

ARCHAEOLOGICAL FIELD REPORT
SCDOT ENVIRONMENTAL SECTION



TITLE: Cultural Resources Reconnaissance for the US Route 278 (Barnwell Road/Kings Avenue) Shoulder Improvement from S-3-518 (Bells Road) to S-6-39 (Boiling Springs Road)

DATE OF RESEARCH: November 7, 2017

COUNTY: Allendale and Barnwell

PIN: P028047

ARCHAEOLOGIST: Tracy Martin, Bill Jurgelski

ARCHITECTURAL HISTORIAN: David Kelly

PROJECT: US Route 278 (Barnwell Road/Kings Avenue) Shoulder Improvements from S-3-518 (Bells Road) to S-6-39 (Boiling Springs Road)

DESCRIPTION: The Department proposes shoulder improvements to US Route 278 (Barnwell Road/Kings Avenue) from S-3-518 (Bells Road) to S-6-39 (Boiling Springs Road) (**Figure 1**). The length of the proposed project area is approximately 7.4 miles. The majority of impacts from the project will occur within the existing disturbed right of way (ROW) and consist of adding approximately two feet of pavement to the existing paved shoulder on each side of the road within the project area to create a four foot wide shoulder adjacent to both the north and south bound lanes. However, in some locations cutting, filling, or drainage improvements will extend a short distance beyond the existing ROW (**Figures 2 – 4**). The archaeological area of potential effect (APE) for the survey consisted of land that might be acquired as new right of way for the project as well as land within the existing ROW that may be impacted by the proposed undertaking. The architectural APE consisted of a 100 foot buffer placed around the archaeological APE (see **Figures 2 – 4**).

LOCATION: The project area is located in southern Barnwell County and northern Allendale County between the towns of Kline and Allendale.

USGS QUADRANGLE: Allendale

DATE: 1979

SCALE: 7.5'

APE Northern End:

UTM: NAD 27

ZONE: 17

EASTING: 468043.07

NORTHING: 3665149.19

UTM: WGS 84

ZONE: 17

EASTING: 468043.77

NORTHING: 3665340.75

APE Southern End:

UTM: NAD 27

ZONE: 17

EASTING: 470891.57

NORTHING: 3653667.85

UTM: WGS 84

ZONE: 17

EASTING: 470892.21

NORTHING: 3653859.07

ENVIRONMENTAL SETTING: The project area is located in the Middle Coastal Plain physiographic province. The lands within the project APE consist of heavily disturbed grassy, paved, or graveled areas within the current right-of-way. Areas outside the current ROW consist of grassy lawn, lightly wooded areas, or pasture. Ground disturbances in the project area consist of buried and above ground utility lines, roadside ditches, and paved or gravel driveways and parking lots. **Figures 5 – 6** show the APE as it looked at the time of survey.

NEAREST RIVER/STREAM AND DISTANCE: Multiple water sources cross the project area. Jackson Creek crosses the central portion of the APE. Log Branch crosses in the southern end. An unnamed tributary to Fiddle Pond Creek is adjacent to the northwestern end of the project area.

SOIL TYPE: Thirteen soil types are present within the project area. The majority of soil is Norfolk loamy sand, 0-2 percent slopes. This soil is well drained and comprises 38.3 percent of the project area. Table 1 shows the soil types present within the project area.

Table 1. Soil Types Within the Project Area.

Soil Type	Drainage Capacity	Percent of Project Area
Barnwell Loamy Sand, 2-6 percent slopes	Well Drained	4.2
Blanton Sand, 0-6 percent slopes	Moderately Well Drained	3.3
Bonneau Fine Sand, 0-2 percent slopes	Well Drained	6.8
Coxville Loam	Poorly Drained	1.4
Emporia Loamy Sand, 2-6 percent slopes	Well Drained	17.1

Soil Type	Drainage Capacity	Percent of Project Area
Goldsboro Loamy Sand	Moderately Well Drained	1.0
Noboco Loamy Sand, 0-2 percent slopes	Well Drained	7.2
Norfolk Loamy Sand, 0-2 percent slopes	Well Drained	38.5
Orangeburg Loamy Sand, 0-2 percent slopes	Well Drained	3.9
Rains Loamy Fine Sand	Poorly Drained	7.1
Uchee Sand, 2-6 percent slopes	Well Drained	5.1
Wagram Sand, 2-6 percent slopes	Well Drained	4.4

REFERENCE FOR SOILS INFORMATION: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.sc.egov.usda.gov/>. Accessed [11/22/2017].

GROUND SURFACE VISIBILITY: 1-25% 26-50% 51-75% 76-100%

CURRENT VEGETATION: Because the project area is limited to current right-of-way and extremely narrow strips of land adjacent to the existing ROW, vegetation within the project area is mostly comprised of grasses and weeds. A few forested areas consisting of pines and hardwoods are also present.

BACKGROUND INVESTIGATION: Prior to the field investigation the online GIS database (ArchSite) was examined to determine if any previously identified archaeological sites, historic structures or National Register of Historic Places (NRHP) sites were present within a quarter mile of the project area. Background investigations indicated three such resources have been recorded within or within a quarter of mile of the project area. Site 38AL0189 is a potentially eligible Archaic and Woodland Period site located about 0.2 miles west of the project area. Site 38AL0009 was recorded in 1970 as an “Indian Mound” and is located approximately 332 feet east of the Archaeological APE. The eligibility of the site is unknown. Google Earth imagery and topographic maps show a cemetery on top of the topographic feature that likely corresponds to the “mound.” It will not be impacted by the current project. Site 38AL0257 is a 19th and 20th century railroad berm located about 10 meters from the project area. The site is recorded as not eligible for the NRHP. **Figure 7** shows the previously recorded resources within a quarter mile of the project area.

In addition, historical maps and aerial photos dating to between 1919 and 1961 were examined to determine if any structures or architectural features could be identified within the project area (SCSHD 1938 and 1939; USGS 1919, 1943, and 1961). The 1938 Allendale County and 1939 Barnwell County General Highway and Transportation Maps showed structures within or adjacent to the project area in the late 1930s (**Figure 8**). The earliest aerial images examined were from 1961. Multiple structures or features are visible in or within 300 feet of the project area on these aerials.

ARCHAEOLOGICAL SURVEY: An archaeological survey of the project area was conducted on November 7, 2017. Field methods consisted of a vehicular and pedestrian reconnaissance of the entire project area.

ARCHAEOLOGICAL SURVEY RESULTS: The portion of the archaeological APE that was confined within the existing US 278 ROW was found to be uniformly disturbed by the construction of the roadway. Areas within the archaeological APE outside of the current ROW were also found to be heavily disturbed. In all case, these new areas were heavily disturbed and shovel testing was not deemed useful. Disturbances consisted of roadside construction, roadside ditches, and buried and above ground utility lines. **Figures 9a and 9b** show utility lines and roadside ditching in the project area.

ARCHITECTURAL SURVEY: A historical resources survey of the project area was conducted on November 7, 2017. Survey methods consisted of a visual examination of all structures within the architectural APE.

ARCHITECTURAL SURVEY RESULTS: A total of 34 newly-identified historic resources (Site #s 0044-0060 and 0476-0493) were identified within the architectural APE (see **Figures 10–36 and 38**). A number of outbuildings were not surveyed due to accessibility issues. Two of the surveyed resources are cemeteries (Site #s 0054 and 0059). It should be noted that the Mount Arnon Cemetery (Site #0054) is on the eastern side of US 278

(see Figure 13). However, what appeared to be a modern grave was present on the west side of the road, opposite the Mount Arnon cemetery (see Figure 39). The presence of this probable grave along with property corner markers and what appeared to be a religious monument or statue set well back from the road suggest that either the Mount Arnon cemetery is being expanded or a new cemetery is being established on the west side of the road. Neither cemetery should be impacted by the current undertaking as it is presently planned.

All 34 resources were assessed under National Register of Historic Places (NRHP) Criteria A, B, and C. Four of the resources were determined eligible for the NRHP under Criteria A & C (site #s 0048, 0058, 0060, and 0492). Site 0048 is a good example of an early 20th Century rural store with an attached residential wing (Criterion A for Commerce and C for Architecture). Site 0058 is another good example of an early 20th Century rural store with an attached residential wing (Criterion A for Commerce and C for Architecture). Site 0060 is a farmhouse that is an excellent example of the Folk Victorian style of architecture and appears to maintain much of its original fabric/integrity (Criterion A for Agriculture and C for Architecture). Site 0492 is an exceptional example of a very early 20th Century train depot (Criterion A for Railroad History and C for Architecture).

Seventeen (17) sites were determined eligible for the NRHP as contributing elements of a proposed Kline Historic District (one of which, 0492, is also individually eligible). It should be noted that the present study only documented resources within the proposed project area and that field reconnaissance suggests that there may be other resources contributing to the Kline Historic District immediately outside of the present study area (see Figure 37 for potential boundary area for Kline Historic District and location of resources surveyed within that proposed district as part of this study). It is recommended that the Kline Historic District would be eligible for the NRHP under Criterion A (for Railroad History relative to the town’s development and Agriculture as it appears some of the residences outside of the study area may be housing for a transient agricultural workforce) with a period of significance from 1850—1939. The proposed boundary for the Kline Historic District is based upon a mixture of intensive survey (within SCDOT project area), reconnaissance survey (outside of SCDOT project area), and logical/defensible linear features (roads, tree lines, and apparent parcel boundaries) observed via aerial map imagery that indicate a core area of historic significance. Future investigations have the potential to alter the proposed boundary area based upon field observations and/or changes to the integrity of the district or its constituent resources.

Table 2 lists the properties examined.

Table 2. List of Newly-Identified Historic Resources.

