CITY OF BIRMINGHAM

MUSEUM BOARD

NOTICE OF VIRTUAL MEETING

NOTICE DATE:	April 28. 2021
MEETING DATE/TIME:	May 6, 2021, 5:00 p.m.
MEETING PLACE:	Virtual Meeting

PLEASE TAKE NOTICE that the regularly scheduled Museum Board meeting for the City of Birmingham will be conducted online using a virtual meeting format. Meetings will be conducted virtually in light of health concerns surrounding the COVID-19 pandemic and in accordance with the Department of Health and Human Services orders and related legislation that emphasize safety and limiting large gatherings.

Museum Board Zoom Meeting Invitation

Topic: Regular Museum Board Meeting Time: 05:00 PM Eastern Time (US and Canada)

Potential Future Virtual Meetings:

June 3, 2021, 05:00 PM

Join Zoom Meeting https://zoom.us/j/99524391376

Meeting ID: 995 2439 1376

One tap mobile

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+13126266799,,655079760# US (Chicago) +19292056099,,655079760# US (New York) Meeting ID: 995 2439 1376 The agenda, agenda packet, and detailed instructions for viewing and participating in the meeting will be posted on the City of Birmingham's website as follows: www.bhamgov.org/government/boards/mb_agendas.php

Public comment will be handled by the virtual "raise hand" method as controlled by the participant. See instructions as posted on the City of Birmingham website: <u>www.bhamgov.org/participate</u>.

The meeting will be captioned; if participating in the meeting through the Zoom platform the user must select "view subtitles" in order to see the captions.

NOTICE: Individuals requiring accommodations, such as mobility, visual, hearing, interpreter or other assistance, for effective participation in this meeting should contact the City Clerk's Office at (248) 530-1880 (voice), or (248) 644-5115 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance.

Las personas que requieren alojamiento, tales como servicios de interpretación, la participación efectiva en esta reunión deben ponerse en contacto con la Oficina del Secretario Municipal al <u>(248) 530-1880</u> por lo menos el día antes de la reunión pública. (Title VI of the Civil Rights Act of 1964).



CITY OF BIRMINGHAM MUSEUM BOARD AGENDA VIRTUAL MEETING 556 W MAPLE Thursday, May 6, 2021 5:00 PM

Mission Statement: The Birmingham Museum will explore meaningful connections with our past, in order to enrich our community and enhance its character and sustainability. Our mission is to promote understanding of Birmingham's historical and cultural legacy through preservation and interpretation of its ongoing story.

1. Call to Order

2. Roll Call

3. Approval of the Minutes

A. Minutes of April 1, 2021

4. New Business

- A. Pandemic time capsule project
- B. Proposed modification at base of Hunter House fence; trash receptacle area repairs

5. Communication and Reports

- A. Director Report
- B. Member comments
- C. Public comments

6. Next Meeting: June 3, 2021 (Currently planned as a virtual meeting)

7. Adjournment

NOTICE: Individuals with disabilities requiring accommodations for effective participation in this meeting should contact the city clerk's office at (248) 530-1880 (voice), or (248) 644-5115 (TDD) at least one day in advance to request mobility, visual, hearing or other assistance. *APPROVED MINUTES OF THE MUSEUM BOARD MEETINGS ARE AVAILABLE IN THE CITY CLERK'S OFFICE AND ON THE CITY WEBSITE AT <u>www.bhamgov.org</u>. City of Birmingham, 151 Martin, Birmingham, MI 48009; 248.530.1800. Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-5115 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, or other assistance. <i>Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-5115 (para las personas con incapacidad auditiva) por lo menos un dia antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964).*



Members Present: Russ Dixon, Pat Hughes, Judith Keefer, Tina Krizanic, Marty Logue, Jacquie Patt, Caitlin Rosso

Members Absent: None

Student Members: Aidan Schoener

Administration: Museum Director Leslie Pielack

Guests: None

Ms. Krizanic called the meeting to order at 5:00 PM.

Approval of the Minutes Minutes of March 18, 2021

MOTION: by Dixon, seconded by Hughes:

To approve the minutes of March 18, 2021.

VOTE: Yeas, 7 Nays, 0

Unfinished Business

None.

New Business

Museum Director Pielack discussed the plan for the volunteer survey of Greenwood Cemetery and the purpose of the project, which is to assess the conditions of the grave markers in the oldest parts of the cemetery and create a baseline with photos and descriptive information. Although some of the data may dovetail with biographical information about the individuals buried there, the purpose is not to research or investigate the individuals buried there; it is to establish the condition and need for preservation, if any, of the actual markers. Director Pielack also presented members with Part I of the museum's Disaster Preparedness Plan. The intent of the plan is to have clear guidelines in place in the event of a major disaster at the museum. Part II of the plan will include detail about collection priorities, which will be complete after the collection re-structuring can be done. Beginning in May, the museum will be holding "Porch Pop Up" exhibits on the Allen House front porch, which will follow all social distancing guidelines and permit the public to view and handle selected artifacts (with safety precautions in place) according to changing themes. Pat Hughes, Tina Krizanic, Marty Logue, and Jacquie Patt agreed to come on individual Fridays when the museum presents "Meet A Museum Board Member" opportunities (probably June).

