

2-17-21 Vilas Park Master Plan Public Comment Submission

Re: Effigy Mounds, Archaeological Sites, and the "Vilas Park Investigation – Study of Potential Archaeological Adverse Effects” Madison, Wisconsin: J183099300, Oct. 2018 (provided in appx. 6)

Background on Lake Wingra Mounds:

“Perhaps because of the spiritual and symbolic importance of springs and marl, the small lake attracted much ceremonial activity. There are few other places in the effigy mound region that had such a density of mounds in such a small area...Native Americans sculpted at least 233 mounds on the elevations around the small lake, creating a vast part of the Four Lakes ceremonial landscape and covering several square miles. Urban expansion destroyed many of the mounds, but the University of Wisconsin Arboretum preserves several whole groups, and remnants of others are found at Forest Hill Cemetery, the Edgewood College campus, Vilas Circle Park [current Bear Mound Park], and Vilas Park.”

-- Robert A. Birmingham, former Wisconsin State Archaeologist.¹

Introduction:

We are writing to request that 1) the proposed new entrance to the Zoo at Campbell Street and Drake Street be removed from the Vilas Park Master Plan; and 2) the Vilas Park Master Plan requires an Archaeological Phase I Survey of Vilas Park be completed in conjunction with the State of Wisconsin Historic Preservation Office, the Ho-Chunk Nation Tribal Historic Preservation Office, and other Native American consultants, prior to any future planning and ground-disturbing activities in Vilas Park. These requests are based upon the following:

I. Construction of a new Zoo entrance and exit at Campbell Street and Drake Street will not only alter the existing physical and sound barrier between residential homes from the Vilas Zoo and Park areas, but also create more destruction to areas that are regarded as sacred land.

¹ Birmingham, Robert A. *Spirits of Earth, The Effigy Mound Landscape of Madison and the Four Lakes*. The University of Wisconsin Press, 2010, 148.

A. Bear Mound Park, Site DA-0185/BDA-0412 should have been included in the 2018 Vilas Park Archaeological Report.

The cover of the “Vilas Park Investigation – Study of Potential Archaeological Adverse Effects Oct. 2018” shows a survey drawing of the Bear Effigy mound (DA-0185/BDA-0412) located in Bear Mound Park depicting the Bear having a spliced lower limb². However, within the Report there is no discussion about Bear Mound Park. Bear Mound Park is only referenced on a map as DA-0185 (Figure 1, appx. 6). Bear Mound Park should also be listed in Summary of Site Evaluations (Table 1 and 2, appx. 6) and again in Project Construction Activities – Potential Adverse Effect (section 3.3, appx. 6) as archaeologically significant in development of the Vilas Park Master Plan. In this letter the City of Madison’s “The Vilas Park Investigation - Study of Potential Archaeological Adverse Effects Oct. 2018 by Cardno CR”, will be referenced as the “2018 Vilas Park archaeological Report”(appx. 6).

With the omission of Bear Mound Park (DA-0185/BDA-0412) from Section 3.3 Potential Adverse Effects, the engineers, designers, and planners of the Vilas Park Master Plan did not account for any impacts on Bear Mound Park (DA-1085/BDA-0412) during their plan developments. Bear Mound Park is in close proximity to Vilas Park by one block (standard city block is 660 feet long). The close proximity can be viewed on the Figure 4 photo in the “2018 Vilas Park archaeological Report”, but it is cropped and omitted from the aerial photo from 1937 (Figure 6, appx. 6).

Bear Mound Park (DA-0185/BDA-0412) will be directly impacted by this proposed change of the Vilas Park Zoo entrance /exit moved to Campbell Street and Drake Street.³ While there may not be overt construction on Bear Mound Park, a discussion of the sacred burial sites, history, and the culturally significant designation of Bear Mound Park (DA-1085/BDA-0412) is essential, yet absent in this report from Table 1, Table 2, and Section 3.3 (appx. 6).

² 1910_07_07CE Brown, Box 22

³ This stretch of land also has Oak trees, other trees, and understory, which provide important biodiversity and habitat for birds and wildlife. Oak trees can live to more than 100 to 200 years and are not near their end of life. Oak trees, other trees, and understory work in syncytium to protect each other during storms, which will be disrupted, as described by Hugh Iltis, Professor of Botany University of Wisconsin–Madison (Professor Iltis was highly influential in the 1996 saving the white oak Marker Tree in Bear Mound Park.).

As Bill Quackenbush, Tribal Historic Preservation Officer for The Ho-Chunk Nation, reiterated to the Vilas Park Master Plan planners, viewscales and soundscapes need to be taken into account in relation to redevelopment and the preservation of mound sites; the City should do more than what is minimally legally required by the burial law, and instead, create better management practices for the protection and preservation of these sacred sites.⁴(appx. 4) Bear Mound Park, just one block north of the proposed Vilas Zoo entrance and exit at Campbell Street and Drake Street, will be highly affected by redirection of traffic.

The change of traffic flow will add to the already existing confusion on the neighborhood roads and particularly the one-way streets around Bear Mound Park. Visitors and their cars, bus drivers, and people walking are easily misguided in this section of the neighborhood where multiple roads are angled between Monroe Street, Regent Street, and Grant Street, as well as one-way streets. For example, the one-way sections of the 1400-1500 Vilas Avenue block on either side around Bear Mound Park or the Oakland Avenue one-way block. In addition, there are no sidewalks on Campbell Street between Vilas and Drake, and the sidewalks on the south side of Vilas Avenue around the Bear Mound Park perimeter are 2 feet wide. Hence, the Vilas Park plan proceeded without considering the motor-vehicle traffic and pedestrian impact on the Bear Mound Park (formerly considered a traffic circle by the City of Madison). As Larry Johns, Oneida Nation, states, the proposed new entrance and exit on Campbell and Drake “should not be allowed.”⁵

B. The City of Madison Board of Park Commissioners designated Bear Mound Park as having cultural and archaeological value.

To provide a bit of recent history, the entire hill where Bear Mound park (DA-0185) is located is considered historically, culturally, and geologically significant. The Madison Board of Park Commissioners, in Dec. 1997, designated the entire former “Vilas Circle”-- now Bear Mound Park -- as having cultural and archaeological value and placed the park in the “Special Facilities Park” category, along with Forest Hill Cemetery, the Olbrich Botanical Gardens, and the Henry Vilas Zoo (appx. 5).

⁴ MSA THPO 5/14/20 Meeting Minutes regarding discussion (appx. 4), on Site DA-0148/BDA-270 near the Dinosaur Playground, regarding redevelopment and mound preservation considering viewscales and soundscapes that effect the mound sites, and Ho-Chunk Historic Preservation Officer Quackenbush’s statement that: “These effects need to be taken into account when the City makes management and maintenance decisions. Do they only follow what (is) minimally legally required by burial law, or do they create better management practices for the protection and preservation of these sacred sites.”

⁵ Larry Johns, Oneida Nation, expert in Native American Burial sites and Marker Trees, has documented many sites throughout Wisconsin, and he was instrumental in saving the Marker Tree in Bear Mound Park with its Conical/round mound determined to be a burial site.

