

Attachments

Attachment A- Cultural Resources Field Report

Attachment B- Natural Resources Tech Memo

Attachment C- Bridge Replacement Scoping Risk Assessment Form

Attachment D- Floodplain Checklist

Attachment E - Public Involvement

Attachment A- Cultural Resources Field Report

LANC
35071
NHPA



South Carolina
Department of Transportation

July 19, 2023

Ms. Elizabeth Johnson
Director, Historical Services, D-SHPO
State Historic Preservation Office
SC Department of Archives & History
8301 Parklane Road
Columbia, SC 29223

***RE: Phase I Cultural Resources Survey of Proposed Improvements to the S-292 Bridge
over Bear Creek Bridge, Lancaster County, South Carolina***

SCDOT Project #: P041170

Dear Ms. Johnson:

Please find attached a copy of the above referenced report that describes cultural resources investigations conducted for the proposed replacement of the S-292 Bridge over Bear Creek in Lancaster County, South Carolina

The South Carolina Department of Transportation (SCDOT) in coordination with the Federal Highway Administration (FHWA) proposes to replace the S-292 (N. Plantation Road) bridge over Bear Creek, located west of the city of Lancaster. The study area extends approximately 1,500 feet from either end of the bridge along S-998. The archaeological area of potential effect is 75 feet from the road centerline and 1,500 feet from either end of the bridge. The architectural survey examined all above ground resources with sightlines to the bridge.

The cultural resources survey identified no archaeological sites and 6 new architectural resources and 5 sub-resources. SHPO Site Nos. 1226, 1227, 1228, and 1229 are all ranch houses dating to the early to mid-1960s. SHPO Site Nos. 1230, 1230.01, 1230.02, 1230.03, 1230.04, and 1230.05 are buildings associated with the Wylie Arms Apartment complex, a colonial revival apartment complex dating to 1969. SHPO Site No. 1231 is a vernacular country store dating to circa 1965. All of these resources were assessed as not eligible for the National Register of Historic Places (NRHP).

Based on the results of the background research and field investigations, the SCDOT has determined that there will be **no historic properties affected** by the proposed undertaking.

Per the terms of the Section 106 Programmatic Agreement executed on October 6, 2017, the Department is providing this information on behalf of the Federal Highway Administration. It is requested that you review the enclosed material, and, if appropriate, indicate your concurrence in the Department's findings. Please respond within 30 days if you have any objections or if you have need of additional information.

Sincerely,





Rebecca Shepherd
Chief Archaeologist

RES:res

Enclosures: Cultural resources survey report

I (~~do not~~) concur in the above determination.

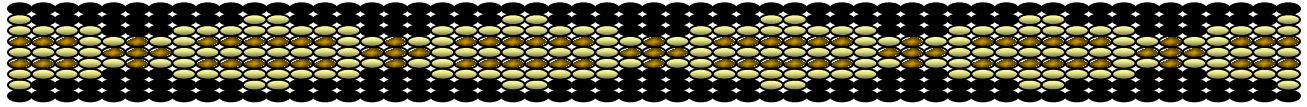
Signed:  Date: 7/26/2023

cc: Shane Belcher, FHWA
Russell Townsend, Eastern Band of Cherokee Indians
Stephen J. Yerka, Eastern Band of Cherokee Indians
Elizabeth Toombs, Cherokee Nation
Acee Watt, United Keetoowah
Whitney Warrior, United Keetoowah

cc: Wenonah G. Haire, Catawba Nation
Keith Derting, SCIAA

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



August 21, 2023

Attention: Rebecca Shepherd
SCDOT
P.O. Box 191
Columbia, SC 29202

Re. THPO #	TCNS #	Project Description
2023-66-23		Phase I Cultural Resources Survey of Proposed improvements to the S-292 Bridge over Bear Creek Bridge, Lancaster Co., SC

Dear Ms. Shepherd,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-7369, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

**CULTURAL RESOURCE FIELD REPORT
SCDOT ENVIRONMENTAL SECTION**



TITLE: Phase I Cultural Resources Survey of Proposed Improvements to the S-292 Bridge over Bear Creek

DATE OF RESEARCH: 5/16/23

ARCHAEOLOGIST: Kelly Higgins, MA, RPA

ARCHITECTURAL HISTORIANS: Sean Stucker, MHP and Katie Dykens Quinn, MSHP

COUNTY: Lancaster

PROJECT: Closed and Load Restricted Bridge Replacements- Package 20

F. A. No.:

File No.

