Bailey, Heather

From: admin@institutefornaturalphilosophy.org
Sent: Friday, May 22, 2026 10:41 AM
To: Knepp, Eric; Matthews, Julia; Clayton.Winneshiek@ho-chunk.com; chokabrown53@gmail.com; uwac@mailplus.wisc.edu; christian.overland@wisconsinhistory.org; Madison Landmarks Commission; Engineer; Planning; amy.rosebrough@wisconsinhistory.org; bill.quackenbush@ho-chunk.com; clayton.winneshiek@ho-chunk.com; Glenn, Carmella; Kaniewski, Adam B; directorofculturalpreservation@institutefnp.onmicrosoft.com; sluysb@aol.com; tomsolberg25@gmail.com; randomity@aol.com
Subject: Roth Street Burial Site – Formal Letter and GPR Report Attached
Attachments: Roth Street Burial Mound Report.pdf; Letter to the City.pdf

Dear Honorable Mayor Rhodes-Conway and Esteemed Recipients,

Please find attached a formal letter from the Institute for Natural Philosophy, together with the Ground Penetrating Radar (GPR) investigation report concerning the site located south of Roth Street in the vicinity of Hartmeyer–Roth Park.

A physical copy of the letter has also been sent directly to the Office of the Mayor Rhodes-Conway via postal mail for formal record.

After my personal visit to the location and our careful review of the findings presented in the report, we believe the matter warrants immediate and serious consideration prior to any ground-disturbing activity at the site.

The attached materials outline significant evidence consistent with an extensive Indigenous burial and ceremonial landscape, as well as the historical, archaeological, and legal basis supporting a full and comprehensive investigation before any irreversible action is undertaken.

Given the cultural sensitivity and potential significance of the site, we respectfully request that the attached documents be reviewed in full and entered into consideration by all relevant departments and representatives.

Thank you for your time, attention, and consideration in this important matter, which I am confident will receive the care and diligence it rightfully requires.

Respectfully,

Ricardo Calvário

President

Institute for Natural Philosophy

Institute for Natural Philosophy

Bringing the Past to the Present for a Better Future

Tennessee State Nonprofit Corporation # 002004158
Internal Revenue Service EIN # 33-3782688

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To:
Mayor Satya Rhodes-Conway
Mayor's Office
210 Martin Luther King Jr. Blvd, Room 403
Madison, WI 53703

Cc via Email:
Alder Carmella Glenn, District 18, Council Vice President
Alder Julia Matthews, District 12, City of Madison
Amy Rosebrough, State Archeologist, Wisconsin Historical Society
Chief Bill Quackenbush, Tribal Historic Preservation Officer, Ho-Chunk Nation
Chief Clayton.Winneshiek, Traditional Court, Ho-Chunk Nation
Christian W. Øverland, Wisconsin Historical Society, Burial Sites Preservation Program
City of Madison, Engineering Division
City of Madison, Landmarks Commission
City of Madison Planning Division
Clayton Winneshiek, Ho-Chunk Traditional Court
Elder Richie Brown, Ho-Chunk
Elizabeth Leith, UW, Anthropology Museum Director, Campus NAGPRA Coordinator
Eric Knepp, Superintendent, City of Madison Parks Department

The Institute for Natural Philosophy is organized exclusively for and is dedicated to the preservation, advancement and promotion of culture, heritage, history and science by way of archiving, teaching, research, research projects, presentations and publications.

Re: Formal Notice and Demand for Full Investigation and Protection of Roth Street Burial Site Prior to Any Ground Disturbance

To Whom It May Concern,

I write to you upon receiving and following a detailed review of the Ground Penetrating Radar (GPR) investigation already submitted to Eric Knepp, Superintendent, City of Madison Parks Department and concerning the site located south of Roth Street, in the vicinity of Hartmeyer - Roth Park. A copy of this report is included in the Email.

The findings presented in that report are clear, consistent, and of serious consequence. The data identifies a substantial number of subsurface anomalies - ranging from dozens to potentially several hundred - exhibiting characteristics strongly aligned with human burial activity across multiple depths. Of particular significance is the identification of a continuous, high-density anomaly zone extending approximately 125 feet in length beginning at approximately 3.5 feet below ground surface, consistent with multiple or communal interments. These findings do not describe an isolated feature. They describe a burial complex. However, the implications extend further still.

When considered in the broader context of the site - including the known burial mound to the north, the presence of a marker tree, and the identified ceremonial area - it becomes evident that this location constitutes an integrated cultural and ceremonial landscape.

Archaeological research in Wisconsin has consistently demonstrated that mound groups function as part of broader cultural systems rather than isolated features (Birmingham, R. A., and Eisenberg, L. E., *Indian Mounds of Wisconsin*, University of Wisconsin Press, 2000).

Additionally, regional archaeological literature establishes that burial mounds in Wisconsin were used over extended periods, often resulting in layered subsurface deposits reflecting repeated interment practices (Ritzenthaler, R. E., and Ritzenthaler, P., *The Woodland Indians of the Western Great Lakes*, Milwaukee Public Museum, 1970).
The Wisconsin Historical Society's own mapping and cataloguing of burial sites further confirms that this area contains a concentration of known and recorded burial locations, reinforcing that this site exists within a documented mortuary landscape rather than as an isolated feature.

Any evaluation of this site that isolates one feature from the others fails to accurately reflect its nature. It must also be stated unequivocally that prior disturbance - including the removal, alteration, or grading of mound structures - does not eliminate the presence of human remains. Archaeological and geophysical research consistently demonstrates that subsurface burial features persist even when surface expressions have been altered or removed (Conyers, L. B., *Ground-Penetrating Radar for Archaeology*, AltaMira Press, 2013).

The submitted GPR report confirms this directly. Despite prior disturbance, the site continues to exhibit extensive and organized subsurface anomalies consistent with burial activity. This establishes a critical point:

Loss has already occurred.

The removal or degradation of mound structures represents an irreversible loss of cultural and archaeological information. What remains now exists largely beneath the surface - preserved, but vulnerable. Under these conditions, any further disturbance carries disproportionate and irreversible consequence. What has already been lost cannot be recovered. What remains must not be subjected to the same fate.

Given the findings already established, any ground-disturbing activity undertaken without a full and comprehensive investigation carries a substantial and unacceptable risk of disturbing human remains.

This is not speculative. It is a direct implication of the data currently before the City.

