Tulsa Race Massacre Investigation
Oaklawn Cemetery

Executive Summary of 2020 Test Excavations

Presented by the Physical Investigation Committee

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Key Findings:

- **Test excavations in the Sexton Area (July 13-22, 2020):**
  - No evidence of a mass grave or any other human remains was identified.
  - Excavations revealed evidence of two historic roads and several episodes of dumping of debris, early to mid-20th century artifacts, and soil from other locations that collectively resulted in the accumulation of about 10 feet of fill over the sloped surface that we believe would have been present in the early 1900’s.
  - Excavations also revealed a low-lying swampy area near the southern end of the Sexton Area that contains very dark, wet soil, numerous artifacts, fragments of wood, and some non-human bone.

- **Soil Cores and Augers excavated in the Clyde Eddy Area (October 19-22, 2020):**
  - No evidence of a mass grave or any other human remains was identified in the soil core samples.
  - From these results, it is possible that we are not looking in the same location indicated by Mr. Eddy or where the earlier geophysical survey (Brooks and Witten 2001) identified a promising anomaly.
  - Further investigation is needed.

- **Test excavations in the Original 18 Area (October 19-22, 2020):**
  - Test excavations revealed a mass grave that contains the remains of at least 12 individuals based largely on evidence for coffins and coffin hardware.
  - The excavations focused principally on exposing evidence of graves but, with one exception, stopped short of fully exposing the skeletal remains contained therein in an effort to maintain their preservation for later exhumation and analyses.
  - The combined test excavations in the Original 18 Area exposed nearly 27 square meters (290 square feet), which represents a portion of the overall mass grave dimensions.
  - Initial data from soil core samples suggest the mass grave could encompass an area that measures about 131 square meters (1410 square feet).
  - If the estimated dimensions of the overall grave shaft are accurate, it is possible that the total number could include more than 30 individuals. This figure presumes a single layer of burials; it is possible that some stacking of coffins took place, which would increase the number of individuals potentially interred in this mass grave.
  - Steps were documented at the western edge of the mass burial trench. These were likely cut to facilitate easier movement into and out of the trench while carrying coffins of decedents.
  - Additional investigations are needed to confirm the actual dimensions of the mass grave and collect detailed data on the remains themselves, including the extent to which they do indeed represent victims of the 1921 Tulsa Race Massacre.
Introduction

In 2018, the City of Tulsa reopened investigations to locate mass graves thought to contain the remains of victims of the 1921 Tulsa Race Massacre. The Physical Investigation Committee was formed, in part, to assist with the process of locating such graves and to facilitate forensic analyses. This reopened investigation focused first on four areas of interest including: Oaklawn Cemetery, Newblock Park, an area near Newblock Park called The Canes, and Rolling Oaks Memorial Gardens (formerly Booker T. Washington Cemetery). The Oklahoma Archeological Survey completed geophysical survey at the first three locations in 2019 (Hammerstedt and Regnier 2019) and 2020.

The Physical Investigation Committee developed two proposals to conduct test excavations in three areas within Oaklawn Cemetery where geophysical anomalies and other lines of evidence suggested the possible presence of graves of Massacre victims. These areas are identified as the Sexton Area, Clyde Eddy Area, and Original 18 Area (Figure 1). These proposals were presented to the City and Public Oversight Committee and approved during public meetings on February 3, 2020 and September 14, 2020, respectively. The ensuing test excavations were completed in July and October of 2020. The fieldwork was completed by an excavation team led by the Physical Investigation Committee and with observation by and participation of representatives from the Public Oversight Committee.

A full technical report of these investigations is in progress. This current document serves as a summary overview of the results of the test excavations for each of the three subject locations.

