



ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **Bridge 188** County: **Columbus**
 WBS No: **DF15006.2024026** Document: **MCC**
 F.A. No: Funding: ☒ State ☐ Federal
 Federal Permit Required? ☒ Yes ☐ No Permit Type: **NWP3**

Project Description: Replacement of Bridge No. 188 on SR 1516 (Paul Willoughby Road) in Columbus County, North Carolina. The archaeological Area of Potential Effects (APE) is centered on the bridge structure and measures 600ft in length (300ft from each bridge end-point) and 150ft in width (75ft from each side of the SR1516 center-line).

SUMMARY OF ARCHAEOLOGICAL RESOURCES REVIEW: **SURVEY REQUIRED**

To determine the cultural resource potential of the APE, numerous sources of information were considered. First, preliminary construction design, funding, and other data was examined for defining the potential impacts to the APE ground surfaces and for determining the level of effort necessary for compliance. In this case, the project is state-funded with federal permit interaction and subject to Section 106 of the National Historic Preservation Act. For the most part, the APE dimensions were formulated to capture any federal permit area.

Next, a map review and site file search was conducted at the Office of State Archaeology (OSA) on Thursday, March 9, 2017. No previously documented archaeological sites have been recorded within the limits of or directly adjacent to the project's APE. Examination of National Register of Historic Places (NRHP), State Study Listed (SL), Locally Designated (LD), Determined Eligible (DE), and Surveyed Site (SS) properties employing resources available on the North Carolina State Historic Preservation Office (NCSHPO) website demonstrated that none of these properties are situated in the APE. Also, historic maps of Columbus County were appraised for former structure locations, land use patterns, or other confirmation of historic occupation in the project vicinity. Archaeological/historical reference materials were reviewed as well.

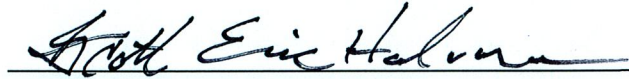
In addition, topographic, geologic, flood boundary, lidar, and NRCS soil survey maps (WkB, Js) were referenced for the evaluation of geomorphological, pedecological, hydrological, and other environmental-type elements that may have resulted in past occupation at this location. Finally, review of aerial and on-ground images (NCDOT Spatial Data Viewer, Google, ARC-GIS) afforded first-hand perspectives of the overall study area which were useful for assessing localized disturbances, both natural and human induced, which compromise the integrity of archaeological sites/deposits. Based on environmental determinants, the APE is considered to have a moderate potential for the recovery of archaeological artifacts, deposits, or features.

Because of environmental factors that increase the likelihood of prehistoric occupation at this location, an in-field reconnaissance and survey of the site location is recommended prior to construction/replacement activities.

16-03-0002

SUPPORT DOCUMENTATION

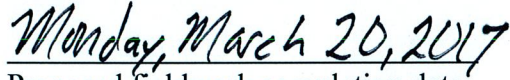
See attached: ☒ Map(s) ☒ Previous Survey Info ☐ Photos ☐ Correspondence
☐ Photocopy of County Survey Notes Other:

FINDING BY NCDOT ARCHAEOLOGIST – SURVEY REQUIRED

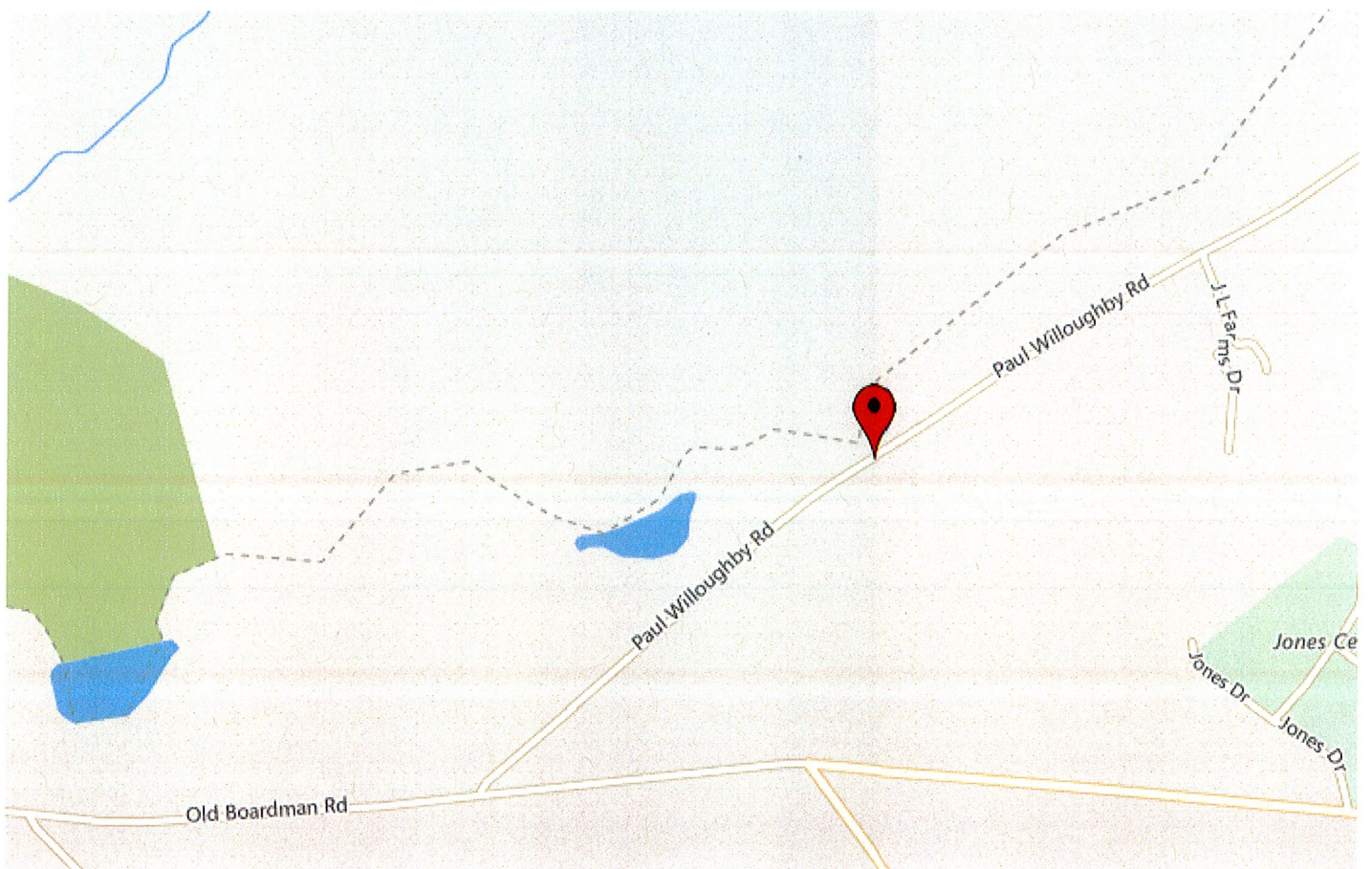