Applicable Law and Regulatory Framework

1. Wisconsin Statutes §157.70 - Burial Sites Preservation

This statute provides:

> "No person may intentionally disturb a burial site or remove from a burial site any human remains or associated burial objects without a permit issued by the director [Wisconsin Historical Society]."

Further:

> "Any person who knows or has reasonable grounds to believe that a burial site may be present shall immediately notify the director and shall not disturb the site."

Given the findings of the GPR report, the condition of **"reasonable grounds to believe"** is clearly met.

2. Wisconsin Statutes §157.70(2)(b)

> "If human remains are discovered, all activity in the area shall cease immediately until the director determines the appropriate course of action."

The presence of strong geophysical evidence indicating probable burials places this site within the protective intent of this statute.

3. National Historic Preservation Act (NHPA), Section 106 (54 U.S.C. §306108)

If federal funding, permitting, or involvement is present, this law requires:

- Federal agencies to "take into account the effect of the undertaking on any historic property."

Burial sites and Indigenous cultural landscapes qualify as such properties.

4. Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. §3001 et seq.

Where applicable (particularly if federal nexus exists):

- Protection applies to Native American human remains and associated cultural items, requiring consultation and prohibiting unauthorized disturbance.

5. Wisconsin State Historical Society Oversight Authority

Under Wisconsin law, the State Historical Society is the designated authority responsible for identifying, cataloguing, and protecting burial sites. Their involvement is mandatory once burial likelihood is established.

Formal Demand

In light of the above, the Institute for Natural Philosophy formally demands:

1. That no ground-disturbing activities of any kind be permitted at the site until a full and systematic investigation has been completed.

2. That such investigation be conducted at a site-wide scale, including:

    A. The identified high-density burial zone
    B. The relationship between the mound, marker tree, and ceremonial area
    C. The full extent of subsurface anomalies beyond the currently surveyed footprint

3. That all investigation remain non-invasive unless otherwise directed by appropriate authorities in consultation with Indigenous representatives.

4. That immediate consultation be initiated with the Ho-Chunk Nation and other relevant Indigenous communities.

The report submitted to the City has already established a high probability of extensive burial activity. Under such conditions, the standard of care must be elevated accordingly.

Once disturbed, such a site cannot be restored.

Any failure to act with due diligence at this stage would result in irreversible loss and potential legal consequence.

This position is grounded in the data presented, reinforced by historical documentation, supported by established archaeological understanding, and compelled by statutory law.

We trust that the City will act with the seriousness and responsibility that this matter demands.

Sincerely,
Ricardo Calvário
President

Institute for Natural Philosophy

ROTH STREET BURIAL MOUND

Geophysical Report by
Ritchie Brown & Steve Solberg

Roth Street Burial Mound

by Ritchie Brown, Ho Chunk Elder &
Steve Solberg, Professional Land Surveyor

Table of Contents

Executive Summary

This report presents the findings of a non-invasive geophysical investigation conducted at a burial mound located south of Roth Street within Hartmeyer-Roth Park, Madison, Wisconsin. The study employed Ground Penetrating Radar (GPR) technology to assess subsurface features and identify potential archaeological and cultural resources without disturbance to the site.

The survey results reveal a significant concentration of subsurface anomalies consistent with human burial activity at varying depths. These anomalies exhibit spatial organization and density patterns characteristic of long-term, repeated interment practices. The data strongly indicates the presence of numerous burial features, including both cremation deposits and intact interments, accumulated over an extended historical period.

Based on the collected data and its interpretation, the site demonstrates clear characteristics of a significant burial complex rather than isolated or incidental deposits. The number of detected anomalies suggests the presence of **hundreds of burial features**, representing a culturally and historically significant mortuary landscape.

Given the density, organization, and cultural context of these findings, this site must be regarded as a highly sensitive and significant heritage location. The evidence supports its classification as a burial ground of substantial archaeological and cultural importance.

It is therefore the professional opinion of this report that the site warrants immediate consideration for protection, preservation, and formal recognition. Any ground-disturbing activities in or around the surveyed area carry a high risk of impacting human remains and associated cultural materials.

This report forms part of a broader effort to document, recognize, and safeguard ancestral lands and burial sites, ensuring their protection for future generations and in accordance with cultural respect and legal frameworks.

Introduction

The Madison area has always been very popular and very populated. Long before European settlement, this area was inhabited by Indigenous peoples for many generations, including the Ho-Chunk Nation and other Native communities. The region is widely recognized for its historical and cultural significance, particularly as a center of prehistoric mound-building activity in North America.

Earthen mounds constructed throughout the region served a variety of purposes, including ceremonial, territorial, and mortuary functions. Among these, burial mounds represent some of the most culturally sensitive and historically important features, as they contain the physical remains of past populations and reflect long-standing traditions of honoring the deceased.

The area surrounding Hartmeyer-Roth Park is known to contain multiple mound structures, with historical mapping and prior documentation indicating a concentration of burial sites in this vicinity. The mound investigated in this study is one of the larger features in the immediate area and is consistent in form and location with known burial mounds documented by regional historical sources.

Previous understanding of such sites indicates that burial practices evolved over time, including both cremation and full-body interment. These practices often resulted in layered deposits within mound structures, reflecting extended periods of use and repeated ceremonial activity.

As a result, burial mounds of this type are not isolated features but are better understood as cumulative cultural landscapes, representing centuries of continued use. The potential presence of numerous interments within a confined area significantly increases both the archaeological value and the sensitivity of the site.

This investigation builds upon that historical and cultural context by applying modern geophysical techniques to evaluate the subsurface composition of the mound without disturbance, providing new data to inform preservation efforts.

