

ARCHAEOLOGICAL FIELD REPORT
SCDOT ENVIRONMENTAL SECTION



TITLE: Cultural Resources Survey for US 521 over Old Railroad Bed

DATE OF RESEARCH: April 10, 2018

COUNTY: Kershaw

PIN: P030341

ARCHAEOLOGIST: Tracy Martin, Bill Jurgelski

ARCHITECTURAL HISTORIAN: David Kelly

PROJECT: Bridge Replacement and Intersection Improvement

DESCRIPTION: The Department proposes to replace a bridge carrying US 521 over an old railroad bed and to improve the intersection at US 521 (Kershaw Highway) and DeKalb School Road in Kershaw County, South Carolina (**Figure 1**). The proposed plan will change the intersection to give DeKalb School Road a perpendicular intersection with US 521. The improvement project area extends approximately 1870 feet along US 521 and about 445 feet along DeKalb School Road, and varies in width from approximately 72 to 180 feet (**Figure 2**). A small amount of new right of way will be required to complete the project. The APE (Area of Potential Effect) for archaeological resources for the project consists of land that will be acquired as new right of way as well as those areas within the existing right of way that might be affected by the undertaking. The APE for architectural resources consists of a 300 foot buffer around the archaeological APE (**Figure 3**).

LOCATION: The project area is located in the north central portion of Kershaw County, approximately three miles south of Westville.

USGS QUADRANGLE: Westville

DATE: 1988

SCALE: 7.5'

APE Centroid:

UTM: WGS 84

ZONE: 17

EASTING: 537274.88

NORTHING: 3806182.53

ENVIRONMENTAL SETTING: The project area is located along the fall line between the Piedmont and the Upper Coastal Plain. The lands within the project APE consist of disturbed ROW, paved surfaces, disturbed graded surfaces for lawn, as well as fairly intact hilltops and side slopes. Ground disturbances in the project area consist of buried and above ground utility lines, cut banks, and roadside ditches. A large abandoned railroad cut bisects the project area. **Figures 4 – 5** show the APE as it looked at the time of survey.

NEAREST RIVER/STREAM AND DISTANCE: The closest water source to the project area is an unnamed tributary of Grannies Quarter Creek, approximately 1650 feet to the northwest.

SOIL TYPE: Three soil types are present within the APE. The most abundant is Lakeland sand, 0 to 6 percent slopes, which comprises 51 percent of the project area. This soil variety is formed from eolian sands and is excessively drained. This is followed by Wagram sand, 0 to 6 percent slopes, which comprises 44 percent of the project area. This soil type is formed by loamy marine deposits and is well drained. Blanton sand, 0 to 6 percent slopes makes up 5 percent of the project area. This soil is considered moderately well drained and is formed from sandy and/or loamy marine deposits.

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 [4/12/2018].

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

CURRENT VEGETATION: Vegetation within the project area consists of medium-aged hardwood and pine forest, logged areas with a light understory of briars, and grassy areas of right of way.

BACKGROUND INVESTIGATION: Prior to the field investigation the online GIS database (ArchSite) was examined to determine if any previously identified archaeological sites, standing structures or National Register of

Historic Places (NRHP) sites were present within a quarter mile of the project area. The background investigation indicated that two archaeological sites had been recorded within a quarter mile. Site 38KE1013 is approximately 410 feet east of the project area. This resource is the Dabney House, described as a one-and-a-half story frame house constructed in 1819. The NRHP eligibility status of the house is not listed. The second site, 38KE122, is a Late Archaic site located about 750 feet east of the project area. This site was documented during an artifact collections survey and is described as a five acre artifact scatter. It is listed as probably not eligible for the NRHP (**Figure 6**).

In addition, historical maps and aerial photos dating to between 1820 and 1964 were examined to determine if any structures or architectural features could be identified within the project area (Mills and Boykin 1825, SCSHD 1938, USGS 1935, 1938, 1942, and 1964). The earliest map showing structures in the area is the 1919 Kershaw County Soil Survey Map (**Figure 7**). This map predates the construction of US 521, but shows the path of the Southern Railroad line (now abandoned) that crosses through the project area. The 1938 SCDOT Kershaw County Highway Map shows several structures in the vicinity of the project area (**Figure 8**). The earliest aerial imagery examined was from 1964. Many of the standing structures noted around the project area today are visible on the 1964 aerial. This includes a farmstead complex in the southwest and the DeKalb School in the northeast (**Figure 9**).

ARCHAEOLOGICAL SURVEY: An archaeological survey of the project area was conducted on April 10, 2018. Field methods consisted of a pedestrian reconnaissance augmented with shovel testing in high site probability areas where there was limited surface visibility.

ARCHAEOLOGICAL SURVEY RESULTS: The northern portion of the project area was narrow and included little room for shovel testing in undisturbed areas, as well as large areas of exposed cut bank that could be inspected for cultural resources. A total of two shovel test pits were excavated along DeKalb School Road and three were excavated along US 521 north of the abandoned railroad cut (**Figure 10**). Shovel testing was more intensive south of the railroad cut because the project area was wider in this vicinity and encompassed a larger amount of undisturbed ground that featured limited surface visibility.

Soils throughout the project area were generally found to consist of about 10 to 20 centimeters of grayish-brown (10YR 5/2) to dark brown (10YR 3/3) loamy sandy followed by brownish-yellow (10YR 6/8), light yellowish-brown (10YR 6/4), or pale brown (10YR 6/3) sand to 80 centimeters below surface (cmbs). A second stratum was periodically visible between 10 and 20 centimeters consisting of olive brown (10YR 4/4) sand.

Much of the project area was found to exhibit significant disturbance from road construction, roadside ditches, road cuts, and buried and above ground utilities. **Figures 11 and 12** show the ground disturbance, buried utilities, and exposed ground surface within the project area.

Two archaeological sites were identified during the archaeological survey.

38KE1174

Site 38KE1174 consists of a small scatter of prehistoric artifacts along the east side of US 521 north of the abandoned railroad cut (see **Figure 1**). The site was defined by two positive shovel tests. It is located on a ridge top overlooking sloping ground to the east. Vegetation on the site consists of a sparse mix of pine and hardwood trees with a moderately thick understory of saplings and brush (**Figure 13**). Disturbance to the site consists of road right of way, paved surfaces, and buried utilities. The site was delineated at 15 meter intervals and is bound by two negative shovel tests to the south and two unexcavated shovel tests in the paved road to the north. The eastern portion of the site is bound by slope. Shovel tests were not excavated to the west due to disturbance in the US 521 right of way (**Figure 14**).

