Chapter 3: Cultural Resources Stewardship

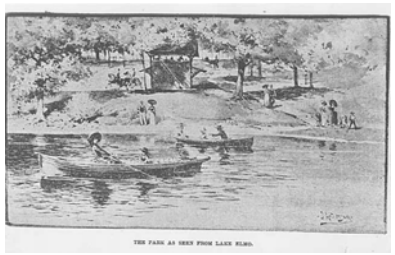
Legal & Regulatory Framework

The county will need to consider the legal and regulatory framework within which any future development is proposed at the park reserve. A proposed development or redevelopment project involving federal funds or permits will require compliance with various federal laws and regulations. Laws such as the "National Environmental Policy Act (NEPA) of 1969" (PL 91-190) and the "National Historic Preservation Act (NHPA) of 1966 as amended" (PL 89-665) provide protection for the nation's cultural resources. The NEPA requires that archaeological and other historic resources be considered during the environmental assessment process and in environmental impact studies. The NHPA established a national historic preservation policy; created the National Register of Historic Places (NRHP) and the cabinet-level Advisory Council on Historic Preservation (ACHP); and established the Section 106 process, which requires consideration of cultural resources for undertakings that are federally funded, licensed, or permitted. It is not uncommon for park & recreation projects to involve impacts to wetlands thereby necessitating a permit from the U.S. Army Corps of Engineers (USACE). A USACE permit, in turn, will federalize the entire proposed project so that compliance with Section 106 of the NHPA will also become necessary.

Since the park reserve is owned & operated by Washington County, a political subdivision of the State of Minnesota, state statutes also apply to lands within the park reserve. For instance, the "Minnesota Historic Sites Act" (MS 138.51), the "Field Archaeology Act of 1963" (MS 138.31-.42), the "Private Cemeteries Act" (MS 307.08), the "Outdoor Recreation Act of 1975" (MS 86A), and the "Minnesota Environmental Rights Act" (MS 116B) all apply to lands within the park reserve.

The Minnesota Historic Sites Act recognizes that "it is in the public interest to provide for the preservation of historic sites, buildings, structures, and antiquities of state and national significance for the inspiration, use, and benefit of the people of the state." This law directs state agencies and departments to cooperate with each other and the Minnesota Historical Society (MHS) in protecting properties listed in the NRHP or State Register of Historic Places and that may be affected by state or local undertakings.

The Field Archaeology Act ensures that "the State of Minnesota reserves to itself the exclusive right and privilege of field archaeology on state sites, in order to protect and preserve archaeological and scientific information, matter, and objects." This law established the Office of the State Archaeologist (OSA), and



"The Park" as seen from Lake Elmo

Horse Drawn Carriage and Riders at Lake Elmo

Swimming and Boating at Lake Elmo

directs state agencies to cooperate with the OSA and the MHS in protecting known or suspected archaeological sites on non-federal, publicly owned or leased land or waters, or on land or waters affected by publicly funded (state and local) projects.

The Private Cemeteries Act states that "... all human burials and human skeletal remains shall be accorded equal treatment and respect for human dignity ... the state archaeologist shall authenticate all burial sites for purposes of this section ..."

The Outdoor Recreation Act covers the "... the unique natural, cultural and historical resources of Minnesota that provide abundant opportunities for outdoor recreation and education…" The act encourages these resources to "…be made available to all the citizens of Minnesota now and in the future."

The Minnesota Environmental Rights Act asserts that "... each person is entitled by right to the protection of air, water, land and other natural resources within the state..." The state's definition of natural resources in this context includes historical resources.

This legal & regulatory framework means that the county should be prepared at a minimum to coordinate with the State Historic Preservation Office (SHPO) and/or the OSA for plans involving new construction and reconstruction within the park reserve's exterior boundaries. In many cases, the county also should be prepared to conduct archaeological & historical investigations prior to many future projects. The biggest functional difference between federal- & state-level compliance is that federal compliance requires consideration of adverse impacts that would result from proposed development within the viewshed of NRHP-eligible or listed cultural resources.