In 1996, Vilas neighbors worked together to prevent the City of Madison from removing the large white oak Marker Tree on the northern side of the former “Vilas Circle,” prior to this designation of a Special Facilities Park by Madison Board of Park Commissioners. Through our efforts, Vilas neighbors had confirmation of the Marker Tree and found documentation of a former Round/Conical Mound northeast of the Bear Effigy Mound where the Marker Tree limb was pointing downward (per childhood stories about sledding and flying high over a bump under the Marker Tree by the neighbor raised at 314 Campbell St.). After contacting the Ho-Chunk Nation Tribal Historic Preservation Office in August 1998, Ho-Chunk staff used a Ground Penetrating Radar (GPR) to determine this was the burial site likely the Round/Conical Mound written down by T.H. Lewis in 1888. These recent culturally significant findings – specifically the documentation of the Marker Tree and its Round/Conical Mound, needed to be included in the planning of Vilas Park and Archaeological Report. The diagram used by C.E. Brown in the 1920s was originally documented by T.H. Lewis in 1888. If you notice at the bottom of the size and location list on the left, TH Lewis writes, “NE there is a Round mound” with the date (appx. 1; 1888 08 02 TH Lewis N’Book24 p.54).

C. There are several unique features of Bear Mound Park that led to its’ special designation by the City of Madison.

Other historic features of Bear Mound Park presented to the Madison Board of Park Commissioners – in conjunction with Marker Tree and its’ Round Mound are:

1. This hill is one of the last remaining pieces of the geologic ridge that once connected to Monona Bay.
2. In 1990, James Schertz Professor emeritus, UW Madison Civil and Environmental Engineering Dept., and Larry Johns, Oneida Nation, not only surveyed and documented the Bear Effigy Mound Marker Tree as well as prominent rocks located throughout this hill, it was also determined that the angular analysis’ location and alignment of the rocks mark the view of the equinox and solstices. These rocks were placed by early people living near Lake Wingra.
3. The Bear Effigy Mound was placed on the National Register of Historic Places (Oct. 1974).

D. The location of the proposed new Zoo entrance and exit at Campbell and Drake is on a known archaeological site, Site DA-1193/BDA-0574, where there may be partial mounds and human remains.

The 2018 Vilas Park archaeological Report discusses Site DA-1193/BDA-0574, stating “Park improvements could impact the site,” and this is the exact location of the

proposed new Zoo entrance and exit where “human remains or partial mounds” could be located (Table 1, Table 2, appx. 6). In fact, the report states “this area consisted of a historically reported mound group consisting of effigy mound, linear mounds and conical mound” and the status is “unknown.”

II. Other effigy mounds and archaeological sites within Vilas Park have also been overlooked by planners of the Vilas Park Master Plan.

According to Dr. Amy L. Rosebrough, archaeologist in the State of Wisconsin Historic Preservation Office, the area around Lake Wingra was home to a particularly dense cluster of effigy and other mounds, to the point that the divisions between sites here are largely arbitrary; archaeologists in the State of Wisconsin Office of Historic Preservation know the locations of some mounds with certainty, while others are less well documented, and quite a few have been destroyed by development of the area and the extensive landscaping and filling in and around Vilas Park and the Zoo.⁶

Due to this, the State of Wisconsin Office of Historic Preservation recommends an ‘identification’ survey, also known as an Archaeological Phase I Survey, before projects are designed, stating this “would give the City the confidence to design future projects knowing that they aren’t harming any cultural resources, or that they are at least causing minimal impacts.” Dr. Rosebrough explains that: “The goal of a Phase I survey is to find any archaeological sites that might be adversely impacted by a project, so that all involved can plan construction to either work around the archaeology or plan how to ‘mitigate’ it (i.e., excavate the site and recover the information about the past it contains before it is destroyed).”

A. There is a discrepancy and lack of archaeological investigation relating to Site DA-0178/BDA-0497.

The 2018 Vilas Park Archaeological Report places the Conical Mound noted as Site DA-0178/BDA-0497 (Table 1, Table 2, appx. 6) on the north side of Vilas Avenue near Lincoln Street, while the DMNA Arboretum photo (appx. 2) shows it as being located south of Vilas Avenue next to the tennis courts. This discrepancy should be evaluated

⁶ The 2018 Vilas Park Archaeological Report omits this important information by providing a smaller zoomed-in and cropped 1937 aerial photo in Figure 6 (appx. 6) without the depiction of known mounds as seen in the more comprehensive aerial photo of the known mounds depicted in red surrounding Lake Wingra found on the Dudgeon-Monroe Neighborhood Association (DMNA) website, provided by the UW-Arboretum (appx. 2).

through an archaeological investigation rather than stating “current status – unknown” (Table 1, Table 2, appx. 6).

- B. The deer shaped effigy mound within Vilas Park on the DNMA Arboretum photo is not discussed in the 2018 Vilas Park Archaeological Report, and there is topography adjacent to the Van Buren playground, within Site DA-0196, needing further archaeological investigation prior to any ground disturbing activities.

The 1937 Arboretum photo (appx. 2) shows a deer shaped effigy mound near the Van Buren Street playground and field of Vilas Park where there once stood a large oak, and its standing trunk remains. This effigy mound shape, depicted in red, in the Arboretum photo is strikingly similar to the brown shape in the grass near the Van Buren playground viewed on the google satellite image (appx. 3).

According to Dr. Rosebrough, archaeologist in the State of Wisconsin Historic Preservation Office, this area is within the Ho-Chunk village site, DA-0196. This potential mound and area should be more fully documented so that it can be taken into account by planners, especially considering that the 2018 Vilas Park Archaeological Report states “Park improvements could impact the site,” recommending to “(a)void, or conduct archaeological survey or monitoring.”⁷

- C. The City of Madison should follow the recommendations of the 2018 Vilas Park Archaeological Report and avoid park improvements on the Vilas Park Mound Group (DA-0148/BDA-0270) near the Dinosaur Playground.

The proposed Vilas Park Master Plan includes a new sidewalk and overlooks on Site DA-0148/BDA-0270, the location of partially intact conical and effigy mounds even though the 2018 Vilas Park Archaeological Report recommends avoiding park improvements in this area (Table 2, appx. 6). According to Ho-Chunk Nation Tribal Historic Preservation Officer Quackenbush, the effigy mounds in Site DA-0148/BDA-0270 that are visible today are not necessarily the original extent of the mounds⁸(appx. 4). Larry Johns, Oneida Nation, recommends avoiding the proposed new features in this location around the mounds, further stating that the land surrounding mounds was also used to bury deceased.⁹ In other words, effigy mounds are like monuments or grave markers for other surrounding underground burial sites and the

⁷ According to the 2018 Vilas Park Archaeological Report, Site DA-0196 represents a large prehistoric and historic-era Native American village site, and Ho-Chunk camps and villages were reported in the literature review of this area, named “Kichunkochheperrach” or “*place where the turtle emerges*,” from 1850-1925.

⁸ See MSA THPO Meeting #2 Minutes (appx. 4).

⁹ 11/18/20 email from Larry Johns to Eileen Hornberger Thompson.

land should be treated as such. Therefore, the proposed new path development here should be removed from the Vilas Park Master Plan.

