

May 31, 2022

Mr. Colin Maus
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

Re: Initial Site Inspection Request
Adams County Landfill
Adams County, Wisconsin
License #3150

Dear Mr. Maus,

On the behalf of the Adams County Solid Waste Department (County), Ayres Associates is submitting this Initial Site Inspection (ISI) request for potential expansion of the existing municipal solid waste (MSW) landfill, License #3150. The estimated remaining life of the MSW landfill and the timeframe to permit the expansion of the landfill dictates that the expansion process needs to start at this time. This ISI request incorporates the requirements for an ISI for a MSW landfill and soil borrow source (NR 509.04).

NR 509.04 (4)(a) – Applicant and Authorized Contact

Mr. Charlie Kuhn, Director
Adams County Solid Waste Department
1420 State Highway 21
Friendship, WI 53934
(608)339-9178 Ext.304

NR 509.04 (4)(a) – Type of Landfill

MSW Landfill

NR 509.04 (4)(a) – Proposed Operation

Proposed Vertical Expansion – Adams County Landfill, License #3150
Soil Borrow Source for construction of future horizontal expansions

NR 509.04 (4)(a) – Current Property Ownership

Adams County Solid Waste Department

NR 509.04 (4)(a) – Property Location

Physical Address
1420 State Highway 21
Friendship, WI 53934

Legal Description

Landfill Expansion – SW ¼, NE ¼ of Section 13 & SE ¼, NE ¼ of Section 13
Soil Borrow Source – SE ¼, NW ¼ of Section 13 & NE ¼, NW ¼ of Section 13
Town of Strong Prairie
Township – 18N, Range – R5E

NR 509.04 (4)(a) – Present Land Use

MSW Landfill #3150, Closed C&D Landfill, Recycling Material Recovery Facility, Composting Facility, MSW collection facility, office and maintenance building, agriculture, and vacant land (woodland).

NR 509.04 (4)(b) – Known impacts to Endangered and Threatened Species or Historical, Scientific, or Archeological Areas

Endangered and Threatened Species

Ayres Associates requested an Endangered Resources Review for both the vertical expansion and the soil borrow source. Ayres received the ERR review verification from the Department on January 19, 2022, which indicated the proposed vertical expansion of the landfill is covered by Activity 1-A12, vertical landfill expansion. A determination of no/low impact will be made to endangered and threatened species in the state.

We also received an Endangered Resources Review (ERR, Log #22-157) from the Department in regard to this proposed project on March 13, 2022, in regard to the soil borrow source. The review indicated one endangered (1) specie of required action, one endangered (1) specie of recommended action, and three endangered (3) species of No Follow-up action to be taken. Ayres Associates performed the Level 1 vegetation survey that satisfied the required action. No instances of the vegetation were identified in the project area. Please refer to Appendix A for the ERR Verification and survey results.

Historic and Archaeological Sites

Ayres Associates conducted a historical and archeological search at the Wisconsin Historical Society using the Wisconsin Archeological Site Inventory (ASI) and the Architectural Historical Inventory (AHI) databases in Madison, WI. There are no known historic or archeological findings within the proposed project area. See Appendix B for search results regarding historical and archeological findings.

NR 509.04 (4)(d) – Site Map

Refer to Figure 1 for the regional location of the proposed vertical expansion and soil borrow source. Figure 2 is a Solid Waste Adams County ownership map.

NR 509.04 (4)(e) – Potential Conflicts with Locational Criteria

Evaluation of potential conflicts with locational criteria related to the proposed landfill expansion and proposed clay borrow source are summarized in Table 1. A wetlands map attached in Figure 3 and a national flood plain is attached in Figure 4. There are no wetlands or flood hazard zones located within the project site boundaries. In addition, there are no surface waters located on the property as shown in figures.

Table 1 - Landfill Expansion – Evaluation of Locational Criteria [NR 504.04(3)]

Locational Criteria	Potential Conflict?
Within 1,000 feet to the nearest navigable lake, pond, or flowage	No
Within 300 feet to the nearest navigable river or stream	No
Within a floodplain	No
Within 1,000 feet to the edge of right-of-way to a state or federal highway	No
Within 5,000 feet to the end of runway for piston airplanes	No
Within 10,000 feet to the end of runway for turbojet airplanes	No
Within 1,200 feet of a water supply well	No
Within 200 feet of a fault line	No
Within a seismic impact zone	No
Within an unstable area	No
Anticipated to have a detrimental effect on any surface water	No

Feel free to contact myself or Logan Seipel at (715) 831-7685 or Seipell@ayresassociates.com if you have any questions regarding this ISI request. Please invoice Adams County directly for the ISI site visit. To schedule the ISI, visit please contact Mr. Charlie Kuhn at (608) 339-9178, Ext. 3.

Mr. Maus
May 31, 2022
Page 3 of 3

Sincerely,

Ayres Associates Inc



Michael G. Leopold, E.I.T
Environmental Engineering Staff
Direct: 715.831.7534
Office: 715.834.3161
LeopoldM@AyresAssociates.com

ML:ac

Enclosure – Figure 1 – Regional Location Map
Figure 2 – Property Ownership Map
Figure 3 – Wetlands and Surface Water Bodies
Figure 4 – National Flood Hazard Map
Appendix A – Endangered Resources Verification and Survey Assessment
Appendix B – Historical and Archeological Review Results

cc: Mr. Charlie Kuhn – Adams County Solid Waste Department
Mr. Michael Leopold – Ayres Associates

Figure 1

Regional Location Map

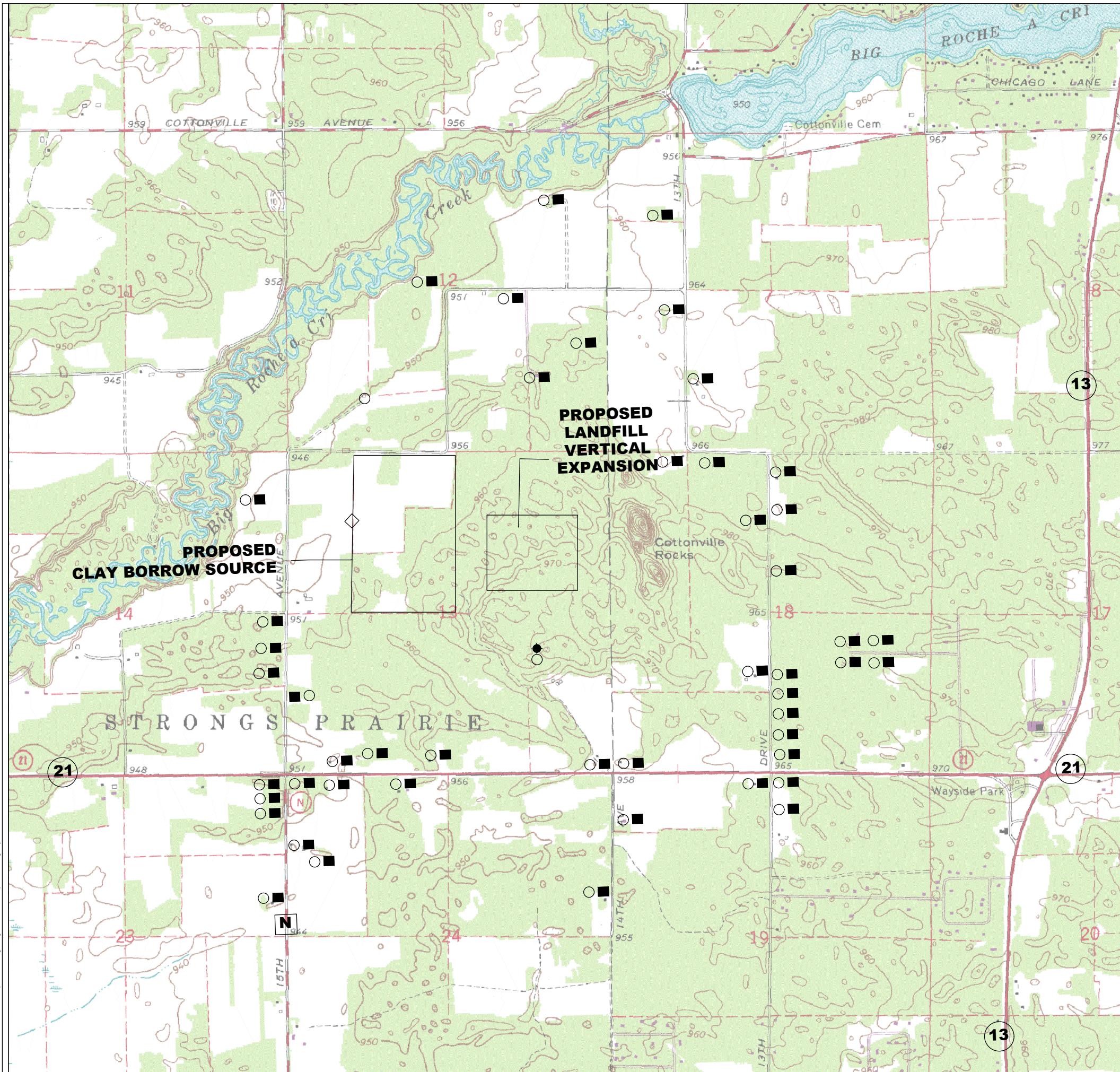


Figure 2

Property Ownership Map

Solid Waste Adams County Ownership Map



3/21/2022, 11:46:35 AM

1:18,056

Municipal Boundary

Property Addresses

Search Property by Name Query result

PLSS Section

Parcels

Quarter Sections

A number line representing distance. The line starts at 0 and ends at 1 km. Major tick marks are labeled at 0, 0.25, 0.5, and 0.75. Minor tick marks are labeled at 0.15 and 0.3. The label "0.6 mi" is placed at the 0.6 mark on the line.