SHPO site #	Address	Eligibility	Figure Numbers
0044	2230 US 278	Not Eligible	10, 19a, 38
0045	2234 US 278	Not Eligible	10, 19b, 38
0046	2316 US 278 (store)	Not Eligible	10, 20a, 38
0047	2316 US 278	Not Eligible	10, 20b, 38
0048	2915 US 278	Eligible (Criteria A & C)	11, 21a, 38
0049	2915 US 278	Not Eligible	11, 21b, 38
0050	New Zion Baptist – Concord Church Road	Not Eligible	11, 22a, 38
0051	3170 US 278	Not Eligible	12, 22b, 38
0052	3278 US 278	Not Eligible	13, 23a, 38
0053 (church)	Mount Arnon Baptist Church & Cemetery—3358 US 278	Not Eligible	13, 23b, 38
0054 (cemetery)		Not Eligible	13, 24a, 38
0055	3358 US 278	Not Eligible	13, 24b, 38
0056	3680 US 278	Not Eligible	14, 25a
0057	Agricultural complex- Unknown address on US 278	Not Eligible	15, 25b, 26a, 38
0058	4215 US 278	Eligible (Criterion A & C)	15, 26b, 38
0059	Cave Methodist Church Cemetery	Not Eligible	15, 27a, 38
0060	4461 US 278	Eligible (Criterion A & C)	16, 27b, 38
0476	Unidentified residence—unknown address on US 278	Not Eligible	17, 28a, 38
0477	945 US 278	Eligible as contributing element to Kline Historic District	18, 28b, 38
0478	975 US 278	Eligible as contributing element to Kline Historic District	18, 29a, 38

SHPO site #	Address	Eligibility	Figure Numbers
0479	1093 US 278	Eligible as contributing element to Kline Historic District	18, 29b, 38
0480	1135 US 278	Eligible as contributing element to Kline Historic District	18, 30a, 38
0481	Wooden 2 story building on Queen Street	Eligible as contributing element to Kline Historic District	18, 30b, 38
0482	Wooden 1 story building on Queen Street	Eligible as contributing element to Kline Historic District	18, 31a, 38
0483	1200 block of Kings Street	Eligible as contributing element to Kline Historic District	18, 31b, 38
0484	1200 block of Kings Street	Eligible as contributing element to Kline Historic District	18, 32a, 38
0485	1300 block of King Street	Eligible as contributing element to Kline Historic District	18, 32b, 38
0486	72 Railroad Ave.	Eligible as contributing element to Kline Historic District	18, 33a, 38
0487	165 Railroad Ave.	Eligible as contributing element to Kline Historic District	18, 33b, 38
0488	100 block of RR Ave.	Eligible as contributing element to Kline Historic District	18, 34a, 38
0489	Shotgun house on Queen Street	Eligible as contributing element to Kline Historic District	18, 34b, 38
0490	Store at corner of Queen St. and RR Ave.	Eligible as contributing element to Kline Historic District	18, 35a, 38
0491	325 RR Ave.	Eligible as contributing element to Kline Historic District	18, 35b, 38
0492	Depot building on RR Ave.	Eligible as contributing element to Kline Historic District, Individually eligible (Criteria A & C)	18, 36a, 38
0493	445 RR Ave	Eligible as contributing element to Kline Historic District	18, 36b, 38

REMARKS AND RECOMMENDATIONS: The cultural resources survey of the US Route 278 (Barnwell Road/Kings Avenue) Shoulder Improvement project area resulted in the identification no new archaeological sites and 34 new above ground resources. Twenty (20) of the above ground resources were determined to be eligible for inclusion in the National Register of Historic Places (four as individually eligible and seventeen as contributing elements to the Kline Historic District). No historic properties will be affected by the proposed undertaking. No additional cultural resources investigations are recommended.

SIGNATURE: _____ **DATE:** _____

References Cited

South Carolina State Highway Department (SCSHD)

- 1938 General Highway and Transportation Map of Allendale County, South Carolina. Retrieved from University of South Carolina University Libraries, Maps Department, Digital Collections <<http://digital.tcl.sc.edu/cdm/singleitem/collection/scrm/id/13/rec/1>>.
- 1939 General Highway and Transportation Map of Barnwell County, South Carolina. Retrieved from University of South Carolina University Libraries, Maps Department, Digital Collections <<http://digital.tcl.sc.edu/cdm/singleitem/collection/scrm/id/17/rec/1>>.

United States Geological Survey (USGS)

- 1919 1919 Allendale 1:62,500 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer <<http://historicalmaps.arcgis.com/usgs/>>.
- 1943 1943 Allendale 1:62,500 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer <<http://historicalmaps.arcgis.com/usgs/>>.
- 1961 1961 Aerial Photo Single Frames. Entity ID ARCVAP2A0060047, Project VAP2A, Roll 000006, Frame 647, Scale 60,000, Retrieved from USGS Earth Explorer <<https://earthexplorer.usgs.gov/>>.
- 1980a 1979 Allendale 1:24,000 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer <<http://historicalmaps.arcgis.com/usgs/>>.
- 1980b 1979 Barnwell 1:24,000 Scale Topographic Quadrangle. Retrieved from USGS Historical Topographic Map Explorer <<http://historicalmaps.arcgis.com/usgs/>>.

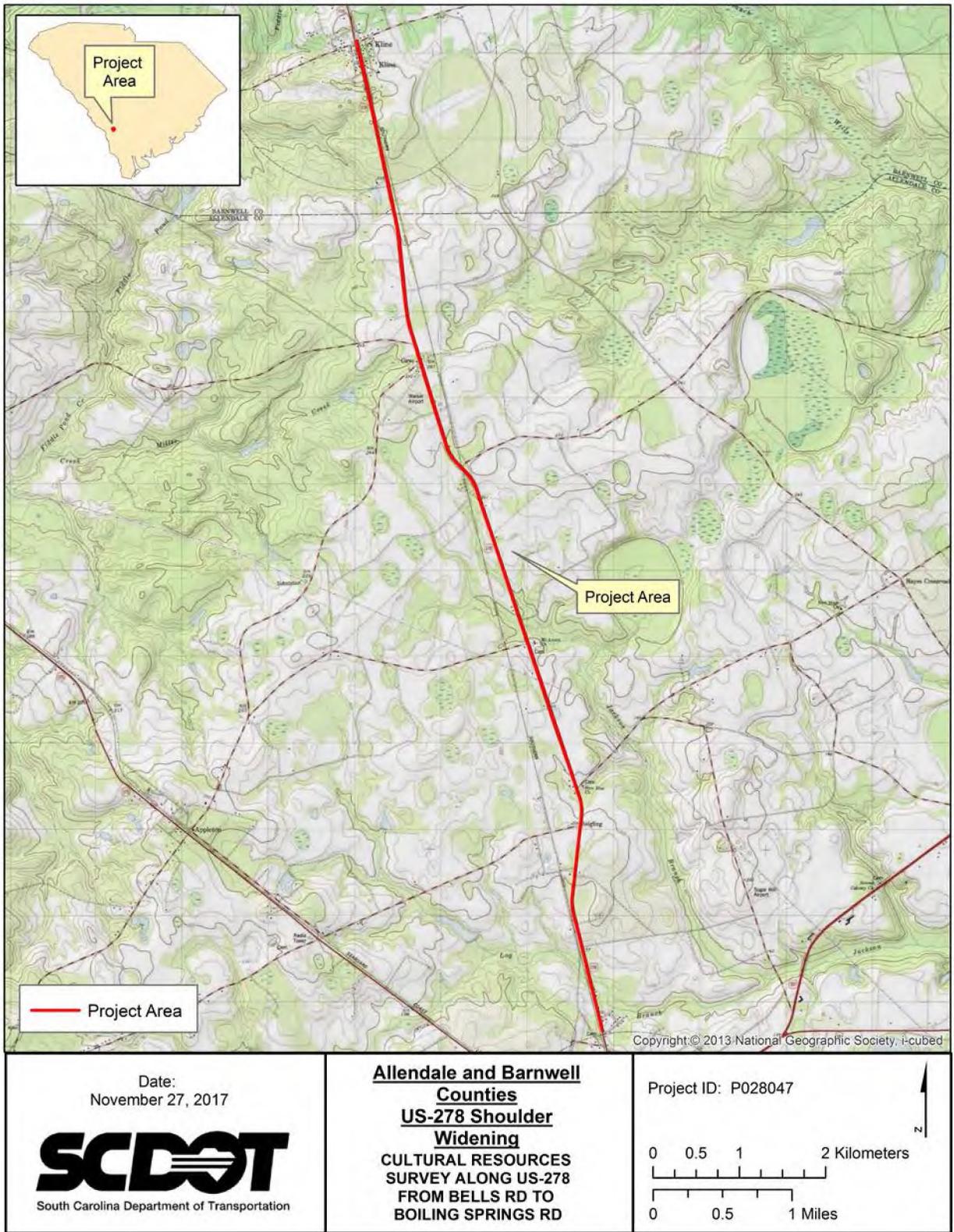


Figure 1. Project Area, Allendale and Barnwell 7.5' USGS Quadrangles (USGS 1980a and 1980b)