Communication and Reports

Director Pielack reviewed the Director Report and updated members regarding a sudden failure of the HVAC unit at the Hunter House requiring complete replacement of the furnace. The proposal is over the usual threshold for going out for a public bid; however, it is within the range of the amount the City Commission can waive that requirement for. If waived, the unit can be replaced quickly. If not, an RFP has to be developed and a public bid sought, which can take approximately 60 days to accomplish. This would put the historic building and artifacts at risk of uncontrolled environmental conditions of heat, cold, moisture, and lack of ventilation. Director Pielack also updated the board on the process for the geotechnical study of the pond area, which is set to go forward in the next couple of weeks. Also, the city will be changing its website, and the museum has prepared a plan for the new site to help organize the content in a more logical and easier to navigate way.

Ms. Krizanic suggested that the Museum Board consider resurrecting the time capsule project with a new theme-"What Did 2020 Mean to You," to capture student reflections on the COVID-19 pandemic. Members agreed to take the matter up on the agenda at the May meeting of the Museum Board.

There were no public comments.

The next Regular Meeting is scheduled for Thursday, May 6 at 5:00 PM, currently planned as a virtual meeting.

Ms. Krizanic adjourned the meeting at 6:03 PM.

Design for Trash Receptacle Area

Brian Devlin of Nagy Devlin Land Designs, 2018 (Plan)



O Trash/dumpster area in Heritage Zone plan.

The intent was to provide a visual barrier using post and wire supports for vining materials instead of wood picket fencing.



- The plan calls for removal of shrub hydrangea, but no vining plants were specified. Possible non-invasive plants, consistent with historical gardens:
 - Vining clematis, viticella type. Tolerant of drought once established. Easy late winter pruning. Few pests or diseases. Pollinator-friendly. Winter cover would not be evergreen.
 - Climbing hydrangea. Tolerant of drought once established. Can become large and heavy, but is a traditional garden plant. Can be kept under control with maintenance. Winter cover would not be evergreen.
- There is existing irrigation below hydrangeas. The sprinkler heads can be fitted with a dribbler-type to maximize use of water to roots and minimize loss and moisture-related damage to supports.
- Depending on the vine chosen, the hydrangea shrubs can be left in place and will provide additional cover for wildlife as well as long flowering period with little care.



May 6, 2021
Museum Board
Leslie Pielack, Museum Director
Director Report

Budget Hearing—Update

<u>Preservation and Repair Projects; Hunter House Furnace</u>—due to supply issues, the furnace replacement at the Hunter House has been delayed. Approval was received from the city commission at their meeting on April 12 to proceed with the replacement.

<u>Pond Zone Geotechnical Investigation/ Rouge trail improvements</u> —G2 Engineering will be providing their final report soon. The museum will be coordinating planning in the coming months with the Parks Department to collaborate on planned Rouge trail improvements and integration with our paths and Willits parking component of the landscape design.

<u>City Website</u>—Museum staff are continuing to work with the City web team to formulate the best web content and structure approach going forward. Content, content, content!!

<u>The Virtual Birmingham Museum</u>—Our virtual audiences are finding our content satisfying, and our numbers are continuing to increase gradually. This is a good sign, as it indicates we are meeting our virtual audiences' needs outside pandemic issues. We now have 65 YouTube subscribers who actively watch our content, and are **nearing 1000 Twitter followers**, who regularly comment and re-tweet our content; our Instagram account is also closing in on 1000 followers! Our Facebook audiences are stable but their interaction is continuing to increase. We also periodically get donations to the museum from Facebook contacts. In general, we are proud of the fact that we try to provide detailed and accurate information to our questions and comments as part of our commitment to share Birmingham's story.

<u>Collection/Recent Donations</u>—We are excited to report that the family of **Chad Smith of the Red Hot Chili Peppers** have contacted us with an offer to donate a number of his personal artifacts to the museum, including memorabilia, gold records, and more. The idea is to focus on Chad's formative years here in Birmingham, primarily in what would be, in essence, the Chad Smith Archives. This will be unfolding over the coming months, so stay tuned!

We also worked out an arrangement to get a digital image and full rights to the **1942 Carlos Lopez mural** currently preserved in the former Post Office building (now the Surnow Building) on Martin. The Surnow Company recently had a professional photographer in to photograph the mural, titled, "The Pioneering Society's Picnic," and is pleased that we wanted to add it to our archives. The mural was part of a federal program called the Section of Fine Arts Project that followed the well-known WPA programs of the 1930s. We will be looking at opportunities to explore and research further on this amazing and very Birmingham-centric mural, and to help the public understand its importance to our cultural history.

<u>New Research</u>: Greenwood Cemetery's 'potter's field'—after many hours of research in our collection, a report with findings on the location of the former 'potter's field' has been created for the Greenwood Cemetery Board, (attached).



MEMORANDUM

Museum

DATE: May 7, 2021

- TO: Greenwood Cemetery Advisory Board
- FROM: Leslie Pielack, Museum Director

SUBJECT: Greenwood Cemetery's Unmarked Burial Areas and Cemetery Terminology

Unmarked Burial Areas and Source Material

One of the stated priorities of the Greenwood Cemetery Advisory Board has been to identify the exact location of Greenwood's 'potter's field.' In the history of the cemetery, many references and different records exist that refer to 'potter's field' in the general vicinity of Sections B and C, where a number of individuals have been buried over time without markers or accurate records to identify their exact location.

In addition, several graves in Section I (designated by a rectangular boundary running east and west, just north of sections B and C) do not have markers, and this area has sometimes been confused with Greenwood's former 'potter's field.' However, we have sufficient records of the 39 grave plots and burials in Section I to determine that this area was probably never part of Greenwood's 'potter's field.'