Cultural and Natural History

Washington County was established on October 27, 1849. Its namesake is George Washington, the first President of the United States. Comprising 423 square miles and including part of the scenic St. Croix River Valley, Washington County was one of the nine original counties created in the Territory of Minnesota.[1] Since its establishment, the county has played a diverse role in the region, serving the Twin Cities metropolitan area with its commercial, industrial, natural, and agricultural resources.

Washington County experienced modest population growth in the early part of the 20th century. In 1900, the county's population was reported at 27,808 and increased only slightly to 34,544 in 1950. However,

[1] Minnesota became a state on May 11, 1858.

Washington county experienced dramatic and rapid population growth during the last half of the 20th century. In 1990, the population had skyrocketed to 145,896 and continued increasing throughout the 1990s at a rate of nearly 38%. The 2002 population estimate for Washington County was 210,724, ranking the county as fifth in population out of the 87 Minnesota counties. While much of Washington County has retained its rural atmosphere, today it is considered a “suburban” county.

One early settler near Lake Elmo Park Reserve was Bernard B. "Bun" Cyphers, a Virginian who arrived in the area in 1848. He & his wife, Maria, built a hotel, tavern, and stage stop, known as the "Lake House," near Sunfish Lake. Earlier travelers had reached St. Paul from the St. Croix River Valley via a road from Afton and later by one from Stillwater that first crossed Little Canada. The Cyphers moved away, and John Morgan became the first permanent settler near the park reserve when, in 1849, he purchased a farm on Stillwater Road, west of Lake Elmo. By 1850 a new road, suitable for stagecoaches – had been constructed from St. Paul to Stillwater.[2] Morgan built a spacious hotel known as the "Halfway House," where stagecoaches enroute from St. Paul to Stillwater changed horses and ate meals.

The two-mile-long water body now known as Lake Elmo[3] has played an important part in the development of the Town of Lake Elmo and Washington County. Since the late-1800s, visitors have been drawn to the lake for recreation, relaxation and scenery.

Developers for the St. Paul, Stillwater & Taylors Falls Railroad first recognized the recreational potential of Lake Elmo in the early 1870s. By 1880, the railroad company had built a small resort community along the lake's north end, and steamships provided access to distant shores. Large upscale cottages, a hotel, bathhouses, and sailboats attracted wealthy cosmopolitans to Lake Elmo's summer beauty and supply of fish. The most ambitious was the Elmo Residence Park, intended as a year-round community, which was platted in 1884 around the eastern side of the lake by a group of St. Paul businessmen (Goodman 2004). The development was publicized as "a beautiful park & lakeside home suburb near St. Paul".

A community named, "Lake Elmo Village," sprang up around the resort and railroad station. A "Doctor Stevens" established a practice in the village, and years later he founded a private hospital in the village. In 1889, a power house was erected, giving Lake Elmo the first electric lights west of Chicago. By the early 1890s, streetcars were well established and streetcar companies were extending their lines to lakes

Passengers on the Steamship, Henry W. Longfellow, probably at Lake Elmo

[2] This road corresponds roughly to modern Highway 5 & Stillwater Road.
[3] Early settlers first called it "Bass Lake;" it was renamed in honor of a novel entitled, "Lake Elmo," in 1879 by railroad promoter, Alpheus B. Stickney.

Park Structure with Lake Elmo in Background, ca. 1888

close to the Twin Cities. During this time, the village included a store, saloon, grain-house,[4] blacksmith, and wagon repair shop. By 1900, a cooperative creamery and grain elevator had been added to the village. In 1911 a bank was established, and a consolidated school was built there by 1914. By the 1920s, Stillwater Road had been paved, and the village incorporated in 1925 as a substantial shipping point and dairy center.