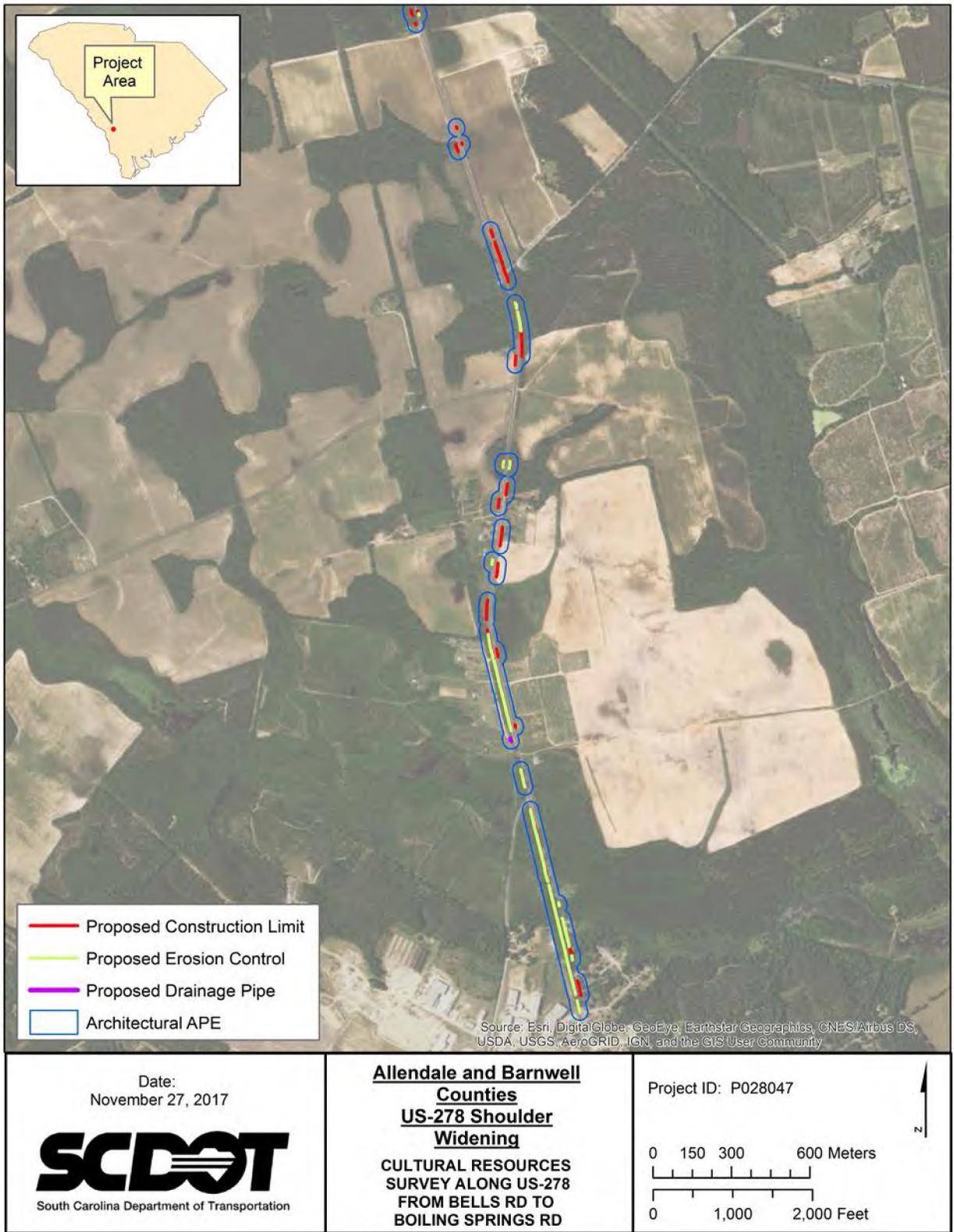


Figure 2. US-278 Shoulder Widening Project Area and Architectural APE, Map 1 of 3, Southern Portion.

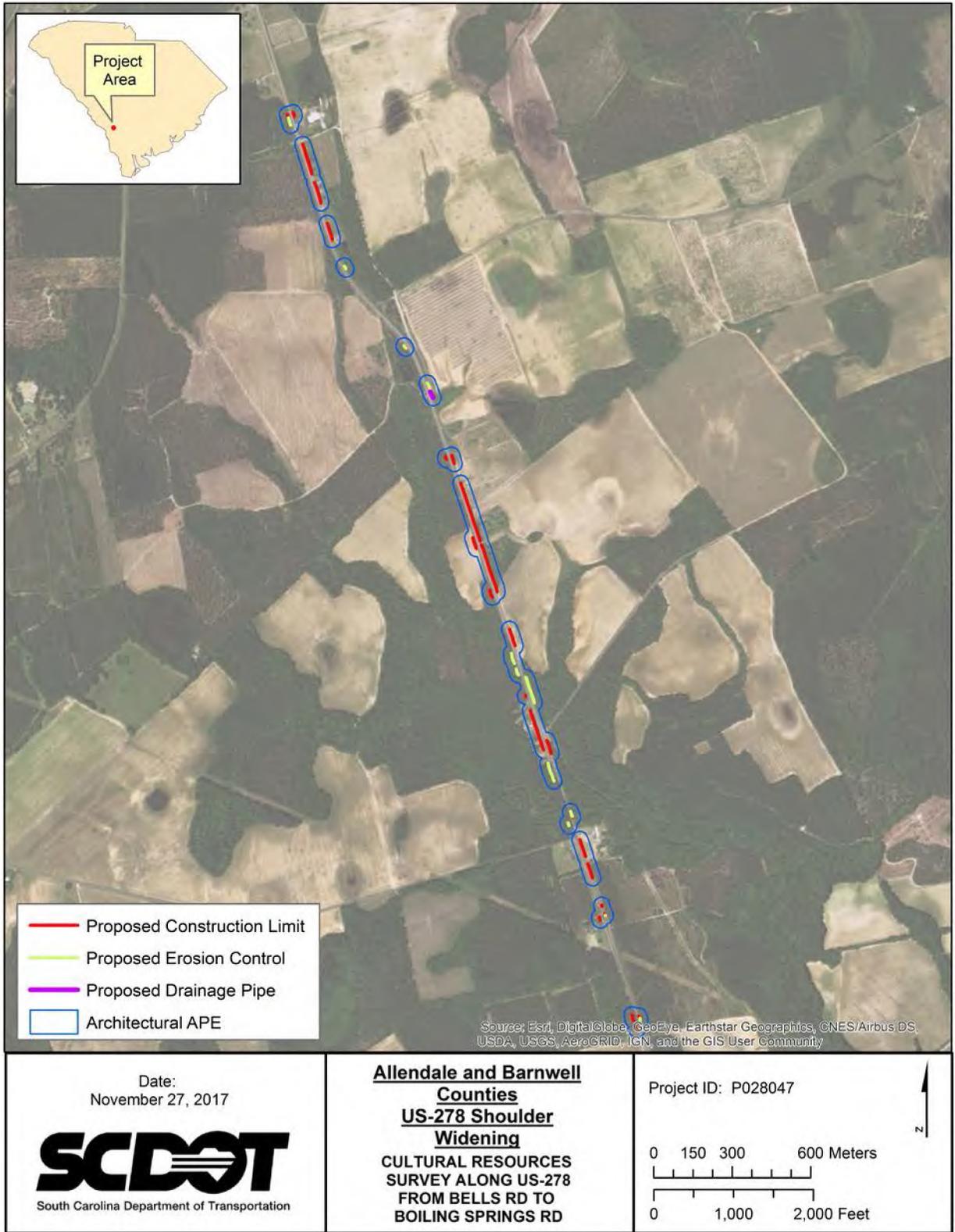


Figure 3. US 278 Shoulder Widening Project Area and Architectural APE, Map 2 of 3, Central Portion.

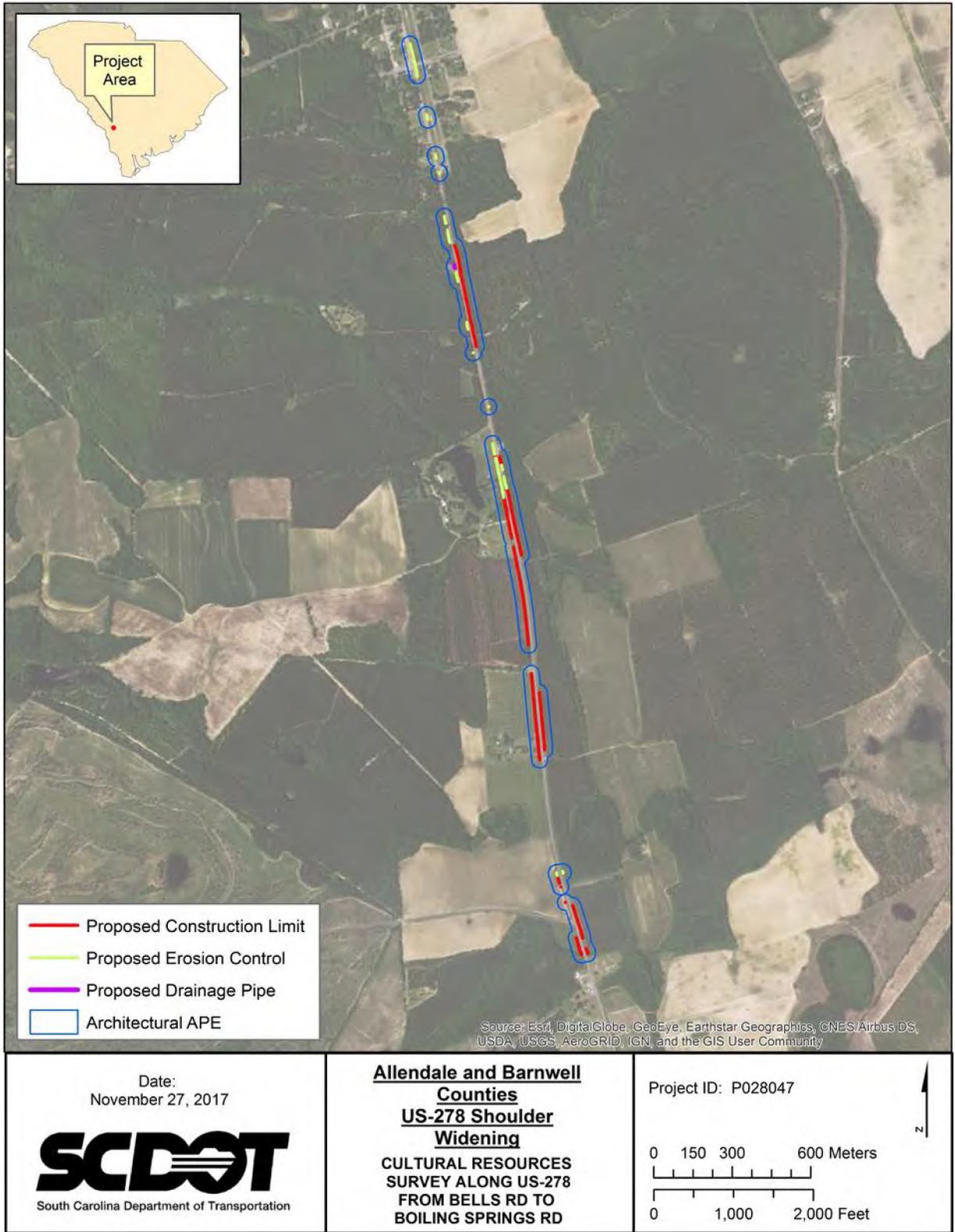


Figure 4. US 278 Shoulder Widening Project Area and Architectural APE, Map 3 of 3, Northern Portion.



