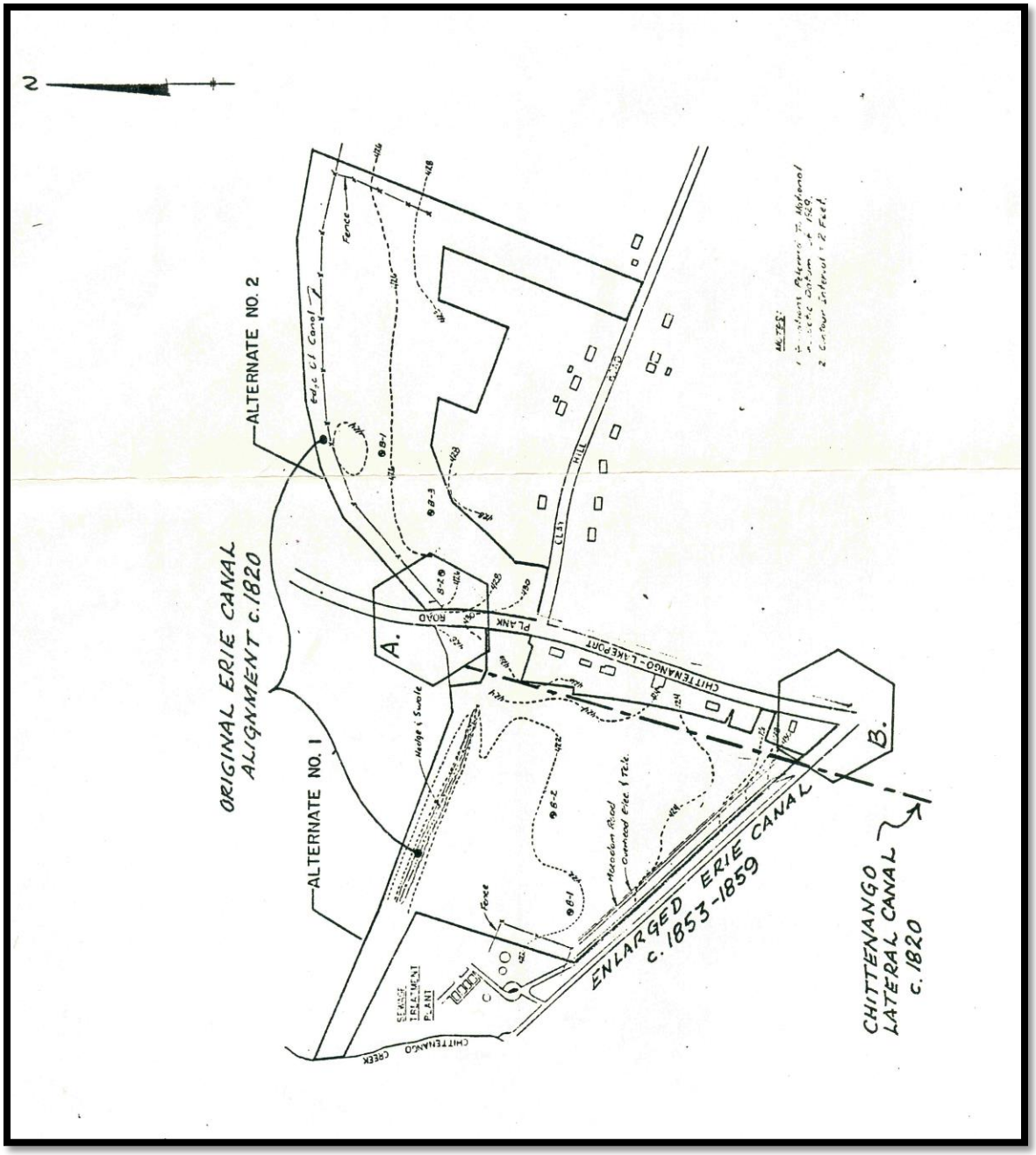


Figure 3 - Pratt (1981) Project Area.

