FINAL

Historic Structures Management Plan
Sault Ste. Marie, Michigan

18 November 1998

Prepared for:

City of Sault Ste. Marie, Michigan
Department of Planning and Development
1301 West Easterday-Industrial Park
Sault Ste. Marie, Michigan 49783

Prepared by:

Gray & Pape, Inc.
1318 Main Street
Cincinnati, Ohio 45210

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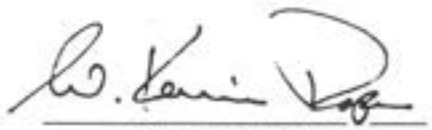
Prepared by:

Rita Walsh, Principal Investigator
Robert A. Powell, Architectural Consultant



W. Kevin Pape
Project Manager

HISTORIC STRUCTURES MANAGEMENT PLAN
SAULT STE. MARIE, MICHIGAN

PROJECT STEERING COMMITTEE

Mary June, Chippewa County Historical Society
Sharon MacLaren, Chippewa County Historical Society
Charles Ludwick, Chippewa County Historical Society
Paul Freedman, Citizen Participant
Jimmie Hobaugh, Le Sault de Sainte Marie Historical Sites, Inc.
Susan Schacher, Saulte Ste. Marie Foundation for Culture and History
Johann Ingold, Saulte Ste. Marie Foundation for Culture and History

CITY STAFF

Spencer Nebel, City Manager
James Hendricks, Director, Planning and Development Department
DiAnn Pettett, Development Assistant, Planning and Development Department

ABSTRACT

Gray & Pape, Inc. (Gray & Pape), was contracted by the City of Sault Ste. Marie, Michigan (City), to provide three major services for four buildings: the John Johnston House, Henry Rowe Schoolcraft House, Bishop Baraga House, and the Kemp Coal Dock Office Building, located on Water Street on the shore of the St. Mary's River. These services entailed an up-to-date assessment of the structural condition, costs and work phases required to rehabilitate the four structures; recommendations and guidance on the most effective organization(s) and appropriate personnel to manage the rehabilitation effort; and recommendations on the ongoing management of the structures, including suggestions on funding sources for both the rehabilitation and ongoing operations.

A thorough assessment of the condition of each building was conducted and stabilization costs were prepared. Recommendations for the proposed uses of each building were also formulated; all four are proposed as a museum or to house interpretive displays along with public meeting or office functions. Stabilization and rehabilitation/ restoration costs were proposed for each of the buildings in these future uses and a prioritization of the buildings regarding this work was presented.

Design and site improvement recommendations for the museums area and the corridor from Soo Locks Park to the S. S. Valley Camp were included as part of this report. The most important recommendations involves the marina under construction north of the buildings. A more sensitive design of the ramp, parking, and services areas would substantially improve the appearance and function of this marina in conjunction with the four buildings.

Management recommendations included an assessment of the capabilities and interests of the major participants involved in this report and a study of four historical villages and the Main Street Program as potential models for management. The resulting management recommendations specify an operating agreement between the City, as owner of all four properties, and Historic Sites, as the operator in charge of stabilization, restoration/rehabilitation, and operation of the properties, which would be overseen by a five-person steering committee composed of representatives of Historic Sites, the Foundation for Culture and History, the Chippewa County Historical Society, and two at-large members appointed by the Mayor of Sault Ste. Marie.

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CHAPTER I. INTRODUCTION

Gray & Pape, Inc. (Gray & Pape), was contracted by the City of Sault Ste. Marie, Michigan (City), to provide three major services for four buildings: the John Johnston House; the Henry Rowe Schoolcraft House; the Bishop Baraga House; and the Kemp Coal Dock Office Building, which are located adjacent to each other on Water Street on the shore of the St. Mary's River. These services entailed an up-to-date assessment of the structural condition, costs and work phases required to rehabilitate the four structures; recommendations and guidance on the most effective organization(s) and appropriate personnel to manage the rehabilitation effort; and recommendations on the ongoing management of the structures, including suggestions on funding sources for both the rehabilitation and ongoing operations. An informal committee composed of representatives from the three historic preservation organizations in the city, Le Sault de Sainte Marie Historical Sites, Inc. (Historic Sites), the Chippewa County Historical Society (CCHS), and the Foundation for Culture and History (FCH), and city staff have overseen and participated in this study.

The investigations were carried out from May through October 1997 and entailed two site visits by Gray & Pape Principal Investigator, Rita Walsh, and architectural consultant, Robert Powell. Presentations to the City and to the steering committee composed of representatives from the three principal historic preservation organizations in the city were made in July 1997.

ACKNOWLEDGEMENTS

The Project Steering Committee for the Historic Structure Management Plan was composed of three members from the Chippewa County Historical Society: Mary June, Sharon MacLaren, and Charles Ludwick; Paul Freedman, Citizen Participant; Jimmie Hobaugh, Le Sault de Sainte Marie Historical Sites, Inc.; and Susan Schacher and Johann Ingold of the Sault Ste. Marie Foundation for Culture and History. The City staff involved in the project were Spencer Nebel, City Manager; James Hendricks, Director, Planning and Development Department; and DiAnn Pettett, Development Assistant, Planning and Development Department.

Rita Walsh, Principal Investigator, was responsible for overseeing this project and performed the research on past and current efforts to preserve these structures and investigated other organizations with similar circumstances. Robert Powell, architectural consultant, assessed the structural condition of the buildings which he authored in Chapter III, as well as formulated realistic costs and work phases for their rehabilitation. Ms. Walsh and Mr. Powell collaborated on the design and management recommendations. Graphics were provided by Robert Powell and Gray & Pape Graphics Director, Kris Luce, and Casey Fagin, Graphic Artist/Illustrator. Carly Meyer was responsible for production of the report. W. Kevin Pape served as the Project Manager.

CHAPTER II. EXISTING CONDITIONS IN PROJECT AREA

This chapter describes the existing conditions in the project area and in the area which surrounds the four buildings. A brief discussion of the past efforts which involved the buildings and surrounding area will also be presented as these efforts have largely determined the existing conditions found in the project area.

The project area is located at the east end of Water Street on the southern shore of the St. Mary's River in Sault Ste. Marie in Michigan's Upper Peninsula (Figure 1). The project area is comprised of four buildings, ranging in age from c. 1822 to 1903, which are located on four contiguous parcels on the north side of Water Street (Plates 1 and 2). The types of uses which surround the buildings are quite diverse and include U. S. Coast Guard administrative facilities to the west, a residential area composed mainly of one-story houses from the 1950-1970s to the south, and an early twentieth century freighter berthed in a slip to the east which currently serves as a ship museum. The buildings are in close proximity to the city's downtown business district, the site of Fort Brady and the earlier Fort de Repentigny (both in Brady Park), the old Federal Building and Chippewa County Courthouse, and the city's most famous tourist attraction, the St. Mary's Falls Ship Canal, more commonly known as the Soo Locks (Figure 2; Plates 3 and 4). Another visitors' stop in the vicinity is a monolithic concrete observation structure, called the Tower of History, which is located to the south and west of the project area.

The project area is currently known as the Historic Homes area, a name which the authors suggest should be changed in the interim to the Water Street Museums area. This name not only accurately describes the current and proposed functions, but is more inclusive of the nearby museum sites in the vicinity. Three of the four buildings originally served as residences for some of Sault Ste. Marie's most important citizens and have functioned as museums in the recent past. The fourth building was built as a coal dock office by a local company which operated from the late nineteenth century into the 1950s. Although not part of the project area as studied in this report, two other museums are located in the vicinity, the River of History Museum in the old Federal Building and the Valley Camp ship museum berthed directly east of the Kemp Coal Dock office building.

While the project area cannot strictly be labeled a historical village, it does share a similar concept for the preservation of historic buildings. Neglected and threatened on their original sites, both the Schoolcraft House and the Baraga House were moved to this location in the 1980s in order to preserve them. The Johnston House, the oldest of the buildings, is located approximately where it was built on the city's riverfront; the Kemp Coal Dock Office building, the youngest of the buildings, has been moved a short distance from its original site although it remains on property which belonged to the Kemp business until the family donated it to the city. The Baraga House was moved twice before its present location on Water Street; the house originally stood on Portage Street

Location of Project Area

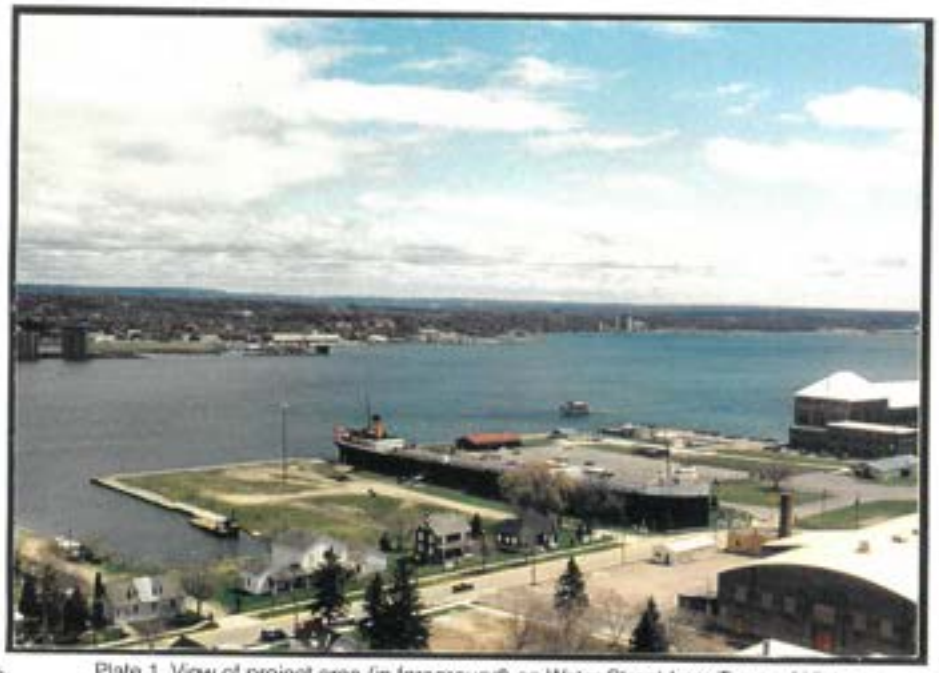


Plate 1. View of project area (in foreground) on Water Street from Tower of History, facing northeast.

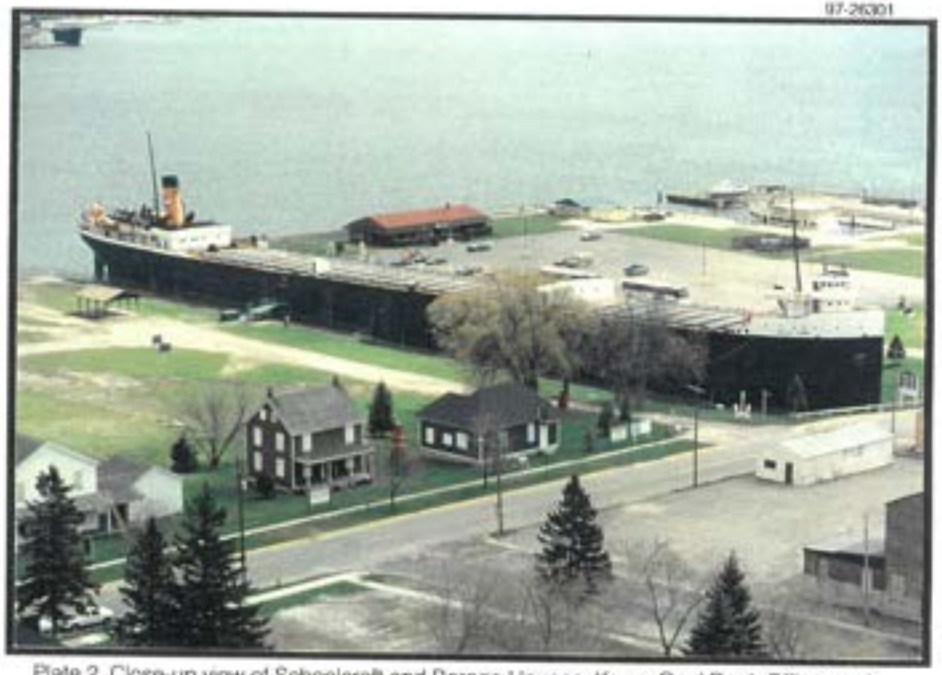
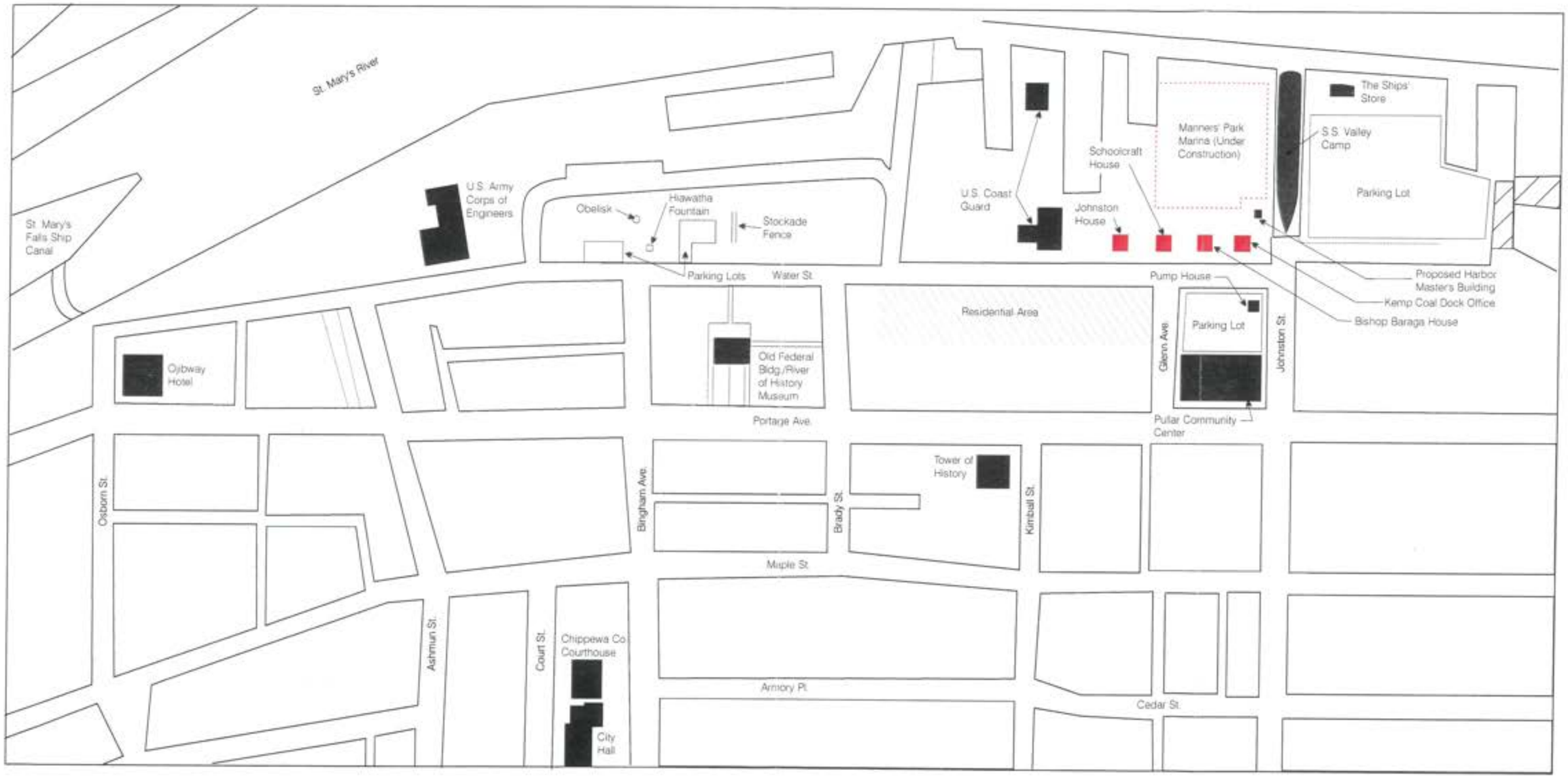


Plate 2. Close-up view of Schoolcraft and Baraga Houses, Kemp Coal Dock Office, and Valley Camp ship museum (left to right) from Tower of History, facing northeast.

Plate 3. Close-up view of Johnston House (on right), towing operation behind (north) of it, and Coast Guard facility to west, facing north.

Plate 4. View northwest from Tower of History of Water Street west of project area with Old Federal Building in foreground and Soo Locks to northwest.



Water Street Museums and Surrounding Area-Existing Conditions

GRAY & PAPE, INC.
CULTURAL RESOURCES CONSULTANTS

Figure 2

close to the St. Mary's church complex approximately two blocks away. The Schoolcraft house came from the farthest distance; the house was originally located east of the basin of the Edison Sault Power canal and was moved to the Water Street site by barge on the St. Mary's River.

Together, these four buildings represent over 150 years of the city's historical development and are associated with important people and events for which the city is best known. The significance of these buildings, particularly the three residences, is recognized by the local community which has over the past 50 years participated in the preservation of these structures. The plethora of studies, plans, architectural drawings and specifications, both for the individual buildings and the surrounding area, indicate the strong desire to protect and utilize the significant historic resources of the community. But admittedly their number also indicates a lack of implementation strategies or at least enough realistic detailed direction to carry out the plans.

PREVIOUS PRESERVATION/INTERPRETATION EFFORTS

JOHN JOHNSTON HOUSE

The earliest preservation efforts were directed towards the Johnston House, the home of Irish-born fur trader John Johnston, his Chippewa wife, O-Zhaw-Guscoday-Way-Qua (also known as Susan), and their family. One of the oldest houses in the region, built originally in 1815 with the existing section added in 1823, the house was revered for its "colonial" cedar log construction and its association with the colorful individuals in the early Euroamerican settlement period of Sault Ste. Marie's history. In the 1940s, the neglected structure was purchased by the City from Great Lakes Towing Company, still a current neighboring activity, after a resolution was adopted by the CCHS to save the building. The driveway between the Johnston and Schoolcraft Houses which leads to the towing facility is a physical legacy of the towing company's ownership of the Johnston property.

Guided by Emil Lorch, Professor-Emeritus of Architecture, University of Michigan, the building was thoroughly studied and repaired using contemporary restoration standards and techniques during the late 1940s and early 1950s. It appears that Mr. Lorch's participation was mainly off-site in the form of letters to Mr. Fred Rodiger, President of the CCHS, which presented analyses of the condition of the building and suggested remedies and restoration techniques. It does appear, however, that inadequate construction supervision during the rehabilitation led to a number of problems which are still a concern today. Some work, including a new roof covering, was done in the 1970s.

The building has served as a house museum, a common utilization of historic buildings in the early to mid-twentieth century, since the purchase by the City. Open mainly in the summer and now by appointment only, the house requires substantial stabilization/restoration measures to make it accessible to the public.

HENRY ROWE SCHOOLCRAFT HOUSE

The Henry Rowe Schoolcraft House was built in 1827 as both the residence of Mr. Schoolcraft and his wife, Jane, the daughter of John Johnston, and as the Indian Agency headquarters. The house, known as Elmwood for the surrounding elms and other magnificent trees on the property, was the most high style building in the area. It was built by Obed Wait, who had also constructed the courthouse in Detroit which served as Michigan's capitol until 1847.

Henry Rowe Schoolcraft, a native of New York, was appointed by the Territorial Governor, Lewis Cass, as the first Indian agent in the region in 1822. The family lived in the house until 1833 when the Indian agency office was moved to Mackinac Island. The building served as a residence for several families, including Charles T. Harvey, the builder of the St. Mary's Falls Ship Canal. During the course of the nineteenth century, the building was remodeled from its simple Federal design to a Queen Anne concoction with projecting bays and porches. In the early twentieth century, the building was used as an office and then stood vacant for several decades in the ownership of Union Carbide Company. It was briefly opened as a museum in the 1950s under the operation of the CCHS during the city's centennial celebration of the construction of the Soo Locks.

Almost completely surrounded by industrial development by the mid-twentieth century, the re-use of the building was extensively studied in the 1970s and 1980s and finally moved by barge on the St. Mary's River to the Water Street location in 1985. The building received some preliminary structural treatments in the 1980s, including a new roof and reconstruction of the east dependency. All of the later Queen Anne accretions were removed at this time, with the intention of restoring the original Federal design of the house. An office use was contemplated for the building, but it has not been used for any long-term purpose since its move to this site.

In 1997, bid documents for partial rehabilitation work (mainly for the two dependencies) were prepared by the architectural firm of Crumlish and Crumlish of South Bend, Indiana. The preparation of these documents was the first step in the planned restoration/rehabilitation that was funded by a $90,000 interiors grant. The bid documents were based on drawings done by the same firm in 1986. Uses for the building were not specified in these drawings. A more detailed description and analysis of this 1997 project is presented in Chapter IV, Proposed Building Uses.

BISHOP FREDERIC BARAGA HOUSE

The Baraga House was built in 1864 as the residence of Bishop Frederic Baraga, who had been consecrated Bishop of the new diocese which included Sault Ste. Marie as its seat in 1853. He only spent seventeen months in the house, however, because he then moved the seat of the diocese to Marquette in 1866. The building then served as a school and convent until 1898, having been moved in 1884 to make way for a new parochial school. It was used to house parish staff (with a second move in the early 1950s) until it was donated to Historic Sites and finally moved to its present location in 1986. Construction work was carried on in the late 1980s to replace the 1884

porch which did not survive the move with a replica and determine the original floor plan of the house, which had sustained numerous interior changes. The building was used as museum for a short time after the move, although it presently is used only for storage by Historic Sites.