Location Maps

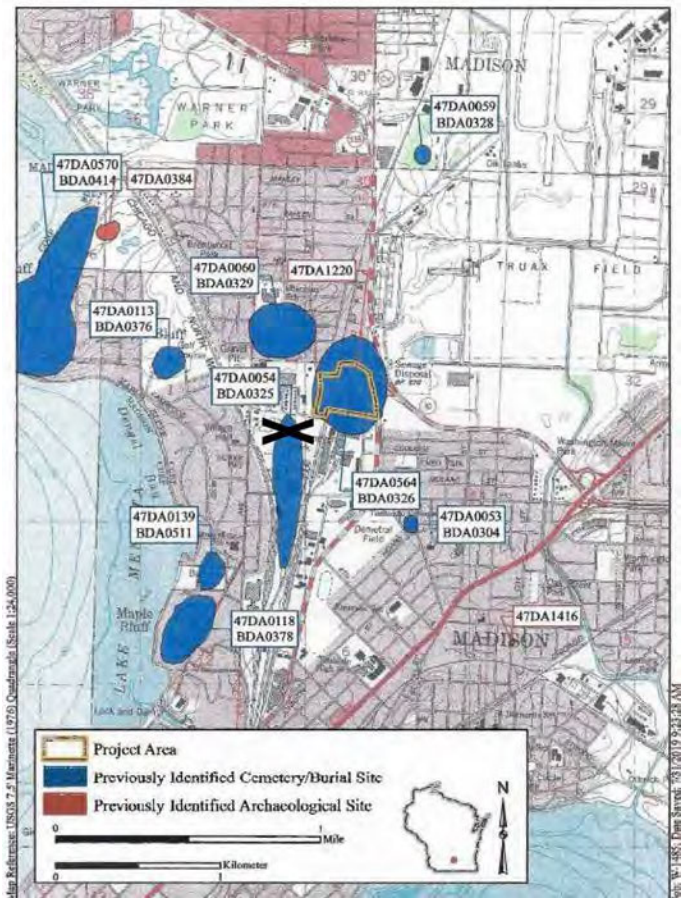

Figure 1

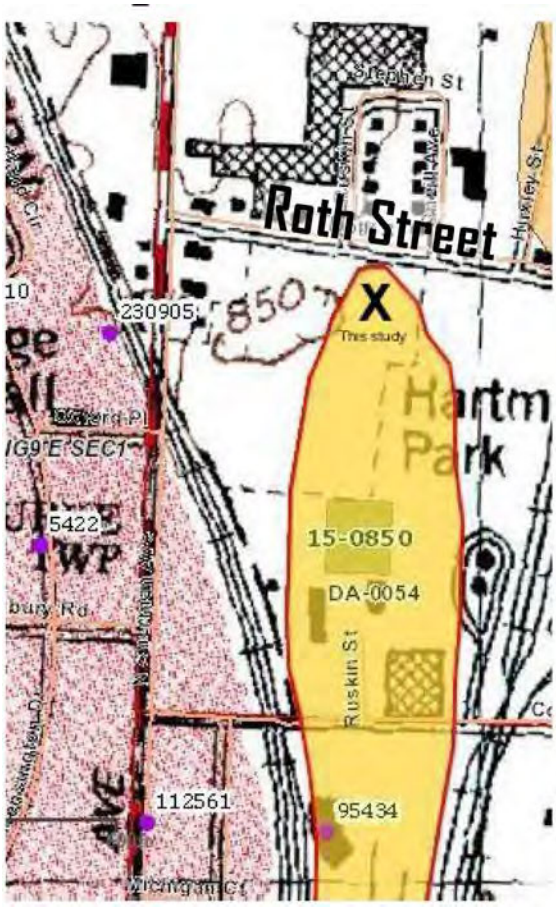

Figure 1A

Figure 1: Project area location indicated by the X sign and previously identified Archaeological and Cemetery Burial sites within one mile.

Figure 1A: Maps from Wisconsin Historical Society showing in detail the location of the project area location.

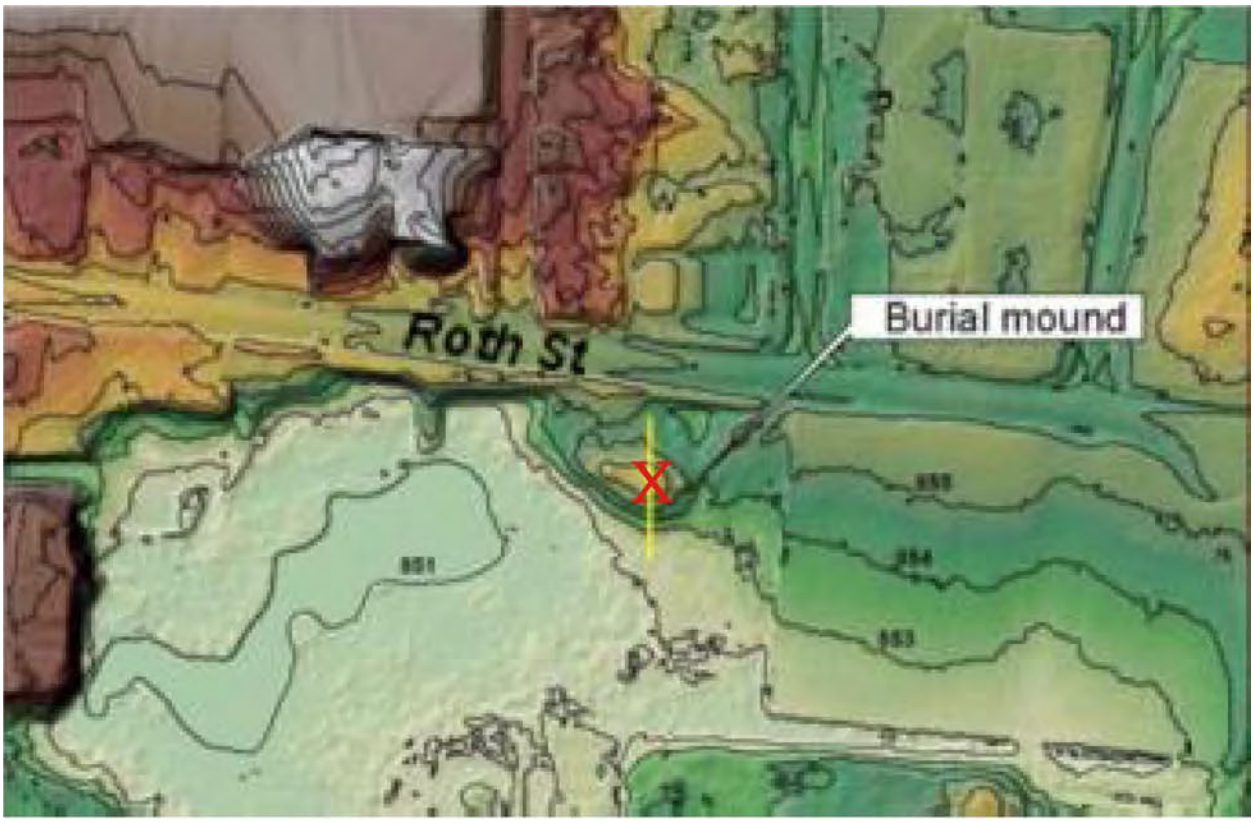

Figure 2: This is the largest of several mounds in the area and the subject of our study. Its location is indicated by the red X symbol

It is a blessing that this area has been preserved in its natural state by the City of Madison. Not only is it a home to a variety of wildlife and plant species, it is also a critical watershed which helps managing stormwater runoff. Beyond all that, it is a living history book covering untold centuries of the people who called this area home.