Figure 4 - Chittenango Landing in 1995.

Figure 5 - Chittenango Landing in 2011.

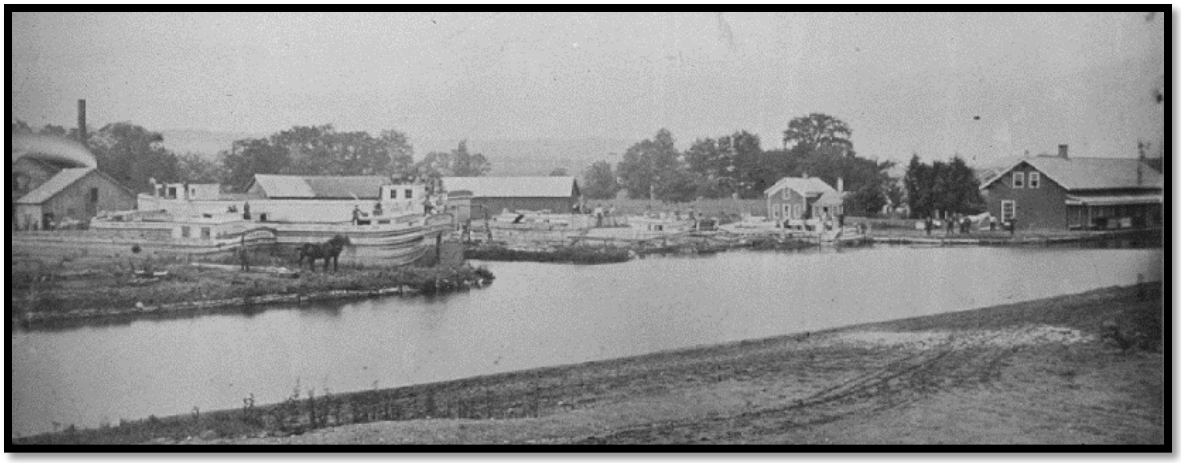


Figure 6 - 1870 photograph of Chittenango Landing.

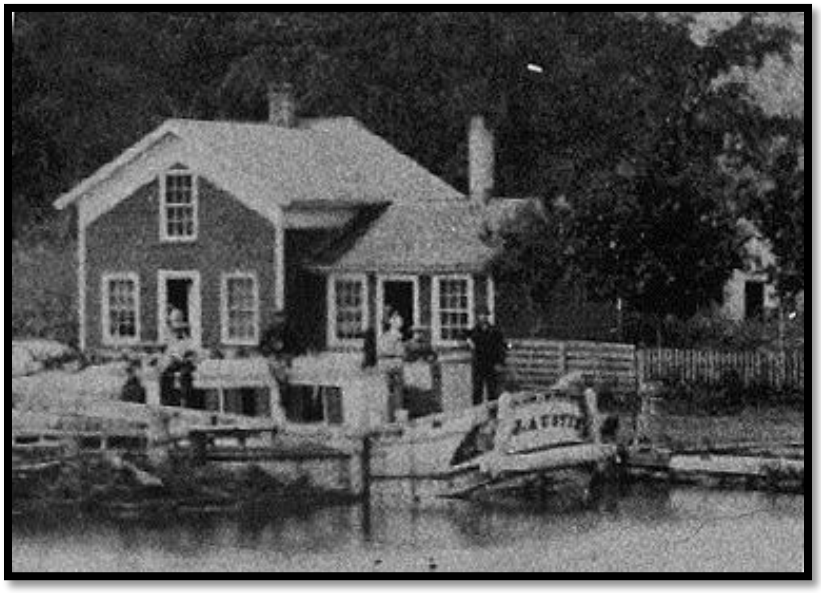


Figure 7 - 1870 photograph of Chittenango Landing, detail of tenant house.