In subsequent decades, the area retained a bucolic, old-fashioned appeal that drew lake visitors through the 1950s. As residential growth and suburban development proceeded eastward from St. Paul, however, Lake Elmo lost its prominence as an agricultural center.

Americans became more reliant on automobile transportation nationwide in the years after World War II, and passenger rail service to Lake Elmo ended in 1963. An ambitious development project of the 1960s known as, "Cimarron," was a planned community of manufactured homes next to a golf course in Lake Elmo. The village was converted to a city in 1969, but Lake Elmo has retained some of its peaceful, small town character. Today, Lake Elmo's farmland continues to yield to residential & other developments in all directions.

Refer to Appendix A for more detailed information about cultural and natural history relating to Minnesota, Washington County and Lake Elmo Park Reserve.

Known & Potential Cultural Resources

American Indian

Only two archaeological sites have been recorded within the park reserve's boundaries. Site 21WA0057 was discovered in 1989 during a Phase I archaeological survey for a proposed landfill site on the shores of Eagle Point Lake (Stanley & Hoppin 1989). This small lithic scatter is situated on a landform that archaeologists interpreted as a large dune. The site is only shallowly buried by the dune (i.e., cultural materials in the top 30 cm below the ground surface). Site 21WA0057 yielded a triangular Hixton silicified sandstone projectile point, a jasper flake tool, and cracked rock fragments, and the site's function was identified as a campsite. At the time the investigators completed an official state site form, the site's eligibility for the NRHP had not yet been formally determined, although the archaeologists recommended 21WA0057 as ineligible for the NRHP.

[4] Apparently this was an early type of grain elevator at which farmers unloaded their wagons directly onto the trains.

Site 21WA0058 also was discovered in 1989 during the same Phase I archaeological survey at Eagle Point Lake (Stanley & Hoppin 1989). This is an even smaller lithic scatter than 21WA0057. According to the archaeologists, 21WA0058 is located on an interfluve that was carved into a glacial outwash plain. The depth of cultural materials was not recorded on the site form, but note was made that the cracked rock fragments came from only two of the 15 excavated shovel tests. At the time the investigators completed an official state site form, the site's eligibility for the NRHP had not yet been formally determined, although the archaeologists recommended 21WA0058 as ineligible for the NRHP.

It appears that no systematic, professional archaeological surveys have been conducted for the management of Lake Elmo Park Reserve. There is high archaeological potential for American Indian archaeological sites throughout the park reserve. Particularly the shorelines of Lake Elmo and Eagle Point Lake should be considered high priorities for archaeological surveys. There also is high archaeological potential for American Indian sites around the shores of ponds, present and former, as well as the waterways connecting bodies of surface water. The shorelines of surface water bodies may lack stratigraphic integrity, particularly around Lake Elmo and Eagle Point Lake, because of Euro-American development subsequent to any past American Indian land uses.

Euro-American

Several historic standing structures (HSS) or HSS complexes are known, but uninventoried, within the park reserve. Additionally, there is high archaeological potential for Euro-American archaeological sites within the park's boundaries.

Refer to Appendix B for detailed information on the history of ownership, structures and infrastructure related to Euro-American settlement of the park.

Archaeological Sensitivity Models

Some of the earliest professional efforts at recording archaeological sites in Minnesota were undertaken by Jacob V. Brower, Alfred J. Hill, and Theodore H. Lewis in the late 1800s and by Newton H. Winchell in the early 1900s. Their reports provide the earliest records of American Indian mound sites prior to extensive disturbance by Euro-American settlers, farmers, and industrialists. Although much of their work entailed exhaustive field verification of sites, a great deal of data was derived from informant interviews rather than actual field surveys.

In subsequent years, only two archaeological sites have been recorded from within the park reserve. No

systematic, professional surveys have been conducted. This lack of information underscores the importance of predictive modeling with respect to locations of low sensitivity (lowest likelihood), medium sensitivity (more likely), and high sensitivity (highest likelihood) for archaeological resources. Sensitivity models, in short, are used as aid in the planning process for new development or redevelopment on a particular land parcel. Yet it is important to keep in mind that the dependability of a predictive model for a particular location can only be evaluated through comparison to archaeological field results there (ground-truthing).