KEMP COAL DOCK OFFICE BUILDING

The Kemp Coal Dock Office Building was built in 1903 for the Kemp Coal Company, a thriving coal shipping concern on the St. Mary's River. Most of the waterfront in this area was occupied by industrial concerns which had separate docks for their shipping activities. The Kemp Company operated here until the 1950s; George and Viola Kemp donated the eight acre site including this building to the city. The building has mainly been used for storage purposes by Historic Sites since that time.

CURRENT OWNERSHIP/MANAGEMENT SITUATION

The four properties within the Water Street Museums area present a complicated ownership and operation status. The land of each property is owned by the City of Sault Ste. Marie, although Historic Sites leases the land upon which the Kemp and Baraga buildings are situated and leases the Kemp Building from the City. Historic Sites owns the Baraga House, while the City owns the other three buildings. Ownership of the buildings has shifted back and forth from nonprofit to city owned over the past 20 years to accommodate the requirements of funding organizations. The CCHS, formerly the owner of both the John Johnston House and the Schoolcraft House, now manages the Johnston House as a house museum, mainly by appointment only. The Schoolcraft House, Baraga House, and the Kemp Coal Dock office are currently vacant with the latter two used for storage of furniture, signage, etc. Minimal maintenance needs, including lawn mowing and overseeing the security of the buildings, such as boarding up the windows and keeping entries locked, is handled by Historic Sites.

PREVIOUS PLANS FOR THE AREA

As stated above, several feasibility studies and plans have been prepared for the area over the past 30 years. The most active presence in the area during this period has been that of Historic Sites, which operates the ship museum, S. S. Valley Camp, berthed just east of the Kemp Coal Dock Office; a gift shop/bookstore nearby east of the Valley Camp; and the observation structure known as the Tower of History on Portage Street. The organization, newly formed in 1967 to restore historical buildings in the area as part of the city's tricentennial celebration, commissioned an organizational plan in that year by Frank & Stein. The conceptual plan included recommendations to acquire a salvaged freighter for interpretation purposes, provide a parking area and information center (the latter built by the Army Corps of Engineers near the west end of Water Street), and conduct archaeological research at Fort Brady and Fort de Repentigny, all of which were

accomplished. Other suggestions in the plan included the establishment of a historic district ordinance for Water Street, which was defeated; a monorail system; and the acquisition of the Edison Sault power plant for incorporation into the tourist-oriented facilities envisioned for the St Mary's River waterfront.

During the 1970s, there were renewed efforts to study the individual buildings and their feasibility for new uses. The most comprehensive individual building study was directed at the Schoolcraft House, which was threatened on its original site. The 1976 study by Preservation Urban Design, Inc., remains an important source of historical and construction information about this building and should be consulted in future work planned for the structure.

HISTORIC LOCKS PARK TRAIL

The idea of a pedestrian corridor to link the heavily visited Soo Locks with the houses at the east end of Water Street was first discussed in the 1970s in some of the reports produced in that period. The most important plan to address this concept, and the one with the farthest reaching physical effect, was the 1981 study by O'Boyle, Cowell, Rohrer, & Associates, Inc., whose avowed purpose was "to develop an attraction that will demonstrate to visitors there is more to see and do in Sault Ste. Marie after they have seen the locks" (O'Boyle et al 1981:1). It was undoubtedly the most concrete of the studies because text and design for exhibit panels and signage was the focus of this study, which examined the entire Water Street corridor from the Soo Locks visitor center to the Water Street houses. Interpretive elements designed in this study and subsequently installed still remain and include the segment of stockade fence in Brady Park, the strap rail in Soo Locks Park, and the kiosks and podiums with interpretive text along the corridor.

EXISTING CONDITIONS OF HISTORIC LOCKS PARK TRAIL

Vestiges still exist of the six-block "trail" or pedestrian corridor envisioned in the 1981 plan, seen in the physical interpretive elements, such as the segment of strap railway at the entrance to the Soo Locks Park, the segment of stockade fencing in Brady Park, and the signage and kiosks still found along Water Street. The information presented along the route is still relevant and the sites to be interpreted are just as important as they were envisioned in 1981. Three major obstacles, however, deter visitors from the passage as envisioned: lack of clear directional signage; confused identity in certain areas due to mixed uses and poorly maintained streetscape elements; and lack of an informational brochure that specifically delineates the sites to be seen along this designated route.

In addition, it needs to be observed that the concept that people will walk from the Soo Locks to the east end of Water Street is ambitious, just given the propensity for people to drive rather than walk a distance over two blocks. It also has to be acknowledged that over the past 20 years the availability of the three houses for visitor access has been limited. If the buildings were open and

hosted activities on the grounds adjacent to them, then a larger audience would be there to participate.

A descriptive walk along the pedestrian corridor envisioned from the Soo Locks Park to the Water Street Museums area illustrates these obstacles. Most visitors to the Soo Locks park their cars either on Portage Street in front of the visitors center and west in an assortment of lots or on the west end of Water Street adjacent to the Soo Locks Park and the Ojibway Hotel at metered spaces. While some visitors may stroll east of their parked cars to see more of the St. Mary's River and incoming ships into the locks, most just get back into their cars for their next destination. What visitors see in this area is the back side of the commercial district on the south side of Water Street, mainly occupied by surface parking lots and ill-maintained landscaping. The north side of the street presents a more inviting view, with the Army Corps of Engineer's building and its cohesive lighting and landscaping as an extension of the Soo Locks Park (Plate 5). An attractive and relatively well-maintained grouping of nineteenth and early twentieth century houses on the south side of Water Street, which include a bed-and-breakfast operation, opposite the Army Corps of Engineers' building may confuse visitors into thinking they constitute the "Historic Homes Area" indicated on signs and brochures. Just beyond to the east is Brady Park, a passive open space that was formerly the north half of the first Fort Brady built in Sault Ste. Marie beginning in 1822 (Plate 6). Certainly this park is a stop for some visitors, due to its open views of the river and its military interest which is interpreted by kiosks and panels with text and a segment of stockade fencing. The park is also the site of commemorative objects in the form of an obelisk celebrating the 50th year of the Soo Locks and the Hiawatha Fountain (Plate 7). Some off-street parking is available, which actually interrupts the pedestrian passage here. The continuity of sidewalk is broken in the park which has two parallel walkways along Water Street, neither of which have any relation to the sidewalks in front of the Soo Locks Park and the Army Corps facility.

Opposite Brady Park stands the old Federal Building centered by itself on a landscaped block, which formed the southern half of the original Fort Brady. The first floor of the building is occupied by the River of History Museum operated by the Sault Ste. Marie Foundation for Culture and History (FCH). During the summer, field school excavations are carried out under the auspices of Lake Superior State University and led by Sue Schacher, professor of archaeology at the university and the guiding force at the museum (Plate 8). Signage around the museum is scarce, partially due to state design controls, although the banners on the Water Street side which advertise the museum are either missing or in poor condition.

Evidently, Brady Park and the River of History Museum are the furthest east that visitors on foot, and possibly even in their cars, will venture along the Water Street corridor from their original stop at the Soo Locks. It is likely that this is due to the inclination of pedestrians to walk more than two blocks to a destination, but visual obstacles and a lack of signage at this location as to the attractions to the east are also factors. To the east of the park and museum, the street alignment jogs slightly and in the summer with full tree foliage the eastern streetscape is difficult to see beyond the first few houses (Plate 9). Although the visibility is better during the months when the trees do not have leaves on them, the predominant view to the east from Brady Park is of a mid-twentieth century

Plate 5. View east of Water Street from the Soo Locks park at west end of the street.

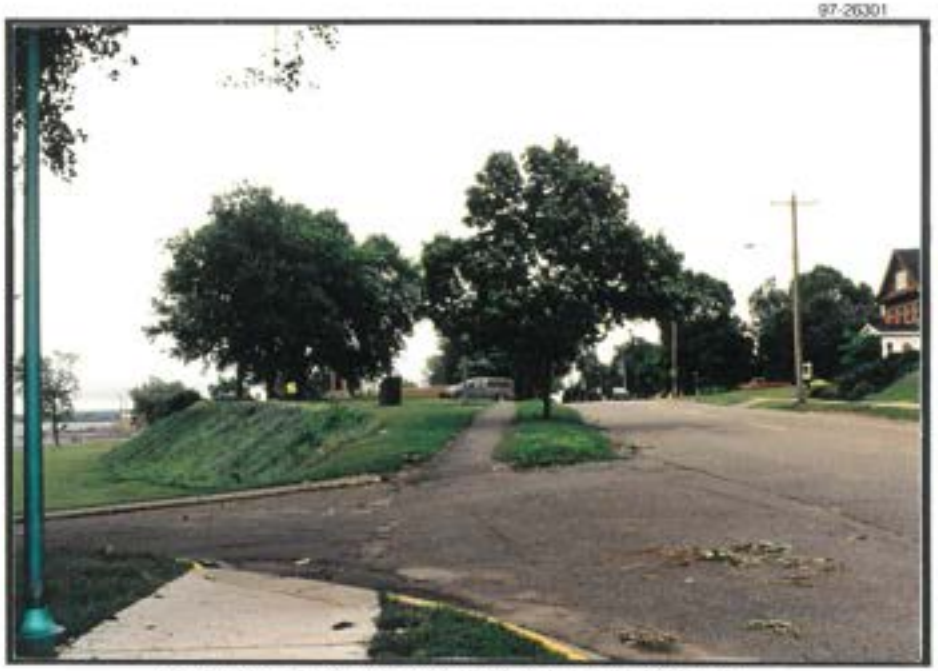


Plate 6. View east of Water Street from west end of Brady Park.

Plate 7. View northeast of Brady Park showing monuments and signage.

Plate 8. View of Old Federal Building where River of History of Museum is located on first floor and summer archaeological field school excavation in north lawn area, facing southeast.

Plate 9. View of Brady Park from the east end in the summer with tree foliage, facing east.

Plate 10. View of Brady Park from the east end in the spring without tree foliage, facing east.

Plate 11.View east from Brady Park area showing the current condition of Water Street and the predominantly residential aspect of this area.

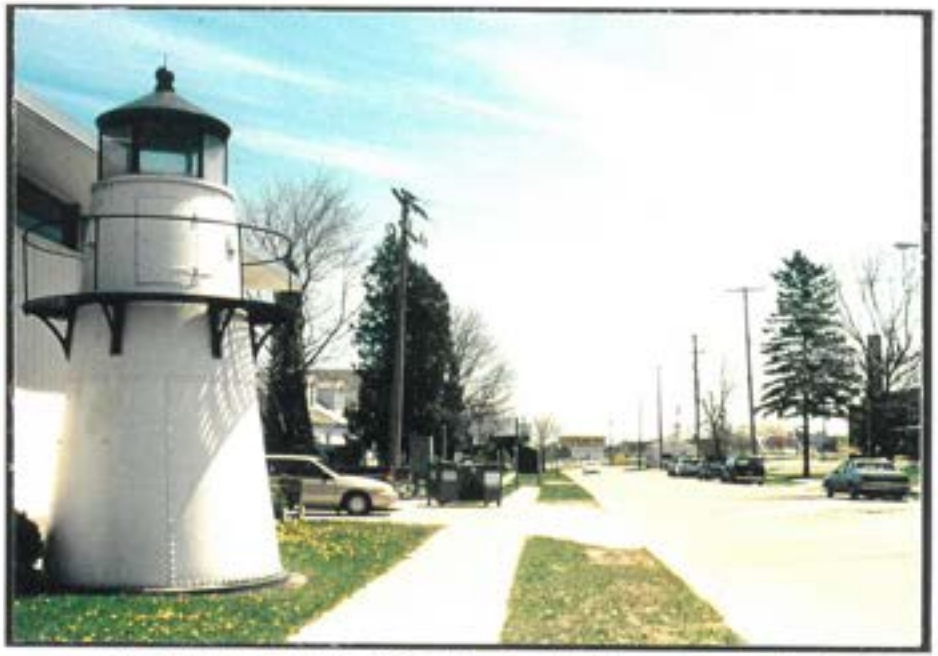


Plate 12. View east from Coast Guard facility with lighthouse in front setback.

residential neighborhood (Plate 10). Glimpses of the bow of the Valley Camp and perhaps the bright yellow entrance sign to the Soo Locks Boat Tour #2 are the only apparent clues of tourist attractions from this vantage point, and those can only be obtained during the months when the least number of tourists are around.

If visitors do keep walking east from Brady Park, there are still quite a few visual obstacles to the Water Street Museums area, which at this point is only one block away. The overwhelming impression is that the area is strictly residential and institutional. The north side is dominated by the U.S. Coast Guard facilities, which are bordered by a tall iron picket fence in front and numerous warning signs against entering the facilities. While the residential area to the south is a pleasant stretch of mid-twentieth century housing, it cannot be said to be of interest to tourists. The bareness of this area is reinforced by a lack of trees, the yellow striping along most of the street curbing, and the numerous curb cuts. None of these elements suggest that a museums area is actually quite close by (Plate 11). The U.S. Coast Guard facility presents significant visual deterrents; the one-story dining room built to the front sidewalk line, the old lighthouse situated in the front setback (which is not interpreted), and the inconsiderate placement of a dumpster in the sidewalk on the eastern end of the facility (Plates 12 and 13).

After a visitor passes around the dumpster (and it is hard to know why they would unless they knew what was beyond), the scene changes dramatically with the northeasterly view of the handsome buildings in the Water Street Museums area. The buildings have the potential to be a visual oasis in the area, although they currently display a forlorn aspect as they are all boarded up (Plate 14). East and south of the four buildings, the area is filled with surface parking lots and the large freighter, the S. S. Valley Camp, adjacent to the Kemp Building. The bright yellow overhead signage of the Soo Locks boat tours operation at the 90 degree curve in Water Street where Johnston Street intersects, may provide tourists with directional signage but is not an attractive streetscape element (Plate 15). The current awkward location of the driveway entrance into the Soo Locks boat tour facility, the Ships' Store and Valley Camp, and Edison Sault facility at this curve presents a traffic hazard as well.

Parking in the vicinity of the buildings is limited to some on-street spaces or in the Pullar Community Center lot south of the Kemp Building, which presents its rear elevation on Water Street. People may also use the larger surface lot east of the Valley Camp where parking is also used by visitors to the Ship's Store operated by Historic Sites, the Edison Sault employees, and Soo Locks Boat Tour #2 patrons. Transportation to the eastern end of Water Street is either by private automobile or via a loop of the Soo Locks Train Tour, a motorized vehicle disguised as an older locomotive and its railroad cars. The train tours do not stop at the Water Street Museums area at the present time although the narration include some information about the buildings to the passengers (Plate 16).

Despite the deficiencies outlined above along Water Street, the concept of providing an attractive and interesting corridor for tourists is still viable. The physical amenities of landscaping and signage and issues such as circulation and parking need to be improved and, of course, the east

Plate 13. View northeast of project area from Coast Guard facility showing disruption of the view (and passage along the street) due to dumpster location in the sidewalk.

Plate 14. View east from west end of project area, in front of Johnston House, along Water Street.

Plate 15. View east of Water Street from east end of project area showing entrance to Valley Camp, Soo Locks Boat Tours #2, and Edison Sault facilities.

Plate 16. View south of Soo Locks train tour vehicle on Water Street and Tower of History in background.

end where the Water Street Museums area is located needs to become active. But the west to east passage by foot, or even by car, from the Soo Locks cannot be the only source. The marina under construction north of the buildings, a well-marked route from the business district, and traffic from the Valley Camp and Soo Locks Boat Tour #2 are other equally important sources of tourists to this area. Chapters IV and V present recommendations on the future uses of the buildings and design and site improvements which will help stimulate activity in the Water Street Museums area.

CHAPTER III. HISTORIC STRUCTURES REPORTS

This chapter presents a description of the investigative techniques used to examine the condition and structural elements of each building, an outline presentation of the structural elements and finishes of each building, the condition of the individual elements, an evaluation of the most serious areas of deterioration, and stabilization recommendations and priorities to resolve these conditions.

INVESTIGATIVE TECHNIQUES

Investigations of the four historic properties current condition was conducted by nondestructive methods requiring no dismantling or demolition of any historic fabric. Some small samples of materials were taken from various discreet locations for clarification of material types and composition.

Slivers from beams and framing elements, flooring, and some trim pieces were carefully collected and catalogued. These have been forwarded to the United States Forest Service Laboratory in Madison, Wisconsin, for analysis and species identification. Additional samples were collected from plaster, masonry, and chinking and are also undergoing professional laboratory investigation. Upon their receipt, all laboratory results will be forwarded as addenda to this report.

Throughout the chapter, there are references to the moisture content of various wood components. These measurements were acquired in the field by use of a Delmhorst RC-1C Solid State Moisture Detector.

JOHN JOHNSTON HOUSE

The John Johnston House is a one-and-a-half story side gable house with a rectangular plan which is of cedar log construction (Plate 17). Clapboard siding was first applied in the late nineteenth century, which was then replaced with beaded board clapboard siding in the 1940s during the first restoration effort. Dormers were installed in the front and rear slopes of the roof in the late nineteenth century as well. Entrances to the building are located in the west end on both the front and rear elevations.

DESCRIPTION OF BUILDING ELEMENTS AND CONDITION

This section provides a description of the major building elements, with conditions that are of special concern called out in the bulleted sections after the description.

A. Foundations

The structure is supported by three parallel, poured in place concrete, walls, each 12" thick, located beneath the south and north exterior walls and at the centerline. The east and west ends of the system are open and allow ample ventilation. These board-formed concrete walls are not original to the John Johnston House and are poured to an unknown depth. At the west end of the structure is a remnant of the 1815 first Johnston cabin to which the present building was attached as an addition (Plate 18). There are portions of stone piers below the ends of this wall segment which are more typical of original foundation construction but may also be replacements.

B. Floor Systems

1. First Floor

The original building has been placed on an entirely new floor system comprised of non-preservative treated, rough sawn joists and beams. A portion of the west wall (the earlier structure) still includes a hewn sill timber, which remains as part of the earlier structure to which the present building was added. The new floor system is assembled of 2" x 12" joists at 30" on center (oc) running north and south with 6" x 10" beams at the east and west end. These joists rest atop rough sawn sill plates attached to the concrete foundation walls and are overlaid with 1 1/4" thick T & G planking. Field measurements indicated that most members had a 10-15 percent moisture content. The process of replacing the first floor system resulted in a change to the relationship between the new floor plane and the remaining building elements. Walls and partitions within the house are anywhere from 3" to 5" higher (in relation to the floor) than were the original. Gaps at the bottoms of walls have been filled with added planks in most location but many door openings still reflect these gaps. This "lowered" floor gives a misrepresentation of the original space by making the room volumes greater than they were originally.

- Underfloor spaces are subject to animal and insect infestation due to the open foundation.

2. Second floor

The components of the second floor system more closely resemble the original construction than do the components of the first floor system. The floor is supported by clear spanning beams approximately 9" high by 6" wide and spaced 5'-0" +/- center to center (Plate 19). Areas where close inspection of the beam connection to the wall members was possible revealed that earlier beams had been mortised into the wall posts; the beam tenon bores, however, are not consistent with the peg

Plate 17. Johnston House showing south (now used as the front entrance) andeast sides, and the present driveway to the Great Lakes towing operation, facing northwest from Water Street.

Plate 19. Interior view of Johnston House, showing both cross lath and split lath.

Plate 18. View north of west side of Johnston House, showing the bowed wall where original portion of house was taken off.

bore pattern of the posts. The replacement beams currently in place are secured by steel angles bolted to the load bearing posts. Flooring of the second level is in two layers with the first composed of 1-1/4" T & G boards applied directly to the beams. This floor is then overlaid with 2" x 4" sleepers, furred at about 2'-0" oc, covered by 3/4" thick T & G finish flooring.

- Beam and post connections are subject to deterioration from roof leakage and connector rusting.

- Rafter loads have spread the top beam over time. A long steel rod has been added to resist these forces. Rod integrity and condition may be deteriorated.

C. Walls

1. Exterior Walls

The building is constructed of hewn post and beam bays set 5' apart with vertical posts grooved to receive hewn log sections laid horizontally between posts. One section of older wall at the west end reveals smaller round log infill (Plate 20). These older logs were installed without removing the natural bark covering. This infill of chinked logs extends full height to the rafter plate beam. Individual bay frame elements are tied together by their connection to continuous sill and rafter plate beams, all joined by pegged mortise and tenon method. East and west end walls are provided with vertical posts at approximately 10' oc with similar log infill construction.

2. Interior Walls

Other walls within the building are constructed of two distinct types representing different periods of construction. The older partitions are constructed of hand-sawn boards of 1-1/2" thickness laid vertically in panels. The panels are then covered by hand split lath that is attached in an overlapping diamond or woven pattern and plastered with a single layer of lime rich horsehair plaster (Plates 19 and 21).

Later walls were constructed of 2" x 5" studs spaced at 18" oc covered with hand split lath in a parallel horizontal pattern and plaster with one or more layers of lime rich plaster (Plate 21). The second floor (attic) walls are probably of the most recent construction. These are constructed of 2" x 5" studs at 18" oc covered with 3/4" T & G paneling.

- Extensive dry rot of studs and paneling in attic around dormers.

D. Roof Systems

Several early or original 3-1/2" x 4-1/2" rafters remain, spaced 60" oc to match the spacing

Plate 20. Interior view of Johnston House, showing the round cedar log construction on the west wall where the original house and addition are connected, facing west and up.

Plate 21. Interior view of Johnston House, showing the middle room and the split lath exposed on the east wall, facing east.

Plate 22. View northeast of south roof slope of Johnston House, showing the temporary tarp installed to prevent water leakage.

of the post and beam bays. These are typically notched into the continuous rafter plate beams along the north and south walls with most fiber deterioration occurring at these connections in the rafter tails. Previous efforts to stabilize the roof structure are evident from the steel bars noted above and numerous supplemental rafters of newer non-contributing 2" x 4" lumber placed between the remaining original rafters. This treatment is nearly complete along the north roof area.