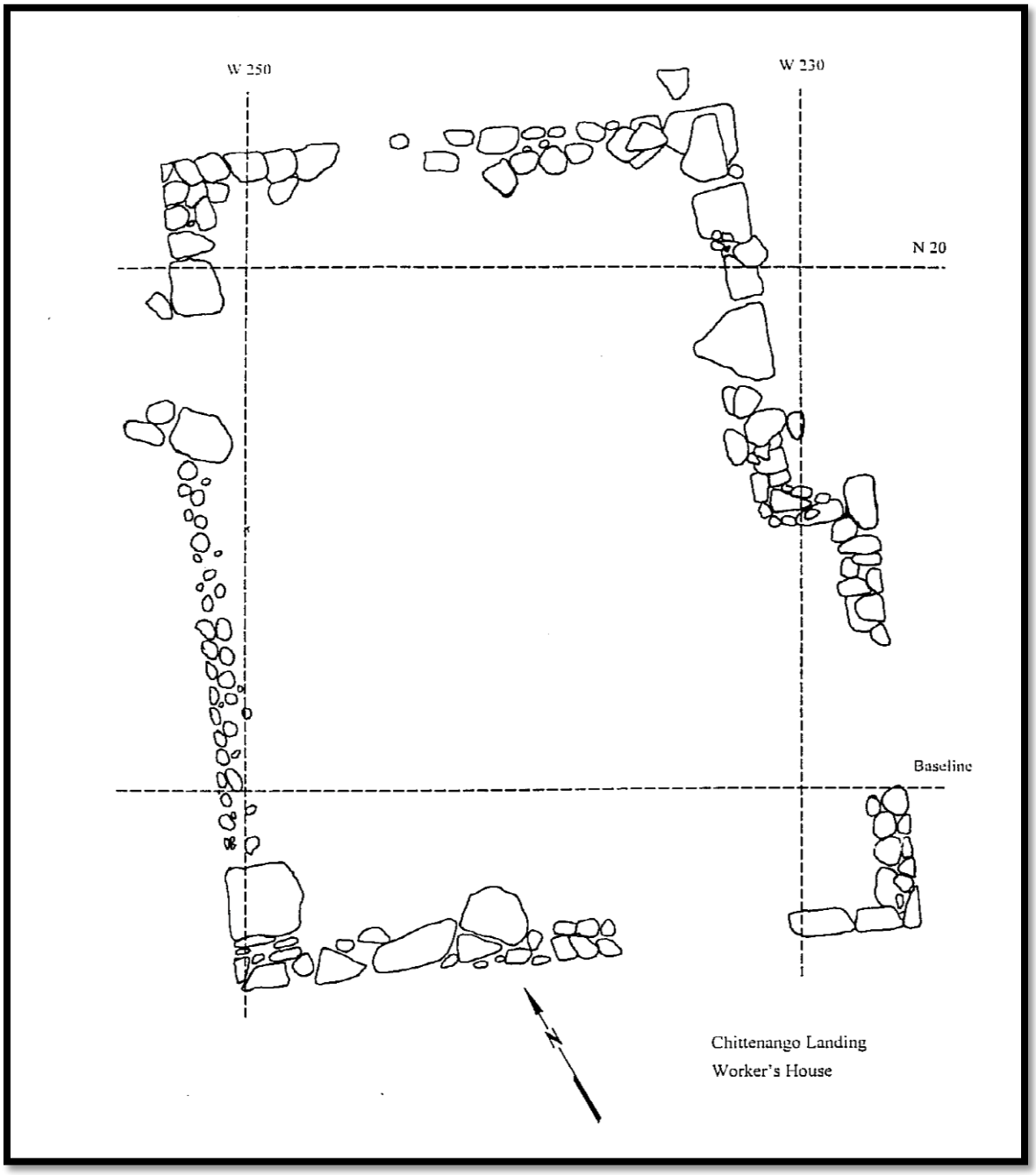


Figure 8 – Plan of the tenant house foundation (Pippin 1996).