There are four main sources of Greenwood burials that reference 'potter's field.' These are:

- 1) A burial ledger book of sexton Henry Benedict from 1893 to 1908
- 2) An interment record and cemetery notes by Henry Benedict from 1892-1900, which seems to have been transcribed in part into the main burial ledger book
- 3) A DAR/Piety Hill Chapter's 1948 Greenwood Cemetery survey/book (which apparently includes some city record information)
- A 1984 Birmingham Historical Society publication that is the most recent compilation and reference manual, with index and main book with some city record information.

The attached map shows where various notes and references describe the location of 'potter's field.' The sources all agree on four lots in **Section C—56, 57, 58 and 59**. There is one reference for one burial in Section C-20, but it does not appear to be accurate, and later notes that reference this have not been substantiated by any further information. Therefore, it is reasonable to restrict the focus for Greenwood's former 'potter's field' to be in the four lots mentioned.

A cross referenced list of named individuals and/or unknown burials in 'potter's field' shows that the earliest burials involved a few in 1848 and 1850, with the majority from the 1870s

to about 1907, with burials decreasing through the 1910s, and the final noted 'potter's field' burial in 1933. The two Benedict ledgers cover the period from 1892 to 1908 and have good notes as to who was buried and the year, and in some cases, measurement locations for their 'potter's field' graves from what was the 'south fence' at the time. After Benedict's time, further notes indicate additional burials in 'potter's field' decreasing except during the latter 1910s. Several markers were placed at some point to recognize individuals buried in 'potter's field,' presumably in close proximity to the actual burial site (see reference attachments.)

During this nearly 75-year period, the cemetery was enlarged several times, so there seems to have been little pressure to develop plots in the 'potter's field' area. Around the turn of the 20th century, it was treated as a general area, with at least one fence line at Oak Street and probably other recognizable boundaries on the surface. However, as the cemetery became increasingly full, it appears that the area was incorporated into burial plots for the original Section C in lots 56-59 when that section was laid out. In addition, surviving records indicate that several identified graves are actually located within the pathways between these four lots (see list). Furthermore, when new graves were laid out in 2015, an additional 32 graves were plotted in the N-S paths around C-56 and C-57 (in rows 18-A, 19-A, and 20-A) Except for those in 20-A, the majority of these new graves have now been sold and interments have taken place. Trees have been planted in the former 'potter's field' in the past century as well. During all this additional ground activity in the past 100 years or so in the area, there has been no report of any unexpected disturbance of earlier remains. This suggests that the integrity of Greenwood's 'potter's field' has remained intact and is not under threat of disturbance in the anticipated future (see updated map showing oldest known grave and recent sales).

Limited Value of Ground Penetrating Radar for Greenwood's Unmarked Graves

Ground Penetrating Radar (GPR) has been suggested as a tool to identify remains and unused areas of Greenwood Cemetery that could be used to create new plots or to locate the boundaries of unmarked burial areas such as the former potter's field. However, GPR does not have the capability of locating specific remains or definitively identifying unmarked graves or burials older than about 150 years (in Greenwood, 1870s burials and older). GPR can identify ground disturbances, but does not distinguish between types of disturbance, e.g., movement of roots, seismic or hydrologic movements, animal burrowing, etc. In Michigan, **under ideal conditions** of low moisture, no clay, few rocks or stones, etc., GPR is able to get readings from 3 tor 6 feet—usually only enough to pick up the top of a vault or casket. Its effectiveness to definitively determine remains or original burial sites in Greenwood's former 'potter's field' would appear to be quite limited (see attachments).

The best way to know the location and sites of Greenwood's burials is through crossreferencing existing records. The attached list includes all available information on Greenwood's former 'potter's field.' It lists the burial dates and individual names (when known) and is followed by a breakdown of the four lots previously identified as the location of 'potter's field' and the names and/or number of recorded burials there. In two cases, only names and the general location of 'potter's field,' are available. But, in most cases, there is a more information that helps pinpoint probable location and/or date interred. This appears to be sufficient to establish the overall location and most of the individuals who were buried there, and when. It would seem that GPR cannot add very much to the existing information on the location of Greenwood's 'potter's field,' since this data is consistent and fairly conclusive in itself. The Greenwood Cemetery Advisory Board is now in a position to decide what, if any, further study is warranted beyond what is now firmly established about the status of Greenwood's former 'potter's field.'

Cemetery Terminology for Unmarked Burial Areas

For centuries, cemeteries have had 'potter's fields'—separate areas for burials of indigent citizens, immigrants, infants, or individuals from marginalized cultural or social groups. Their graves are often shallow, unmarked and crowded together. The funeral industry appears to be avoiding using the term because of this negative connotation. However, when looking at Greenwood Cemetery, it is important to see the use of this term in its historic context. It appears in our source material and is specific and descriptive in nature. There is no practical way to change the existing records, and it is not clear that doing so would be helpful or necessary.

In a review of terminology currently in use in historic cemeteries, many continue to use the term 'potter's field' as a reference point and for research and/or study. There does not appear to be a movement to change terminology in these older cemeteries. That said, the Greenwood Cemetery Advisory Board may wish to consider other terminology to refer to the former 'potter's field' in the future and in official reports and communications. Here are some suggestions for consideration:

- 1. "Public Burial Ground"—This label is used by some historic cemeteries in lieu of the 'potter's field' term. It is descriptive of the nature of the non-standard burials or lack of individual markers in these areas.
- 2. "Unmarked Burial Ground/Area"—simple and descriptive; this term could also be used as the equivalent of 'former potter's field.'