Observations inside the attic were very difficult for the south sloping roof; however, from outside there are is evidence of the same connection deterioration. Paneling around the south roof dormers suffers extensive microbiotic deterioration from continuous leakage problems. Roof structural changes from deteriorated connections at the rafter plate beam have allowed gaps at the base of dormer assemblies which have contributed to leakage (Plate 22). Rafters are overlain by well- spaced sawn sheathing boards and covered with wood shingles. Flashing at dormers and roof offsets are poorly installed, badly deteriorated, or missing completely.

- Multiple deteriorations of roof structural connections and components are contributing to increased leakage.

- Deteriorated, lost, or poorly installed roof covering elements (flashing) are causing leakage.

- There are accelerated decay problems throughout the structure. The roof system needs replacement.

E. Chimneys and Fireplaces

One platform-supported chimney exists but presently it does not extend through the roof.

F. Stairs and Railings

The existing stairway probably dates from the period of the second floor development. The stair is very steep with tall risers and narrow treads. The condition is made worse by first floor changes referred to above and the fact that many treads are loose. Wall scars indicate more moldings and trim existed earlier but are now missing.

- While the stairway is fairly accurate in design for historic cabins, it is unsafe for frequent use. Altering its design to improve it by making it larger would have a negative impact on the remainder of the spaces in the house.

G. Siding and Exterior Trim

The present siding material, installed in the 1940s, is 1-1/4" thick with a beaded pattern

similar to the second floor planking. Application techniques at several window openings exhibit a lesser quality of workmanship than might be expected for original work and random piecing indicates possible changes to windows and other openings.

Exterior trim consists of S4S door and window moldings with full drip caps and projecting sills. The siding is terminated in full height corner boards, the rafter tails are provided with a simple fascia that is continued on the rake end.

- Earth is graded near the sills and siding at southeast corner.
- The rafter tails and fascia trim are deteriorating at some locations. The fascia is loose where rafter tails are rotted.
- Extensive deterioration and movement around dormer windows, concurrent siding and trim deterioration.
- Deck at north side entrance is collapsing.

H. Windows

1. First Floor

Double-hung, nine over six sash are either fixed in place or stuck due to several layers of paint. Sash deterioration level appears moderate to good without closer inspection. The muntins and panes of glass are fairly secure and weather tight throughout.

2. Second Floor

Double-hung, six over six sash within the two dormers remains on the south side. The substantial deterioration in the frame members have caused a good deal of water leakage.

I. Doors

The north and south entrances, both featuring sidelights, are intact. Interior doors are present at the front to rear hall opening, bathroom opening, first and second bedroom openings, opening to the earlier building (now abandoned), and the side door from the kitchen. On the second floor, a door remains between the east and west chambers.

The first floor doors are at various heights above the finish floor except at exterior openings where their relationship is normal. The remaining doors show a mixture of types, all stile and rail

with raised panels, of which some may likely be original. The doors exhibit a range of conditions, with most being candidates for restoration.

J. Plaster and Lath

Where remaining, all plaster is of a lime rich formula applied over split wood lath. The oldest walls are covered with lath in a diamond-weave, or cross lath, pattern, which was attached with forged nails. The newer examples are covered with lath applied in horizontal pattern and attached with manufactured nails. Lime rich horsehair plaster is applied in one or more coats.

K. Moldings, Paneling, Casework, and Miscellaneous Trim

Two distinct styles of door and window casing trims are seen. The variety observed at exterior doors, and all but two of the first floor windows, consist of beaded 5/4" boards, butt joined, and wrapped with a framing trim mitered at each corner. Those openings without this style of molding are trimmed in a more utilitarian fashion with S4S boards, butt joined. Second floor openings are similar to this simpler approach. There are a few remaining sections of beaded base molding on the first floor and none on the second. The entire second floor walls and ceiling are paneled in S4S 3/4" x 6" T & G paneling.

L. Plumbing

No plumbing exists in the building.

M. HVAC

No HVAC elements are located in the building.

N. Electrical

The building has been retrofitted with a 60A, 120 vac service that provides power for a few lights and receptacles.

O. Stabilization Recommendations

The John Johnston House roof has been temporarily protected with plastic sheeting in an effort to control leakage (Plates 17 and 18). Based on the observations and moisture measurements

taken inside the attic, the leakage problem has been progressing for several years and has contributed to the acceleration of both structural and finish element damage. Appropriate restoration of the roof system should include extension and proper flashing of the masonry chimney and provisions for adequate attic and roof cavity ventilation. This work is of the highest priority for the structure and should be undertaken before funds are expended for any other purpose directed to the building.

Because of the historic significance of this property and in consideration of the present and proposed uses noted elsewhere in this report, all work should be performed in accordance with the Secretary of Interiors Standards for *Restoration* (Appendix A). Materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the period should be preserved. Deteriorated features should, to the greatest extent possible, be repaired rather than replaced and, where replacement is necessary, new elements should match the old in design, texture, and where possible, material.

The process of performing an appropriate restoration to the Johnston Hose roof will necessitate removal and protection of the artifacts currently displayed. All materials should be on site before work is started to assure that exposure from removal of the old roof will be minimized. Construction drawings, permits and contracts should be completed well in advance to enable timely progress of the work. The contractor should be required to include the cost of a qualified superintendent on a full time basis throughout the project. This person should be qualified as a master carpenter with *no less than five years experience in the field of historic restoration projects.*

All work should be performed in accordance with industry standards and manufacturer's recommendations. The basic scope of work will include, but may not necessarily be limited to, guidelines published by the following agencies (Appendix C):

1. Red Cedar Shingle and Hand Split Shake Bureau
2. Sheet Metal and Air Conditioning National Association (SMACNA)
3. Brick Institute of America (BIA)
4. National Forest and Paper Association (NFPA)
5. National Park Service-Technical Division

Stabilization of the Johnston House is of the highest priority because the area of concern is the roof 's condition. The estimated stabilization budget of $35,000 to $45,000 would mainly be composed of this work. The tables in Appendix B reflect the stabilization costs. The fundraising priority within the Water Street Museums area should be the reconstruction of this roof structure.

BISHOP FREDERIC BARAGA HOUSE

The Bishop Baraga House is a 2-1/2 story frame side gable house with a rectangular plan (Plate 23). The three bay front contains a central entrance with widely spaced window openings on both the first and second floors. A full-width porch extends across the front (south) facade, installed

Plate 23. Bishop Baraga House, showing Water Street (south) side and the east side, facing northwest.

Plate 24. View of first floor interior of Baraga House, facing east.

Plate 25. View of second floor interior, west chamber, of Baraga House, facing north.

Plate 26. View of west and north sides of Baraga House and its relationship to the Schoolcraft House east dependency, facing southeast.

in the 1980s to replace one added to the house in 1884, and is supported by turned columns. There is no railing or other decorative elements. The gable peaks on both the east and west sides each contain two small attic windows.

DESCRIPTION OF BUILDING ELEMENTS AND CONDITION

A. Foundations

Foundation walls are of concrete masonry units (CMU), 8" minimum with three uniformly spaced CMU piers supporting a continuous steel (W8" x 15") center beam. These CMU elements rest atop poured-in-place concrete footings of unknown depth. The perimeter of the foundation system is thermally protected with 1" thick expanded polystyrene (EPS) panels applied inside the crawl space area. The EPS board does not cover the top three courses of CMU. The crawl space is ventilated by four 8" x 16" screened vents. It is filled with clean sandy fill. Access to the crawl space is through a floor opening at the northeast corner of the building.

- The south quarter of the east foundation wall was never completed. Mortar has not been tooled into the CMU joints; they are open to the crawl side and wedged with wood shims.
- Supplemental wood beams and the porch attachment have been placed in positions that block the ventilation openings on the south wall.
- EPS insulation is only partially effective as installed.
- Wood powder evident in the southeast corner may be from insect damage.

B. Floor Systems

1. First Floor

The first floor framing consists of original 10" x 8" transverse bay beams carried by the steel center beam with preservative treated lumber blocking and preservative treated sill plates at the perimeter walls. These beams are further supported along their full length by 6" x 8" beams retrofitted directly below. Original 2" x 8" floor joists, notched into the 10"x 8" transverse beams, are placed at about 24" oc. End bearing for the outboard bays is on preservative treated 2" x 8" sill plates. Field measurements indicate most members contain between 10-15 percent moisture content. Original 1-1/4" thick T & G flooring is laid directly atop the joist and beam components. Additional flooring overlays of 3/4" T & G finish flooring, one layer in some locations and two layers in other portions, can be found throughout the first floor areas.

- There is severe deterioration of flooring at entry. The structure below has been saturated repeatedly from water leakage with corresponding deterioration probable.

2. Second Floor

Second level floor framing is mostly visible from first floor areas (Plate 24). Similarly located transverse beams are sized at 6"x 8" with notched in 2"x 8" joists at 24" oc running longitudinally. Flooring is 1-1/4" thick, single layer, T & G and applied directly to joists and beams. An opening for the documented original central stairway has been infilled with dimensional lumber framing.

3. Attic Floor

The attic floor joists run perpendicularly to first and second floor joists and are 2" x 6" at 24" o.c. with 1-1/4" T & G flooring directly applied.

C. Exterior Walls

1. First Floor

The three-bay post and beam frame is essentially a free standing structural system. Exterior and interior walls are infill, fabricated from 2" x 5" studs at 18" oc. As the frame ages and shifts, sagging members begin to transfer more loads into the studs. Thus modifications to infill framing initially not considered load bearing can weaken the total system. A longitudinally-positioned 6" x 6" beam, extending about two feet beyond both original second floor transverse beams and supported by two turned columns, has been substituted for previously removed original interior walls (Plate 24). New interior walls have been added at the northwest corner in conjunction with the stairway relocation. A new exterior opening has been cut into the east wall at the north end.

- Building frame is weakened by new opening of east wall which removed original diagonal corner bracing.

- Building frame is weakened by removal of original interior walls in plane of bay beams.

2. Second Floor

Fewer previous modifications to the original walls on the second floor limits the amount of nonintrusive observation possible. There is infill framing of newer, noncontributing, 2" x 4" studs at an abandoned opening of the north exterior wall of the hallway. Earlier infill framing is suspected

at possible window openings at the west end of the north wall (corresponding to the remaining original opening at the east end), and in the central area of the south exterior wall (corresponding to the door opening below).

D. Roof/Ceiling System

Roof rafters are 2" x 6" at 24" oc with collar ties at 6'-6" above attic floor. The rafters and attic floor joists are installed perpendicularly to the joist line found at both first and second floor systems. The rafters are joined without a ridge board and the roof is sheathed with wide rough sawn boards which are closely spaced. The wood roof shingles are applied with galvanized nails over asphalt impregnated building paper.

- Shingles installed over building paper are retaining moisture and cupping. This condition also accelerates the rusting of roofing nails.

- Rafter cavities and peak space are not ventilated.

E. Chimneys and Fireplaces

Two brick chimneys are provided at each end (east and west) of the house. The masonry is supported on wood shelf frames at about 5' above the first floor elevation. These chimneys extend through second and attic levels and terminate about 4' above the roof ridge. Newer, noncontributing masonry and mortar materials have been used to reconstruct portions of each chimney as it passes through the roof plane.

- Evidence of past water damage at both chimneys may still be active on the west assembly since daylight is visible through the flashing.

- Cap all unused chimneys.

F. Stairs and Railings

The present first to second floor stairway configuration is a modification from the original. The infilled stair opening at the central hall position aligns with the attic stairway presently in use. The attic stair was enclosed after its construction to give privacy to attic spaces.

G. Siding and Exterior Trim

The siding is a composite of original clapboard and newer beveled siding products. The

majority of siding on the east, west and north elevations is new up to the rafter plate beam elevation. Also, the majority of siding below the front porch ceiling is newer. The older clapboard and newer beveled siding are applied with approximately 7" to the weather and both terminate at the full height corner boards. Eave trim is 12" frieze board with exposed roof sheathing. Fly rafters and rafter tail fascia are S4S lumber with a continuous barge molding along the shingle edge. The frieze/soffit transition is trimmed with a wide crown mold. Window openings are trimmed in S4S casings with drip cap moldings and no sill aprons.

A three bay front porch with low pitched wood shingle roof occurs across the entire south elevation at first floor level. The roof assembly of this porch is supported on turned columns resting directly on the porch floor system which is constructed of preservative treated, 2" x 6" decking on 2 "x 6" joists at 16" oc. This porch deck system is resting on four CMU piers with unknown depth of footings.

- South elevation rafter tail fascia is missing.
- Several siding boards are warping, especially gable ends and over abandoned openings.
- The porch roof has too shallow of a pitch for wood shingles.
- Porch floor is attached over siding and covers foundation vents on south elevation.

H. Windows

Original double hung sash remains at the majority of the window openings on the first and second floors. Original hinged casement windows at the attic floor elevation are intact at the west end. It is possible that original window openings existed at both the first and second floor levels on the north wall, but have since been infilled. An additional opening definitely existed at the second floor south elevation over the main entry. All present windows are protected with plywood panel covers.

- Verify all opening protection panels do not dam or hold moisture against sash.

I. Doors

The main entry and other miscellaneous interior doors remain throughout. One of the sidelight panels, the threshold, and frames appear salvageable. Few interior doors remain otherwise.

- See window note on protective panels.

J. Plaster and Lath

The building has experienced many changes throughout its life, most of which have been confined to the first floor level. Many areas of the walls on the first and second floors retain their original split lath and lime rich horsehair plaster. Earlier modifications introduced sawn lath with harder layered plaster. The entire attic was developed with these later materials. Recent noncontributing work has utilized gypsum wallboard mostly seen at the first floor ceiling.

- Plaster and other debris in attic can hold moisture from building leaks and animal droppings. This accelerates building material deterioration and creates health hazards for rehabilitation workers.

K. Moldings, Paneling, Casework, and Miscellaneous Trims

Window and door casings, stools and aprons are intact at all remaining openings throughout. Second floor paneled cupboards by the chimneys are intact (Plate 25), beaded paneling attic stair skirt enclosure is also remaining. Baseboards are intact mostly on second and attic floors.

L. Plumbing Systems

There is an abandoned drain piping in the northeast corner. There are no fixtures, no supply piping, and no connections to sewer.

M. HVAC

No HVAC systems exist in the building.

N. Electrical

The building was retrofitted with 60A, 120 vac service. The electrical panel is located in the southwest corner of the first floor. There is no power at present.

O. Stabilization Recommendations

The Bishop Baraga House has been relocated and set upon a suitable, albeit incomplete, new foundation system. Conscientious efforts have been made to protect the structure. Stabilization of this building will not require structural invasion, however, future development may include restoration to an earlier period configuration which would impact the framing system. Pending a

final decision on future use, immediate stabilization needs to address, in prioritized order, repair of roof flashing and trim on the main structure, improving window protection at miscellaneous locations, reattachment of random siding pieces, and completion of foundation pointing (Plates 26 and 27).

One special consideration is offered regarding the porch assembly and final development design. The present porch roof is configured in a low slope design and the end of the floor deck is applied over siding elements and partially block foundation ventilation openings. The use of wood shingles on this roof slope is not consistent with manufacturer's recommendations and alternate materials should be considered if the present assembly is expected to remain. Further, provisions must be made to allow maximum air circulation to the crawl space. If final development will retain this porch but is not expected to occur within two years, then the roof should be replaced and additional ventilation openings retrofitted.

All required maintenance should be performed in accordance with the Secretary of Interior's Standards for *Restoration* (Appendix A). Materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the period should be preserved. Deteriorated features should be, to the greatest extent possible, repaired rather than replaced and where replacement is necessary new elements should match the old in design, texture, and where possible, material.

All work should be performed in accordance with industry standards and manufacturer's recommendations. The basic scope of work will include, but may not necessarily be limited to, guidelines published by the following agencies (Appendix C):

1. Red Cedar Shingle and Hand Split Shake Bureau
2. Sheet Metal and Air Conditioning National Association (SMACNA)
3. Brick Institute of America (BIA)
4. National Forest and Paper Association (NFPA)
5. National Park Service-Technical Division

The estimated stabilization budget for the Bishop Baraga House is $12,000 to $15,000, which is included in the tables in Appendix B. The stabilization work is prioritized as the last of the four building, due to its stable condition.

HENRY ROWE SCHOOLCRAFT HOUSE

The Henry Rowe Schoolcraft House is a front gable frame structure flanked by matching one-story front gabled dependencies on either side. The orientation of the two-story front facade is north, towards the St. Mary's River, as it faced on its original site just east of the present Power Canal (Plate 28). The south side of the central section is linked to the dependencies by a shallow pitched verandah which is supported by columns. (Plates 29 and 30).

Plate 27. View of clapboard damage on east wall of Baraga House, facing west (and up).

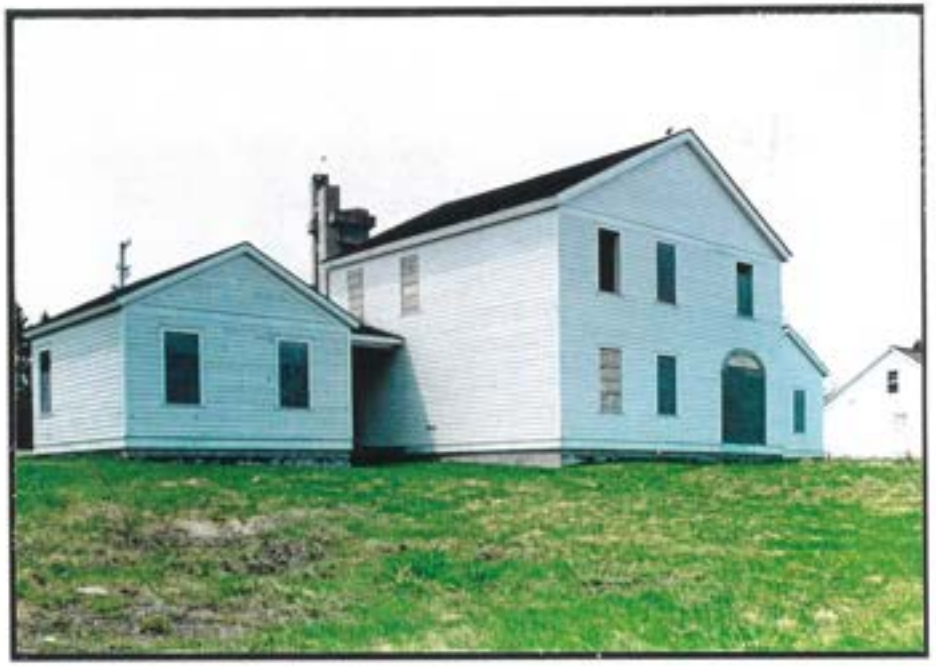


Plate 28. Schoolcraft House, showing north elevation of central block with east dependency, the original river orientation of the house, facing southwest.

Plate 29. Schoolcraft House, showing the south (Water Street) side, facing northwest.

Plate 30. Schoolcraft House, showing closeup view of veranda on south side, facing west.

DESCRIPTION OF BUILDING ELEMENTS AND CONDITION

A. Foundations

Each of the three separate structures are set on newer foundations of 8" thick (or larger) CMU units. In the main building, the CMU walls are configured to conform to the primary beam layout and consequently divide the crawl space into four distinct segments. A passageway is provided connecting the southeast and southwest segments. The foundation system is complete with CMU walls for supporting future fireplaces at locations consistent with the original fireplace positions. All CMU foundations bear upon poured in place concrete footings of unknown depth.

The dependencies are not provided with crawl space access openings and could not be observed from below. The east dependency is a new structure while the west is believed to be of mostly original components. Their foundation elements and assembly techniques appear similar to those of the main building when observed from the exterior.

The main building crawl spaces were found to be filled with clean and dry sandy granular material. Areas around the large openings for future fireplaces contained varying construction debris.

Supplementing the CMU foundations are steel beams (W12" x 40") running east to west. The northernmost of these beams runs continuously from the east to west exterior walls and passes through the northwest and northeast crawl space segments. The southernmost beam is segmented. One section runs through the southeast crawl space segment in a position similar to the northern element and terminates at the east side of the southwest segment. A separate beam member is provided to continue through the southwest segment and is offset several feet northward from the position of the beam in the southeast segment. Bearing support for these beams is on CMU walls or piers. These beams are shimmed with a variety of wood spacers, some being preservative treated lumber products and others of nontreated material.

- There is no crawl space ventilation to any foundations of the three buildings.
- Beam shims are subject to deterioration.
- There is no connecting access between crawl space subdivisions in main building.
- There is no crawl space access to dependencies.

B. Floor System

1. Main Building, First Floor

Original primary beams of 7" x 9" hewn lumber are set directly atop new CMU and steel foundation elements with 2-1/2" x 8" sawn joists notched into beams and laid out at 18" oc. Numerous joists beneath the northeast parlor are deteriorated; these are reinforced with or have been replaced by newer, noncontributing dimensional lumber. Lower surfaces of sawn joists observed below the southeast parlor have lath scars on the bottom surface.

Most of the southwest portion has been reframed with newer, noncontributing lumber (2" x 8" at 16" oc). Headers and cripple joists at future fireplace openings are framed with newer, noncontributing materials (2" x 8"). Several feet of primary beam at the southwest corner was replaced with a built up shape of newer, noncontributing lumber.

Primary beams and joists are overlain with older 1-1/4" T & G flooring mixed with large areas floored in newer, noncontributing plywood.

- Untreated, historic beams atop CMU and steel are subject to accelerated deterioration; some area of high (over 20 percent) moisture content was measured.

- There is excessive deterioration of many joist elements.