Figure 5a. Typical View of the Archaeological APE.



Figure 5b. Typical View of the Archaeological APE.



Figure 6a. Typical View of the Archaeological APE.



Figure 6b. Typical View of the Archaeological APE.

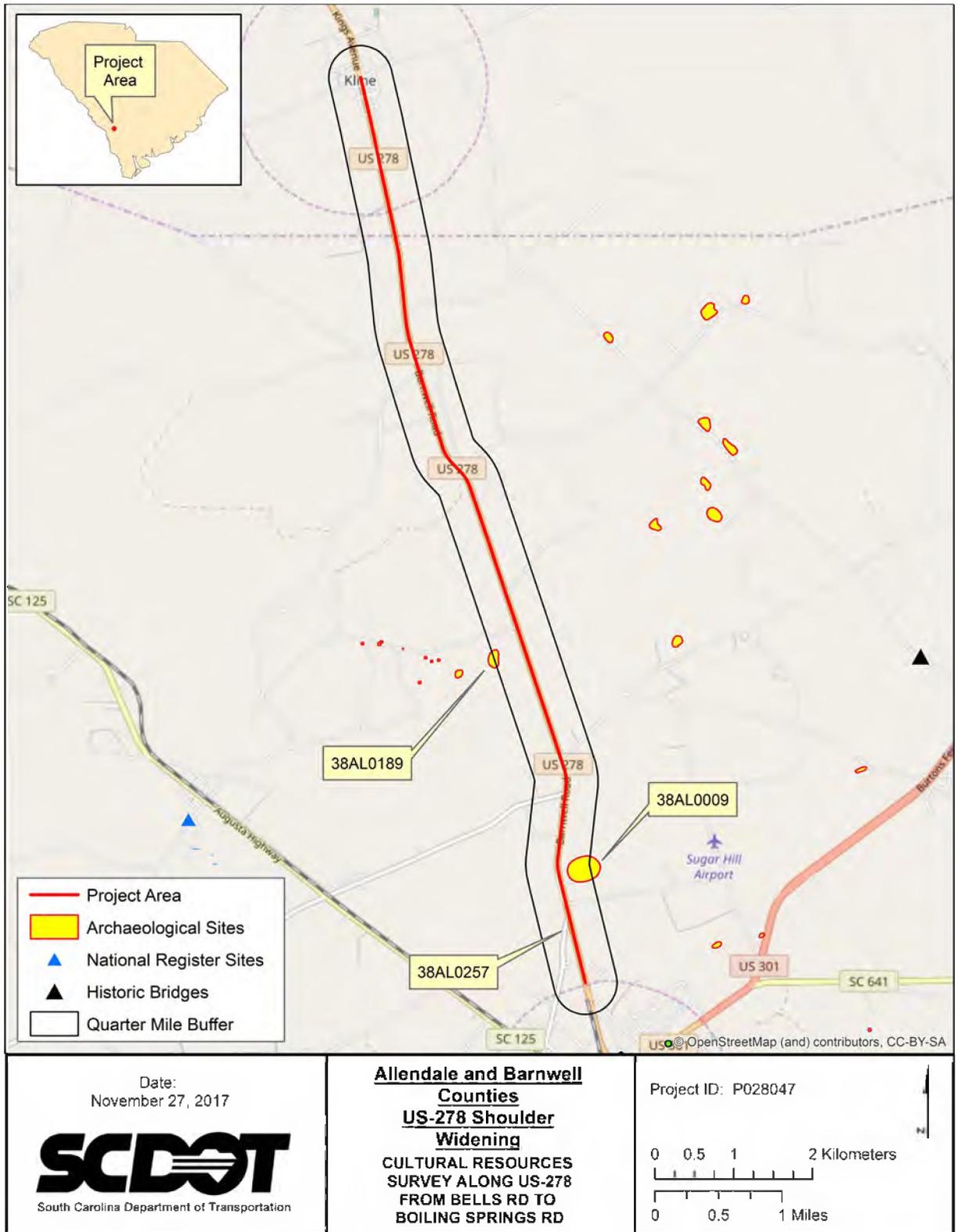


Figure 7. Previously Recorded Cultural Resources Within a Quarter Mile of the Project Area.

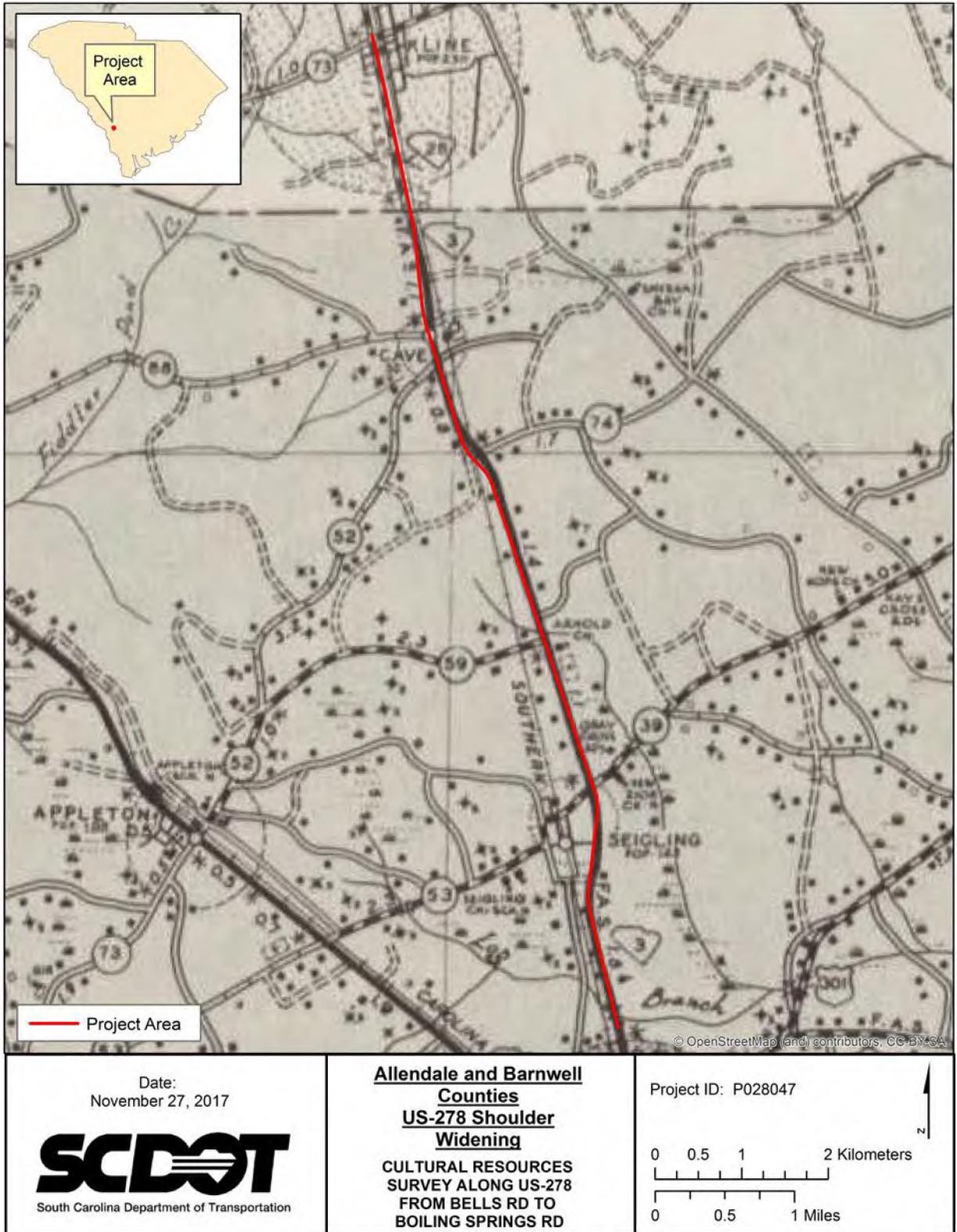


Figure 8. 1938 Allendale and 1939 Barnwell County Highway Maps Showing Project Area (SCSHD 1938 and SCSHD 1939).



Figure 9a. Typical Buried Utilities and Drainage Ditches Prevalent in the APE.



Figure 9b. Typical Buried Utilities and Drainage Ditches Prevalent in the APE.

