

EXHIBIT 2

SHPO AUTHORIZATION

From: felipe.avila@wisconsinhistory.org
To: [Wegner, Carissa](#)
Subject: SHPO Review: 23-1068/DA - Mendota/Grassman Greenway
Date: Thursday, May 25, 2023 10:01:51 AM

Caution: This email was sent from an external source. Avoid unknown links and attachments.

Dear Ms. Carissa Wegner,

We have completed our review of WHS #23-1068, Mendota/Grassman Greenway and find that no eligible properties will be affected, as none are present.

Based on the amount of deposited runoff sediment in the drainage way, we will require an archaeological monitor for when the channel is regraded for the new lowered drainage way.

If your plans change or cultural materials/human remains are found during the project, please halt all work and contact our office.

Please use this email as your official SHPO concurrence for the project. If you require a hard copy signed form, please contact me and I will provide you a signed copy as soon as possible.

Sincerely,
Felipe Avila
State Historic Preservation Office

Wisconsin Historical Society
816 State Street, Madison, WI 53706
608 264-6013
felipe.avila@wisconsinhistory.org

Wisconsin Historical Society
[Collecting, Preserving, and Sharing Stories Since 1846](#)

EXHIBIT 3

WI PUBLIC LANDS PERMIT

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT 2023
REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NON-FEDERAL PUBLIC LAND UNDER WIS. STAT. § 44.47
Wisconsin Historical Society

Name/Organization/Contact City of Madison Engineering Telephone 608-266-4751
Address 210 MLK Jr. Blvd. Room 115 City Madison State WI Zip 53711
E-mail cwegner@cityofmadison.com
Institutional Affiliation _____

Location: County Dane Civil Town Madison
Town 7 North Range 9 East Section 13, 18 Quarter Sections _____
Hwy/Rd Hwy/Rd: _____ Other Type of Project: Drainage

Project Description: The City of Madison is proposing to lower the Mendota-Grassman greenway to prevent flooding.

Type of fieldwork: Phase I/Survey Phase II/Testing Phase III/Excavation Monitoring

Purpose of the fieldwork: Federal Compliance State Compliance Education Other

Site # N/A Burial Site # N/A Burial Permit Secured? Y N WHS #: _____

Dates of field work: Begin date: 24 April 2023 End date: 10 May, 2023

What institution will curate recovered artifacts, notes, and records? UW-Madison
(A curation agreement must be on file with WHS; all materials must be curated in an appropriate, staffed facility.)

Print name John G. Hodgson see attachments

Signature of Archaeologist _____ Date 17 April, 2023

Maps and/or Letters of explanation can accompany this application

Landowner or custodian name City of Madison Phone 608-266-4751

Affiliation: City of Madison Engineering
Signature of Landowner Greg Fries Digitally signed by Greg Fries
Date: 2023.04.17 16:56:35 -05'00' Date _____

Administrative use only below this line.

Permit Approved [Signature] Date April 26, 2023

PLP # 23-0747

Dr. James Skibo
State Archaeologist
Wisconsin Historical Society
816 State Street, Madison, WI 53706
608-264-6496
statearchaeologist@wisconsinhistory.org



**WISCONSIN
HISTORICAL
SOCIETY**

One paper copy and one PDF copy of the final report must be submitted to the State Historic Preservation Office.

Additional authorization or permitting is necessary to conduct work within the boundaries of uncataloged and cataloged human burialsites under Wis. Stat. § 157.70. For more information, wihist.org/Request-to-Disturb

EXHIBIT 4

USACE PERMIT

DEPARTMENT OF THE ARMY PERMIT

Permittee City of Madison, c/o Kathy Cryan
Permit No. 2022-01641-CCK

Issuing Office St. Paul District
U.S. Army Corps of Engineers

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

You are authorized to permanently discharge dredged and fill material within approximately 0.87 acres of wetlands, temporarily discharge fill material into 0.20 acre of wetlands, and permanently discharge fill material (rock riprap) into approximately 2322 linear feet (0.829 acre) of an unnamed tributary to Lake Mendota for stormwater improvements, increased flood capacity, and floodplain restoration. Approximately 0.20 acre of wetlands would be temporarily excavated and 0.829 acre (2322 linear feet) of tributary would be dredged to realign and lower the elevation of the channel for increased flood conveyance capacity and floodplain bench restoration. The profile of the existing channel would be lowered up to 3 feet, lined with light riprap, and the cross section would incorporate a low flow channel with floodplain benches of varying widths on either or both sides. Floodplain benches along the proposed low flow channel would be restored with a wetland seed mix to facilitate establishment of new wetland areas in the benches which would be flooded during 0.5 inch or greater rain events. Goals for ecological restoration work include: stabilize the greenways post-reconstruction, improve ecological functionality of the greenways by preserving/creating conditions of wet-mesic hardwood forest where possible, and introducing native wetland herbaceous species, control herbaceous and woody invasive species, and provide opportunities for wildlife viewing and passive recreation. The 164 LF University Avenue box culvert will be replaced with a 12' span x 5' rise box culvert set approximately 3 feet lower than the existing culvert, and the 164 LF Camelot culverts with a drop inlet will be replaced with dual 10' span x 4' rise box culverts with no drop inlet.

The authorized work area is shown on the attached drawings labeled MVP-2022-01641-CCK Pages 1 through 22.

Project Location:

The project site is in Section 18, Township 7 North, Range 9 East, Dane County, Wisconsin.

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2026. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archaeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. You shall implement the attached Monitoring Plan (Hodgson June 2023), which requires monitoring by a qualified archaeologist of construction-related activities within the APE. A monitoring report shall be submitted to the Corps within 90 days following construction completion.
2. You, or your archaeological consultant, shall notify the Ho-Chunk Nation THPO (Mr. William Quackenbush, (715) 284-7181 [Bill.Quackenbush@ho-chunk.com]) two weeks prior to the beginning of construction activities.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

() Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

() Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.


b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.



(PERMITTEE SIGNATURE)

7-31-2023

(DATE)

Jim Wolfe, City Engineer

(PERMITTEE PRINTED OR TYPED NAME)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Todd Vesperman
Chief, WI West Branch

(DATE)

For: Eric R. Swenson
Colonel, Corps of Engineers
District Commander

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE SIGNATURE)

(DATE)

(TRANSFEREE PRINTED OR TYPED NAME)

EXHIBIT 5

INVESTIGATION REPORT

**Proposed Mendota Grassman Greenway Flood Mitigation and
Restoration Project Phase I Cultural Resources Investigation
Results: City of Madison, Dane County, Wisconsin.**

SHSW PLP # 23-0747



Prepared for the City of Madison

19 May, 2023

**John G. Hodgson
Principal Investigator
Phase One Archaeological Services Inc.
PO Box 45822
Madison, Wisconsin
53744-5822**

Abstract

The following report describes the results of field and literature research conducted for a Phase I cultural resources investigation requested by United State Army Corps of Engineers for the proposed Mendota Grassman Greenway Project located in the southwestern area of the City of Madison, Dane County, Wisconsin.

The field investigation was problematic as a result of areas of standing water in the southwestern area of the Project with the decades of thick sediment covering the proposed Project area southwest of university avenue. These difficulties were compounded with large sections of meter deep fill soils deposited over wetland areas consisting of gravel, crushed rock, construction debris, concrete, and larger stone fill that was brought in to redirect the stream course and line the rerouted creek bed.

Naturally deposited soils that would contain the archaeological materials within the proposed project area have been covered with naturally deposited silt and with non-local construction materials such as crushed granite and gravel that were placed in the creek bed to direct the flow of water and minimize erosion.

As a result of the surface conditions and inability to conduct shovel-testing, Mr Bill Quackenbush of the Ho-Chunk Nation and Mr. Felipe Avila the State Historical Society were consulted. It was decided that rather than conducting a complicated and expensive preconstruction study to remove the fill soils and rocks in order to expose possible remaining naturally deposited soils that may contain artifacts and of cultural materials, it was agreed that the Project should be allowed to proceed under the condition of archaeological monitoring.

A single building foundation was identified during the field investigation and recorded as 47-DA-1604. The site is not associated with historical persons or events and does not currently meet any of the other criteria specified for NRHP eligibility or warrant further study/evaluation in order to determine eligibility for the NRHP under NPS Criteria A, B, C or D.

Based on study findings, the current project design will not disturb or have any adverse effects on any identified archaeological resources or human burial areas.

As a result of the investigation, the principal investigator recommends that no further cultural resource investigations be required prior to proceeding with planned construction activities.

As a precautionary measure, archaeological monitoring is recommended during the initial phases of all ground disturbing activities (including removal of the existing structure foundations) occurring within the reported boundaries of 47-DA-1604.

Table of Contents

Abstract	II
Table of Contents	III
List of Figures	IV-VI
Introduction	1-2
Project Location	2
Description of Proposed Undertaking	2
Area of Potential Effect	2-3
Environmental Context	3
Wisconsin: Regional Cultural Prehistory and Early History	3-8
Literature Investigations	9
Field Investigation	9
Study Results and Recommendations	10
Supporting Illustrations	11-24
References Cited	25-27
Appendix A: Site Form 47-DA-1604	28-29
Appendix B: Soil Information for the General Project Area	30-32
Appendix C: WPL Investigation Authorization letter from SHPO	33
Appendix D: Plan Sheets with proposed construction activities and existing conditions within Project area	34-39
ARI Form	40

Figures

Figure 1: Overall project location plotted (outlined in red) on USGS 7.5 topographic map section (USGS 1983).

11

Figure 2: Proposed project area (outlined in red (Mead and Hunt)).

12

Figure 3: Investigated area shown in light blue plotted on satellite map section showing the two closest previously reported archeological sites DA-0172 and DA-0821 (City of Madison Image).

13

Figure 4: General Investigation area shown in purple on SHSW database layer showing locations of previously reported archaeological sites, cultural resource surveys and standing structures recorded in the SHSW Architectural Historical Inventory (SHSW WHPD).

13

Figure 5: General Investigation area shown without project area platted showing locations of previously reported archaeological sites, cultural resource surveys and standing structures recorded in the SHSW Architectural Historical Inventory (SHSW WHPD).

14

Figure 6: Government Land office Plat map of the area from survey made in 1834 showing original north-south creek orientation prior to realignment of channel to NE/SW alignment seen in Figure 7 (GLO).

14

Figure 7: Area of investigation shown on July 6, 1937 air photo with general project area outlined and showing several standing structures that are no longer present in the general area of DA-1604.

15

Figure 8: View to southwest area of the southwest terminus of Project at Old Middleton Road.

15

Figure 9: View to southwest area of existing culvert at the central terminus of Project at Old Middleton Road.

16

Figure 10: View to northeast of wetland areas near the southwest terminus of Project at Old Middleton Road.

16

Figure 11: View to southeast in wetlands of Julia Street (right) in the southeast of the terminus of Project at Old Middleton Road.

17

Figure 12: View to east of fill and wetland areas of the project to the north of Julia Street and Old Middleton Road.

17

Figure 13: View to north of northwest corner of building foundation reported as DA-1604.

18

Figure 14: View to northeast of existing culvert on the southern side of University Avenue.

18

Figure 15: View to southwest of existing culvert on the northern side of University Avenue

19

Figure 16: View to northeast of Project area showing non-local deposited stone and gravel exposed in creek bed.

19

Figure 17: View to northeast of Project area showing non-local deposited stone and gravel exposed in creek bed with crushed stone fill area to left of creek.

20

Figure 18: View to northeast of creek bed and fill area showing non-local rock and gravel materials brought in a fill.

20

Figure 19: View to northeast of straightened creek bed at Lake Mendota showing exposed fill materials.

21

Figure 20: View to southwest of straightened creek bed at Lake Mendota showing exposed fill materials.

21

Figure 21: View to southwest of straightened creek bed to right and berm under gravel road at Lake Mendota

22

Figure 22: Example of an area consisting of fill and gravel placed over natural ground surface in eastern Project area north of Camelot Drive

22

Figure 23: View to south showing an example of non-local stone and crushed rock used to cover creek bed area to the northeast of University Avenue.
23

Figure 24: View to northeast showing an example of non-local stone and crushed rock used to cover creek bed area to the southwest of Camelot Drive.
23

Figure 24: Treefall to northeast of Julia Street showing gravel fill soils deposited over wetland areas.
24

Figure 24: View to south of foundation identified during field investigation and recorded by SHSW as DA-1604.
24

Introduction:

The following report describes the results of field and literature research conducted for a Phase I cultural resources investigation requested by United State Army Corps of Engineers for the proposed Mendota Grassman Greenway Project located in the southwestern area of the City of Madison, Dane County, Wisconsin (Figure 1).