Conclusion:

Given this information, documentation, and the designation of Bear Mound Park by the Madison Board of Park Commissioners – Vilas Neighbors are requesting that:

- 1) The proposed Zoo entrance and exit change to Drake Street and Campbell Street be **removed** from the Vilas Park Master Plan. The Vilas Zoo entrance and exit needs to remain at the current locations as in the original Vilas Park plan of 1909, avoiding additional mound destruction. Current engineers and planners were uninformed and misled by the omission of Bear Mound Park (Site DA-0185/BDA-0412), and did not take a close look at the proposed new entrance and exit location on sacred land (DA-1193/BDA-0574);
- 2) Park improvements within the Ho-Chunk Village Site (DA-0196), including the area discussed above adjacent to the Van Buren playground, should be avoided until further archaeological investigations, including extensive archaeological fieldwork and Native American consultation, is completed and an informed determination can be made regarding the presence of cultural resources;
- 3) Further archaeological investigations and fieldwork should be conducted near the tennis courts regarding site DA-0178/BDA-0497 (area near the Lincoln and Vilas Avenue intersection), and the discrepancy noted above, prior to any park improvements in this area;¹⁰
- 4) The City should follow the recommendations of the 2018 Vilas Park Archaeological Report and avoid park improvements in Site DA-0148/BDA-0270 (the Vilas Mound Group and current location of the Dinosaur Playground). The proposed new sidewalk and overlooks here should be removed from the Vilas Park Master Plan. The City of Madison should conduct further archaeological testing, specifically in conjunction with State of Wisconsin archaeologists and Native American consultants, and consider National Register of Historic Places Designation of this site; and

¹⁰ The Vilas Park Master Plan proposes a new parking lot near this area as well as redevelopment of the tennis courts.

- 5) Due to the high density of burial mounds and cultural resources within Vilas Park and the surrounding area, the Vilas Park Master Plan should require an Archaeological Phase I Survey in conjunction with Ho-Chunk Nation Tribal Historic Preservation Officers and the State of Wisconsin archaeologists in the Historic Preservation Office prior to any future park planning and ground-disturbing activities so that all parties know what might or might not be impacted and cultural resources can be respectfully taken into account.¹¹

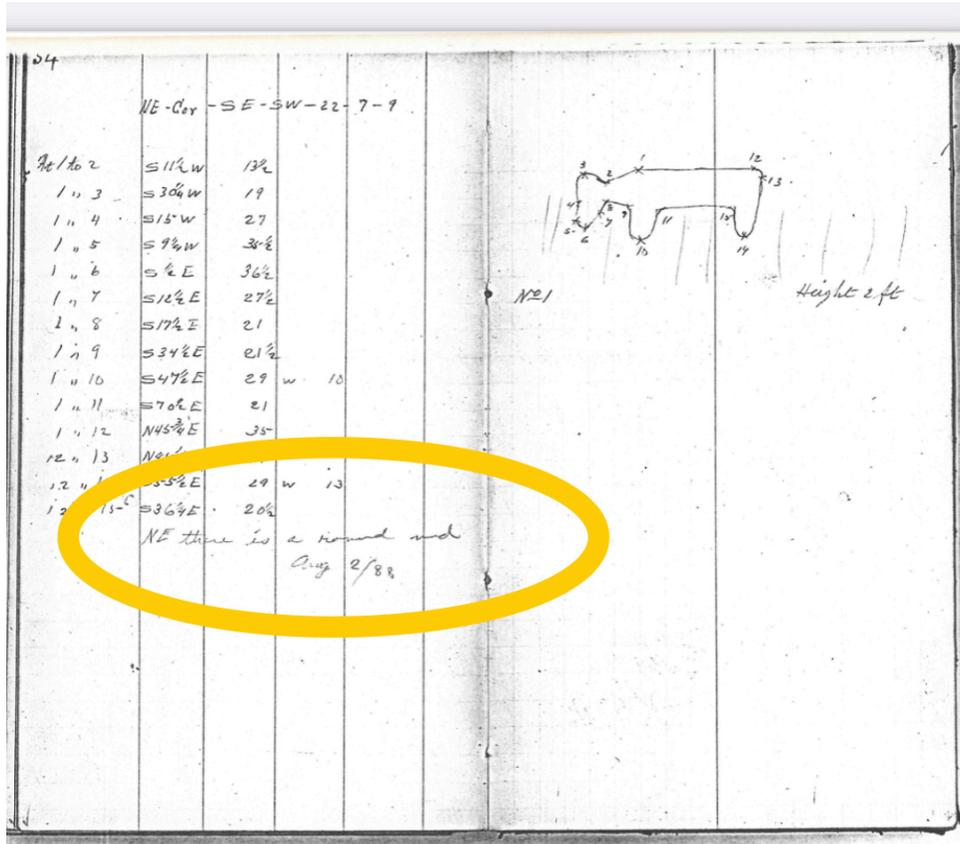
Regards,

Eileen Hornberger Thompson
Vilas Neighborhood Representative for Bear Mound Park

Sally Lehner
Vilas Neighborhood Resident

¹¹ According to Dr. Amy Rosebrough, the newer technology of Light Detection and Ranging - Remote Sensing (LIDAR imaging) would not necessarily help, since it just shows ground contours, but Ground Penetrating Radar might (or might not, whether GPR is useful depends a lot on soil conditions). Dr. Rosebrough also notes that because this is an urban park, techniques that rely on magnetism or electrical resistivity would probably be useless (too much metal trash, piping, utility lines etc.).

Appendix 1



Appendix 2

Zoomed-in 1937 DMNA_Arb photo



Appendix 3

Google satellite image of Vilas Park





THPO MEETING #2 MINUTES

Project:	Vilas Park Master Plan	Location:	Skype
MSA Project No.:	15885004	Date:	May 14, 2020
Meeting Purpose:	State Agency Advisory - THPO	Time:	2:30 pm – 3:20 PM
Meeting Organizer:	Dan Williams		

Attendees:

Name	Affiliation	Email	Phone
Bill Quackenbush, THPO	The Ho-Chunk Nation	bill.quackenbush@ho-chunk.com	715-284-7181
Dan Schmitt	MSA	dschmitt@msa-ps.com	608-216-2059
Dan Williams	MSA	dwilliams@msa-ps.com	608-216-2066
Kate Kane	Parks Div., City of Madison	kkane@cityofmadison.com	608-261-9671
Ann Freiwald	Parks Div., City of Madison	AFreiwald@cityofmadison.com	608-243-2848

Action Items:

- Review concept plans
- Greenbush Neighborhood Grant Application
- Discuss/verify mound identification/setback as shown on “Compilation Topographic Survey of Vilas Park Mounds Area 2010”.
- Specific Questions:
 - Identify appropriate setback boundary for mounds.
 - WHS mounds boundary Doc 2205332 boundary is the initial mound management zone. This may not be the limit or extent of the mounds at the park. If there is a potential unearthing of artifacts in other areas outside the WHS boundary an archeologist will be required to further study and indicate additional mound locations.
 - Concerns of replacing the Dinosaur Playground in place? Relocation as shown in Concept C?
 - Development (such as the playground) has a direct, in-direct and an accumulative effect to the remaining mounds onsite. These include viewscapes and b) soundscapes.
 - “Although the playground is conducive for a park like location, the site is in fact a burial location and for a lack of a better term, a mortuary site. – Bill Q.”
 - Redevelopment of site and preservation of mound sites should consider viewscapes and soundscapes that effect the mound sites. *“These effects need to be taken into account when the City makes management and maintenance decisions. Do they only follow what minimally legally required by the burial law, or do they create better management practices for the protection and preservation of these sacred sites. – Bill Q.”*
 - *Viewscapes include features lighting and “Darksky” planning if the site is used for a cultural event or placement of built features that may block original views from the mounds to other natural or cultural features.*
 - *Soundscapes include considerations for noise levels (traffic, kids playing, etc.) adjacent to the burial mounds. Consider development in modern cemeteries, and respect for persons who which to pay respects to the deceased or take a moment for personal introspection.*
 - Per state law: Mounds are grave markers and should be treated as such.