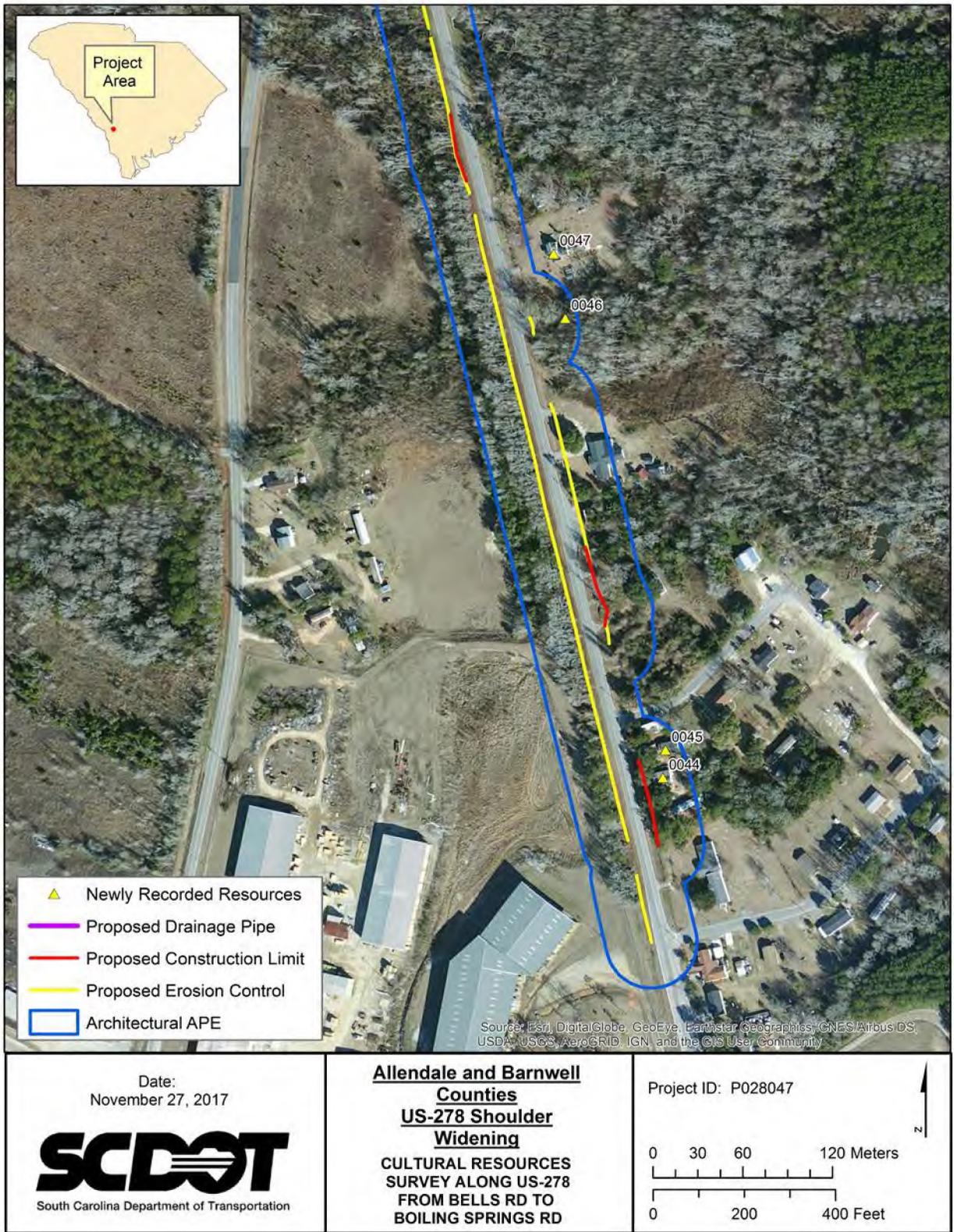


Figure 10. Newly Recorded Resources, Map 1.

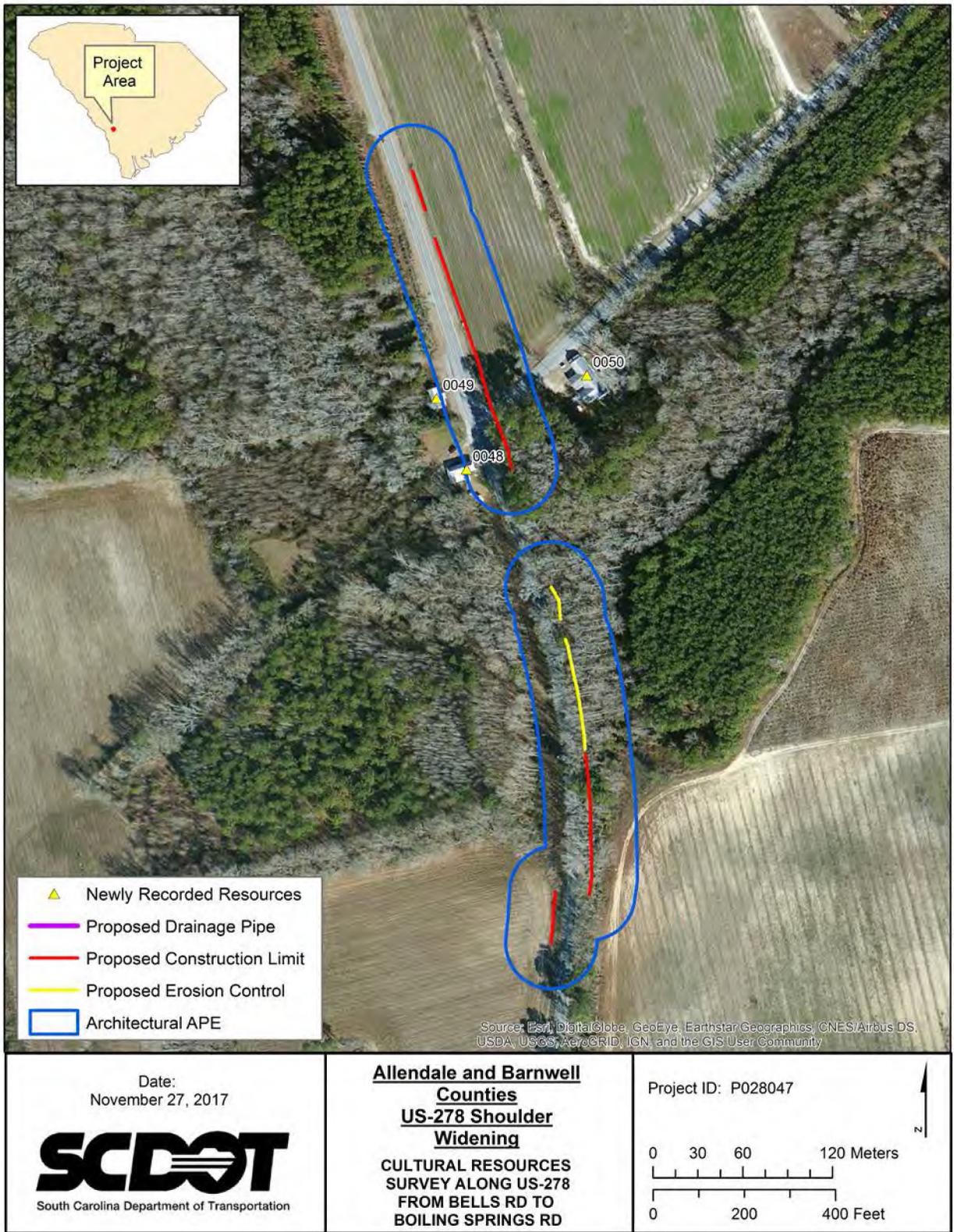


Figure 11. Newly Recorded Resources, Map 2.



Figure 12. Newly Recorded Resources, Map 3.

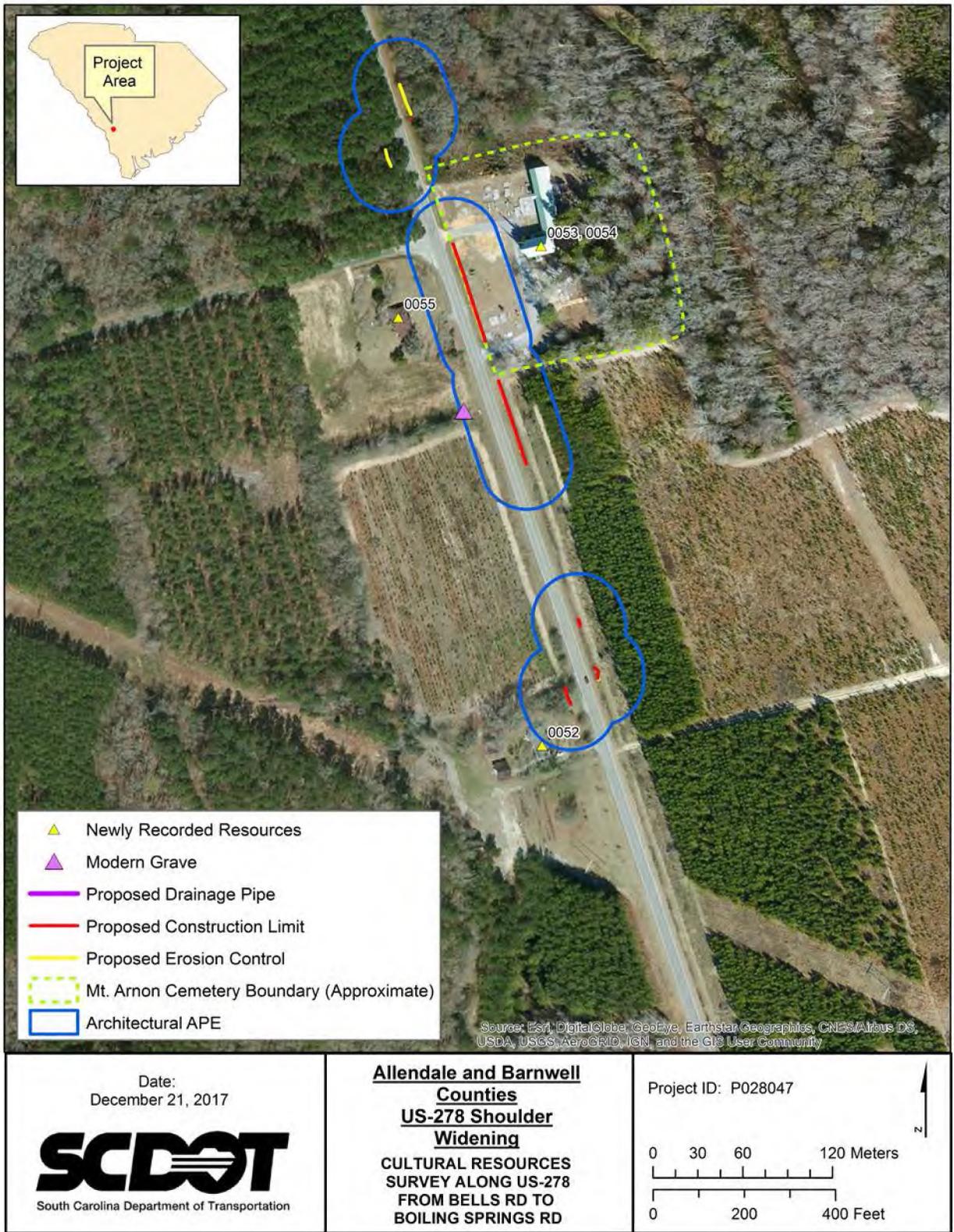


Figure 13. Newly Recorded Resources, Map 4.