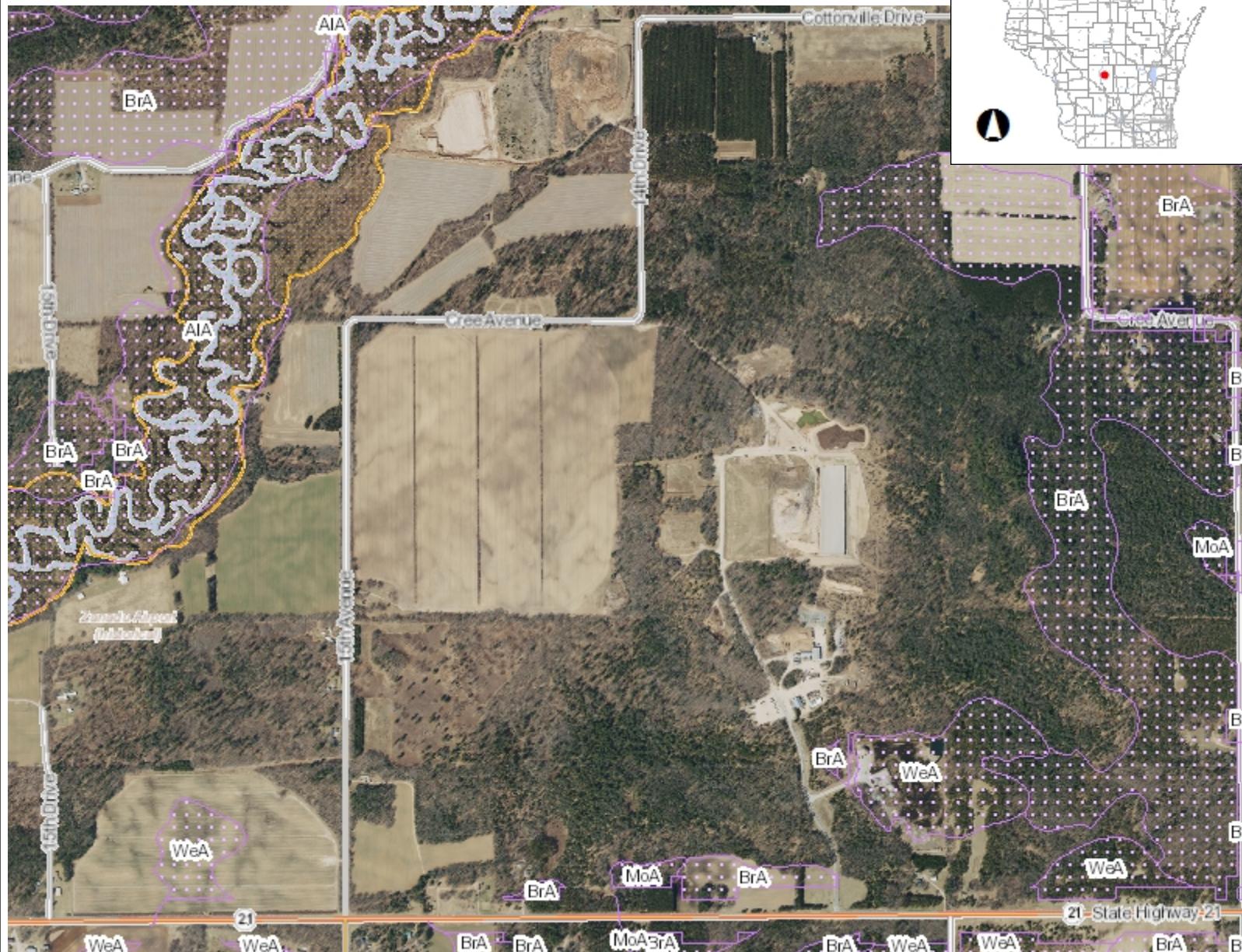
Ayres Associates, Esri Canada, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA

Figure 3

Wetlands and Surface Water Bodies



Surface Water Data Viewer Map



0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>



Legend

- Wetland Indicators
- Wetland Class Areas
- Wetland Class Points
 - Dammed pond
 - Excavated pond
 - Filled/drained wetland
 - Wetland too small to delineate
 - Filled excavated pond
- Filled Points
- Wetland Class Areas
- Filled Areas
- Wetland Class Areas
- Wetland Class Points
 - Dammed pond
 - Excavated pond
 - Filled/drained wetland
 - Wetland too small to delineate
 - Filled excavated pond
- Filled Points
- Wetland Class Areas
- Filled Areas
- Wetland Class Areas
- Wetland Class Points
 - Dammed pond
 - Excavated pond
 - Filled/drained wetland
 - Wetland too small to delineate
 - Filled excavated pond
- NRCS Wetspots
- Critical Habitat Areas
 - Other Public Rights Feature
 - Sensitive Area Designation
- Municipality
- State Boundaries
- County Boundaries
- Major Roads
 - Interstate Highway
 - State Highway
 - US Highway
- Local Roads

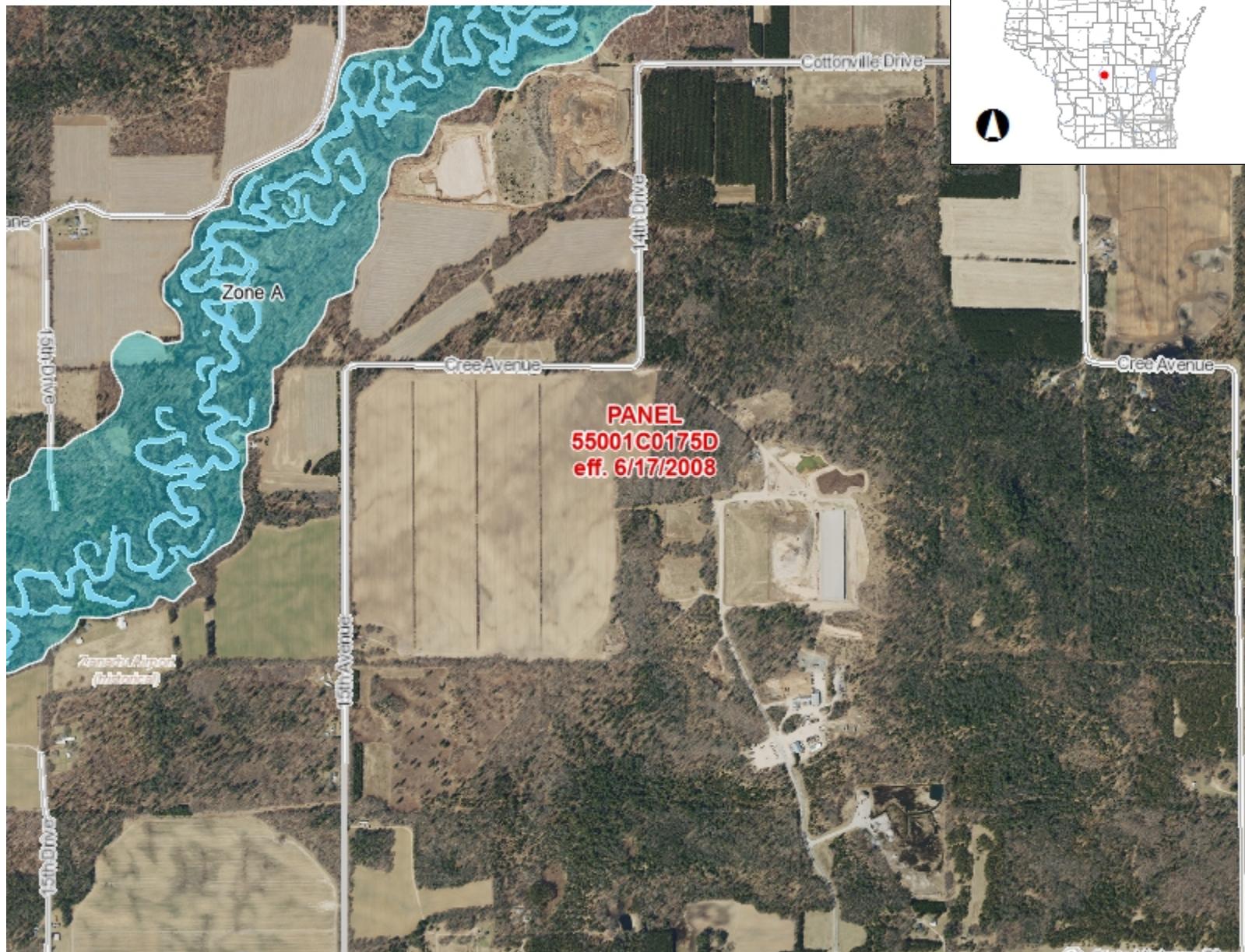
Notes

Figure 4

National Flood Hazards Map



National Flood Hazard Map



0.5

0

0.25

0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

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Legend

2D Water Surface Elevation Grid

High : 937.446

Low : 855.125

Dams

Yellow: Dams with FERC License

Red: Dams

Record Flood Levels

Analysis Lines

Other

Flood Insurance Study

Letter of Map Revision

Case By Case Analysis

Bridge

Analysis Points

Other

Flood Insurance Study

Letter of Map Revision

Case By Case Analysis

Bridge

Analysis Catchments

Floodplain Storage

Cross Sections

Floodplains

Flood Fringe

Floodway

FERC Project Area Boundaries

DOT Bridges

Statewide Paper FIRM Index

FIRM Panels

Cross-Sections

Flood Hazard Boundaries

Limit Lines

Notes

Appendix A

Endangered Resources Verification and Survey Assessment

Endangered Resources (ER) Review Verification
Broad Incidental Take Permit/Authorization
for No/Low Impact Activities
Form 1700-079 (R 1/20)

Notice: This form is authorized by s. 29.604, Wis. Stats. This completed signed form, once submitted to DNRERRReview@wi.gov using the Submit by Email button at the bottom of the form, fulfills the requirement of an Endangered Resources Review and should be attached to other permits requiring an ER Review to show that Endangered Resources requirements have been met. Personal information collected on this form will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.].

Instructions: Complete this form if your project is covered under the Broad Incidental Take Permit/Authorization for No/Low Impact Activities and therefore does not require an Endangered Resources Review.

Section 1: Applicant and Project Information

Requester Name	Organization or Agency Name			
Haley Jahnel	Ayres Associates			
Project Name	County	Township	Range	Section
Adams County Landfill Vertical Expansion	Adams	18 N	5	<input checked="" type="radio"/> E <input type="radio"/> W 13
Telephone Number	Email Address			
(608) 443-1200	jahnelh@ayresassociates.com			

Project Description

Vertical expansion of an existing landfill.

Indicate who you are completing this form as:

DNR Staff
 Certified Reviewer
 Other: _____

Section 2: Broad Incidental Take Permit/Authorization Coverage Information

How is your project covered under the Broad Incidental Take Permit/Authorization for No/Low Impact Activities?

It is included in the list of activities in Table 1 – No/Low Impact Table for All Species at All Times of the Year.
 It is included in the list of activities in Table 2 – No/Low Impact Table by Taxa Group for DNR Staff and ER Certified Reviewers Only and the Taxa groups for the species of concern are covered.
 It is included in the list of activities in Table 2 – No/Low Impact Table by Taxa Group for DNR Staff ER Certified Reviewers Only and the species of concern are covered by the Avoidance Measures document.

Activity Number(s)

1-A12, Vertical landfill expansion

Section 3: Applicant Certification

By my signature below, I certify that to the best of my knowledge, the information stated above is complete and accurate.

NOTE: If submitting this verification electronically, please type your name on the signature line. Your typed name, along with the email message generated from electronic submittal of this form, will be used as an electronic signature which is the legal equivalent to an actual signature.

Melissa Tumbleson
Signature

1/19/2022
Date Signed

Melissa Tumbleson
Requester/Submitter Name (please print)



State of Wisconsin / DEPARTMENT OF NATURAL RESOURCES

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

101 S. Webster St.
Box 7921
Madison, WI 53707-7921

March 13, 2022

Michael Leopold
Ayres Associates
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

SUBJECT: Endangered Resources Review (ERR Log # 22-157)
Proposed Adams County Landfill Clay Borrow, Adams County, WI (T18N R05E S12, T18N R05E S13)

Dear Michael Leopold,

The Bureau of Natural Heritage Conservation has reviewed the proposed project described in the Endangered Resources (ER) Review Request received February 28, 2022. The complete ER Review for this proposed project is attached and follow-up actions are summarized below:

Required Actions: 1 species

Recommended Actions: 1 species

No Follow-Up Actions: 3 species

Additional Recommendations Specified: No

This ER Review may contain Natural Heritage Inventory data (<http://dnr.wi.gov/topic/NHI>), including specific locations of endangered resources, which are considered sensitive and are not subject to Wisconsin's Open Records Law. Information contained in this ER Review may be shared with individuals who need this information in order to carry out specific roles in the planning, permitting, and implementation of the proposed project. **Specific locations of endangered resources may not be released or reproduced in any publicly disseminated documents.**

The attached ER Review is for informational purposes and only addresses endangered resources issues. **This ER Review does not constitute DNR authorization of the proposed project and does not exempt the project from securing necessary permits and approvals from the DNR and/or other permitting authorities.** Please contact the ER Review Program whenever the project plans change, new details become available, or more than a year has passed to confirm if results of this ER Review are still valid.