Summary

- The location of Greenwood Cemetery's 'potter's field' is in the area bounded by Sections C 56-59, and includes burials in the east-west paths between 56-57 and 58-59.
- In the Section C area mentioned, the majority of grave plots have been sold and interments have been taking place. During the past 100 years and more, activity has taken place in the 'potter's field' area, the original Section C and additional 2015 plots have co-existed without any known incident of disturbance of remains.
- Ground Penetrating Radar (GPR) would not be able to identify individual remains to pinpoint burials with any degree of confidence or accuracy beyond the existing data and would not appear to justify the expense for this purpose.
- In light of the findings of this report, the Greenwood Cemetery Advisory Board can determine what, if any, further study is warranted of the former Potter's Field area
- The Greenwood Cemetery Advisory Board may wish to consider adopting a more general term to refer to the 'potter's field' area of Greenwood cemetery in official reports and communications, but for reasons of historic context, the term is attached to specific records and is useful for research and identification purposes.

Greenwood 'Potter's Field' Burial List

						Benedict	Benedict		
Last Name	First Name	Year	Age	Location Info	Comments	Ledger-1	Ledger-2	DAR book	BHS Book
					also listed as PF; also noted as				
Hyatt	Joseph W	1848	11	stone in C-57, #2	1933 but transcr error			х	х
Cowan/Cowen	Emily	1848	4	stone in C-20 #6	also listed as PF			х	х
Lord	Malinda	1850	43	stone in C 58 #6				х	х
Baringer	Mary E	1854	20	C 56				х	х
Blanchard	William H	1858	21	C 59				х	х
Child-	found on RR	1872							Х
Woodin	Child	1873						х	Х
Woodin	Child	1873			?duplicate entry?			x	Х
Wilde	Charles	1875							Х
Howland	Child of Frank	1875						x	х
Adams	Mrs	1875							х
McKale	Hannah	1881							х
Child-		1882			removed from Perrin lot				х
Warner	children	1882							х
Fall	Child of William	1883							х
Riffenburg	William	1883		C 59 #10	veteran of CW			x	х
Johnson	William	1884							х
Woodruff	Mrs	1884							х
Hutton	Child	1886							х
Kelcher	Child	1887							х
Carron	Child	1889							х
Munson	Mrs	1889							х
Clark	James	1891							х
Messer	Alouice (sp)	1892			NEW : (HB-2 p 13; p16)		Х		
Smith	Louis	1892			(HB-2 p 13)		х		х
Shadbolt	Child	1897						x	х
					in path between C 56 and 59:				
Clark	Mrs	1899		C 56/C 59	(HB-1- p 20; HB-2 p 25)	x	х	x	х
Eagle	Child of	1901		C 56	('foot of grave' HB-1 p26)	x			
Moore	Harry E	1901		C 56	('49 ft S." HB-1 p 25)	x			

						Benedict	Benedict		
Last Name	First Name	Year	Age	Location Info	Comments	Ledger-1	Ledger-2	DAR book	BHS Book
					Buried in pathway betw C 57				
					& 58 ; ("5 ft, 3in. North-				
Heyden/Hayden	Child of Frank	1901		C 57/C 58	Potter's Field" HB-1 p24)	х		х	х
					('57' from South Fence to				
Courtney	Henry S	1903		C 56	center Grave' HB-1 p 29)	x			
					see also 1906 ("child of				
					Pohort Eurgison, Pottors Field				
					60 ft from South Eonco to				
Forguson	Child of	1002			- 50 It II offi South Fence to				
reiguson		1903			(") (abia Hawa Baby Battara	X			
					(Valvia Howe Baby-Potters				
					Field-60 ft South Fence to				
					head of Grave at foot of 2				
					Furgison Babys Graves" -HB-1				
Howe, Valvia	baby ?	1906		C 56	p 38)	Х		х	x
					Flossie? Marie? ('Stanly				
					Furgison Baby-Potters Field-				
					63 ft S Fence to center Grave'				
Ferguson	Child (of Stanley)	1906		C 56	НВ-1, р36)	х			x
Grayson	Child of Stanley	1906		C 56					
					('Mr John Johnson-Potters				
					Field-62 ft frome South Fence				
Johnston/Johnson	John J	1907	70	C 56	to center Grave' HB-1 p39)	х		х	х
Pepperall	Child	1912							х
Sorter	Carl	1914	4 das.						х
Sorter	Mrs	1914	29						x
Perrin	Cynthia	1915							х
Ferguson	Levi M	1916	11 mos.						х
Ferguson	Cecil	1917							х
Pepperall	Walter Gordon	1917	3 mos.		Cynthia-Gordon?				х
Ferrier	Clarence	1919							x
Riffenburg	Clarence	1933	50	C 58				х	х
unk				C 56					х
				0.50					
ипк							+		X
				in path between C					
unk				51 & 58					Х

						Benedict	Benedict		
Last Name	First Name	Year	Age	Location Info	Comments	Ledger-1	Ledger-2	DAR book	BHS Book
				in path between C					
unk				57 & 58					х
				in path between C					
unk				57 & 58					х
				in path between C					
unk				57 & 58					х
				in path between C					
unk				57 & 58					x
Gilligan	Sarah			C 58				х	х
unk				C 59					х
unk				C 59					Х
unk				C 59					х
unk				C 59					х
Perrin	Mrs							х	Х
Saur	Georgina							х	Х