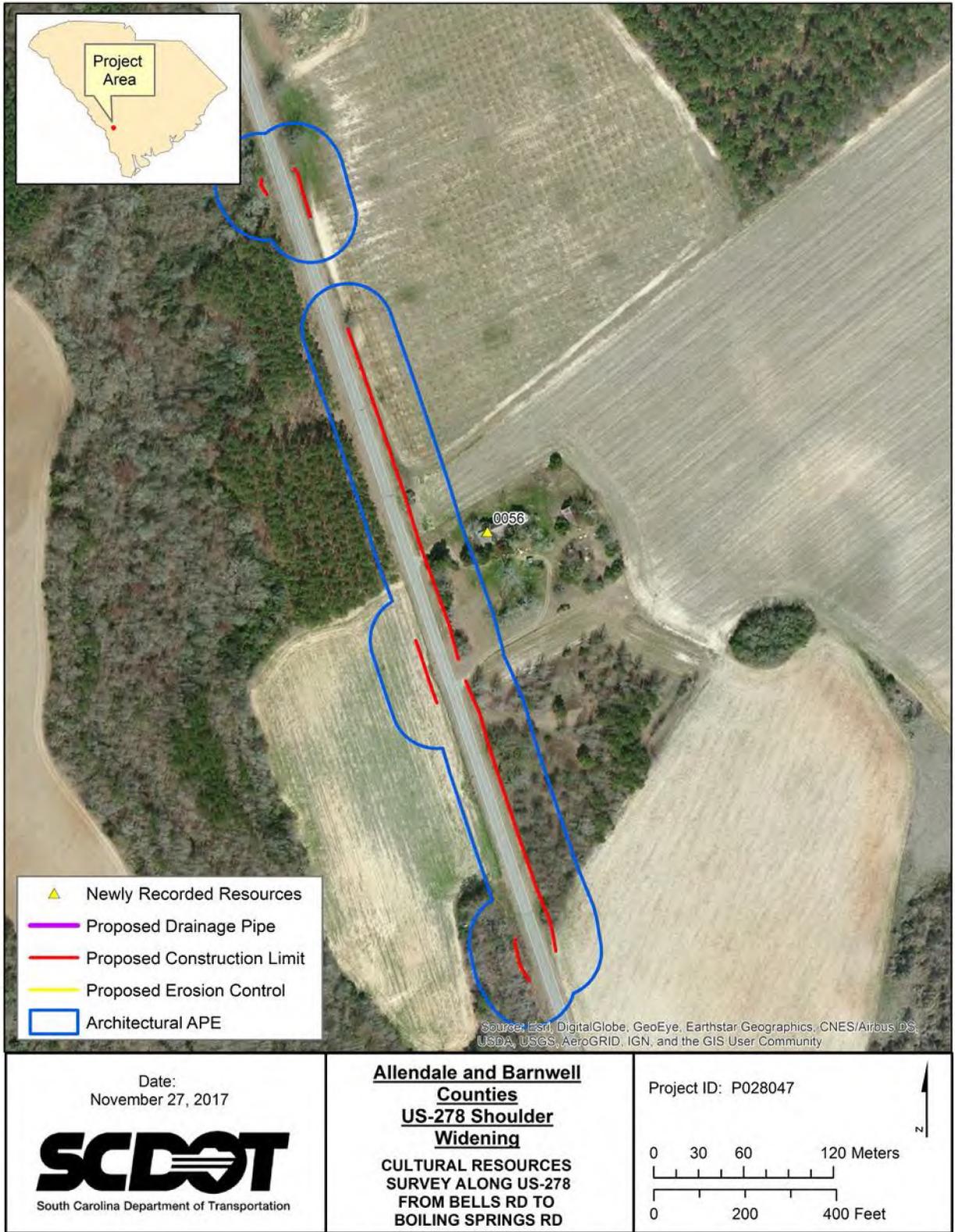


Figure 14. Newly Recorded Resources, Map 5.

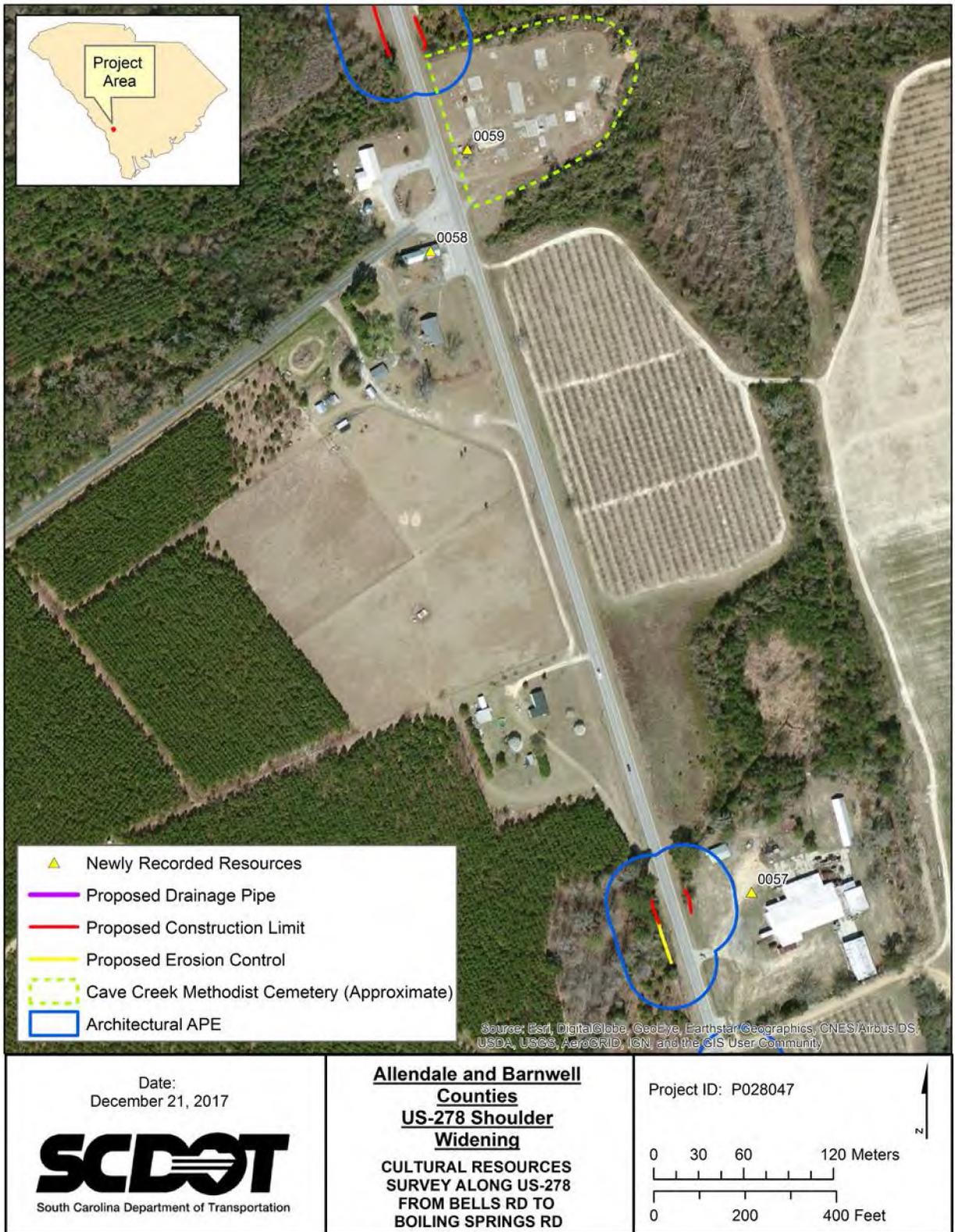


Figure 15. Newly Recorded Resources, Map 6.