The soil classification at the site is Wagram sand, 0 – 6 percent slopes. Soil profiles observed in shovel tests typically contained two strata. Stratum I consisted of gray (10YR 5/1) to grayish-brown (10YR 5/2) loamy sand up to 20 centimeters thick. The second stratum was typically brownish-yellow (10YR 6/8) sand extending to at least 80 cmbs.

A total of 11 artifacts were recovered at 38KE1174. These include metavolcanic flakes and flake fragments (n=5), one chert flake fragment, one fabric impressed sherd with medium sand temper, one fabric impressed sherd with

medium sand temper and very coarse sand inclusions, and three medium sand tempered sherds with an unidentified/weathered surface treatment. All of the artifacts were recovered from Stratum II at depths ranging from 20 – 50 cmbs.

Site 38KE1174 is a small Woodland Period site with a moderate amount of artifacts. Because of the limited size of the site and because it has been heavily disturbed by US 521 and the Dekalb School access road, it is unlikely that additional work at the site will yield important information about the prehistory of the surrounding region. The site is recommended as not eligible for the NRHP and no further work is recommended.

38KE1175

Site 38KE1175 is a large historic and prehistoric site consisting of a prehistoric lithic scatter and an historic farmstead. It is located on a ridge top on the east and west sides of US 521 south of the abandoned railroad cut (see **Figure 1**). The portion of the site on the western side of US 521 was recently logged and is vegetated with very sparse brush while the portion on the eastern side of US 521 is moderately wooded with pine and hardwood and a very light understory of saplings and brush (**Figure 15**). Disturbance to the site consists of road right of way, road cut, and buried utilities.

A total of 13 shovel test pits were excavated at 15 meter intervals within the site (**Figure 16**). Of these, 11 were positive for cultural material. Shovel testing was not conducted outside the project APE. However, the site boundaries were extended to encompass three partially collapsed structures located immediately outside (to the west) of the APE. The first is the remains of a house (**Figures 17 and 18**). The second is an unknown collapsed structure with an intact gabled roof (**Figure 19**), and the third is an outhouse (**Figure 20**). Additional testing would be necessary to determine the site boundaries beyond the structural remains and outside of the APE.

Background research indicated that the historic component of the site predates the construction of US 521. The 1919 Kershaw County Soil Map shows one (possibly two) structures visible in the vicinity of the project area on what would be both sides of the current road. Because of this, the positive shovel tests on the eastern and western sides of the road were kept as one site. Both the 1938 Kershaw County Highway Map and a 1964 aerial photograph of the area show a structure visible in the location of the site (**Figures 21a, 21b, and 22a**).

Two soil types are present at the site: Blanton sand, 0 – 6 percent slopes and Lakeland sand, 0 – 6 percent slopes. Typically, soil profiles observed in shovel tests at 38KE1175 contained two strata. Stratum I consisted of dark gray (10YR 4/1), dark grayish-brown (10YR 4/2), grayish-brown (10YR 5/2), or dark olive brown (2.5Y 3/3) loamy sand up to 20 centimeters thick. The second stratum was typically brownish-yellow (10YR 6/8) sand extending to at least 80 cmbs.

A total of 41 artifacts were recovered at 38KE1175. Prehistoric artifacts include one quartz biface fragment, three quartz flake fragments, and one piece of metavolcanic shatter. All of the prehistoric artifacts were recovered from Stratum II. Historic artifacts include unidentified metal fragments (n=3), unidentified wire with forked end (n=1), brick fragments (n=18), clear container glass (n=6), dark green bottle glass (n=1), brown container glass with a twist top (n=1), aqua container glass (n=1), cut nail (n=1), unidentified nail (n=1), unidentified refined earthenware sherd (n=1), transfer print whiteware sherd (n=1), and unidentified burnt earthenware sherd (n=1). Historic artifacts were found in both Stratum I (n=8) and Stratum II (n=28).

Site 38KE1175 is a large prehistoric scatter and early to mid-twentieth century farmstead. Because shovel testing was restricted to the project APE the exact site boundaries could not be determined. Therefore the NRHP eligibility of the total site could not be assessed. Although the portion of the site documented in this study contained a fairly high number of artifacts, it has been heavily disturbed by the construction of US 521. It is therefore unlikely that additional work on this portion of the site will yield important information about the prehistory or history of the surrounding region, and no further work is recommended here.

ARCHITECTURAL SURVEY: A historical resources survey of the project area was conducted on April 10, 2018. Site survey methods consisted of a visual examination of all buildings within the Architectural APE. The presence of large dogs on the property and the absence of the property owner at the time of the survey prevented a

close examination of the buildings located at the extreme northern end of the Baron DeKalb School campus (site # 1842). Structures in the northern and eastern sections of the campus were therefore not recorded. Aerial imagery suggests there are multiple structures on the campus of this resource.

ARCHITECTURAL SURVEY RESULTS: Four (4) newly-identified structures (site #s 1842—1845) were identified within the Architectural APE (**Figure 22**). Site # 1842 is an early 20th century school. Site # 1843 is a residence. Site # 1844 is a highway bridge over an abandoned railroad cut, and site # 1845 is the abandoned railroad cut (**Figures 23 – 25**).

Site # 1842 is the Baron DeKalb School. This school was built circa 1930 and had a student population of around 300 pupils (Inabinet 2010). Based on aerial imagery, the campus appears to have several auxiliary buildings (gymnasium, etc.) that could not be accessed for documentation during the current survey effort. Nonetheless, given the integrity of the main school building and the appearance that an intact early 20th Century campus remains, it is recommended that site # 1842 is eligible for the NRHP under Criteria A (Education) and C (Architecture).

Site # 1843 is a circa 1940 vernacular residence. It has no special merit in terms of historical significance and is therefore recommended as ineligible for the NRHP.

Site # 1844 is the US 521 bridge over an abandoned railroad cut. The 1948 bridge, built by the state highway department as a typical grade crossing improvement project, has no significant historical associations with railway development nor is it significant in terms of bridge design or appearance (Transystems 2013). It is therefore recommended as ineligible for the NRHP.