Following requirements under State laws (Chapters 44.40 and 157.70 Wisconsin Statutes), investigations were made for the planned project location to identify the presence or absence of archaeological materials and human remains. Prior to field work, on-line historical documents and other resources maintained at the State Historical Society of Wisconsin (SHSW) were consulted for information the general area.

All aspects of the reported archaeological investigation were conducted in accordance with methodological guidelines of the Wisconsin Archaeological Survey (WAS) as outlined in *Guide for Public Archaeology in Wisconsin* (Dudzik et al. 2012). WAS methods are endorsed by the WDNR and the Division of Historic Preservation, SHSW and provide the professional standards for conducting all legislative compliance related archaeological research in the State of Wisconsin.

As required by Federal law, the principal investigator meets all standards of the Secretary of the Interior's criteria for "Qualified Archaeologist" and "Architectural Historian" as specified in Appendix A of 36 CFR 61. A permit to conduct archaeological investigations on public lands was secured before conducting the field investigation (Appendix C).

Literature research was conducted on-line during the week of April 20, 2023. A field investigation was made for the area on 23 April 2023 by the Principal Investigator (PI) John Hodgson. During the field study, the entire project area located within the reported boundaries of 47-DA-145 was investigated (Figures 2-3). The investigation did not locate any archaeological resources within the boundaries of the proposed development.

The field investigation was problematic as a result of areas of standing water in the southwestern area of the Project with the decades of thick sediment covering the proposed Project area southwest of university avenue. These difficulties were compounded with large sections of meter deep fill soils deposited over wetland areas consisting of gravel, crushed rock, construction debris, concrete, and larger stone fill that was brought in to redirect the stream course and line the rerouted creek bed.

Naturally deposited soils that would contain the archaeological materials within the proposed project area have been covered with naturally deposited silt and with non-local construction materials such as crushed granite and gravel that were placed in the creek bed to direct the flow of water and minimize erosion.

As a result of the surface conditions and inability to conduct shovel-testing, Mr Bill Quackenbush of the Ho-Chunk Nation and Mr. Felipe Avila the State Historical Society were consulted. It was decided that rather than conducting a complicated and expensive preconstruction study to remove the fill soils and rocks in order to expose possible

remaining naturally deposited soils that may contain artifacts and of cultural materials, it was agreed that the Project should be allowed to proceed under the condition of archaeological monitoring.

A single early 19th century building foundation was identified during the field investigation and recorded as archaeological site 47-DA-1604 (Appendix A). The site is not associated with historical persons or events and does not currently meet any of the other criteria specified for NRHP eligibility or warrant further study/evaluation in order to determine eligibility for the NRHP under NPS Criteria A, B, C or D.

Based on study findings, the current project design will not disturb or have any adverse effects on any identified archaeological resources or human burial areas. As a result of the investigation, the PI recommends that no further cultural resource investigations be required prior to proceeding with planned construction activities.

As a precautionary measure, archaeological monitoring is recommended during the initial phases of all ground disturbing activities (including removal of the existing structure foundations) occurring within the reported boundaries of 47-DA-1604.

Project Location:

The investigated project area is located on the southern central area of the of the City of Madison, Dane County, Wisconsin. The project area is situated within the SE 1/4 of the NW 1/4 of Section 18 and the NE ¼ of Section 13, Township 7 North and Range 9 East (Figures 1-2).

Description of the Proposed Undertaking

The City of Madison is improving the conveyance of the Mendota Grassman Greenway to mitigate the flooding of adjacent homes with a reconstruction and restoration project. The proposed project consists of re-grading the greenway drainageway to lower the profile and change the cross section, and replacing existing culverts at University Avenue and Camelot Drive. Approximately 3.77 acres will be disturbed during the proposed project. Plans for the proposed construction are provided in Appendix D of this report.

Area of Potential Effect

Direct APE

The Direct APE for this project is limited to the areas that will be physically be affected and subjected to ground disturbance by the proposed construction activities. Areas to be subjected to ground disturbance include the planned greenway corridor, any access road areas and workspace/staging areas.

Indirect APE

The proposed Project construction consists of below surface placement of a greenway and areas will be restored back to previous land use after construction activities are

completed. As a result, definition of an Indirect APE and investigation of standing structures etc. was not part of the reported investigation.

Environmental Context

The Project area is in the Eastern Ridges and Lowlands physiographic region of Wisconsin. This area is characterized by low ridges, rolling plain with lakes, mostly row crops, with pasture, and suburban development. It formerly consisted of oak species and mixed forest with some expanses of grasslands (Finley 1976; USEPA, 2017). More broadly, the Project area is in the Mixed Wood Plains of the Eastern Temperate Forests (USEPA, 2013).

Soils within the Project area consist primarily of silt loams (USDA, 1954 and 1989; NRCS, 2013). Soil information for the Project is provided in detail in Appendix B. The Project area is drained by the unnamed creek which drains in Lake Mendota, which in turn is part of the Yahara River drainage, a tributary of the Rock River, in the Upper Mississippi River Drainage (USEPA, 2013).

Wisconsin: Regional Cultural Prehistory and Early History

The south-central region of Wisconsin has been inhabited by people since at least 13,000 years B.P. (Green et al. 1986). The presence of these people is attested to by archaeological features and material remains found throughout the state. This section provides an overview of the prehistoric environmental, cultural, and temporal phases that characterize the region. The traditions discussed are defined broadly by patterns of material culture linked to dated contexts and are organized chronologically.

Paleo-Indian Tradition (13,000-8000 B.P.)

The earliest known inhabitants of the west-central Wisconsin region were Paleoindian people. Evidence of Paleo-Indians was found at sites 47-DR-79 and 47-DR-107. These people are currently understood to have entered Wisconsin from the south and southwest, in small, highly mobile bands, gradually migrating to the north and east following the retreating glacial ice (Mason 1997:80). They hunted and gathered across a wide territory, adapting to a range of changing environments with a climate that was somewhat colder than today.

The Paleoindian Period (ca. 12,000 – 8000 B.P.) in Wisconsin is subdivided into two sub-stages: the Early Paleoindian stage and the Late Paleoindian. These stages are divided mainly on the presence or absence of fluting on projectile points of the period. The Early Paleoindian Stage (ca. 11,300-10,000 B.P.) is characterized by the presence of fluted projectile point styles such as Clovis, Gainey, and Folsom (Stoltman 1991:260).

These projectile points are lanceolate in shape, centrally fluted, and often laterally and basally ground. Fluted points have been recovered in association with Pleistocene megafauna such as mastodon, mammoth, and extinct bison species on the Great Plains from Western states (Mason 1997). Early Paleoindian Stage sites in Wisconsin have been

generally limited to isolated surface finds of fluted points. However, fluted points have been found in association with mammoth kills at sites such as Schaefer and Hebior in Wisconsin (Overstreet 1993).

The Late Paleoindian Stage (ca. 10,000-8,000 B.P.) is characterized by a series of non-fluted projectile points that correlate with types such as Agate Basin, Scottsbluff-Eden, and Plainview (Nienow and Boszhardt 1997:14-15), commonly found in the Western Plains states. These projectile points are often stemmed or lanceolate in form, and while lacking fluting, continue the pattern of basal and lateral grinding seen in earlier Paleoindian styles.

The Late Paleoindian Stage has been divided into two complexes in southern Wisconsin; an earlier Plano Complex and a later Cody Complex (Overstreet 1993). In northern Wisconsin, a Flambeau Phase (ca. 9000 B.P.) containing Agate Basin style points and a Minocqua Phase (ca. 8000-6000 B.P.) featuring Scottsbluff style projectile points have also been suggested (Salzer 1969). Both Late and Early stage Paleoindian archaeological sites are rare in the Driftless region. One small Late Paleoindian site, the Markee site (47-VE-195), has been investigated in Vernon County (Halsey 1974). Agate Basin and Scottsbluff type projectile points were recovered from the Markee site, which is estimated to date from 8500-7500 B.P. (Boszhardt 1991:163). A possible example of megafauna hunting within the Driftless region is the Boaz Mastodon site from Richard County (Palmer and Stoltman 1976).

Archaic Tradition (ca. 8,000-2500 B.P.)

The Archaic Tradition is characterized by a broad trend toward technological, cultural and ideological diversification in the period following the Paleoindian Tradition. The Archaic Tradition is marked by an increase in the diversity of resource exploitation, including the development of plant processing technologies, and the adoption of a more broadly-based diet dependent on hunting, fishing, and gathering.

Burials in large cemeteries, often placed on natural knolls or terraces, appear during this period and may indicate an elaboration of social organization of people in the Archaic Tradition. Ground-stone tools and native copper manufacture first appear during this period. A trend toward increased regionalization in artifact styles and inventories, manifested in a greater diversity of projectile points and other technologies emerges, possibly linked to the reduced ranges of broad-based subsistence strategies and the accompanying increase in population size.

The Archaic Tradition is divided into three stages in Wisconsin. The Early Archaic Stage (ca. 8000-6000 B.P.) is characterized by the appearance of beveled, resharpened, and bifurcated projectile points such as the Hardin Barbed, Street Charles, Thebes, and Bifurcate base-types (Goldstein and Osborne 1988:23-27). Early Archaic sites are rare in Western Wisconsin and little is known about the peoples and lifeways of the period. The general absence of Early Archaic sites from Western Wisconsin may be connected to the Altithermal climatic episode, an extended dry period present from roughly 8,000-6,000 B.P. This episode may have reduced the productivity of this area rendering it less attractive to early foragers.

The Middle Archaic Stage (ca. 6000-3500 B.P.) is characterized by continued diversification and regionalization in subsistence strategies and artifact styles. Projectile point diversity continues to increase, with the development of side-notched varieties such as the Raddatz, Osceola, and Madison Side-Notched types. Technological developments dating to this period include the use of the atlatl or spear thrower, raw-copper manufacture, and the use of specialized groundstone woodworking tools including axes and adzes. Subsistence evidence from rock shelter sites suggests winter occupations based on deer and elk hunting. Warm-season, open-air sites are less common but have been found on Mississippi River Islands. Middle Archaic sites are fairly abundant in southwestern Wisconsin, suggesting that the area became more productive at the termination of the Altithermal dry period (approx. ca. 6000 B.P.).

The Old Copper Complex, a wide-spread mortuary complex featuring large communal cemeteries and extensive use of native copper for tool making also developed during the Middle Archaic. The Osceola site, a large cemetery located in Grant County, Wisconsin, is the best-known site of the Old Copper Complex.

During the Late Archaic (ca. 3500-2500 B.P.) cooler, moister, environmental conditions prevailed. Lifeways include seasonal movements from wintering sites within rock shelters and interior valleys to summer encampments along major rivers. Expanding regional exchange networks are attested to by the appearance of marine shells, exotic stone tools, and other exotic objects recovered from burials of the period. The Red Ochre Complex, a mortuary complex characterized by the use of powdered hematite (red ochre) and the inclusion of diverse burial goods often fashioned from exotic or high value materials, begins during this stage and continues in some areas into the following Early Woodland Period. Side-notched projectile points become less frequent, replaced by stemmed and corner-notched forms. Two regional phases have been designated in Western Wisconsin based on projectile point styles (Stoltman 1997); the Preston Phase (ca. 3500-3000 B.P.) features small corner-notched Preston-Notched points and the later Durst Phase (ca. 3000-2500 B.P.) features small-stemmed projectile points called the Durst Stemmed type.

Woodland Tradition (ca. 2500-700 B.P.)

The Woodland Tradition is marked by a series of important sociological, economic, and technological innovations. Ceramic vessels and earthen mound burials appear during this tradition, accompanied by an increased reliance on plant cultivation and horticulture, supplemented by continued hunting and gathering of wild foods.

The Woodland Period also witnessed the adoption of the bow and arrow, a development that greatly affected warfare and hunting (McElrath *et al.* 2000:12). Settlement patterns from the Woodland Tradition indicate a greater geographic and topographic diversity in site locations and resource use. Throughout the Woodland Tradition there was a trend toward increasing sedentary or semi-sedentary lifeways, accompanied by population growth and an increased reliance on domesticated crops. The Woodland Tradition is divided into a series of Early, Middle and Late stages.

During the Early Woodland Stage (ca. 2500-1850 B.P.) the first ceramic artifacts in the region were produced. These ceramics, known as Marion Ware are characterized by thick

grit-tempered walls. Marion Ware, along with straight-stemmed projectile points known as Kramer Points, are diagnostic to the Indian Isle Phase (ca. 2300-2100 B.P.), the first of two recognized cultural phases designated for the Early Woodland Stage in Western Wisconsin. The later phase, the Prairie Phase (ca. 2100-1900 B.P.), is characterized by thin, sand-tempered pottery known as Prairie Ware and contracting stemmed projectile points such as the Waubesa Contracting Stem type. Floodplain aquatic subsistence resources became increasingly important during this phase, especially the exploitation of shellfish.