- The mounds as visible today are not necessarily the original extent of the mounds.
- State Statute 157.70; Administrative Code 44.40
- Future Development: Soil disturbance on or adjacent to mounds should be monitored by qualified archeologist. Inadvertent discovery during excavation requires work stoppage and investigation by archeologist, if not already present. If development occurs as shown in Concept C, same steps should be followed, as inadvertent discovery is likely due to original nature/extent of the mound group.
- If no playground existed, the Ho-Chunk would recommend against placement a playground near the mounds. The hierarchy of the site as a historic and cultural site outweighs the need for recreation in this type of space.
- Are there other spaces within the Park boundary that need to be specifically considered, other than mounds group area?
 - Did not discuss.

Past Meeting:

- From 12/9/2020 meeting. THPO suggestions or additional contacts:
 - Discuss regulatory process for proposed improvements.
 - Any land disturbance in the sites identified in the 2018 Archeological Report by Ryan Howell (Cardno) the must be supervised by a qualified archeologist.
 - No soil disturbance on mound – even during maintenance such as mowing.
 - Follow existing City of Madison Mound Management Plan regarding maintenance or disturbance (inadvertent discovery practice/protocol) around the existing mounds. (25’ management buffer is preferred.)
 - If neighbors are to assist in managing mound, if not already required, develop a release form to define guidelines and protocols.
 - Consider “Dark Sky” practices when considering site lighting to protect the nighttime viewsheds of the mounds and other culturally sensitive sites within the park.
 - If replacement of the “Dinosaur” playground is desired or required, consider location of replacement due to impact of excavation for the structures footings. (No need to disturb just to move, but make considerations if maintenance or replacement is to occur.) Archeological report/investigation required for new disturbance in the area.
 - Discuss project with Wisconsin State Historic Preservation Office as concepts are developed.
 - Consider National Register Designation and Cataloging of site

Next Steps

- Future Meetings - TBD,
 - possible on-site review
 - review of final concept

Attachments:

- Concept plans (A, B, C)
- Sections
- Concept Presentation
- Greenbush Neighborhood Grant Application
- Mound set-back

Appendix 5: 1997 Bear Mound Park Designation

Department of Public Works
Parks Division



December 6, 1997

MADISON BOARD OF PARK COMMISSIONERS
MADISON, WISCONSIN

Madison Municipal Building, Room 120
215 Martin Luther King, Jr. Boulevard
P.O. Box 2987
Madison, Wisconsin 53701-2987
608 266 4711
TDD # 608 267 4980
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PARK COMMISSION LETTER NO. 241
SUBJECT: Vilas Circle Master Plan

Attached is a master plan document prepared by a group of neighborhood volunteers. The plan provides a thorough and thoughtful discussion of the issues along with their recommendations. The Parks staff supports adoption of the Plan and its recommendations, except as noted below. This letter will highlight the recommendations of their plan and comments on them from the Parks staff viewpoint.

Park Designation

The Plan recommends that Vilas Circle be designated as a park, listed in the category of Special Facilities. Staff concurs with this designation. Other parks within this category which also have historical features are the Period Gardens, Forest Hill Cemetery, and the James Madison Park Landmark Buildings.

Archeological and Cultural Values

The Plan recommends that the current policy of mowing the bear mound with a hand mower be enforced, and that we defer to the HoChunk Nation's preference for managing the bear mound and the second mound/burial site which was identified. Parks staff concurs. However, any additional restoration or maintenance would be subject to budgeting funds, accepting donations or volunteer assistance.

The Plan recommends allowing the hazard tree which has been identified as a marker tree to stand, and replace it when it comes down naturally. Parks staff concurs, subject to an adequate resolution of the liability issues discussed later, and would work directly with HoChunk representatives on any specific replacement tree.

Groundcovers and Maintenance

The Plan recommends that a mix of sunny and shaded areas be maintained in the park, rather than planting for a full canopy of trees. It also makes several specific recommendations regarding turf maintenance, mowing intervals, trimming around tree bases, leaf mulching and maintenance vehicles. Parks staff concurs with these recommendations, and will work with the neighborhood and Alderperson to experiment with modifications to our standard maintenance practices.

The Plan recommends establishing a small oak savannah garden on the south side of the park as an experiment to be evaluated and possibly expanded after five years.



Parks staff has no objection to this recommendation if it reflects the consensus of the neighborhood, and is done completely with volunteer efforts. Burning may be problematic, because we do not allow volunteers to conduct burns, and we do not have staff available to do such small areas.

Tree Removals and Replacements

The Plan recognizes that the decline of the old oak trees is actually being accelerated by shading from the maples, lindens and other shade tolerant trees planted in and around the oaks to replace them. The Plan recommends removing all of the shade tolerant trees (24) except for one isolated maple, maximizing the lifespan of the oaks, and making limited replacements with native trees which are compatible with an oak-hickory savannah. Neighborhood representatives have contacted the people who donated some of the plantings which are proposed for removal, and have received their approval.

Parks staff agrees with the analysis and recognizes the concerns. Other trees were planted over the past 50 years due to concern that oak wilt or other diseases would wipe out all the big trees as happened with American Elms. However, oak declines have not proven to be nearly as serious, and it now seems likely that many of the oaks may last another century.

We are now faced with a choice of which trees we want to be there in 50-100 years. If we leave the maples, they will shade out the oaks and the groundcover beneath them. If we remove the maples, most of the oaks will survive. Some oaks may be lost in spite of our efforts and some maples may also be lost to decline or storm damage due to structural defects. Maintaining oaks is more compatible with the cultural and landscape history of the site, and will preserve a better groundcover to combat erosion. However, leaving a greater diversity of trees may be a better strategy for dealing with potential disease or insect pests. Leaving only oaks would provide the aesthetic integrity of a savannah oak grove, while leaving maples would provide more aesthetic diversity in color, texture and light intensity. Either option would be a legitimate choice for a landscape treatment in a park setting.

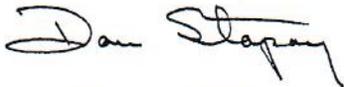
The Parks staff can support the neighborhood recommendation to remove almost everything except the oaks if there is wide community support for it, but we are concerned that other opposition may surface when the tree removals occur. The staff would also support an alternate plan that would leave four more of the large trees that do not have as much impact on the oaks as the others.