- Finish grading is very close to wooden members along south side (Plate 30).

2. Main Building, Second Floor

Primary beams conform to the first floor layout, while the remaining original portions are 8" x 8" hewn beams with notched-in 2-1/2" x 8" joists at 18" oc, and 1-1/4" T & G flooring. A second layer of newer 3/4" thick hardwood strip flooring has been applied over most of the second floor area. There are large areas of original and older framing elements missing along the east wall.

Second floor openings for fireplaces reflect the original framed openings. A retrofitted opening in the southwest room, a consequence of the many modifications imposed on the original building, is consistent with documentation showing historic changes from the late nineteenth century.

- Long spans of original floor systems at second floor elevation have noticeable bounce and deflection.

- Frame shifting and age have reduced end bearing capacity of joists.

3. Main Building, Attic Level

The attic level floor/ceiling joists are 2" x 6" at 24" oc running in a north-south line similar to first and second floor joists. These joists are notched into hewn rafter plate beams. These joists are covered with randomly sized sheathing boards and further overlain with sleeper furring and 3-1/2" T & G finish flooring.

- Attic floor is unsupported for several feet along the north building wall.

4. West Dependency (Exterior observation only)

- The sill beam is set directly atop CMU of foundation wall and has been left without protective cover of traditional sill closure trim. This exposure will result in accelerated structural deterioration.

5. East Dependency

The flooring of this newer structure is noncontributing.

C. Load Bearing Members

1. Main Building, First Floor

The main building is constructed of a post and beam frame type. Primary structural elements are supplemented with infill frame members consisting of some original 2" x 5" studs at 18" oc. Much of this fabric, however, has been replaced with newer, noncontributing 2" x 4" at 16" oc studs. The reframed areas constitute about 30 percent of the first floor exterior walls including the entire east exterior wall portion, 12' of the west exterior wall and miscellaneous portions of the north and south exterior walls. Most of the interior partitions are intact, notwithstanding some fire damage to the west wall of the southeast parlor and locations where transoms were retrofitted over original doors. Posts have been repaired or reinforced at four of their nine original locations with newer, noncontributing materials.

- The east-west wall dividing the northeast from the southeast parlors is 4" to 5" out of plumb at its midsection.

- Post repairs or replacements have neglected to reconnect or replace diagonal braces at some locations.

2. Main Building, Second Floor

Second floor load bearing members correspond with first floor in type, layout, and assembly

and are generally more intact original materials. There is infill framing of newer, noncontributing materials at an abandoned door location on the west exterior wall.

3. West Dependency

The dependency is constructed of its original frame with studs at 18" oc mixed with newer, noncontributing materials.

4. East Dependency

The load bearing members of this dependency are all newer, noncontributing materials.

D. Roof Systems

1. Main Building

The rafters and gable ends are framed of newer, noncontributing lumber with 2" x 8" rafters at 16" oc and 2" x 6" collars tying alternate rafters pairs. Sheathing is 1/2" CDX plywood. Double sawn 18" wood shingles are installed approximately 5-1/2" to the weather applied over impregnated building paper with double starter course and fitted ridge coping. There are no roof openings presently.

- Shingles applied over solid sheathing and building paper are retaining moisture and cupping. Retained moisture accelerates rusting of roofing attachments. Many shingles have already been lost.

- Attic ventilation should be improved.

2. East and West Dependencies

Both have newer, noncontributing materials similar to main building.

- See notes in Roof Systems above.

E. Chimneys and Fireplaces

None are presently located in the building.

F. Stairs and Railings

The original main stairway opening has been maintained with original stringers and trim

intact, but various replacement phases of rails, balustrades, newels, and previous enclosures evidenced. Some miscellaneous railing and trim components in the attic are not likely original. Modified third floor (attic) access stair remains.

G. Siding and Exterior Trim

With the exception of the main building entry, few other trims are still intact. The vast majority of building exteriors (east dependency excluded) is the product of previous restoration efforts. Present siding is beveled noncontributing exterior grade installed 7" to the weather. Full corner boards, frieze, rafter and fly rafter fascia boards, sill covers and water tables are of the simple S4S shape. Window moldings are S4S, butt joined with full width dripcaps and projecting sills without aprons.

H. Windows

All window openings are framed in newer, noncontributing materials, without sash or glazing. Many miscellaneous sash were observed in the southwest room of the second floor. It was not determined if these fit any openings.

I. Doors

The original main entry with sidelights is stored in the building but not installed. Several miscellaneous doors are located throughout the building (Plate 31). Some first floor doors have been retrofitted with transoms. The collection of doors on site is a product of accumulation over time.

J. Plaster and Lath

A good majority of the remaining plaster work is of the original high lime quality on split or riven lath. This plaster work can be found on exterior walls, interior walls and ceiling portions throughout. There are also remaining sections of harder plaster formulas over sawn lath, especially on second floor spaces that were elements of previous remodeling. Due to the many traumas suffered by the building it is questionable as to how much original plaster and lath fabric can be preserved (Plate 32).

K. Molding, Paneling, Casework, and Miscellaneous Trim

All interior openings are trimmed, however, window openings are not. Much miscellaneous trim is on site (Plate 31). The baseboard is about 50 percent intact throughout. Three of the mantels

Plate 31. View of first floor interior in rear parlor, Schoolcraft House, facing south.

Plate 32. View of second floor interior, front chamber, in Schoolcraft House, facing east.

are assembled and on site with pieces of a fourth also in the building (Plate 31). Interior door casings are of two predominant and similar styles. One style is attached with wire nails while the other with square nails. Picture molding is present in various locations throughout the house.

L. Plumbing Systems

No plumbing systems exist in the building.

M. HVAC Systems

No HVAC systems exist in the building.

N. Electrical Systems:

Only remnants of abandoned noncontributing wires and fixtures are located in the building.

O. Stabilization Recommendations

The Henry Rowe Schoolcraft House is situated on new foundations and measures have been implemented to protect the structure from further deterioration. Future development of the facility will need to include additional corrective work not presently listed as an immediate stabilization need. Present threats to the structures are discussed in terms of either the main building or the (east/west) dependencies. Stabilization recommendations are presented in the order of priority.

The main building structure is threatened internally by the unsupported attic floor section along the north wall. This is the first priority for stabilization efforts. This condition has two significant negative effects on the building structure. First, the unsupported dead loads (weight of the materials) causes the attic floor system to sag, exerting excessive stress on materials and connections. Permanent deflection can result from prolonging this deformed condition; over stressed attachment points can result in premature failure of otherwise acceptable connections. Second, lack of attachment between the attic floor diaphragm and the north exterior wall undermines the shell rigidity at this line. Wind and snow load forces transferred to the north wall have an increased opportunity to overcome the resistive strength of the wall without the stiffening advantages offered by the connection with the attic floor plate.

The west dependency is a composite of original and new materials used to rebuild portions removed for previous alterations. Portions of the original sill beam are exposed to the weather along the east elevation, north of the covered porch. This should be protected with a suitably fabricated permanent siding element consistent with the similar treatment on the original building. When

relocated to the present site it was placed on a new foundation constructed without provision for ventilation. This should be corrected in conformance with local code requirements.. The east dependency is of new construction and structurally complete. Foundation ventilation was not provided at the time of construction and needs to be retrofitted in conformance with local code requirements.

All work should be performed in accordance with industry standards and manufacturer's recommendations. The basic scope of work will include, but may not necessarily be limited to, guidelines published by the following agencies (Appendix C):

1. Michigan Department of Labor, Building Code Rules, 1993 (or current) Edition
2. Brick Institute of America (BIA)
3. National Park Service-Technical Division

The estimated stabilization budget for the Schoolcraft House is $5,000 to $7,000. The tables in Appendix B include these costs. The priority for both its stabilization and rehabilitation is rated below the Johnston and Kemp buildings but on an equal level with the Baraga House. The choice between pursuing work on either the Baraga House and the Schoolcraft House will be dependent upon the availability of particularly funds which may fund one but not the other. Some consideration, however, should be given to completing the Schoolcraft House first, due to its proposed future use as a visitor center/public rental space and the income-generating potential which comes from these functions.

KEMP COAL DOCK OFFICE

The Kemp Coal Dock Office building is a one-story frame building with a saddleback hip roof and an L-shaped plan (Plate 33). The clapboard-sided structure contains a main entrance on the east end of the front (south) side which is sheltered by a decorative porch hood.

DESCRIPTION OF BUILDING ELEMENTS AND CONDITION

A. Foundations

The foundation is composed of 8" thick (minimum) CMU units on poured in place continuous concrete footings, with two CMU piers, approximately 16" square for center beam bearing. Access is gained through a very small and awkward opening to the exterior.

- The crawl space is very damp, foundation vents have been covered with steel protection plates which impede air circulation (Plates 33 and 34).

Plate 33. Kemp Coal Dock Office, view of south and east sides of building from Water Street, facing northwest.

Plate 34. View of skewed line in concrete block wall at the southeast corner of the Kemp Coal Dock office building, facing northwest.

Plate 35. View of rot in clapboards on east wall of Kemp Coal Dock Office building, facing northwest.

- High level of ground moisture beneath and surrounding the building at the time of inspection.

- Damage along the east foundation wall near the southeast corner. CMU are pushed inward for a distance of about 6' (Plate 34).

- Depth of footings unknown.

B. Floor Systems

The joists are nominal 2" x 8" lumber, original in most of the main section but newer, noncontributing material in the addition. Beams are three built up 2" x 10" lumber for center bearing in main section and three 2" x 8" newer, noncontributing lumber for ledger along the south edge of the addition. The flooring materials include 1-3/4" wide T & G original flooring overlaid with newer, noncontributing underlayments and composition finish products.

- Perimeter sill plate is not preservative treated.

- There is generally high (over 20 percent) moisture content in perimeter components.

- Some indications of earlier water damage in the northwest corner of main building.

C. Load Bearing Walls

The older section is of balloon frame construction with walls of full size 2" x 4"original lumber studs, 24" oc. The rear addition walls are platform frame with 2" x 4" newer, noncontributing studs at 16" oc.

D. Roof/Ceiling System

The ceiling joists are clear span 2" x 6" original lumber at 24" oc. Miscellaneous attic flooring is composed of random loose boards. The roof rafters are 2" x 4" at 24" oc with hip jack and main ridge boards. The original wood shingles on wide, spaced sheathing are still in place with noncontributing asphalt impregnated shingle applied directly over them. The entry porch hood is constructed of extended ceiling joists with separate rafter and ridge components and has a similar roof covering.

- Rafters are carrying more weight than intended.

- Original wood shingles are beginning to show signs of curling beneath new shingle which may become a problem in the future. There are no immediate signs of leakage at valleys or eaves.

- There is no provision for controlled attic ventilation.

E. Chimneys / Fireplaces

There are no chimneys or fireplaces in the building.

F. Stairs and Railings

No stairs or railings exist in the building.

G. Siding and Exterior Trim

The original clapboard siding with 4" (maximum) to weather and full height corner trim of 6" wide S4S boards. The original door and window trims of varying width S4S material have a rain cap and projecting sills without aprons. The original sill band trim board is 9" S4S lumber with water table. The upper portion of the building features its original frieze board of 12" S4S with nosed crown mold, original soffit of beaded, tongue-and-groove boards, and original rafter tail fascia with nosed molding. The small porch hood over the front door features original decorative brackets.

- Some serious deterioration to siding was discovered at west elevation (Plate 35).

H. Windows

A variety of different windows openings and sash types are present on the building. The conditions of each are variable. Protective panels are installed over all openings.

- Verify protective panels do not dam or retain moisture against frame and sash where installed.

I. Doors

The front and rear exterior doors are in place and protective panels are provided.

- See window note above.

J. Plaster and Lath

The walls and ceiling of the addition are covered in newer, noncontributing ½" thick gypsum drywall.

K. Moldings, Paneling, Casework, and Miscellaneous Interior Trims

The walls and ceilings in the main building are original double beaded wood paneling. The ceilings in the eastern half are subdivided into coffered areas by false box beams; some minor panel damage is seen in the north wall. Small crown and picture molds are present throughout the main section. Window and door trim are S4S, butt jointed; the windows have wood stools and aprons.

- Stored items need to be removed for further review of elements.

L. Plumbing

Remnants of previous piping and fixtures, drinking fountain (with vent through the roof) in place in the main section, no drains connected.

M. HVAC

No HVAC elements exist in the building.

N. Electrical

The building is powered through a 60A, 120/240vac disconnect panel on the north wall. Minimum quantity of receptacles and few lights.

O. Stabilization Recommendations

The Kemp Coal Dock Office was in active commercial use until the 1950s. Most of the building shell fabric is original and well maintained. The roofing materials are of a more modern type and in good condition. Nevertheless, this building has significant moisture related problems that need to be addressed to stabilize the structure.

The building foundation system of 8" concrete masonry is of more recent period (estimated to be around 1970) than the original structure. While there is every indication that the new foundations are of adequate load bearing capacity, their assembly was somewhat sloppy. This may have been a function of working conditions since it appears that the new masonry was put in place beneath the existing building. Additional consequences of these suspected working conditions are the remaining excavation spoils in the crawl space and the absence of pressure preservative treated wood products retrofitted at sills and other bearing plate locations throughout.

Necessary stabilization efforts for the Kemp Coal Dock Office must address the crawl space conditions first. Additional excavation of organic soil material from within the foundation area should be performed to allow replacement with well draining granular fill, installed to a uniform elevation not less than 24" below the wooden members. The replacing of all untreated sill and bearing plates, pointing of masonry, provision of improved underfloor accessibility, repair of damaged portions of the east wall and replacing the center beam with a steel element should all be included as well. Existing openings for foundation ventilation are adequate in size and number but must be uncovered to allow proper air circulation (Plate 34). After these foundation stabilization efforts, there is need for siding and trim repair/replacement at miscellaneous locations. Siding deterioration can admit water into the frame structure (Plate 35). A detailed survey of the building shell fabric should be conducted to quantify the extent of similar areas.

All corrective work shall be completed in accordance with the Secretary of Interiors Standards for *Rehabilitation* (Appendix A). Deteriorated materials shall be repaired unless severity of deterioration requires replacement. New materials shall match the old in design, texture, and other visual qualities.

All work should be performed in accordance with industry standards and manufacturer's recommendations. The basic scope of work will include, but may not necessarily be limited to, guidelines published by the following agencies (Appendix C):

1. Michigan Department of Labor, Building Code Rules, 1993 (or current) Edition
2. Forest Products Institute
3. Pressure Preservative Treatment Standards
4. Brick Institute of America (BIA)
5. National Park Service-Technical Division

The Kemp Building stabilization is prioritized second after the Johnston building because of the building's proposed use by Historic Sites in conjunction with its operation of the adjacent marina. The estimated stabilization budget is $27,000 to $30,000, a cost included in the tables in Appendix B. While the stabilization costs are higher than those estimated for the Schoolcraft and Baraga houses, this work will constitute most of the entire cost of putting this building into use. The estimated costs for rehabilitation of the Kemp Building should add no more than $30,000 to $35,000 for the final development.

CHAPTER IV. PROPOSED BUILDING USES

A discussion of how each building is suggested to function within the recommended overall scheme and the major considerations attendant on these recommended functions is presented in this chapter. Preliminary ideas for interpretive themes for exhibit and museum uses in the buildings are also introduced. An outline of the restoration/rehabilitation measures necessary to make these buildings functional and an estimated cost for restoration or rehabilitation is also presented, although these costs will vary depending on the specific program implemented in each building.

As presented to the City and the steering committee members in July 1997, the activities in the buildings and in the immediate surrounding area would serve a variety of audiences, both local residents and out-of-town visitors. Taken as a whole, the four buildings and their surrounding green area would provide space for rotating and permanent exhibits, be available for rental for public and private functions, serve as offices for Historic Sites, and offer interpretations of the history of the region through house museum and living history demonstrations.

Major considerations for the array of uses presented in this chapter would include alternative building uses in the summer versus a more dormant period in the winter, cost, physical condition, funding sources, personnel need, design issues, accessibility, and ancillary services required for such uses. These considerations and others that are relevant to the particular use will be discussed.

Although uses are specifically proposed for each building, it must be remembered that the functions need to be as versatile and multi-component as possible. These uses need to be adaptable to changing seasons and audiences. The interpretation proposed for each building needs to be accurate and educational. While a Disney theme park is not proposed, the concept that the activities need to be entertaining to tourists should be a guiding principle. Each building is proposed to have a specific interpretation theme which relates to associated individuals or events for permanent exhibits. Other themes, however, about the city and region's history are relevant for rotating exhibits and lectures at the Water Street Museums area.

The main deterrent to visitors here up to this date stems from the fact that the buildings have seldom been open in recent years. Although the buildings are advertised in the city's tourist literature, there has been little offered for visitors. Provision of such activities as displays, lectures, parties, children's games, and people-watching opportunities will ensure these buildings will be utilized more fully and effectively.

JOHN JOHNSTON HOUSE

PROPOSED USE

The John Johnston House has served as a house museum for almost 50 years. Originally conceived as a monument to the Johnston family as well as a way to preserve the neglected and vacant structure, the Johnston House is an important illustration of one of the earliest and favored ways buildings were preserved earlier in the twentieth century. As with most house museums, the house was furnished with artifacts belonging to Johnston family members, with small note cards describing the object, date, and/or donor.

The fragile nature of this building favors its continued use as a house museum attended by on-site docents who would lead visitors through the house. This practice would allow the public to view the structure but keep its artifacts protected. The north side of the building, its original front yard and the area which offers the most open outdoor space, is proposed to be a second avenue for interpretation and displays. This area would be planted with numerous indigenous trees and other plantings to approximate its earliest setting but mainly to screen the U.S. Coast Guard and Great Lakes towing operations.

During the winter, the house could be open for limited tours, particularly around Christmas or New Year's Day. Its size and fragility restrict its possibility as a venue for events involving large numbers of people.

INTERPRETATION

The Johnston family members and the events associated with their occupation in the house as well as those which occurred in the area in the late eighteenth-early nineteenth centuries should be the focus for interpretation. Each room could be the focus for stories about a particular family member or event. John Johnston's famous hospitality, the actions of his brave and wise wife, the accomplishments and beauty of his daughters, domestic activities, the fur trading industry, and the local events related to the War of 1812 are all possible topics.

Of the four buildings in this study, the notion of employing first-person interpretation is the most feasible for the Johnston House. This method of interpretation needs to be professional and believable; actors need to be able to "stay in character" throughout the visitors' stay. Needless to say, an interesting and accurate script is key. If it cannot be done well, then this method of interpretation should not be attempted. But if it can be accomplished, the Johnston House and its colorful and well-documented family members is the best choice.

The north yard is proposed as the repository for a relocated garden and statue currently on the west side front of the house. The design recommendations in Chapter V address this concept in

more detail. This garden could be expanded in size and planted with native flowers which could be interpreted with small signs. Gardening lectures and demonstrations could be held in this yard as well.

The rare log construction and plastering methods of the house are in themselves objects for interpretation. Exposed areas of log construction, seen in the west hall where the 1815 and 1822 sections were connected, is the best place for a display of the log construction. The cross, or diamond, lath is exposed in many areas already. It is recommended that only the west hall and the middle north room be kept in this condition, with plain glass applied over them for protection. The other rooms should be re-plastered to a more accurate original appearance.

PHYSICAL CONSIDERATIONS

The building is not easily accessible, particularly to the second floor with its steep stairs, and would really only be available to the general public on the first floor. Although the building has been open over the years to the public in its present state, a comprehensive restoration of the interior will prevent the need for emergency work in the future. A restoration will also help the public better understand the highly civilized conditions in which the Johnston family resided despite the rough environment in which they lived.

The physical problems include the fact that the windows and doors are not fully operational, much of the remaining plaster is crumbling and friable, the roof structural elements and covering are deteriorated and failing, and the stairway is unsafe. In addition, the accumulation of dirt, debris and feces in the attic and concealed spaces poses a significant health hazard to both occupants and workers. The deteriorating original plaster and earth chinking add to this hazard.

After stabilization by roof preservation and cleaning, the development program for continued public use should include the following work, which are listed in their order of priority:

- Sensitive installation of heating and ventilating equipment to provide an improved environment for preservation of the building and the artifacts.
- Sensitive installation of necessary electrical power, lighting, alarm and communication services.
- Sensitive design and installation of museum quality display lighting.
- Sensitive installation of staff toilet on the second story.
- Sensitive incorporation of accessibility improvements, such as a ramp to south entry.
- Reconstruction of north porch stoop and interior stairway.

- Sensitive improvements to the building's thermal performance.

- General wall plaster restoration with specific areas appropriately displayed to reveal various construction materials and techniques.

Due to the nature and extent of this work list it is recommended that the project be vacated by the current user during all stabilization and later development work. The estimated cost for the restoration is in the range of $100,000 with an estimated $75,000 in hard costs, $14,5000 for soft costs, and a 15 percent contingency allowance of $11,250. The total cost is included in the tables in Appendix B.

BISHOP BARAGA HOUSE

PROPOSED USE

The Baraga House is, like the Johnston House, envisioned as a house museum mainly due to the fact that it is the only surviving building associated with Bishop Baraga in the city. Although the house has sustained substantial interior changes since Baraga's tenancy here, it appears possible to reconstruct the original interior configuration. The reconstructed spaces should be fully employed for exhibit purposes which focus on the life of Baraga, a candidate for beatification and sainthood, as well as present the entire religious context of Sault Ste. Marie. The third floor space could be devoted to staff uses including a toilet.

INTERPRETATION

Information about Bishop Baraga and the missionary efforts of all religious groups in the Upper Peninsula would be the permanent interpretation themes in the building. A series of rotating exhibits other topics with a religious theme, prepared through collaborative efforts with regional religious organizations, could be displayed in a room reserved for that purpose. Furniture and other objects associated with Baraga and the Catholic church in the city could either be displayed as individual pieces in various rooms or possibly displayed together in one room.