The Middle Woodland Stage (ca. 1900-1500 B.P.) is associated with the growth, expansion, and eventual collapse of the Hopewell-Havana Tradition, a cultural pattern focused in the Ohio and Illinois River Valleys. The Hopewell-Havana Tradition included a body of the adoption or development of elaborate mortuary and ceremonial practices that were part an extensive trade and interaction network, known as the Hopewell Interaction Sphere. In Western Wisconsin the influences of the Hopewell Interaction Sphere are represented in the Trempealeau Phase (ca. 1900-1800 B.P.), which is characterized by burials placed in conical mounds, often featuring sub-floor tombs. Artifacts characteristic of the Trempealeau Phase include grit-tempered, stamped, and punctated ceramics known as Havana Ware, as well as corner-notched projectile points and knives of the Snyder, Gibson and Manker Corner-Notched types.

The Hopewell-Havana Tradition declined in Western Wisconsin after approximately 200 A.D. and was gradually replaced by influences of the Weaver cultures of Western Illinois and eastern Iowa. The Weaver Culture is represented by the Millville Phase of the Middle Woodland (ca. 1800-1500 B.P.). The Millville Phase is characterized by the first well-dated use of domesticated small-seed plant species, regular use of storage features (Stoltman 1991:248), and semi-sedentary residential villages such the Millville Site in Grant County, Wisconsin. Hopewell-related mortuary behaviors cease and the undecorated thinner, finer-pasted, grit-tempered ceramics known as Linn Ware replace the earlier Havana Ware. Projectile points characteristic of the Millville Phase includes stemmed types such as Steuben Expanded Stemmed, Ansell, and Monona Stemmed.

The Late Woodland Stage (ca. 1500-650 B.P.) is characterized by an economic transition from incipient-horticultural into a system that incorporated intensive maize-based agriculture. The Late Woodland period also saw the rise of the Effigy Mound Tradition, with its characteristic linear, animal, and human-shaped mounds (Rowe 1956). Technological innovations of the Late Woodland Period include the adoption of the bow and arrow as a hunting tool and weapon in warfare. The use of the bow and arrow would have increased the effectiveness of hunting and may have had social implications for raiding and warfare behavior (Hall 1980).

In Western Wisconsin, the Effigy Mound Tradition is represented by the Eastman Phase (ca. A.D. 700-1000) and the currently undated, but possibly contemporaneous, Lewis Phase. The Eastman Phase is represented by thin, grit-tempered, cord-impressed ceramics known as Madison Ware and small notched and un-notched arrow points similar to Madison Triangular projectile points. The Lewis Phase features grit-tempered, incised Angelo Punctated ceramics and also contains Madison Triangular projectile points.

Mississippian / Oneota Tradition (ca. 1000-300 B.P.)

The Mississippian/Oneota Tradition represents the post-Woodland period that saw the development of nucleated agricultural villages containing increasingly larger populations, shell-tempered ceramics, and a dependency upon maize agriculture. The Mississippian Tradition in Wisconsin encompasses the initial expansion of the Mississippian Tradition from the American Bottom known as the Middle Mississippian Culture and the secondary influence of the Mississippi tradition on primarily local populations that led to the development of the regional Oneota Culture.

The Middle Mississippian Culture (ca. 1000-800 B.P.) politically centered on large, highly-populated ceremonial centers such as Cahokia, near modern day Street Louis. Middle Mississippian centers such as Cahokia often feature flat-topped pyramid shaped mounds that may have served as ceremonial centers or elite residences. Middle Mississippian sites show evidence of part-time craft specialization and the presence of social and political hierarchies typical of ranked societies.

Several sites in the Upper Mississippi Valley and surrounding regions show evidence of contact with the Middle Mississippian people of Cahokia and other centers at the height of the Middle Mississippian. Middle Mississippian influence can be seen in Cahokia-related cultural traits, such as the use of Ramey Incised ceramics. Other important evidence for influence include changes in the internal layout of sites. Examples of sites that manifest Mississippian influence include archaeological settlements near modern-day Red Wing, Minnesota and Trempealeau, Wisconsin.

The Oneota Culture (ca. 900 B.P.-500 B.P.) is represented by a series of Mississippian Tradition occupations that differ from Middle Mississippian cultures. While Oneota sites generally share the Middle Mississippian characteristics of sedentary nucleated villages focused on the use of maize agriculture supplemented by hunting and gathering, they typically lack evidence for social ranking and pyramidal or platform mounds. Oneota ceramics are mostly globular, shell-tempered vessels decorated with a combination of punctates, chevrons, finger, and tool-trailed designs. Small, un-notched triangular arrow-points such as the Madison Triangular type utilized in the previous Late Woodland tradition, continued to be manufactured and used by the Oneota people.

Historical Period

The first European documented to have entered into what is now Wisconsin was Jean Nicolle, in 1634, landing near the present-day town of Green Bay. A fur trading post was established and flourished. In 1673 Jacques Marquette and Louis Jolliet landed in the bay of Green Bay and explored waterways to southwest, reaching what is now Prairie du Chien. In 1679 French explorer Robert Cavalier de la Salle made landfall in what is now eastern Door County.

The entrance of Europeans into the area that would become Wisconsin, the introduction of new diseases, and the development of the fur trade disrupted local economies and led to the displacement of many Native Americans. Many Eastern tribes immigrated to Wisconsin between 1640 and 1680. The Iroquois invaded neighboring nations in Michigan and Ontario, driving the Sauk, Meskwaki (Fox), Potawatomi, Mascouten, Kickapoo, Ottawa, and other tribes into the land between Lake Michigan and the Mississippi.

Competition for resources such as food and furs generated almost a century of intertribal warfare among the displaced people and the already-present Menominee, Ho-Chunk, Sioux, and Ojibwe. The English discouraged Indian hunters from trading with the French in Green Bay, Michilimackinac, or Detroit. The Meskwaki (Fox) often supported these efforts and put up the most determined resistance to the French presence in Wisconsin, engaging in clandestine attacks, retribution, open warfare, and shifting alliances.

From 1700 to 1730, the Meskwaki (Fox) and the Mascouten rebelled against the French, who brutally suppressed the rebellion. In 1712 the French killed nearly 1,500 members of these tribes during the siege of Detroit. The French also mounted several long-distance military expeditions against the tribes, including the major battle at Little Lake Butte des Morts in 1716 located near present-day Neenah, and sent the most important tribal leaders into slavery in French colonies in the Caribbean. By 1750, the remnants of the Meskwaki (Fox) had taken refuge in a village near the mouth of the Rock River, a few miles from the Mississippi.

European diseases such as smallpox and measles reached Wisconsin's Indians before and during the time of the European explorers (1634). In the fifty years following Hernando de Soto's invasion of the lower Mississippi in 1539-1540, disease wiped out 90 percent of Indian villages in the middle Mississippi Valley. Wisconsin's Oneota culture had traded with these villages for centuries.

The introduction of European goods made Wisconsin Indians dependent in many crucial ways upon French traders as Indian communities began to adopt these materials to carry out the tasks of daily life. By the early eighteenth-century Wisconsin's Indians tended their cornfields with hoes of iron instead of stone or bone. They dressed in cloth garments more often than deer skins. They lit fires with steel flints. Their jewelry was made of silver, bronze, and copper shipped from France. The Indians also pursued game and warfare with firearms rather than with bows and arrows.

The social upheaval caused by more than a century of disease, warfare, and colonialism drastically changed the Native American cultures. By the 1760s several tribes such as the once powerful Ho-Chunk, Mascouten, and Meskwaki (Fox), had been reduced to a fraction of their pre-European contact size and geographic influence. Most tribes were transformed from settled subsistence oriented agricultural communities who engaged in part-time seasonal hunting to full-time trappers and hunters, entwined in a global economy, who wandered far and wide to harvest furs.

Euro-American Historical Period

The area around Dane County and the Four Lakes region was inhabited by Native American groups for thousands of years with Euro-American traders and explorers not entering the area until the late 1820s. The settlement of the area that would become the City of Madison began in the 1830s when the capitol and territorial government was moved from Belmont to Madison. By the 1840s, the area around Madison had a population of almost 7000 people.

The proposed Project area was the location of farms and orchards until the period after the second world war and expansion of suburban development in the general project area in the 1950s and 60s.

Literature Investigations:

Prior to field investigations, modern and historical documents were examined from the SHSW Archives and Library available on-line. Resources examined included Government Land Office (GLO) records, historic air photos (Robinson Map Library), historic plat maps (Cantwell 1911; East Side Print Shop 1955; Foote 1890; Harrison and Warner 1873; Hixson 1930 Snyder 1878), land records (SHSW N.D.), and descriptive histories of the project area (USDA 1915, 1974 and Western 1880). In addition to historical records and maps, reports of past cultural resources investigation that occurred near the proposed Project area were reviewed (Egan-Bruhy 2010 and Hodgson 2022).

Two previously reported archaeological sites are located in the area of the lakeshore and northeastern terminus of the proposed Project area. The sites are located several hundred feet outside of the construction areas and will not be physically impacted by the proposed Project activities (Figure 3).

Field Investigation:

Areas of standing water and large softball-volleyball size rocks intermixed with crushed stone prevented shovel testing in the majority of the proposed Project area. Surface conditions for the project area at the time of the field investigations can be seen in Figures 8-24.

During the first part of the investigation the entire project area was walked looking for evidence of mounds or other archaeological features visible on the surface. During the course of the walkover survey, a building foundation was observed and reported to the SHSW (47-DA-1604). Following the walkover of the parcel, soils were probed in areas that were not covered with water or fill soils visible at the surface. The majority of the project was observed to have deep sediment deposits and/or fill materials. The general area of the creek appears to have been heavily disturbed from previous shifting and directing of the natural creek course and grading to contain water flow to the existing channel (e.g., Figures 16-18).

Soils throughout the project area including those observed near houses that were disturbed generally match the types reported by the NRCS (n.d.) and USDA (1915 and 1974) as silt loams of several different series (Appendix B).

During the course of field investigations, aside from the building foundation (DA-1604), only small amounts of 20th century garbage including wire, plastic bottles and glass were observed in the Project area. No archaeological artifacts of other historic or prehistoric cultural materials were observed or recovered from the proposed project area.

Study Results and Recommendations:

A single building foundation was identified during the field investigation and recorded as 47-DA-1604. The site is not associated with historical persons or events and does not currently meet any of the other criteria specified for NRHP eligibility or warrant further study/evaluation in order to determine eligibility for the NRHP under NPS Criteria A, B, C or D.

Based on study findings, the current project design will not disturb or have any adverse effects on any identified archaeological resources or human burial areas. As a result of the investigation, the principal investigator recommends that no further cultural resource investigations be required prior to proceeding with planned construction activities.

After discussions with Mr. Bill Quackenbush of the Ho-Chunk Nation and Mr. Felipe Avila of the SHSW, there are concerns that the ground disturbing activities associated with the planned project may encounter archaeological deposits during construction. For this reason, archaeological monitoring (the observation of ground disturbing activities by a qualified archaeologist) has been recommended during the project within certain areas.

The PI recommends that archaeological monitoring will be required within all areas of the project where the soils and surface covering materials (rock and fill etc.) within the area of proposed ground disturbing construction are not known to be non-local soils, crushed rock, gravel, or fill. Ground disturbing construction activities are required to be observed by a qualified archaeologist until the depth and horizontal limits of ground disturbance has been reached. If the areas are found to be fill or soils that do not contain archaeological deposits, monitoring will no longer be required.

Any modifications to the project design may require additional investigations and a modified survey report. If changes are made to plans, personnel in the Office of Historic Preservation at SHSW should be consulted to ensure that compliance standards have been met prior to any construction at the proposed site location.

In the event any archaeological materials are encountered during the project, it is recommended that all construction activities be brought to a halt and the PI or the Office of Historic Preservation at SHSW be consulted prior to continuing work.

Pursuant to Federal and Wisconsin State laws, should grave markers or human skeletal remains be encountered during construction, all activities in the area are required to cease immediately and the State of Wisconsin Burial Sites Preservation Office must be contacted at 608-264-6503 or 800-342-7834 for further instructions.