Please contact me at 608-264-8968 or via email at anna.rossler@wi.gov if you have any questions about this ER Review.

Sincerely,

Anna Rossler
Endangered Resources Review Program

CC:

**Endangered Resources Review for the Proposed Adams County Landfill Clay Borrow, Adams County
(ER Log # 22-157)**

Section A. Location and brief description of the proposed project

Based on information provided by the ER Review Request form and attached materials, the proposed project consists of the following:

Location	Adams County - T18N R05E S12, T18N R05E S13
Project Description	The site for clay borrow source is a proposed project along with a vertical expansion of the landfill that received ERR verification. The request is part of the DNR Solid Waste permitting, initial site inspection for a clay borrow source. Work associated with the clay borrow source includes clearing, grubbing, access roads, excavation of overburden and clay and hauling. The clay borrow source is approximately 92 acres.
Project Timing	TBD
Current Habitat	The site for clay borrow source consists of 92 acres. 80% is currently used as a agricultural land for the leased farming practices. The remaining 20% is forested areas in between the proposed borrow site and the existing closed C&D landfill and infiltration basin.
Impacts to Wetlands or Waterbodies	Big Roche-A-Cri Creek is approximately 0.3 miles northwest of the proposed projects. No suspected impacts. No discharge anticipated.
Property Type	Private
Federal Nexus	Unknown

It is best to request ER Reviews early in the project planning process. However, some important project details may not be known at that time. Details related to project location, design, and timing of disturbance are important for determining both the endangered resources that may be impacted by the project and any necessary follow-up actions. Please contact the ER Review Program whenever the project plans change, new details become available, or more than a year has passed to confirm if results of this ER Review are still valid.

Section B. Endangered resources recorded from within the project area and surrounding area

	Group	State Status	Federal Status
A Riffle Beetle (<i>Stenelmis antennalis</i>)	Beetle~	SC/N	
Floodplain Forest (<i>Floodplain forest</i>)	Community~	NA	
Sioux (Sand) Snaketail (<i>Ophiogomphus smithi</i>)	Dragonfly~	SC/N	
Karner Blue Butterfly High Potential Range	Other	NA	HPR
Brittle Prickly-pear (<i>Opuntia fragilis</i>)	Plant	THR	

For additional information on the rare species, high-quality natural communities, and other endangered resources listed above, please visit our Biodiversity (<http://dnr.wi.gov/topic/EndangeredResources/biodiversity.html>) page. For further definitions of state and federal statuses (END=Endangered, THR=Threatened, SC=Special Concern), please refer to the Natural Heritage Inventory (NHI) Working List (<http://dnr.wi.gov/topic/nhi/wlist.html>).

Section C. Follow-up actions

Actions that need to be taken to comply with state and/or federal endangered species laws:

- Karner Blue Butterfly High Potential Range - Other

State Status: NA Federal Status: HPR

Impact Type	Impact possible
Required Measures	Surveys
Description of	While the agricultural area is not considered suitable habitat, portions of the north, east and southern borders, particularly the wooded

Required Measures	<p>areas, are located within the Karner Blue Butterfly (KBB) High Potential Range (HPR). To see where the project falls within the HPR downloaded the layer here: https://www.arcgis.com/home/item.html?id=1383d5610dc8486f92ffda60d2c43510 or find the interactive map here: https://dnr.wisconsin.gov/topic/endangeredresources/karner/range.html</p> <p>The wild lupine (<i>Lupinus perennis</i>) is the host plant for this species and suitable habitat may be present at the project site. Therefore, the following surveys need to be conducted in areas within the HPR:</p> <p>1) Wild lupine surveys will need to be conducted by a certified surveyor, (http://wiatri.net/er/nhitraining/docs/KBBSurveyors.pdf) from green-up to July 31 and prior to any ground disturbance at the site. If lupine is not present on the site, then no further action for the butterfly is necessary. Lupine survey forms can be found at the WDNR KBB HCP website (https://dnr.wi.gov/topic/endangeredresources/karner/access.html). To see if you qualify to take they training to become a surveyor, please visit the website.</p> <p>2) If lupine is identified at the project site, additional surveys will be required to determine the presence of the Karner Blue Butterfly. These surveys must be conducted by a certified surveyor (http://wiatri.net/er/nhitraining/docs/KBBSurveyors.pdf) during the two peak flight periods (roughly late May - late June and mid July - late August). If KBBs are not present on site, then no further action for the butterfly is necessary. Both wild lupine and KBB survey results should be submitted to the Endangered Resources Review Program.</p> <p>If the Karner Blue Butterfly is present on or near the site, please coordinate with the U.S. Fish and Wildlife Service (952-252-0092) or the WDNR HCP Coordinator (Rebecca.Roth@wisconsin.gov) on measures to avoid impacts to the butterfly. If avoidance of all occupied habitat is not possible and the project may result in take of the butterfly, the applicant can become a partner to the Wisconsin Statewide KBB Habitat Conservation Plan (HCP).</p> <p>If the project is already an HCP partner, please follow the specific management protocols.</p>
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Actions recommended to help conserve Wisconsin's Endangered Resources:

• Brittle Prickly-pear (*Opuntia fragilis*) - Plant

State Status: THR

Impact Type	Impact possible
Recommended Measures	Surveys, Other
Description of Recommended Measures	<p>While the agricultural areas or any maintained areas would not be suitable, suitable habitat for the Brittle Prickly-pear may be present in other portions of the project site. Although not required because plants are not legally protected on private property, we recommend that you avoid or minimize take of the Brittle Prickly-pear. Avoidance and minimization efforts may include site surveys to confirm presence/absence of species and fencing off areas of occupied habitat. Survey results should be submitted to the Endangered Resources Review Program.</p> <p>Brittle Prickly-pear (<i>Opuntia fragilis</i>), a Wisconsin Threatened plant, is found in thin, dry soil over rock, as well as sand prairies. Blooming occurs early June through late July; fruiting occurs early July through late August. This species can be identified year-round.</p>

Remember that although these actions are not required by state or federal endangered species laws, they may be required by other laws, permits, granting programs, or policies of this or another agency. Examples include the federal Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, State Natural Areas law, DNR Chapter 30 Wetland and Waterway permits, DNR Stormwater permits, and Forest Certification.

No actions are required or recommended for the following endangered resources:

• A Riffle Beetle (*Stenelmis antennifer*) - Beetle

State Status: SC/N

Impact Type	No impact or no/low broad ITP/A
Reason	Lack of Suitable Habitat within Project Boundary
Justification	<p>No suitable habitat is present at or adjacent to the project site. No impacts are anticipated.</p> <p>A Riffle Beetle (<i>Stenelmis antennifer</i>), a State Special Concern species, has been found in submerged wood in large sandy rivers.</p>

• Floodplain Forest - Community~

State Status: NA

Impact Type	No impact or no/low broad ITP/A
Reason	Lack of Suitable Habitat within Project Boundary
Justification	No Floodplain Forest is present at or adjacent to the project site. No impacts are anticipated.

• Sioux (Sand) Snaketail (*Ophiogomphus smithi*) - Dragonfly~

State Status: SC/N

Impact Type	No impact or no/low broad ITP/A
Reason	Lack of Suitable Habitat within Project Boundary
Justification	<p>No suitable habitat is present at or adjacent to the project site. No impacts are anticipated.</p> <p>Sioux (Sand) Snaketail (<i>Ophiogomphus smithi</i>), a State Special Concern dragonfly, has been found in small to medium clean, fast-flowing sandy warm streams. The flight period extends from late May through mid June.</p>

Section D. Next Steps

- Evaluate whether the '**Location and brief description of the proposed project**' is still accurate. All recommendations in this ER Review are based on the information supplied in the ER Review Request. If the proposed project has changed or more than a year has passed and you would like your letter renewed, please contact the ER Review Program to determine if the information in this ER Review is still valid.
- Determine whether the project can incorporate and implement the '**Follow-up actions**' identified above:
 - 'Actions that need to be taken to comply with state and/or federal endangered species laws' represent the Department's best available guidance for complying with state and federal endangered species laws based on the project information that you provided and the endangered resources information and data available to us. If the proposed project has not changed from the description that you provided us and you are able to implement all of the 'Actions that need to be taken to comply with state and/or federal endangered species laws', your project should comply with state and federal endangered species laws. Please remember that if a violation occurs, the person responsible for the taking is the liable party. Generally this is the landowner or project proponent. For questions or concerns about individual responsibilities related to Wisconsin's Endangered Species Law, please contact the ER Review Program.
 - If the project is unable to incorporate and implement one or more of the 'Actions that need to be taken to comply with state and/or federal endangered species laws' identified above, the project may potentially violate one or more of these laws. Please contact the ER Review Program immediately to assist in identifying potential options that may allow the project to proceed in compliance with state and federal endangered species laws.
 - 'Actions recommended to help conserve Wisconsin's Endangered Resources' may be required by another law, a policy of this or another Department, agency or program; or as part of another permitting, approval or granting process. Please make sure to carefully read all permits and approvals for the project to determine whether these or other measures may be required. Even if these actions are not required by another program or entity for the proposed project to proceed, the Department strongly encourages the implementation of these conservation measures on a voluntary basis to help prevent future listings and protect Wisconsin's biodiversity for future generations.
- If federally-protected species or habitats are involved and the project involves federal funds, technical assistance or authorization (e.g., permit) and there are likely to be any impacts (positive or negative) to them, consultation with USFWS will need to occur prior to the project being able to proceed. If no federal funding, assistance or authorization is involved with the project and there are likely to be adverse impacts to the species, contact the USFWS Twin Cities Ecological Services Field Office at 612-725-3548 (x2201) for further information and guidance.

Section E. Standard Information to help you better understand this ER Review

Endangered Resources (ER) Reviews are conducted according to the protocols in the guidance document *Conducting Proposed Endangered Resources Reviews: A Step-by-Step Guide for Wisconsin DNR Staff*.

How endangered resources searches are conducted for the proposed project area: An endangered resources search is performed as part of all ER Reviews. A search consists of querying the Wisconsin Natural Heritage Inventory (NHI) database for endangered resources records for the proposed project area. The project area evaluated consists of both the specific project site and a buffer area surrounding the site. A 1 mile buffer is considered for terrestrial and wetland species, and a 2 mile buffer for aquatic species. Endangered resources records from the buffer area are considered because most lands and waters in the state, especially private lands, have not been surveyed. Considering records from the entire project area (also sometimes referred to as the search area) provides the best picture of species and communities that may be present on your specific site if suitable habitat for those species or communities is present.

Categories of endangered resources considered in ER Reviews and protections for each: Endangered resources records from the NHI database fall into one of the following categories:

- Federally-protected species include those federally listed as Endangered or Threatened and Designated Critical Habitats. Federally-protected animals are protected on all lands; federally-protected plants are protected only on federal lands and in the course of projects that include federal funding (see Federal Endangered Species Act of 1973 as amended).
- Animals (vertebrate and invertebrate) listed as Endangered or Threatened in Wisconsin are protected by Wisconsin's Endangered Species Law on all lands and waters of the state (s. 29.604, Wis. Stats.).