Figure 1. Aerial image displaying the location of the three areas in Oaklawn Cemetery discussed in the text that were the subject of test excavations in 2020.
The results of geophysical survey completed by the Oklahoma Archeological Survey (OAS) at Oaklawn Cemetery revealed a rather large anomaly in the Sexton Area (Hammerstedt and Regnier 2019:20-23). The size, location, and orientation of this anomaly, paired with oral history accounts, led the Physical Investigation Committee to recommend test excavations at this location (Figure 2) to ascertain if it represented a mass grave—perhaps associated with the 1921 Tulsa Race Massacre. The goals of this testing were to: 1) establish the presence or absence of human remains; 2) determine the nature of the interments (if present); and 3) obtain data to help inform the ensuing steps in the investigation—including appropriate recovery efforts. The original plan was to initiate excavation on April 1, 2020. Due to the COVID-19 pandemic, however, the start date was pushed to July 13 and this phase of fieldwork completed on July 22, 2020.

Three backhoe trenches (A-C) were excavated in the Sexton Area. Trench A was situated over the large geophysical anomaly discussed above (Figure 2). This trench measured approximately 6 m (19.7 ft) east/west by 3 m (9.8 ft) north/south. Excavation of Trench A revealed a series of overlapping and tightly compacted fill episodes that continued from just beneath the surface to approximately 10 feet below ground surface (Figure 3). The fill included various artifacts, construction debris, and non-local soil that had been dumped in this location (Figure 3). No evidence of a mass grave or human remains was encountered in Trench A. It appears that the geophysical anomaly corresponded to the compacted fill.

Trench B measures approximately 26 m (85.3 ft) north/south by 2m (6.6 ft) east/west from the southern wall of Trench A (Figures 2 and 4). Trench C was excavated about 3 m (9.8 ft) to the east from the south end of Trench B. These excavations similarly did not result in the identification of a mass grave or human remains. They did, however, reveal evidence of one historic road (oriented north-south) stratigraphically overlying another such road (Figure 5) and a deeply-buried swampy area with very dark soil, numerous artifacts, fragments of wood, and some non-human bone. The swampy area extends further to the south and was not fully explored during the July excavations due to challenges created by its depth and location just above the water table (Figure 6). This feature corresponds to an anomaly that was detected by the gradiometer (Figure 2; see also Hammerstedt and Regnier 2019: Figure 27).

The open space between the backhoe trenches A-C and the nearest marked graves to the east and south were tested with twelve deep core samples (Figure 7-8). These were excavated to assess the extent to which the soils were consistent (or different) compared to those observed in the trench profiles and to investigate for evidence of a mass grave. No such evidence was observed in these core samples.
Figure 2. Location of backhoe excavation trenches A-C in relation to the geophysical anomalies identified with the gradiometer in the Sexton Area.

Figure 3. Compacted, multi-colored dump loads exposed in Backhoe Trench A in area of geophysical anomaly detected at the north end of the Sexton Area (view facing south).
Figure 4. Drone image of the backhoe excavation in the Sexton Area; not shown here is Trench C (Image courtesy of the City of Tulsa).

Figure 5. View of Trench B east wall profile. Note the road segments, which appear as black lines of asphalt at about 1.3 m and 1.9 m above the bottom of the trench, respectively.
Figure 6. Trench C (view facing southeast). Note the standing water in the bottom of the trench.

Figure 7. Aerial view of Sexton Area with mapped locations of excavation trenches and auger tests.
Figure 8. View of the mechanical auger (left) and Drs. Bement and Green examining an auger sample (right) (Images courtesy of the City of Tulsa).
Clyde Eddy Area

This area is named for the gentleman—Clyde Eddy—who, as a 10-year-old child, observed the excavation of a mass grave in Oaklawn Cemetery. Eddy reportedly witnessed:

white laborers at Oaklawn digging a ‘trench.’ There were also a number of black riot victims present in several wooden crates. While Mr. Eddy did not directly see the victims being placed in this trench-like area, it is reasonable to assume that its purpose was for a mass grave. Mr. Eddy recalls this area being within the white section of the ‘Old Potters Field’ and was able to point out the area in a visit to Oaklawn during the spring, 1999 (Brooks and Witten 2001:140).