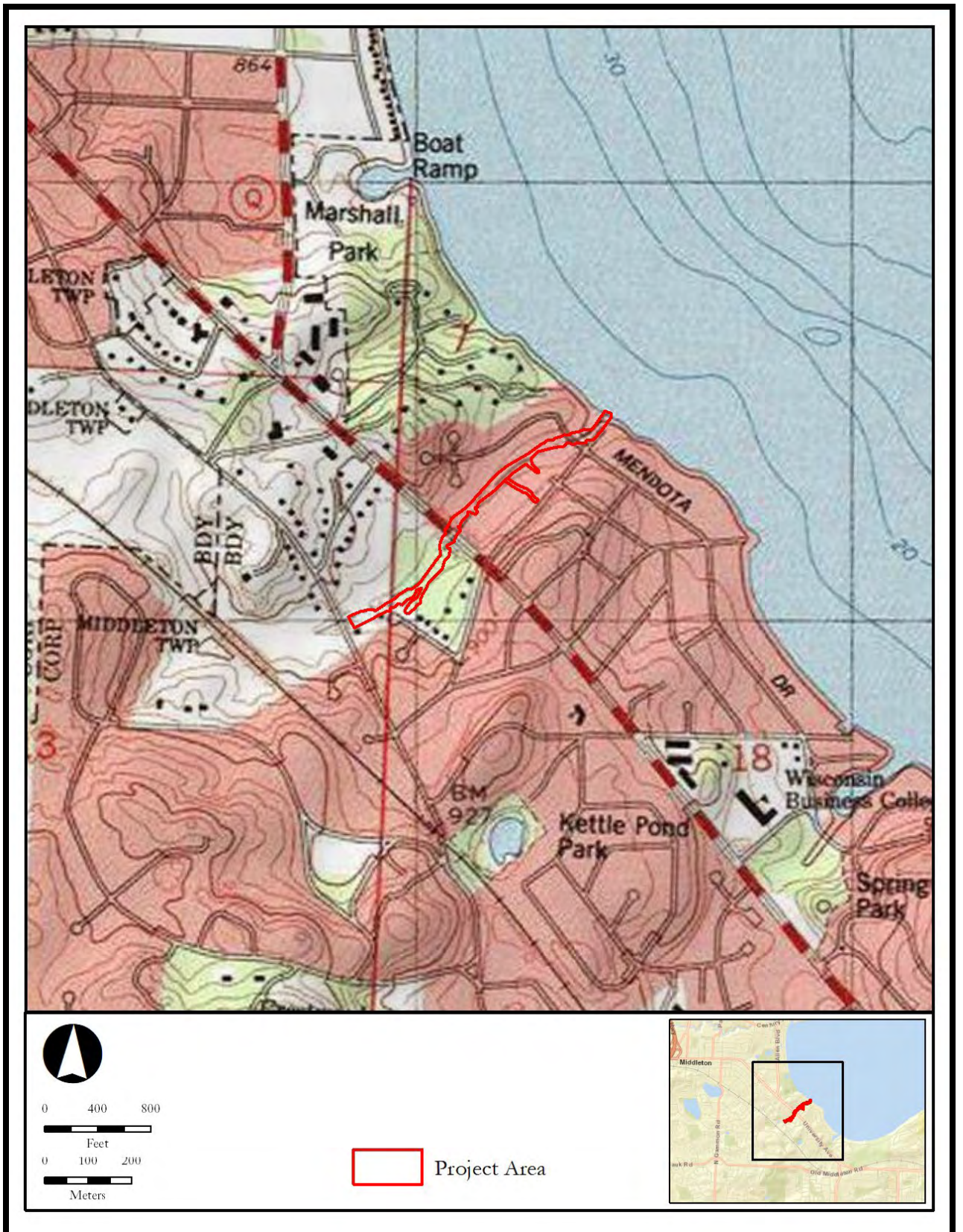


Figure 1: Overall project location plotted (outlined in red) on USGS 7.5 topographic map section (USGS 1983).

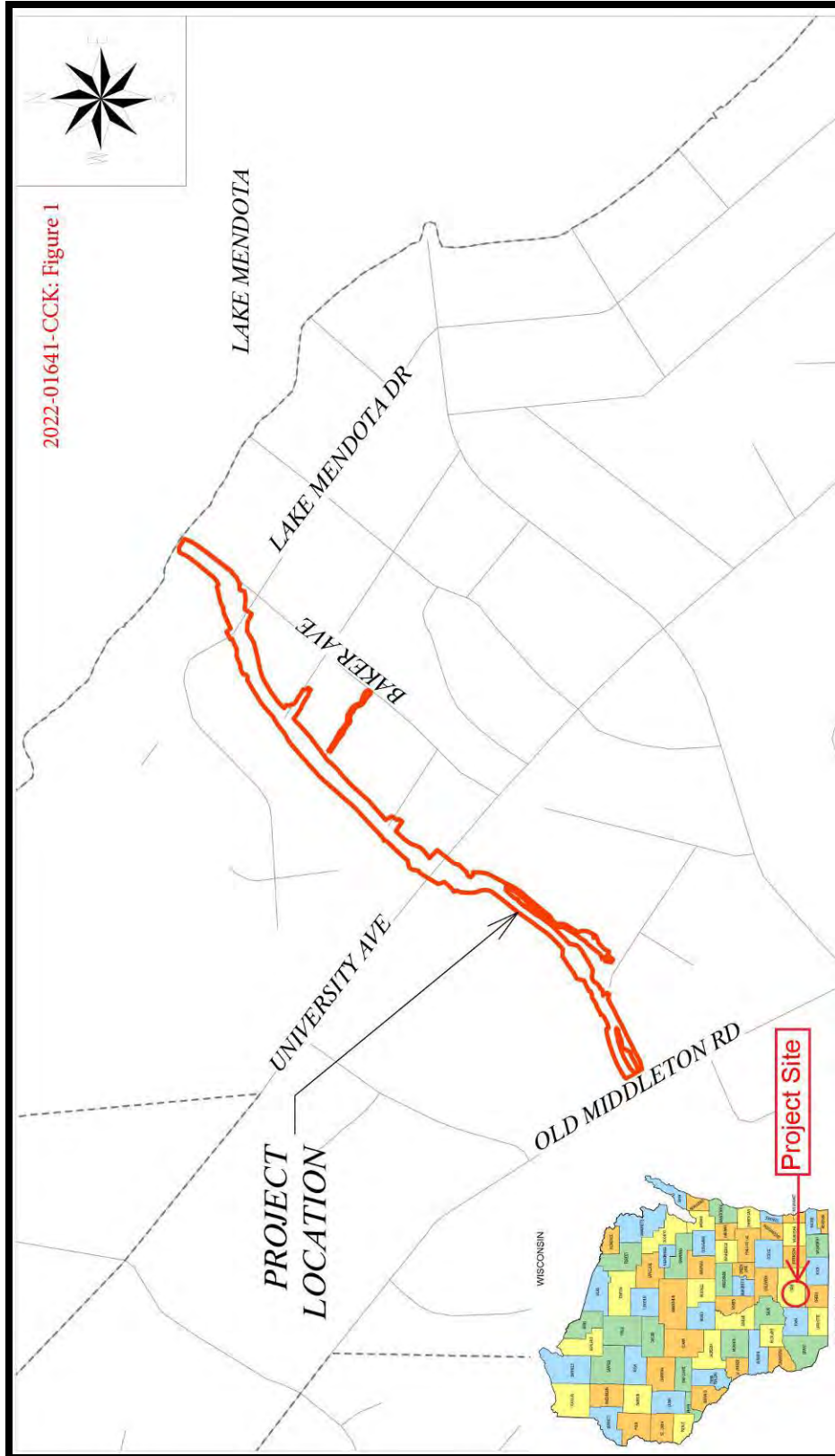


Figure 2: Proposed project area (outlined in red (Mead and Hunt)).



Figure 3: Investigated area shown in light blue plotted on satellite map section showing the two closest previously reported archeological sites DA-0172 and DA-0821 (City of Madison Image).

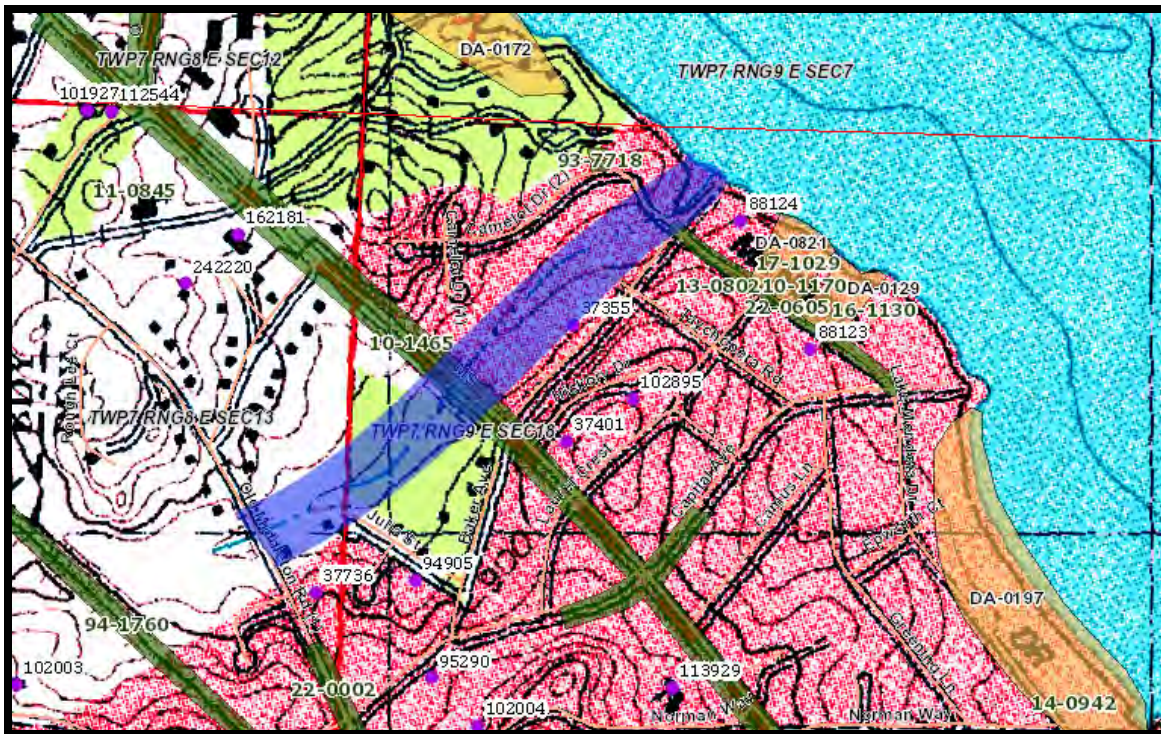


Figure 4: General Investigation area shown in purple on SHSW database layer showing locations of previously reported archaeological sites, cultural resource surveys and standing structures recorded in the SHSW Architectural Historical Inventory (SHSW WHPD).

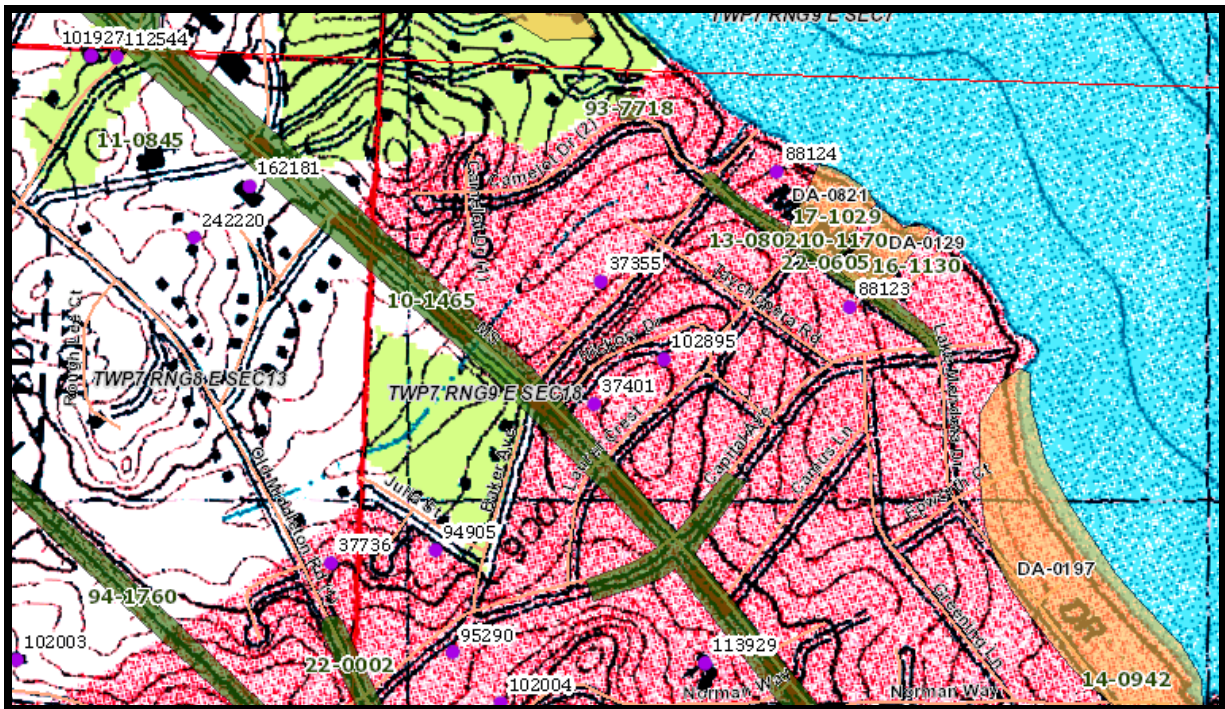


Figure 5: General Investigation area shown without project area platted showing locations of previously reported archaeological sites, cultural resource surveys and standing structures recorded in the SHSW Architectural Historical Inventory (SHSW WHPD).