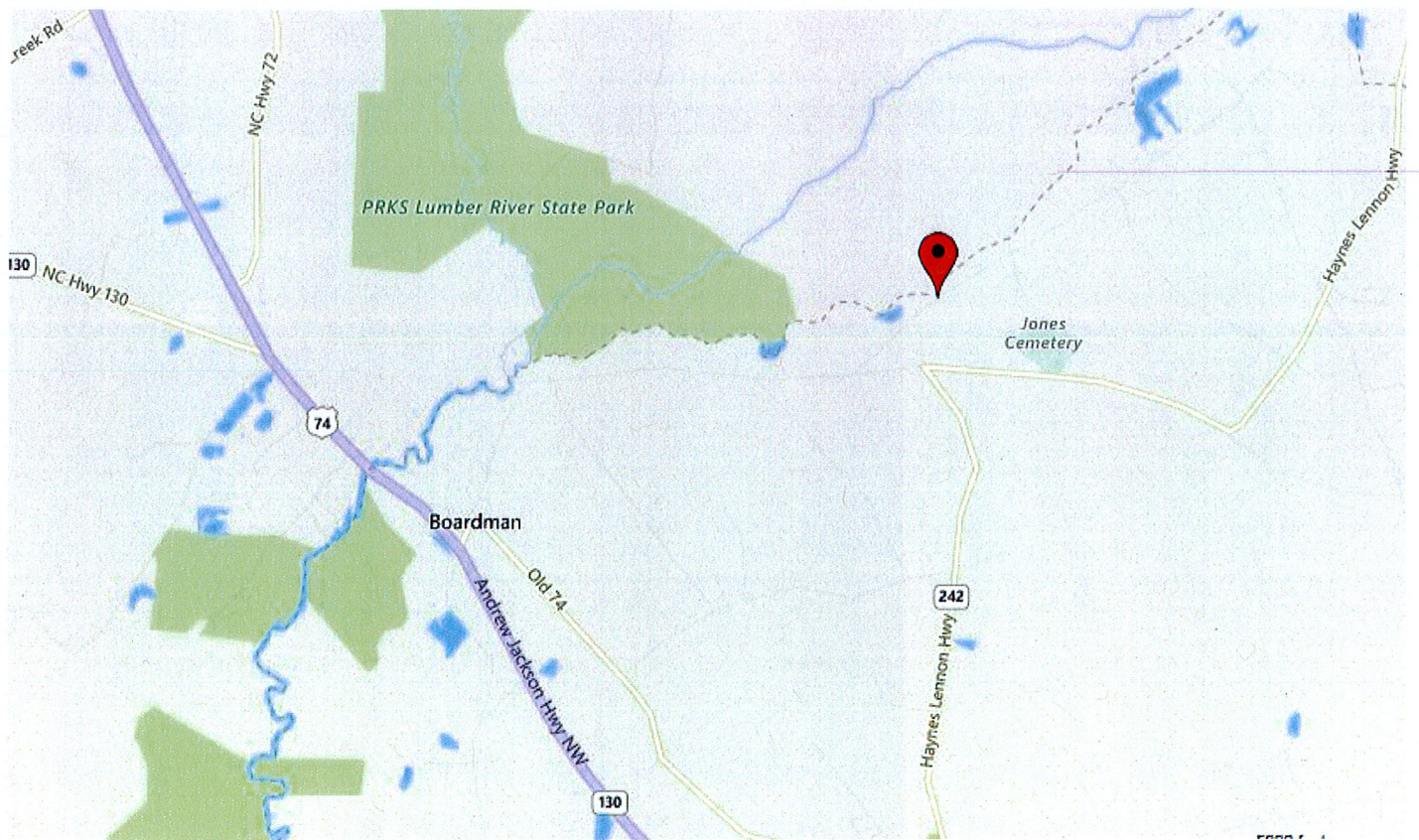
NCDOT ARCHAEOLOGIST