Site # 1845 is a deep railroad cut associated with a former branch railroad line of the Southern Railway between Kershaw and Camden. The line was established in the late 1880s by the Charleston, Cincinnati & Chicago Railroad. The line was later absorbed into the Southern Railway system and served as a minor branch line before being abandoned in mid-1980s (Transystems 2013). The rail line is not historically significant and the railroad cut is recommended as ineligible for the NRHP.

REMARKS AND RECOMMENDATIONS: The cultural resources survey for the intersection improvement and bridge replacement at US 521 (Kershaw Highway) and DeKalb School Road in Kershaw County resulted in the identification two new archaeological sites, 38KE1174 and 38KE1175. Site 38KE1174 and that portion of Site 38KE1175 that extends into the project APE are heavily disturbed and lack integrity. No further work is recommended on either site. Four (4) new architectural resources were documented during the project investigations. Only one of these, the Baron DeKalb School (Site # 1842) is considered NRHP eligible. Impacts from the proposed improvements will be limited to an area around the US 521 Bridge (Site # 1844) and will not have any impact to on Site # 1842. No historic properties will be affected by the proposed undertaking. No additional cultural resources investigations are recommended.

SIGNATURE: _____ **DATE:** _____

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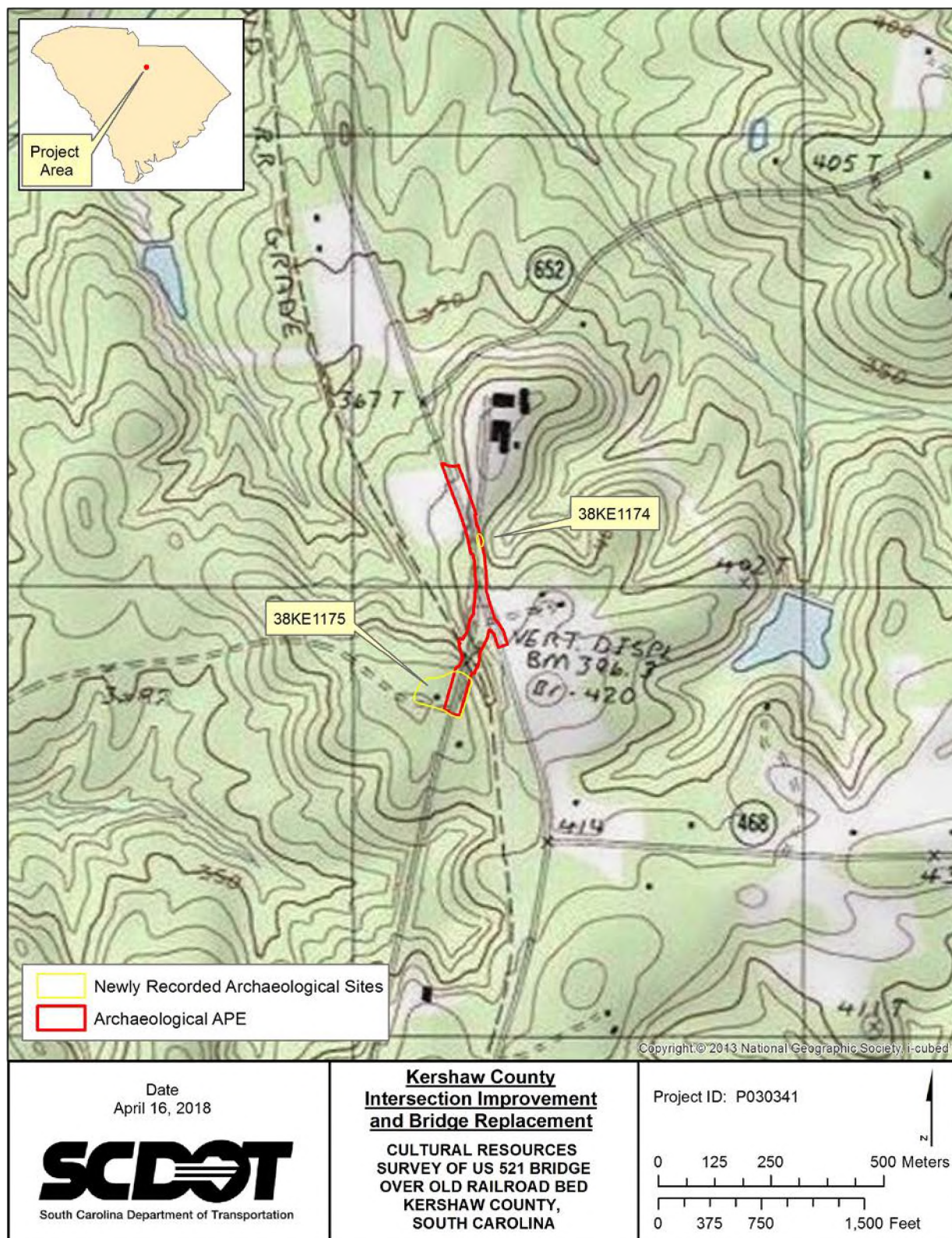


Figure 1. Project Area, Westville 7.5' USGS Quadrangles (USGS 1988).