PIN: P041170

DESCRIPTION:

The South Carolina Department of Transportation (SCDOT) proposes to replace various closed or load-restricted bridges including the S-292 (N Plantation Road) bridge over Bear Creek in Lancaster County, South Carolina. The project area is defined as that area within 75 feet of either side of the proposed roadway centerline and extending 1,500 feet from the bridge. The archaeological survey covered the entire project area, while the architectural survey examined all above-ground resources with sightlines to the bridge. This cultural resources survey was performed under contract with HNTB.

LOCATION:

The project is located approximately 1.5 miles west of the city of Lancaster in western Lancaster County, South Carolina (Figure 1).

USGS QUADRANGLE: Lancaster, SC

DATE: 1969

SCALE: 1:24000

UTM: NAD83

ZONE: 17N

EASTING: 518566

NORTHING: 3841917

ENVIRONMENTAL SETTING:

The project area is located within the Piedmont physiographic region. Elevations within the project area range from 430 feet above mean sea level (amsl) to 470 feet amsl. The surrounding environment is suburban, with a small portion of a historic housing development, Forest Hills, in the northern portion of the survey area and mixed historic and modern commercial development at the southern terminus. Central portions of the project area consist of a floodplain for Bear Creek with stands of mixed pines and hardwoods present.

NEAREST RIVER/STREAM AND DISTANCE:

Bear Creek crosses the project area roughly in the center of the tract, and its confluence with Gills Creek is located approximately 115 meters to the east. Bear Creek is a tributary of Cane Creek, located approximately half a mile to the west. Cane Creek joins the Catawba River approximately four miles southwest of the project area.

SOIL TYPE:

Soils in the project area consist of silty and clayey loams ranging from somewhat poorly drained to well drained. Parent soils include loamy or clayey alluvium, and residuum weathered from metavolcanics, metasedimentary rock, slate, argillite, sericite schist. The Natural Resource Conservation Service (NRCS) maps six soil types in the project area (Table 1). By the early twentieth century, continuous row cropping destroyed soil nutrients and large tracts of

farmland were rendered unsuitable for cultivation. Today, the NRCS considers over 58 percent of the project area eroded.

Table 1. Soil Types in the Project Area

Map Unit	Map Name	Drainage Class	Notes	Acres in Project Area	Percentage of Project Area
Ch	Chewacla soils	Somewhat Poorly Drained		4.8	41.7
DaB2	Davidson clay loam	Well Drained	2–6% slopes, eroded	5.2	45.2
GeB2	Georgeville silt loam	Well Drained	2–6% slopes, moderately eroded	0.0	0.2
GIB2	Gills silt loam	Somewhat Poorly Drained	2–6% slopes, eroded	0.8	7.4
HdB2	Herndon silt loam	Well Drained	2–6% slopes, eroded	0.6	5.5
MaB	Masada and Altavista soils	Moderately Well to Well Drained	2–6% slopes	0.0	0.1
Total				11.4	100

REFERENCE FOR SOILS INFORMATION:

USDA-NCRS Soil Survey Division, Custom Soil Resource Report (websoilsurvey.sc.egov.usda.gov)

GROUND SURFACE VISIBILITY: 0% X 1-25% 26-50% 51-75% 76-100%

CURRENT VEGETATION:

Roadsides in the project area consist of manicured lawn and landscaping in the residential northern portion of the tract and at the commercial southern terminus. The central portion of the tract consists of hardwood and some pines with a moderately dense understory. River cane is present along Bear Creek (Figures 2–4).