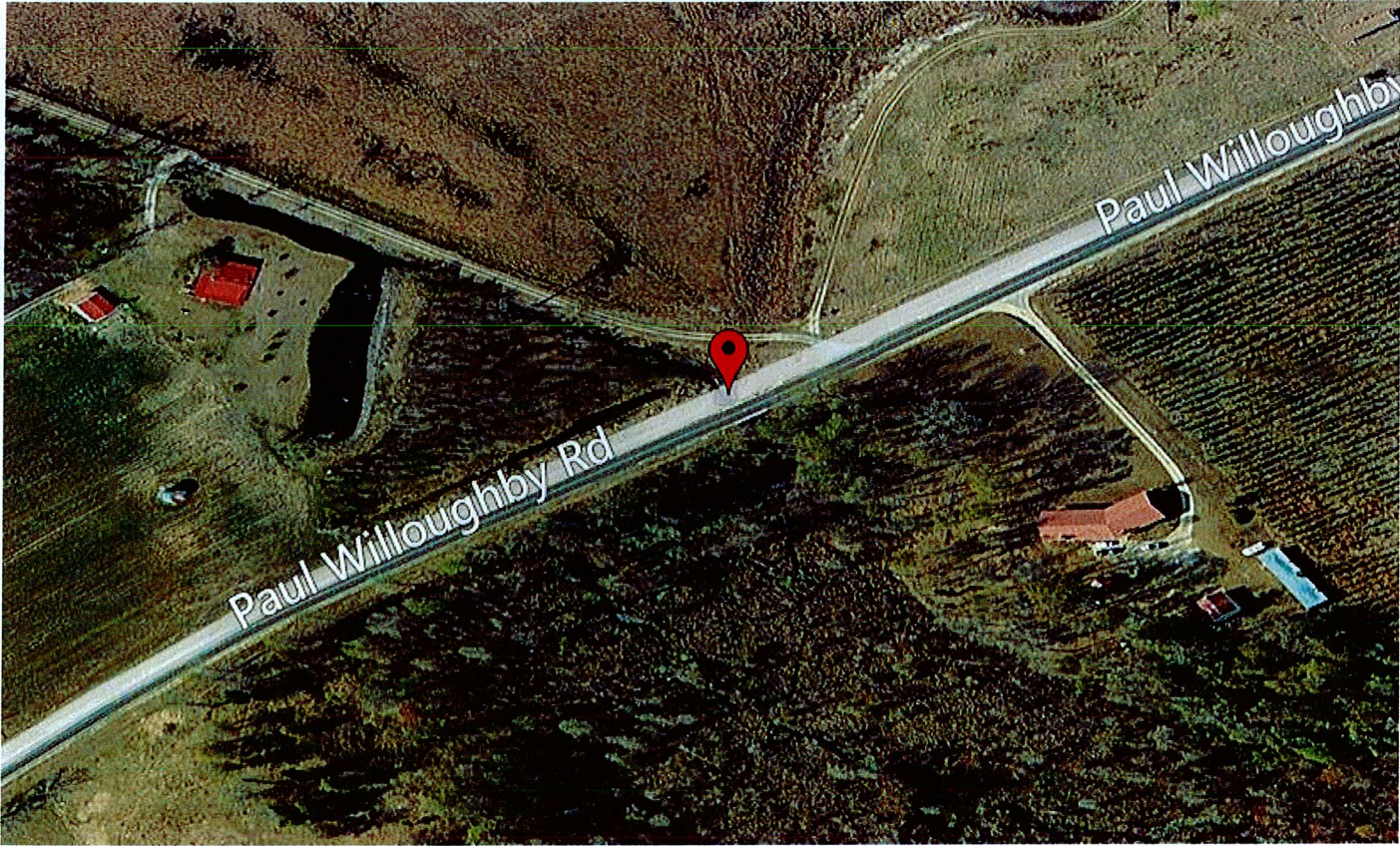
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