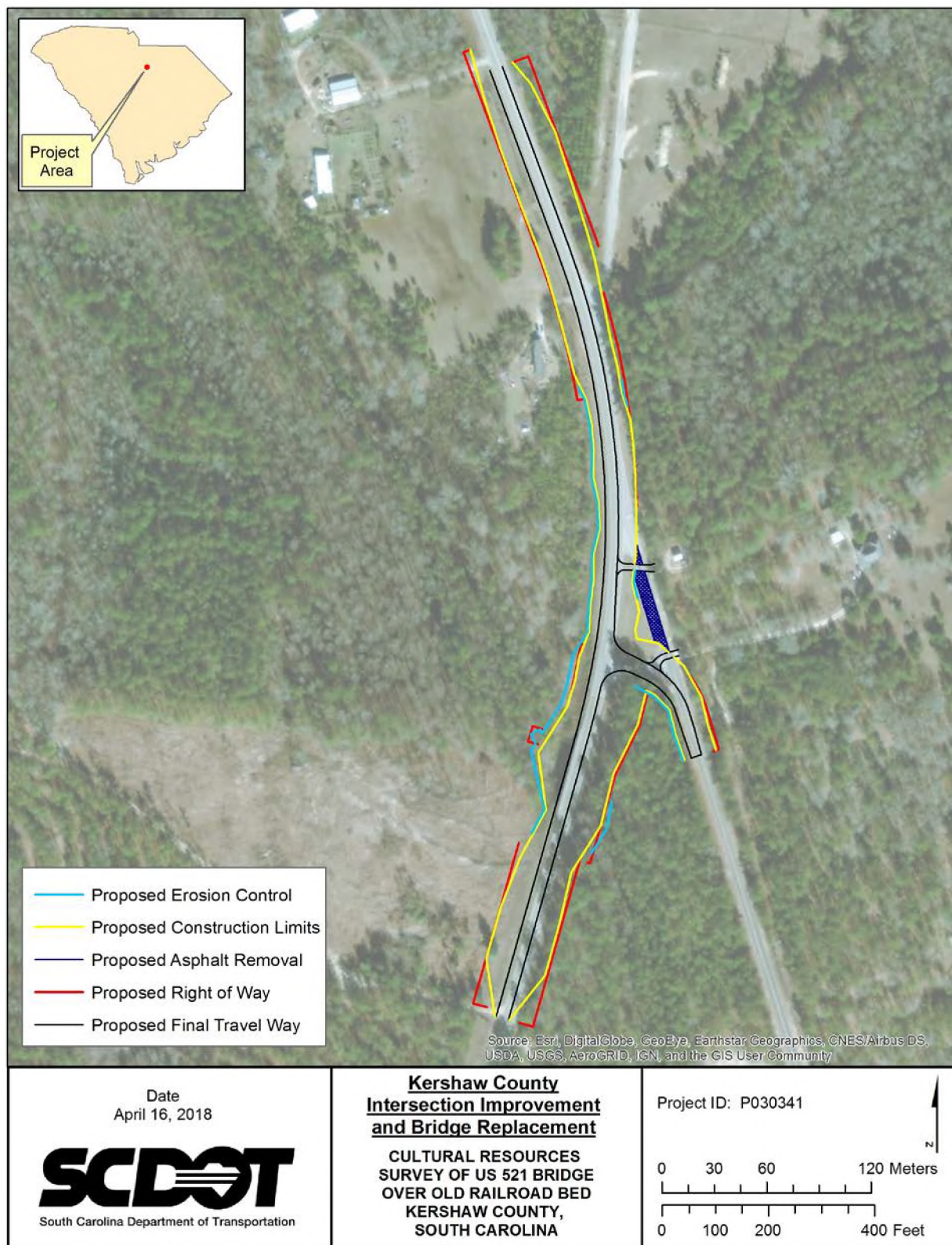


Figure 2. Intersection Improvement and Bridge Replacement Plans on US 521.

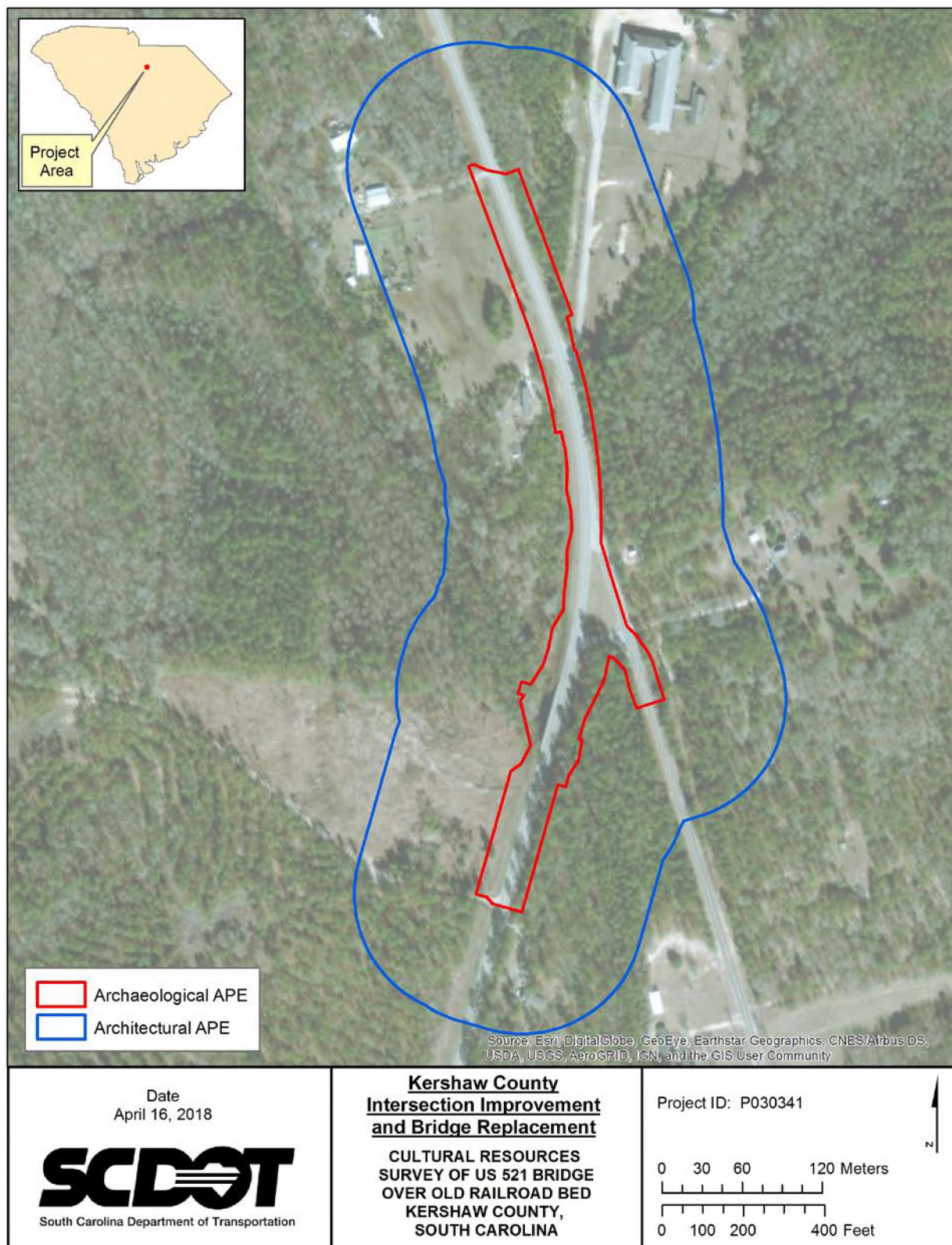


Figure 3. Archaeological and Architectural APEs.



