

Archaeological Investigation Workplan for a Portion of Greenlawn Cemetery (CR-49-6) – Henry Street Bridge Project

City of Indianapolis, Center Township, Marion County, Indiana

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Principal Investigators: Ryan Peterson Dr. Brooke Drew Dr. Jeremy Wilson The conclusions in the Report titled Archaeological Investigation Workplan for a Portion of Greenlawn Cemetery (CR-49-6) - Henry Street Bridge Project are Stantec's professional opinion, as of the time of the Report and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk. Stantec has assumed all information received from the City of Indianapolis (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance, or any other theory to any third party and will not be liable to such third party for any damages or losses of any kind that may result.

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1.0 INTRODUCTION

This archaeological investigation plan for excavation and relocation of a portion of the Greenlawn Cemetery (12MA1108, CR-49-6) is presented to the City of Indianapolis (City) and the Indiana Department of Natural Resources—Division of Historic Preservation and Archaeology (IDNR—DHPA) as a requirement under IC 14-21-1-26. The Stantec team will assist the City with the excavation, analysis, and relocation of graves within the Henry Street Project Area of the Greenlawn Cemetery. The investigation will be conducted by personnel who meet the Secretary of the Interior's standards for professional archaeologists and are registered with the IDNR—DHPA.

Project Team

Stantec will be the lead contractor for the project and Ryan J. Peterson and Dr. Brooke Drew will serve as the Principal Investigators. The project will be completed in partnership with Indiana University—Indianapolis (IU-Indianapolis) and Dr. Jeremy Wilson, professor of anthropology, will serve as Co-Principal Investigator for the project. The crew will consist of an experienced group of archaeologists and bioarchaeologists.

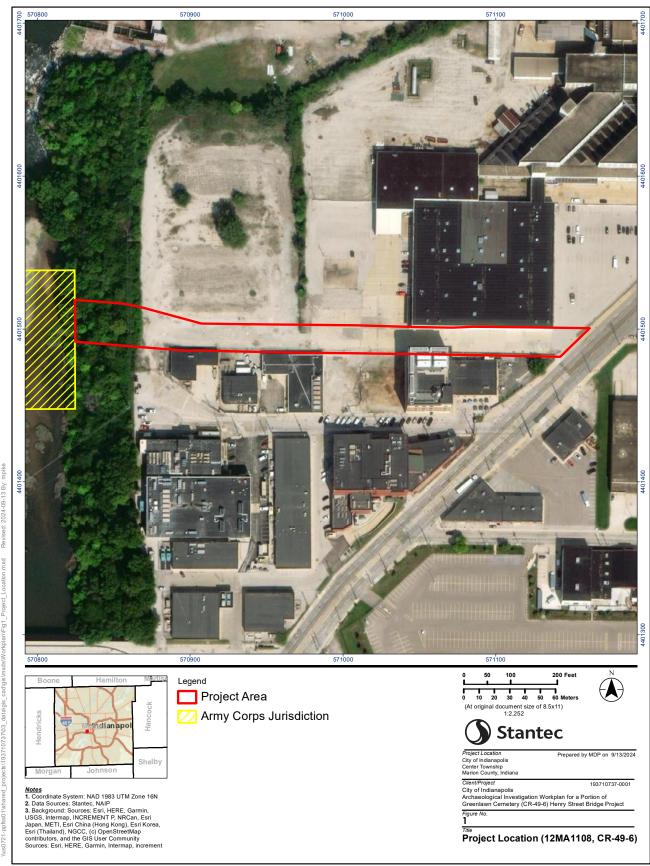
2.0 PROJECT SUMMARY

The City contracted Weintraut & Associates, Inc. (W&A) to conduct background research and a Phase I archaeological investigation of the portion of Greenlawn Cemetery within the Henry Street Project Area (Goldbach 2023), as well as monitoring of boring and test pits associated with subsurface utility engineering (Arnold et al. 2024). The Greenlawn Cemetery is located in the NW ¼ of Section 11, Township 15N, Range 3E on the Indianapolis West, Indiana USGS 7.5' topographic map quadrangle in Marion County, Indiana (Figure 1). The historic boundaries of the cemetery expanded from its original size of 4 acres in circa 1821 to a maximum extent of approximately 25 acres by 1866. The Henry Street portion of the cemetery measures approximately 0.56 hectares (1.38 acres).