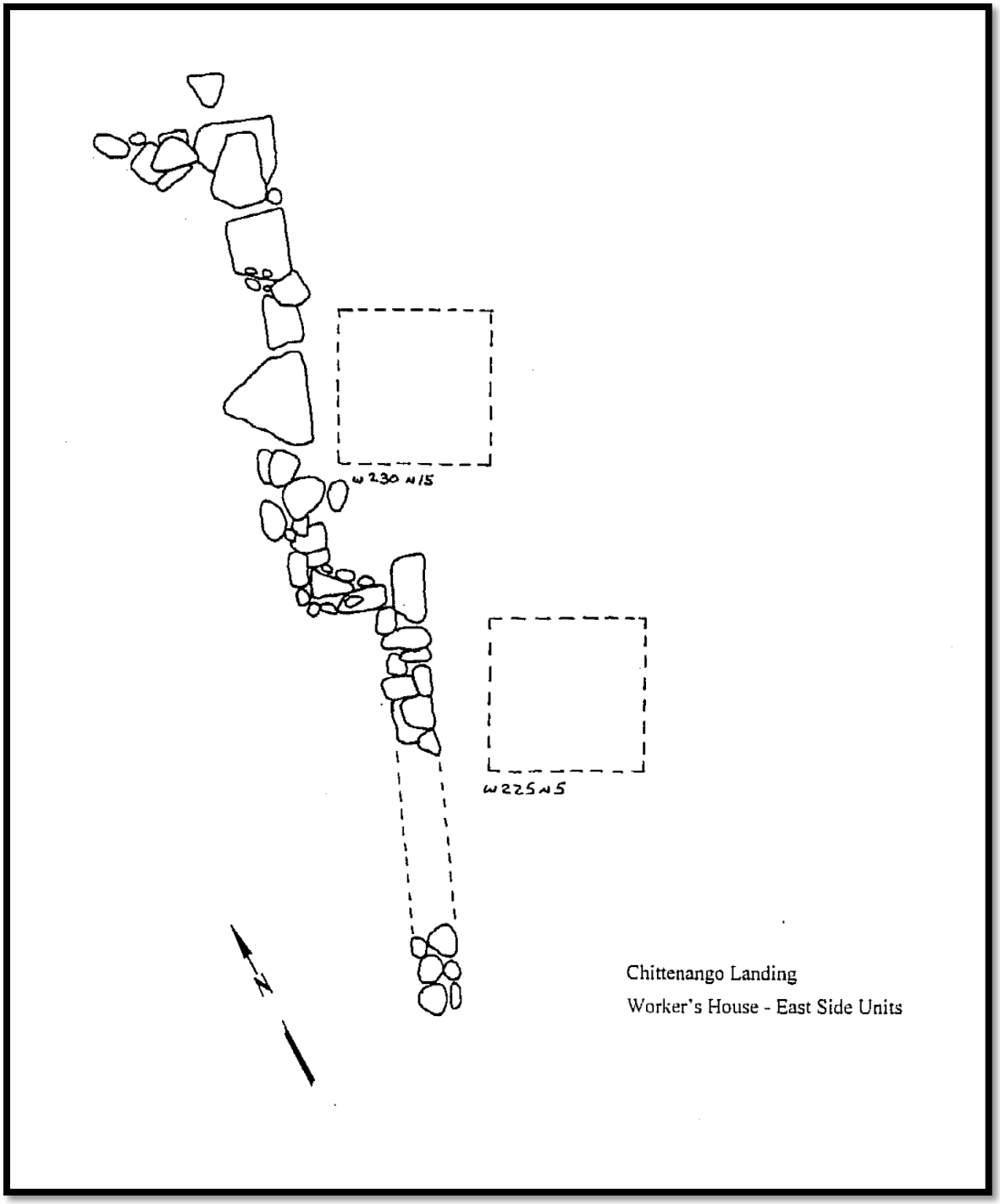


Figure 8 – Plan of the tenant house foundation (Pippin 1996), detail of east side units.