The spaces could also be available for lectures and small meeting, although arrangements would need to be made for restroom accommodations at either the Schoolcraft House or possibly the Harbor Master's building proposed for the marina operation.

Both floors of the building should be available to the public as exhibit space, but in order to preserve the original configuration of the interior, it should be acknowledged that the second floor

may not be accessible to all disabled visitors. A summary brochure of the exhibits displayed on the second floor may be an alternative to physical access to the upper floor for such visitors.

PHYSICAL CONSIDERATIONS

The Bishop Baraga House is the most intact of the three original nineteenth century buildings. Subsequent modifications have enclosed a few original exterior wall openings but only one new opening appears to have been cut into the frame. The foundations are recent and of reliable design and reinforcing has been previous provided to strengthen the first floor. Many of the original doors and windows remain and while their condition is poor in some cases, they are available for use as patterns.

Interior areas of all three floors have received the majority of changes throughout the life of the house. Most of these alterations have occurred on the first floor and the least to the third floor. The result of these modifications, relocation of interior walls, and general deterioration has left the interior spaces a present health hazard for visitors or workmen.

Following stabilization work and a thorough cleaning of dirt, debris, feces, and friable materials the development efforts should include the following work, listed in the order of their priority:

- Sensitive installation of heating and ventilating systems to protect and preserve building and archival resources.
- Sensitive installation of staff toilet at third floor level.
- Sensitive installation of electrical power and museum quality lighting.
- Sensitive upgrade of the building's thermal performance.
- Sensitive incorporation of accessibility improvements.
- Restoration of original first floor partitions and finishes.
- Restoration of original central stairway to second floor.
- Restoration of original second floor partitions and finishes.
- Restoration of historic third floor partitions and finishes.

The estimated costs for restoration to a house museum totals $146,000. The estimated hard cost is $115,000, while soft costs are estimated at $19,500. A 10 percent contingency allowance is included of $11,500. The total cost is reflected in the tables in Appendix B.

HENRY ROWE SCHOOLCRAFT HOUSE

PROPOSED USE

The primary purpose proposed for the Schoolcraft House is that of a multi-purpose visitors' center. Its commodious size and visibility are the main reasons for considering this use. Its reuse as a house museum is considered infeasible because the building has been so heavily modified from its original 1827 construction; the percentage of original material is estimated to be around 30 percent. Actually, the building originally served a public purpose as the Indian Agency headquarters and in that capacity accommodated many visitors. Accurately reconstructed to its 1827 Federal appearance, the building would be a stunning gateway from the marina. As proposed, the main entrance would be located on the north side, its original orientation. The first floor would provide information/restroom facilities for visitors from both the marina and street side. The second floor spaces might be used as conference rooms, receptions, or lectures. In addition to the verandah on the Water Street side of the house, there could be a large patio on the north side next to the marina offering a broad view of the harbor and St. Mary's River beyond.

With a sensitive rehabilitation that includes the restoration of the original Federal mantels, doors, and trim, the building would be one of Sault Ste. Marie's most elegant rental spaces for small wedding receptions and other social events.

The dependencies offer important supplemental services. The eastern structure, added in the 1980s as a replica of the missing dependency, is of sufficient size to accommodate carry-out food service operations. A successful venture in the summer would be an ice cream store, which would be relatively easy to install in this space. The verandah adjacent to the dependency on the south side and proposed patio on the north would be attractive seating and eating areas for visitors. The west dependency could serve as an interim museum space outfitted in its original use as the Indian Agency office as well as a temporary visitors' center. After the main building is finished for visitor center/rental space uses, the west dependency could then either serve as a staff office or small gift shop. Alternative uses could include storage or exhibit space.

INTERPRETATION

The front hall entrance on the north side of the main building is proposed to serve as an exhibit space, one of its original function, which would contain "several large cases of carefully arranged mineral specimens [with] Indian curiosities, animal skins, and stuffed birds adorned the walls," as it was during Schoolcraft's tenure (Bremer 1987:105). The rooms on both the first and

second floor would contain wall-mounted exhibits to accommodate the public meeting and circulation needs of a visitor center/events rental space.

The multi-faceted interests and activities of Henry Rowe Schoolcraft and his wife, Jane Johnston Schoolcraft, would be a major focus of the exhibits. The purpose and activities of the Indian Agency; the evolution of the house from an elegant Federal house to an equally imposing Queen Anne residence; and the changing uses on its original site and their effect on its setting and environment are other suggestions for permanent exhibits.

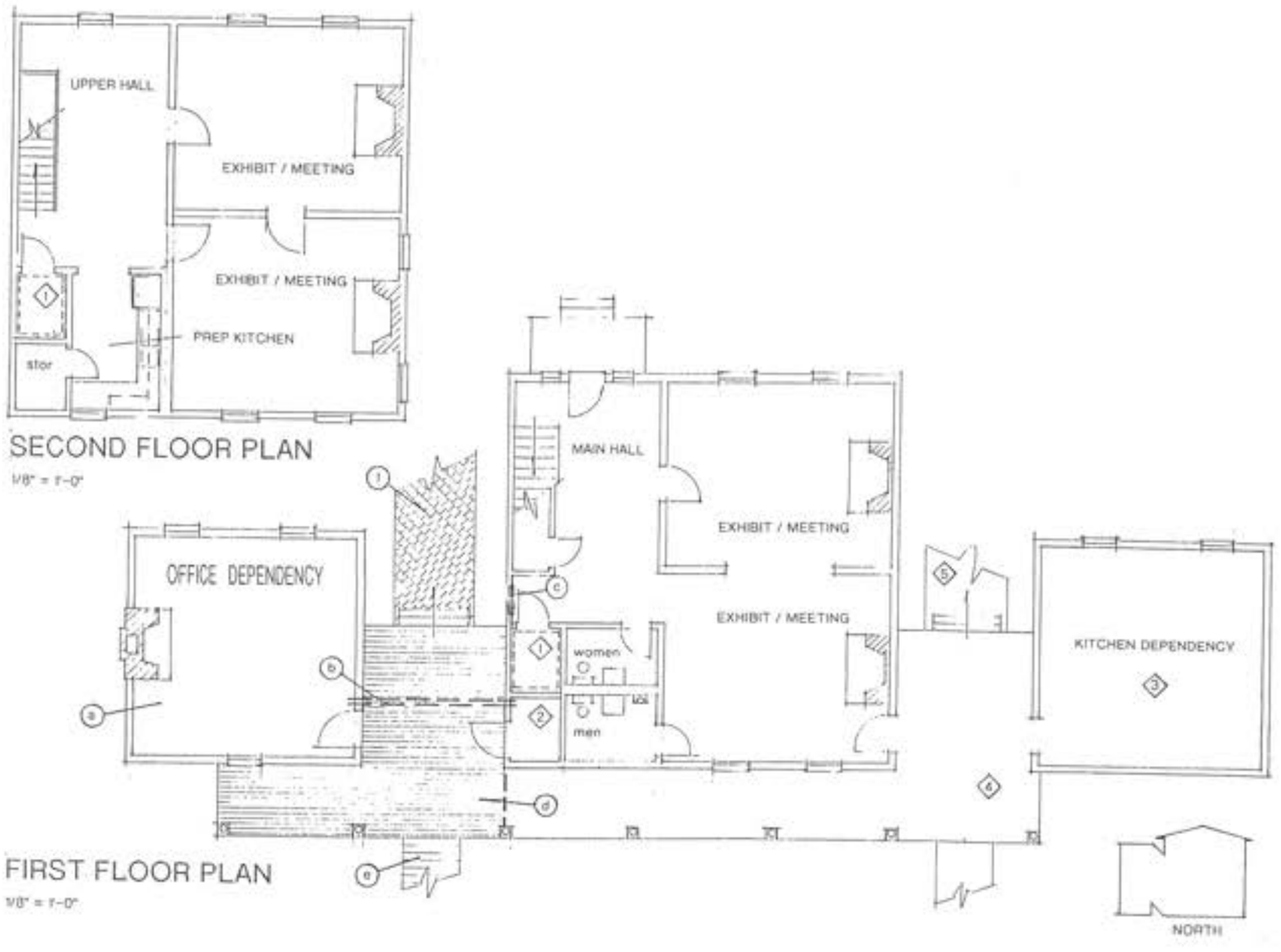
PHYSICAL CONSIDERATIONS

The existing conditions of the Henry Rowe Schoolcraft House do not suggest an investment for work guided by the Secretary of Interior's Standards for Restoration or Preservation. All of the original windows are missing along with much of the flooring, all of the siding, roof structure and its covering. The east dependency is new, while the the west dependency roof structure and covering are new. All of the foundations are new, as well as the connecting porch on the south side. The remnant stairway components are from an earlier renovation and incomplete. The fireplaces and chimneys will be rebuilt in the future, while there are very little existing wall surfaces that can be expected to be reused and thus will also need to be rebuilt.

In 1997, drawings and bid documents were prepared by Crumlish and Crumlish of South Bend, Indiana for the interior "restoration" of the two dependencies. This work was adapted from plans completed by the same firm in 1986. Functional uses and the changes needed to the structures to accommodate uses was not included in either the 1986 or 1997 plans and specifications. The elements included in the 1997 scope of work included the repainting of the entire exterior, new window sash and doors, and interior work in the two dependencies. The interior work consists of new walls (plaster and lath in the office dependency and gypsum in the kitchen dependency), finish flooring, hearths, chimneys, and mantels. New electrical and mechanical systems were also planned for all three structures. No plumbing or automatic fire suppression systems were planned (Crumlish and Crumlish 1997:21).

Figure 3 depicts a schematic idea of the layout of both floors of the main building and the spaces in the two dependencies, based on the proposed uses presented above. Appendix D provides data on the proposed heating system and chairlift assembly. The proposed work from the 1997 plan is incorporated into this drawing, although there are some modifications proposed to this work.

Attempts at authentic recreation of the construction materials and techniques would require an excessively high budget. Due to the long history of modification and change that has damaged or destroyed the vast majority of original fabric, the main structure and dependencies are considered a more appropriate candidate for adaptive reuse development. Improvements to the buildings can be completed with sensitivity to the known original appearance, be consistent with the Secretary of



FIRST PHASE NOTES:

a Restoration of *OFFICE DEPENDENCY* substantially consistent with the 1997 Plans prepared by Cramlish and Cramlish except:
Construct functional fireplace located per 1976 Preservation/UrbanDesign report.
Delete northwest doorway.
Provide temporary electric baseboard heaters to temper environment throughout winter.

b Install (4) 3" conduits connecting Dependency crawl space to Main Building crawl space, (1) conduit to be utilized immediately for power and (3) spares to be for future HVAC and Phone/Data.

c Install main ELECTRIC service. Provide underground supply with meter and disconnect on building exterior and main distribution panel as indicated. Service capacity to be based on anticipated future requirements for Main and both Dependencies combined.

d Reinforce porch decking adjacent to restored Office Dependency to accommodate loading for public use (verify local code requirements).

e Provide decked ramp/way from Water Street to ADA requirements. Upon completion of all site development work replace ramps with permanent assemblies.

f Extend paved walkway to new stairs from Marina dock. Provide signage at Marina dock informing maritime visitors of the Schoolcraft Visitor's Center Office.

FINAL PHASE NOTES:

1 **Main Building** development to include flexible exhibit / meeting spaces with Main Hall entry restored to reflect Henry Rowe Schoolcraft era, working fireplaces with gas service for future use, men's and women's ADA toilet rooms on first floor and second floor prep kitchen for staff or caterer's use. Chairlift assembly for second floor accessibility. Sample manufacturer's data sheets are provided in Appendix D.

2 Utility closet for HVAC equipment, gas fired high efficiency boiler/water heater unit with cooling coil for A/C in Main Building only. Sample manufacturer's data sheets are provided in Appendix D.

3 *KITCHEN DEPENDENCY* to be developed at a later date in coordination with future vendor's requirements (intended seasonal ice-cream and refreshment service.)

4 Final porch deck assembly to be reinforced to accommodate code required live loads of public facility. Paved walks and patios for visitor's use and other outdoor activities.

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Proposed Rehabilitation
of
Henry Rowe Schoolcraft
House
Sault Ste. Marie, Michigan

SCHEME # 1 ©

Project No.	Sheet No.
Date Issued: 03 - 10 - 98	A - 1
Date Revised:	

Interior's Standards for *Rehabilitation*, and result in a multi-use facility offering a variety of services to the community (Appendix A).

As the buildings are vacant, development would not interfere with any current activities. Following stabilization and a thorough cleanup to remove all dirt, debris, feces and friable materials a development program should be initiated to accomplish the following work, listed in the order of priority:

First Phase (Office Dependency)

- Provide utility services. Extend electric from service in Main Building and provide in wall power/data/telephone/lighting rough-in work. Provide additional empty conduits from Main Building utility area for future supplemental utility needs.

- Restore missing apron siding at exposed sill beam (northeast portion), patch in new siding at northwest doorway being abandoned. Provide windows and new door.

- Provide crawl space access and ventilation.

- Provide functional masonry fireplace. Provide piping as required to allow future gas service to fireplace.

- Thermally improve building shell membrane to the greatest extent practical.

- Repair/restore ceiling damage. Repair/replace wood lath as required and plaster throughout. Replicate all original moldings, trim and finishes throughout.

- Reconstruct and reinforce porch deck west of Main Building to accommodate public use. Provide ramp to Water Street sidewalk and walkway to Marina dock. Provide signage identifying OFFICE DEPENDENCY as Visitor's Center.

First Phase (Main Building)

- Provide electrical main service entrance to accommodate all future power and lighting requirements. Provide conduits, sleeves, etc. for future utility service entrances including gas, water, sewer. Coordinate with anticipated site development expectations.

Final Phase (Main Building)

- Install all utility services including water, sewer, gas and electric for power and lighting. Connect to site utility service.

- Provide all rough-ins for plumbing, heating, cooling, alarms, fire suppression, power and lighting systems.

- Provide functional masonry fireplaces with gas service for future use. Install windows and doors, thermally improve building shell membrane to the greatest extent practical. Provide crawl space access and ventilation.

- Reinforce second level floor systems for public use. BOCA 93 model building code section 1008.0 prescribes occupant loads for *Assembly without fixed seats.* Based on these standards the capacity of each Exhibit/Meeting space in the Schoolcraft Main Building should be posted to not exceed 25 occupants. Restore/repair partitions, ceilings, lath, plaster and replicate moldings and trim throughout.

- Reinforce as required porch system for public use, Provide ADA access features and components including permanent rampways and chairlift mechanism.

Final Phase (Kitchen Dependency)

- All final phase work should be closely coordinated with whatever entity is determined to be the vendor for this operation. A refreshment retailer has been recommended by this report.

- ***ROOF NOTE: All buildings of the Schoolcraft compound are anticipated to require roof replacement within five to seven years. If at all possible, this work should be included with all* Final Phase *activities.***

The transformation of the Schoolcraft house into a visitors' center and public meeting and event space is estimated to total $214,125. Hard costs are estimated at $175,000, while the soft costs would be around $26,000. A 7.5 percent contingency allowance would be $13,125. The total cost is included in the tables in Appendix B.

KEMP COAL DOCK OFFICE

PROPOSED USE

The smallest of the four buildings, the Kemp office building is envisioned to serve three distinct purposes. Historic Sites, which already owns the building but leases the land of this property from the city, plans to move their offices into the main room. This move from the gift shop building would allow them more room for personnel, currently squeezed into a small space at the gift shop building. The move would also make it possible to expand the gift shop operations into the vacated space at the Ships' Store. The Kemp building would be used by Historic Sites for their operation of the Mariners' Park Marina complex now under construction. The two other uses suggested for

the Kemp building would be a ticket sales/information counter for entry into the other three buildings (as well as the Valley Camp) and a small exhibit area in the vicinity of this counter. The location of these last two uses in the front entrance area would allow a visual and functional separation between the office space and visitors.

These uses are compatible with the original design and improvements to accommodate their goals can be implemented without negative impact on the historic building elements. Since some of their business activity will interface with the visitors, the building will still remain visible as a record of commercial activity in the area, which is highly desirable.

INTERPRETATION

Although space is tight inside the building, a small exhibit area could be installed inside the front entry which would discuss the coal companies and their operations that were prevalent in this area in the late nineteenth and twentieth centuries.

To further interpret the nature of the coal operation, a set of bulk scales similar to those originally located on the west side of this office building should be installed and explained with text on a small sign or other display mode.

PHYSICAL CONSIDERATIONS

The Kemp Coal Dock Office, the newest of the four buildings studied, has been reasonably well cared for through the years. It is presently protected by a recently applied new roof membrane of asphalt impregnated fiberglass shingles applied directly to the older wood shingles. Stabilization recommendations stipulate necessary remedial effort to the foundations, which will be tedious and moderately expensive. After the stabilization efforts are accomplished, the remaining rehabilitation work will be of a significantly smaller degree than the other three structures.

Completion of stabilization work and clean-up to remove dirt, debris, feces and other friable materials should be followed by the following development efforts, listed in the order of their priority:

- Reinforce areas of the damaged ceiling to provide attic access.
- Provide heat and ventilation for occupancy requirements.
- Provide electrical power, lighting, communications, and alarm systems as required for occupancy requirements.
- Provide staff toilet facilities.

- Incorporate sensitive accessibility improvements.
- Develop interior separation partition between public and business areas.
- Rehabilitate damaged finish surfaces throughout.
- Rehabilitate or replace front entry stoop.

The estimated budget for development of the Kemp building is between $30,000 and $35,000, which when added to the proposed stabilization costs would total approximately $65,000 for the entire rehabilitation. The hard costs for rehabilitation would be $28,000, with $6,000 in soft costs. A contingency allowance of $3,5000 is included in the total cost, which is shown in the tables in Appendix B.

CHAPTER V. DESIGN AND SITE DEVELOPMENT RECOMMENDATIONS

Attracting tourists to the Water Street Museums area is a goal that has been studied and discussed for over 20 years. It was recognized in the reports from the 1970s and the 1980s that in addition to careful historical renditions of the buildings' appearances, the surrounding area also needed to be enhanced by good signage and compatible design. These factors are especially important in the immediate environment of the four buildings. While the entire Water Street corridor is not part of the present study area, it is imperative that certain visual and directional improvements be considered as well due to their impact on the approach to the museums area. A unified landscaping and street furniture scheme, directional signage along Water Street, and the removal or screening of certain elements will aid in tourists' impressions that more is to be seen along Water Street than the Soo Locks and parks.

The description in Chapter II of the existing conditions in both the immediate vicinity of the buildings and along the corridor from Soo Locks Park to the east end of Water Street is the basis for the design recommendations presented in this chapter and should be referred to for further information.

WATER STREET MUSEUMS AREA

Several elements immediately surrounding the four buildings could benefit from an improved logistical arrangement and redesign of physical features. The main approach to the buildings is Water Street, a relatively wide street which hosts residential and institutional uses in close proximity to the buildings (Plate 36). A second foreseeable approach to the area is by water from the Mariners' Park Marina currently under construction north of the buildings (Plate 37). Sites for parking, interpretive and directional signage, and areas of congregation; general circulation and orientation around the buildings; and landscaping to both enhance and screen are other crucial design areas. General recommendations on these elements are outlined in Figure 4. The drawing is not intended to be a final plan for parking, landscaping or other elements discussed, but is rather a graphic presentation of these suggestions.

MARINA ENTRANCE REDESIGN

Planned as early as the 1970s, the marina's presence is a welcome venue as a new approach and source of activity for tourists into the museums area. This development has a far-reaching effect not only on the proposed reuse of these buildings but a profound physical impact. Entrance components to the marina as currently designed include a short service drive and dumpster station

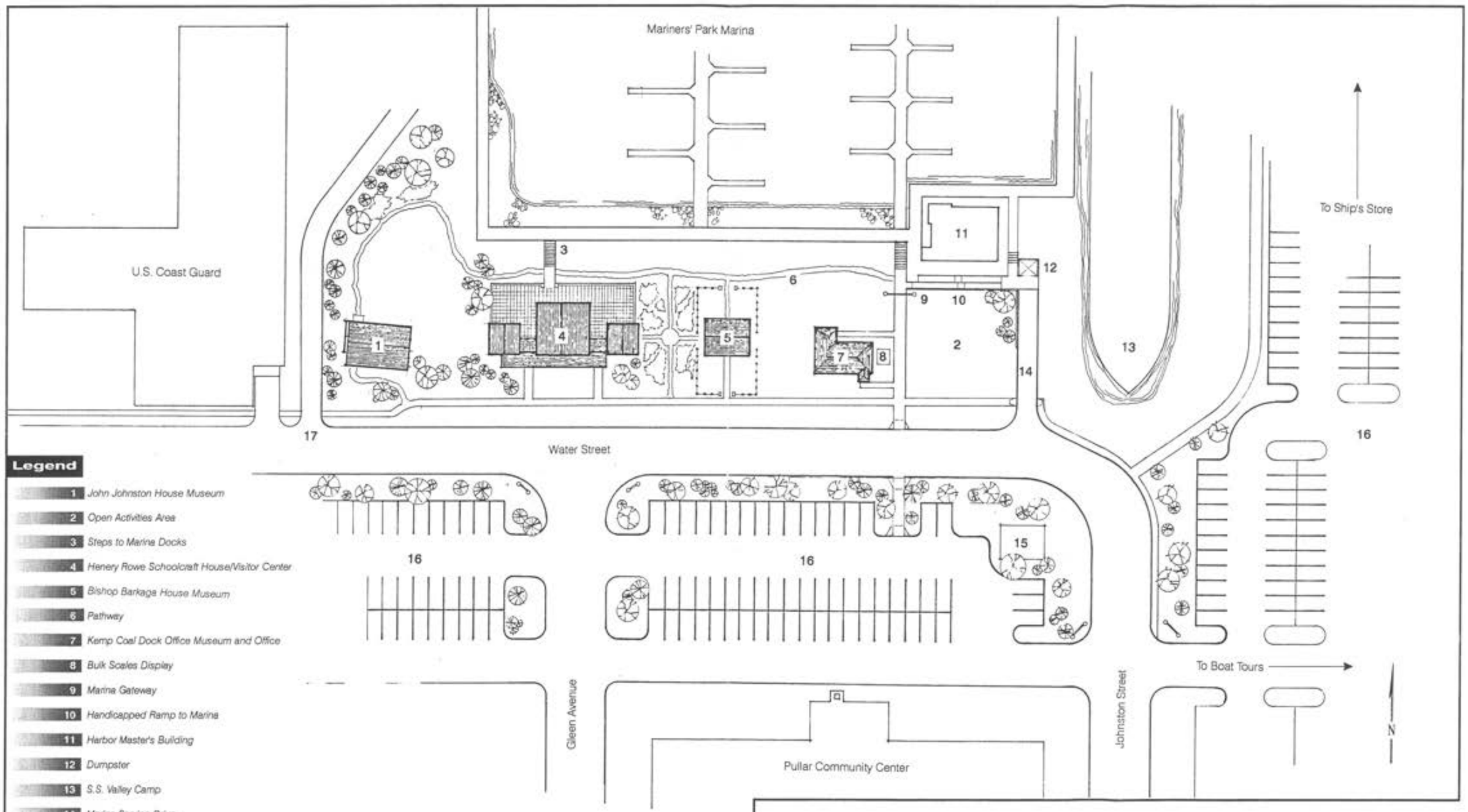
Plate 36. View west of Water Street from in front of Kemp Coal Dock Office building.

