



GROUND PENETRATING RADAR SCANNING OF HISTORIC

*Green Oak Plains &
Lakeview Cemeteries*

OF GREEN OAK CHARTER TOWNSHIP, MICHIGAN

SEPTEMBER 23 & 24, 2021



Geologist Matt Turner of GeoModel, Inc. scans Green Oak Plains Cemetery on Maltby Rd. September 24, 2021

DETAILED REPORT AND FINDINGS OCTOBER 2021

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Backstory

In 2000, after finding decades of overgrowth and neglect at both active Green Oak Township Cemeteries, newly elected Clerk Michael Sedlak inherited a history of incomplete cemetery recordkeeping from previous generations. Since both cemeteries were formerly ran by a series of old local churches, some records were lost or even destroyed in fires long ago. Eventually both cemeteries had fallen into hands of Green Oak Township. In 2003, with full support of both the township board, and Supervisor Mark St. Charles, Clerk Sedlak began renovating

Lakeview Cemetery. With the help of local Boy Scout troops, over 500 trees were removed, and the gravel loop road was completed to provide residents full and convenient access. The cemetery was then professionally surveyed, and all graves were marked as to where they should be. This extensive upgrade was prompted by the discovery of a veteran's headstone obscured by heavy overgrown brush.

Fast forward to 2021, and the to the introduction of reliable Ground Penetrating Radar. Looking to avoid the horror stories of mismanaged cemeteries seen recently on the news, and to prevent anything like that happening here, a request was made and approved by the board to GPR scan both active Green Oak Township cemeteries.

Scanning Lakeview Cemetery

After many delays due to heavy rainfall, we were finally able to meet geologist Matt Turner of GeoModel, Inc. to finalize details for both cemeteries. On Thursday, September 23, 2021, scanning began at Lakeview Cemetery. Just like a scene out of an old movie, it was a very grey and foggy day, and the soaked hilly terrain made for a challenging scan.



The scan began in the north section, which is the oldest part of the cemetery. Almost immediately, we were able to answer many of our decades old questions and began finding new mysteries and "surprise guests". Each grave detected was marked with orange paint and later mapped out, identified when possible, and recorded for future generations of Green Oak residents.



Some of the more interesting things we have discovered:

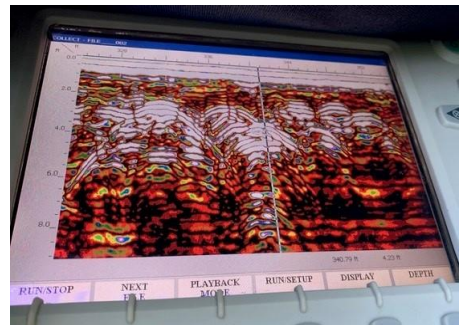
- **A total of 47 previously unknown/undocumented gravesites were found!** Based on the evidence, many of these were estimated to be over 100-150 years old and some were unusually deep. There was no record of their location or identity in any historical documentation that we currently had before finding them with GPR scanning. These graves have now been mapped and recorded, so that they are never accidentally sold or disturbed.
- **The oldest known burial was in 1862, although some previously unmarked graves discovered during scanning could be much older.**
- **Approximately 35 gravesites that did not align with headstones or had shifted position over time.** This was not totally unexpected as much of the north side of the cemetery is on a steep hill, and many graves are well over 100 years old.

Scanning Green Oak Plains Cemetery

Scanning began on Friday, September 24, 2021 at Green Oak Plains on Maltby Road, and the weather was beautiful. The geologist explained that this cemetery would be more challenging to find the very old graves among the abundant mature tree roots on the property. In a few cases, where trees had been planted on family plots 150 plus years ago, the tree trunk had expanded and partially swallowed some of the headstones. Despite these challenges, with the expertise of the geologist we were able to successfully scan and locate many of the cemetery's long buried secrets.



The photo at left shows multiple burials with multiple mature tree roots that have intermingled with and in some cases displaced the remains. The damaging effects of tree roots in a cemetery cannot be understated. There were many burial sites in Green Oak Plains that are now unsuitable for use due to the numerous roots.



The photo on the right shows a full burial in a burial vault next to older full burials before vaults were commonly used.

Some of the most interesting findings at Green Oak Plains:

- **A total of 26 previously unknown/undocumented gravesites were found.** This was expected as this cemetery is much older, and with much of the historical record lost, long before Green Oak Township took over its care and management. Further, there are approximately 14 named individuals rumored to be buried in Green Oak Plains, without any record of exactly where they are located. Perhaps the public or local descendants can help us match these individuals with the corresponding gravesites found in the GPR scan.
- **The oldest (known) burial occurred in 1833.** This is based on surviving legible headstones. For historical reference, Green Oak became a township in 1835, and Michigan did not achieve official statehood until 1837.
- **Previously lost headstones were found and uncovered.** A couple of areas that appeared to be “just a rock” turned out to be previously covered headstones that had long ago fallen over. In these cases, the ancient headstones are very fragile, and returning them to an upright position could cause further damage. In the future, we will explore further methods of historic preservation and restoration.



So where do we go from here?



The valuable information gained from the historic scans will be used to improve our cemeteries for future generations of Green Oak Township residents:

- Eliminate the possibility of disturbing a previously unknown historical grave.
- Eliminate the possibility of confusion when a body was not placed where it was originally intended, long before modern positioning equipment was available.
- Identify gravesites that are not suitable for use due to tree roots or other issues.
- Look into proper historical preservation of deteriorating monuments and headstones, preserving them for historians and local genealogists.



AS THESE CHALLENGES HAVE BEEN UNCOVERED AND IDENTIFIED, WE NOW HAVE THE UNIQUE OPPORTUNITY TO CORRECT MISSING AND INACCURATE HISTORICAL INFORMATION, AND MOST IMPORTANTLY IDENTIFY (WITH MUCH MORE CERTAINTY) EXACT LOCATIONS OF ALL CURRENT BURIALS, NEARLY ELIMINATING THE CHANCES FOR UNFORTUNATE FUTURE SITUATIONS TO ARISE.

Additional Resources

In addition to the information from the GPR scanning, additional resources used in the creation of this report:

- ❖ *Yesteryears of Green Oak 1830-1930*
Published in 1981 by Green Oak Township Historical Society
- ❖ Information collected from local historians and genealogists.
- ❖ www.findagrave.com
- ❖ www.ancestry.com
- ❖ www.legacy.com



Update: The Latest Improvements

at 
Lakeview
Cemetery



THIS PAST WEEKEND, Eagle Scout Drake Lammers, with a group from local Boy Scout Troop 350 and Township staff, installed a beautiful new sign at the entrance to Lakeview Cemetery. In addition, several benches were refurbished. The new sign and benches are a welcome addition to this historic cemetery and will no doubt be enjoyed by Green Oak Township residents for years to come.