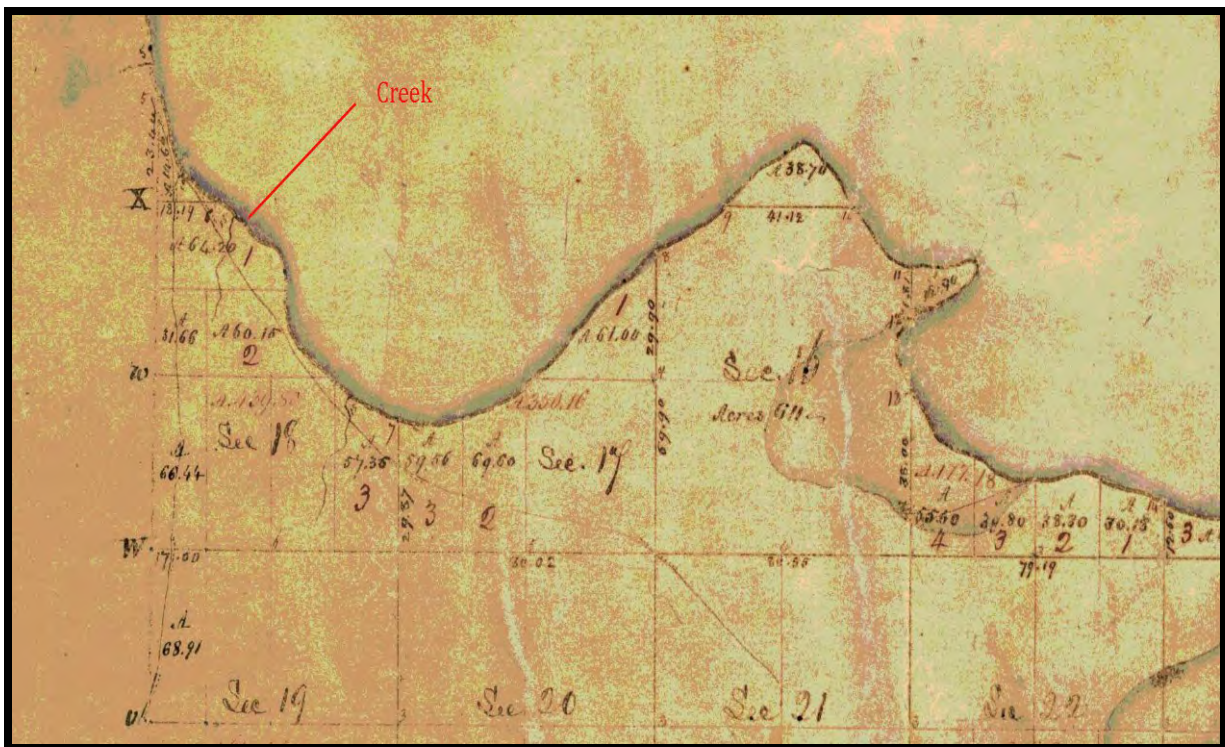


Figure 6: Government Land office Plat map of the area from survey made in 1834 showing original north-south creek orientation prior to realignment of channel to NE/SW alignment seen in Figure 7 (GLO).

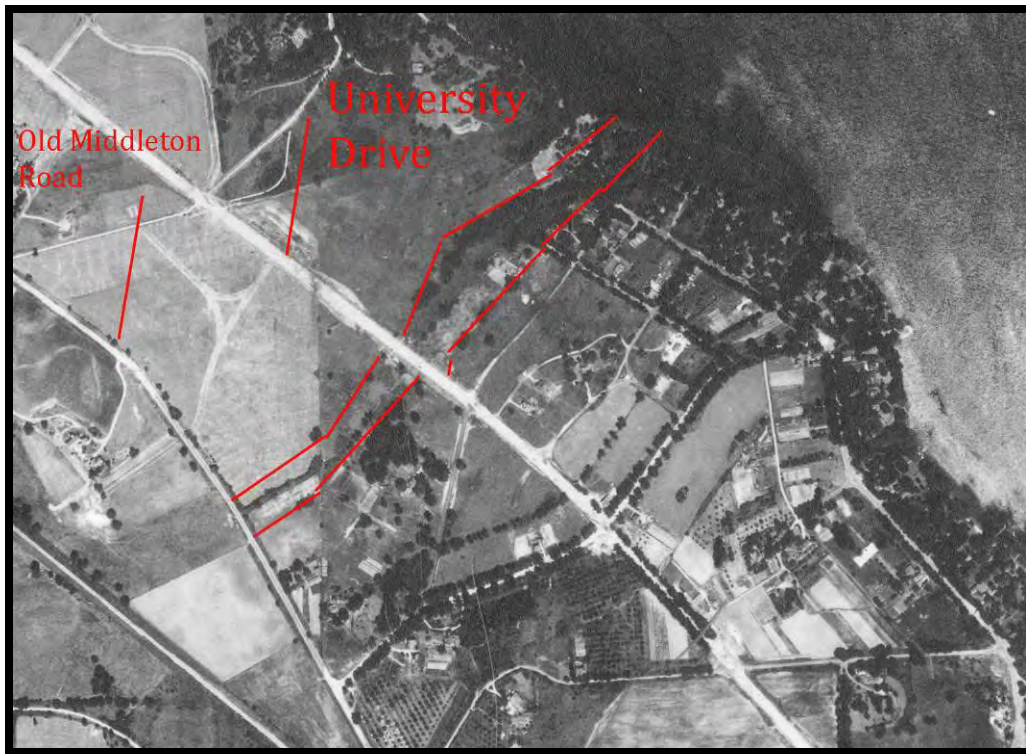


Figure 7: Area of investigation shown on July 6, 1937 air photo with general project area outlined and showing several standing structures that are no longer present in the general area of DA-1604.



Figure 8: View to southwest area of the southwest terminus of Project at Old Middleton Road.



Figure 9: View to southwest area of existing culvert at the central terminus of Project at Old Middleton Road.



Figure 10: View to northeast of wetland areas near the southwest terminus of Project at Old Middleton Road.



Figure 11: View to southeast in wetlands of Julia Street (right) in the southeast of the terminus of Project at Old Middleton Road.



Figure 12: View to east of fill and wetland areas of the project to the north of Julia Street and Old Middleton Road.



Figure 13: View to north of northwest corner of building foundation reported as DA-1604.



Figure 14: View to northeast of existing culvert on the southern side of University Avenue.



Figure 15: View to southwest of existing culvert on the northern side of University Avenue



Figure 16: View to northeast of Project area showing non-local deposited stone and gravel exposed in creek bed.



Figure 17: View to northeast of Project area showing non-local deposited stone and gravel exposed in creek bed with crushed stone fill area to left of creek.



Figure 18: View to northeast of creek bed and fill area showing non-local rock and gravel materials brought in a fill.



Figure 19: View to northeast of straightened creek bed at Lake Mendota showing exposed fill materials.



Figure 20: View to southwest of straightened creek bed at Lake Mendota showing exposed fill materials.



Figure 21: View to southwest of straightened creek bed to right and berm under gravel road at Lake Mendota



Figure 22: Example of an area consisting of fill and gravel placed over natural ground surface in eastern Project area north of Camelot Drive



Figure 23: View to south showing an example of non-local stone and crushed rock used to cover creek bed area to the northeast of University Avenue.



Figure 24: View to northeast showing an example of non-local stone and crushed rock used to cover creek bed area to the southwest of Camelot Drive.



Figure 24: Treefall to northeast of Julia Street showing gravel fill soils deposited over wetland areas.



Figure 24: View to south of foundation identified during field investigation and recorded by SHSW as DA-1604.

References Cited

Boszhardt, R.

1991 Paleoindian Study Unit: Region 6, Western Wisconsin. *The Wisconsin Archaeologist*. pp:163.

Cantwell Company

1911 Standard Historical Atlas of Dane County Wisconsin. Cantwell Printing Company, Madison, Wisconsin.

Dudzik, Mark, Joseph Tiffany, and Katherine Stevenson

2012 *Guide for Public Archaeology in Wisconsin*. Wisconsin Archaeological Survey, Milwaukee, Wisconsin.

East Side Print Shop

1955 Plat Book, Dane County, Wisconsin. East Side Print Shop, Madison, Wisconsin.

Egan-Bruhy, Kathryn

2010 WDOT Archaeological Survey Field Report: CTH MS (University Avenue) Allen Boulevard - Segoe Road Dane County, Wisconsin WisDOT ID: 5992-08-18 (79). Unpublished manuscript on file with SHSW, Madison, WI.

Finley, Robert

1976 *Original Vegetation Cover of Wisconsin* (Map). University of Wisconsin at Madison.

Foote, C.M. and J.W. Henion

1890 Plat Book of Dane County, Wisconsin. C.M. Foote and Company, Minneapolis, Minnesota.

Goldstein, Lynne G. and Sannie K. Osborn

1988 A Guide to Common Prehistoric Projectile Points in Wisconsin, Milwaukee Public Museum, Milwaukee, WI.

Green, W., J. Stoltman, and A. Kehoe (editors)

1986 Introduction to Wisconsin Archaeology. *The Wisconsin Archeologist* 67(3-4):163-395.

Halsey, M.

1974 The Markee Site: An Early-Middle Archaic Campsite in the Kickapoo River Valley. *The Wisconsin Archeologist*.

Harrison and Warner

1873 Atlas of Dane County, Wisconsin. Harrison and Warner Publishing, Madison, Wisconsin.

Hixson, W.W.

1930 *Wisconsin State Atlas*. W. W. Hixson and Company, Rockford, Illinois.

Hodgson, John G.

2022 Archaeological Investigation Results, Street Improvement Project: Portions of Lake Mendota Drive and Uncataloged Burial Sites 47-DA-0129/47-BDA-0384 (Mendota Beach Mound Group) and 47-DA-0821/47-BDA-0536 (Burton Mortuary Area), City of Madison, Dane County, Wisconsin. Unpublished manuscript on file with SHSW, Madison, WI.

Lapham, Increase

1855 *Antiquities of Wisconsin*. Smithsonian Institution, Washington D.C.

Mason, R.

1997 The Paleoindian Tradition. *The Wisconsin Archeologist*. Pp:80

National Park Service

1983 Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. National Park Service, Department of the Interior, Washington, D.C.

Natural Resources Conservation Services

Not Dated Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/>.

Nienow, J. and R. Boszhardt

1997 *Chipped Stone Projectile Points of Western Wisconsin*. Mississippi Valley Archaeology Center, University of Wisconsin-La Crosse. La Crosse, Wisconsin.

Overstreet, D. F.

1993 Chesrow: A Paleoindian Complex in the Southern Lake Michigan Basin. Case Studies in Great Lakes Archaeology No. 2, Great Lakes Archaeological Press, Milwaukee, WI.

Palmer, Harris A., James B. Stoltman

1976 The Boaz Mastodon: A Possible Association of Man and Mastodon in Wisconsin. *Midcontinental Journal of Archaeology* 1 (2): 163-177

Peet, Stephen

1898 *Prehistoric America*, Volume 2:98-100,111,272-273. American Antiquarian Office, Chicago, Illinois.

Rowe, C.

1956 *The Effigy Mound Culture of Wisconsin*. Milwaukee Public Museum, Publications in Anthropology 3. Milwaukee, Wisconsin.

Salzer, R.

1969 An Introduction to the Archaeology of Northern Wisconsin. PhD. Dissertation, Southern Illinois University, Carbondale.

Smith, L.

1953 Effigy Mounds in Richland County. *The Wisconsin Archaeologist* 34(3):168-174.

Snyder, Van Vechten

1878 *Historical Atlas of Wisconsin*. Snyder, Van Vechten Company, Milwaukee, Wisconsin.

State Historical Society of Wisconsin (SHSW)

Not Dated Wisconsin Land Economic Inventory Maps (Bordner Survey).

<http://digital.library.wisc.edu/1711.dl/EcoNatRes.WILandInv>

United States Department of Agriculture, Soil Conservation Service (USDA/NRCS)

Not Dated <http://websoilsurvey.nrcs.usda.gov/app> Website data base of Soil Survey information for the United States of America.