Figure 4a. Facing Southwest along APE from the Intersection of US 521 and DeKalb School Road.



Figure 4b. Facing North from near the Southern end of the APE Towards the US 521 Bridge over Railroad Bed.



Figure 5a. Facing North along US 521 near the Northern end of the APE.



Figure 5b. View of APE on DeKalb School Road facing South.

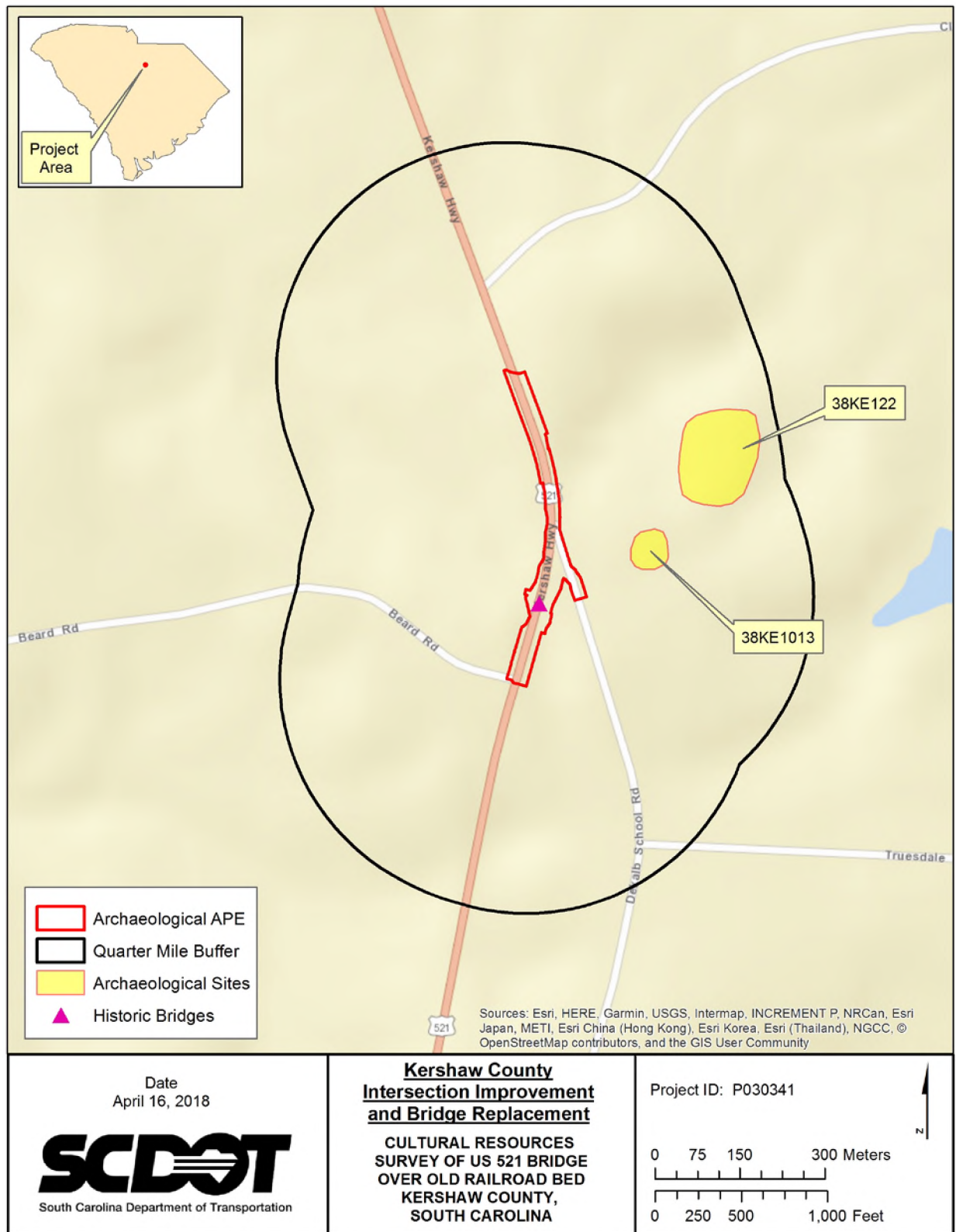


Figure 6. Archaeological APE and Quarter Mile Buffer showing Previously Recorded Resources.