- Plants listed as Endangered or Threatened in Wisconsin are protected by Wisconsin's Endangered Species Law on public lands and on land that the person does not own or lease, except in the course of forestry, agriculture, utility, or bulk sampling actions (s. 29.604, Wis. Stats.).
- Special Concern species, high-quality examples of natural communities (sometimes called High Conservation Value areas), and natural features (e.g., caves and animal aggregation sites) are also included in the NHI database. These endangered resources are not legally protected by state or federal endangered species laws. However, other laws, policies (e.g., related to Forest Certification), or granting/permitting processes may require or strongly encourage protection of these resources. The main purpose of the Special Concern classification is to focus attention on species about which some problem of abundance or distribution is suspected before they become endangered or threatened.
- State Natural Areas (SNAs) are also included in the NHI database. SNAs protect outstanding examples of Wisconsin's native landscape of natural communities, significant geological formations, and archeological sites. Endangered species are often found within SNAs. SNAs are protected by law from any use that is inconsistent with or injurious to their natural values (s. 23.28, Wis. Stats.).

Please remember the following:

1. This ER Review is provided as information to comply with state and federal endangered species laws. By following the protocols and methodologies described above, the best information currently available about endangered resources that may be present in the proposed project area has been provided. However, the NHI database is not all inclusive; systematic surveys of most public lands have not been conducted, and the majority of private lands have not been surveyed. As a result, NHI data for the project area may be incomplete. Occurrences of endangered resources are only in the NHI database if the site has been previously surveyed for that species or group during the appropriate season, and an observation was reported to and entered into the NHI database. As such, absence of a record in the NHI database for a specific area should not be used to infer that no endangered resources are present in that area. Similarly, the presence of one species does not imply that surveys have been conducted for other species. Evaluations of the possible presence of rare species on the project site should always be based on whether suitable habitat exists on site for that species.
2. This ER Review provides an assessment of endangered resources that may be impacted by the project and measures that can be taken to avoid negatively impacting those resources based on the information that has been provided to ER Review Program at this time. Incomplete information, changes in the project, or subsequent survey results may affect our assessment and indicate the need for additional or different measures to avoid impacts to endangered resources.
3. This ER Review does not exempt the project from actions that may be required by Department permits or approvals for the project. Information contained in this ER Review may be shared with individuals who need this information in order to carry out specific roles in the planning, permitting, and implementation of the proposed project.

MEMORANDUM

To: Michael Leopold

From: Rob Wayne

Date: May 25, 2022 Project No.: 52-0755.50

Re: Adams County Landfill Clay Borrow Sites – Karner Blue Butterfly/Lupine Level 1 Survey

On May 24, 2022 Rob Wayne, Environmental Scientist with Ayres, performed Karner Blue Butterfly and Lupine Level 1 Survey at the Adams County Landfill Clay Borrow Sites. The sites are located in Sections 12 & 13 of Township 18 North, Range 5 East. See attached map for specific site locations.

The Karner blue assessment involved a Level 1 Lupine Presence/Absence survey, as prescribed by the Wisconsin DNR's Habitat Conservation Plan. Wild lupine (*Lupinus perennis*), which is the host plant for the Karner blue. Wild lupine was surveyed for in areas of suitable habitat—generally dry, open areas where the herb layer receives plentiful sunlight—via transects which allowed all vegetation to be observed. Wild lupine was not present at the site, and a Level 2 Karner Blue Butterfly Presence/Absence survey was unnecessary. Due to the lack of wild lupine and agricultural disturbance, the Karner blue is assumed to be absent from the site. See the attached Level 1 survey form for further details.

See the attached vegetation inventory for a list of the species observed during the survey

Wisconsin Karner Blue Butterfly Habitat Conservation Plan

Survey Report Form

2022

Enter year of survey

Lupine Presence/Absence

Purpose

Native lupine is the obligate host plant for the federally endangered Karner blue butterfly (KBB). The purpose of the lupine presence/absence survey is to determine if sufficient lupine is present on the site to support KBB, and if present, to map its location.

General Instructions

Report on this form results of lupine presence/absence surveys conducted by certified surveyors. Collecting complete and accurate data will minimize potential project delays. Surveys are valid for 5 years for that particular site, and July 31st is the last day to survey. If it is a drought year, the last day to survey may be earlier. This information will be posted on the WDNR KBB website and communicated by the KBB Habitat Conservation Plan (HCP) coordinator.

Submit a copy of the completed survey via email to Rebecca.Roth@wisconsin.gov, or by mail to: HCP Coordinator, 101 S. Webster St., Madison, WI 53703

Keep a copy of this completed form for your records. Contact KBB HCP staff at the Wisconsin Department of Natural Resources with questions, or refer to the [WDNR website](#) (keyword: Karner Blue).

Partner/Company & Surveyor Information

Date of survey: 05/24/2022

HCP Partner or Non-partner project (select one)? HCP Partner Non-HCP Partner

HCP Partner or Company Name: N/A

Any DNR permit or review number associated with this survey: _____

Surveyor(s) (Last name, First name): Wayne, Robert

What is the most recent year you took the survey training provided by the WDNR: 2018

Site Location & Description

Site/project name or comp/stand (or other descriptive name):

Adams County Landfill Clay Borrow Areas - Endangered Resource Survey

Site size (select unit): 92 acres or linear miles

GPS Coordinates: Lat: 44.035988 Long: -89.853147

Provide latitude and longitude for the approximate center of the site or habitat surveyed. Site locations are needed for all reports. For sites that are large or that are along a right-of-way, mark the surveyed area and lupine observations on the site map.

Lupine Observations

1. Lupine survey method (select one):

transects covering entire site transects covering portion of site random walk

2. Is lupine present on the site?

Yes Continue to next question.

No Stop here and submit survey.

3. Is the lupine density at least 50 lupine plants/acre, or 25 lupine plants/200 meters for linear (e.g. right-of-way) sites?

Yes Lupine is sufficient to support Karner blue butterflies. Complete KBB surveys.

No Stop here and submit survey.

Site Map

Mapping Options:

OPTION 1. Use the DNR's location finder tool to create a map.

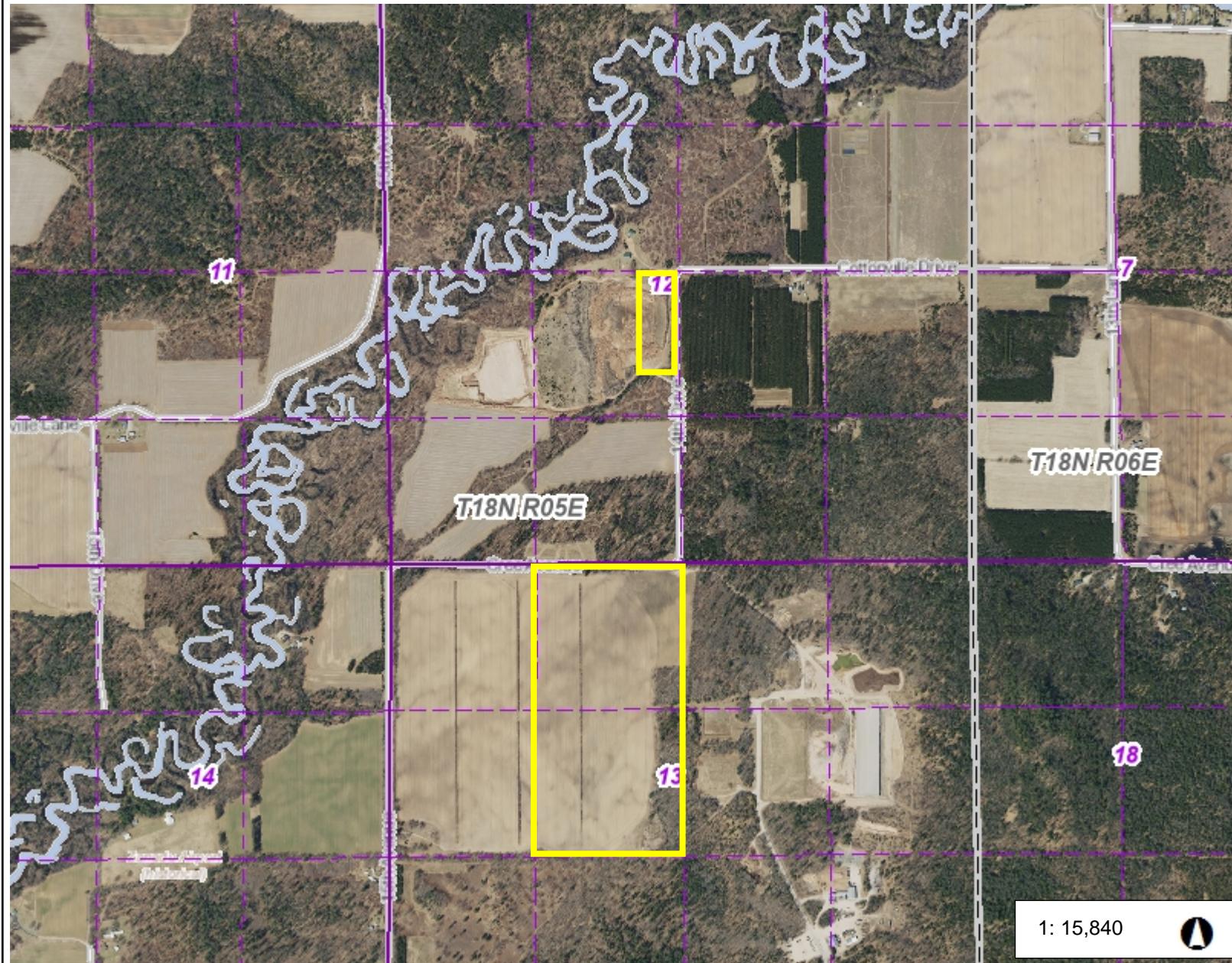
- a. <https://dnr.wisconsin.gov/maps/AppList>
- b. Select the General tab, then select Location Finder Viewer
- c. Accept the Terms and Conditions
- d. Zoom to the survey area. Use the "Search By" tool to zoom to an area by coordinates, city name, town-range section, etc.
- e. Hit the "Get lat/long" button and click on the map where Karners or lupine are found. Numbered markers with the coordinates will appear for each location you click on the map. You can delete and edit these markers by clicking on the 3 dots to the right of each coordinate.
- f. Once you are done, hit "Print". Change the output to "Pdf", change the map scale to 1:3960, add a title, and indicate in the notes what your markers represent. To reposition the print area, zoom in/out or pan to over and then hit "print" again at the top of the webpage.
- g. Hit "Print" below the notes section and then "Open File" to view and download your map.
- h. **Save a copy of the PDF map.** Attach map to this survey form.

OPTION 2. Photo copy a USGS topo map, or print a satellite or aerial photo with hand-drawn locations (perhaps this is the map that was brought into the field for the survey).

- a. Make sure that road names, town-range-section information is included and legible
- b. Zoomed to 24,000m at minimum and 2,000m at maximum
- c. Indicate on map the karner and lupine observations (discretely hand-drawn patches or points) **with coordinates**
- d. Attach map to this survey form.