1915 Soil Survey of Dane County, Wisconsin. United States Printing Office, Washington D.C.

1974 *Soil Survey of Dane County, Wisconsin*. United States Printing Office, Washington D.C.

United States Geological Survey (USGS)

1983 *Madison West WI*. (Map). Series 7.5 Quadrangle, 1:24000 scale Topographic map. USGS Publishing, Reston, Virginia.

United States Government Land Office (GLO)

1834 Historical Government Land Office Survey Notes- publication available on the World Wide Web at: <http://digicoll.library.wisc.edu/SurveyNotes>

Western Historical Company

1880 *History of Dane County, Wisconsin*. Western Historical Company, Chicago, Illinois.

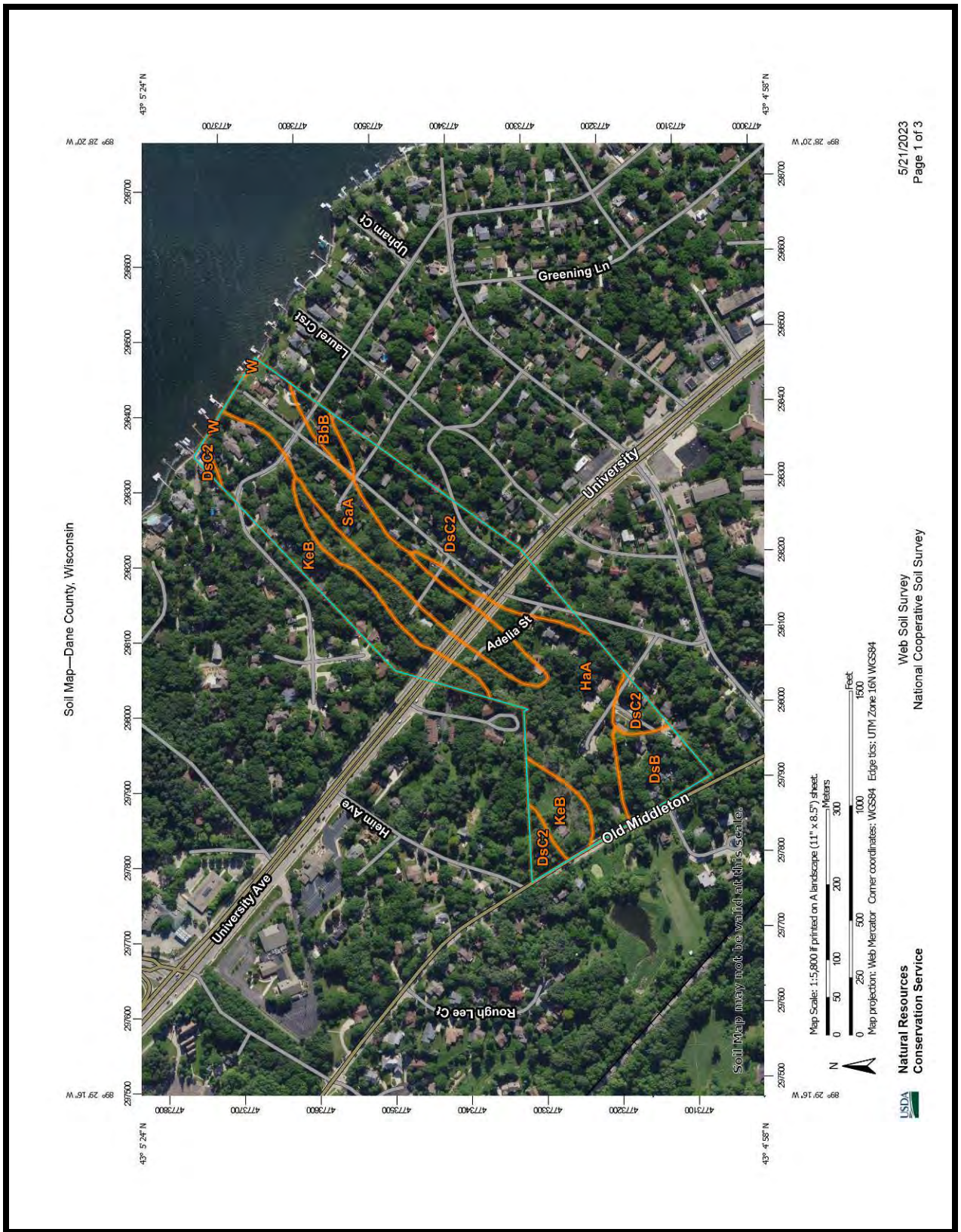
Primary Info																	
State Site #	DA-1604																
Name	6024 Old Middleton Road Foundation																
Other Name																	
Field #																	
ASI #	100628																
Location Information																	
County	Dane																
Municipality	Madison																
Civil Town	Madison																
Location Description	Foundation is along edge of creek terrace 100 feet north of Julia Circle.																
PLSS	<table border="1"> <tr><td>Township</td><td>Range</td><td>Direction</td><td>Section</td><td>QSection</td><td>Grid Alignment</td><td>French Lot</td><td>Gov. Lot</td></tr> <tr><td></td><td>7</td><td>9</td><td>E</td><td>7</td><td>SWSW</td><td></td><td></td></tr> </table>	Township	Range	Direction	Section	QSection	Grid Alignment	French Lot	Gov. Lot		7	9	E	7	SWSW		
Township	Range	Direction	Section	QSection	Grid Alignment	French Lot	Gov. Lot										
	7	9	E	7	SWSW												
UTM Info	<table border="1"> <tr><td>UTM Method</td><td>UTM Zone</td><td>Easting</td><td>Northing</td></tr> <tr><td>Global Positioning System (GPS)</td><td>16</td><td>297988</td><td>4773256</td></tr> </table>	UTM Method	UTM Zone	Easting	Northing	Global Positioning System (GPS)	16	297988	4773256								
UTM Method	UTM Zone	Easting	Northing														
Global Positioning System (GPS)	16	297988	4773256														
USGS 7.5' Quad Info	MADISON WEST																
Parcel ID																	
Site Description																	
Site Description	Low foundation for farmstead utility type building or garage. Building most likely associated with farm visible on historic 1939-40 air photos. Former address was 6024 Old Middleton Road. Concrete appears to date to early 20th century. No associated artifacts.																
Site Dimensions (feet)	50x50																
Site Dimensions (meters)	15x15																
Site Type	Foundation/depression																
Cultural Info	<table border="1"> <tr><td>Culture</td><td>Certainty</td></tr> <tr><td>Historic Euro-American</td><td>Definite</td></tr> </table>	Culture	Certainty	Historic Euro-American	Definite												
Culture	Certainty																
Historic Euro-American	Definite																
Investigation Type	Shovel Testing/Probing, Surface Survey																
Archaeological Phase/Complex																	
Tribe/Ethnic Group	Other Europeans																
Site Status																	
Covenant																	
Site Characteristics																	
Modern Landuse	Recreational																
Degree of Disturbance	Moderate																
Impacts to Sites	Natural Threats																
Burial Site Info																	
National Register Info																	
Other Eligibility Evaluation																	
Individual Eligibility Evaluation																	
Proposed Historic District																	
Contributing																	
Evaluation Date																	
Eligibility Comments																	
Ownership																	
Artifact Info																	
Artifact Repository																	
Material Class																	
Artifact List																	
Date of Site																	
Dating Method																	

Appendix A-1: 47-DA-1604 ASI Form-page 1 (SHSW WHPD).

Investigator Info			
Investigator	Organization	Date	Recommendation
Site Reporter Info			
Reporter			
Organization			
Date Reported			
Bibliography			
Tracking Info			
WHS Project #	ARI #	Reason For Reporting	

The map displays the Great Lakes basin, with Wisconsin and Michigan highlighted in yellow. Several purple square markers are placed on the landmasses, indicating specific sites of interest. A scale bar in the bottom left corner shows a distance of 200 miles. Zoom in (+) and zoom out (-) buttons are located in the top left corner of the map area.

Appendix A-2: 47-DA-1604 ASI Form-page 2 (SHSW WHPD).



Appendix B-1: General Soil Information for the proposed project area, page 1 (NRCS).

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Dane County, Wisconsin
 Survey Area Data: Version 21, Sep 6, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 13, 2020—Jul 31, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

MAP LEGEND

	Area of Interest (AOI)		Soil Area
	Soils		Stony Spot
	Soil Map Unit Polygons		Very Stony Spot
	Soil Map Unit Lines		Wet Spot
	Soil Map Unit Points		Other
	Special Point Features		Special Line Features
	Blowout		Water Features
	Borrow Pit		Streams and Canals
	Clay Spot		Transportation
	Closed Depression		Rails
	Gravel Pit		Interstate Highways
	Gravelly Spot		US Routes
	Landfill		Major Roads
	Lava Flow		Local Roads
	Marsh or swamp		Background
	Mine or Quarry		Aerial Photography
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

Appendix B-2: General Soil Information for the proposed project area, page 2 (NRCS).

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BbB	Batavia silt loam, gravelly substratum, 2 to 6 percent slopes	0.8	2.1%
DsB	Dresden silt loam, 2 to 6 percent slopes	2.5	6.6%
DsC2	Dresden silt loam, 6 to 12 percent slopes, eroded	8.3	22.1%
HaA	Hayfield silt loam, 0 to 3 percent slopes	10.6	28.4%
KeB	Kegonsa silt loam, 2 to 6 percent slopes	8.4	22.4%
SaA	Sable silty clay loam, 0 to 2 percent slopes	6.8	18.3%
W	Water	0.0	0.1%
Totals for Area of Interest		37.4	100.0%



Appendix B-3: General Soil Information for the proposed project area, page 2 (NRCS).

WISCONSIN PUBLIC LANDS FIELD ARCHAEOLOGICAL PERMIT 2023
 REQUIRED TO CONDUCT ARCHAEOLOGY ON ALL NON-FEDERAL PUBLIC LAND UNDER WIS. ST. AT. § 44.47
 Wisconsin Historical Society

Name/Organization/Contact City of Madison Engineering Telephone 608-266-4751
 Address 210 MLK Jr. Blvd. Room 115 City Madison State WI Zip 53711
 E-mail cwegner@cityofmadison.com

Institutional Affiliation _____

Location: County Dane Civil Town Madison

Town 7 North Range 9 East Section 13, 18 Quarter Sections _____

Hwy/Rd Hwy/Rd: _____ Other Type of Project: Drainage

Project Description: The City of Madison is proposing to lower the Mendota-Grassman greenway to prevent flooding.

Type of fieldwork: Phase I/Survey Phase II/Testing Phase III/Excavation Monitoring

Purpose of the fieldwork: Federal Compliance State Compliance Education Other

Site # N/A Burial Site # N/A Burial Permit Secured? Y N WHS #: _____

Dates of field work: Begin date: 24 April 2023 End date: 10 May, 2023

What institution will curate recovered artifacts, notes, and records? UW-Madison
 (A curation agreement must be on file with WHS; all materials must be curated in an appropriate, staffed facility.)

Print name John G. Hodgson see attachments

Signature of Archaeologist _____ Date 17 April, 2023

Maps and/or Letters of explanation can accompany this application

Landowner or custodian name City of Madison Phone 608-266-4751

Affiliation: City of Madison Engineering

Signature of Landowner Greg Fries Digitally signed by Greg Fries Date: 2023.04.17 16:56:35 -05'00'

Administrative use only below this line.