INVESTIGATION:

BACKGROUND RESEARCH

New South Associates, Inc. (NSA) conducted background research prior to fieldwork using the ArchSite GIS database maintained by the South Carolina Institute of Archaeology and Anthropology (SCIAA) and the South Carolina Department of Archives and History (SCDAH). No previously surveyed architectural resources are located within the 0.5-mile search radius. There are two previously recorded archaeological sites within the 0.5-mile search radius, 38LA19 and 38LA434. Neither are within the project area (Figure 5).

Site 38LA19 was recorded in 1977 by SCIAA during a pedestrian survey for proposed construction around an existing sewer plant. The site is located immediately southeast of the treatment plant and was identified by quartz artifacts and debitage eroding out of the hillside. Planned construction would not impact 38LA19, however, archaeologists recommended additional work should those plans change. A 2004 letter from the State Historic Preservation Office indicates previous construction activities at the treatment plant had damaged what remained of 38LA19 and the site is not eligible for the National Register of Historic Places (NRHP).

Site 38LA434 was recorded in 2000 by the Natural Resource Conservation Service, identified in a single shovel test on a north/south ridge overlooking Cane Creek. Seventeen artifacts were recovered from the shovel test, and the

assemblage included quartz and metavolcanic flakes, pottery sherds, and a possible pecking stone. Additional work consisting of complete survey and testing was recommended to determine the site's significance. Site 38LA434 was revisited in 2021 by RS Webb and Associates. This investigation yielded a sparse lithic and ceramic assemblage from the plowzone. Site 38LA434 was recommended not eligible for the NRHP.

SURVEY RESULTS

The cultural resources survey did not identify any new or previously recorded archaeological sites or isolated finds within the project area. The architectural survey recorded five new individual resources and an apartment complex containing five sub-resources. These resources are listed in Table 2 and shown in relation to the project area in Figure 6.

ARCHAEOLOGY

The Phase I Archaeological Survey was performed on May 16, 2023. Kelly Higgins, MA, RPA, served as Field Director and was assisted in the field by Archaeological Technicians John Tomko and Derrick Westfall. The archaeological investigation included a pedestrian walkover of the entire project area and the excavation of shovel tests at 30-meter (100-foot) intervals within the project area. Shovel tests were placed along a single transect parallel to either side of N. Plantation Road. Soil profiles were recorded for all excavated shovel tests, and location data was recorded for all investigated shovel test using handheld GPS instruments.

Sixty-two shovel test locations were investigated across the project area, of which 40 were negative for cultural material. The remaining 22 shovel test locations were not excavated due to pavement or gravel, buildings, buried utilities, and standing water (Figure 7). Two soil profiles were noted across the project area. The northern portion of the project area contains a residential development and soils have been impacted by grading and levelling. The soil profile consists of approximately 15 centimeters of strong brown (7.5YR 4/6) sandy clay loam A horizon overlying a dark reddish brown (5YR 3/4) sandy clay subsoil. In the area surrounding the creek and in the southern portion of the project area, soils consisted of approximately 20 centimeters of grayish brown (10YR 5/2) silty loam A horizon overlying a yellowish brown (10YR 5/8) silty clay loam E horizon. This is followed by a yellowish brown (10YR 5/8) silty clay subsoil. Soils in the southern portion of the project area only contain two strata (Figures 8 and 9). No new or previously recorded archaeological sites were identified in the project area.

ARCHITECTURAL SURVEY

The architectural survey was conducted on May 18, 2023, by Architectural Historian Sean Stucker, MHP. Five individual resources were recorded, as well as an apartment complex containing five sub-resources. Each resource was documented with South Carolina State Survey forms and photography and assessed for NRHP eligibility in accordance with the *South Carolina State Historic Preservation Office (SHPO) Survey Manual: South Carolina Statewide Survey of Historic Places*. The bridge itself, constructed in 1963, was not evaluated per the FHWA's Post-1945 Bridges Program Comment (U.S. Department of Transportation, Federal Highway Administration 2012). This bridge (ID 04157) is of a common type, with flat concrete stringers and wood piers with concrete caps and footings (Figure 8). Newly identified resources are discussed in detail below.