Public Safety and Liability Concerns

The Plan recommends that neither of the two identified hazard trees be removed, and that another strategy such as signage warning of the hazard be used. They are opposed to leaving the temporary fence or erecting a permanent fence around the area where the hazard exists. Recognizing the unique situation presented by the marker

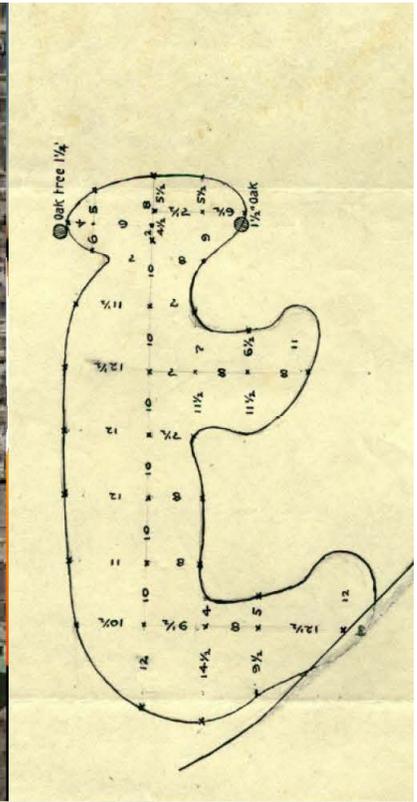
Madison Board of Park Commissioners
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tree, the Parks staff and City Risk Manager are willing to leave it standing and post a sign or signs stating "WARNING: TREE LIMBS MAY FALL" or something similar, as approved by the Risk Manager. However, staff does not believe that this is generally the best way to deal with hazard trees, and can only recommend it for a situation as unique as the marker tree. Staff recommends that the other hazard tree be removed, in accordance with the policy generally in effect throughout the park system. We believe that is clearly the best policy from both a liability and a safety standpoint.



Daniel R. Stapay
Superintendent of Parks

DRS:ASW:la



Document Information

Prepared for City of Madison, Wisconsin- Department of Public Works
Project Name Vilas Park Investigation – Study of Potential Archaeological
 Adverse Effects
Project Number J183099300
Project Manager Ryan Howell
Date October 2018

Prepared and Submitted By Ryan Howell

Principal Investigator



Ryan Howell

Prepared for:



**City of Madison, Department of Public Works
210 Martin Luther King Jr. Boulevard, Madison, Wisconsin 53703**

Prepared by:



**Cardno, Inc.
6140 Cottonwood Drive
Fitchburg, Wisconsin 53719**

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Management Summary

The City of Madison Engineering Division contracted Cardno to conduct an archaeological literature and records review of the Vilas Park area, and to compile an archaeological Determination of Adverse Effects of upcoming construction plans based on these findings. The proposed study area consisted of evaluating the entirety of Vilas Park in Madison, Wisconsin, for cultural resources. This will be completed in order to provide guidance for master planning purposes.

Background research determined that the project area intersects the mapped locations of six previously recorded archaeological sites, DA-0148, DA-0149, DA-0174, DA-0178, DA-0196 and DA-1193 (Table 1)

Site DA-0148/BDA-270 is a group of conical and effigy mounds first formally reported in 1915. This site is located in Vilas Park on a ridge overlooking the Henry Vilas Zoo. The mound group once contained at least two bird effigies, one linear mound, and as many as eight conical mounds. One of the conical mounds and the left wing of one of the bird effigies has been reconstructed historically.

Site DA-0149/BDA-0395 consisted of a historically reported isolated effigy mound of a deer. The site was apparently destroyed during the construction of the Vilas Park animal house around 1905. Even though the mound at site DA-0149 is no present, the area still has the potential to yield disturbed cultural resources include isolated and fragmentary human remains. As such, it is recommended that any project activities within the mapped boundaries of site DA-0149 be initially monitored for cultural resources.

Site DA-0174/BDA-0405 consisted of a single large conical mound located in Vilas Park Zoo. The mound was documented in 1915 (Brown 1915b), but was subsequently damaged in 1915 when workmen grading over the parks “subway” damaged the mound and disturbed human remains. Location and mapping of the mound was based on zoo buildings, which have changed over the years, making its exact location hard to pin down. Despite cement and metal markers having been placed on the mound since 1915, its location is now only vaguely known and is thought to have been located near the current (2005) otter enclosure/aviary. The Office of State Archaeologist believes the mound may have since been destroyed.

Site DA-0178/BDA-0497 consisted of a single large conical mound located at the intersection of Lincoln and Vilas Streets. The mound was apparently destroyed by the lot owner, a Mr. John Kenny, prior to 1915 who used the mound for black soil fill.

Site DA-0196 represents a large prehistoric and historic-era Native American village site. The historic era component likely represents known Ho-Chunk camps and villages in the area reported from 1850-1925.

Site DA-1193/BDA-0574 consisted of a historically reported mound group consisting of effigy mound, linear mounds and conical mound. The site was first reported by T. H. Lewis in the nineteenth century (Lewis 1886). The exact location of this group is uncertain, and Brown did not record it during his 1915 survey.

A summary of site evaluations and recommendations for Vilas Park is outlined in the table below.

Table 1. Summary of Site Evaluations

State Site Number	Current Status	Determination of Effect	Recommendations
DA-0148	Partially Intact	Park improvements could impact the site	Avoid
DA-0149	Destroyed	Park improvements will not adversely affect site	Initial construction monitoring for disturbed human remains
DA-0174	Unknown	Park improvement could impact the site	Initial construction monitoring for disturbed human remains or partial mounds
DA-0178	Unknown	Park improvements will not adversely affect site	Initial construction monitoring for disturbed human remains
DA-0196	Unknown	Park improvements could impact the site	Avoid, or conduct archaeological survey or monitoring
DA-1193	Unknown	Park improvements could impact the site	Initial construction monitoring for disturbed human remains or partial mounds

1 Introduction

In response to a request from the Engineering Division of the Department of Public Works for the City of Madison, Cardno conducted an archaeological records review and Determination of Adverse Effects Report for Vilas Park, located in Madison, Wisconsin (Figure 1). The proposed project area consists of evaluating the entirety of Vilas Park in Madison, Wisconsin, for previously recorded cultural resources. This will be completed in order to provide guidance for master planning purposes.

Vilas Park is located at 1602 Vilas Park Drive, and covers approximately 45.67 acres consisting of parkland, beach, ice skating rink and the adjacent UW Arboretum and Henry Vilas Zoo (City of Madison 2018a). As a public park owned and maintained by the City of Madison, any and all ground disturbing activities within Vilas Park will be considered state agency actions requiring review of impacts to cultural resources pursuant to Wisconsin Statute 44.40. Additionally, Vilas Park encompasses several known burial sites, so any future work within this portion of the park will need to be completed pursuant to Wis. Stat. 157.70. This report has been written as fulfillment of the literature review of previously recorded archaeological sites within the current boundaries of Vilas Park.

Cardno conducted a records search utilizing the Wisconsin Historic Preservation Database (WHPD), the University of Wisconsin Digital Collections (UWDC), and research at the Wisconsin Historical Society (WHS). Research focused on the previously recorded archaeological sites located within or overlapping the current boundaries of Vilas Park. This research revealed written documentation of six archaeological sites, including prehistoric and historic Ho-Chunk villages, as well as several burial and effigy mound groups. The goal of this present study is to determine whether future ground disturbance within Vilas Park will adversely impact these previously recorded sites.

As a result of this investigation, six previously recorded sites were reviewed DA-0148, DA-0149, DA-0174, DA-0178, DA-0196 and DA-1193.



Figure 1. Project Location

2 Project Location

2.1 Historic Land Use (ca. 1840-present)

Currently Vilas Park in Madison, Wisconsin, is bounded by Lake Wingra to the south, Vilas and Edgewood Avenues to the west, Grant and Drake Streets to the north, and S. Randall Avenue, S. Orchard Street and S. Mills Street to the west (Figure 1).