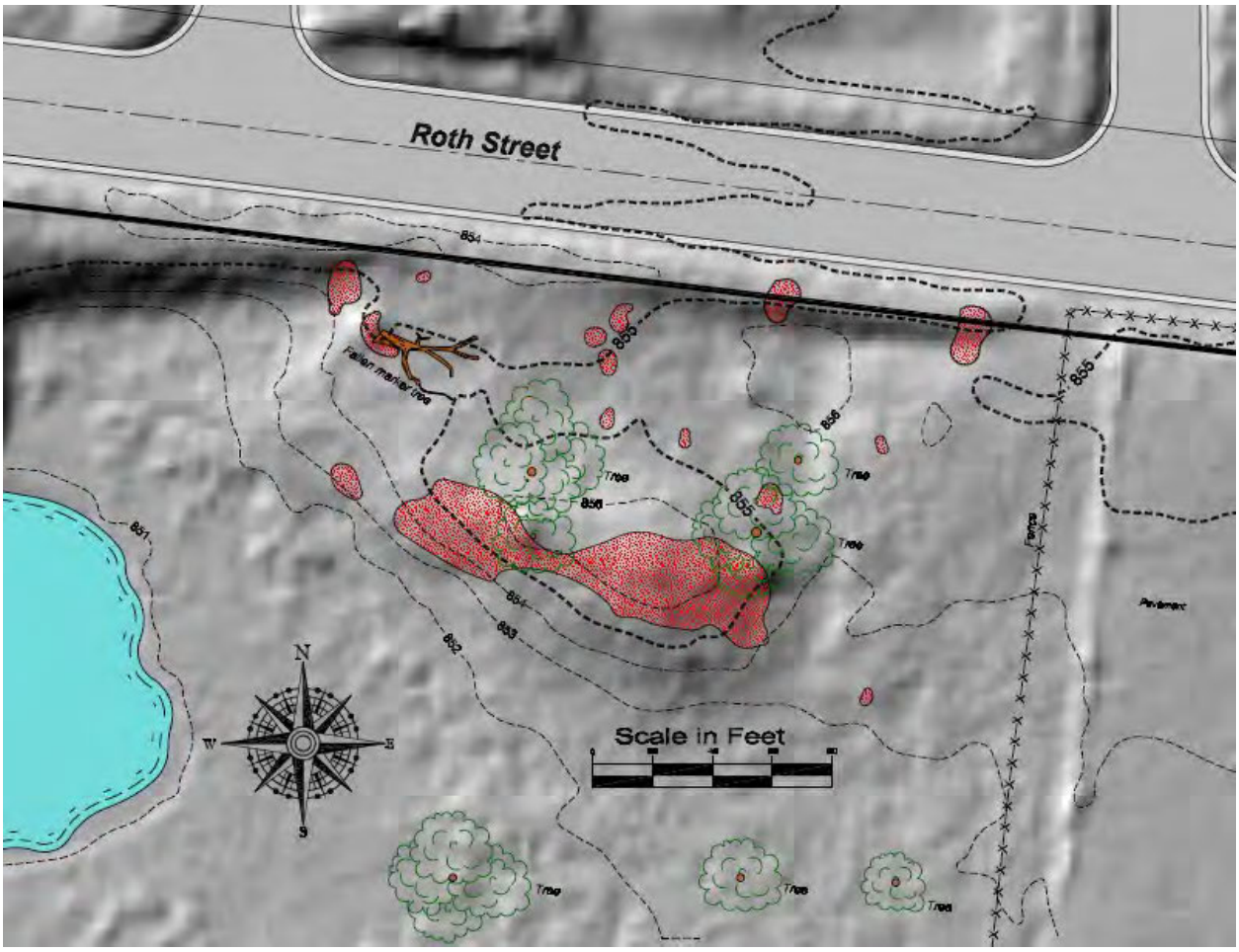

Figure 3: Close-up of large mound showing objects (in red) detected 3.5 feet below the surface.

It is a blessing that this area has been preserved in its natural state by the City of Madison. Not only is it a home to a variety of wildlife and plant species, it is also a critical watershed which helps managing stormwater runoff. Beyond all that, it is a living history book covering untold centuries of the people who called this area home.

Burial Practices

There were two kinds of burials practiced by Native Americans – cremation and whole body interment. For many centuries, beginning about 1000 years ago, bodies were brought to the burial site and cremated. The ashes were then buried.

Figure 4: Cremation ceremony

Obviously, these burials didn't leave a very large footprint however sometimes several ash remains were buried in the same designated area and these burial clusters have been detected.

About 350 years ago, tribal attitudes about cremation changed and from then on the entire body was placed in shallow pit and then soil was mounded up over it.

Figure 5: Individual interment.

If deaths occurred in the winter, bodies were wrapped and stored until spring. Then all the bodies were buried together. There were also occasionally mass burials. Early white settlers to this country brought many diseases (notably smallpox) which ravaged large portions of the Native.

These burial practices result in distinct patterns in terms of size, density, elevation and thickness. The horizontal distribution of anomalies reveals **non-random clustering and spatial organization**, which is inconsistent with natural subsurface processes.

Figure 6: Mass interment photos from around world demonstrate varying patterns which would account for different patterns and sizes of underground anomalies detected with GPR..

For many centuries, beginning about 1000 years ago, bodies were brought to the subject burial mound. As bodies (cremated and whole) were covered, the mound gradually grew until it reached its full size and shape about 300 years ago.

Hundreds, maybe thousands, of cremation remains were buried in the early centuries of this mound. This would account for some of the smaller more whispery objects detected especially at deeper levels. Eventually generations of natives buried whole bodies singly and in mass burials.

Therefore we must consider this one mound as the equivalent of a vast cemetery although it occupied less than an acre. Think of the outrage that would be unleashed if a modern cemetery was uprooted and paved over. And yet we are talking about sacred grounds that are a tiny fraction of a modern cemetery's acreage.

Ethnohistorical accounts and archaeological interpretations suggest that burial sites of this nature functioned not only as places of interment but also as enduring cultural landmarks. Their continued use over generations reflects their importance within the social and spiritual life of the communities that created them.