As part of the initial investigations, W&A completed a Phase I archaeological survey, an accidental discovery plan, and a Memorandum of Agreement (MOA) with the Corps of Engineers. At the time the MOA was completed, no human remains had been recovered from the Henry Street portion of Greenlawn Cemetery. Following the signing of the MOA, a single human metacarpal was recovered from test pits associated with subsurface utility engineering. In addition, Stantec oversaw the extraction of 10 geoprobe cores spaced across the Henry Street Project Area. Two cores produced human remains near the western extent of the Project Area. Several projects in proximity to the Project Area (Diamond Chain to the north and Netrality to the south) have reported encountering human remains during construction activities involving ground disturbance. There are no extant burial markers within the Project Area.

The following archaeological investigation plan provides a summary of steps and procedures to be implemented as part of the Greenlawn Cemetery–Henry Street Bridge Project relocation project as required under IC 14-21-1-26. Throughout the duration of the project, any unanticipated deviations from the data recovery plan will be communicated to and approved by the IDNR–DHPA and the City.

Figure 1. Project Location



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

3.0 BACKGROUND RESEARCH

Much of the history of Greenlawn Cemetery has been reported in previous documents prepared for the Henry Street Bridge Project (Arnold and Jones 2023, Weintraut & Associates, Inc. 2021). The following summary draws primarily from these documents.

The location of the site of the former Greenlawn Cemetery is recorded as early as 1821 on the original plat map for the City of Indianapolis (Sanford 1994:392; Sulgrove 1884:385) as a 4-acre plot labeled "Grave Yard." Also referred to as the "Old Burying Ground" and "Old Cemetery" on later maps, this section occupies the southwestern portion of what would become the full extent of Greenlawn Cemetery near the eastern bank of the White River. Additional land was added to the cemetery over the years as cemetery space was needed for the growing city. These include a 1836 6.13-acre addition between the "Old Burying Ground" and Kentucky Avenue known as the "New Ground" (also known as "Union Cemetery"), an 1852 additional section of 6.2-acres to the north east that was also mapped as "New Burying Ground (E.J. Peck)" (also known as "North Burying Ground" and "Peck's Ground"), and, in 1866, a final section to the north mapped as "Green Lawn Cemetery" that brought the total area of the cemetery to around 25 acres (Sanford 1994). There is also some documentary evidence that the land between the "Old Burying Ground" and the eastern bank of the White River may have been used during the early history of the cemetery as a separate burial site for the city's African American residents, although this section was never officially recorded on any city maps (WIRD Infrastructure 2024).

Soon after reaching their maximum extent, burials were removed from some cemetery areas and reinterred at other local burying grounds. Subsequently, during the 1870s, the cemetery began to shrink as land parcels were repurposed for industrial development. Burials ceased in Greenlawn by the 1890s and more land was repurposed for non-cemetery uses. Burial removal for reinterment elsewhere was not systematic prior to land repurposing and appears to have often only been conducted at the bequest of descendants. The remaining cemetery land was redesignated as a park in the late 1890s and operated as such through the middle of the 1910s. In 1916, the Baist Atlas shows the boundaries of Greenlawn had shrunk to near its original boundaries of 1821 and is labeled as "condemned." By 1941, Greenlawn was no longer included on city maps and the entire area had been converted for industrial use.

In the 1920s, some effort was made to record the headstones still present within the Old Burying Ground (Moore 1920). In 1924, the Terminal Realty Company attempted to systematically reinter individuals that could be located within the Old Burying Ground (Garman 1924). Since that time, no systematic internment removal has been conducted; however, as a result of ongoing development, at least eight separate instances of inadvertent discoveries of human remains were documented in the area of the former cemetery between 1935 and 2000 (Arnold and Jones 2023). Based on limited early record keeping, the absence of a concerted effort to identify and remove all Greenlawn interments, and the continued accidental discovery of human remains during construction activities at the site over the last nine decades, there is a high likelihood that many interments remain within the boundaries of the former Greenlawn cemetery. As a result, any construction activity in the area should expect to encounter human remains.