Adams Co Landfill Clay Borrow Sites



0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM
© Latitude Geographics Group Ltd.

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

1: 15,840



PLSS Town & Range

PLSS Sections

PLSS Quarter-quarter Sections

County Boundary

Municipality

State Boundaries

County Boundaries

Major Roads

- Interstate Highway
- State Highway
- US Highway

County and Local Roads

- County HWY
- Local Road

Railroads

Tribal Lands

Rivers and Streams

Intermittent Streams

Open Water

Notes

Observed Plant Species

	<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>
Tree Stratum	<i>Acer saccharum</i>	Sugar maple	Native
	<i>Fraxinus americana</i>	White ash	Native
	<i>Pinus strobus</i>	White pine	Native
	<i>Populus deltoides</i>	Cottonwood	Native
	<i>Populus tremuloides</i>	Aspen	Native
	<i>Prunus serotina</i>	Wild black cherry	Native
	<i>Quercus alba</i>	White oak	Native
	<i>Quercus rubra</i>	Red oak	Native
	<i>Quercus velutina</i>	Black oak	Native
	<i>Ulmus americana</i>	American elm	Native
Shrub Stratum	<i>Cornus sericea</i>	Red osier dogwood	Native
	<i>Crataegus douglasii</i>	Black hawthorn	Native
	<i>Frangula alnus</i>	Buckthorn	Invasive
	<i>Lonicera tatarica</i>	Tatarian honeysuckle	Invasive
	<i>Lonicera xylosteum</i>	Dwarf honeysuckle	Native
	<i>Pinus strobus</i>	White pine	Native
	<i>Prunus serotina</i>	Wild black cherry	Native
	<i>Quercus rubra</i>	Red oak	Native
	<i>Quercus velutina</i>	Black oak	Native
	<i>Rhus glabra</i>	Smooth sumac	Native
	<i>Rubus idaeus</i>	Red raspberry	Native
	<i>Rubus occidentalis</i>	Black-cap	Native
	<i>Sambucus racemosa</i>	Red elderberry	Native
	<i>Zanthoxylum americanum</i>	Prickly ash	Native
Herb Stratum	<i>Alliaria petiolata</i>	Garlic mustard	Invasive
	<i>Ambrosia artemisiifolia</i>	Common ragweed	Introduced - naturalized
	<i>Asclepias syriaca</i>	Common milkweed	Native
	<i>Asclepias verticillata</i>	Whorled milkweed	Native
	<i>Athyrium filix-femina</i>	Ladyfern	Native
	<i>Barbarea vulgaris</i>	Yellow rocket	Introduced - naturalized
	<i>Berteroa incana</i>	Hoary alyssum	Introduced - naturalized
	<i>Bromus inermis</i>	Smooth brome	Invasive
	<i>Bromus tectorum</i>	Cheat grass	Introduced - naturalized; potentially invasive
	<i>Carex pensylvanica</i>	Pennsylvania sedge	Native
	<i>Centaurea biebersteinii</i>	Spotted knapweed	Invasive
	<i>Chenopodium album</i>	Lamb's-quarters	Native
	<i>Conyza canadensis</i>	Canadian horseweed	Native
	<i>Corylus cornuta</i>	Beaked hazelnut	Native
	<i>Elymus repens</i>	Quackgrass	Invasive
	<i>Equisetum arvense</i>	Field horsetail	Native
	<i>Euthamia graminifolia</i>	Grass-leaved goldenrod	Native

<i>Fallopia convolvulus</i>	Black-bindweed	Introduced - naturalized; potentially invasive
<i>Fragaria virginiana</i>	Wild strawberry	Native
<i>Galium aparine</i>	Sticky willy	Native
<i>Hordeum jubatum</i>	Foxtail barley	Introduced - naturalized
<i>Impatiens capensis</i>	Jewelweed	Native
<i>Lespedeza capitata</i>	Round-headed bushclover	Native
<i>Lotus corniculatus</i>	Bird's-foot trefoil	Invasive
<i>Maianthemum canadense</i>	Canada mayflower	Native
<i>Mollugo verticillata</i>	Carpetweed	Introduced - naturalized
<i>Monarda punctata</i>	Horsemint	Native
<i>Onoclea sensibilis</i>	Sensitive fern	Native
<i>Plantago major</i>	Plantain	Native
<i>Poa pratensis</i>	Kentucky blue grass	Introduced - naturalized
<i>Polygonatum biflorum</i>	Soloman's Seal	Native
<i>Potentilla recta</i>	Rough-fruited cinquefoil	Introduced - naturalized
<i>Rumex crispus</i>	Curly dock	Introduced - naturalized; potentially invasive
<i>Saponaria ocymoides</i>	Soapwort	Introduced - naturalized
<i>Setaria viridis</i>	Green foxtail	Introduced - naturalized
<i>Silene latifolia</i>	Bladder campion	Introduced - naturalized
<i>Solidago canadensis</i>	Canada goldenrod	Native
<i>Sonchus arvensis</i>	Field sow-thistle	Introduced - naturalized
<i>Taraxacum officinale</i>	Common dandelion	Introduced - naturalized
<i>Tephrosia virginiana</i>	Goat's-rue	Native
<i>Thlaspi arvense</i>	Common penny-cress	Introduced - naturalized
<i>Trifolium arvense</i>	Rabbit-foot clover	Introduced - naturalized
<i>Trifolium pratense</i>	Red clover	Introduced - naturalized
<i>Urtica dioica</i>	Stinging nettle	Native
<i>Verbascum thapsus</i>	Common mullein	Introduced - naturalized; potentially invasive
<i>Veronica arvensis</i>	Corn speedwell	Introduced - naturalized
<i>Vitis riparia</i>	Riverbank grape	Native