Detection Methodology

The subsurface investigation of the Roth Street burial mound site was conducted using Ground Penetrating Radar (GPR), a non-invasive geophysical method widely used in archaeological and environmental studies to detect and map subsurface features.

GPR operates by transmitting high-frequency electromagnetic pulses into the ground and recording the reflected signals from subsurface interfaces. Variations in material properties - such as soil composition, moisture content, and the presence of buried objects - produce measurable reflections that can be analyzed to identify anomalies.

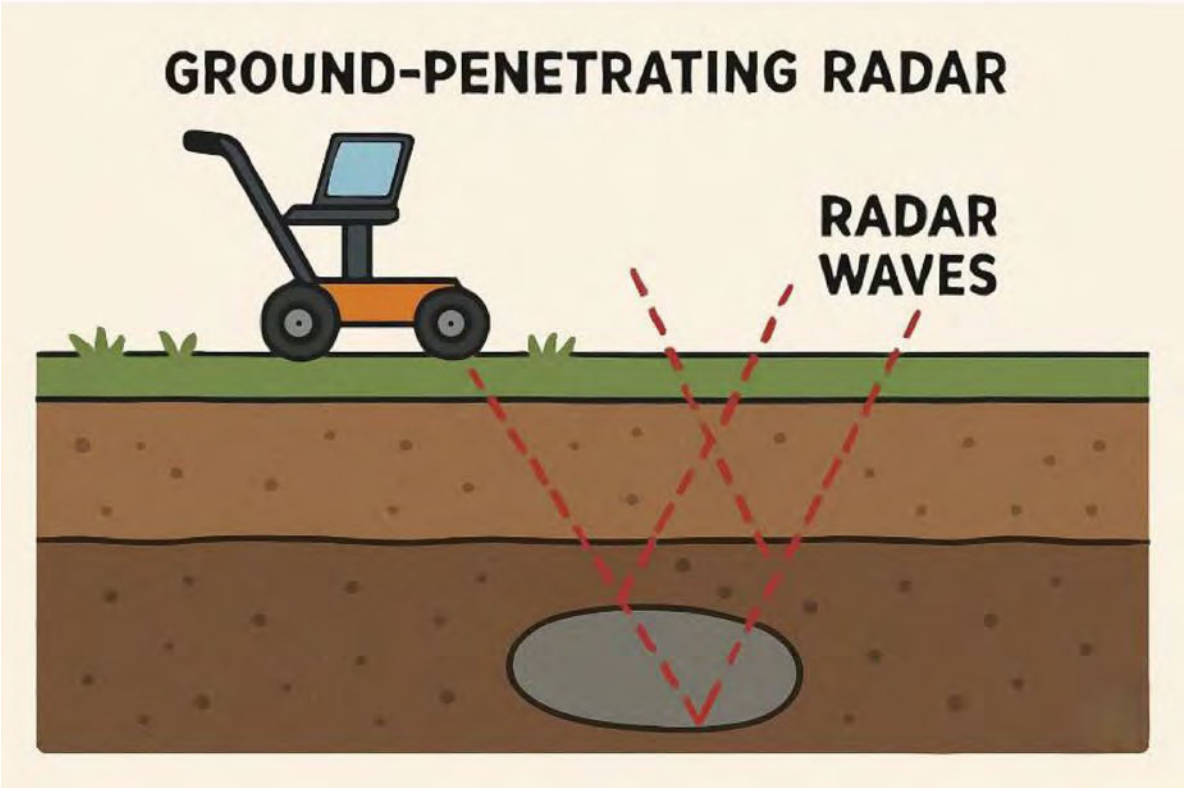

Figure 7: GPR operates something like SONAR fishing equipment. Pulses transmitted downward bounce off objects and are detected by on board antennas.

This method, widely used in archaeological and environmental studies, was selected due to its effectiveness in identifying buried features while preserving the integrity of sensitive cultural sites.

GPR operates by transmitting high-frequency electromagnetic pulses into the ground and recording the reflected signals from subsurface interfaces. Variations in material properties - such as soil composition, moisture content, and the presence of buried objects - produce measurable reflections that can be analyzed to identify anomalies.

The GPR unit is pushed, somewhat in the manner of a lawn mower, in a grid pattern. Trees and other surface features make a strict pattern impossible. To compensate for this a GPS unit is attached to the GPR. This GPS is more accurate than those in cars or on I phones so data gathering is reliable both horizontally and vertically.

Figure 8: Ben Hanson pushes the GPR past the fallen marker tree (see Figure 3). A monitor just above his hands is displaying raw data.

The raw data created by radio waves reflecting off underground materials or structures is displayed on a monitor and is recorded for future analysis. Here is the result of one 240 foot pass over the subject area.

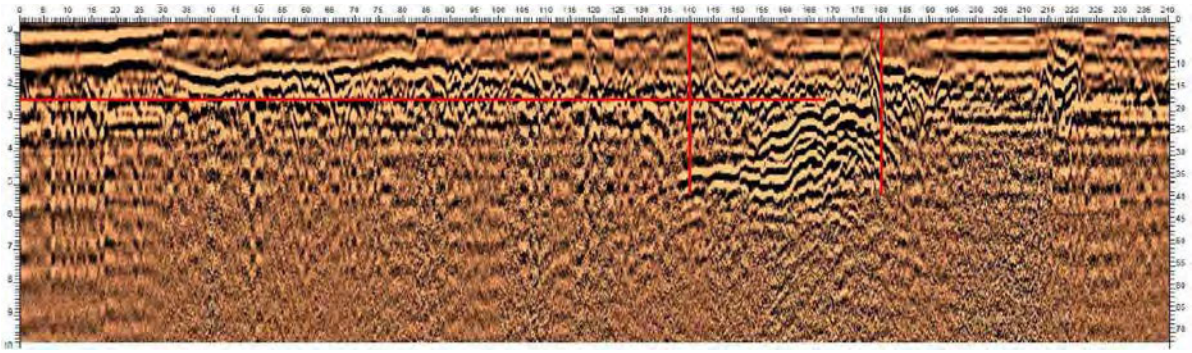

Figure 7: GPR produces raw data visible on the monitor. The horizontal line indicates length along the line of the scan from 0 to 240 feet and the vertical line indicates the depth from the surface, from 0 to 10 feet.