Plate 37. View of Water Street houses from north end of marina site, facing southwest.

Plate 38.View east of the Baraga and Kemp buildings and the beginning of the breakfront (where uncut grass is shown on left).

Plate 39. View west from Baraga House showing the site line and distance from house's north side of proposed breakfront (roughly where the grass is uncut on right side of photograph).

97-26301



Proposed Development Map for Water Street Museum Area

GRAY & PAPE INC
CULTURAL RESOURCES CONSULTANTS

Figure 4

located about 20' from the Water Street curb line; a paved parking lot for about 16 vehicles located about 20' east of the Kemp Coal Dock Office; an approximately 6' wide collector walk extending north from the Water Street sidewalk to steps leading down to the dock, and an 8' wide V-shaped ramp which runs about 80' west from the collector walk to an intermediate level slab and then reverses direction to the east about 65' to the dock elevation. Collectively, these site developments result in the removal of a significant amount of open green space around the buildings.

Suggested modifications to this plan need to be considered which should have no negative cost impact to the project budget and would contribute to the greater enhancement of the appearance and usability of the marina and the buildings. These modifications include the following:

- By utilizing the existing Pullar Community Center parking lot in lieu of creating the planned new parking area, there can be substantial dollars returned to the budget and an alternative location made available for the required accessibility ramp.

- By repositioning the ramp to the east of the collector walkway and just south of the Harbor Master's building, the ramp can be shortened and simplified reducing more dollars spent on the budget. This modification will beautify the marina entrance by creating a park-like space in front of the Harbor Master's building. It would also allow the retention of more level surface behind (north) of the Kemp and Baraga buildings, which would have lost significant amounts of flat area with the ramp as originally designed (Plates 38 and 39). Visitor circulation in general is improved with the ramp location proposed in this report.

- By repositioning the dumpster further north from the sidewalk and lowering it to a pad elevation aligned with the intermediate platform of the ramp system, the service activities can be more effectively screened from visitor view and deliveries can take advantage of the ramp system for transporting goods to and from the Harbor Master's building.

- By positioning the tank field closer to the revised service drive and increasing the pavement thickness, fuel trucks can service the marina without blocking traffic circulation on Water Street.

ORIENTATION OF BUILDINGS

Two of the four buildings, the Johnston House and the Schoolcraft House, originally faced toward the river, while the Baraga and Kemp buildings are oriented to the Water Street side. The Schoolcraft Building was moved on site with a river orientation to approximate its original setting. The Johnston House was re-oriented in the late nineteenth century to face the south although the rear entrance remains basically unchanged.

With major access areas to the buildings from both Water Street and the marina, both the south and north sides should either have an entrance or signage directing visitors to the other side

for access. Both entrances of the Johnston House could be utilized for visitor access, with the south door proposed for handicapped entry with a ramp. The entrances to the Baraga and Kemp buildings will remain oriented to Water Street; their north sides should be enlivened with planting beds or possibly exhibit panels that would add interest to these elevations.

The main approach to the Schoolcraft House would be from the marina or river side (Plate 40). Every attempt should be made to recreate this entrance as it appeared in the nineteenth century, which would include paving or landscaping treatments. Another important consideration in this approach to the Schoolcraft House is the landscape screening of the U.S. Coast Guard building to the west.

CIRCULATION AROUND BUILDINGS

Unification of the John Johnston House with the other properties is essential. The present driveway which separates the house from the other three buildings is disruptive visually and functionally. Creating a contiguous relationship of all four buildings promotes a sense of place for visitors and would, in the long term, provide a safer environment. Revising the Great Lakes Towing Company's entry route to the west side of the Johnston House can be accomplished without comprising their operations. The revised route would be screened with plantings and serve as the visual western termination of the Museums area. These plantings can be selected to reinforce a more rural setting of the Johnston House museum and also effectively screen the east elevation of the U.S. Coast Guard building to the west as suggested above in the discussion about orientation.

The proposed revision would require the relocation of the small garden and statue on the west side of the house and some trees (Plates 41 and 42). If the driveway can be moved to the west of the house, then the resulting excavation work for the drive should include archaeological monitoring for evidence of the original Johnston cabin and associated features.

A curvilinear path along the north side of the buildings would visually unify the setting and assist visitors to the building entrances and other destinations.

SIGNAGE

The present signage in the Water Street Museums area matches the exhibit panels seen along the Water Street corridor in Soo Locks Park and Brady Park (Plate 43). Located between the Johnston and the Schoolcraft houses, these panels are accompanied by state historical markers which refer to these two buildings (Plate 44). Small wood markers emblazoned with the city's logo of a ship, another 1980s streetscape element along the entire corridor, are in very poor condition.

These older exhibit panels and wood markers are worn and appear outdated in design. The state historical markers should stay in place, but the rest of the present signage needs to be replaced

Plate 40. View southwest showing the grade of slope north of houses and the relationship of the Schoolcraft and Johnston houses and the Coast Guard facility.

Plate 41. Johnston House garden on west side of house (left in photograph), facing northeast from Water Street.

Plate 42. View of area between the west side of the Johnston House and the Coast Guard facility, facing south.

Plate 43. View of Brady Park signage and exhibit podium, facing northwest.

Plate 44. West view from in front of Schoolcraft House, showing varied types of signage in project area.

Plate 45. View of north side (rear) of Pullar Community Center from Water Street, facing southeast.

Plate 46. Close-up view of statue of O-Zhaw-Guscoday-Way-Qua (Mrs. Johnston) in Johnston House garden, facing southwest.

with text panels or other interpretive displays, such as sculpture, that is more colorful and simple in its design. The name of each building should be clearly marked by signs on both their north and south sides. Directional signage should be installed at the marina entrance and the east and west ends of the museums area to guide visitors to major destinations including the River of History Museum, central business district, Valley Camp and Ships' Store, and Soo Locks.

Site furnishings around the buildings would share a similar design concept with the signage. These amenities would include benches on both the street and marina sides of the buildings, trash receptacles, and lighting to match those already selected for the marina

PARKING

Existing parking areas in the immediate vicinity are essential resources. Across Water Street to the south is the paved lot at the rear of the Pullar Community Center (Plate 45). Landscaping, an effort to beautify the center's rear elevation facing the museum buildings, and well-defined circulation patterns in this lot can improve its use for both the community center and the museum buildings. At the northeast corner of this lot is a small brick pump house which must remain. Proper landscaping screening will enable it to visually harmonize with the adjacent historic properties.

At the eastern termination of Water Street is another lot that offers in excess of two acres of additional parking opportunities. This lot's contribution is mainly important for its role in snow management activities as deposits of snow from the streets are regularly made in this lot during the winter. Refinement of the circulation pattern to and within the lot should be considered which will reposition the entrance from its current location to one approximately 100' further south on Johnston Street. Plantings for screening and beautification around the perimeter and connecting walkways to link this area with the museum area can be developed that will preserve the lot's wintertime utility and augment the Water Street Museums area design goals.

A third possible parking site would be the green space south of the buildings, west of the Pullar Community Center, which is owned by the City. This conversion of green space to parking for the museums should be carefully considered and be implemented only if the other lots are not adequate or cannot be used.

LANDSCAPING

Landscaping will serve three useful purposes within the Water Street Museums area. Landscaping will add visual interest to the settings of the buildings; provide an additional element of interpretation; and screen buildings that do contribute the historic atmosphere desirable in this area. Different kinds of plantings and bed configurations are suggested for each of the buildings that will lend more interest to the setting. A formal garden is proposed for the area between the Schoolcraft and the Baraga House that might include the Hiawatha Fountain now located in Brady

Park to the west. Some concerns have been expressed about moving the fountain from its original location in the park. The authors suggest that the fountain will have more of an individual focus in a central location in the Water Street Museums area and that its historical association with Henry Rowe Schoolcraft will be more meaningful located next to his former residence.

The small garden and statue west of the Johnston House is also suggested for relocation into the north garden area proposed for the Johnston House. The driveway relocation discussed previously would provide the motivation for this move. Whether relocated or not, a larger planting bed is proposed to surround the statue of Mrs. Johnston (Plate 46). Plantings in the garden could replicate those known to have existed in Mrs. Johnston's garden and those of her descendants. The north area behind the Johnston House should be set apart through the planting of trees both to screen the U.S. Coast Guard building on the west and the towing operation to the north. The tree screen could encircle the north yard and form a small entrance between the Johnston and Schoolcraft houses.

Different styles of fencing are suggested around the buildings, such as the installation of a small picket fence around the north yard of the Baraga House with a small garden inside it. The north yard of the Johnston House might be partially fenced on the west side with a rail fence.

The walkway proposed in the discussion about circulation around the buildings could become a part of the interpretation with its concrete panels embossed with quotes about the area derived from early visitors to the region. Statements from such individuals as Anna Brown Jameson, Henry Rowe Schoolcraft, and the other individuals associated with these buildings would make this utilitarian feature into another layer of interpretation for visitors.

SITE UTILITIES DEVELOPMENT

Each of the proposed historic properties discussed in the report is proposed for development to accommodate occupancy either on a full-year or a partial-year basis. As a result, each building will require some measure of environmental conditioning whether it is intended for preservation purposes or for human comfort. The discussions of a development strategy for each building identified the installation of heating and conditioning equipment as well as provisions for electrical and phone service and some measure of plumbing services. The more conventional approach to utility upgrades for independent facilities would include individual services from each utility transmission branch to a building as a separate consumer. Table 1 in Appendix B reflects property development cost estimates based on this concept of individual property site utility improvement.

Correspondingly there is no line item for central utility service installation. Table 2 in this Appendix B reflects an alternative to the conventional approach. The introduction of the line item of central utility service installation reflects an estimate to install onsite underground distribution branches for all of the required utilities. Thus, each building would be connected to these service sources and not be required to initiate, coordinate, excavate, and tie into the Water Street mains. it

further proposed that the heat source for all buildings be located in one central high efficiency boiler with a similar underground supply loop from which each building would borrow energy via independently managed control equipment. It is estimated that the cost to provide this system of central utility services is offset by the savings gained from the elimination of more costly individual property "taps". The table clearly shows this estimated first cost savings, but does not reflect long term savings that may be generated by simplifying the operation, maintenance, and management of the combined properties. Comparison of these two tables, which also include landscaping and other site improvement costs in both approaches, reveal the cost improvements in a unified approach.

STREET IMPROVEMENTS

The City's Master Roadway Rehabilitation Plan and Watermain Plan 1997-2019 specifies that such work will be conducted in the Water Street corridor from Gov. Osburn to Johnston Streets in 2005. Work done at this time should include a stipulation that archaeological monitoring be carried out in conjunction with all excavation phases. This monitoring will be especially crucial around Brady Park and in the area of the Johnston House. Consideration should be given prior to the 2005 work for a landscaped boulevard in the middle of Water Street in the museums area. The water main and road rehabilitation work could then be carried out to accommodate the new road configuration.

WATER STREET CORRIDOR

Because most of the existing uses along Water Street have been in place for many decades, it does not make sense to suggest sweeping changes in land use along the waterfront. The key to unification along Water Street is not the specification of a narrow set of uses as much as enhancing the tourist attractions presently located there and visually unifying the area through landscape, sidewalk, signage, and other streetscape improvements. As discussed in Chapter II, most of the perception problems regarding the area have to do with signage and physical improvements or lack thereof. Design considerations for the area leading west into the Water Street Museums area from the Soo Locks Park and other tourist attractions to the west will be addressed first, as well as suggestions for physical improvements to other avenues of approach from the south and east.

HISTORIC LOCKS PARK TRAIL

Originally conceived in the 1970s and implemented in the 1980s, the pedestrian corridor along Water Street (formerly known as Park Place) was christened the Historic Locks Park Trail in the 1981 study which focused on the design and interpretation of the walkway. Many elements installed in the 1980s are still extant today, although they are in poor condition or inadequate now as interpretation devices.

The adjacent area is a variety of somewhat schizophrenic uses, unlike the more buffered and well-defined settings of most historic villages. The freighter museum, the S. S. Valley Camp, which is operated by Historic Sites, is docked in a berth directly to the east, while the c. 1930 Pullar Community Center which actually fronts on Portage Street, presents its rear elevation and parking lot to the Water Street Museums area. A c.1950-1970 residential area is located to the south across Water Street, while immediately adjacent to the west is the U. S. Coast Guard administration facility. Mariners' Park Marina, currently under construction, is a 45-slip marina north of the four buildings on the St. Mary's River where an undeveloped park space functioned.

The corridor is approximately five blocks from the Soo Locks Park operated by the Army Corps of Engineers (ACOE) and two blocks from Fort Brady Park and the River of History Museum, the latter installed in the former Federal Building.

Access to the Water Street Museums area is adequate, although directional signage is minimal in the tourist area north and west of the area. From Soo Locks Park to the Water Street Museums area, visual barriers discussed in Chapter II either need to be removed or minimized in order to encourage pedestrians to continue their stroll along the river to the east.

PROPOSED DESIGN AND DIRECTIONAL IMPROVEMENTS

- Design and provide walking tour brochure for this corridor which is available at the Soo Locks visitor center and in small covered kiosks within the Soo Locks Park.

- Provide uniform street lights, benches, trash receptacles, and directional signage along the entire length of Water Street.

- Screen parking areas on south side opposite Soo Locks Park and the ACOE building. Screening could be in the form of fences (iron picket, pierced brick wall, or vertical wood board) or substantial landscaping (shrubs, planters, or trees).

- Encourage the tasteful rehab and maintenance of buildings on south side opposite ACOE building. Provide design advice directly or refer to appropriate publications or experts.

- Continue uniform sidewalk from in front of ACOE building on north side of Water Street into and across the entire length of Brady Park. A concrete walkway with designs relating to the activities and appearance at Forts Brady and De Repentigny incorporated into the sidewalk panels is suggested.

- Replace interpretive elements in the park, particularly the segment of the stockade fence.

- Redesign parking lots in the park so that they do not interrupt the pedestrian passage as abruptly.

- Improve signage around the old Federal Building/River of History Museum to identify its presence.
- Install directional signage/exhibit panels on tall kiosk or gateway at east end of Brady Park to draw tourists further east.
- Continue similar sidewalk design from Brady Park into the block east. The designs in the sidewalk panels could incorporate U.S. Coast Guard motifs and water-related symbols.
- Remove yellow striping from curbs in front of the Coast Guard facility. Minimize curb cuts in this area.
- Relocate, or at least interpret, the lighthouse in front of Coast Guard dining room.
- Relocate dumpster further back on Coast Guard property.

CHAPTER VI. MANAGEMENT RECOMMENDATIONS

This final chapter presents recommendations on the stabilization and rehabilitation of the buildings in the Water Street Museums area and recommendations on the organization and personnel to maintain and operate these buildings in their future functions. A framework for organization and the major tasks is also presented. Potential funding sources and organizations that could be of assistance in the future are presented in Appendices E and F.

The major participants in the present study are discussed first in order to understand their strengths and interests in the future stewardship of the area. In addition, the City stipulated that the study include an investigation of the organization of several historical villages in order to understand the pros and cons of their operating methods. Colonial Williamsburg and Henry Ford Museum/Greenfield Village are two prominent institutions that were requested to be investigated. In recognition of the fact that these institutions are much larger and complex than the expected activities of the Water Street Museums area, the operations of smaller entities were also researched for a more realistic assessment of successes and failures.

MAJOR PARTICIPANTS

The current study is being overseen by three historic preservation groups, Historic Sites, the Chippewa County Historical Society, the Sault Ste. Marie Foundation for Culture and History, and the City, which all have an abiding interest in the area. Each of the organization possesses different strengths and foci, which can make it easier to combine their collective forces and delegate different responsibilities for the future operation of the area. The strengths and interests of each is presented below.

LE SAULT DE SAINTE MARIE HISTORICAL SITES, INC.

Incorporated in 1967 to restore historical buildings in the region as part of the City's three hundredth birthday celebration, Historic Sites is dedicated to a program of preservation and interpretation of historic resources in the city as a means to promote economic vitality, a goal that stands valid, even more so, thirty years later. Their major focus is the Great Lakes and St. Mary's River maritime history, but they have demonstrated interests in the religious and early settlement history of the area with their stewardship and research of the Baraga House and the Johnston and Schoolcraft Houses.

Of the three organizations, Historic Sites is the most comprehensively staffed, with a director and assistant director, administrative, gift shop personnel, and maintenance staff. The backgrounds of the previous and present directors reflects its maritime focus. The organization also operates the Tower of History, a monolithic concrete tower built originally by the Catholic archdiocese as a bell tower in their initial plans for a new cathedral. Although the tower is an inappropriate streetscape neighbor, it offers 270 degree views of the St. Mary's River, Soo Locks, Sault Ste. Marie, Ontario, downtown, and the historic homes area.

Under the leadership of Captain Jimmy Hobaugh, Historic Sites continues to demonstrate their effectiveness through the multitude of alliances they have forged with individuals and groups in the city, visionary plans, practical management, and ability to achieve results. The new marina which was begun in 1997 behind the buildings will be operated by Historic Sites although the property is owned by the City.

CHIPPEWA COUNTY HISTORICAL SOCIETY

The oldest of the historical organizations in Sault Ste. Marie, the CCHS has been active in the community since 1919 when they were founded. They were the first to play a role in the preservation of the buildings here when they transformed the Johnston and Schoolcraft houses into house museums beginning in the 1940s. Both houses were neglected and vacant prior to the efforts of CCHS, which chose an adaptive reuse solution that was quite common in the early to mid-twentieth century for threatened buildings.

The Johnston House remained their focus, which was furnished and interpreted as a representation of artifacts from the period of the Johnston family occupancy. Currently responsible for management and maintenance of the building, it now resides in city ownership although it was owned by the historical society in the past.

Their current mission is to catalogue and properly store the records and artifacts entrusted to them, a project financed by the Michigan Council on the Arts. The scope of this work includes scanning the documents for storage on CD-ROM. These materials are presently stored in several repositories, which includes the public library where the collections are available for examination by the public. The library's holdings include the Donner Collection, a significant series of scrapbooks of older photographs and drawings of the Sault Ste. Marie area. Although public access to these archives is desirable, they need to be more closely guarded as a number of photographs are missing. Their other activities have included participation in the summer arts festival held annually in early August and in the Christmas walking tour of the area sponsored by the American Red Cross. Activities inside the Johnston House have been held to a minimum due to the fragile condition and the difficulty of access into and through the house for older or disabled people.

Renewing their leadership role is also a focus; the organization has a 14-member board led by president, Mary June, who is serving her third year in that position. The group also has two vice

presidents, secretary and treasurer. They would like to be involved in the interpretation and exhibit assembly associated with the Johnston House, but would prefer not to be responsible for the maintenance of the structure as they have been in the past.

SAULT STE. MARIE FOUNDATION FOR CULTURE AND HISTORY

The Foundation for Culture and History was founded in 1990 with the specific goal of developing a visitor center that introduced tourists to the Sault Ste. Marie area with the unifying theme of the St. Mary's River. They have transformed the first floor of the old Federal building into a compact yet high quality exhibit space that introduces visitors to the native American experience, early traders and settlers, military presence, and business of the community. During the summer, field school archaeological excavations are conducted in the surrounding green space of the old Federal building that was the site of old Fort Brady. Dr. Sue Schacher, professor of archaeology at Lake Superior State University, serves as the principal spokesman of this organization.

The FCH would like to function as a consultant to the organization managing the buildings and to provide professional assistance in interpretation, exhibits, design, restoration procedures, curation, and archaeological monitoring.

CITY OF SAULT STE. MARIE

The City of Sault Ste. Marie is represented by James Hendricks, Director of Planning and Development, DiAnn Pettett with the same department, and City Manager, Spencer Nebel. The prime motivator of the rehabilitation and planning activities to date for the area, the City is mainly concerned about the future organizational aspects of this area. The City views a definition of the management structure as the crucial element for its successful operation. They are concerned about too complex or unwieldy of a structure and do not think that an additional layer of involvement by a new organization is the answer. Another prominent concern is that the management of the buildings be clearly and fully defined as to the participants' responsibilities. Although some reservation was expressed about the city's future ownership in the properties, the authors believe that the city should and will always need to be involved in some aspect of the area's development.