38 Greenwood 1906 Lot Sec G Aug 16 Mr Austin Parks Baby 18 ft 4 m South End center Grad 31 Sept 23 Mrs Emily Waring 14 ft South End center Grave B 70 Oct 10 John Blakesee Removed) 15 ft 6 in South End center Grave A 17 Oet 11 Mir Stephen Cooper 2 ft South End center Grave G 32 4 bet 19 Mrs Stephen Coopes Removed 5ft 9 in South End center Isaac 32 Oct 25 Mrs Mary Ann Le awrence 7 ft 10 m South End center Grave E 19 North half Nov 24 Mrs Alfred & Morrow I 18 Dec 4 Harold Gardner Baby South End 19 I Dec 17 Valvia Howe Baby Potter 60 ft South Fience to head of Grave at foot of 2F argison Babys Fraves Potters Field

9213 12 Interments . Cometery Society 12 6m 1 12th Migr Kittie Stone ore Mr Logan lot Mar 65 65 2 Ma Alouce Messler 2 " Jaid \$ 3 \$ 3 00 17 Secce Smith Potters Field 11 mo Sounders Let 17 mo Dainer Led TO 30 mm Albert Niton: Sect-13 \$ 2 50 70 8 9 00 \$ 3 60 49 Daugh 1893 January 121- 1893 Pariel \$ 3.50 bussied Mins Hilliam? Riffenburg on Seat-No 1 dec B 1 - 18:33 Recieved of to O Trowbridge the in Lum of ten Dollars. y Pariel 10.0 for servicing bucklies 0 for Mass. A. C. Wallace 12 Jan I signed a secrept for de. . Soubridge for \$11.50 for. & leven dolls and fifty ets In which \$ 1000 will mine and enellight \$1.50 belonged to the society" M. Benediel-Set 18 Coush by I & Beall # 3100 Bar \$ 3 - 00 , 91 21 Mar Robert M.C. Masters. On Not- No aid 183. 28. 14 Mrs: John Cromwell on lot No - Apr 20 Mrs. R.E. Troubridge 63 puil 300

25 July Geenwood Interments 8 JA 25" Fid July 3 OF Snitchur Infant Child 54 B \$ 320 ard - - 7 Daisy Hoffman DB 3 2 Daid Sell- 20 Mrs. John, Brown 39 9\$ 2.50 Paid Nov 25 James Hanna Dec 1 Eli & Woosler 47 B& 600 Said 47 13 \$ 600 Paid Jan 18 1899 Mr. W.m. Smith 9 DA3 5 Paid ... 29 1899 Child Rell, Brones 8 9\$250 Or to bash \$ 1.00 ... 80 Mrs Clark. Pottersfield Zac goud Feb 10 Mrs. Ely, Baker. 48 & \$ 38 Paid 35 & \$ 300 Baid ... 21 Mrs William Carles Mar 3 Mr Morlans Smith \$ 1.50 19 B \$320 Suid -- 16 Mrs Rachel, Bookham 16 B\$ 35 500 42 & \$ 6- 5 Paid --- 22 Mr Joseph Allen' --- 25 Atro Legeer Andoguet D\$ 320 Said --- 28 Mas margeret Keyser --- 30 Mars anson Waight --- 31 Mar Eelward . Corawford 6 9 # 300 Pail M 3.\$300 P/ 13 \$ 52 14 Mr James, Goinley 72. Afr



At the turn of the century, when this photo was taken, Greenwood Cemetery had large open areas, and there was very little pressure on developing the 'potter's field' area. *Birmingham Museum Collection.*



Greenwood Cemetery General Location of 'Potter's Field'

Section I - many graves unmarked but no evidence it was ever potter's field

Sources:

Benedict, Henry. Ledger Book of Greenwood Burials, 1893-1913. Birmingham Museum Collection.

Daughters of the American Revolution, Piety Hill Chapter. "Records of Greenwood Cemetery," 1848. Birmingham Museum Collection.

Birmingham Historical Society. "The Greenwood Cemetery: Its Inscriptions and Burials." 1984. Birmingham Museum Collection.

DAR record reports that this is part of former potter's field-inconsistent with burial records, probably an error except Emily Cowan/Cowen, 1848; has stone in Lot 20, #6, but noted elsewhere as a potter's

All three records are in agreement about these four lots-#s 56, 57, 58, and 59 of Section C being used as potter's field from 1848-1933.



Locating Unmarked Cemetery Burials

Office of the State Archaeologist, University of Iowa, Iowa City, IA 52242. Burials Program: 319-384-0740.

This guide may be freely copied and distributed. Check the OSA web site for future updates (www.uiowa.edu/~osa/burials).

◆Introduction

Burials are often poorly marked in cemeteries, and many cemeteries suffer from poor or nonexistent record keeping. Cemetery plots are typically treated as property, and conflicting claims on a plot can lead to legal headaches for everyone concerned. Likewise, the disturbance of an unmarked grave by a subsequent burial can be traumatic for all the families involved. For these reasons, it is important for the caretakers of a cemetery to do their best to verify that a plot is empty before someone is buried in it or before the plot is sold or traded.

This information is relevant only for the identification of graves which can reasonably be considered less than 150 years old. Older graves, including Native American and pioneer graves, fall under the jurisdiction of the Office of the State Archaeologist. If you are dealing with a grave you suspect is more than 150 years old, cease work immediately, cover any exposed remains, secure the area, and call the Burials Program of the Office of the State Archaeologist (319-384-0740).