The raw data from figures 7 and 8 is somewhat inscrutable but it does give immediate feedback on the presence of underground objects. Notice around 140 foot to about the 180 foot mark there is a large object (or group of objects) starting at about 2.5 feet down and extending another 2 feet or to about the five foot level on the depth scale. Therefore, without even doing any processing, we can tell there is something about 40 feet in length and 2 or 3 feet thick. Subsequent parallel scans will give information relating to the width of the anomaly.

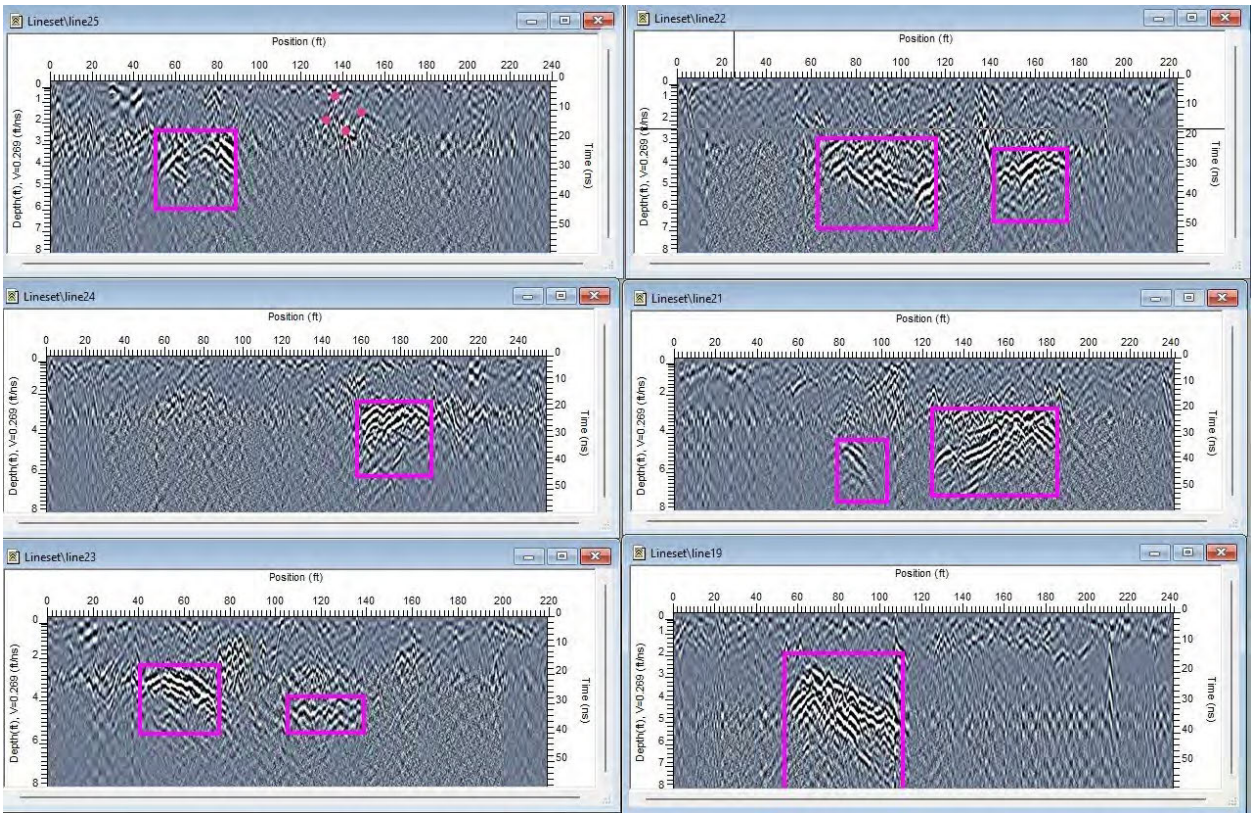

Figure 8: This is an example of several parallel scans.

Processing Data

Once the field data is gathered it is entered into software which organizes it into different views. Probably the most illuminating function is presenting the data in slices. This allows us to observe the land in somewhat the same manner that an MRI analyses a human body. By setting the slicer at different increments we can get a look at layers of a project.

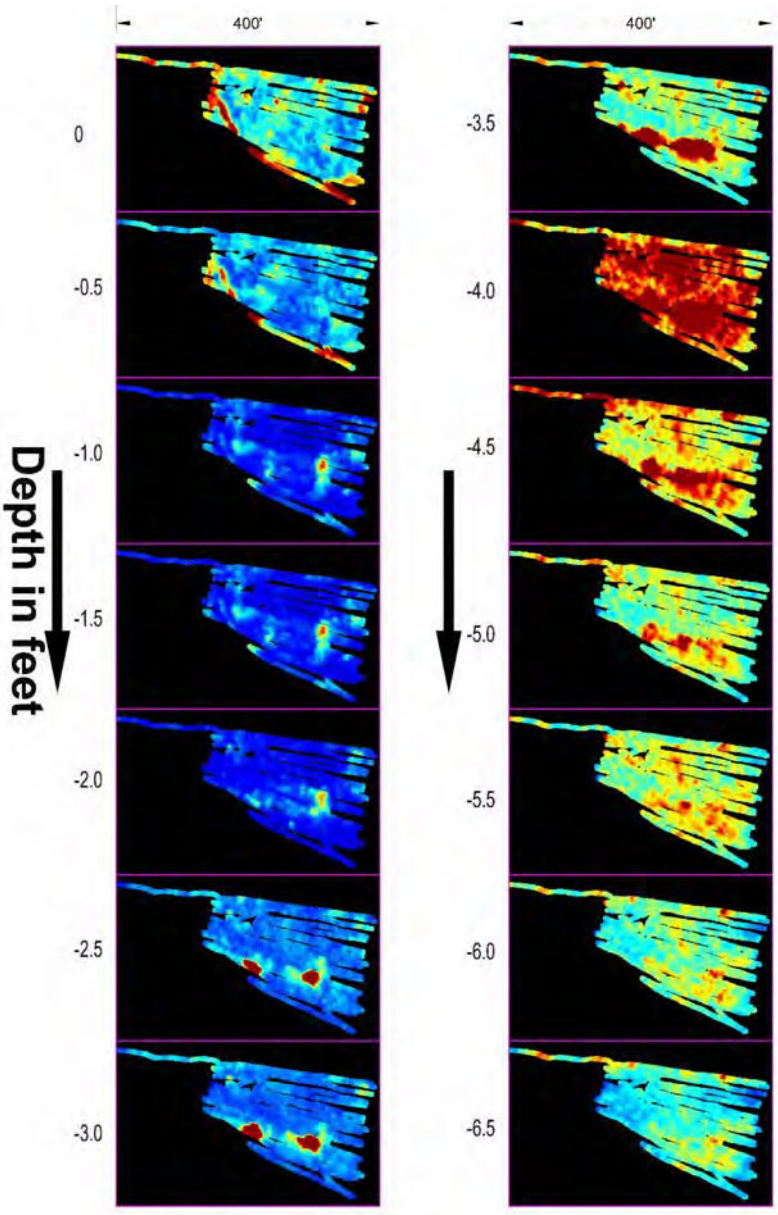

Figure 9: Horizontal slices at ½ foot increments showing multiple objects especially at depths 3.5 to 4.5.