The construction of the park was mainly financed by Senator William Freeman Vilas who contributed \$35,000 for its purchase and construction (City of Madison 2018b). The 1905 original design was by O. C. Simonds who proposed a park of sixty-four acres with lagoons of eight and one-half acres. Through dredging of the lake bottom, this was to be made out of twenty-five acres of land and thirty-five acres of bog. Originally, the lagoons surrounded three islands, but the smallest has since been removed, and the eastern end of the largest has been joined to the mainland, so there now remains only one. The two stone and concrete bridges over the lagoon were donated by Mr. Vilas in 1906.

Prior to the construction of the park the area was largely woods (“Vilas Woods”) and bogs surrounding the northern banks of Lake Wingra. This area was used as a village and campsite by members of the Ho Chunk Nation throughout the 19th and early 20th century.

2.2 Summary and Discussion: Landscape Integrity

As previously mentioned, prior to the initial construction of the park in 1905 the area was largely 50-acres or more of unclaimed woods (known locally as “The Vilas Woods”) mixed with wetlands, swamp prairies bogs surrounding the northern banks of Lake Wingra. This area was used as a village and campsite by members of the Ho Chunk Nation and other Native American peoples from pre-contact times to as late as the 1930’s because it was marginal for Euro-American housing and the owner (Vilas) did not apparently drive Native residents out of his unused holdings.

The Henry Vilas Zoo (a 28-acre division of the original park) was partitioned into an animal exhibit and the Henry Vilas Zoo was established in 1914. The city of Madison assumed ownership in 1937 and ownership was transferred to Dane County in 1983.

Early maps of the area show that while the area was platted for development by the 1860’s (Ligowski 1861, Figure 2) it was not used for housing with the exception of scattered houses off of what is now Monroe Street, several blocks to the west of the current park.

The park location is noted on 1904 maps (Figure 3) and shown in full detail in 1909 maps (Figure 4).

The first archaeological survey of the park area was conducted by Charles E. Brown in 1915 (Brown 1915) and noted several mound and village sites throughout the park. All of these finds are discussed in Section 5 of this report.



Figure 2. Project Location in 1861 (Ligowski Map Of Dane County)



Figure 3. Project Location 1904 (West Part of Madison by OHSG Anson)

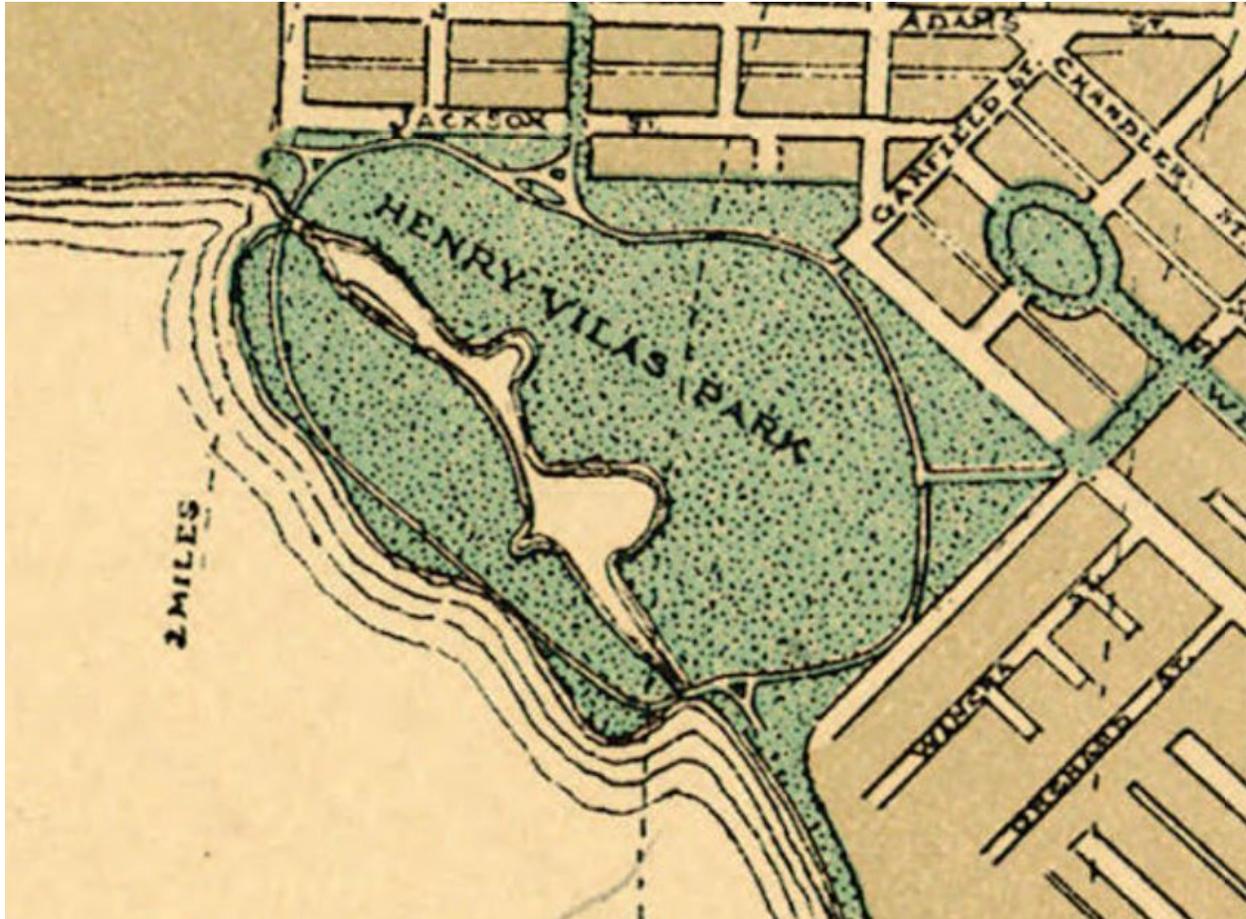


Figure 4. Project Location 1909- (From “Park System City of Madison Wisconsin)

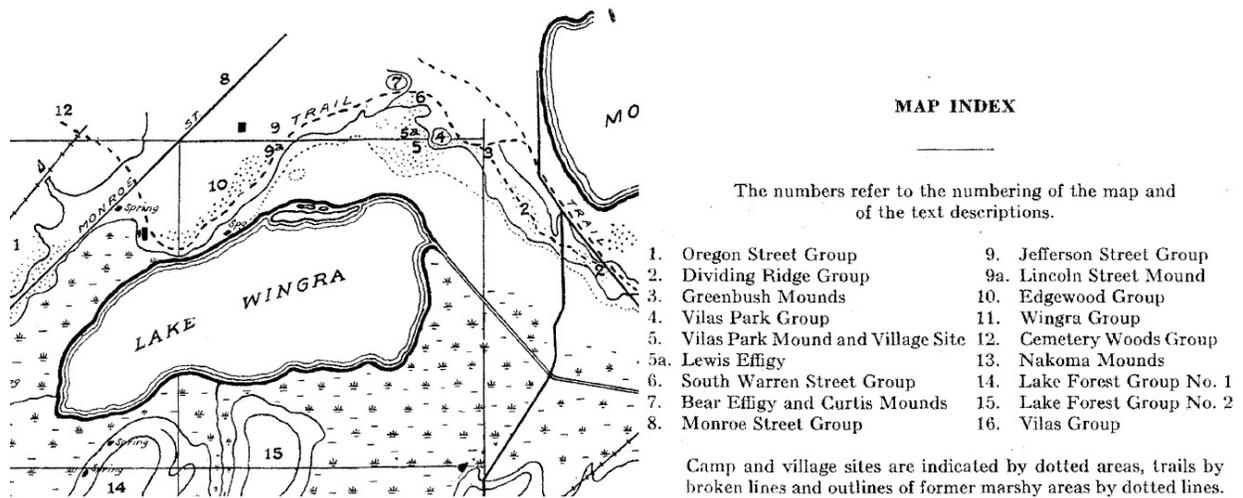


Figure 5. Project Location-1915 with Archaeological Sites (Brown 1915)



Figure 6. Project Location 1937- Historic Aerial Photo

In summary, early Euro-American activity was remarkably light and has only affected this area since the park's own development in 1905. Park development activities have been the primary force altered the landscape to a significant degree and thus disturbing any archaeological or cultural sites (see Figure 7).