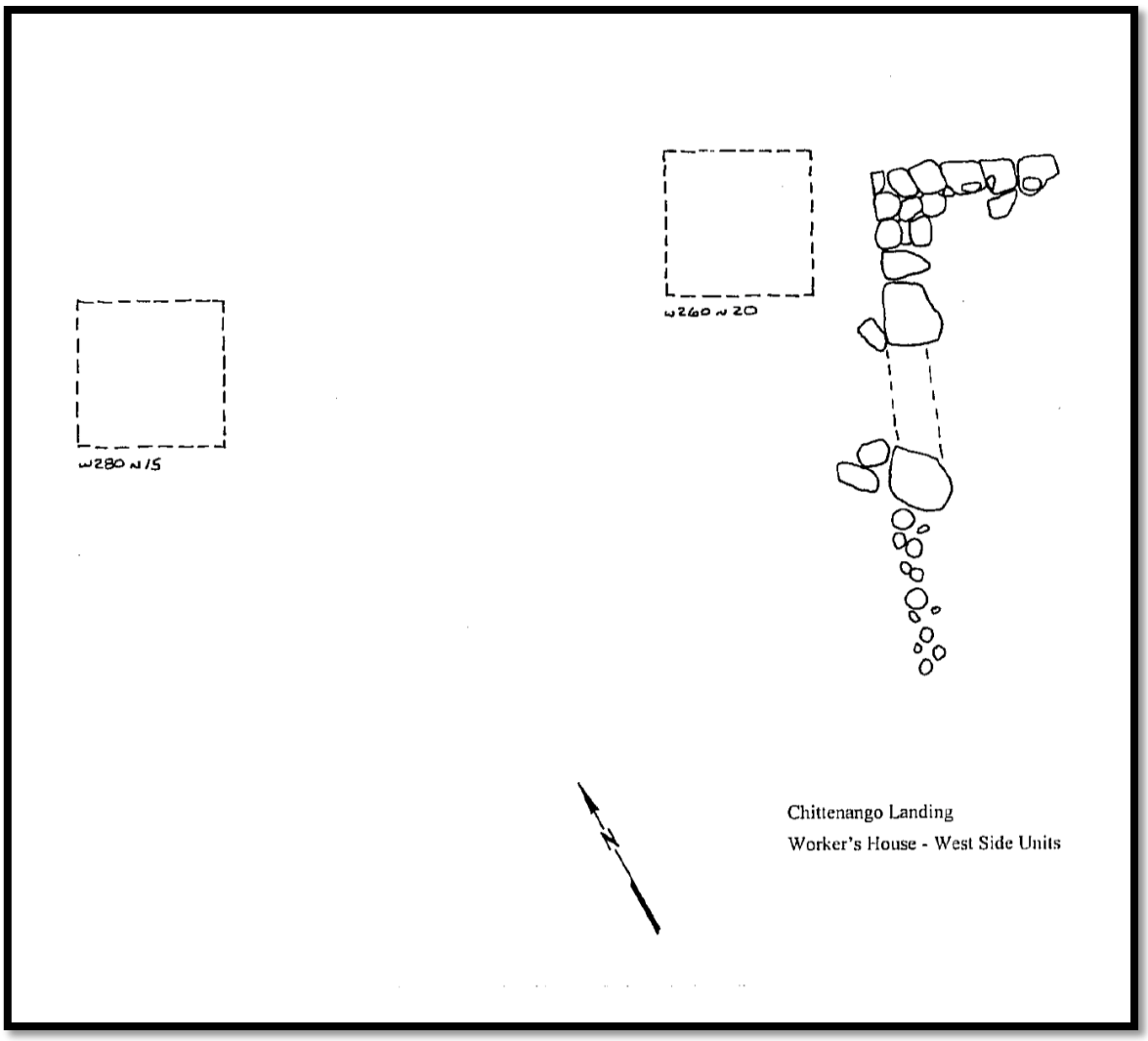


Figure 8 – Plan of the tenant house foundation (Pippin 1996), detail of west side units.

