

## Research Objectives and Methodologies

This poster presents a work in progress. A magnetometer survey covering 43-hectares of the Moundville Archaeological Park was conducted over 10 days during the spring and fall of 2010. The goal of this project, the Moundville Geophysical Survey, is to use a suite of geophysical instruments to survey the archaeological landscape at the Moundville site in order to map buried archaeological features such as the remains of houses, middens, fortifications, and other evidence of residential use that are no longer visible on the ground surface.



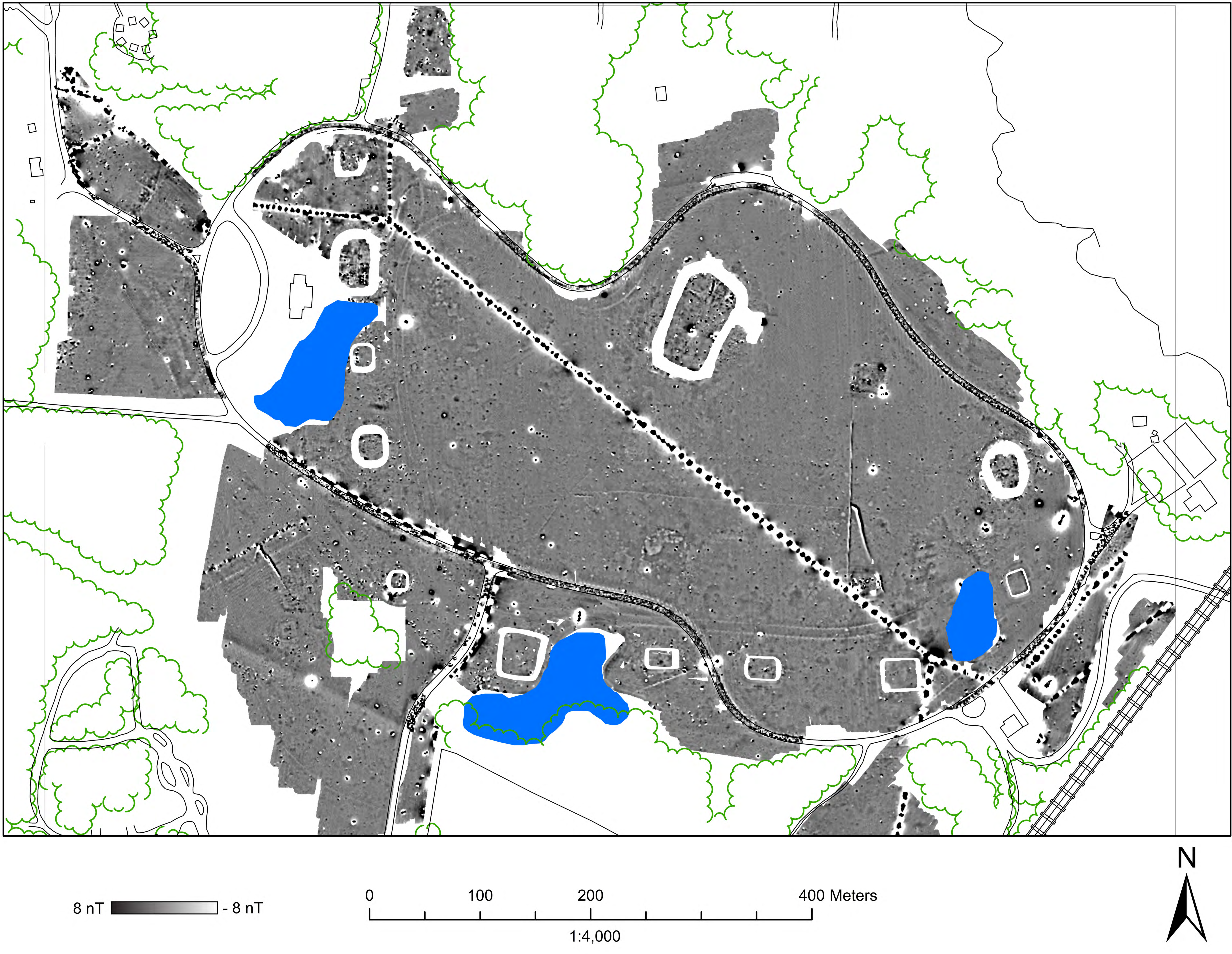
A fluxgate gradiometer survey has successfully located numerous geophysical anomalies resulting from geological events and both modern and prehistoric cultural activity. Several anomalies are representative of burned residential and communal structures arranged in residential groups.