Between July 1998 and November 1999, Witten and Brooks surveyed this area using a suite of geophysical equipment, including 1) a Geometrics 858 cesium magnetometer; 2) electromagnetic induction (EMI) with GEM-2; and 3) ground penetrating radar (GPR) in conjunction with 200, 250, and 500 MHz antenna. They identified an anomaly (5 meters square) that they interpreted as a “trench-like feature” considered worthy of further investigation (Brooks and Witten 2001:141).

As part of the most recently reopened investigation, OAS intended to relocate the anomaly identified by Witten and Brooks and conduct a new geophysical survey using more modern equipment, including: 1) GPR (GSSI Utility Scan with 350 MHz antenna; data processed using RADAN 7); and 2) electrical resistivity (Geoscan Research RM15 with an MPX15 multiplexer in a PA20 multi-probe array) (Hammerstedt and Regnier 2019:2-4, 14). Brooks and Witten did not include a datum in their published data. As a result, it is difficult to know precisely where their survey was conducted.

In 2019, Hammerstedt and Regnier attempted to relocate the Brooks and Witten survey area; however, the results did not appear to correspond to those obtained by the earlier geophysical investigation. With the assistance of members of the Public Oversight Committee, Hammerstedt completed a second geophysical survey in the “Clyde Eddy Area” in July 2020. This effort resulted in the identification of an anomaly thought to approximate that identified in the 1999 survey—specifically, the one interpreted as a possible mass grave. The October 2020 fieldwork targeted this anomaly for ground-truthing.

A series of core and auger samples were extracted in and around the anomaly (Figure 9) to assess the soil stratigraphy and the extent to which disturbed fill—perhaps akin to that which we would expect to be present over buried coffins in a mass grave—was indeed present. These soil samples revealed largely intact, natural stratigraphy that was not indicative of a grave shaft feature.
Figure 9. Mapped position of series of cores and augers excavated in the vicinity of a targeted geophysical anomaly in the Clyde Eddy Area.
Original 18 Area

This area was targeted for investigation due to documentation of at least 18 Black males for whom death certificates were completed and were reportedly buried in individual graves in Oaklawn Cemetery, presumably in the Black Potter’s Field (Snow 2001: 18-19, Table 13). During the previous investigation, Dr. Clyde Snow stated: “Assuming, as the records indicate, that they were buried in separate graves in the order indicated by the Stanley-McCune grave numbers, they should be encountered in an orderly row(s)” (2001:118). Further, the geophysical survey data indicated anomalies in areas without headstone markers that were consistent with geophysical signals of individual graves with markers (Figure 10). While there was some level of expectation of encountering individual unmarked graves in this part of the cemetery (from these preceding lines of evidence), there was nothing to otherwise suggest that we should expect to find a mass grave in this area.

The testing strategy focused first on a single geophysical anomaly--#6 (Figures 11-12). Excavations revealed the presence of an adult individual burial—likely a female based on in-field assessment of the cranial features. She was interred in a wooden coffin oriented with her head to the west and feet to the east. A metal coffin plate with the words “At Rest” was uncovered in association with this burial (Figure 13). While some of the skeletal elements were inadvertently removed during backhoe excavation, efforts were made to leave as many in place as possible.

The skeletal elements unaffected by the backhoe were in a fragile state of preservation. This affected our strategy for excavating other burials as part of this testing phase. In order to safeguard the remains for future analysis, we determined to limit exposure of skeletal remains to the extent possible. We would only excavate as deep as necessary to reveal the coffin, leaving the bones relatively untouched until such time as the actual exhumation process could take place.

There was no well-defined grave shaft apparent during excavation of the fill overlying Burial #1 as would have been expected for an individual interment. However, the overburden was heavily disturbed. The area of disturbed fill exposed in the backhoe trench was greater than would have been necessary to inter a single individual. As such, we began to ponder the possibility that this grave might include more than just the one individual.