Table 2. Newly Recorded Architectural Resources

Site No.	Address	Style/Type	Build Date	NRHP Recommendation
1226	House 414 North Plantation Road	Plain Linear Ranch House	Circa 1965	Not Eligible
1227	House 418 North Plantation Road	Plain Linear Ranch House	Circa 1965	Not Eligible
1228	House 422 North Plantation Road	Plain Linear Ranch House	1963	Not Eligible
1229	House 421 North Plantation Road	Plain Split-Level	Circa 1965	Not Eligible

Site No.	Address	Style/Type	Build Date	NRHP Recommendation
1230	Wylie Arms Apartment Complex North Plantation Road and Meadow Drive	Colonial Revival Apartment Complex	1969	Not Eligible
1230.01	Wylie Arms Apartment Complex – Eastern Building 1041 Meadow Drive	Colonial Revival Apartment Building	1969	Not Eligible
1230.02	Wylie Arms Apartment Complex – Central Building 1045 Meadow Drive	Colonial Revival Apartment Building	1969	Not Eligible
1230.03	Wylie Arms Apartment Complex – Northwest Building 417 North Plantation Road	Colonial Revival Apartment Building	1969	Not Eligible
1230.04	Wylie Arms Apartment Complex – Southwest Building 413 North Plantation Road	Colonial Revival Apartment Building	1969	Not Eligible
1230.05	Wylie Arms Apartment Complex – Southern Building 409 North Plantation Road	Colonial Revival Apartment Building	1969	Not Eligible
1231	Martinez, LLC 111 North Plantation Road	One-Part Vernacular Country Store	Circa 1965	Not Eligible

RESOURCE 1226 – 414 North Plantation Road

Facing east from its site near the intersection of North Plantation Road and Meadow Drive, Resource 1226 is a plain linear ranch house. The Lancaster County Tax Assessor indicates that it was constructed in 1964. It is not visible on a historic aerial photograph dating to that year, but is consistent with that time period in both materials and type and has been given a circa 1965 construction date (Figure 11) (United States Geological Survey 1964). The house is one story tall with a rectangular historic core and a laterally gabled roof covered in composition shingle roofing material (Figure 12). It is clad in brick veneer and the windows throughout are modern one-over-one vinyl sashes. The modern door is unsheltered and accessed via a set of brick steps. Two sets of paired windows are located to its south. Two additional sets of paired windows are to the north, along with an engaged carport. The foundation is concealed but vent holes suggest it is continuous concrete block. The house is sited on a slight incline and has a partial raised basement.

Resource 1226 is located on North Plantation Road, or S-292, a busy two-lane road. The house is located on the outskirts of the Forest Hills Subdivision. This housing development was constructed between 1963 and 1965 on land of the estate of Richard Evans Wylie, a prominent Lancaster County resident and former mayor (County of Lancaster 1988; Find A Grave 2010). The development as a whole was not assessed as a result of this survey. Resource 1226 is a linear ranch house. It is not a distinctive or noteworthy example of this house type, which is common in South Carolina and has been modified, including with replacement fenestration. It was not found to embody the distinctive characteristics of a style, period, or method of construction, and does not possess significance for its engineering or materials. It is not known to be associated with events or persons significant in the past. Therefore, the resource is recommended as not individually eligible for the NRHP under Criteria A, B, or C.

RESOURCE 1227 – 418 North Plantation Road

Facing east from its site at the intersection of North Plantation Road and Meadow Drive, Resource 1227 is a plain linear ranch house. The Lancaster County Tax Assessor indicates that it was constructed in 1960. However, it is not visible in a historic aerial photograph dating to 1964. It is consistent with a circa 1965 construction date in both materials and type (see Figure 11) (United States Geological Survey 1964). The house is one story tall with a rectangular historic core and a laterally gabled roof covered in composition shingle roofing material (Figure 13). It is clad in brick veneer and windows throughout are six-over-six wood frame sashes with louvered shutters. The wood panel door is accessed via a set of concrete steps. While there is no porch, the roofline extends to shelter the front door

along with two windows and the engaged carport, which is accessed via the north (side) elevation. Two additional windows are located to the south of the door. The foundation is concealed but vent holes suggest it is continuous concrete block. The house is sited on a slight incline and has a partial raised basement.