A Bartington Grad 601 Fluxgate Gradiometer was used with 1 meter traverse interval and a 10 Hz sample interval. An RTK GPS system was used to position the readings as well as guide the survey. The Magnetometer array was both towed by an ATV and pulled by hand over the collection area.

The Moundville Geophysical Survey is ongoing and will continue to use a suite of non-destructive geophysical techniques to reconstruct the prehistoric landscape at the Moundville site.

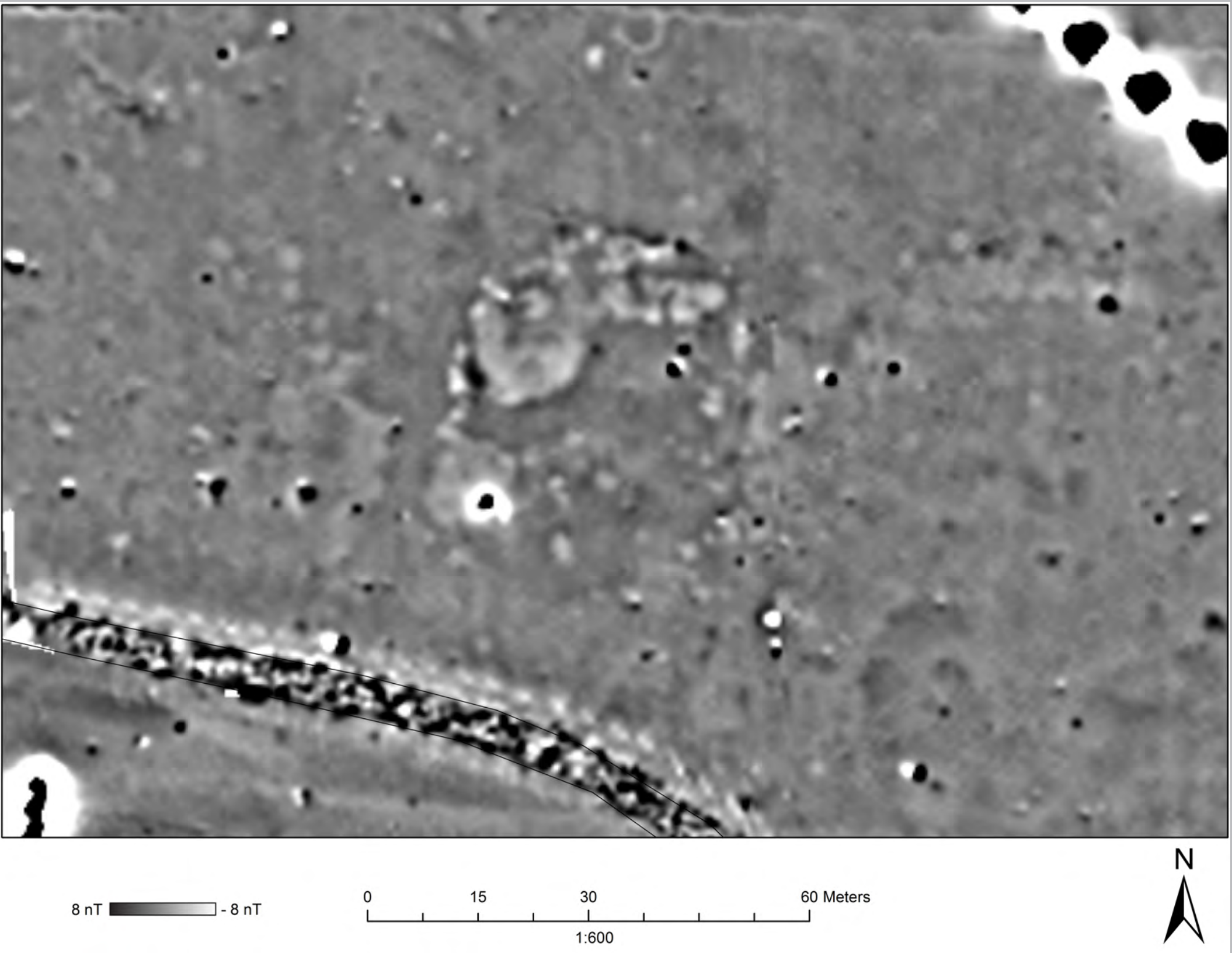
# Geophysical Survey at Moundville Archaeological Park