Mn/Model is a suite of GIS-based statistical models that map the potential for pre-1837 surface archaeological sites in Minnesota. The first phases of Mn/Model development occurred over a number of years.[5] The following information is quoted directly from Mn/DOT's website:

> Mn/Model development began in 1995. The goal of the project was to use Geographic Information Systems (GIS) and statistical analysis to produce archaeological predictive models that could be replicated by anyone using the same data and following the same procedures. The aim was that these models be accurate enough to predict 85% of known archaeological sites without designating more than 33% of the state's area as high and medium site probability. The Phase 2 models, completed in 1997, achieved this goal. The Phase 3 models exceeded it.[6]

Information about Mn/Model's phased development is paraphrased here from Mn/DOT's website. *Phase 1* was defined as "Basic Data Accumulation and Prototype Model Development." The data were collected through a combination of background research, archaeological field work, geomorphological methods, and archaeological database development. Digitized archaeological site information was used for the database development. The end-products of this phase of the project were prototype GIS models for five archaeological resource regions (i.e., environmental regions based on the State's surface hydrology).

Phase 2 involved "Formal Model Development." Goals of this phase were to add additional archaeological and environmental data to the GIS database, to refine modeling techniques, to extend modeling to the entire state, and to develop information on major river valley sediments and the

[5] The Mn/Model process and the resulting data models are copyrighted by the Minnesota Department of Transportation (Mn/DOT). This state agency received significant funding from the Federal Highway Administration (FHWA) for the Mn/Model process.
[6] Information available at http://www.mnmodel.dot.state.mn.us/index.html.

paleoclimate of Minnesota. Introducing the fourth dimension (time) into the model also was attempted through radiocarbon dating of samples.

The final phase of development was "Model Refinement and Implementation" (*Phase 3*). Major tasks for this phase were the development of a model of suitable pre-Woodland habitats for predicting locations of very old or buried sites, testing the geomorphic models with archaeological data, and enhancing the statewide predictive model with additional data and refinements. At this stage, the preliminary Phase 2 models also were applied to specific archaeological projects to begin planning for the implementation of Mn/Model.

As described in a previous section of this report, nine archaeological regions have been proposed for the State of Minnesota (Anfinson 1990). In this classification system, the park reserve lies within the "Region 4: Central Deciduous Lakes Region." Region 4 has more documented burial mounds than any of the other eight regions (Anfinson 1990). Furthermore, Anfinson (1990:156) predicts that

> most base camps should be on major lakes, especially where stream inlets or outlets foster seasonal increased fish populations or wild rice beds. Temporary camps should be near any surface water source. Subsistence resource procurement sites can also be anywhere depending on the resource sought. Mound sites should be near base camps on elevated terraces or hills.

Mn/Model information was not considered during the creation of the following sensitivity models for the park reserve, but Washington County might consider requesting Mn/Model output for the park reserve. However, sensitivity models should be treated as dynamic tools. That is, as more is learned by engineers and planners about the subsurface in the park reserve, then the models should be updated accordingly. For instance, observational data collected prior to and during construction of new park features should be scrutinized for information that could be useful for updating the models for the park reserve.

Pre-Contact & Contact Period Archaeological Sensitivity Models for the Park Reserve