Adams Co Landfill

Overview Map

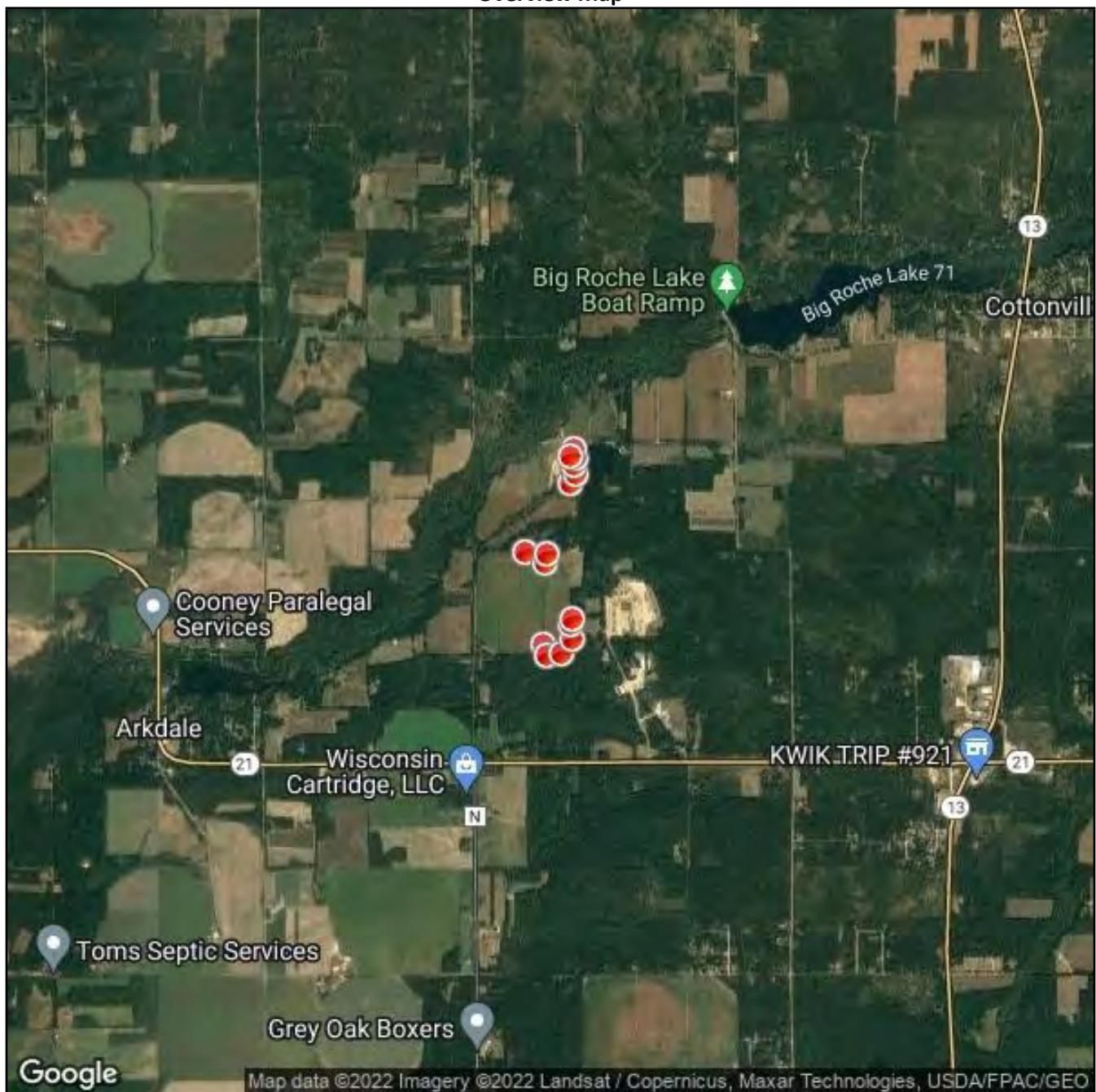


Photo 1

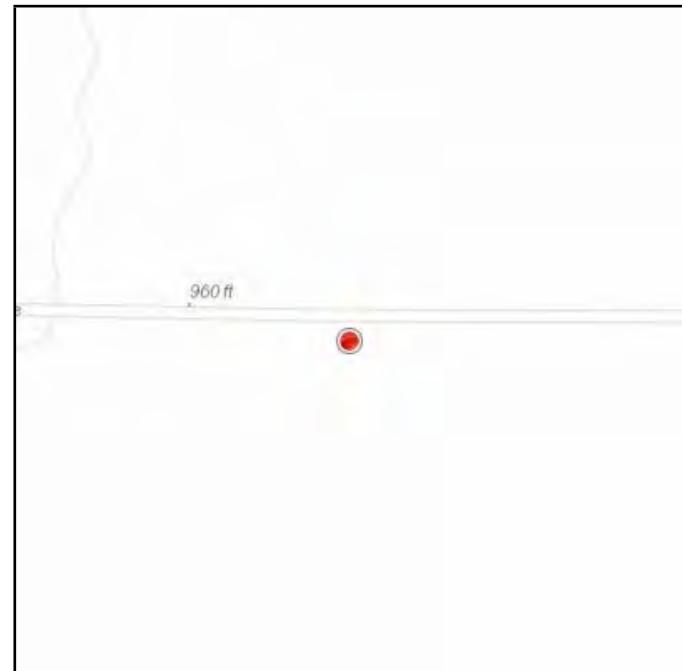


Photo 2

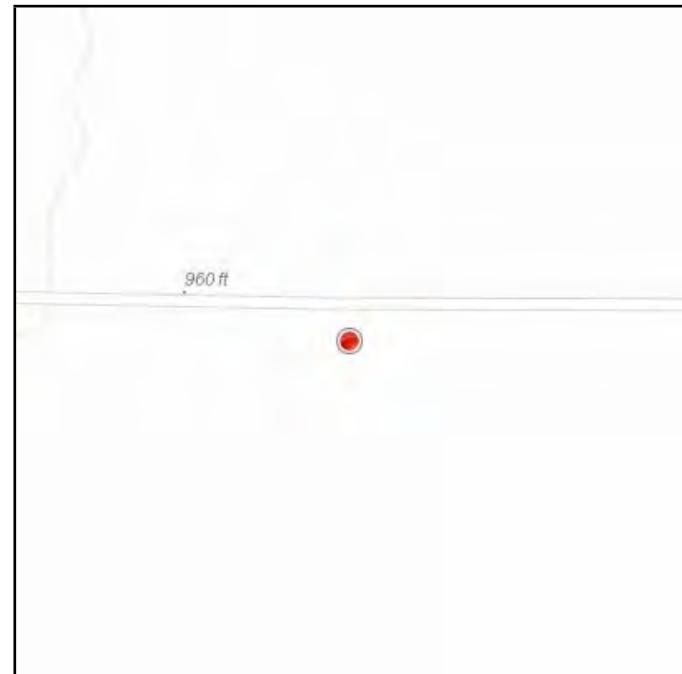


Photo 3

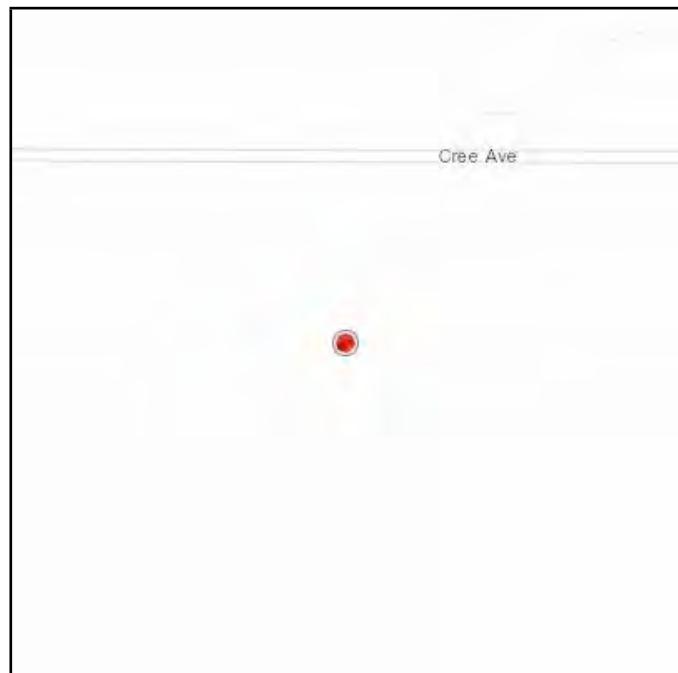
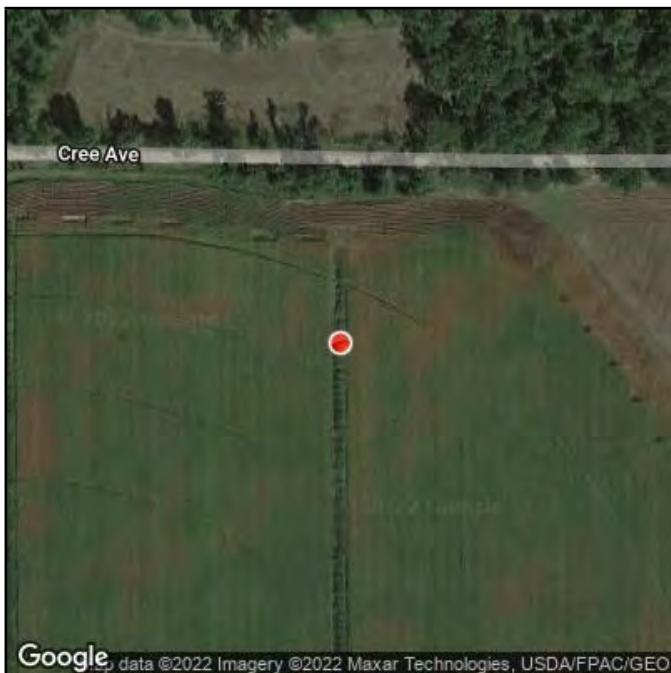


Photo 4



Photo 5



N 44° 01' 55.84"
W 89° 51' 03.87"

5/24/2022



Google data ©2022 Imagery ©2022 Maxar Technologies, USDA/FPAC/GEO

960 ft



Photo 6



960 ft



Photo 7



N 44° 01' 56.15"
W 89° 50' 58.43"

5/24/2022



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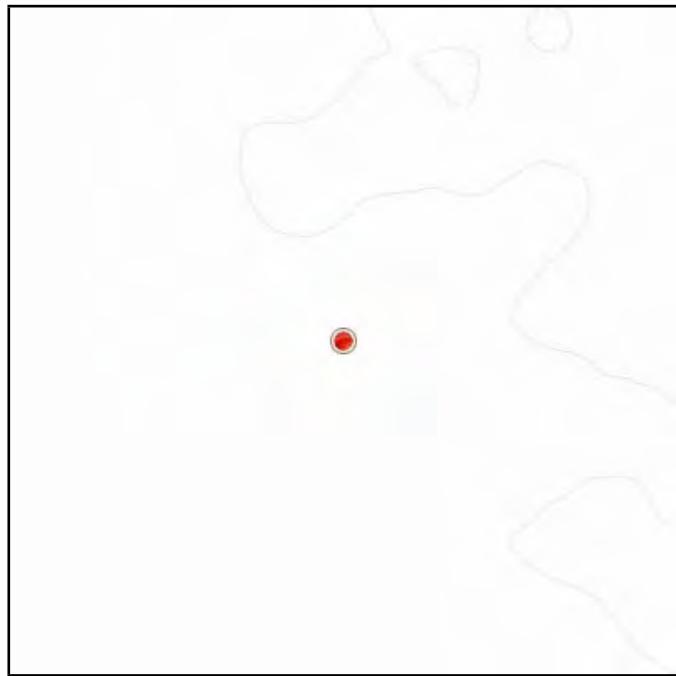
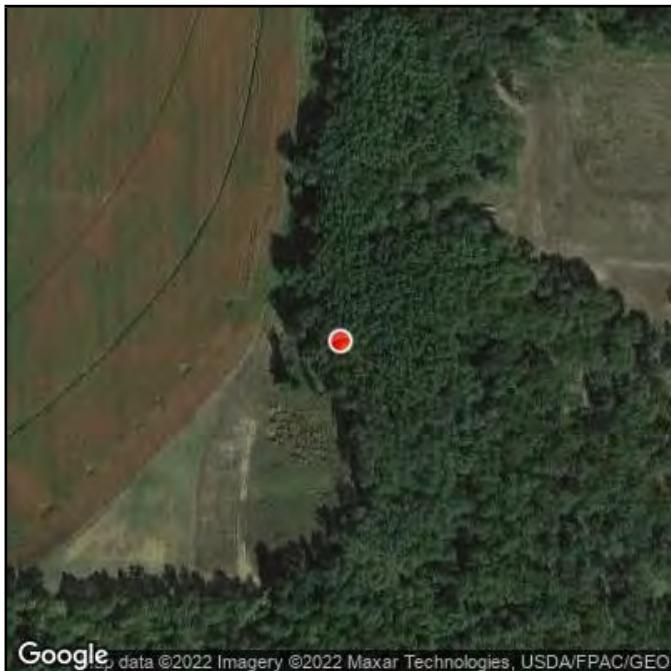


Photo 8



N 44° 01' 59.96"
W 89° 50' 54.69"

5/24/2022



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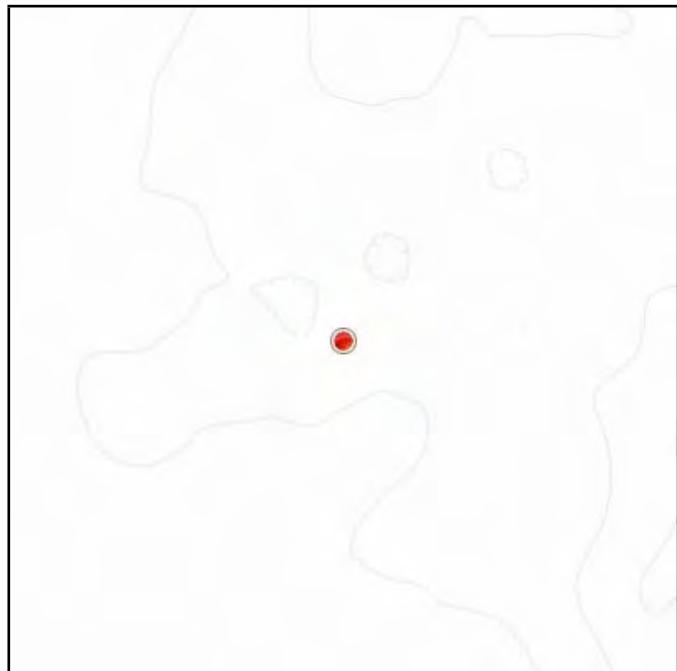
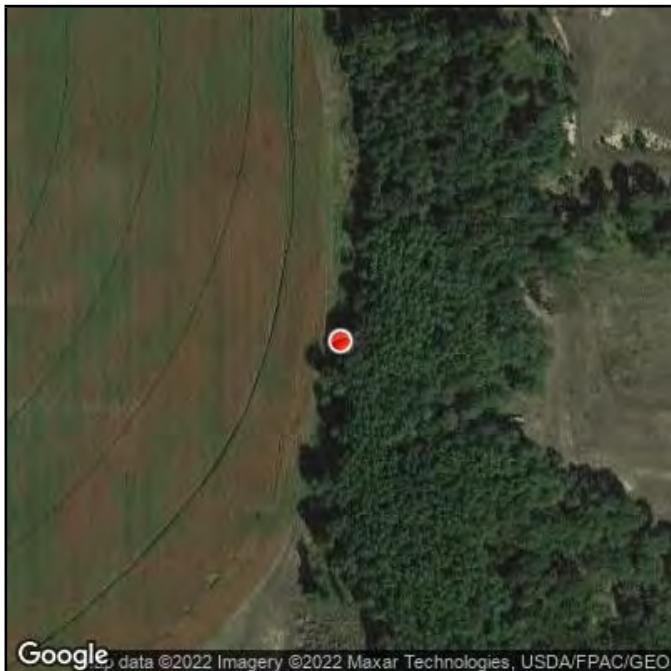


Photo 9



N 44° 02' 03.45"
W 89° 50' 55.38"