This guide is intended to help cemetery caretakers and the general public understand the options that exist for locating unmarked graves in Iowa. The most common ways of locating graves are discussed, as well as their advantages and disadvantages. It should be noted that no process is foolproof in finding unmarked graves. There are specific laws related to disturbance of graves in Iowa. If you are unsure if you are allowed to conduct an investigation, please call one of the phone numbers at the end of this list before beginning work.

As cemetery caretakers well know, what you see on the surface does not always reflect what is below. Grave markers can be at the head, foot, or center of a grave, or can be some distance from the grave. Burials can be oriented in any direction relative to a marker or nearby burials. The markings on the grave stone may face towards or away from the burial. Multiple individuals may be buried under one marker. Many burials lack markers, typically because the original marker was made of wood or because of vandalism. Markers may be situated over empty graves. Well-maintained cemeteries typically do not have depressions over a grave; if there is a depression, it may be far larger or smaller than one would think necessary. Depressions are not always signifiers of graves, since grave diggers can borrow soil from nearby areas to fill in low spots, creating depressions that resemble graves.

In sum, you cannot assume that surface indications have anything to do with what is below the surface. If records are inadequate, some sort of remote sensing or subsurface testing is needed to locate burials. Described here are the most common techniques.

At the end of this report is a flowchart that explains some of the decision-making steps that an archaeologist or geophysicist go through to decide what survey technique to use, this chart may help you decide what survey technique is best for your situation.

Rod Probing

Probably the most common way to search for graves is to probe the soil in the area with a 6-footlong rod with a blunt end and a T-shaped handle. These rods can be purchased commercially or be made by the user. The soil is probed in various spots looking for the resistance one would expect from a coffin or vault.

Advantages: Inexpensive, easy to use, generally accurate for recent burials in coffins or vaults.

Disadvantages: Invasive, so families may object. Cannot find burials that were not in coffins. Cannot find wooden coffins that have rotted, which is very common among graves from the 1800s and early 1900s. The coffin and remains decay and the coffin void fills in, leaving no resistance or voids to be found by the probe. Very difficult to find small coffins of infants or children. Rocks in the soil often give false readings, and it is very difficult to probe when the ground is hard or frozen.

Soil Coring

A more-exact method of probing is soil coring, in which a 3/4-inch or 1-inch diameter hollow tube is inserted into the ground above a suspected grave. The core is pulled out, and the soil examined for evidence of disturbance through comparisons with nearby undisturbed areas. This work should be done by a trained archaeologist or soils scientist, since the differences between a disturbed and undisturbed soil can be very subtle, especially if the soil is homogenous or very complex.

Advantages: better than rod probing, since it can detect burials even if the coffin is severely decayed. Cost is usually less than remote sensing. There are numerous qualified archaeologists in Iowa who can help; Iowa archaeology firms are listed at the end of this document.

Disadvantages: Invasive, so families may object. Requires an archaeologist or soils scientist, so cost is greater than rod probing. Difficult or impossible in rocky soil. Often, soil difference can be so subtle that even a trained archaeologist cannot tell if a grave exists for certain or not, especially if the original soil matrix is very homogenous or if the upper soil layers are disturbed by non-grave activity such as earth moving or burrowing animals. It is very difficult to core when the ground is hard or frozen.

♦Formal Excavation

The most-definitive way of determining if a burial exists in a plot is formal excavation. Formal excavation is different than grave digging; typically a grave digger will not notice if they are digging an occupied grave until it is too late and the coffin or burial is damaged or destroyed. Human remains are occasionally found in back dirt or borrow piles at cemeteries, since the grave digger cannot always tell if they have gone through an existing grave. Formal excavation is different than exhumation, in which a fairly-recent burial from a known grave is removed; many funeral parlors or medical examiners can arrange for exhumation. In contrast, formal excavation is the systematic removal of soil in a controlled fashion to locate suspected graves while causing minimal damage to them. Formal excavation is best performed by a trained archaeologist who has an understanding of soils and excavation methods. While there are many ways to perform formal excavation, a common way is to use a wide, toothless backhoe to slowly strip away the soil in

level layers a few inches at a time. This allows the archaeologist to check for evidence in the soil of a grave shaft (the filled-in grave hole) above the burial. Once evidence of a burial is encountered, archaeologists can map the burial and leave it in place. If a disinterment permit has been obtained from the Department of Public Health, an archaeologist can carefully excavate the remains for reburial elsewhere, after a consultation with the person who obtained the permit. If the remains and effects are removed, they can be studied to help determine the identity of the individual. Formal excavation can also stop well above the grave if there is evidence of a shaft.

Advantages: Almost fool-proof and, if properly done, will provide a definitive answer. Can be performed in any soil type, rocks are not a problem. Excavation can provide information about not just if a burial is located there, but can also provide information needed to determine the identity of the buried person. There are numerous qualified archaeologists in Iowa who can help; Iowa archaeologists are listed at the end of this document.

Disadvantages: Highly invasive, so families may object. Expensive; it requires an archaeologist and machinery, and possibly laboratory time. There is always a chance that a very ephemeral burial will be missed and destroyed by machinery, although this is unlikely.