Considerable research related to Greenlawn Cemetery has been completed by the City and their contractors, including comprehensive archival searches conducted by Deedee Davis. Additionally, a Community Advisory Group (CAG) comprised of various stakeholders was assembled to provide technical knowledge, transparency, and additional archival, genealogical, and research support, as well as guide discussions on interpretation, memorialization, and messaging. The Stantec team will integrate the results of the previous research into our reporting and continue to work with Ms. Davis and the CAG to integrate their additional findings and supplementary research.

3.1 PERMIT REQUIREMENTS AND CONSULTATIONS

The portion of Greenlawn Cemetery associated with the Henry Street Bridge Project will be relocated archaeologically under a plan approved by IDNR-DHPA per IC 14-21-1-26. The following will also be completed in the process of the relocation:

- In accordance with IC 14-21-1-26.5, a cemetery development plan approved by IDNR–DHPA that remains in effect for the duration of the project (Weintraut & Associates 2021)
- Approval from the IDNR–DHPA before reburial
- Filing of appropriate forms with the Marion County Recorder's office and IDNR-DHPA
- Maintain CAG involvement throughout the process; additional consulting parties may be added with the approval of the City and CAG

3.2 PUBLIC INVOLVEMENT

Three public meetings were held relating to the Henry Street Bridge project. In addition, the CAG was formed 18 months ago and has met monthly to advise on project details. Stantec will continue to participate in monthly CAG meetings for the duration of the project. In addition, Stantec will participate in other public meetings and engagements at the direction of the City and CAG.

4.0 CEMETERY MAPPING

Currently, no visible cemetery infrastructure remains within the Project Area. However, as historic fill is removed during site preparation, it is possible early cemetery infrastructure features may be exposed. These may include, but are not limited to, buried grave monuments, metal coffins or burial vaults, fences, small building foundations, and cemetery paths. Stantec will conduct detailed mapping of the cemetery's features when they are encountered, along with mapping of identified grave shafts. This map will provide the location and orientation of graves identified within the cemetery boundaries, as well as other infrastructure features. Features will be georeferenced to an established coordinate system and datum. This documentation will aid in planning for reinterment in a new location yet to be determined. Additionally, mapped cemetery features and interments will be integrated with existing georeferenced historical maps and other Greenlawn Cemetery historical records.

5.0 SITE PREPARATION, BACKHOE STRIPPING AND MONITORING

Previous geotechnical investigations have identified fill material of varying depths (between approximately 8 and 11 ft) throughout the eastern portion of the Project Area between Kentucky Avenue and the eastern bank of the current course of the White River (Arnold and Jones 2023, WSP 2023). In preparation for the excavation of the Henry Street portion of Greenlawn Cemetery, Stantec requested the extraction of additional geotechnical borings across the Project Area to identify the depth of fill dirt that is presently capping the original ground surface of Greenlawn Cemetery (Figure 2). These are necessary in order to find the potential maximum depth that will need to be excavated to completely identify and remove all internments from the Project Area (Pike and Peterson 2024). In total, 10 geoprobe cores were extracted from across the Project Area. The soil stratigraphy from the extracted cores was examined by Stantec geoarchaeologists who estimated the fill depth above the original cemetery ground surface to vary between 3.5 and 7.5 ft below the current ground surface; the depth to the base of burial deposits associated with Greenlawn Cemetery interments varies between 6.5 and 10 ft below the current ground surface. This maximum estimated excavation depth was used for the design of a shoring system for the stabilization of excavation trench walls.

The trench stabilization shoring system will consist of soldier piles and lagging. Shoring will be essential to ensure the safety of the field crew and has been selected to be as minimally invasive as possible. Piling installation will have the potential to disturb burials, but the lagging between the piles will be added as the excavation is completed to minimally disturb internments.

Prior to the excavation of historic fill by mechanical stripping, trees and shrubs will be removed from the western portion of the Project Area. This process will be monitored by archaeologists to ensure that any cemetery-related features such as buried monuments are protected during the removal process. Sections of the current chain link fence will also be removed to clear the area for mechanical excavation.