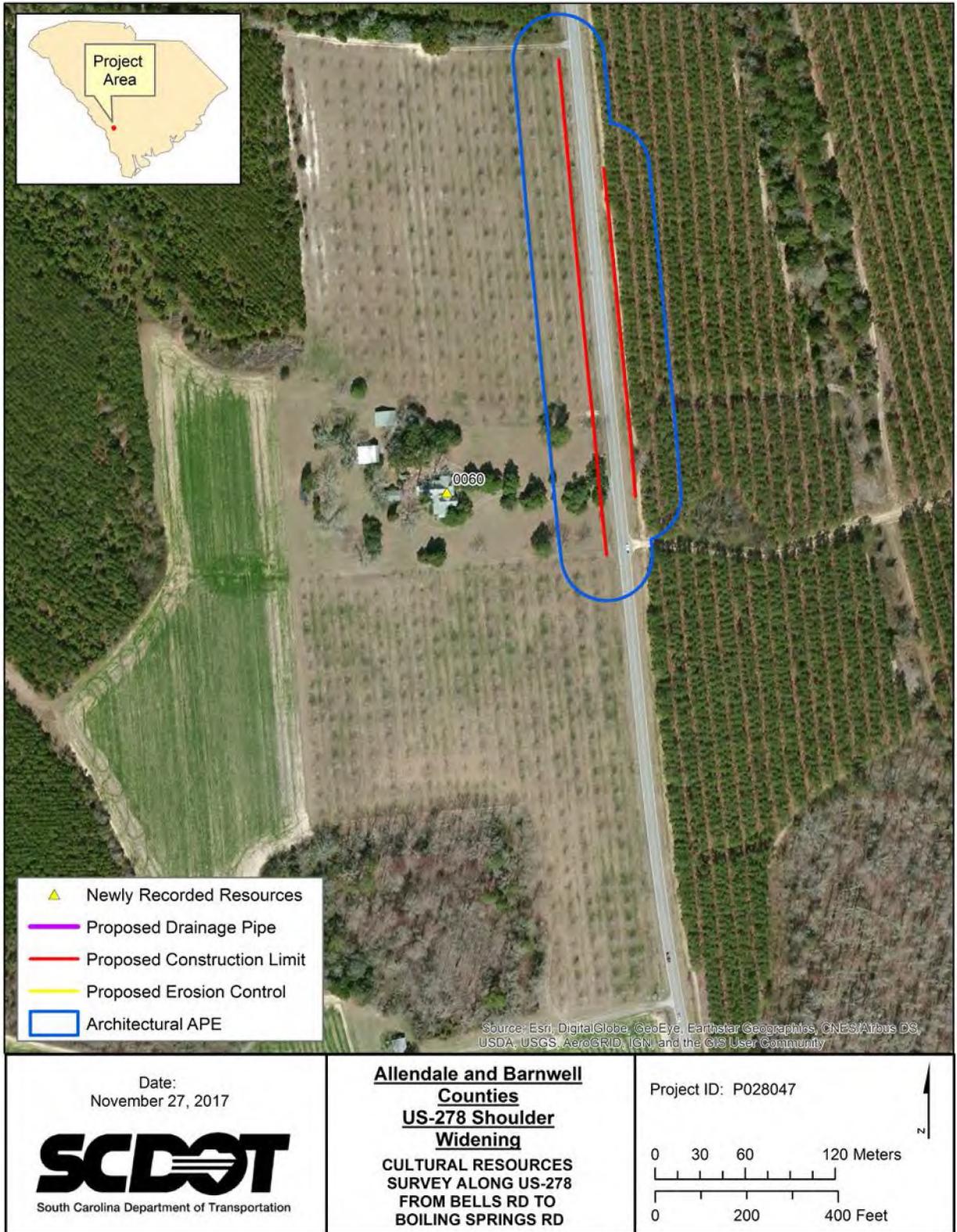


Figure 16. Newly Recorded Resources, Map 7.

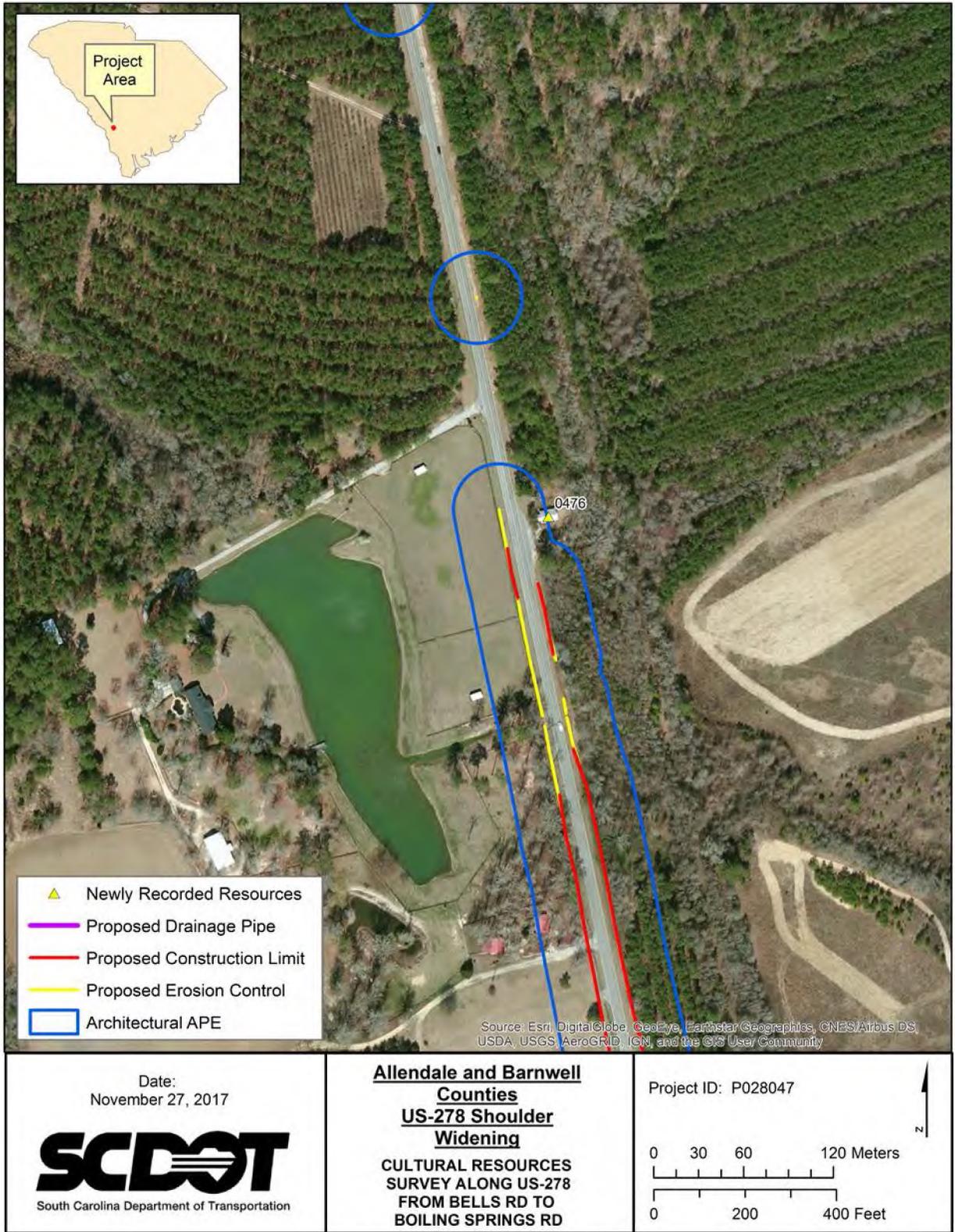


Figure 17. Newly Recorded Resources, Map 8.



Figure 18. Newly Recorded Resources, Map 9.



Figure 19a. Newly Recorded Resource No 0044, Facing Northeast.



Figure 19b. Newly Recorded Resource No 0045, Facing East.



Figure 20a. Newly Recorded Resource No 0046, Facing East.



Figure 20b. Newly Recorded Resource No 0047, Facing Southeast.



Figure 21a. Newly Recorded Resource No 0048, Facing Southwest.



Figure 21b. Newly Recorded Resource No 0049, Facing Northwest.



Figure 22a. Newly Recorded Resource No 0050, Facing Southeast.



Figure 22b. Newly Recorded Resource No 0051, Facing Northwest.



Figure 23a. Newly Recorded Resource No 0052, Facing West.



Figure 23b. Newly Recorded Resource No 0053, Facing East.



Figure 24a. Newly Recorded Resource No 0054, Facing East.



Figure 24b. Newly Recorded Resource No 0055, Facing West.



Figure 25a. Newly Recorded Resource No 0056, Facing Northeast.



Figure 25b. Newly Recorded Resource No 0057, Structure 1, Facing Northeast.



Figure 26a. Newly Recorded Resource No 0057, Structure 2, Facing East.



Figure 26b. Newly Recorded Resource No 0058, Facing Northwest.



Figure 27a. Newly Recorded Resource No 0059, Facing West.



Figure 27b. Newly Recorded Resource No 0060, Facing Northwest.



Figure 28a. Newly Recorded Resource No 0476, Facing Northeast.



Figure 28b. Newly Recorded Resource No 0477, Facing Northwest.



Figure 29a. Newly Recorded Resource No 0478, Facing West.



Figure 29b. Newly Recorded Resource No 0479, Facing West.



Figure 30a. Newly Recorded Resource No 0480, Facing Northwest.



Figure 30b. Newly Recorded Resource No 0481, Facing Southwest.



Figure 31a. Newly Recorded Resource No 0482, Facing Southwest.



Figure 31b. Newly Recorded Resource No 0483, Facing Northwest.



Figure 32a. Newly Recorded Resource No 0484, Facing Northwest.



Figure 32b. Newly Recorded Resource No 0485, Facing West.



Figure 33a. Newly Recorded Resource No 0486, Facing Northeast.



Figure 33b. Newly Recorded Resource No 0487, Facing East.



Figure 34a. Newly Recorded Resource No 0488, Facing Northeast.



Figure 34b. Newly Recorded Resource No 0489, Facing South.



Figure 35a. Newly Recorded Resource No 0490, Facing South.



Figure 35b. Newly Recorded Resource No 0491, Facing East.



Figure 36a. Newly Recorded Resource No 0492, Facing Southeast.



Figure 36b. Newly Recorded Resource No 0493, Facing East.