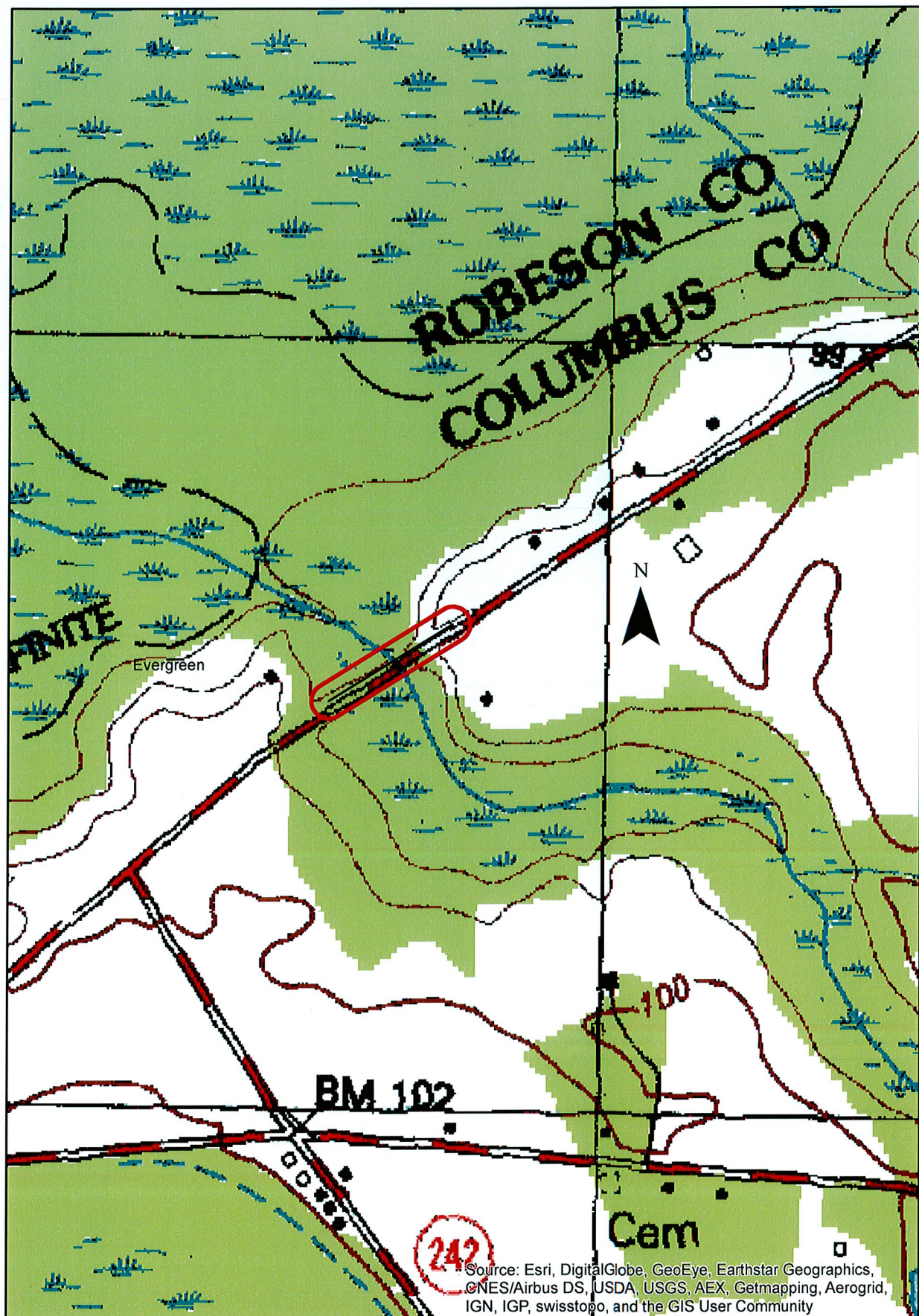
Date