We chose to show the data at one half foot increments though the actual data is much denser. One can easily see several colored blobs scattered over each slice. The redder to color, the more solid the object.

The slices shown on that exhibit are consistent with what one would expect in a communal cemetery site. There are several objects at various depths and sizes which would correspond to burials performed at different historic times. The yellow objects in figure 10 could be ash deposits. The red areas could be bodies or groups of bodies. The variation in size is accounted for by the nature of the burial. Cremated remains would be the smallest. Of course, some of the objects might also be rocks or animal bones. One would expect natural objects to be situated more randomly.

There is one area off the mound, to the southeast, where the distribution is anything but random. We did a deeper dive in that area. Beginning at 3.5 feet below the surface, things get interesting. A dense area about 125 feet in length appears. There are also several smaller objects scattered about.

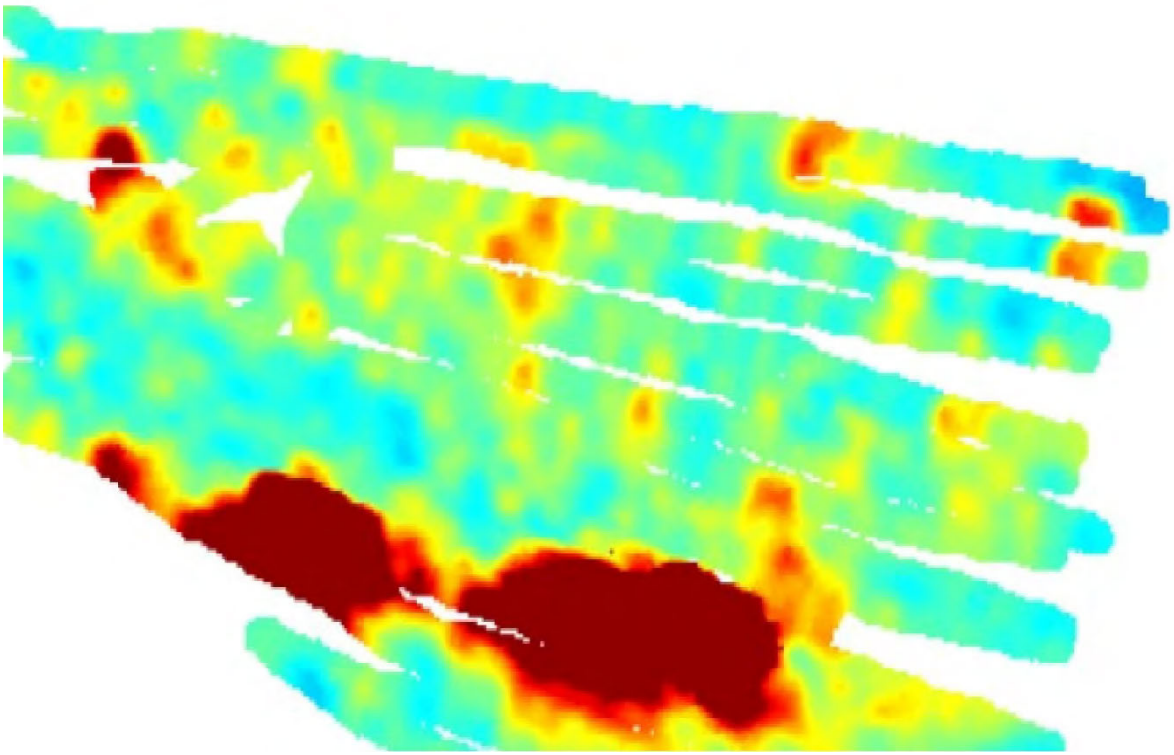

Figure 10: Closeup of Slice -3.5 shows an area that is densely populated with objects.

We surmised that this is probably an area set aside for whole body burials – especially mass burials such as the preserved winter bodies.

The following is a graphic view of this anomaly. The first figure is a plan view and the second is a cross section.