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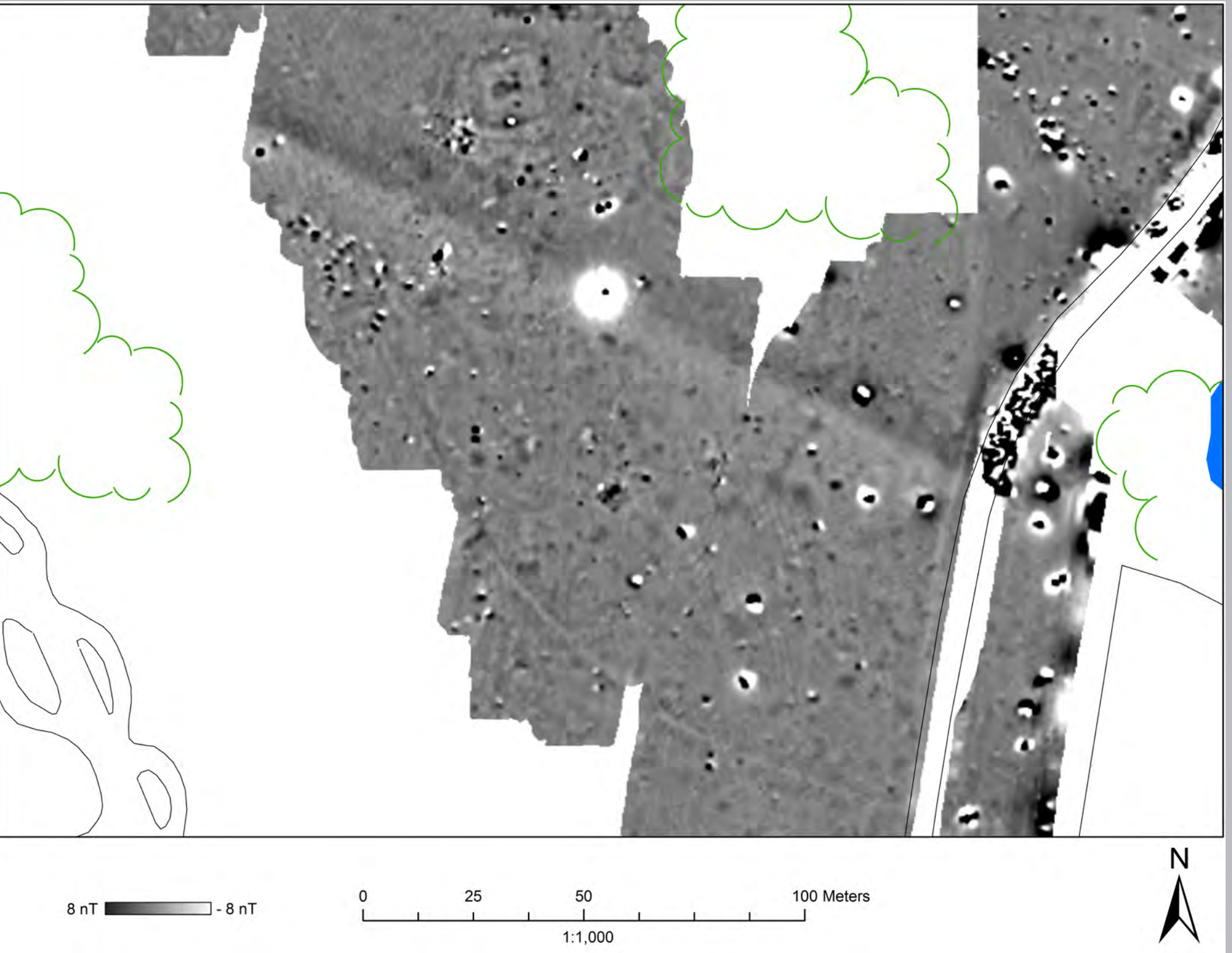
## Preliminary Interpretations

Identification of dense clusters of structures arranged as a circular residential group south of Mound A.