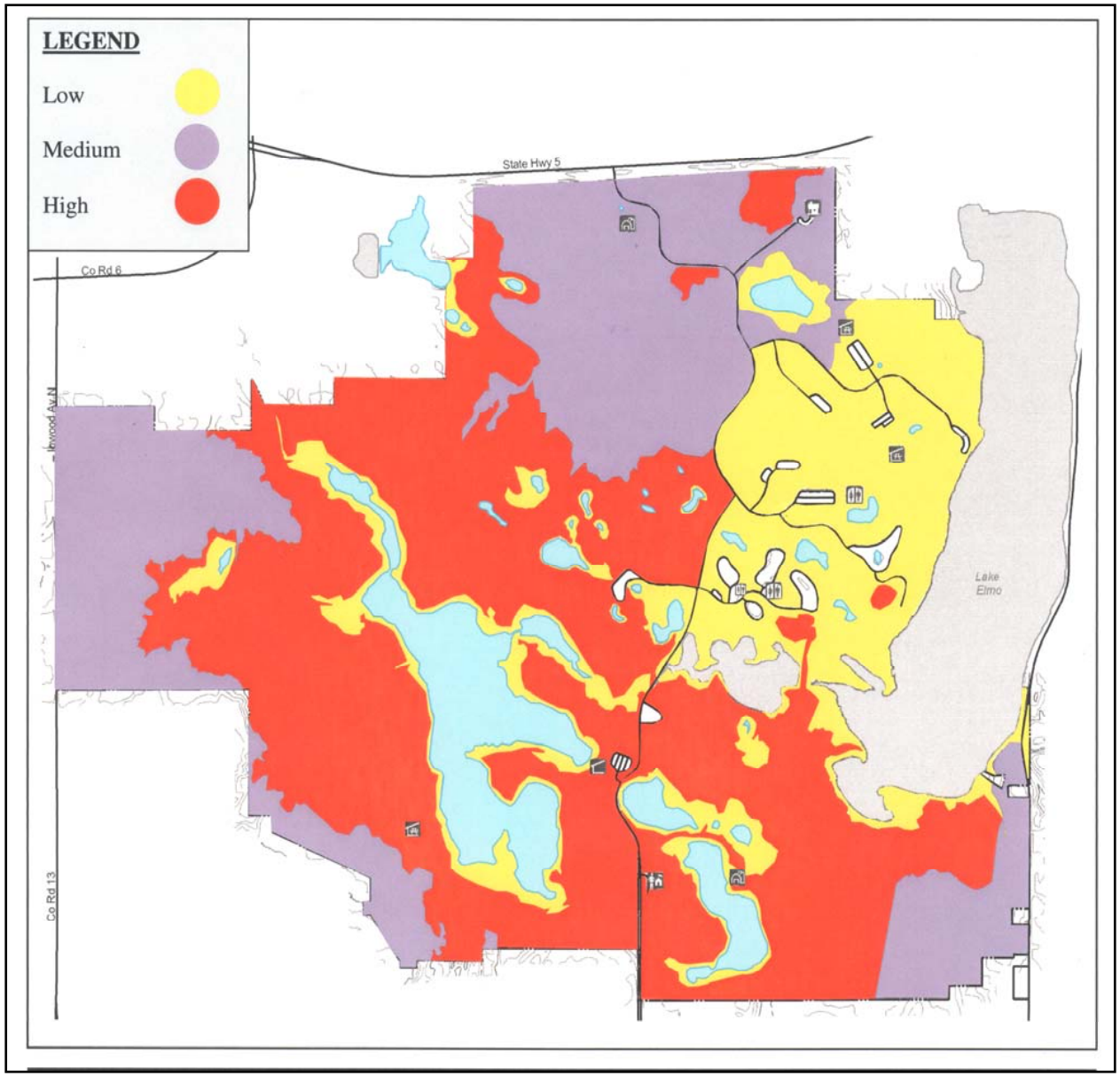
Archaeological research and cultural resources management studies in the general region have resulted in the identification of archaeological sites affiliated with the pre-contact and contact periods. Sites already recorded in Washington County include habitation and mound/mortuary sites, lithic and artifact scatters, lithic and artifact findspots, trading post(s), mill(s), and ghost towns. These inventories are updated frequently as new sites are discovered and previously recorded sites are revisited. Figure 3.0 summarizes the archaeological sensitivity for pre-contact and contact period sites in the park reserve.