♦Ground-Penetrating Radar (GPR)

With GPR, a radio or microwave signal is sent into the ground and the reflected signal is recorded. The time it takes for the signal to return reflects the depth of penetration, and the returning signal can be stronger or weaker depending on the type of material it is passing through and reflecting off. This data can be used to make an image of the subsurface. A GPR technician will walk an antenna over an area, recording data. This data is processed in a computer to create a two- or three- dimensional image of the subsurface. Under ideal conditions, the grave shaft and possibly the coffin or vault will be visible, but under normal conditions, only the upper part of the grave shaft is visible.

Advantages: GPR is non-invasive, so families typically do not object. Under ideal conditions, it can provide a highly-detailed image of the subsurface. GPR can often see through surface disturbances. GPR is probably the best form of remote sensing if the clay content of the soil is low. Services are available in Iowa, for a fee, from the Office of the State Archaeologist (319-384-0724). Other regional practitioners can be found at the web page listed at the end of this document, or by contacting one of the archaeologists listed.

Disadvantages: GPR's effectiveness depends on soil conditions; it does not work well in clayrich, rocky, or saturated soils. GPR can be expensive.

♦Resistivity

Resistivity can often be useful in finding graves, it is based on the principle that soils have differing moisture retention properties and therefore will conduct electricity differently. A small electric charge is run between spikes placed in the ground, and the resistance is measured. When a soil is disturbed, as in a burial, different types of soil are brought near the surface which have very slight differences in electrical resistivity. The surveyor will probe at close intervals over a large area collecting data, which is then downloaded into a computer to show areas of disturbed soils. In a cemetery, these often correspond to marked and unmarked graves.

Advantages: The spikes only penetrate a few inches into the soil, so it is relatively non-invasive and families typically do not object. Can give some idea if disturbances are deep or not. Under ideal circumstances, resistivity is quite effective.

Disadvantages: Resistivity is ineffective if the upper level of soil is disturbed over a large area (for example, by previous bulldozing), and it is ineffective under certain conditions, such as when the soil is very wet or very dry. Can be expensive. May be adversely affected by rocky soil. Currently, there are no practitioners in Iowa; for regional practitioners, see the web page listed at the end of this document. Likewise, qualified archaeologists can also help you find a practitioner, a list of Iowa archaeologists is included at the end of this document.

Conductivity

Conductivity is often effective in finding graves. It works by applying a magnetic field to the ground surface. This magnetic pulse causes the soil to generate a secondary magnetic field, which is recorded to make a map. When a soil is disturbed, as in a burial, different types of soil are brought near the surface which have very slight differences in conductivity. The surveyor will walk an instrument over a large area collecting data, which is then downloaded into a computer to show areas of disturbed soils. In a cemetery, these often correspond to marked and unmarked graves.

Advantages: Conductivity is non-invasive, so families typically do not object. Can cover a large area in a fairly short period of time. It can be very effective under the proper conditions. Suitable instruments are often available from local soil scientists, but one must be certain the operator understands how to identify variation associated with graves.

Disadvantages: Conductivity is ineffective if the upper level of soil is disturbed over a large area. It is ineffective in the presence of ferrous metal (iron, steel, etc.), so the survey area has to be very clean and checked with metal detectors; metal markers, vases, etc., must be removed. It can be less effective if the soil is saturated, very dry, or rocky. It is affected by nearby power lines. Currently, there are no practitioners in Iowa; for regional practitioners, see the web page listed at the end of this document. Likewise, qualified archaeologists can also help you find a practitioner, a list of Iowa archaeologists is included at the end of this document.

♦Magnetometry

A sometimes effective way to quickly identify graves is with the use of magnetometers. Magnetometers are devices that measure minute changes in the magnetic properties of soil. When a soil is disturbed, as in a burial, different types of soil are brought near the surface which have very slight differences in magnetism. The surveyor will walk a magnetometer over a large area collecting data, which is then downloaded into a computer to produce maps that show areas of disturbed soils. In a cemetery, these often correspond to marked and unmarked graves.

Advantages: Magentomety is non-invasive, so families typically do not object. Can cover a large area in a fairly short period of time. Can be very effective under the proper conditions.

Disadvantages: Magentomety is ineffective if the upper level of soil is disturbed over a large area. Soils need to have significant iron oxide content, or it will not work. Ineffective in the presence of ferrous metal (iron, steel, etc.), so the survey area has to be very clean and checked

with metal detectors; metal markers, fences, vases, etc., must be removed. Because of its limitations, magentometry is often less effective than conductivity or resistance. Magentometry can be expensive. Currently, there are no practitioners in Iowa; for regional practitioners, see the web page listed at the end of this document. Likewise, qualified archaeologists can also help you find a practitioner, a list of Iowa archaeologists is included at the end of this document.

Dowsing/ Witching

A common way to search for graves is dowsing, or as it is frequently called in the Midwest, "witching," or occasionally "divining". The dowser walks over an area with two copper wires or rods bent in an L shape, holding the short ends in each hand and pointing the long ends forward. Dowsers believe the wires will cross over a grave. This practice is ultimately derived from an old English and German folk belief that willow or hazel sticks have an uncontrollable desire for water and will point to underground reservoirs. In America, the willow was replaced with copper rods and used not only to find water, but also graves. One common folk belief is that the two rods will converge if the grave is of a male, and diverge if it is female.