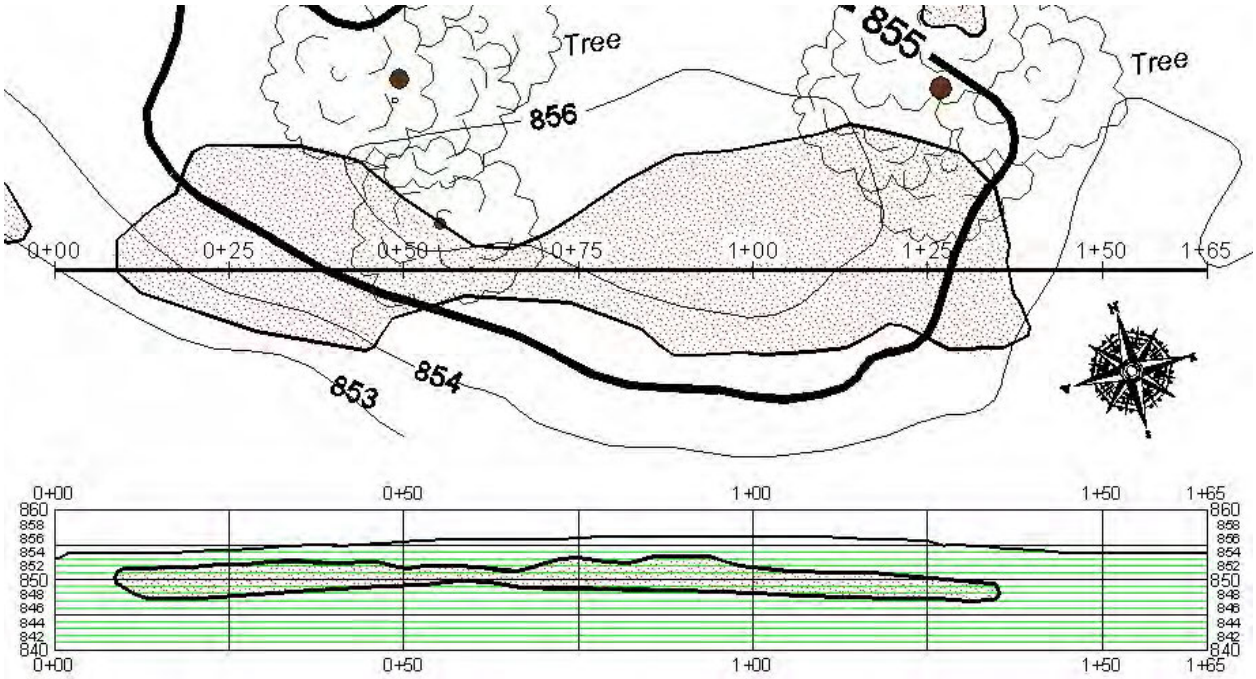

Figure 11: Imagine the 0+00 to 1+65 reference line as a knife which is slicing straight down. The profile below is an underground look at that slice from the south.

This is exactly what we would expect to see in an area set aside for multiple burials.

Conclusions

The Ground Penetrating Radar (GPR) investigation conducted at the Roth Street burial mound site has produced a consistent and compelling dataset indicating the presence of numerous subsurface anomalies with characteristics strongly aligned with human burial activity.

The principal conclusions of this study are as follows:

1. Presence of Extensive Subsurface Features

The survey identified a substantial number of discrete subsurface anomalies distributed across the investigated area.

- The quantity of detectable features is best described as **ranging from dozens to potentially several hundred individual anomalies**.
- These features vary in size, depth, and signal intensity, indicating a diversity of subsurface conditions consistent with different types of interments.

2. Evidence of Stratified Burial Activity

The vertical distribution of anomalies demonstrates a clear pattern of **multi-depth stratification**, indicating that the site was utilized over an extended period.

- Shallow features are consistent with smaller deposits, potentially including cremation remains.
- Deeper and more substantial anomalies suggest full-body interments or grouped burials.
- The layered nature of the dataset supports the interpretation of **sequential burial activity over time**.

3. Organized Spatial Distribution

The horizontal distribution of anomalies reveals **non-random clustering and spatial organization**, which is inconsistent with natural subsurface processes.

- Grouped arrangements and repeated patterns indicate deliberate placement.
- Variations in density across the site suggest designated areas for different types of interment activity.

4. Identification of a High-Density Anomaly Zone

A particularly significant feature was identified in the southeastern portion of the study area:

- A continuous anomaly zone extending approximately **125 feet in length**
- Beginning at approximately **3.5 feet below ground surface**
- Exhibiting **high density and structural coherence across multiple depths**

This feature is interpreted as a **concentrated burial area**, potentially associated with multiple or communal interments.

5. Cultural and Archaeological Significance

The combined evidence indicates that the site represents more than an isolated mound feature:

- The density, distribution, and stratification of anomalies are consistent with a **long-term burial complex**
- The site reflects sustained and organized mortuary practices over multiple generations
- Its characteristics align with known burial traditions of Indigenous cultures in the region

6. Overall Conclusion

Based on the data collected and its interpretation, it is the professional conclusion of this report that:

> **The Roth Street site constitutes a significant and sensitive burial location containing numerous subsurface features consistent with human interment, representing an extensive and historically meaningful cultural resource.**

The strength, consistency, and organization of the detected anomalies support a **high level of confidence** in this interpretation, within the recognized limitations of non-invasive geophysical methods.

This report is a small part of a much larger effort to preserve our precious heritage. This area of the country is unique because it is the epicenter of the greatest mound building culture the world has ever known. We would no sooner want to destroy

the artifacts of that culture than we would want to level Stonehenge or remove the Egyptian pyramids.

What makes this report even more important is that we are dealing with the final resting place of hundreds, maybe thousands, of Native Americans. Too much damage to this great culture has already been done. Preserve this land and we preserve the great spirit that might one day preserve us.

Figure 12: Areal view of the project area with the imaginary memory of Ancestor Spirits Above.

Recommendations

Based on the findings of this Ground Penetrating Radar (GPR) investigation and the high-confidence interpretation of significant burial-related subsurface features, the following recommendations are made:

1. Immediate Site Protection

It is recommended that the Roth Street burial mound site be formally recognized as a **protected cultural and archaeological resource**.

- No ground-disturbing activities (including excavation, grading, construction, or utility installation) should be permitted within the surveyed area or its immediate surroundings.
- Protective measures should be implemented to prevent both intentional and unintentional disturbance.

2. Establishment of a Protective Buffer Zone

A defined buffer zone should be established around the identified mound and associated anomaly areas.

- This buffer should extend beyond the visible mound boundaries to include adjacent areas where subsurface features have been detected.
- The buffer zone will help ensure that peripheral or unmarked burial features are not impacted by nearby activities.

3. Formal Archaeological and Cultural Designation

The site should be evaluated for eligibility and, where appropriate, designated under applicable cultural resource protection frameworks.

- This may include local, state, or federal recognition as a protected burial site or archaeological landmark.

- Coordination with relevant authorities and heritage organizations is recommended to secure appropriate status and oversight.

4. Consultation with Indigenous Communities

Given the high likelihood that the site contains ancestral remains, it is essential that:

- Relevant Indigenous communities, including the Ho-Chunk Nation, be consulted regarding the findings and any future actions.
- All decisions concerning the site respect cultural values, traditions, and protocols associated with burial grounds.

4. Preservation in Place

Preservation of the site **in its current undisturbed condition** is strongly recommended.

- Non-invasive methods, such as GPR, should remain the preferred approach for any future investigations.
- Intrusive methods (e.g., excavation) should be avoided unless explicitly supported by cultural authorities and regulatory bodies.

5. Controlled Access and Public Awareness

Consideration should be given to managing access to the site in a manner that balances preservation with public awareness.

- Educational signage or controlled interpretation may be appropriate, provided it does not increase the risk of disturbance.
- Increased awareness may contribute to long-term protection and respect for the site.

6. Further Non-Invasive Study (If Required)

If additional data is needed, it is recommended that:

- Further investigation be conducted using non-invasive geophysical methods only.
- Expanded surveys focus on defining the full extent of the burial landscape beyond the currently surveyed area.