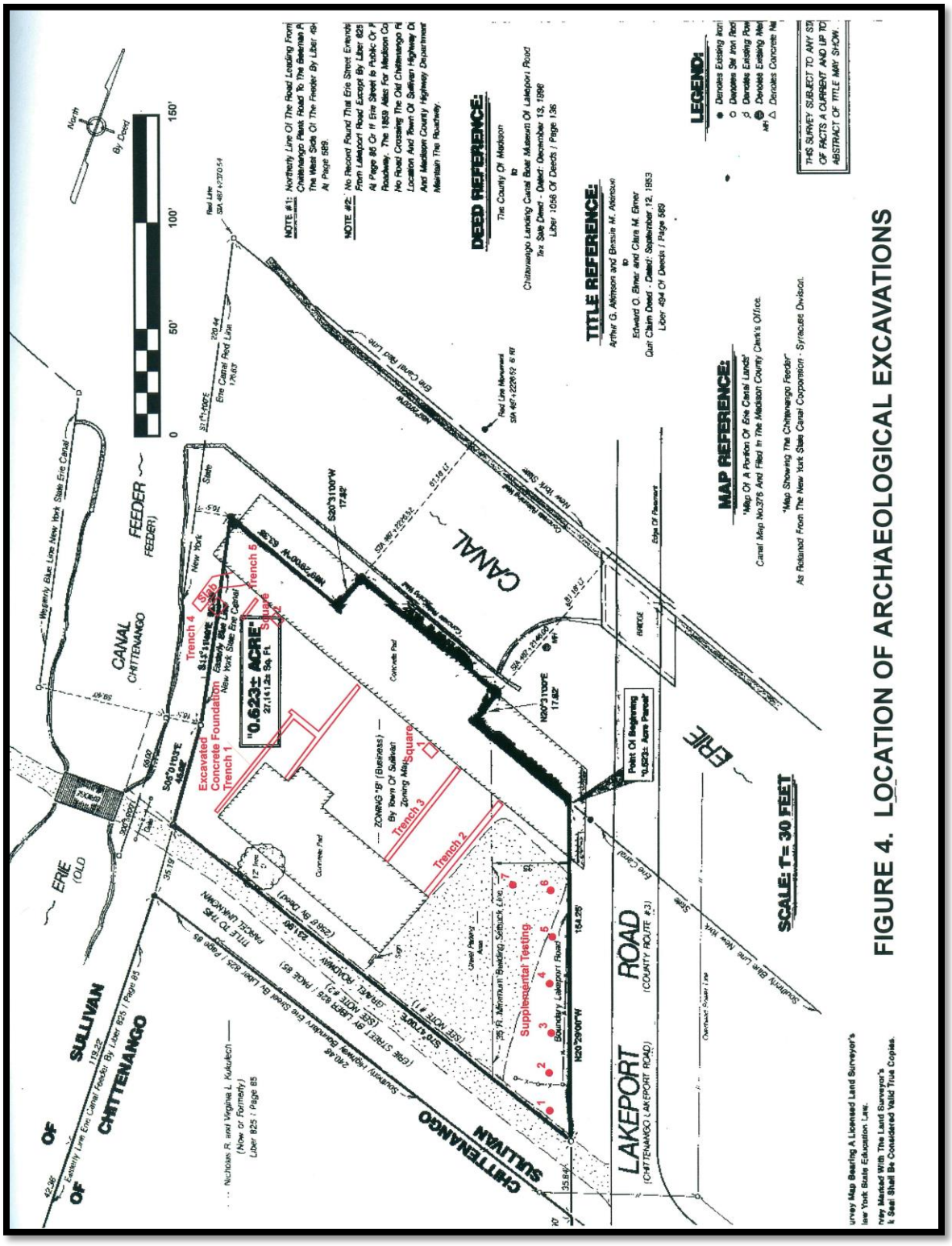


Figure 11 - Map of Pratt and Pratt testing for the public education building, 2002