The park's landscaping has drastically altered the area's shoreline with Lake Wingra. The "island" that forms the southern 1/3 of the park is artificial created with dredge fill sometime in the early 1900's. As such it does not contain any intact archaeological sites or artifacts.

The Zoo area of the park is more problematic. It is built on a portion of the large "Dividing Ridge Mound Complex" (Rosebrough 2003) that once contained several dozen mound groups between Lake Wingra and Lake Monona. As such, park construction has impacted or destroyed several mound over the years and the exposure of human remains and associated grave artifacts is a frequently recorded historical occurrence.

One of the primary problems with locating these find spots during modern day construction monitoring is that most historic finds and maps referenced the various Zoo buildings as landmarks. The buildings have changed in location, name and construction over the previous 107 years of Zoo use and development and many sites and burials have lost provenance with these alterations.

3 Project Construction Activities

3.1 Project Area

The project area encompasses the entirety of the current boundaries of Vilas Park, located at 1602 Vilas Park Drive, Madison, Wisconsin. The Park covers 45.67 acres of land, situated within the municipal boundaries of the City of Madison.

3.2 Project Ground Disturbance

No ground disturbing activities are planned in association with the current project. The proposed project consists of evaluating the entirety of Vilas Park for cultural resources, and of determining the potential impacts to these sites, should ground disturbing activities occur within Vilas Park in the future. This project is being completed in order to provide guidance for master planning purposes.

3.3 Potential Adverse Effect

Future city projects within the project area are likely to have any adverse or negative effects on all six sites (DA-0148, DA-0149, DA-0174, DA-0178, DA-0196 and DA-1193.) known to have been historically present within Vilas Park.

Due to the high density of burial mounds and the potential to encounter human remains within the park it is recommended that any ground disturbing activities located within the current boundaries of the park be monitored by a qualified archaeologist. Extant mound groups like Da-148 (Vilas Mound Group) should be avoided at all cost and ideally should be made part of a site management plan. Other sites, such as the large village site of DA-0196 would need archaeological survey and testing prior to any construction efforts. Given the nature and history of excavations at this site, extensive archaeological fieldwork and Native American consultation would likely be required for any such project.

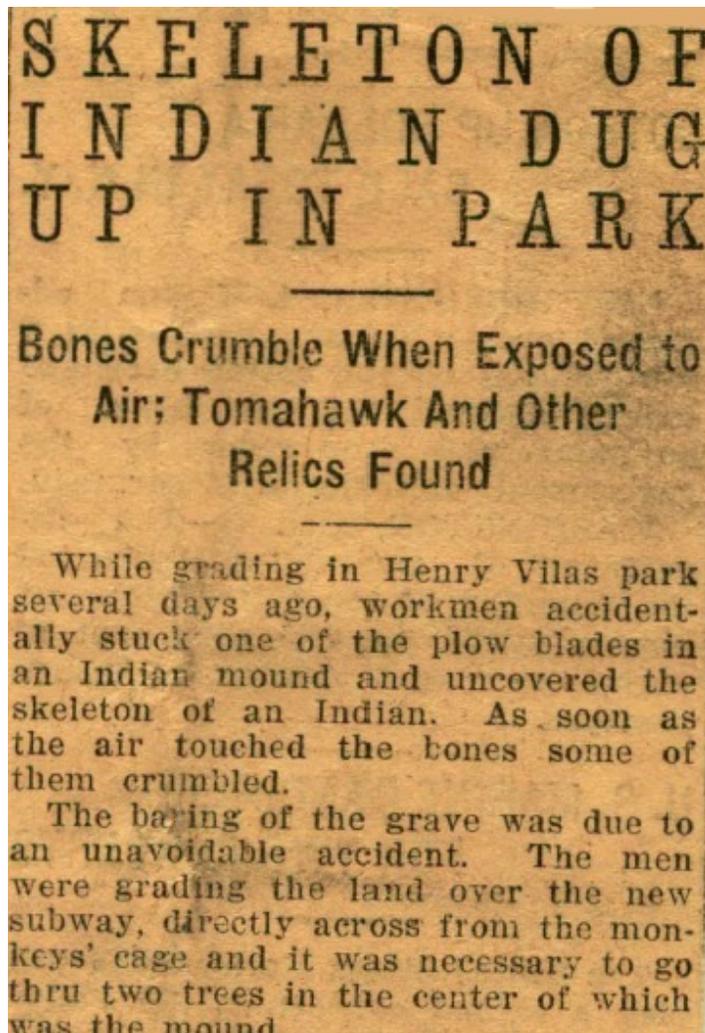


Figure 7. Report of 1915 Park Burial Disturbance (Wisconsin State Journal, 1915 (October 4))

4 Literature Review

4.1 Literature Review: Summary and Discussion

Background research determined that the review area intersects the mapped locations of six documented archaeological sites, DA-0148, DA-0149, DA-0174, DA-0178, DA-0196 and DA-1193.

Site DA-0148, the Vilas Park Mound Group was first recorded in 1913 by Charles E. Brown of the Wisconsin Historical Society (Brown 1915). On-going monitoring around the site was conducted by Salkin (2010) and Picard (2018) and has not revealed additional cultural material.

Site Da-0149, Lewis Effigy Site, was first recorded in 1886 by T.H Lewis (Lewis 1886, 1889). On-going monitoring was conducted by Gartner (2016) and Hodgson (2017) and has not revealed additional cultural material.

Site Da-0174, the Otter Cage Mound Site, was first recorded in 1913 by Charles (Brown 1913, 1925). The Wisconsin State Journal recorded the disturbance of the mound on October 4th, 1915 (WSJ 1915)(Figure 7). On-going monitoring was conducted by Shillinglaw (2016) and has not revealed additional cultural material.

Site Da-0178, the Lincoln Street Mound Site, was first recorded in 1915 by Charles (Brown 1915, 1925). On-going monitoring was conducted by Kubicek (2018) and has not revealed additional cultural material.

Site Da-0196, the Vilas Park Village Site, was first recorded in 1909 by Charles (Brown 1909, 1915). On-going monitoring was conducted by Hodgson (2017) and has not revealed additional cultural material.

Site Da-1193, the Zoo Site, was first recorded in 1886 by T.H Lewis (Lewis 1885-1889). On-going monitoring was conducted by Shillinglaw (2014) and has not revealed additional cultural material.