STUDY OF OTHER HISTORICAL VILLAGES

The following discussion focuses on examples of historic museums and village organizations, some famous and some not as well known, with regard to their organizational structure. In addition to the study of such organizations, the major concepts of the Main Street Program, which is mainly directed to downtown business districts, are also presented.

The historical organizations investigated were Colonial Williamsburg in Williamsburg, Virginia; Henry Ford Museum and Greenfield Village in Dearborn, Michigan; Sauder Village in Archbold, Ohio; and the Berrien County Historical Association in southwestern Michigan.

COLONIAL WILLIAMSBURG
WILLIAMSBURG, VIRGINIA

The information was obtained from Jennifer Stouter, Secretary to the President, Colonial Williamsburg on July 30, 1997. Certainly the most famous of historical villages in the country, Colonial Williamsburg in southeastern Virginia was founded by John D. Rockefeller, Jr. in the late 1920s. The enterprise currently covers over 100 acres with 88 original buildings and over 500 buildings and outbuildings that they maintain and own. The only privately owned building is the Bruton Parish Church, which is held by the congregation. The village is supported by the Colonial Williamsburg Foundation, which accepts gifts and donations to their endowment funds. Donors can choose to earmark their donations to a specific building, research activity, etc. or an unrestricted donation to the annual fund. They do not receive any state or federal funding.

Colonial Williamsburg is run by a Board of Trustees (which usually number between 18 and 20 members) with a President. Eleven Administrative Officers report to the president, with about 70 directors under them, and then managers. There are around 3500 employees presently.

The buildings function mainly as they did originally. There are four taverns which each serve as a restaurant and feature a specialty menu item. The Shields Tavern serves an 18th century menu, while the Christiana Campbell Tavern specializes in seafood items. Some of the houses serve as private residences for Colonial Williamsburg employees. Other buildings, particularly the crafts shops, are open for hands-on or demonstration exhibits, such as the apothecary shop or the woodworker's shop. Some buildings are only open to donors at a certain level for behind-the-scenes tours.

There are no walls or barriers around the complex to limit visitors. Anyone can walk around the village without paying admission. Admission tickets are for certain events, exhibits, or sites. There is a three-day pass, one-day pass, and a Patriot's Pass which is for a one-year period.

There are hotel facilities, although not in the older buildings, which serve the village and are part of the Colonial Williamsburg operation.

HENRY FORD MUSEUM/GREENFIELD VILLAGE
DEARBORN, MICHIGAN

This information came from Rick Stefani, Accounting Representative, at the Henry Ford Museum/Greenfield Village on July 30, 1997. Founded shortly after Colonial Williamsburg in 1929,

this museum/village complex in southeastern Michigan is a 501(c)(3) organization, which is not affiliated with Ford Motor Company, although several board members have been associated with that company. The organization owns all of the property and buildings within the village and museum.

Similar to the circumstances of the Sault Ste. Marie buildings, the buildings displayed in Greenfield Village are associated with important people that have been moved to a group setting without regard to the surrounding historical context. The museum is a vast repository of artifacts that represent American culture ranging from early twentieth century electric cars to household appliances to watch case collections. Both the museum and village routinely sponsor special exhibits and festivals; currently an old car festival and "A Celebration of Emancipation" are featured in the village. Both the museum and the village have a number of restaurants and gift shops, and are important revenue producers. It was noted that the organization is taxed for retail sales if the merchandise is not associated with their educational mission. An example is a plain coffee mug for sale in one of their shops; selling that mug is viewed as competition with other profit-making stores. Retail sales are not taxed if the coffee mug has a picture of an early vehicle in their collection and states the year manufactured and its name, which is considered educational.

Overnight lodging is provided at several venues both inside the village and the Dearborn Inn adjacent to the complex. Available tours of the village include three forms of transportation that each charge a separate fee: a paddle wheeler on the Rouge River that is $1.50 per trip, a half-hour carriage ride that is $5.00, and a steam engine train tour that circles the perimeter of the village for $3.00. Admission fees are currently $12.50 a day for adults for either the village or the museum with a lower charge for seniors and children.

The organization has a board of trustees and a President who is the CEO. A senior leadership team reports to the President. They have 300 full-time employees. They do have a membership base and solicit funds from other foundations.

SAUDER VILLAGE
ARCHBOLD, OHIO

Information on this historical village was provided by Kris Jemmet, Director of Human Resources, Sauder Village, on July 31, 1997. Sauder Village, located in a somewhat isolated location in northwest Ohio, is a multi-activity historical village that includes 34 restored structures moved to the village over the past 20 years, a 33-room inn that primarily serves only the village visitors, campground, a 350-seat restaurant, three gift shops, an exhibition and special event center, and operating crafts studios. The non-profit organization was formed in 1969 and the village opened in 1976. It is open from mid-April until late October, although the bakery and restaurant are open year round.

The organization which runs the village is a non-profit 501(c)(3) organization that is mainly supported by the Sauder Furniture Company. Established in 1934, the company is the largest manufacturer of ready-to-assemble furniture in the world. The company donates approximately $600,000 to $700,00 a year to the operation, which was begun as a retirement project for the Sauder company's president, Erie Sauder. Mr. Sauder, who had turned 92 years old this year, recently died and bequeathed his $5 million estate to the village. The organization is overseen by Sauder family members, who manage the funds and some of the daily aspects of the operation of the village.

Although the contact from Sauder Village, Kris Jemmet, notes the benefits of a wealthy benefactor to the maintenance of the village, the village is not self-supporting at this point and never has been. It is expected that it never will attain that status. Last year the organization sustained a $1.3 million loss, despite the Sauder family donation and admission fees ranging from $9.00 for adults down to $4.50 for students; group rates are slightly lower per head.

The organization is striving to boost membership with plans to hire both a director of development as well as a director of building operations. They would like to be accredited as a museum, but know they would have to work on their authenticity and more staff, which is not possible right now due to lack of funds. They have approximately 350 employees and 300 volunteers, with generally 42 costumed interpreters/craftspeople and 6-8 volunteers working daily. Pay is low, approximately $6.00 an hour and they generally employ college students and retired persons. And yet, salaries are their biggest expense, as well as building and grounds maintenance ($20,000 for parking lot repair this past year). Electricity costs are substantial, due to the high rates charged by the local utility company. Another expensive budget item is the liability insurance that needs to be carried for their operation.

Visitors last year amounted to about 84,000, a lower figure than other years. They believe the admission fee is a little high for families, but have not formulated a solution although they are considering a one-day pass price per family.

The inn, bakery, and restaurant are really not money-makers either. The inn charges $89.00/$99.00 for a room and $129.00 for a suite during the summer, which are considered reasonable rates for Northern Ohio, but the situation is hampered by the fact that the inn only serves the village, not other tourist attractions, due to their isolated location and may be too high for visiting families.

BERRIEN COUNTY BUILDINGS
BERRIEN COUNTY HISTORICAL ASSOCIATION
BERRIEN COUNTY, MICHIGAN

Glenn Uminowicz, director of the Berrien County Historical Association, provided the following information on this cluster of historical buildings. The Berrien County Historical Association (BCHA), headquartered in Berrien Springs in southwestern Michigan, is a 30-year old

organization that provides a good model for historic buildings' operation and maintenance. Staffed by a director, curator, part-time buildings/grounds maintenance person, and administrative assistant, and a museum assistant (generally a student intern), the organization's activities revolve around a block of nineteenth century county-related buildings in the center of the town. The buildings include the 1839 courthouse (the oldest courthouse in Michigan), sheriff's residence, county records building, all on their original site, and a two-story log cabin built by the county's first attorney, which was moved here in 1974. Through a service fee arrangement and a 25-year lease with Berrien County, the BCHA manages and maintains these buildings as museum, exhibition, and archives facilities.

Ownership of the buildings is divided equally into half by both the county and the BCHA. Not only does this relieve both parties of full responsibility, but also provides a wider range of funding sources for the buildings' rehabilitation and operating expenses. The BCHA, however, does manage and maintain all of the buildings.

The BCHA believes in adaptive re-use concepts for the buildings, a logical approach since none of the buildings are able to serve their original functions. The county seat was moved from Berrien Springs to St. Joseph in 1894. The courthouse, which served as a church for over 50 years, now has a court room displayed as a period room, exhibition space, and a museum store. The sheriff's residence (the jail section was demolished in 1916) contains exhibit space on the first floor, the association's offices on the second, and archival storage space in a kitchen wing. The association oversees and maintains the county records here that are of interest to genealogical researchers, a function that county personnel are inclined to give up. The county records building is currently vacant and in need of repairs, but exhibition space and additional storage are planned in the future here. Future plans calls for the restoration of the original staircase in the county courthouse and a recreation of the sheriff's office as well as other period rooms in the sheriff's residence.

The BCHA is overseen by a board that currently includes two county commissioners. The membership numbers over 400, while they have a mailing list of two thousand names. Building membership is one of their main goals as a source of funding and community support. Their retail operations in the museum gift shop are growing and exceeded $50,000 last year.

Besides their paid services for the county, the BCHA provides pro bono preservation expertise to the county that included developing local design guidelines for Berrien Springs. There is no official landmark or preservation advocacy group in the county, although there are fourteen local groups that are involved with the history of their particular locales. The BCHA participates with these groups in joint promotional efforts and on occasion, has stepped in to provide services for the other organizations. It should be noted that the BCHA was formed by seven local historical groups that joined together to save the courthouse from demolition.

The fee for services that the county government has enacted with the BCHA is not unusual in this county. The county government has several such contracts for services with other non-profit organizations; another example is a contract with a local volunteer group that assists with work

assignments for parolees. The county views these contracts with local non-profits positively as access to expertise at a lower cost for county-mandated services.

MAIN STREET PROGRAM

At first glance, the Main Street program, known for its revitalization efforts in downtown business districts, may not seem an appropriate model for the operation of the historic buildings on Water Street. But the program incorporates principles of business practices and community participation that seem quite relevant. Widely proven to be the approach needed in business districts because of its comprehensive strategies, realistic expectation of change (that it does not happen overnight), and requires the involvement of the community rather than a single group or consultant, the program has been successfully implemented in over 1,350 communities in 43 states over the past 17 years.

Many similarities exist between a Main Street program in a business district and the efficient and organized management of the multi-activity site envisioned for the Water Street area. It is precisely because there are so many interested parties and a range of activities involved that the Main Street program seems like an appropriate starting point on Water Street.

Although no statewide program is currently in place in Michigan, many communities in the state have expressed interest through their inclusion on the National Main Street Center mailing list. The commonwealth of Kentucky has conducted a very successful program over the past 18 years due in large part to the guidance, technical assistance, training, and three-year partial funding for staff that they provide. It needs to be stressed, however, that the program is a self-help program and does not a state-wide sponsor to be put in place; the program can really only succeed in a community if local initiative is strong.

The tenets of this extremely successful nationwide program follow the four points of economic restructuring, design, marketing, and organization. More specifically defined, the four points are economic restructuring, that include studies to determine existing market conditions and plan new functions; design, not only of clear and attractive graphics, but also building rehabilitation that follows professional standards, and public space maintenance; promotion, though advertising, the projection of a positive image, and special events; and organization, building a single organization to govern the program with the efforts of other key groups coordinated to make the program successful.

The program is also guided by ten principles of organization that are also applicable to the operation of the historic homes area:

- Widespread community support
- Broad-based community representation in an advisory capacity
- A distinct constituency

- A clear shared sense of mission and a well-defined set of goals and objectives
- Committed, dependable funding
- Working committees
- Full-time management
- A well thought-out work plan based on the four points of the Main Street approach: design, organization, promotion, and economic restructuring
- A commitment to work, and succeed, over time
- Strong public-private partnerships

The National Main Street Center recommends a private organization as the lead in such a project. The logic of this recommendation is based on the fact that a private organization could be focused on this single goal, as opposed to a city agency where funding and political cycles could weaken the agenda. A private organization would also, theoretically, be better able to bring all of the participants, both public and private, together in an objective environment. The project would be headed on a day-to-day basis by a project manager who is guided by a board or steering committee.

MANAGEMENT RECOMMENDATIONS

Like all of the historical organizations described above, the operation of the Water Street Museums area will depend on charitable donations, grants, and admission fees. Like Colonial Williamsburg, it is recommended that the area remain open to visitors who are free to walk around the buildings and view and use the marina. Admission fees would be for admission to the buildings, with tickets purchased at the Kemp Coal Dock Office Building. Gift shops and exhibits should constitute core sources of visitation as well as revenue generation, as they are with all of these organizations.

While it is difficult to compare the proposed operation of the area with such museum giants as Colonial Williamsburg and Henry Ford Museum/Greenfield Village, there are certainly some similarities in management and operation. Although the order of magnitude in the number of buildings, staff, admission fee, number of activities, and income, both of these venerable institutions are dependent on charitable solicitation, membership, and donations, similar to this much smaller operation.

The two smaller organizations that were studied illustrate the importance of location and the need to take on activities that serve the community as well as tourists. Sauder Village's isolated location appears to be a significant factor in their small visitation level and possibly the lack of patronage at the inn. Because there are no adjacent activities, people mainly view a visit to the village as a one day or half-day event and then move on. While the village offers a wonderful array of family activities, it appears that it would be better balanced with nearby tourist attractions. The Berrien County group started small as a grass-roots organization and has steadily increased their services and attractions. Their services for the county provide a reliable income that could be built

upon; this method of revenue generation should be studied by the organizations involved in the Water Street Museums area.

The approach of the Main Street Program is applicable to a future management concept because it recognizes the combined interests of many groups in a focused district. Although commercial activities do not define the Water Street Museums area, promoting visitation and providing quality services and goods are similar goals. Paying attention to the four principles of economic restructuring, design, marketing, and organization are clearly relevant in the successful future operation of the museums area.

The combined skills and interests of each of the participating organizations will greatly add to the success of the area. Areas of program development including interpretation, research, gardening, archaeological excavations, fundraising, and graphic design can be implemented through the talents and time of the members of the management entity.

The management structure for the ongoing operation of the Water Street Museums area will never be as complex as the institutions studied for this report, but it is recommended that a similar framework to a Main Street Program be implemented with an executive entity which oversees a manager responsible for administration of an approved plan (Figure 5).

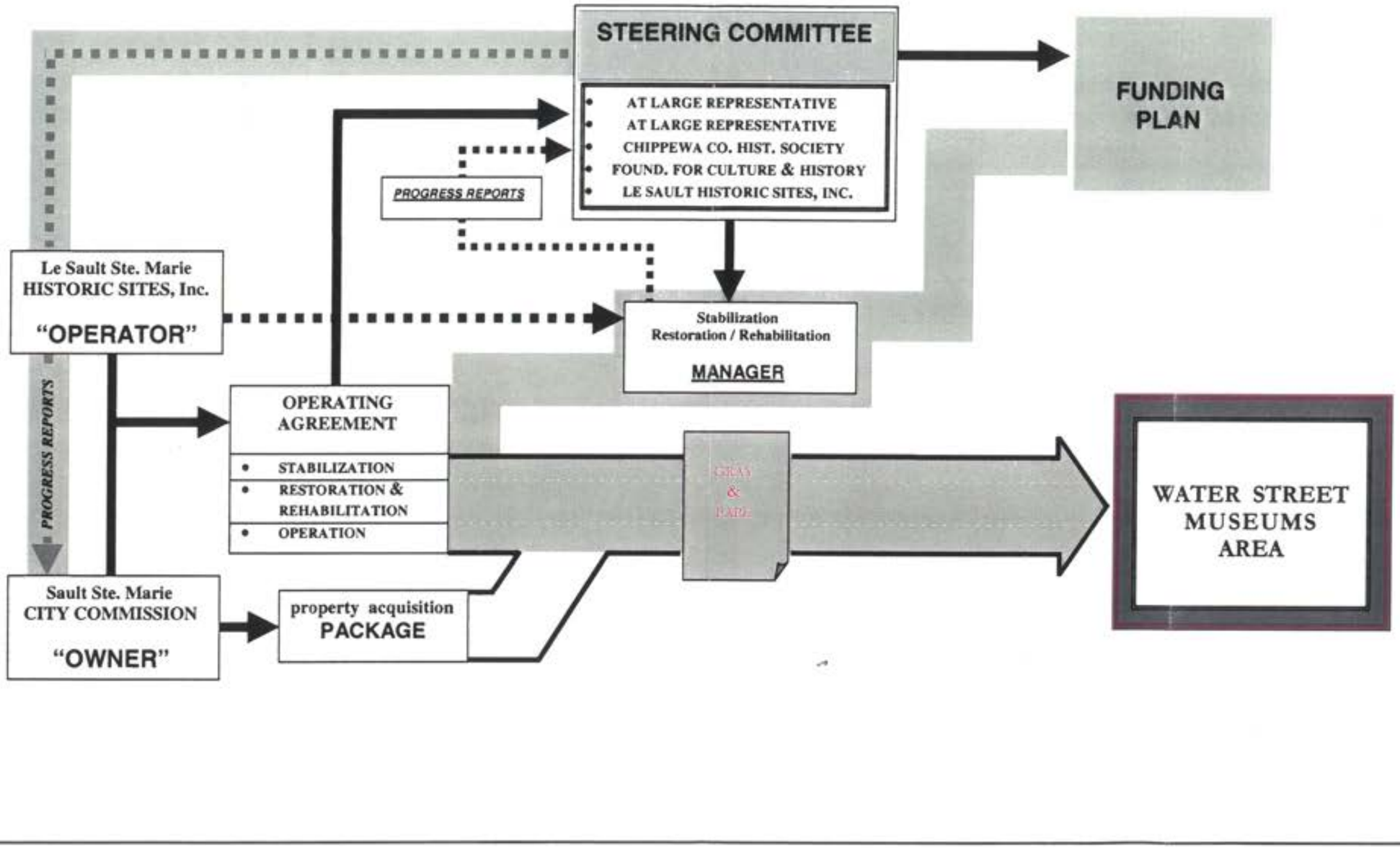
MANAGEMENT STRUCTURE

Fundraising efforts for stabilization and further work will follow different avenues depending on the ownership and management structure. The consensus of the City and the steering committe is that all land and structures should be owned by the City. An operating agreement between the City and Historic Sites would direct the latter organization to oversee the proposed rehabilitation/restoration work on all four buildings and to provide the operating services for them as well. Oversight of this operating arrangement would be provided by a five-person committee, which would advise both the Operator (Historic Sites) and the City Commission. This committee would be composed of one representative each from the following organizations:

- Le Sault Historic Sites
- Chippewa County Historical Society
- Foundation for Culture and History
- Two at large representatives to be appointed by the Mayor of Sault Ste. Marie

The recommendation for Historic Sites as the managing organization is based on their expressed desire to take care of the properties; their expertise with other buildings and programs in the vicinity; their future management of the marina; appropriate staff already in place; adjacent operations at the Valley Camp and marina; and their desire to relocate to a new office in the Kemp Coal Dock Office. Like the BCHA in Berrien County, Historic Sites has been chosen to manage a city-owned property and will use the proceeds for continued care of the four buildings.

97-26301



Major Tasks and Areas of Responsibility for Development of the Water Street Museum Area

GRAY & PAPE INC
CULTURAL RESOURCES CONSULTANTS

Figure 5

As a fledgling operation, the recommended choice of Historic Sites as the managing operator for the stabilization, rehabilitation/restoration, and operation of the four buildings is obvious because of the many practical considerations listed above. But it should be recognized in the future after final development that a separate, autonomous nonprofit, not-for-profit organization, or possibly a private business partnership may be more suitable as the executive entity once the area becomes more active in an operational phase. If the operating agreement with Historic Sites is desired to be continued into this operational phase, it is possible that the membership and duties of the steering committee will needed to be further defined or modified.

It is suggested that the process of hiring a Stabilization and Restoration/Rehabilitation Manager be the initial responsibility of Historic Sites, the Operator. The Operator will present candidates for the Manager position, and together with the Steering Committee determine and select an individual to fill this position. Concurrently, the City will package all target properties ready for development and utilization. With funding in place, the properties packaged, and the Manager position filled, the development work to accomplish stabilization, restoration/rehabilitation and related site improvements can move ahead. Upon staged completion of each facility, the Operator would begin utilization of each building.

STABILIZATION PHASE

This phase is the necessary first step in the preservation, rehabilitation, and operation of the four buildings. While all four buildings exhibit varying levels of deterioration or need for functional updating for the proposed uses, each requires attention to an immediate problem to ensure that its condition is stabilized. The components of each building which need to be addressed during the stabilization phase and the priorization by building is discussed in Chapter III in each individual building's historic structure report and in Table 3 in Appendix B.

As discussed above, the management of this phase will be in the hands of Historic Sites through the operating agreement with the City. The stabilization and rehabilitation of the four buildings on Water Street needs to be specifically overseen by an individual experienced in historic rehabilitation management and procedures and administration of contracts for construction. The individual, basically a rehabilitation manager, would be responsible for carrying out the proposed work depicted in the organizational chart in this report. The individual would report to Historic Sites with oversight by the steering committee on general progress with detailed updates regarding schedules and budget and propose solutions and impacts of alternatives for unforeseen circumstances encountered.

The rehabilitation manager would oversee the historic rehabilitation work, awarding contracts, making periodic review of work progress, monitoring costs, administrating contract payments, and recommending change orders. This position is not meant to replace the need for qualified construction supervision by all contractors. The rehabilitation manager will coordinate the

efforts of the architects, engineers, and contractors to ensure that each component of the design and construction proceeds in a manner consistent with the accepted development plan.