Permit Approved [Signature] Date April 26, 2023

PLP # 23-0747

Dr. James Skibo
 State Archaeologist
 Wisconsin Historical Society
 816 State Street, Madison, WI 53706
 608-264-6496
 statearchaeologist@wisconsinhistory.org

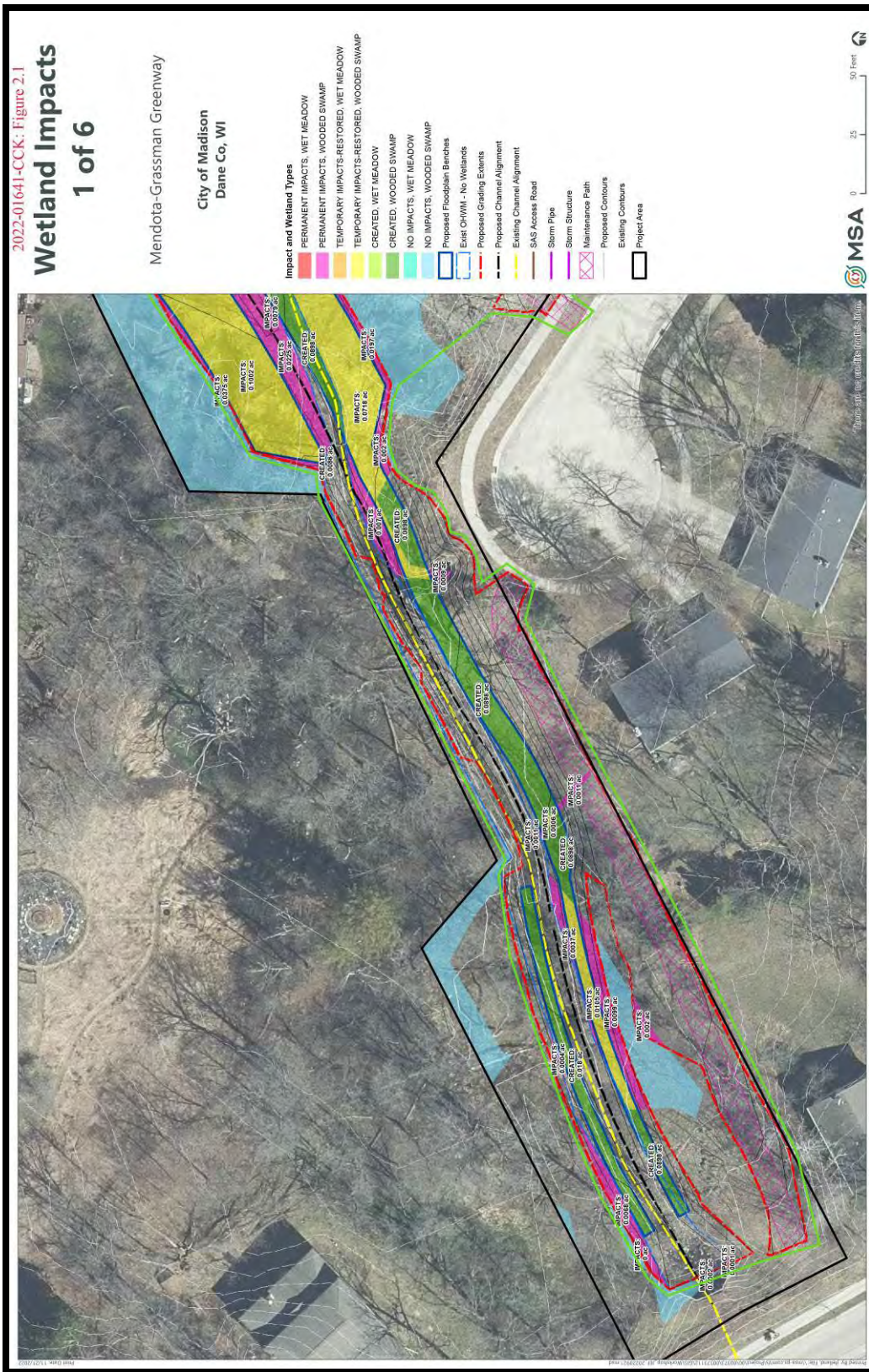


**WISCONSIN
 HISTORICAL
 SOCIETY**

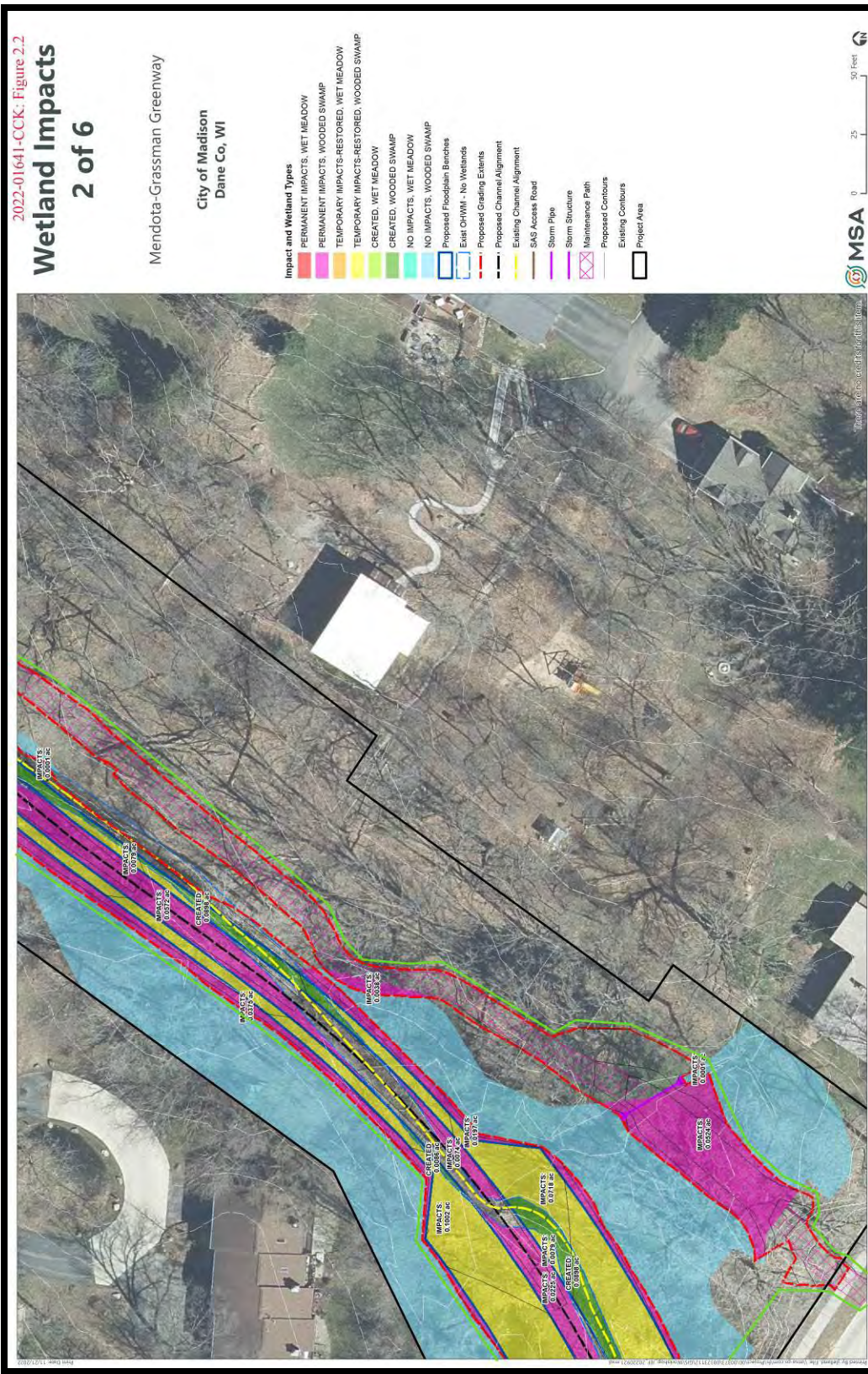
One paper copy and one PDF copy of the final report must be submitted to the State Historic Preservation Office.

Additional authorization or permitting is necessary to conduct work within the boundaries of uncataloged and cataloged human burialsites under Wis. Stat. § 157.70. For more information, wihist.org/Request-to-Disturb

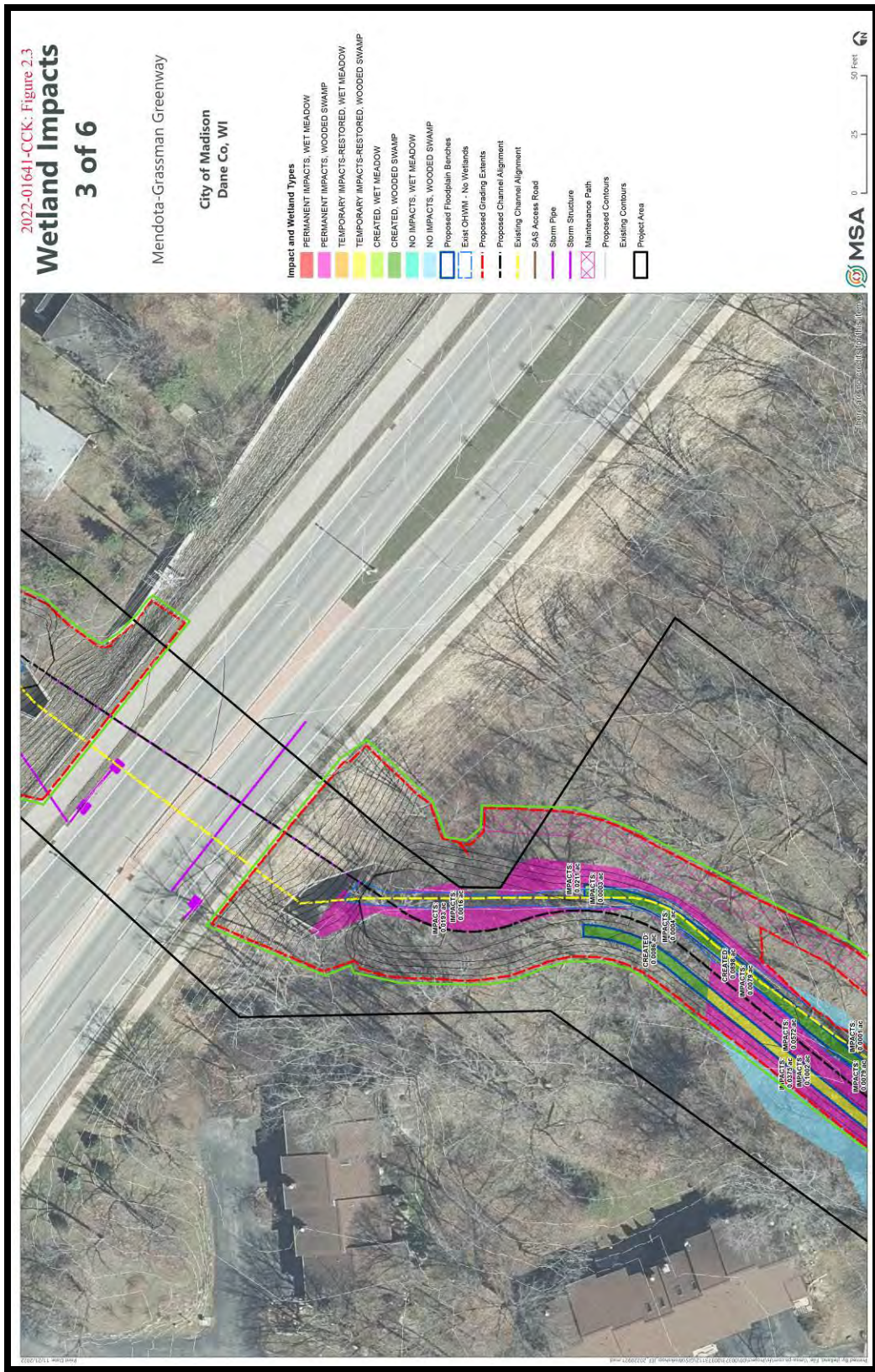
Appendix C-1: Authorization for conducting archaeological investigation on public lands.



Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 1 [Mead and Hunt Image]).



Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 2 [Mead and Hunt Image]).



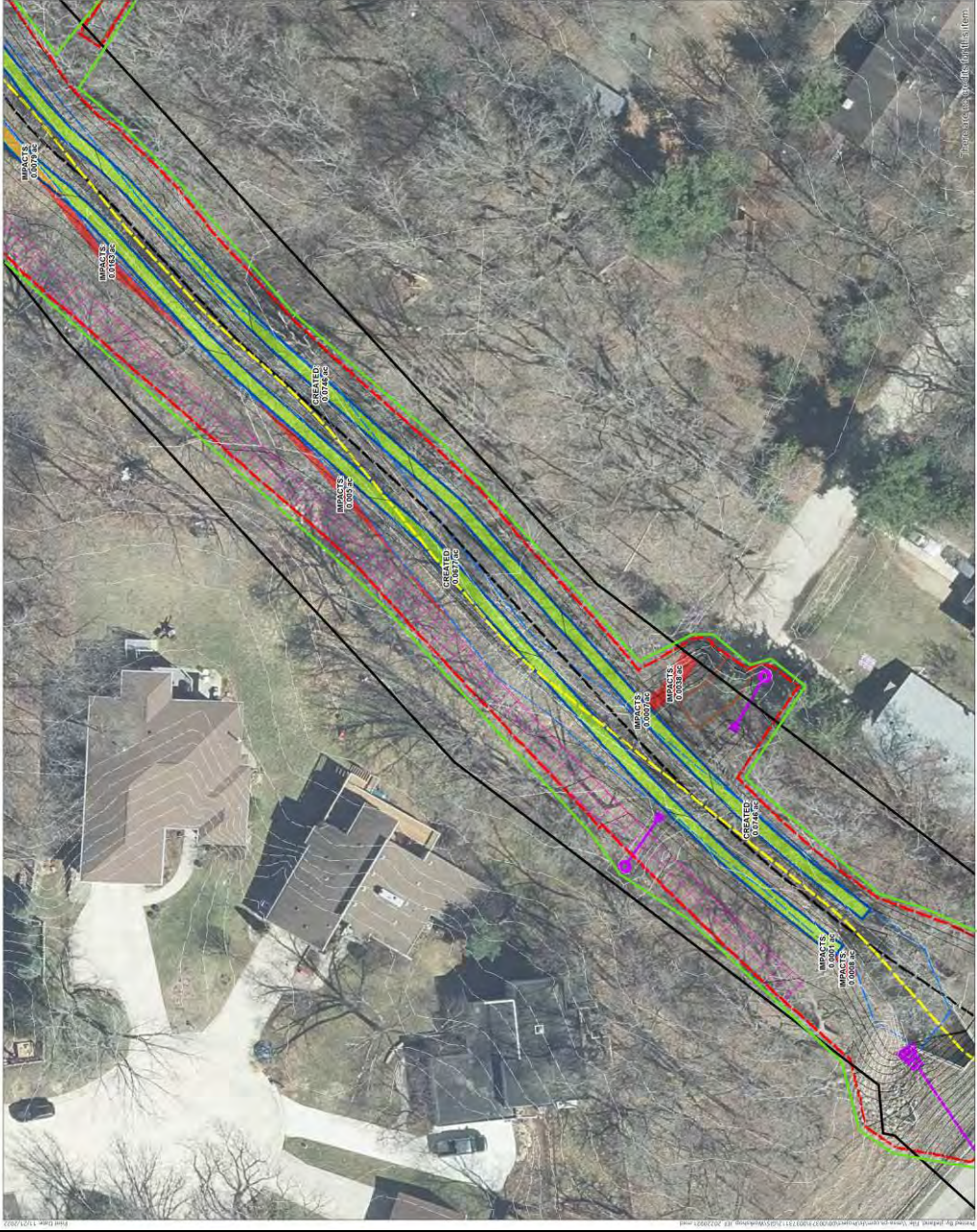
Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 1 [Mead and Hunt Image]).