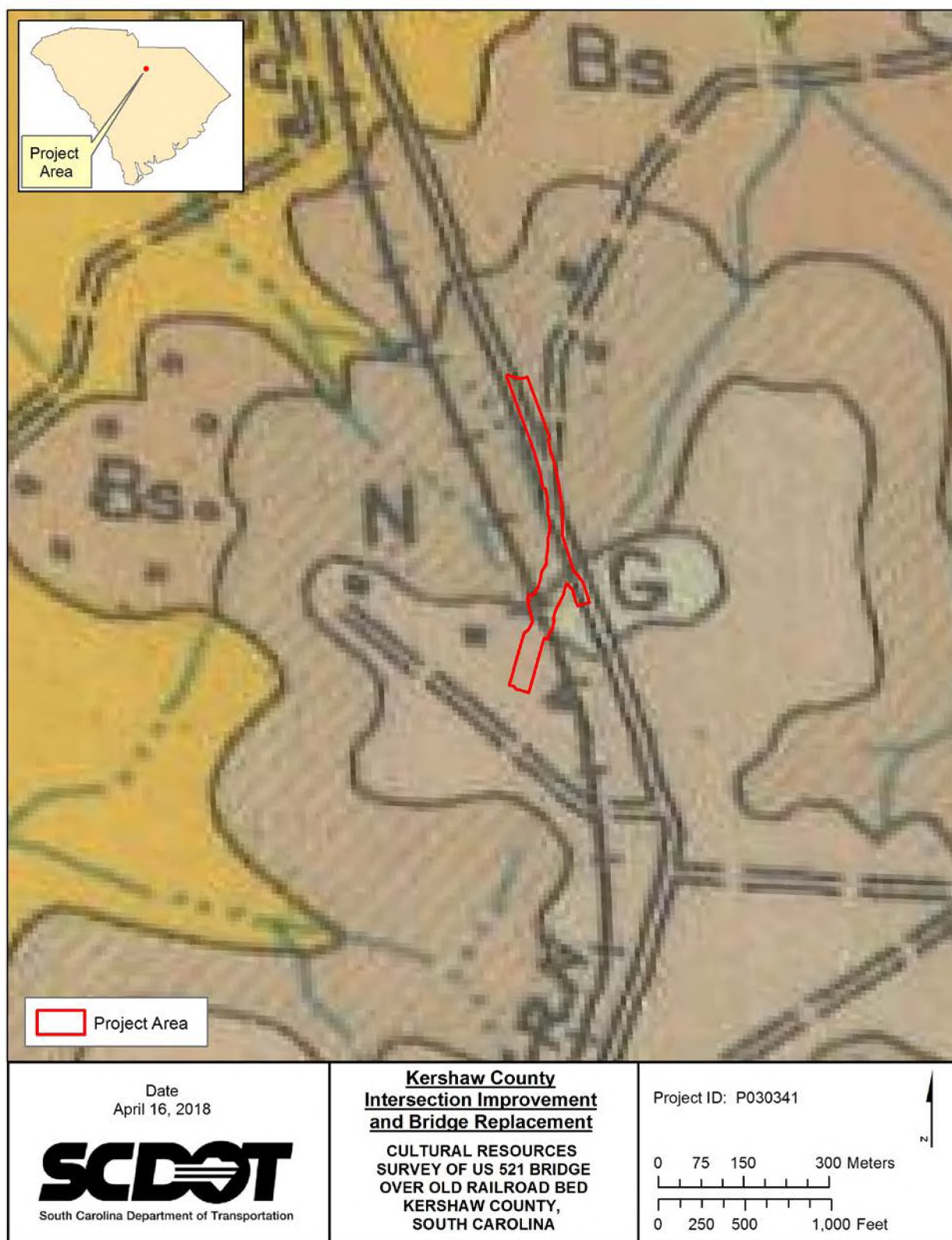


Figure 7. 1919 Kershaw County Soil Map showing the Project Area (USGS 1919).

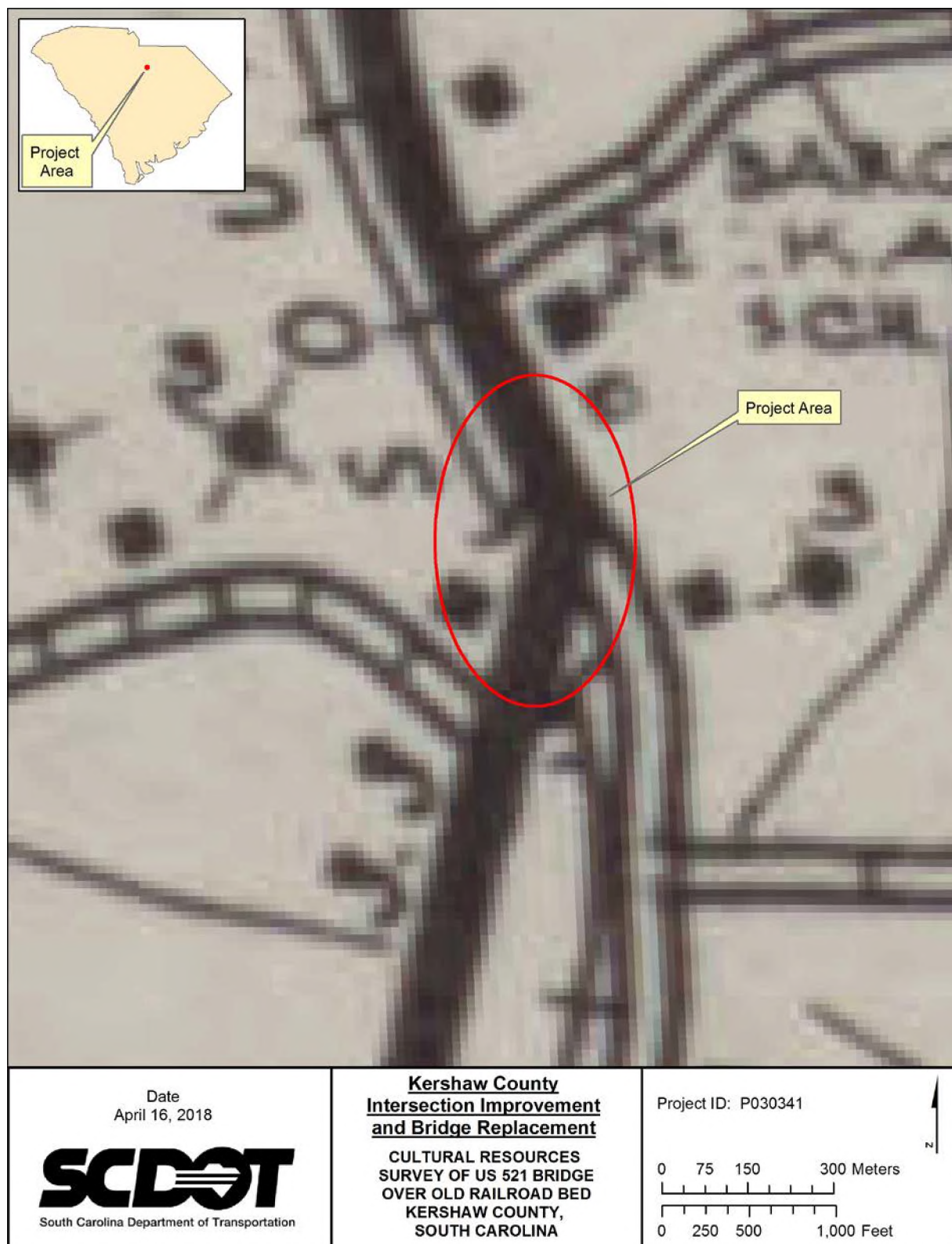


Figure 8. 1938 Kershaw County Highway Map (SCSHD 1938).



Figure 9. 1964 Aerial Photograph Showing the Project Area (USGS 1964).