Resource 1227 is located on North Plantation Road, or S-292, a busy two-lane road. The house is located on the outskirts of the Forest Hills Subdivision. This housing development was constructed between 1963 and 1965 on land of the estate of Richard Evans Wylie, a prominent Lancaster County resident and former mayor (County of Lancaster 1988; Find A Grave 2010). The development as a whole was not assessed as a result of this survey. Resource 1227 is a linear ranch house. It is not a distinctive or noteworthy example of this house type. It was not found to embody the distinctive characteristics of a style, period, or method of construction, and does not possess significance for its engineering or materials. It is not known to be associated with events or persons significant in the past. Therefore, the resource is recommended as not individually eligible for the NRHP under Criteria A, B, or C.

RESOURCE 1228 – 422 North Plantation Road

Facing east from its site at the intersection of North Plantation Road and Meadow Drive, Resource 1228 is a plain linear ranch house. The Lancaster County Tax Assessor indicates that it was constructed in 1963 and it is visible on a historic aerial photograph dating to 1964 (see Figure 11) (United States Geological Survey 1964). The house is one story tall with a rectangular historic core and a laterally gabled roof covered in composition shingle roofing material (Figure 14). It is clad in brick veneer and windows throughout are horizontal two-over-two wood frame sashes, many with louvered shutters. The main roofline extends to create a shed-roofed porch that shelters the wood panel front door and a tripartite picture window. A patio beneath the porch is composed of brick and concrete. A set of paired windows along with one single window is located to the north of the porch. To its south, the engaged carport is slightly inset. The rear of the carport forms an additional room, with a wood door that provides access to the carport and a single window. There is vinyl siding in the gable ends. The foundation is concealed but vent holes suggest it is continuous concrete block. The house is sited on a slight incline and has a partial crawl space.

Resource 1228 is located on North Plantation Road, or S-292, a busy two-lane road. The house is located on the outskirts of the Forest Hills Subdivision. This housing development was constructed between 1963 and 1965 on land of the estate of Richard Evans Wylie, a prominent Lancaster County resident and former mayor (County of Lancaster 1988; Find A Grave 2010). The development as a whole was not assessed as a result of this survey. Resource 1228 is a linear ranch house. It is not a distinctive or noteworthy example of this house type. It was not found to embody the distinctive characteristics of a style, period, or method of construction, and does not possess significance for its engineering or materials. It is not known to be associated with events or persons significant in the past. Therefore, the resource is recommended as not individually eligible for the NRHP under Criteria A, B, or C.

RESOURCE 1229 – 421 North Plantation Road

Facing west from its site at the intersection of North Plantation Road and Meadow Drive, Resource 1229 is a plain split-level house. The Lancaster County Tax Assessor indicates that it was constructed in 1964. It is not visible on a historic aerial photograph dating to that year, but is consistent with that time period in both materials and type and has been given a circa 1965 construction date (Figure 11) (United States Geological Survey 1964). The house has a one-story section with a laterally gabled roof covered in composition shingle roofing material and a two-story section with a front-gabled roof (Figure 15). It is largely clad in brick veneer and windows throughout are horizontal two-over-two metal sashes. The front elevation of the one-story section is clad in vinyl siding, as is a small section of the adjoining side (north) elevation of the two-story section. The modern front door, located on the single-story section, is unsheltered but slightly inset with a set of brick and concrete steps. A set of tripartite picture windows is located to its north while to the south, on the two-story section, fenestration includes three single-window bays on the second story and a tripled window on the ground floor. A shed-roofed vinyl porch has been added to the rear. The foundation is concealed but vent holes suggest it is continuous concrete block. The house is sited on an incline and the basement extends to form an above-ground attached garage on the ground floor of the south elevation.