In order to assess the spatial extent of the disturbed soil that was thought to represent grave shaft fill, we conducted a series of mechanical and hand-excavated augers to the west, north, and south of Burial #1 (Figure 18). From these samples, we were able to delineate the horizontal extent of the disturbed soil—an area that measured approximately 17.5 m (57.4 ft) east-west by 7.5 m (24.6 ft) north-south (Figure 18). The depth at which the disturbed fill terminated is approximately 1.75 m (5.7 ft) below the modern ground surface. If this overall area of consistently disturbed soil contained multiple burials that were similarly devoid of individual grave shafts, might this represent a mass grave? We thought the answer could be “yes.”

With the potential for a mass grave, we adjusted our excavation strategy. We cut Backhoe Trench A to the west and slightly south of Burial #1 (Figures 10, 15, and 18). This area encompassed two poorly defined geophysical anomalies and core samples that displayed evidence of disturbed soil consistent with that observed over Burial #1. This trench measured approximately 12.4 m (40.7 ft) east-west by 1.6 m (5.3 ft.) north-south and was excavated to depths ranging from 1.1 m (3.6 ft) to 1.64 m (5.4 ft) below ground surface (Figure 19). At least 11 burials were defined in this trench based on the outlines of wooden
coffins, casket materials (e.g., handles, wood fragments, possible face plate glass, etc.), some inadvertently exposed human remains, and nails at locations where they would be expected at coffin corners (Figure 19). At least one of these burials may be intrusive (i.e., this individual was interred well after the others). An additional three possible burials may be present based on the observations of the soil, the presence of wood, and—in one case—a metal coffin handle (Figures 19 and 20).

Stairs were identified in the west end of Backhoe Trench A in the Original 18 Area. We believe these stairs were cut into the natural soil to provide access into and out of the mass grave trench. This is not a feature one would expect to be necessary for the interment of one, two, or even three individuals. Rather, this is the type of feature that is implemented when its value to improve the efficiency of the burial process is perceived to be so beneficial as to warrant the effort to create them.

The total area exposed during the test excavations represents only a portion of the estimated spatial extent of the mass grave. If burials are present in the rest of the mass grave in roughly the same density as those identified in Backhoe Trench A, it is possible to estimate that at least 30 individuals were buried within the mass grave. This figure presumes a single layer of burials; it is possible that some stacking of coffins took place, which would increase the potential number of interred individuals.

Confirmation of this interpretation from the 2020 test excavations, along with an assessment of the remains themselves and the individuals interred in this mass grave, will require careful excavation, exhumation, and specialized analyses. Based on the fragile state of Burial 1, recovery and analysis of the mass grave burials will include 1) application of a reversible preservative to most bones, 2) in situ metal detection and possibly radiography to screen for projectiles, 3) reconstruction of skeletal components relevant to identity, if preservation allows, 4) examination and documentation of the morphological features of sex, ancestry, and age at death, and 5) examination and documentation of traumatic features or features that might be associated with a cause of death.
Figure 10. Excavation blocks overlain on the map of geophysical survey results in the Original 18 Area. The “1” in the excavation block on the right demarcates Burial 1. Note that this image does not include all of the coffins mapped in Backhoe Trench A (on the left), which may be seen in Figure 19 below.

Figure 11. The headstone of Eddie Lockard—victim of the 1921 Tulsa Race Massacre—lies adjacent to the area where researchers conducted test excavations in October 2020 to search for other victims (Image courtesy of the City of Tulsa).
Figure 12. Members of the excavation team and Public Oversight Committee monitor as the backhoe excavation begins in the Original 18 Area of Oaklawn Cemetery (Image courtesy of the City of Tulsa).

Figure 13. Metal coffin plate from Burial #1; it reads “At Rest” (Image courtesy of the City of Tulsa).
Figure 14. Dr. Phoebe Stubblefield closely examines an item discovered during the October test excavations at Oaklawn Cemetery (Image courtesy of the City of Tulsa).