Supposedly the magnetic properties of disturbed soil or coffin hardware attract the copper rods. However, this is illogical. First, soil and coffin hardware do not attract metal, as simple experimentation will show. Soil is so weakly magnetic that a hyper-sensitive magnetometer is required to measure it reliably. Second, even if soil or coffin hardware were strongly magnetic, they would not attract copper wire, which is unaffected by magnetism–experimentation at home will show that you can't move a copper wire or penny with a magnet. Third, even if soil or coffin hardware were magnetic, and non-copper rods were used, the rods would *never* cross when exposed to a magnetic field; long metal objects always run *parallel* with strong magnetic fields. Remember the grade-school science project with iron filings on a glass plate over a magnet? The filings line up parallel and curve with the field, they do not cross each other. All credible scientific trials of dowsing have shown that dowsing is no better than random luck or commonsense intuition at finding graves or water (for further information, refer to Robert Todd Carroll's reviews of scientific tests of dowsing in the <u>Skeptic's Dictionary</u> [John Wiley & Sons, 2003], www.skepdic.com/dowsing).

Advantages: There are no advantages to dowsing.

Disadvantages: Dowsing is no better at finding graves than common-sense intuition. Dowsing could put yourself or your organization at legal and financial risk and could lead to public embarrassment. When you make determinations about the presence or absence of burials in a plot you are making decisions about other people's property which carries legal and financial liabilities. The court of law does not recognize folklore such as dowsing as valid scientific practice. While other technologies and methods described here are not foolproof, they can at least be explained and justified in court because they are based on scientific or observational principles.

♦Numbers to Call for Burials Issues:

Office of the State Archaeologist Burials Program (burials older than 150 years, can also answer general questions): Shirley Schermer– 319-384-0740

Regulated Industries Unit, Iowa Securities Bureau (oversight of active cemeteries): Dennis Britson, Director– 515-281-4441; Dennis.Britson@comm6.state.ia.us

State Medical Examiners Office: Jerri McLemore, Associate State Medical Examiner—515-281-6726; jmclemor@idph.state.ia.us

Department of Public Health, Office of Vital Statistics: Jill France, Chief, Bureau of Vital Records—515-281-6762; jfrance@idph.state.ia.us Carol Barnhill, Office Manager, Vital Records—515-281-7824

Attorney General's Office: Mike Smith, Assistant Attorney General—515-281-5351; msmith@ag.state.ia.us

How to Contact Geophysicists (Remote Sensing Practitioners) and Archaeologists:

Remote Sensing. A list of regional practitioners of remote sensing (GPR, magnetometry, resistivity, conductivity) can be found at the North American Database of Archaeological Geophysicists web site, http://www.cast.uark.edu/nadag/. Since geophysics is an unregulated profession, be sure to ask for references and examples of final reports. Geophysicists affiliated with archaeological or engineering firms may be better choices, since archaeology and engineering are regulated professions. Many archaeologists, listed below, can subcontract a geophysicist on your behalf.

Archaeologists. A full list of qualified archaeologists working in Iowa, including out-of-state firms, is maintained by the Iowa State Historical Society on their web site: http://www.iowahistory.org/preservation/review_compliance/consultant_list.html

All Archaeology Firms Based in Iowa Listed with ISHS (as of 9/1/05): Bear Creek Archaeology (563) 547-4545 Consulting Archaeological Services (641) 333-4607 Cultural Heritage Consultants (712) 239-9085 Gradwohl, David (515) 294-8427 Iowa State University Archaeology Laboratory (515) 294-7139 Louis Berger & Associates (319) 373-3043 Office of the State Archaeologist, University of Iowa (319) 384-0724 Prairie Archaeological Research Consultants (641) 757-7830 Tallgrass Historians (319) 354-6722 Wapsi Valley Archaeology (319) 462-4760 Weitzel, Timothy (319) 354-5290

First Version: 9/1/05, William E. Whittaker.

Decision-Making Flow Chart for Finding Unmarked Burials

This chart presents some of the decision-making criteria archaeologists and geophysicists use in deciding a method for finding graves. Contact an archaeologist or geophysicist for more information.







WHEN YOU NEED TO KNOW WHAT'S BELOW



Maler

Unknowns beneath the surface



Gas, Electric, **Communication Lines**

Storage Tanks

ABOUT GPRS



- 2001 GPRS started in Toledo, OH
- 2007 GPRS had 5 employees
- 2008 GPRS began nationwide growth expansion efforts
- 2010 GPRS grew to 35 employees
- 2018 GPRS currently has over 289 employees

Since inception, GPRS has completed over 200,000 jobs as a company







- GPR works by sending electro magnetic pulses of energy from an antenna into a particular medium such as the concrete or ground
- When the radar pulse contacts something other than the material, it generates a reflection back to the antenna.
- This reflection is displayed in real time for the operator to mark the item at the surface. Item depth is also noted







CONCRETE SCANNING





GPR LOCATING



Ground Penetrating Radar:

- Utilities, underground storage tanks, voids, obstruction/debriss unmarked burials
- Standard GPR has a typical depth penetration of 3'-6' deep throughout the state of Michigan (site dependent)

Limitations:

- Size of target typically, a target (utility) must be at least 1" in diameter per 1' of depth in order for it to be located with GPR.
- Soil conditions clay soils, wet soil or soil which contains high amounts of debris can limit the effectiveness of GPR.
- Surface conditions brush, standing water, metal plating, or anything which blocks direct access to the area to be scanned will limit the ability to perform GPR



GPR LOCATING









GPR LOCATING









REPORTING SERVICES



REPORTING

In conjunction with our GPR locate, we can additionally use a hand-held GPS device to collect our finding and overlay them onto an existing CAD document and or Google Earth image for your records.





REPORTING SERVICES









For more information visit **Gprsinc.com**

SUBSURFACE SCANNING SOLUTIONS