Resource 1229 is located on North Plantation Road, or S-292, a busy two-lane road. The house is located on the outskirts of the Forest Hills Subdivision. This housing development was constructed between 1963 and 1965 on land of the estate of Richard Evans Wylie, prominent Lancaster County resident and former mayor (County of Lancaster

1988; Find A Grave 2010). The development as a whole was not assessed as a result of this survey. Resource 1229 is a split-level house. It is not a distinctive or noteworthy example of this house type. It was not found to embody the distinctive characteristics of a style, period, or method of construction, and does not possess significance for its engineering or materials. Its integrity is negatively impacted by the use of modern vinyl siding, replacement doors, and an addition to the rear. It is not known to be associated with events or persons significant in the past. Therefore, the resource is recommended as not individually eligible for the NRHP under Criteria A, B, or C.

RESOURCES 1230-1230.05 – Wylie Arms Apartments

Located at the intersection of North Plantation Road and Meadow Drive, the Wylie Arms Apartments include five buildings. The Lancaster County Tax Assessor indicates that they were all constructed in 1969. While the buildings are all slightly different, there are commonalities between them. All are two stories tall and clad in brick veneer (Figure 16). The original windows are wood frame, with the majority being eight-over-eight sashes and some smaller windows being six-over-six. Roughly half of the windows overall have been replaced with vinyl sashes with faux dividers to match the originals. Windows on the front of the buildings have louvered shutters while those on the rear do not. Three of the buildings contain four-apartment units, while one contains two four-unit blocks and one contains three four-unit blocks. Each block is accessed via a single door on the front elevation and separate doors to the rear that are accessed via a metal staircase. The front doors on all four buildings are slightly inset and have heavy surrounds with sidelights and a top panel. The symmetrical front elevation of each apartment block contains the central front door flanked by two set of paired windows to either side. Windows on the second stories are directly above those on the first. The foundations are concealed in all cases.

Resource 1230.01, the easternmost building, runs north/south on the site (Figure 17). It consists of two connected four-unit apartment blocks, one of which is slightly stepped down from the other. These blocks have laterally gabled roofs. To the rear of the building, each block is symmetrical with two entry doors flanked by single and paired windows. Smaller windows are located above the doors. Resource 1230.02, which is located near the center of the complex, is the largest building, with three apartment blocks (Figure 18). It also runs north/south and faces east towards Resource 1230.01. The two outer blocks of this building are consistent with Resource 1230.01, but the central block is slightly stepped out and is clad in vinyl siding on the second story of the front elevation. The front door of this section has a shed roofed hood. The four rear entrances to this building are located on the central block. Resource 1230.03 is located directly on the corner of North Plantation Street and Meadow Drive and is the northwesternmost building in the complex (Figure 19). Consisting of a single four-unit block, this building has a hipped roof. To the rear, it has four entrances. Resource 1230.04, to the south of Resource 1230.03, is virtually identical to it (Figure 20). These buildings are oriented north/south and face west towards North Plantation Road. Resource 1230.05 is located on the southern end of the complex and is oriented east/west (Figure 21). It consists of one four-unit block and has a laterally gabled roof. As with Resources 1230.03 and 1230.04, it has four rear entrances.

The Wylie Arms Apartments are located on the corner of North Plantation Road, or S-292, a busy two-lane road, and Meadow Drive, a quieter two-lane residential drive. Landscaping includes lawns, shrubs, and sidewalks leading to the front entrances of the buildings. The Wylie Arms Apartments have some Colonial Revival design elements but are generally consistent with typical utilitarian mid-twentieth-century apartment block buildings. They are not a distinctive or noteworthy example of a building type. They were not found to embody the distinctive characteristics of a style, period, or method of construction, and do not possess significance for their engineering or materials. They are not known to be associated with events or persons significant in the past. Therefore, the Wylie Arms Apartments are recommended as not individually or collectively eligible for the NRHP under Criteria A, B, or C.