Figure 3.1 - Archaeological Sensitivity Model: Pre-Contact and Contact Period Sites.

Low sensitivity = previously disturbed areas or margins around water bodies that would have had fluctuating water levels through time.

Medium sensitivity = not low, not high.

High sensitivity = high ground, particularly overlooking surface water.



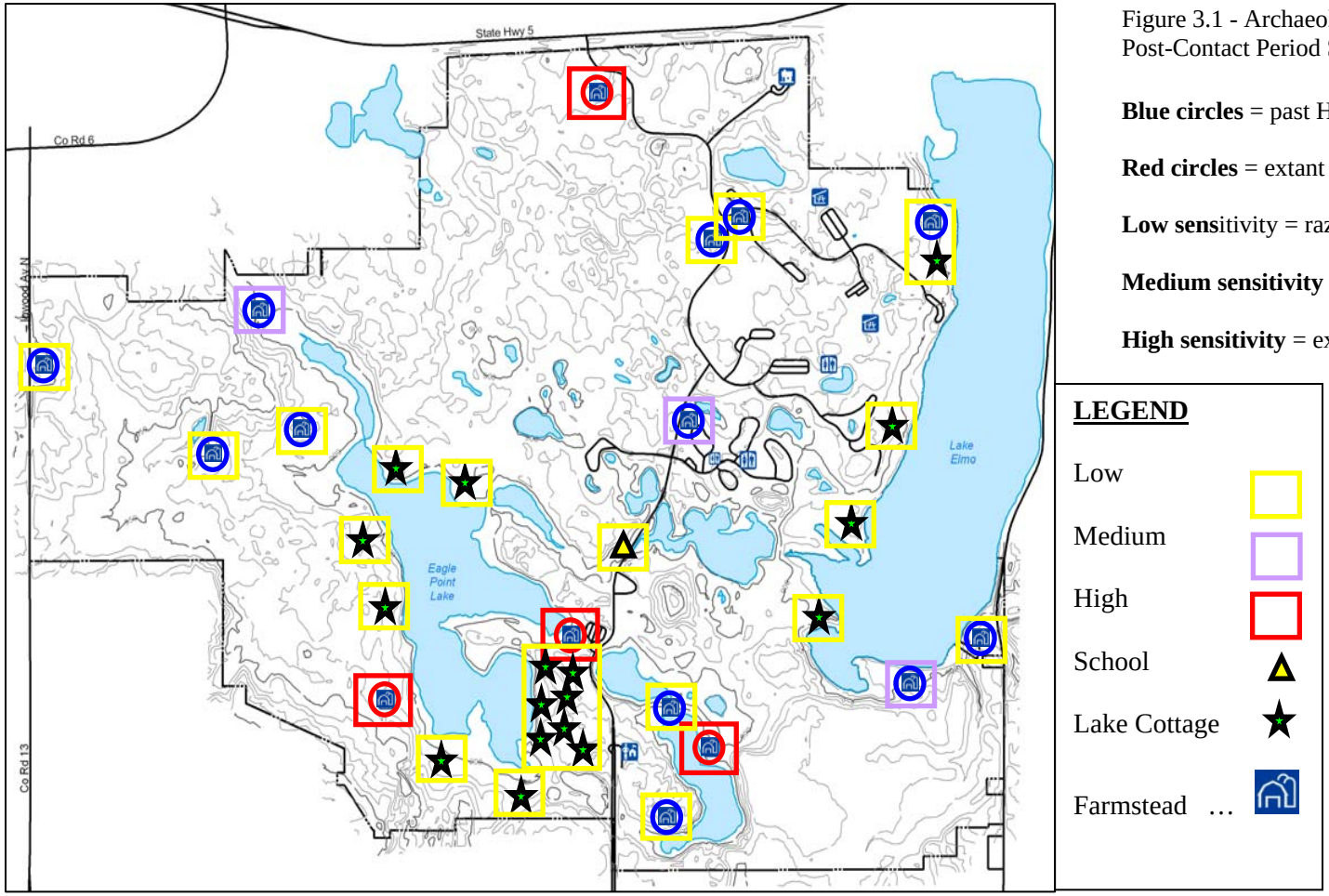


Figure 3.1 - Archaeological Sensitivity Model: Post-Contact Period Sites

Blue circles = past HSS or complex.