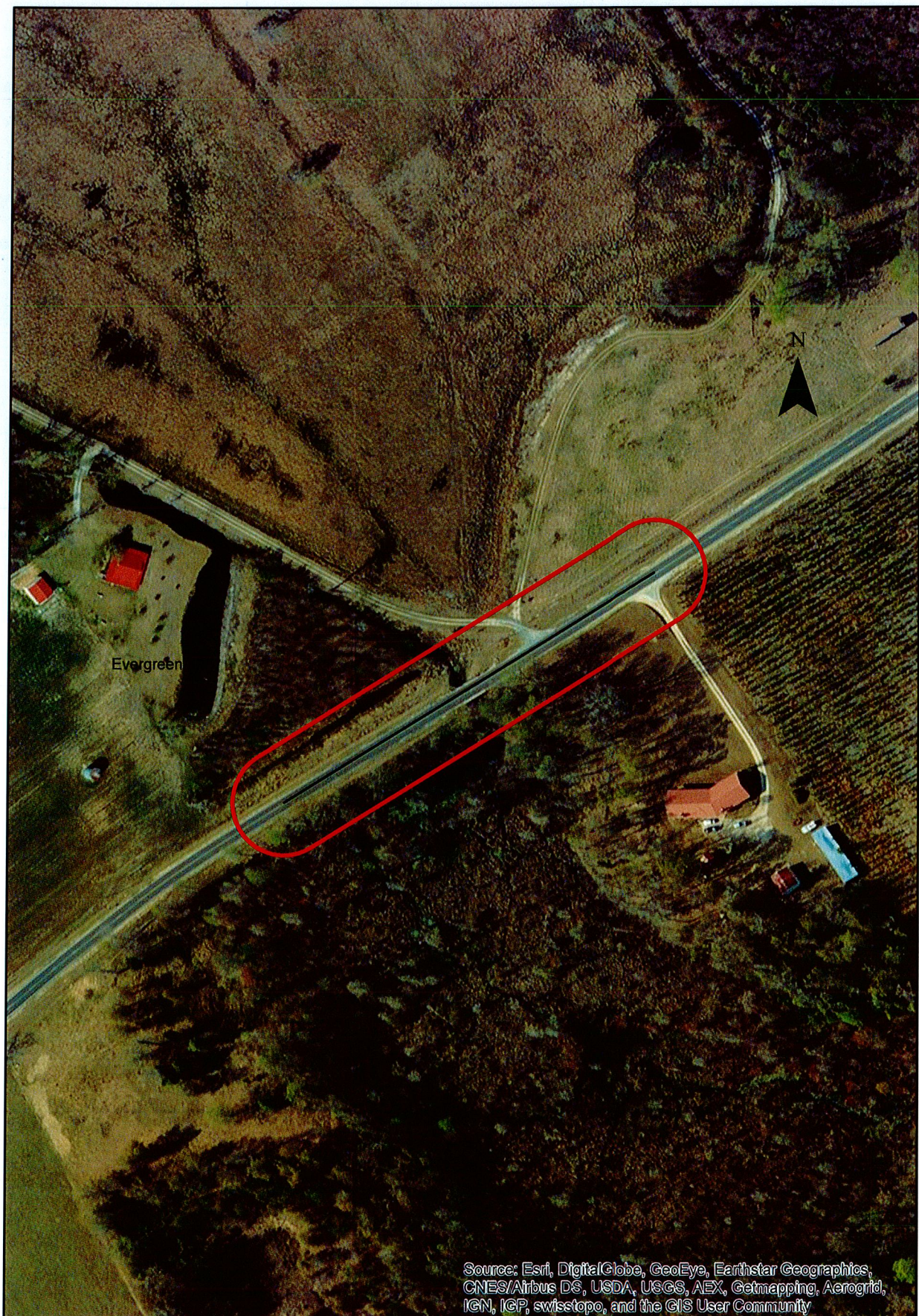
Proposed fieldwork completion date







Portion of the Evergreen topographic map illustrating the location and boundaries of the archaeological APE in Columbus County, NC.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid,
IGN, IGP, swisstopo, and the GIS User Community

ARC-GIS image showing the location and boundaries of the archaeological APE in Columbus County, NC.