RESOURCE 1231 – 111 North Plantation Road

Facing east from its site near the intersection of North Plantation Road and Meadow Drive, Resource 1231 is a front-gable one-part vernacular country store that currently houses Martinez, LLC. The Lancaster County Tax Assessor indicates that it was constructed in 1960; however, it is not visible on a historic aerial photograph dating to 1964. It is consistent with a circa 1965 or earlier construction date in both materials and type (see Figure 11) (United States Geological Survey 1964). The commercial building is one story tall with a rectangular historic core and a front-gabled roof covered in composition shingle roofing material (Figure 22). The historic core is of concrete block construction with brick veneer on the front elevation only. The modern metal door is flanked by a wood 12-pane picture window

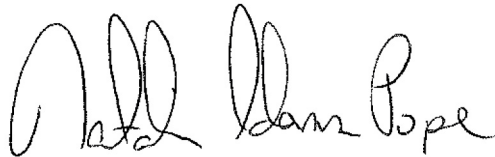
to the north and three long, fixed wood frame windows to the south. A hipped porch with replacement columnar supports shelters the first floor and wraps partially around the side elevations. There is wide, vertical wood siding in the front gable. Windows on the south side of the building are concealed with slats while the north elevation of the building contains another 12-pane window near the front. This section is sheltered by the porch and clad in brick veneer. The rear addition of the building is clad in vertical wood siding and the full north elevation is as well.

Resource 1231 is located on North Plantation Road, or S-292, a busy two-lane road, near its intersection with West Meeting Street, a major four-lane thoroughfare with a central divider. Resource 1231 is a one-part vernacular country store, but it is a late and unremarkable example of the type. It has been modified, including with replacement fenestration and a major addition. It was evaluated under the rubric set forth in *Rural Commerce in Context: South Carolina's Country Stores, 1850-1950* under Criteria A and C (Tyson et al. 2013). It was not found to be significant for its contribution as a commercial, social, or political center for the community and does not retain sufficient character-defining features to be eligible architecturally. It also lies outside the later period of significance defined for South Carolina country stores, which extends from 1921-1950. It is not known to be associated with persons significant in the past. Therefore, the resource is recommended as not individually eligible for the NRHP under Criteria A, B, or C.

REMARKS AND RECOMMENDATIONS:

While the survey did not identify any new or previously recorded archaeological sites or isolated finds, the architectural survey recorded five new individual resources and an apartment complex containing five sub-resources. None of the surveyed resources are recommended eligible for the NRHP. The proposed project as currently defined, would have no effects to historic properties.

SIGNATURE:

A handwritten signature in black ink, appearing to read "Nathaniel Ham Pope". The signature is fluid and cursive, with the first name "Nathaniel" and last name "Pope" being more legible than the middle name "Ham".

DATE: May 30, 2023

BIBLIOGRAPHY:

County of Lancaster

- 1988 Deed of Distribution - In the Matter of William L. Phillips, Deceased. Book T-7, Page 87. Lancaster County Register of Deeds.

Find A Grave

- 2010 Richard Evans Wylie. Find A Grave. <https://www.findagrave.com/memorial/52128904/richard-evans-wylie/>.

Tyson, Jackie, Kristie Lockerman, and Mary Beth Reed

- 2013 Rural Commerce in Context: South Carolina's Country Stores, 1850 - 1950. South Carolina Department of Transportation, Columbia, South Carolina.