5/24/2022



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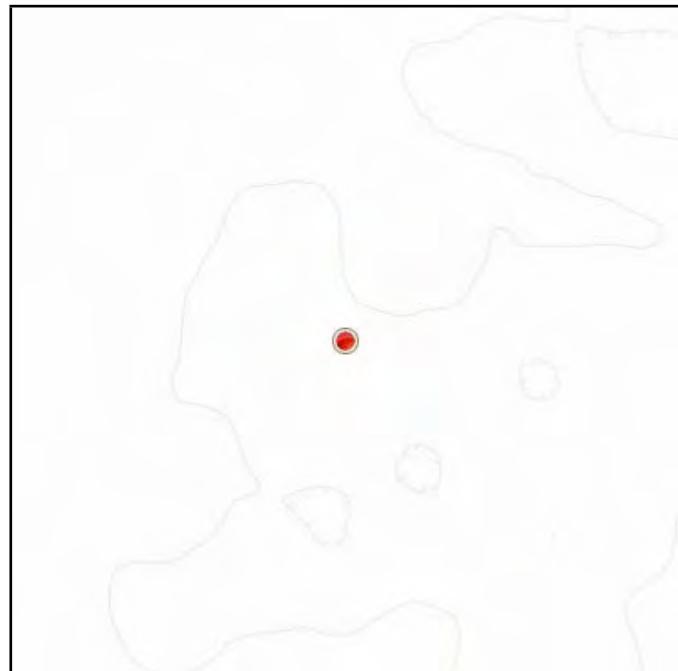


Photo 10

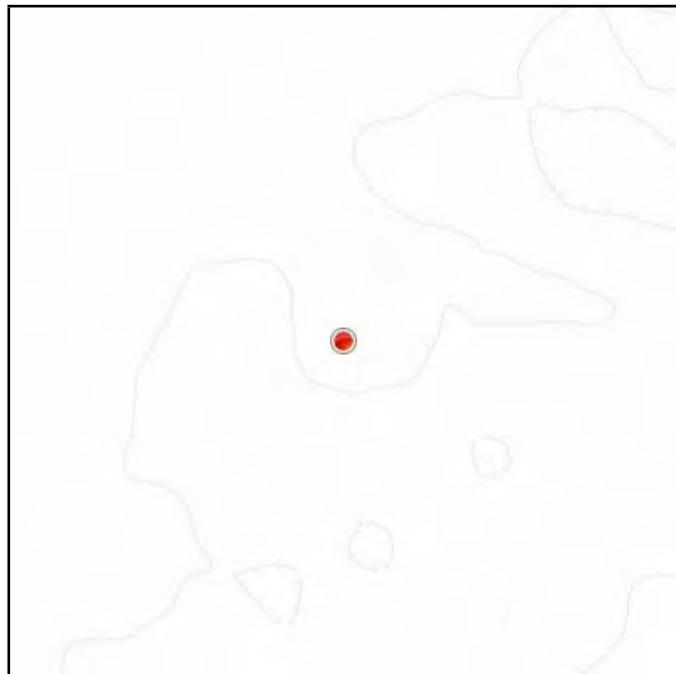
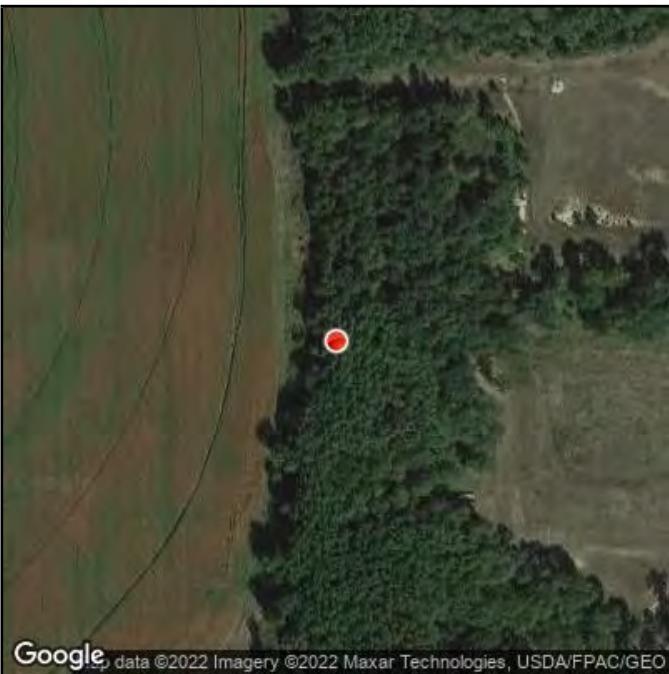


Photo 11



N 44° 02' 20.76"
W 89° 51' 03.78"

5/24/2022



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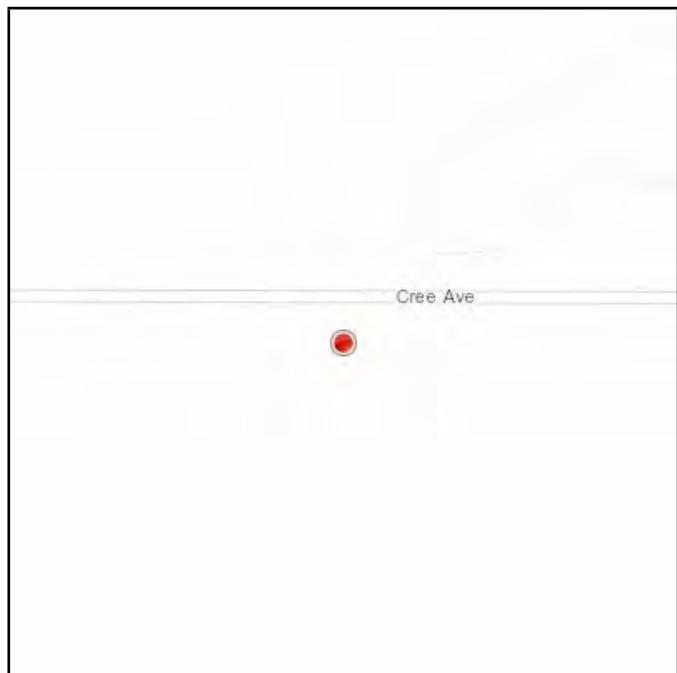


Photo 12

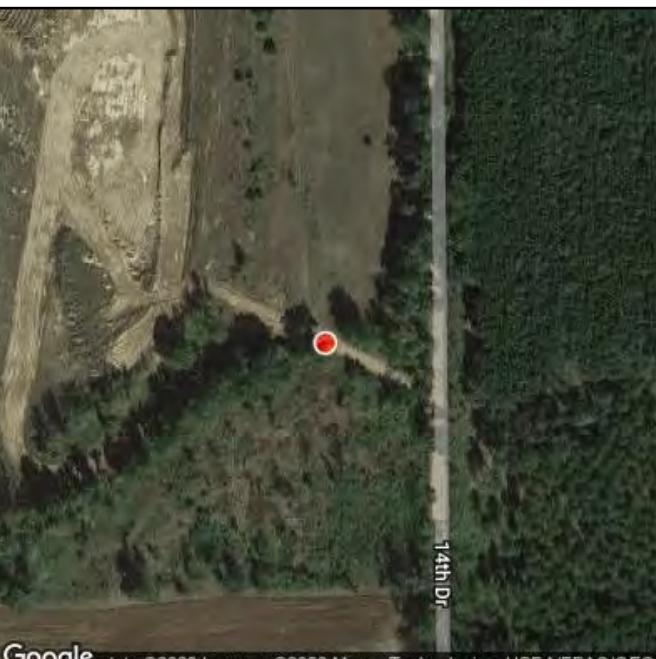


Photo 13

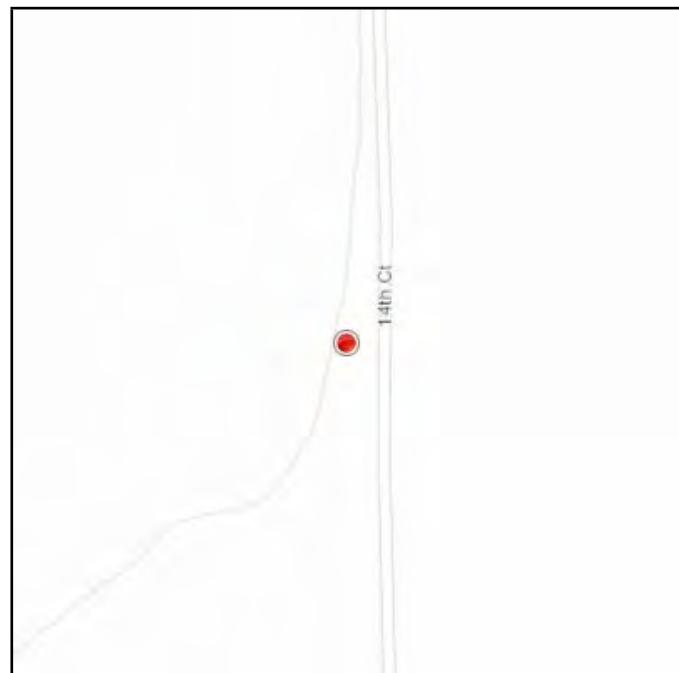
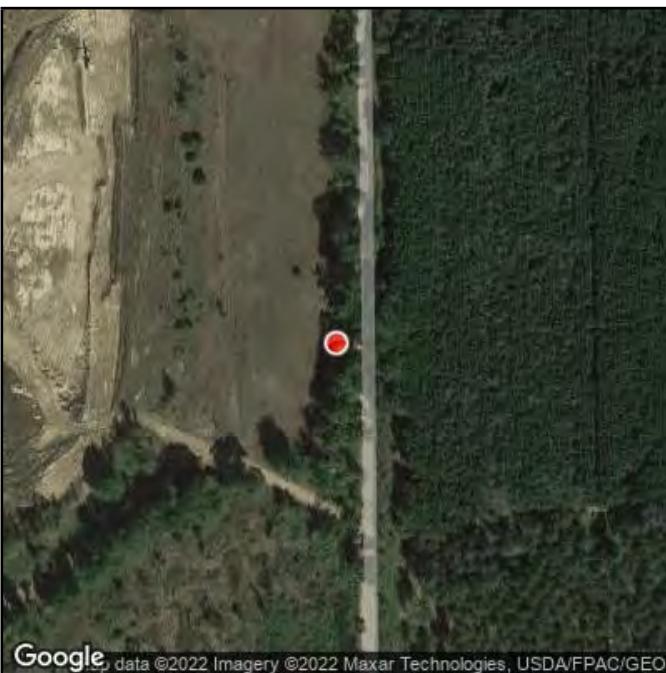
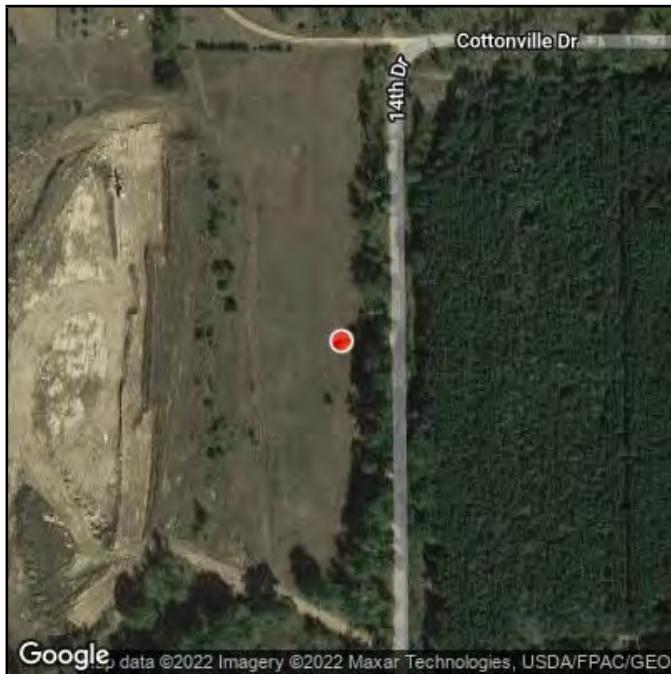