WkB—Wakulla coarse sand, 0 to 6 percent slopes

Map Unit Setting

- *National map unit symbol:* 3wcf
- *Elevation:* 80 to 330 feet
- *Mean annual precipitation:* 38 to 55 inches
- *Mean annual air temperature:* 59 to 70 degrees F
- *Frost-free period:* 210 to 265 days
- *Farmland classification:* Not prime farmland

Map Unit Composition

- *Wakulla and similar soils:* 90 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Wakulla

Setting

- *Landform:* Ridges on marine terraces, broad interstream divides on marine terraces
- *Landform position (two-dimensional):* Shoulder, summit
- *Landform position (three-dimensional):* Crest
- *Down-slope shape:* Convex
- *Across-slope shape:* Convex
- *Parent material:* Sandy and loamy marine deposits and/or eolian sands

Typical profile

- *A - 0 to 7 inches:* sand
- *E - 7 to 24 inches:* sand
- *Bt - 24 to 42 inches:* loamy sand
- *C - 42 to 85 inches:* sand

Properties and qualities

- *Slope:* 0 to 6 percent
- *Depth to restrictive feature:* More than 80 inches

- *Natural drainage class*: Somewhat excessively drained
- *Runoff class*: Very low
- *Capacity of the most limiting layer to transmit water (Ksat)*: High to very high (1.98 to 19.98 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water storage in profile*: Very low (about 2.7 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
 - *Land capability classification (nonirrigated)*: 3s
 - *Hydrologic Soil Group*: A
 - *Hydric soil rating*: No
-

Js—Johnston loam, frequently flooded

Map Unit Setting

- *National map unit symbol*: 3wbm
- *Elevation*: 80 to 330 feet
- *Mean annual precipitation*: 38 to 55 inches
- *Mean annual air temperature*: 59 to 70 degrees F
- *Frost-free period*: 210 to 265 days
- *Farmland classification*: Not prime farmland

Map Unit Composition

- *Johnston, undrained, and similar soils*: 85 percent
- *Johnston, drained, and similar soils*: 15 percent
- *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Johnston, Undrained

Setting

- *Landform*: Flood plains
- *Down-slope shape*: Concave
- *Across-slope shape*: Linear
- *Parent material*: Sandy and loamy alluvium

Typical profile

- *A - 0 to 30 inches*: mucky loam
- *Cg1 - 30 to 34 inches*: loamy fine sand
- *Cg2 - 34 to 80 inches*: fine sandy loam

Properties and qualities

- *Slope*: 0 to 2 percent
- *Depth to restrictive feature*: More than 80 inches
- *Natural drainage class*: Very poorly drained
- *Runoff class*: Ponded
- *Capacity of the most limiting layer to transmit water (Ksat)*: High (1.98 to 5.95 in/hr)
- *Depth to water table*: About 0 inches
- *Frequency of flooding*: Frequent
- *Frequency of ponding*: Frequent
- *Available water storage in profile*: High (about 9.4 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
- *Land capability classification (nonirrigated)*: 7w
- *Hydrologic Soil Group*: A/D
- *Hydric soil rating*: Yes