The rehabilitation manager will need to be experienced in contract administration tasks, including document interpretation, construction cost accounting, trade/contractor coordination and scheduling, site control and security. Historic rehabilitation management and procedures associated with the buildings would involve an understanding of special technological aspects pertinent to projects with archaic materials and assemblies, thorough understanding of the Secretary of the Interior's Standards for Rehabilitation, Restoration and Preservation and Secretary of the Interior's Standards for Treatment of Historic Properties, and the ability to locate resources and materials for sensitive elements of the buildings.

The duties associated with the rehabilitation manager may not require an individual employed in a full-time, permanent position with Historic Sites. A service contract could be awarded, based on the rehabilitation phases and funding schedules. The rehabilitation manager's fee would be reflected as a soft cost in the project budget. Per this arrangement, the rehabilitation manager would not have a vested capital interest in the construction budget.

The rehabilitation manager would be overseen and be directly responsible to Historic Sites, with funding in part for the position to come from the City.

RESTORATION/REHABILITATION PHASES

The phases involved in the restoration or rehabilitation of each building will depend on schedules formulated from the funding plan. As depicted in Figure 5, the funding plan is the responsibility of the Steering Committee and Historic Sites, as the operator. It is acknowledged that the tasks associated with this responsibility may change over time and that the City, as the property owner, will be involved to some degree. These phases will also need to overseen by a qualified rehabilitation manager hired by Historic Sites.

OPERATIONS MANAGEMENT

As discussed above in the stabilization phase, operations in all four buildings will be handled by Historic Sites through an operating agreement with the City. The daily operations of the rehabilitated buildings need to be handled by an onsite operations manager who reports to Historic Sites with the oversight of the steering committee. The operations manager would provide hands-on, daily involvement necessary to promote and operate the facilities and program in an ongoing method consistent with the accepted operations plan. The operations manager would also coordinate activities in the Water Street Museums area with other organizations and residents on the street. For instance, if a street festival or other activity that calls for street closure, increased traffic or parking, or temporary signage, then the director would be responsible for contacting and coordinating these

issues with others in the area. Common problems experienced on the street may also be handled through the manager. It might be advantageous to bring the operations manager on board early to help analyze design and construction schemes for the buildings. The operations manager would be responsible for business operations of the Water Street Museums area and assist in fundraising duties including research on potential funding sources, presentations to potential donors, and the preparation of grant applications.

The multi-component duties of the operations manager require a versatile and diplomatic individual who can coordinate the daily logistical needs of the Water Street Museums buildings and help provide a forward-looking vision for the area. The range of duties associated with this position require an experienced individual, not someone right out of school. The individual must be familiar with the needs of older buildings with regard to proper rehabilitation techniques, code, and intended functions. The person must be able to work with a wide variety of people; this would include effectively managing staff, accommodating tourists needs, and communicating with the overseeing executive entity. Although the services of a bookkeeper is already within the complement of Historic Sites' personnel, the operations manger must be familiar with the administration of budgets.

This position is intended to be full-time during the tourist season months of May-October. Depending on the level of activities during the off-season months, the position may then become part-time.

REFERENCES CITED

Bremer, Richard G.

1987 *Indian Agent and Wilderness Scholar: The Life of Henry Rowe Schoolcraft.* Clarke Historical Library, Central Michigan University, Mt. Pleasant Michigan.

Crumlish and Crumlish Architects, Inc.

1997 *Project Manual for Restoration of the 1827 Henry Rowe Schoolcraft House: 1997 Work.* South Bend, Indiana.

O'Boyle, Cowell, Rohrer, & Associates, Inc. (With the City of Sault Ste. Marie and Historic Sites, Inc.)

1981 *Sault Ste. Marie Historic Locks Park Trail: The Plan of Development.* Kalamazoo, Michigan.

APPENDIX A

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION AND RESTORATION

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, when possible, materials. Replacement of missing features shall be sustained by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

SECRETARY OF THE INTERIOR'S STANDARDS FOR RESTORATION

1. A property will be used as it was historically or be given a new use which reflects the property's restoration period.

2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.

6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive texture, the new feature will match the old in design, color, texture, and where possible, materials.

7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combing features that never existed together historically.

8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

9. Archaeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

10. Designs that were never executed historically will not be constructed.

APPENDIX B

STABILIZATION AND RESTORATION DEVELOPMENT COST ANALYSIS AND PRIORITIZATION TABLES

TABLE 1. PROJECT COST TABULATION (*without Site Utilities Loop included*)

PROPERTY	COST: Stabilization	COST: Rehabilitation / Restoration	COST: Combined
Johnston House	$ 45,000.00 +/-	$ 100,750.00 +/-	$ 145,750.00 +/-
Baraga House	$ 15,000.00 +/-	$ 146,000.00 +/-	$ 161,000.00 +/-
Schoolcraft House	$ 7,000.00 +/-	$ 214,125.00 +/-	$ 221,125.00 +/-
Kemp Office	$ 32,000.00 +/-	$ 37,500.00 +/-	$ 69,500.00 +/-
Site Development			$ 127,500.00 +/-
Landscaping		$ 65,000.00 +/-	
Walkways		$ 15,000.00 +/-	
Paving		$ 12,500.00 +/-	
Equipment		$ 35,000.00 +/-	
Pullar Lot			$ 88,000.00 +/-
Landscaping		$ 8,000.00 +/-	
Paving		$ 45,000.00 +/-	
Walkways		$ 20,000.00 +/-	
Equipment		$ 15,000.00 +/-	
COST TOTAL			$ 812,875.00 +/-

TABLE 2. PROJECT COST TABULATION (*with Site Utilities Loop included*)

PROPERTY	COST: Stabilization	COST: Rehabilitation / Restoration	COST: Combined
Johnston House	$ 45,000.00 +/-	$ 85,750.00 +/-	$ 130,750.00 +/-
Baraga House	$ 15,000.00 +/-	$ 131,000.00 +/-	$ 146,000.00 +/-
Schoolcraft House	$ 7,000.00 +/-	$ 194,125.00 +/-	$ 201,125.00 +/-
Kemp Office	$ 32,000.00 +/-	$ 32,500.00 +/-	$ 64,500.00 +/-
Site Development			$ 162,500.00 +/-
Landscaping		$ 65,000.00 +/-	
Walkways		$ 15,000.00 +/-	
Paving		$ 12,500.00 +/-	
Equipment		$ 35,000.00 +/-	
Utility Loop		$ 30,000.00 +/-	
Pullar Lot			$ 88,000.00 +/-
Landscaping		$ 8,000.00 +/-	
Paving		$ 45,000.00 +/-	
Walkways		$ 20,000.00 +/-	
Equipment		$ 15,000.00 +/-	
COST TOTAL			$ 792,875.00 +/-

TABLE 3. PROJECT PRIORITIES

PROPERTY	STABILIZATION	RESTORATION/ REHABILITATION
Johnston House	1	7
Baraga House	2	8
Schoolcraft House	3	5 (FIRST PHASE) 6 (FINAL PHASE)
Kemp Office	4	5
Site Development		6
Pullar Lot Development		9

APPENDIX C

BUILDING INDUSTRY STANDARDS REFERENCES

BUILDING INDUSTRY STANDARDS REFERENCES

American Forest and Paper Association (AFPA)
1250 Connecticut Avenue NW, Suite 200
Washington, DC 20036
(202) 463-2700

American Wood Preservers Association (AWPA)
P. O. Box 849
Stevensville, Maryland 21666

Brick Institute of America (BIA)
11490 Commerce Park Drive
Reston, Virginia 22091

Red Cedar Shingle and Handsplit Shake Bureau
116th Avenue NE, Suite 275
Bellevue, Washington 98004
(206) 453-1323

Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA)
4201 Lafayette Center Drive
Chantilly, Virginia 22021

APPENDIX D

SAMPLE MANUFACTURER'S DATA SHEETS

ecifications

T 1 — GENERAL

DESCRIPTION OF PRODUCT

ical platform lift for indoor/outdoor use nufactured by Access Industries, Inc. se- and dimensioned to provide building to mobility impaired persons.

QUALITY ASSURANCE

ll meet or exceed ANSI A17.1, Part XX. and installation shall be in compliance applicable regulations of all governing ies with jurisdiction.

facturer: Supplier with not less than 0) years experience in design, fabrica- and installation of specialized equipment bility impaired persons.

sition, Materials, Finishes: Lift shall structed of steel components finished ed polyester electrostatically applied for outdoor use. Standard color is Taupe Brown, Ivory and Pearl Gray are standard 180 optional colors are available from nufacturer).

T 2 — PRODUCT

-LIFT VERTICAL PLATFORM LIFTS

nufacturer/Equipment: Lift shall Porch-Lift® PL-S, PL-TG, ENC or EZE pecify) lifting height and with (specify) 8" (or) 36" x 60" (or) 36" x 56" platform 8" not available with EZE model and 36" not available with TG or EZE models) ufactured by Access Industries Inc., view, MO.

pacity: 750 lbs.

vel speed: 12 fpm maximum. Lift shall automatically at desired landings.

ve: (Specify)

Recirculating Ball Screw with 110V ctric Operation, three-groove pulleys three V-belts and broken belt monitor- ystem, electromechanical brake and nual lowering device

for)

2:2 Roped Hydraulic with full time 24V ery Operation featuring smart charge nology, slack cable safety device and ctric manual lowering relief valve.

ponents: Lift shall have following:

high front and rear platform guard ch.

ip platform and access ramp surfaces.

ntry key-locks on controls meeting ac- limitation requirements of ANSI A17.1, 2000.

truction sensor mounted on platform rpanel.

ify) 42" self-closing gate at top landing ion) 6'8" flush mount door with self t and interlock.

locks which allow platform movement when gates are closed and locked.

-rail on platform.

ion:) Emergency stop which shuts off r to lift and audio alarm which can be ted from platform or landings to sum- mon assistance.

9. (Toe guard models only:) Vertical wall panels that shield underside of platform during ascent/descent.
10. (ENC models only:) Aluminum frame, (specify: domed) acrylic panel hoistway.
11. (EZE models only:) Tubular steel frame, (specify:) steel panel or acrylic panel hoistway.

Applicable Standards: Lift shall be designed and manufactured in accordance with the following standards:

1. American National Standards Institute (ANSI) A.17.1, Part XX.
2. National Building Code (BOCA).
3. National Electrical Code (NEC).
4. American Society for Testing Materials (ASTM).
5. American Welding Society (AWS).
6. Americans with Disabilities Act (ADA).
7. Underwriters Laboratories (UL) when properly equipped and/or similar testing laboratories.

2.02 ELECTRICAL SYSTEMS

Wiring: Electrical contractor shall provide electrical piping and wiring. Lift contractor will make final electrical connections.

Controls: 24V constant pressure directional buttons on platform and On/Off key switches at landings and on platform. (Options:) Call/Send controls at landings with emergency stop button.

PART 3: EXECUTION

3.01 INSTALLATION

Lift shall be installed on a level, reinforced concrete anchor pad in accordance with manufacturer's instructions and as specified and approved by architect.

Codes: All designs, clearances, construction, workmanship, and material, unless specifically excepted, shall be in accordance with all codes having legal jurisdiction.

Maintenance: Lift must be maintained in accordance with manufacturer's instructions outlined in the installation instructions and owner's manual.

Warranty: Basic lift and electrical system shall carry one (1) year limited warranty. Drive train shall carry two (2) year limited warranty. (Options: extended warranty and service agreement for lift maintenance are available from dealer.)

NOTE: This specification is intended to assist you in preparing a precise specification. You may reproduce it in full or in part. Specifications and dimensions are subject to constant change and continually evolving codes and product applications.

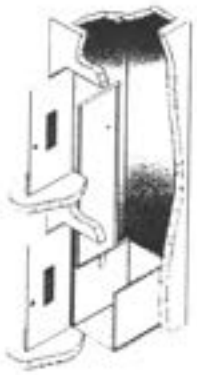
For complete specifications or additional technical information, contact Access Industries Inc., Grandview, MO at (800) 925-3100.

See complete specifications and detailed CAD drawings on CD-Rom in SweetSource, Sweet's Electronic Publishing.

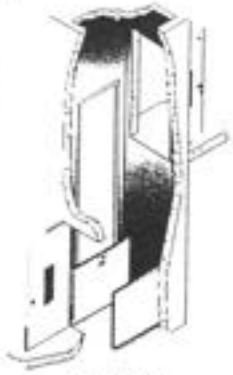
On the Internet: www.SWEETS.COM

Hoistway Configurations:

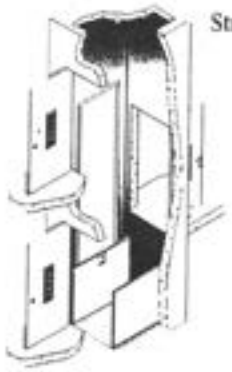
Porch-Lift S Model vertical platform lifts are often installed inside of hoistways. Below are popular configurations. 6'8" fire rated doors are also available from Access Industries.



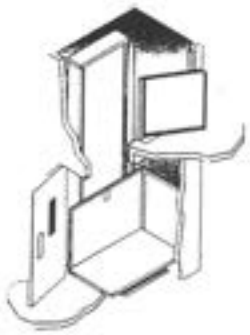
Enter/Exit
Same Side



Enter/Exit
Straight Through



Three
Stop



90° Exit

ACCESS INDUSTRIES INC.

APPENDIX E

POTENTIAL FUNDING SOURCES

POTENTIAL FUNDING SOURCES

Alden Trust (George I.)

Contact: Francis H. Dewey III, Chairman
George I. Alden Trust
370 Main Street
Worcester, MA 01608
(508) 798-8621

Comments: The Trust generally focuses on education activities although historic preservation programs including museums have been funded. There is no geographic restriction for grants. Grants, mainly as challenge, capital and endowments, are in the range of $25,000 to $75,000.

Alexander Foundation (Joseph)

Contact: Robert M. Weintraub, Vice President, Director
Joseph Alexander Foundation
400 Madison Avenue, Suite 906
New York, NY 10017
(212) 355-3688

Comments: The foundation makes grants for education although health and social services is their main focus. Their grants have no geographic restriction, although most are made in New York. The types of grants include capital, conference/seminar, endowment, general support, project, research and scholarship. The average grant is around $10,000.

American Foundation Corporation

Contact: Maria G. Muth, Treasurer
720 National City Bank Building
Cleveland, OH 44114
(216) 241-6664

Comments: The foundation's focus is civic affairs, education, the arts (including historic preservation), and social services. Their grants are mainly made in Ohio, but communties in other states including California, Washington, and Florida have been awarded funds. The grants are generally capital and multi-year/continuing support. Average grants are between $3,000 and $30,000.

Andersen Foundation

Contact: Mary Gillstrom, Assistant Secretary
Andersen Corporation
100 4th Avenue, N.
Bayport, MN 55003
(612) 439-5150

Comments: Although most grants are made in Minnesota, groups in states including Texas, Arizona, Indiana, and Michigan have also been recipients. Their major priorities are for higher education, youth, and medicine, but a number of arts organizations have received grants. Their grants are usually for general support and range from $5,000 to $250,000.

Dreyfus Foundation (Max and Victoria)

Contact: Lucy Gioia, Office Adminstrator
50 Main Street, Suite 1000
White Plains, NY 10606
(914) 682-2008

Comments: The foundation provides grants nationally, although Washington D. C., is a focus. The grants are for general support, project and research. Social services, education, and the arts are their main focus. Average grants are $6,000, with a typical range of $1,000 to $10,000.

Dula Educational and Charitable Foundation (Caleb C. And Julia W.)

Contact: James F. Mauze, General Counsel
112 S. Hanley Road
St. Louis, MO 63105
(314) 726-2800

Comments: Although most grants are made in New York and Missouri, groups in other states have received grants. They do fund operating expenses and are primarily interested in arts and civic affairs. Average grants are $10,000 with a typical range of $1,000 to $15,000.

Lilly Endowment

Contact: Program Office
P. O. Box 88068
Indianapolis, IN 46208
(317) 926-4431

Comments: A variety of grant types are offered including research, matching, and operating expenses. Indiana and Indianapolis are their geographic focus, but grants have been made elsewhere. The average grant is $128,000 with a typical range from $2,500 to $100,000.

Littauer Foundation (Lucius N.)

Contact: William Lee Frost, President
60 E. 42nd Street, Suite 2910
New York, NY 10165
(212) 697-2677

Comments: The range of grant types include conference/seminar, project, research, and challenge grants. Primarily for Jewish studies, the foundation does fund historic preservation activities. The average grant is $10,000 with a typical range of $1,000 to $15,000.

Pew Charitable Trusts

Contact: Nadya Shmavonian, Executive Vice President
One Commerce Square
2005 Market Street, Suite 1700
Philadelphia, PA 19103-7017
(215) 575-9050

Comments: Project, research, multi-year/continuing support, and challenge grants are provided by these trusts. The average grant totals $432,000, with a typical range of $200,000 to $500,000.

Sault Ste. Marie Community Fund
320 Ashmun Street
Sault Ste. Marie, Michigan 49783
(906) 635-1720

Wickes Foundation (Harvey Randall)

Contact: James V. Finkbeiner, President
4800 Fashion Square Blvd.
Plaza North, Room 472
Saginaw, MI 48604
(517) 799-1850

Comments: Education and social services is their primary focus, although historic preservation groups have been recipients for capital, challenge, and scholarship grants. The average grant is $30,000 with a typical range from $5,000 to $100,000.

APPENDIX F

MANAGEMENT INFORMATION SOURCES

MANAGEMENT INFORMATION SOURCES

American Association for State and Local History
172 2nd Avenue North
Suite 102
Nashville, Tennessee 37201
(615) 255-2971

Colonial Williamsburg
P. O. Box 1776
Williamsburg, Virginia 23187-1776
Jennifer Stouter
Secretary to the President
(757) 229-1000

Foundation Center
79 5th Avenue
New York, New York 10003-3050
(212) 620-4230

Kentucky Main Street Program
Roger Stapleton, Coordinator
Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601
(502) 564-7005

Management Assistant Group
1835 K Street, N. W.
Washington, D. C. 20006
(202) 659-1963

Michigan Department of Commerce
Local Development Services
525 West Ottawa Street
Law Building, 5th floor
Lansing, Michigan 48911

National Main Street Center
National Trust for Historic Preservation
1785 Massachusetts Avenue, N. W.
Washington, D.C. 20036
(202) 673-4219

Points of Light Foundation
736 Jackson Place, N. W.
Washington, D. C. 20036
(202) 408-5162

Sauder Village
St. Rt. 2, P. O. Box 235
Archbold, Ohio 43502-0235
(800) 590-9755

Small Towns Institute
P. O. Box 517
Ellensburg, Washington 98926
(509)925-1830

APPENDIX G

SELECTED BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

The bibliography is arranged topically by building or the general area and listed alphabetically within that topic. Most of these documents are located in the office files of Le Sault de Sainte Marie Historical Sites, Inc.

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1977 Baraga House Inventory, May 1977 (updated 6-15-77).

Bishop Baraga Association
n.d. Pilgrimage through Historic-Scenic Baragaland

A Chronological Background on the Bishop Baraga House Although not built until 1864

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1987 Rehabilitation plans for Bishop Baraga House. (Located in Baraga House file, no number)

Gilroy, D.
1982 Baraga House Foundation drawings and specifications. (Located in Baraga House file in Historic Sites files)

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North Shore Design, Sault Ste. Marie, Michigan
1986 Specification for Exterior Restoration, Bishop Baraga House, Sault Ste. Marie, Michigan

Simandl, Timothy H.
1987 Recent Work on the Bishop Baraga House in Sault Ste. Marie, Michigan.

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JOHNSTON HOUSE

Anonymous

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Kenn, John

n.d. John Johnston and the Johnston House. Chippewa County Historical Society, SSM.

Levin, Louis F.

1972 Restoration Plans ("Soo" - Historic Sites Preservation, John Johnston House, 413 Park Place). Oversized drawings of elevations and floor plans (2 sheets). Revised in 1973 to include dimensions and other details.

Lorch, Emil (Professor-Emeritus of Architecture, University of Michigan)

n.d. Johnston House, Correspondence March 2, 1949 to June 7, 1955.

Tomaszewski, Deidre Stevens

n.d. *The Johnstons of Sault Ste. Marie: An informal history of the Northwest, as portrayed through the experiences of one pioneer family.* (On sale at the Ship's Store)

Wheeler, Maurice W.

n.d. Hand-drawn plan of Johnson House (sic). (c. 1960)

SCHOOLCRAFT HOUSE

Ayres, Lewis, Norris & May, Inc.

1980 Plans of Schoolcraft House. Engineers, Architects, Planners, Ann Arbor, Michigan and Steubenville, Ohio. (Includes 1st and 2nd floor plans and elevations).

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1987 *Indian Agent and Wilderness Scholar: The Life of Henry Rowe Schoolcraft.* Clarke Historical Library, Central Michigan University, Mt. Pleasant.

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1986 Project Manual for Restoration of the 1827 Henry Rowe Schoolcraft House, Saulte Ste. Marie, Michigan, Phases II & III (Located in Schoolcraft House #3 file, LSSMHS).

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Lorch, Emil
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Paul, Mrs. Carroll
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Le Sault de Sainte Marie Historical Sites, Inc.
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Ness, Gary (Director, Ohio Historical Society)
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Capstick, Edward, Jack Hastings, and Tony Rougeau
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City of Sault Ste. Marie and Historic Sites, Inc., and O'Boyle, Cowell, Rohrer & Associates, Inc.
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Frank and Stein Associates
1967 A Report on a Proposed Development of the Historic Resources of Sault Ste. Marie, Michigan.

Walk of History (Historic Walkway)
Files regarding city correspondence, leases, agreements re: development of historic walkway in early 1980s. (Located at Historic Sites offices).

S. S. VALLEY CAMP

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1990 A Conservation Assessment of the Museum Ship, Valley Camp

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