Photo 14



N 44° 02' 42.89"
W 89° 50' 53.92"

5/24/2022



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Photo 15



N 44° 02' 44.73"
W 89° 50' 53.47"

5/24/2022



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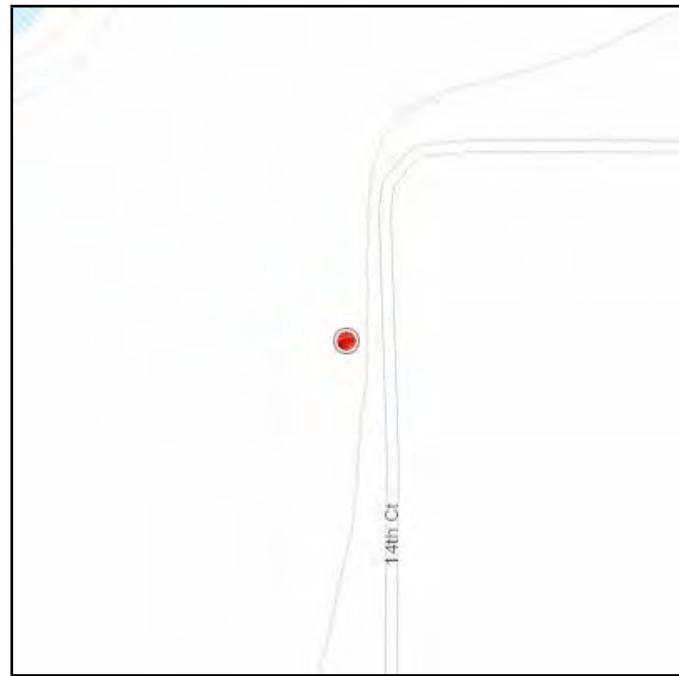


Photo 16

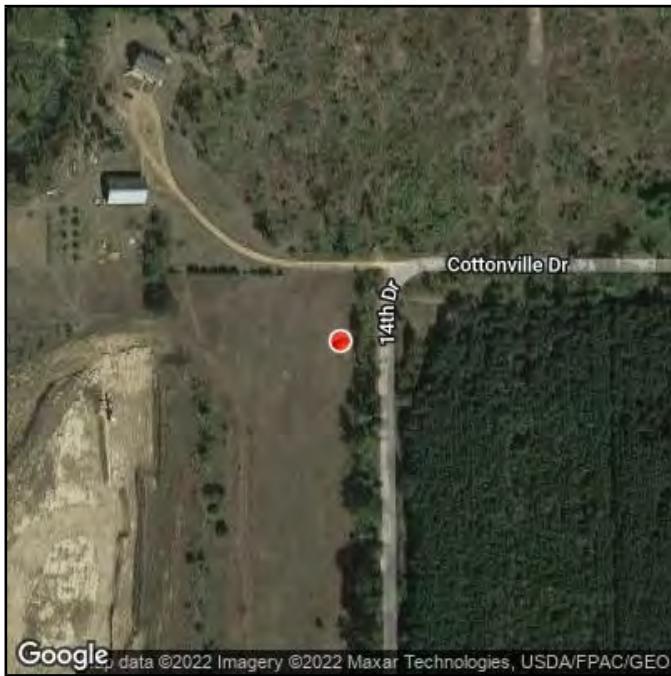
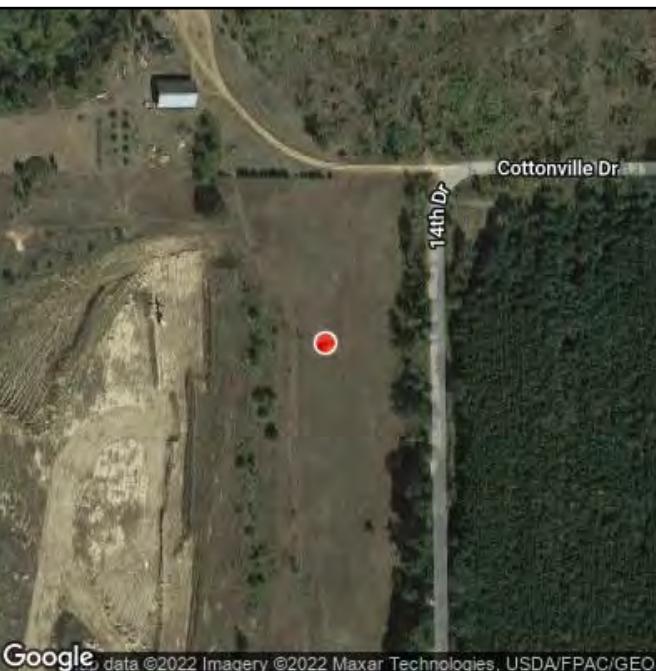


Photo 17



Photo 18



Appendix B

Historical and Archaeological Review Results

Leopold, Michael

From: Leopold, Michael
Sent: Tuesday, March 8, 2022 9:40 AM
To: AMY D WYATT; Peotter, Ben
Subject: RE: Adams County Landfill Clay Borrow Site WHPD

Good Morning Amy,

Thank you for the information, Ben will be available next week to make an appointment for the in person review. He can coordinate with you on what timeframe works best,

Thanks,
Michael

Michael G. Leopold
[Environmental Engineering Staff](#)

Ayres Associates Inc
[Office: 715.834.3161](#) | [Direct: 715.831.7534](#)
LeopoldM@AyresAssociates.com
www.AyresAssociates.com

From: AMY D WYATT <amy.wyatt@wisconsinhistory.org>
Sent: Monday, March 7, 2022 11:15 AM
To: Leopold, Michael <LeopoldM@AyresAssociates.com>
Subject: Re: Adams County Landfill Clay Borrow Site WHPD

Hi Michael,

Now that our offices are re-opened to the public, the appointments are in person only. You can make an appointment to come to the office to do the research or you can purchase a short-term or long-term subscription to do the research remotely: <https://www.wisconsinhistory.org.wphd>.

I can help you either make an appointment or gain temporary online access.

Thanks-
Amy

From: Leopold, Michael <LeopoldM@AyresAssociates.com>
Sent: Monday, March 7, 2022 8:15 AM
To: AMY D WYATT <amy.wyatt@wisconsinhistory.org>
Subject: RE: Adams County Landfill Clay Borrow Site WHPD

Hello Amy,

Are the appointments virtual? I would like to schedule your next available window this afternoon if possible..

Thanks,
Michael

Michael G. Leopold
Environmental Engineering Staff

Ayres Associates Inc
Office: 715.834.3161 | Direct: 715.831.7534
LeopoldM@AyresAssociates.com
www.AyresAssociates.com

From: AMY D WYATT <amy.wyatt@wisconsinhistory.org>
Sent: Wednesday, March 2, 2022 3:37 PM
To: Leopold, Michael <LeopoldM@AyresAssociates.com>
Subject: Re: Adams County Landfill Clay Borrow Site WHPD

Hello Michael,

When would you like to make an appointment? We are generally available Monday-Friday from 8:00-4:30.

Thanks-
Amy Wyatt

Amy Wyatt
Digital Historic Preservation Coordinator
State Historic Preservation Office

Wisconsin Historical Society
816 State Street, Madison, WI 53706
608-264-6506
amy.wyatt@wisconsinhistory.org

Wisconsin Historical Society
Collecting, Preserving, and Sharing Stories Since 1846

From: Leopold, Michael <LeopoldM@AyresAssociates.com>
Sent: Tuesday, March 1, 2022 11:16 AM
To: AMY D WYATT <amy.wyatt@wisconsinhistory.org>
Subject: Adams County Landfill Clay Borrow Site WHPD

Good Morning,

I am requesting an appointment for the WHPD to perform a historical and archeological search at the Wisconsin Historical Society using the Wisconsin Archeological Site Inventory (ASI) and the Architectural Historical Inventory (AHI) databases on Adams County Landfill, 1420 State Highway 21 Friendship, WI 53934. This search is for a clay borrow source search of the contiguous owned property to the west of the landfill area.

Thanks,
Michael



Michael G. Leopold | Environmental Engineering Staff
Office: 715.834.3161 | Direct: 715.831.7534
3433 Oakwood Hills Parkway | Eau Claire, WI 54701-7698

Primary Info

State Site #	AD-0092
Name	Erickson Mound Group
Other Name	
Field #	
ASI #	1029

Location Information

County	Adams													
Municipality														
Civil Town	Strong's Prairie													
Location Description	This site is located seventy-five feet north of Big Roche a Cri Creek, northeast of Arkdale, Wisconsin.													
PLSS	Township	Range	Direction	Section	QSection	Grid Alignment	French Lot	Gov. Lot						
	18	5	E	14	NE, NW									
	18	5	E	14	SW, NW									
UTM Info	UTM Method		UTM Zone		Easting		Northing							
	Interpolated from topo map													
USGS 7.5' Quad Info	ROCHE A CRI													
Parcel ID														

Site Description

Site Description	This site consists of at least three mounds. Mound 1 is an oval, dome-shaped mound while the other two are linear and much larger. Mound 1 was excavated, and found to have been built of mottled sand over an unmodified ground surface. A burial pit was noted in the center of the mound, containing a tightly grouped bundle burial.		
Site Dimensions (feet)		Site Area (acres)	
Site Dimensions (meters)		Site Area (hectares)	
Site Type	Mound(s) - Other/Unk, Mound(s) - Linear		
Cultural Info	Culture		Certainty
	Woodland		Definite
Investigation Type	Test Excavation/ Phase II, Walk Over/Visual Inspection		
Archaeological Phase/Complex			
Tribe/Ethnic Group			
Site Status	This human burial site is protected under Wis. Stats 157.70. Consultation with the Wisconsin Historical Society is required. See burial page.		
Covenant	No - None of site		

Site Characteristics

Modern Landuse	Pasture/Grassland		
Degree of Disturbance	Moderate		
Impacts to Sites	Agricultural		

Burial Site Info

Burial Number	BAD-0100	Burial Status	Not Catalogued
Date Catalogued		Cemetery Type	Inactive/Marked
Earliest Grave Date	Precontact	Latest Grave Date	Precontact
Disposition Activity		Date of Disposition	
Cataloging Comments			

National Register InfoOther Eligibility Evaluation

Individual Eligibility Evaluation	
Proposed Historic District	
Contributing	
Evaluation Date	
Eligibility Comments	

Ownership		Add
Owner	Don A. Massen	Address 2
Chronology	Current Owner	City
Ownership Type	Private	State
Year Determined	1961	Zip
Address 1		-

Artifact Info	
Artifact Repository	
Material Class	
Artifact List	One broken scraper in mound fill.
Date of Site	
Dating Method	

Investigator Info			
Investigator	Organization	Date	Recommendation
Peter Larson	Independent or not affiliated	1/1/1961	

Site Reporter Info			
Reporter	Peter Larson		
Organization	Independent or not affiliated		
Date Reported	1/1/1961		
Bibliography	Lawson, P. L., 1961, The Erickson Mound Group, WA (NS) 42(2): 88.		

Tracking Info			
WHS Project #	ARI #	Reason For Reporting	