Figure 15. Members of the Public Oversight Committee (on the right) observe as researchers from the Physical Investigation Committee discuss the discovery of multiple coffins—representing a mass grave—in Backhoe Trench A in the Original 18 Area of Oaklawn Cemetery (view facing west) (Image courtesy of the City of Tulsa).
Figure 16. Florida Gulf Coast University student, Sonya Concepcion-Jones, observes as Angela Berg collects data on steps that were observed at the west end of the mass grave trench (Image courtesy of the City of Tulsa).

Figure 17. Students from the University of Florida (Siobhan Summers, left) and Florida Gulf Coast University (Sonya Concepcion-Jones, right) sift through dirt from the test excavations. They are looking for human remains, portions of coffins or coffin hardware, and artifacts that might indicate evidence of a burial (Image courtesy of the City of Tulsa).
Figure 18.Mapped positions of augers and approximate boundary of the mass grave in relation to backhoe excavation trenches in the Original 18 Area. Note that this image does not include all of the coffins mapped in Backhoe Trench A (on the left), which may be seen in Figure 19 below.

Figure 19. Plan view of Backhoe Trench A in the Original 18 Area and profile of the north wall of the trench.
Figure 20. Tulsa Mayor G. T. Bynum holds a metal coffin handle discovered in the north wall of Backhoe Trench A in the Original 18 Area (Image courtesy of the City of Tulsa).

Figure 21. Members of the excavation team, Public Oversight Committee monitors, Mayor Bynum, and other City officials who worked on the October 2020 test excavation (Image courtesy of the City of Tulsa).
Summary and Recommendations

Test excavations conducted during July and October 2020 at Oaklawn Cemetery as part of the reopened 1921 Tulsa Race Massacre Investigation focused on three locations: the Sexton Area, the Clyde Eddy Area, and the Original 18 Area (Figure 1). Each location was selected for testing based on multiple lines of evidence. No indication of a mass grave or any other human remains were detected in the Sexton Area or the Clyde Eddy Area as part of this phase of the investigation. However, a mass grave was found in the Original 18 Area near the southwestern corner of the cemetery.

The combined test excavations in the Original 18 Area exposed nearly 27 square meters (290 square feet), which represents a portion of the overall mass grave dimensions. Initial data from soil core samples suggest the mass grave could encompass an area that measures about 131 square meters (1410 square feet) (Figure 19).

The excavations focused principally on exposing evidence of graves but, with one exception, stopped short of fully exposing the skeletal remains contained therein in an effort to maintain their preservation for later exhumation and analyses. At least 12 individuals are believed to be interred within the mass grave based largely on evidence for coffins and coffin hardware (Figures 13 and 20). If the estimated dimensions of the overall grave shaft are accurate, it is possible that the total number could include more than 30 individuals.

Additional investigations are needed to confirm the actual dimensions of the mass grave and collect detailed data on the remains themselves to assess, to the extent possible, the demographics (age at death, sex, and likely ethnicity) of this burial population, cause of death, and potential evidence of trauma. These variables are vital for associating these individuals with the Tulsa Race Massacre. The City is pursuing the requisite medico-legal authorization to facilitate exhumation. In the meantime, the PIC looks forward to working with the City, the Public Oversight Committee, and others in the development of an appropriate exhumation plan, which we believe should also address the reburial of the disinterred remains. In the event this mass grave does contain victims of the 1921 Tulsa Race Massacre, other topics to address include (but are not limited to): 1) memorialization of the victims; and 2) potential efforts to identify victims (e.g., through the use of DNA analysis and forensic genealogy).

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- Tulsa Fire Museum
- Gilcrease Museum
References Cited

Hammerstedt, Scott W. and Amanda L. Regnier

Brooks, Robert and Alan H. Witten

Snow, Clyde

Witten, Alan, Robert Brooks, and Thomas Fenner