5 Summary and Recommendations

5.1 Project Overview

In response to a request from the Engineering Division of the Department of Public Works for the City of Madison, Cardno conducted an archaeological records review and Determination of Adverse Effects Report for Vilas Park, located in Madison, Wisconsin (Figure 1). The proposed project area consists of evaluating the entirety of Vilas Park in Madison, Wisconsin, for previously recorded cultural resources. This will be completed in order to provide guidance for master planning purposes.

Vilas Park is located at 1602 Vilas Park Drive, and covers approximately 45.67 acres consisting of parkland, beach, ice skating rink and the adjacent UW Arboretum and Henry Vilas Zoo (City of Madison 2018a). As a public park owned and maintained by the City of Madison, any and all ground disturbing activities within Vilas Park will be considered state agency actions requiring review of impacts to cultural resources pursuant to Wisconsin Statute 44.40. Additionally, Vilas Park encompasses several known burial sites, so any future work within this portion of the park will need to be completed pursuant to Wis. Stat. 157.70. This report has been written as fulfillment of the literature review of previously recorded archaeological sites within the current boundaries of Vilas Park.

Cardno conducted a records search utilizing the Wisconsin Historic Preservation Database (WHPD), the University of Wisconsin Digital Collections (UWDC), and in-person research at the Wisconsin Historical Society (WHS). Research focused on the previously recorded archaeological sites that could be impacted by ground disturbing activities within Warner Park, and specifically concentrated on the potential for ground disturbing activities to impact human remains. The goal of this study was to determine whether ground disturbing activities within the project area would adversely impact previously recorded archaeological sites.

As a result of this investigation, six previously recorded sites were reviewed DA-0148, DA-0149, DA-0174, DA-0178, DA-0196 and DA-1193.

5.2 Summary of Results and Recommendations

Table 2. Summary of Site Evaluations

State Site Number	Current Status	Determination of Effect	Recommendations
DA-0148	Partially Intact	Park improvements could impact the site	Avoid
DA-0149	Destroyed	Park improvements will not adversely affect site	Initial construction monitoring for disturbed human remains
DA-0174	Unknown	Park improvement could impact the site	Initial construction monitoring for disturbed human remains or partial mounds
DA-0178	Unknown	Park improvements will not adversely affect site	Initial construction monitoring for disturbed human remains

State Site Number	Current Status	Determination of Effect	Recommendations
DA-0196	Unknown	Park improvements could impact the site	Avoid, or conduct archaeological survey or monitoring
DA-1193	Unknown	Park improvements could impact the site	Initial construction monitoring for disturbed human remains or partial mounds

5.2.1 Site DA-0148/BDA-270

Site DA-0148/BDA-270 is a group of conical and effigy mounds first formally reported in 1915. This site is located in Vilas Park on a ridge overlooking the Henry Vilas Zoo. It is located at the corner of current Erin and Wingra streets. The mound group once contained at least two bird effigies, one linear mound, and as many as eight conical mounds. One of the conical mounds and the left wing of one of the bird effigies has been reconstructed historically.

5.2.2 Site DA-0149/BDA-395

Site DA-0149/BDA-0395 consisted of a historically reported isolated effigy mound of a deer. The site was first reported by T. H. Lewis in the nineteenth century (Lewis 1889), and was later reported by Charles E. Brown (1915). The site was apparently destroyed during the construction of the Vilas Park animal house around 1905. Subsequent monitoring of the site has revealed that the site area has been completely disturbed by historic construction, leveling and filling (Gartner 2016). Even though the mound at site DA-0149 is no present, the area still has the potential to yield disturbed cultural resources include isolated and fragmentary human remains. As such, it is recommended that any project activities within the mapped boundaries of site DA-0149 be initially monitored for cultural resources.

5.2.3 Site DA-0174/BDA-405

Site DA-0174/BDA-0405 consisted of a single large conical mound located in Vilas Park Zoo. The mound was documented in 1915 (Brown 1915b), but was subsequently damaged in 1915 when workmen grading over the parks “subway” damaged the mound and disturbed human remains. Location and mapping of the mound was based on zoo buildings, which have changed over the years, making its exact location hard to pin down. Despite cement and metal markers having been placed on the mound since 1915, its location is now only vaguely known and is thought to have been located near the current (2005) otter enclosure/aviary. The Office of State Archaeologist believes the mound may have since been destroyed.

5.2.4 Site DA-0178/BDA-0497

Site DA-0178/BDA-0497 consisted of a single large conical mound located at the intersection of Lincoln and Vilas Streets. The mound was apparently destroyed by the lot owner, a Mr. John Kenny, prior to 1915 who used the mound for black soil fill. No human remains or other artifact were reportedly discovered during the mounds destruction.

5.2.5 Site DA-0196

Site DA-0196 represents a large prehistoric and historic-era Native American village site. The historic era component likely represents known Ho-Chunk camps and villages in the area reported from 1850-1925. Several hundred “corn hills” (Native American gardens) were reportedly present in the area prior to 1908 (Brown 1915:93) along with a large scattering a prehistoric and historic period artifacts. The Ho-Chunk name for this area is reported as “Kichunkochheperrah”, or “place where the turtle emerges” (Brown 1915: 78).

5.2.6 Site DA-1193/BDA-0574

Site DA-1193/BDA-0574 consisted of a historically reported mound group consisting of effigy mound, linear mounds and conical mound. The site was first reported by T. H. Lewis in the nineteenth century (Lewis 1886). The exact location of this group is uncertain, and Brown did not record it during his 1915 survey. It is therefore possible that this Lewis record could refer to the other mound groups in the area, or that these groups (DA-148, DA-174) represent the remnants of a larger group recorded by Lewis.

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APPENDIX

A

ARCHAEOLOGICAL SITE UPDATE
AND ARCHAEOLOGICAL REPORT
INVENTORY FORMS

ARCHAEOLOGICAL REPORTS INVENTORY FORM

WHS PROJECT # _____

COUNTY _____

AUTHORS: _____

REPORT TITLE: _____

DATE OF REPORT (MONTH AND YEAR): _____

SERIES/NUMBER: _____

PLACE OF PUBLICATION: _____

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]

U.S.G.S. QUAD MAP(S): _____

SITE(S) INVESTIGATED: _____

ACRES INVESTIGATED: _____

AGENCY # _____

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

- | | | |
|---|--|--|
| <input type="checkbox"/> Historical Research | <input type="checkbox"/> Surface Survey | <input type="checkbox"/> Geomorphology |
| <input type="checkbox"/> Interview/Informant | <input type="checkbox"/> Soil Core | <input type="checkbox"/> Underwater |
| <input type="checkbox"/> Records/Background | <input type="checkbox"/> Walk Over/Visual Inspection | <input type="checkbox"/> Avocational Survey |
| <input type="checkbox"/> Literature Background Research | <input type="checkbox"/> Mechanical Stripping | <input type="checkbox"/> Chance Encounter |
| <input type="checkbox"/> Traditional Knowledge | <input type="checkbox"/> Test Excavation/Phase II | <input type="checkbox"/> Osteological Analysis |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Major Excavation/Phase III | <input type="checkbox"/> Faunal Analysis |
| <input type="checkbox"/> Shovel Testing/Probing | <input type="checkbox"/> Remote Sensing | <input type="checkbox"/> Floral Analysis |

ABSTRACT:

Included in report

Written in space below

About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
**ZERO
HARM**
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.