Description of Johnston, Drained

Setting

- *Landform*: Flood plains
- *Down-slope shape*: Concave

- *Across-slope shape*: Linear
- *Parent material*: Sandy and loamy alluvium

Typical profile

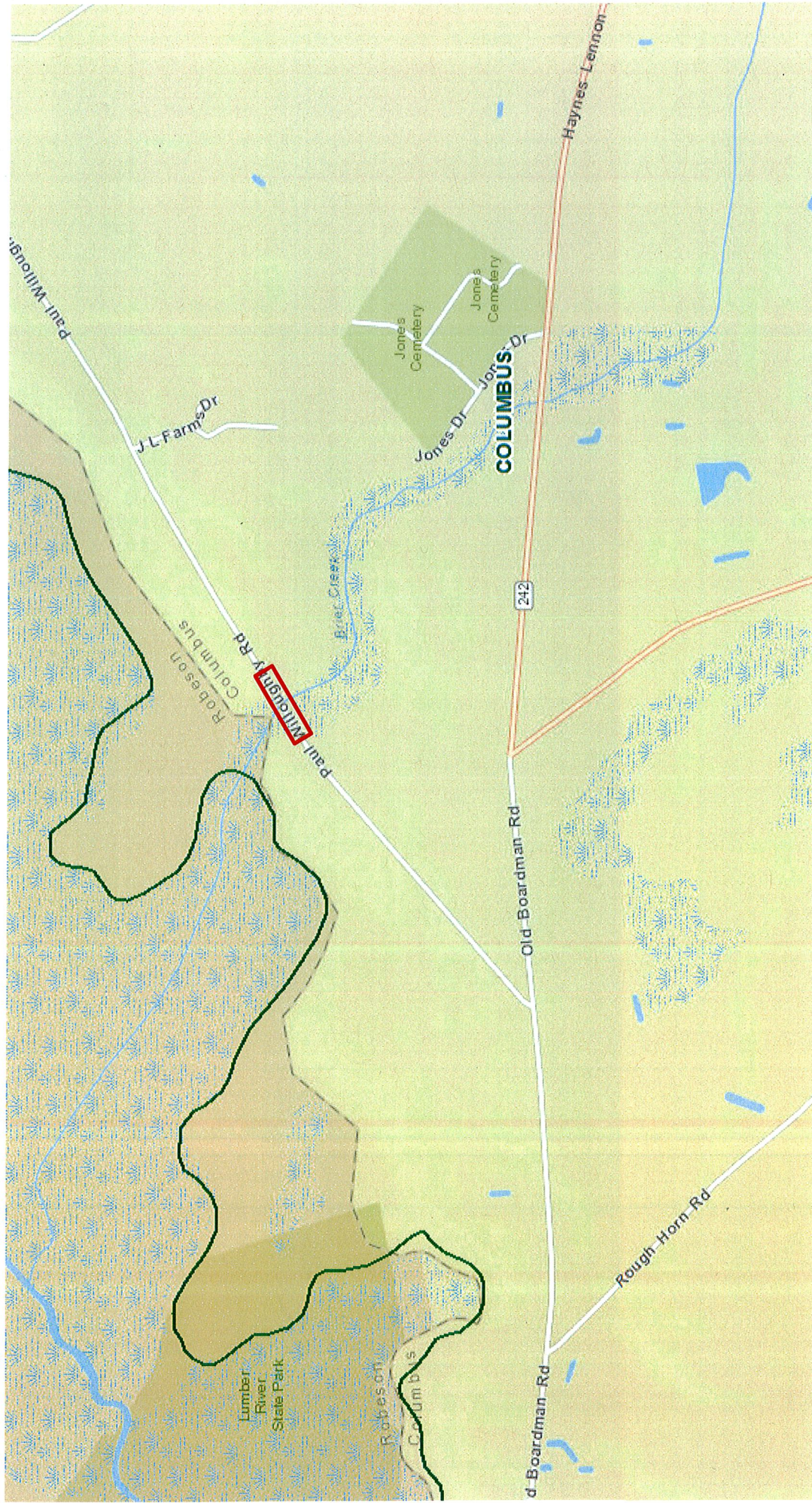
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- *Depth to water table*: About 0 inches
- *Frequency of flooding*: Frequent
- *Frequency of ponding*: Frequent
- *Available water storage in profile*: High (about 9.4 inches)

Interpretive groups

- *Land capability classification (irrigated)*: None specified
- *Land capability classification (nonirrigated)*: 4w
- *Hydrologic Soil Group*: A/D
- *Hydric soil rating*: Yes



NCSHPO website map illustrating the location and boundaries of the archaeological APE in Columbus County.

Bladenboro

STATE OF NORTH CAROLINA
DEPARTMENT OF NATURAL RESOURCES
AND COMMUNITY DEVELOPMENT
RALEIGH, N. C.

EVERGREEN QUADRANGLE
NORTH CAROLINA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW 4 CHADBOURN 15' QUADRANGLE