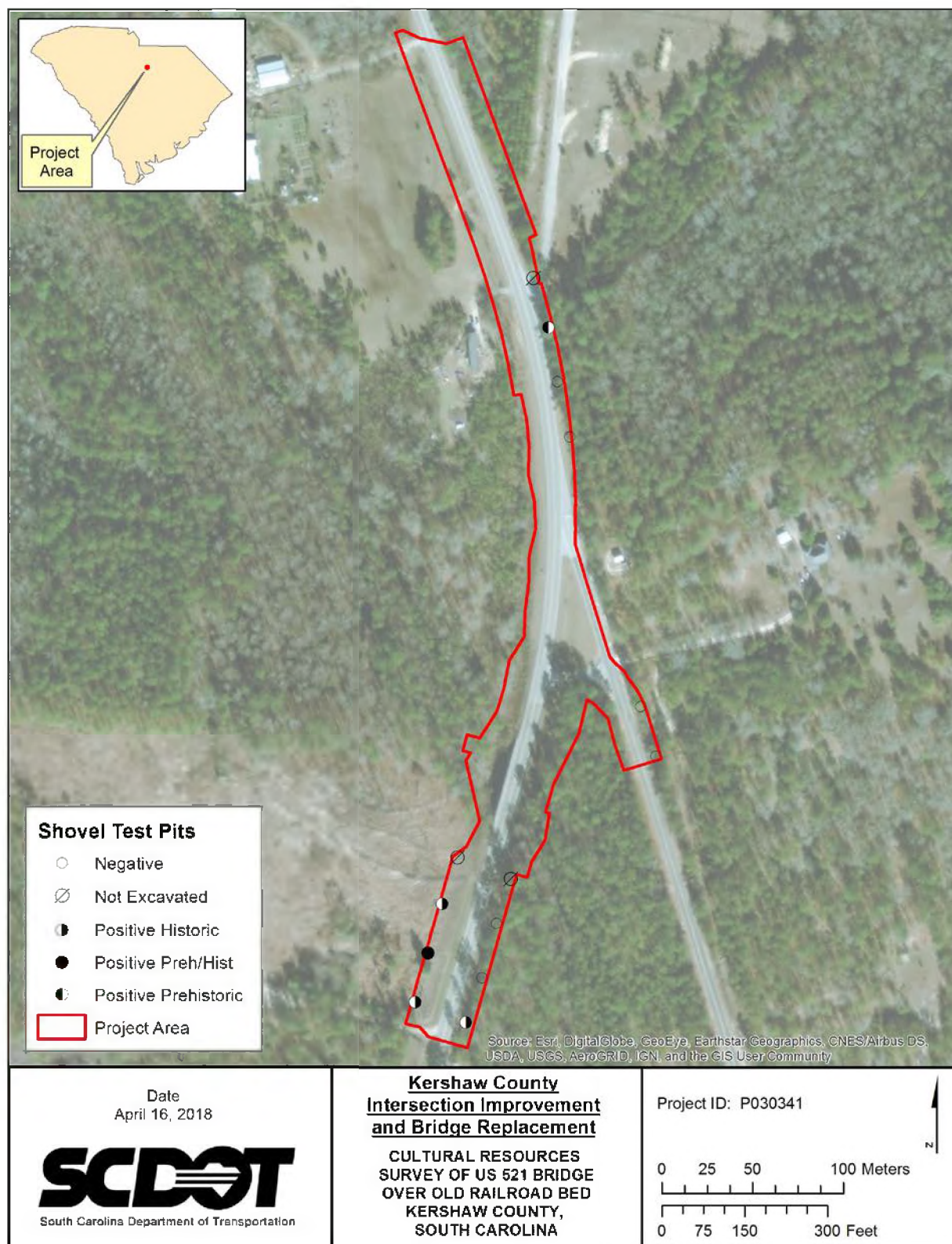


Figure 10. Transect Shovel Tests Excavated Within the APE.



Figure 11a. Buried Utility Disturbance within the Project Area.



Figure 11b. Buried Utility and Road Cut Disturbances within the Project Area.



Figure 12a. Buried Utility and Road Cut Disturbances within the Project Area.



Figure 12b. Road Cut Disturbance and Exposed Ground Surface Within the Project Area.



Figure 13a. General Area View facing North from Site 38KE1174.



Figure 13b. General Area View facing West from Site 38KE1174.



Figure 14. Site Map for 31KE1174.



Figure 15a. General Area View facing South from West Side of Site 38KE1175.



Figure 15b. General Area View facing South from East Side of Site 38KE1175.