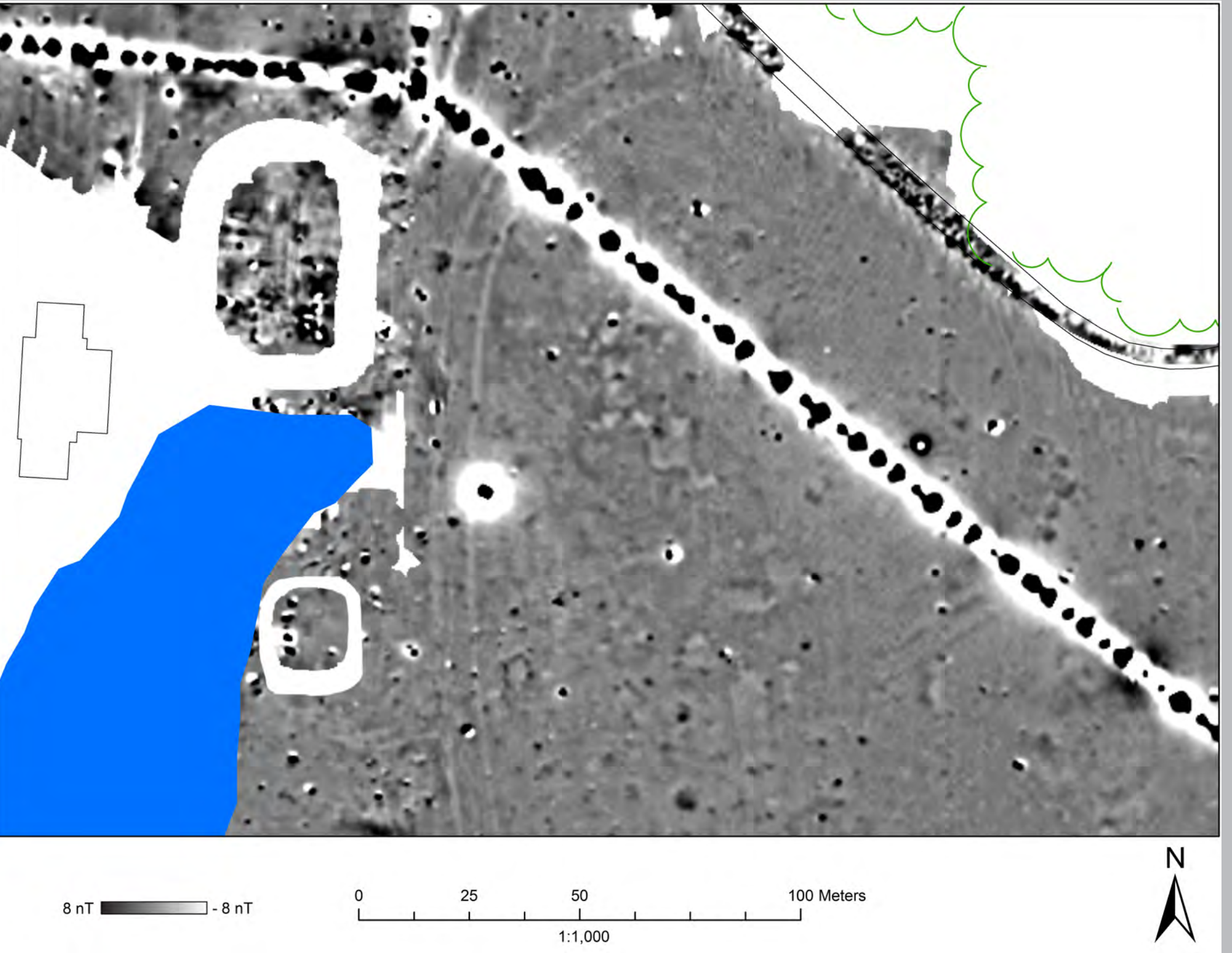
Circular residential group south of Mound A

Portion of the palisade and Mound M'



Detail of Mound M' and southern portion of the palisade

Residential Group 10 east of Mound P



Residential group east of Mound P