Red circles = extant HSS or complex.

Low sensitivity = razed HSS or complex.

Medium sensitivity = not low, not high.

High sensitivity = extant HSS or complex.

Post-Contact Archaeological Sensitivity Models for the Park Reserve

Archaeological research and cultural resources management studies in the general region have resulted in the identification of archaeological sites affiliated with the post-contact period. These sites include cemetery/mortuary sites, artifact scatters and findspots, trading post(s), mill(s), and ghost towns. Like the inventories for the pre-contact and contact period sites, the inventory for post-contact archaeological sites is updated frequently as new sites are discovered and previously recorded sites are revisited. Figure 3.1 summarizes the archaeological sensitivity for post-contact period sites in the park reserve.

Recommendations

It should be emphasized that Lake Elmo Park Reserve possesses numerous areas with medium to high potential for American Indian and Euro-American archaeological sites and structural remnants. In addition, several HSS and complexes remain within the park reserve's boundaries. For these reasons, the following management recommendations can be made:

(1) Complete archaeological surveys in association with proposed development projects or complete a comprehensive survey(s) throughout the park reserve. Such surveys will be coordinated with the State Historic Preservation Office (SHPO) in compliance with the Minnesota Historic Sites Act. Surveys for American Indian and Euro-American sites and structural remnants should be completed by qualified archaeologists who have obtained a license from the Office of the State Archaeologist (OSA).

(2) Document newly identified archaeological sites & keep updating archaeological site forms. Each newly identified archaeological site will be documented on an official Minnesota Archaeological Site Form and submitted to the OSA. If additional information is received or if additional work is completed at 21WA0057 & 21WA0058, their archaeological site forms be updated (see #3 below). Under the Minnesota Private Cemeteries Act, the park reserve will inform the OSA, if human burials are identified during the archaeological survey(s) or inadvertently encountered during future construction projects.

(3) Complete formal evaluation of archaeological sites that are potentially eligible for nomination to the NRHP. Any newly identified archaeological resources should be subjected to formal evaluation for their eligibility for nomination to the NRHP. Following this same rationale, the county should make a formal request to the SHPO in regard to the eligibility determination for sites 21WA0057 & 21WA0058.

(4) Revise & update the park reserve's archaeological sensitivity models. As more is learned about the park reserve's archaeological resources, the archaeological sensitivity models submitted with this updated Master Plan shall be revised periodically by a qualified archaeologist.

(5) Complete a comprehensive survey of historic standing structures (HSS) throughout the park reserve. Survey should be completed by qualified architectural historians. Inventory forms should be submitted to the SHPO for entry into the State's HSS database.

(6) Evaluate any HSS that are potentially eligible for the NRHP. Any HSS potentially eligible for the NRHP should be subjected to formal evaluation for their eligibility for nomination to the NRHP.

(7) Future developments within the park reserve should be coordinated through the SHPO in compliance with the Minnesota Historic Sites Act. If Federal funding is obtained for any future developments (e.g., ISTEA from the U.S. Department of Transportation) or if the park reserve receives any Federal permits (e.g., 404 Permit from the U.S. Army Corps of Engineers), then the park reserve will coordinate with the appropriate federal agency in compliance with the National Historic Preservation Act (NHPA).

(8) Mitigate adverse effects to historic properties within Lake Elmo Park Reserve. If any historic properties are identified within the park reserve (i.e., archaeological sites or HSS that are determined to be eligible for the NRHP), then appropriate mitigative measures will be coordinated with the SHPO prior to any adverse impacts that would result from future development.

Refer to Appendix C for a list of references cited in Chapter 3.