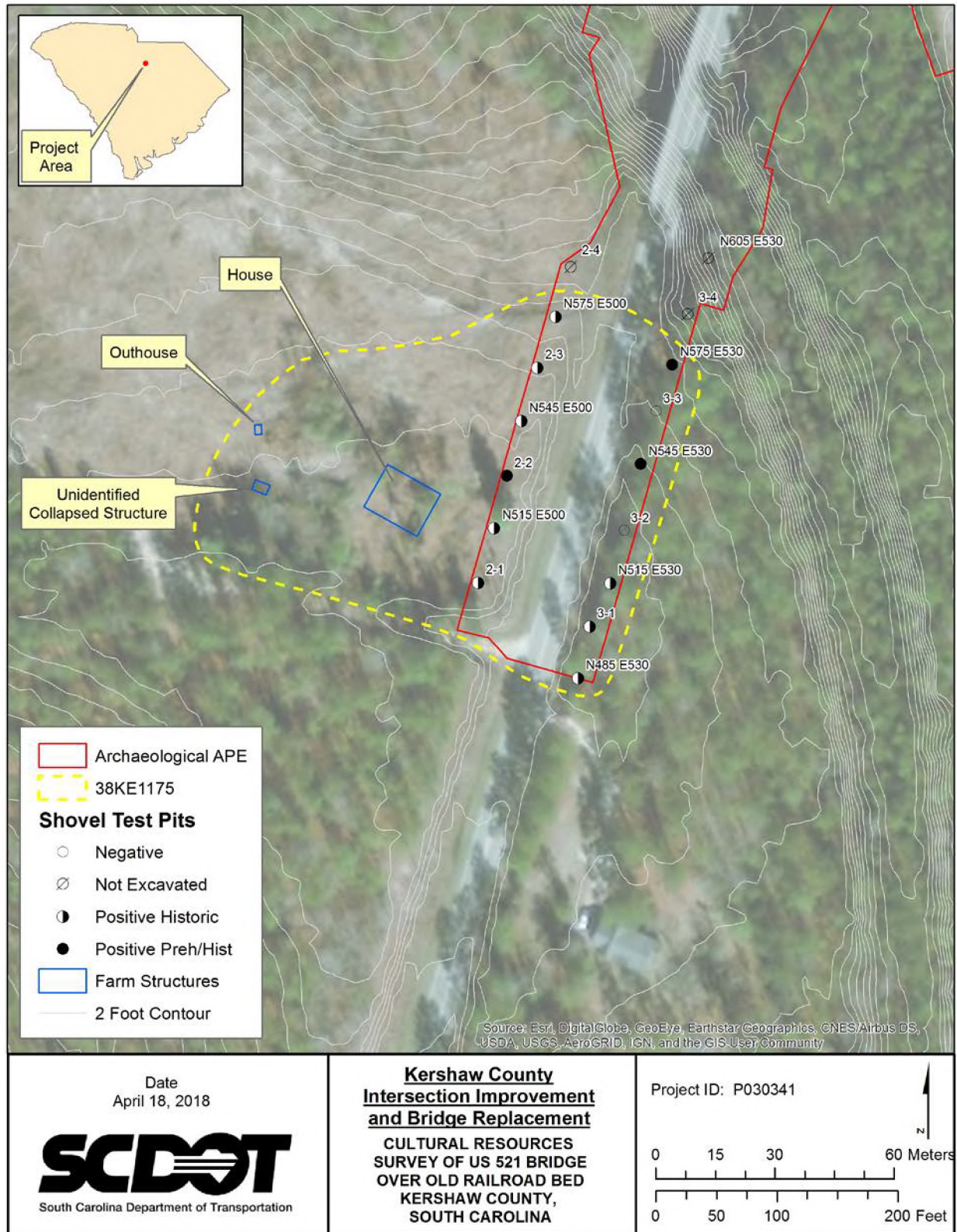


Figure 16. Site Map for 31KE1175.



Figure 17a. View of Partially Collapsed House at 38KE1175, Facing Northwest.



Figure 17b. View of Partially Collapsed House at 38KE1175, Facing Southwest.



Figure 18a. View of Partially Collapsed House at 38KE1175, Facing South.



Figure 18b. View of Partially Collapsed House at 38KE1175, Facing South.



Figure 19a. View of Unidentified Collapsed Structure at 38KE1175, Facing Southeast.



Figure 19b. View of Outhouse at 38KE1175, Facing North.



Figure 20a. Site 38KE1175 on 1919 Kershaw County Soil Map (USGS 1919).



Figure 20b. Site 38KE1175 on 1938 Kershaw County Highway Map (SCSHD 1938).



Figure 21a. Site 38KE1175 on 1964 Aerial Photograph (USGS 1964).

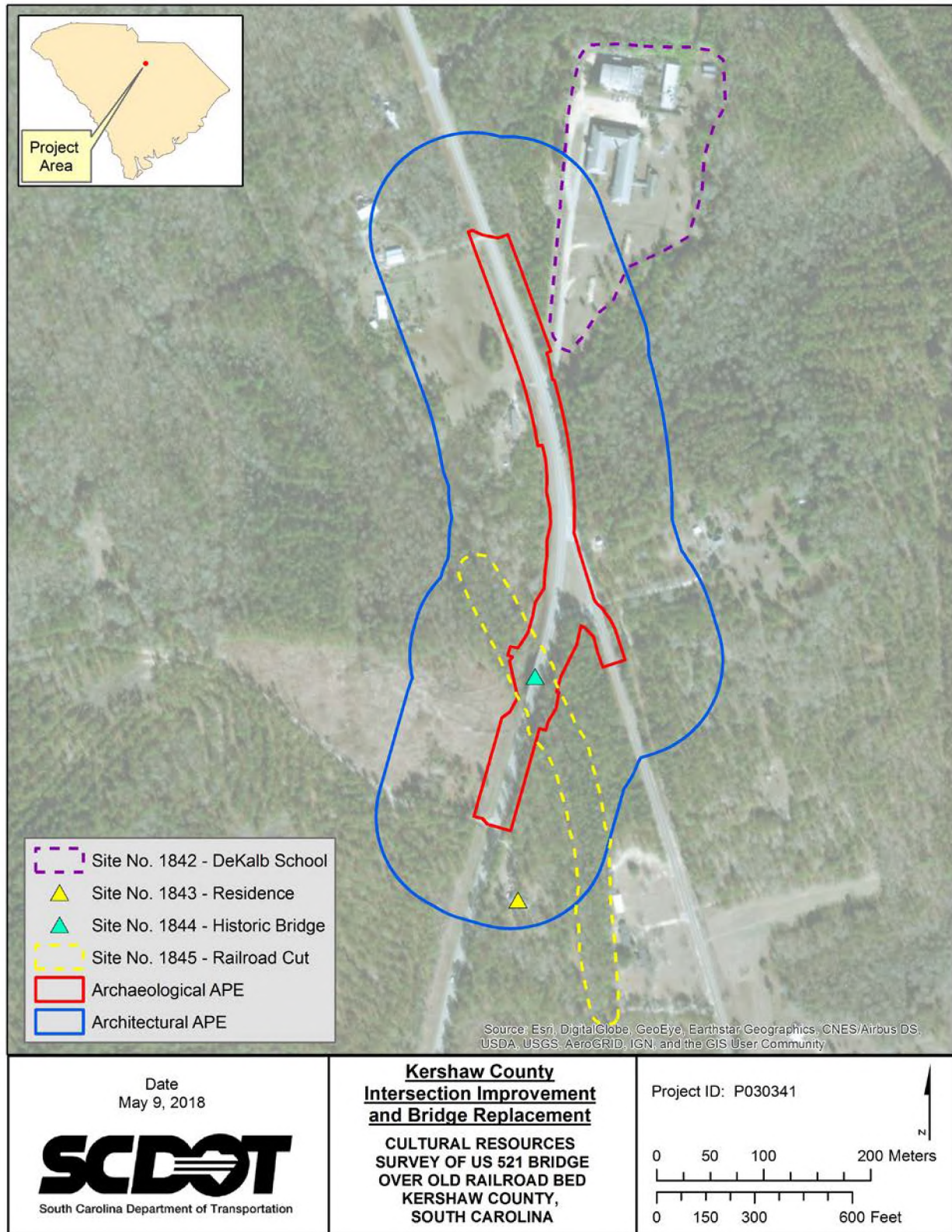


Figure 22. Newly Recorded Architectural Resources.



Figure 23a. Site No. 1842, View of Main Building, facing Southeast.



Figure 23b. Site No. 1842, View of Main Building, facing North.



Figure 24a. Site No. 1843, View of Residence, Facing Southeast.



Figure 24b. Site No. 1844, View of Historic Bridge, Facing Northeast.



Figure 25. Site No. 1845, View of Railroad Cut, facing North.