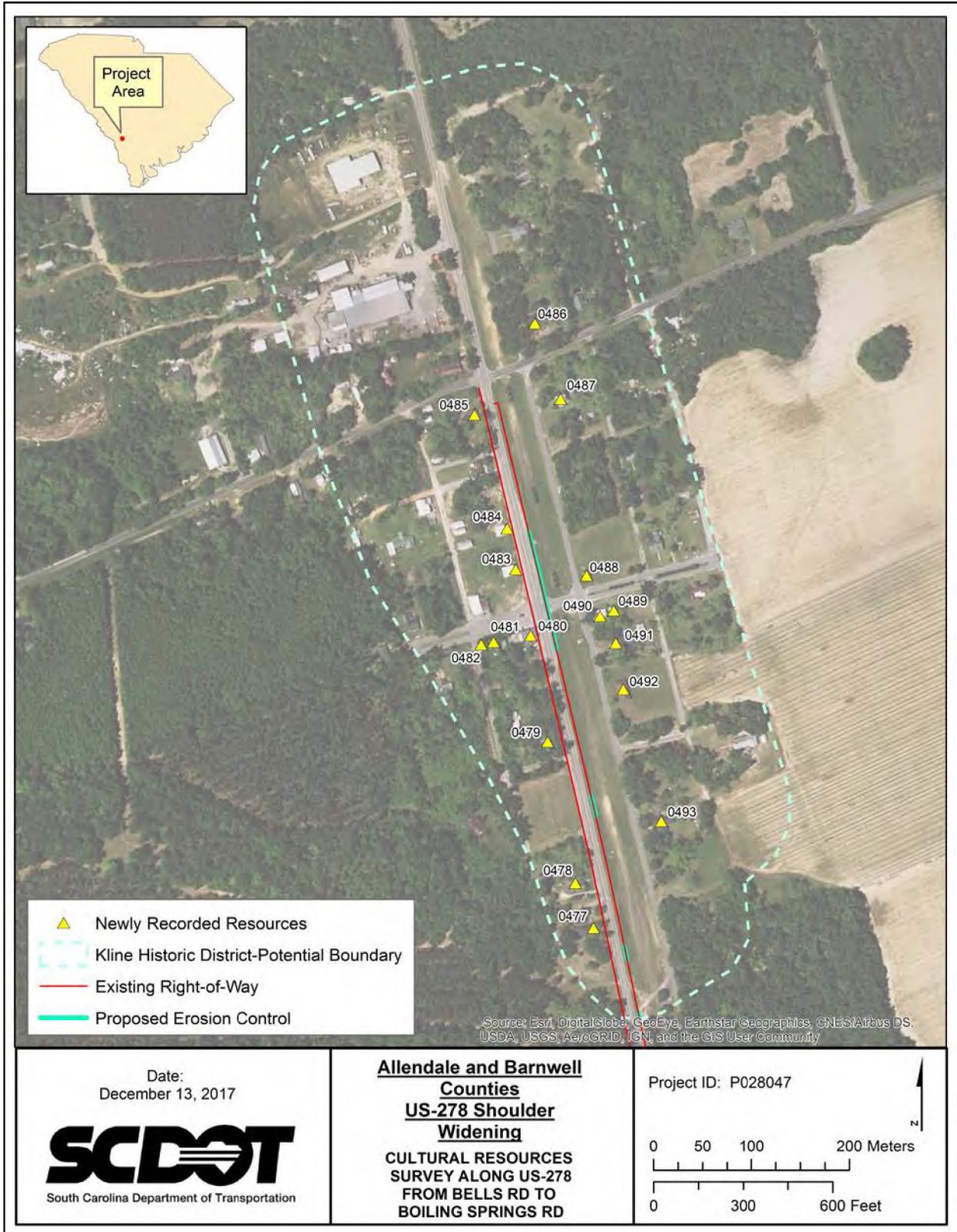


Figure 37. Potential Boundary Area of Proposed Kline Historic District

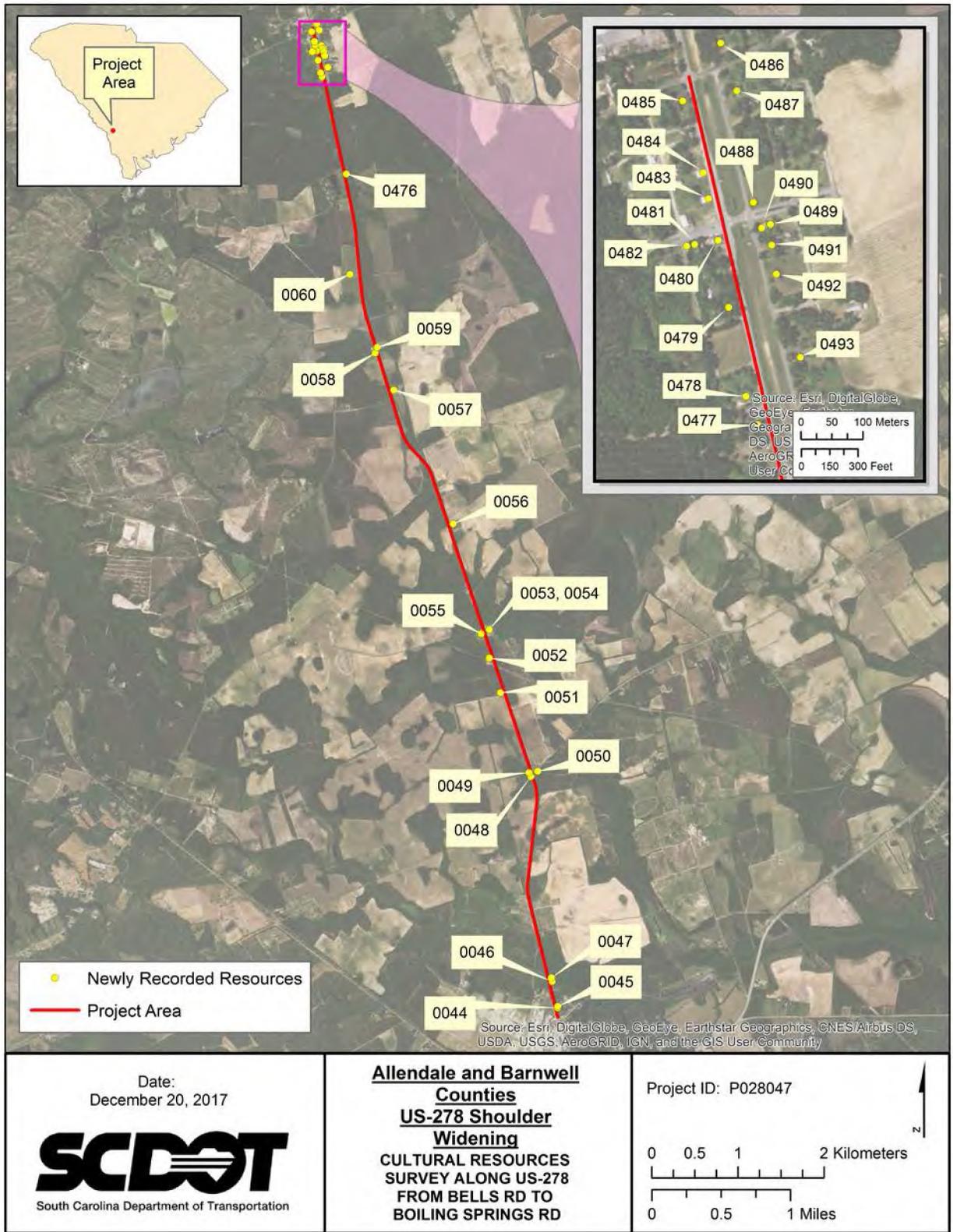


Figure 38. Project Area with Aboveground Resource Locations.

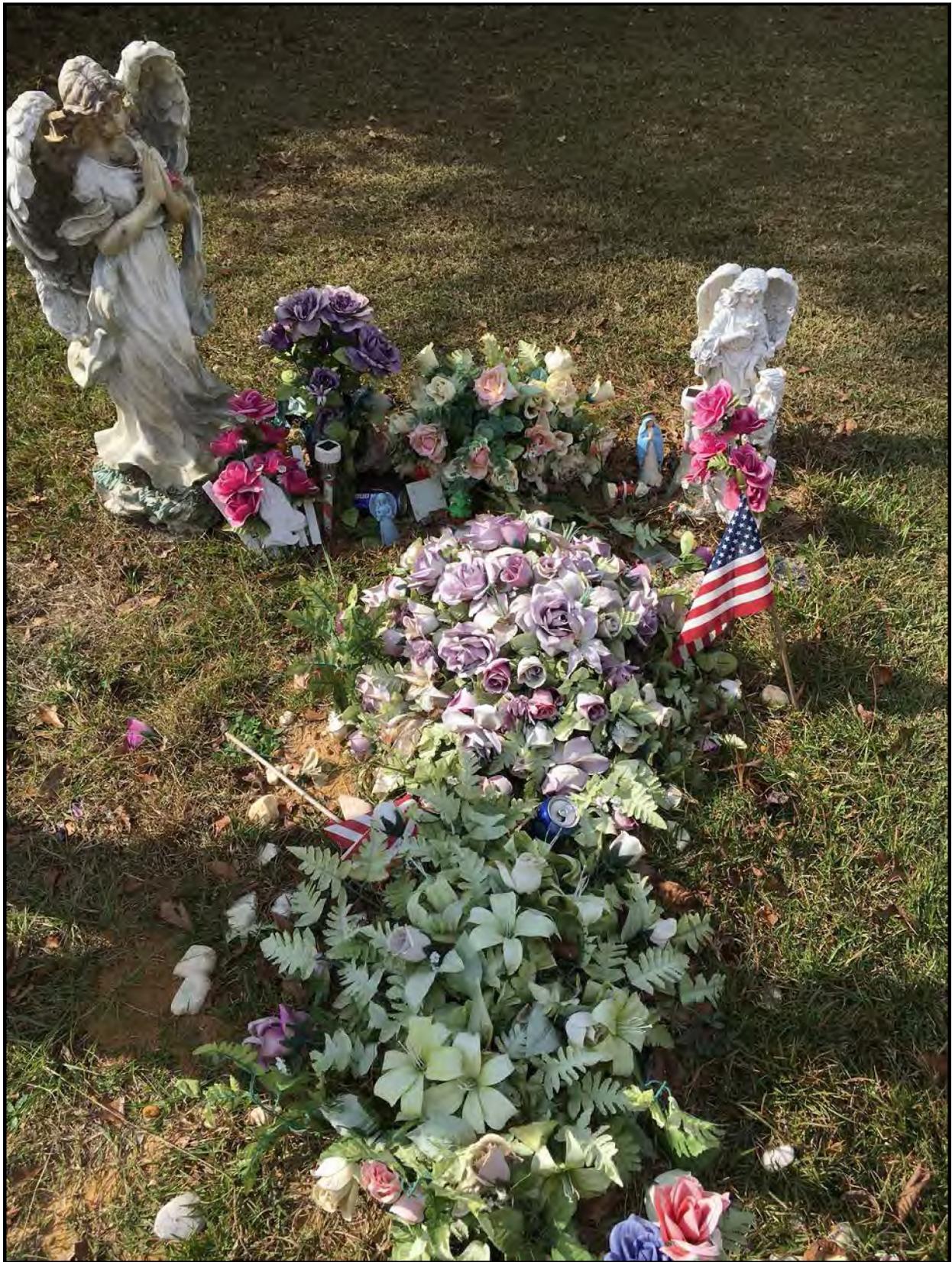


Figure 39. Probable Modern Grave Site Across US 278 From Mount Arnon Cemetery.