Wetland Impacts 4 of 6

Mendota-Grassman Greenway

City of Madison
Dane Co, WI

- Impact and Wetland Types**
- PERMANENT IMPACTS, WET MEADOW
 - PERMANENT IMPACTS, WOODED SWAMP
 - TEMPORARY IMPACTS-RESTORED, WET MEADOW
 - TEMPORARY IMPACTS-RESTORED, WOODED SWAMP
 - CREATED, WET MEADOW
 - CREATED, WOODED SWAMP
 - NO IMPACTS, WET MEADOW
 - NO IMPACTS, WOODED SWAMP
 - Proposed Floodplain Benches
 - Exist OHWM - No Wetlands
 - Proposed Grading Extents
 - Proposed Channel Alignment
 - Exist Channel Alignment
 - SAS Access Road
 - Storm Pipe
 - Storm Structure
 - Maintenance Path
 - Proposed Contours
 - Existing Contours
 - Project Area



Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 1 [Mead and Hunt Image]).

Wetland Impacts

5 of 6

Mendota-Grassman Greenway

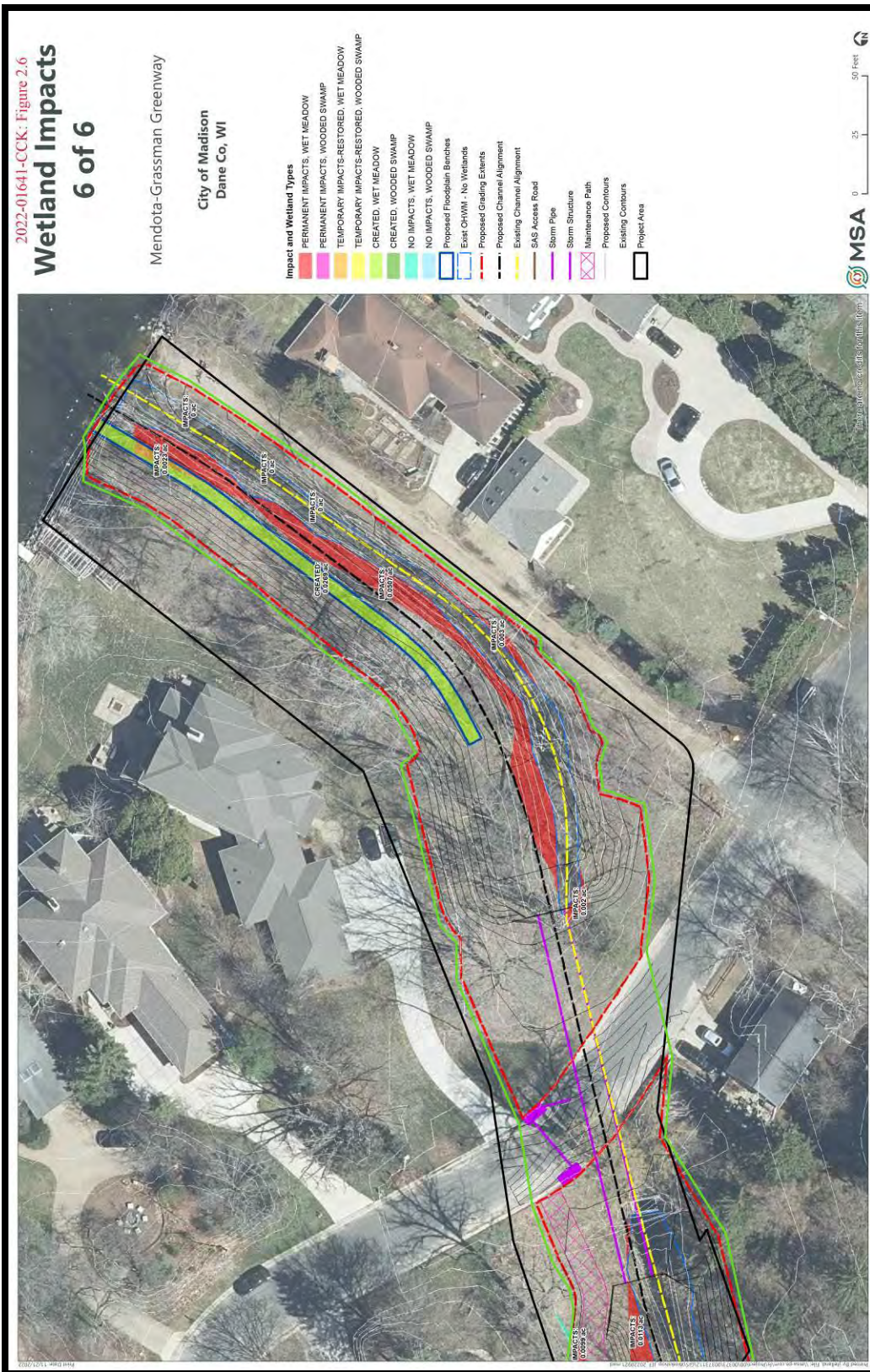
City of Madison
Dane Co, WI

Impact and Wetland Types

- PERMANENT IMPACTS, WET MEADOW
- PERMANENT IMPACTS, WOODED SWAMP
- TEMPORARY IMPACTS-RESTORED, WET MEADOW
- TEMPORARY IMPACTS-RESTORED, WOODED SWAMP
- CREATED, WET MEADOW
- NO IMPACTS, WOODED SWAMP
- NO IMPACTS, WET MEADOW
- Proposed Floodplain Branches
- Exist OHWM - No Wetlands
- Proposed Grading Extents
- Proposed Channel Alignment
- Existing Channel Alignment
- SAS Access Road
- Storm Pipe
- Storm Structure
- Maintenance Path
- Proposed Contours
- Existing Contours
- Project Area



Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 5 [Mead and Hunt Image]).



Appendix D-1: Plan Sheets with proposed construction activities and existing conditions within Project area (Sheet 6 [Mead and Hunt Image]).

ARCHAEOLOGICAL REPORTS INVENTORY FORM

WHS/SHSW # _____ COUNTY: Dane

AUTHORS: John Garwood Hodgson

REPORT TITLE: Proposed Mendota Grassman Greenway Flood Mitigation and Restoration Project Phase I Cultural Resources Investigation Results: City of Madison, Dane County, Wisconsin.

DATE OF REPORT (MONTH AND YEAR): May 2023

SERIES/NUMBER: _____

PLACE OF PUBLICATION: Madison, Wisconsin

LOCATIONAL INFORMATION [LEGAL DESCRIPTION OF SURVEY AREA (T-R-S)]
SE 1/4 of the NW 1/4 of Section 18 and the NE 1/4 of Section 13, Township 7 North and Range 9 East
U.S.G.S. QUAD MAP(S): Madison West (1983).

SITE(S) INVESTIGATED: 47-DA-1604

ACRES INVESTIGATED: 3.77 AGENCY # _____

INVESTIGATION TECHNIQUES COMPLETED (Check all that apply.)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Historical Research | <input checked="" type="checkbox"/> Surface Survey | <input type="checkbox"/> Geomorphology |
| <input type="checkbox"/> Interview/Informant | <input type="checkbox"/> Soil Cores | <input type="checkbox"/> Underwater |
| <input checked="" type="checkbox"/> Records/Background | <input checked="" type="checkbox"/> Walk Over/Visual Inspection | <input type="checkbox"/> Avocational Survey |
| <input checked="" 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 checked="" type="checkbox"/> Shovel Testing/Probing | <input type="checkbox"/> Remote Sensing | <input type="checkbox"/> Floral Analysis |

ABSTRACT: Included in report Written in space below

EXHIBIT 6

UDP

**Archaeological Monitoring Plan- City of Madison Mendota Grassman Greenway Project
14 June, 2023**

John Hodgson

This document outlines an archaeological monitoring plan for the proposed City of Madison Mendota-Grassman Greenway Project located in the southwest area of the City of Madison, Dane County, Wisconsin. This plan supplements information and methodological guidelines described in: *Proposed Mendota Grassman Greenway Flood Mitigation and Restoration Project Phase I Cultural Resources Investigation Results: City of Madison, Dane County, Wisconsin* (Hodgson 2023).

The location of the proposed project is in close proximity to a large number of known prehistoric archaeological sites and near the southern shoreline of Lake Mendota in an area with a higher probability of containing archaeological sites. During field investigation of the project area, fill and non-local rock and cement materials prevented shovel-testing of naturally deposited soils that may contain archaeological deposits.

For this reason, the Principal Investigator recommended (Hodgson 2023) that archaeological monitoring will be required within the area of proposed ground disturbing of the project where the soils underneath the surface covering materials (rock and fill etc.) are known to be non-local soils, crushed rock, gravel, or fill. The PI (Hodgson 2023) recommended the requirement that ground disturbing construction activities are required to be observed by an archaeologist meeting the Secretary of the Interior (SOI) criteria as a “qualified archaeologist” until the depth and horizontal limits of ground disturbance has been reached. If the areas are found to be fill or soils that do not contain archaeological deposits, monitoring will no longer be required.

After review of the field investigation findings, coordination with the State Historical Society of Wisconsin, Mr. William Quackenbush of the Ho-Chunk Nation, and representatives of the U.S. Army Corps of Engineers the following plan was developed.

1. All ground disturbing activities must be monitored by an archaeologist meeting the SOI criteria for “Qualified Archaeologist” as described in Appendix A of 36 CFR 61 (National Park Service 1983). The archaeologist will have authority to stop ground disturbing activities at his or her discretion during the Project for reasons associated with the discovery of cultural materials.
2. Pursuant to Federal and Wisconsin State laws, should grave markers or human skeletal remains be encountered during construction, all activities in the area are required to cease immediately and the Ho-Chunk Nation, U.S. Corps of Engineers, and the State of Wisconsin Burial Sites Preservation Office must be contacted at 608-264-6503 or 800-342-7834 for further instructions.
3. In the event any archaeological materials are encountered during the project, all construction activities be brought to a halt within 50-feet of the find location. The PI will investigate the discovery to determine the significance, should he/she determine intact materials or features, the PI will evaluate the discovery and the Ho-Chunk Nation, U.S. Army Corps of Engineers, and the State of Wisconsin Burial Sites Preservation Office will be contacted to determine the best course of action following discovery prior to continuing work.
4. Following completion of archaeological monitoring, the PI will generate a report of observations and findings made during observation of the ground disturbing construction and submit the report to the USACE.
5. Any modifications to the project design may require additional investigations and a modified survey report. If changes are made to plans, personnel in the Office of Historic Preservation at SHSW should be consulted to ensure that compliance standards have been met prior to any construction at the proposed site location.

References Cited

National Park Service

1983 Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. National Park Service, Department of the Interior, Washington, D.C.

Hodgson, John

2023 *Proposed Mendota Grassman Greenway Flood Mitigation and Restoration Project Phase I Cultural Resources Investigation Results: City of Madison, Dane County, Wisconsin.*