Between 3.5 and 7.5 ft of historic fill dirt capping the original cemetery ground surface will need to be removed prior to the excavation and removal of Greenlawn interments. The removal of this fill horizon will involve the mitigation of existing utilities within the Project Area. If additional non-cemetery related pre-contact or historic materials or features are encountered, they will also be documented. Prior to mechanical stripping, utility location services will identify buried utilities. Stormwater drainage, water, and fiberoptic utilities are known to be in the Project Area. Utilities identified and encountered during the removal of historic fill will be mitigated either through removal or stabilization by the general contractor.

Once overlying fill dirt has been removed and the original ground surface exposed, an archaeological team will monitor backhoe stripping of the cemetery portion within the Project Area. This process will involve using a smooth blade backhoe to incrementally strip back the soil in order to identify unmarked burial features. When soil stains are exposed during the backhoe stripping, archaeologists familiar with historic cemetery excavation will discern whether these stains represent grave shafts. Shaft stains will be assigned unique feature numbers and mapped using the grid established during the cemetery mapping

and georeferenced to the established coordinate system and datum. All potential graves shafts identified will be fully investigated by experienced excavators. Should precontact features or materials be encountered, they will be documented and excavated in consultation with IDNR-DHPA.

6.0 EXCAVATION

The following describes Stantec's procedures for physically handling human remains discovered during archaeological disinterment. Each burial will be treated as a distinct feature and will be excavated and removed separately. All grave shafts identified during mechanical stripping will be excavated. Trained bioarchaeologists and archaeologists will carefully remove the matrix above and around the skeletal material by hand, using standard archaeological methods including utilizing wooden tools and, to ensure the recovery of all associated material, soil recovered from the grave shaft will be screened using 1/4" mesh. Once all human remains are exposed, photographs and data documentation will be completed; this includes, but is not limited to, burial provenience, grave orientation, and associated grave good placement. While the remains and artifacts are in situ, excavators will make preliminary assessments of the skeleton and fully document features such as body orientation and positioning as well as preservation of the individual. All data will be collected using a paperless workflow on iPads and will be integrated into the site's geodatabase. Associated material culture, including coffin hardware and personal items, will be recovered, analyzed, and photographed. Following in situ documentation, the human remains will be carefully removed by element and transferred to a secure facility for further documentation and bioarchaeological analysis prior to reinterment. Artifacts found in each burial will be brought to Stantec's project laboratory for analysis and will be reinterred with the associated remains.

7.0 HUMAN SKELETAL ANALYSIS

The following protocol will be followed for the analysis of recovered skeletal materials. The skeletal analysis will be conducted by staff at Indiana University-Indianapolis at their secure facility. The staff and analytical techniques are included below.

7.1 **PERSONNEL**

Dr. Jeremy Wilson has decades of experience excavating and analyzing human remains recovered in the United States and abroad. He will oversee all aspects of analysis in a secure facility on the campus of IU-Indianapolis and will be supported by a staff of professionals.

7.2 **PROCESSING**

All human remains coming into the lab will be assigned a unique tracking number. Initial processing of each skeleton will include inventory of each skeleton on standardized digital forms and digital photography of the overall skeleton and diagnostic features such as indicators of health or pathology. September 2024 Stantec

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Data collection guidelines as outlined by Buikstra & Ubelaker (1994, Standards for Data Collection from Human Skeletal Remains, Arkansas Archeological Survey) will be followed. Data will be recorded on standardized digital forms and will include, for example, documentation of osteometrics, paleopathology, dental analysis, and discrete (non-metric) traits. Analysts will take non-destructive dental molds for morphological and dietary analysis. No destructive testing of any kind will be included in these analyses. The depth and extent of data collection will be dependent on the condition of the remains and the amount of time allotted to complete the analysis.

7.3 OSTEOLOGICAL ANALYSIS

Two profiles will be constructed for each skeleton. For each individual, the biological profile will include assessments of biological sex, ancestry, age at death, stature and body size, pathological conditions, dental variation, and any other unique identifiers. If presumptive identification is available from a headstone or historical documentation, the biological profile will be compared to the that information to help confirm or exclude identity. A demographic summary of the burial population will be prepared.

The taphonomic profile will include assessments of perimortem trauma that may have been related to the cause of death, descriptions of postmortem modifications, and observations on preservation or differential bone destruction. Comparisons will be made with conditions observed in other cemeteries excavated in Indiana.

8.0 ARTIFACT ANALYSIS

During excavations, the artifacts identified in each interment will be documented and mapped in situ and further analyzed in Stantec's Indianapolis laboratory. The analysis of associated artifacts will be directed by Principal Investigator Dr. Brooke Drew and will be conducted by Stantec's historic cemetery specialists. These analyzes will include photographing diagnostic hardware and all personal items as well as recording important features like material, form, and stylistic elements. A site-specific artifact typology will be created and compared to both contemporary documents such as coffin hardware catalogs and other comparable cemetery excavation reports. This typology and systematic documentation will aid in establishing the likely date of interment, data especially important when dealing with unmarked burials. All artifacts will be reinterred with the individual with which they were associated.

9.0 REPORT OF FINDINGS

A management summary detailing the geotechnical boring data and excavation results will be submitted to the City of Indianapolis and IDNR-DHPA within five weeks of excavation completion. The management summary will verify that all graves have been removed and request concurrence to allow construction to proceed in the former cemetery location. Stantec will submit a complete report of the results of

excavations, skeletal and artifact analyses completed by IU-Indianapolis and Stantec staff to the City of Indianapolis and IDNR-DHPA after reinterment is complete. This report will include detailed maps of each burial location and the individual graves shafts, as well as all post-excavation documentation and analysis results. This document will describe the level of care and thoroughness utilized in the excavation, analysis, and ultimate reinterment of the burials and will be an invaluable resource for the community and any descendants who may come forward after project completion to learn more about the individuals interred at Greenlawn Cemetery.

10.0 REINTERMENT

Stantec understands that reinterment in a respectful and appropriate manner is an important conclusion to the project. Stantec will work closely with the City and CAG to find an appropriate location in reasonable proximity to the current location of Greenlawn Cemetery. The Stantec team will assist with excavated burial reinterment at the reburial location, which has yet to be determined. Additional variables that may need to be considered during reinterment may include:

- Signage or other memorialization
- Possible purchase of grave markers for previously unmarked graves
- Mitigation of the condition of the remains and the potential need for burial vaults

11.0 ASSUMPTIONS

Stantec's ability to adequately provide the services outlined above is contingent upon the following critical assumptions:

- Stantec will have unrestricted access to the Project Area to conduct the archaeological investigations specified in this plan
- Weather and soil conditions will permit the completion of all aspects of the field investigation in the allotted time frame
- All applicable Federal and State permits to conduct archaeological investigations as well as cemetery removal and relocation will be granted prior to beginning excavation
- All utilities and the ROW are clearly marked
- If metal coffins or concrete vaults are encountered, the interments will be moved with the assistance of a vault specialist
- If indications of hazardous embalming materials or any other toxic conditions are identified within the interments, the remains will be removed and reinterred without further analysis
- This plan has been written to comply with Indiana Code on the date submitted; if burial laws change prior to the excavation of the graves, modifications may be necessary

12.0 SCHEDULE AND DELIVERABLES

Based upon the proposal above, Stantec will provide the above services for the archaeological relocation of the Henry Street Portion of Greenlawn Cemetery located in Marion County, Indiana as shown in Table 1. No additional work will be initiated without the prior consent of the City of Indianapolis and IDNR-DHPA.

Table 1. Estimated Schedule

Description	Estimated Time
Background Research	Currently on-going
Mechanical Stripping	Mechanical stripping is anticipated to begin in mid-late October; weather and site safety preparations may result in schedule delays
Burial Excavation	Immediately following mapping and mechanical stripping; anticipated start date is on or about 01 November 2024
Skeletal Analysis	Skeletal analysis will follow burial excavation
Artifact Analysis	Artifact analysis will follow burial excavation
Management Summary	The Management Summary will be completed five weeks from excavation completion and submission to INDR-DHPA around 04 April 2025 Anticipated approval for construction within the current Project Area is 25 April 2025
Reinterment	The location and method of reinterment will be determined after skeletal and artifact analyses are completed
Final Report	A final report of the cemetery relocation will be provided to the City of Indianapolis and IDNR-DHPA within 12 months of reinterment

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