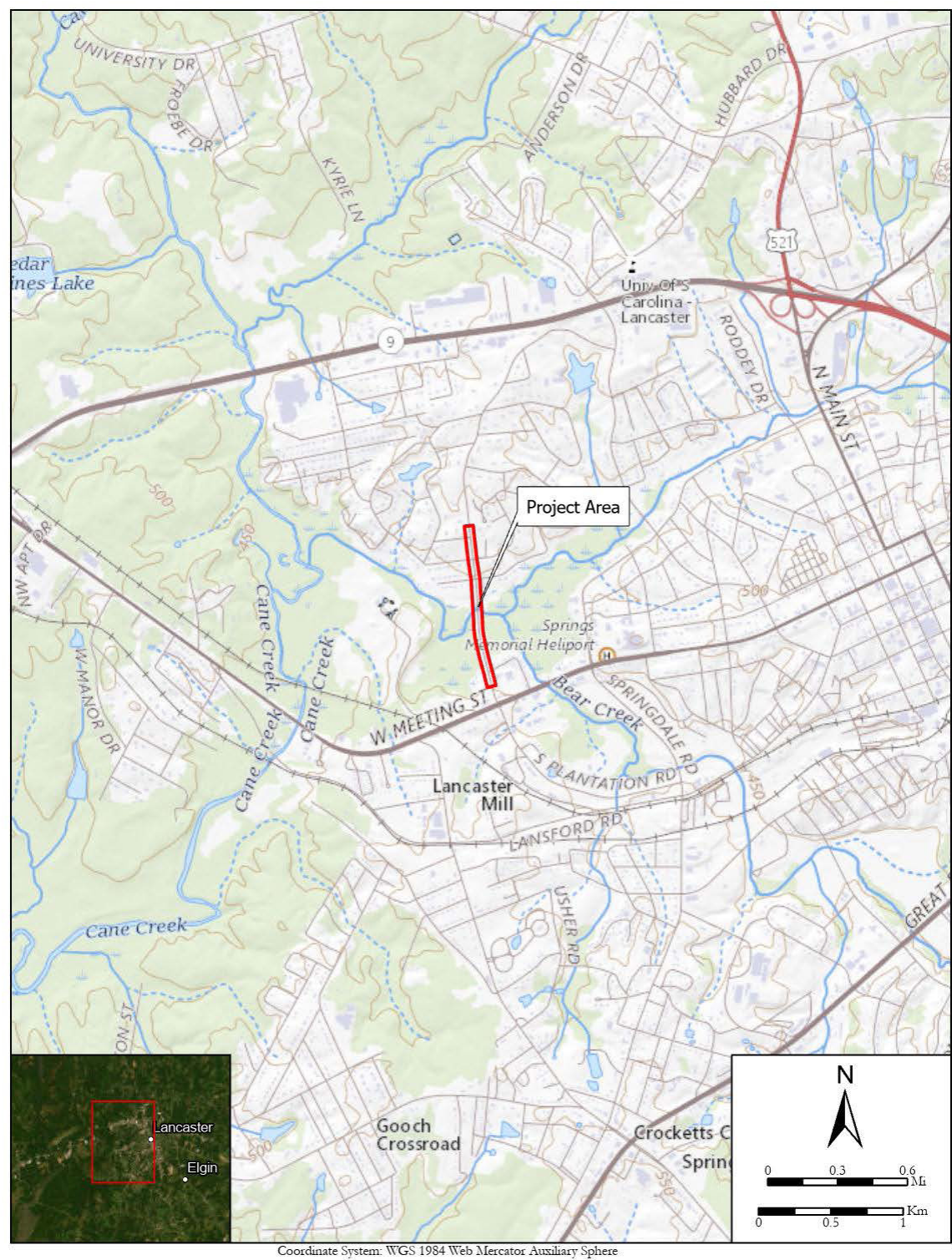
United States Geological Survey

- 1964 Aerial Photograph, Lancaster County, South Carolina. Photograph. USGS EarthExplorer.

U.S. Department of Transportation, Federal Highway Administration

- 2012 Program Comment for Actions Affecting Post-1945 Concrete and Steel Bridges. Advisory Council on Historic Preservation, Washington, D.C.

Figure 1.
Project Location Map



Basemap: United States Geological Survey Topo

Figure 2.
Residential Development in the Northern Portion of the Project Area, Facing North



Figure 3.
Typical Vegetation in the Central Portion of the Project Area, Facing North



Figure 4.
Commercial Development in the Southern Portion of the Project Area, Facing East



Figure 5.
Previously Recorded Cultural Resources within a 0.5-mile Radius of the Project Area

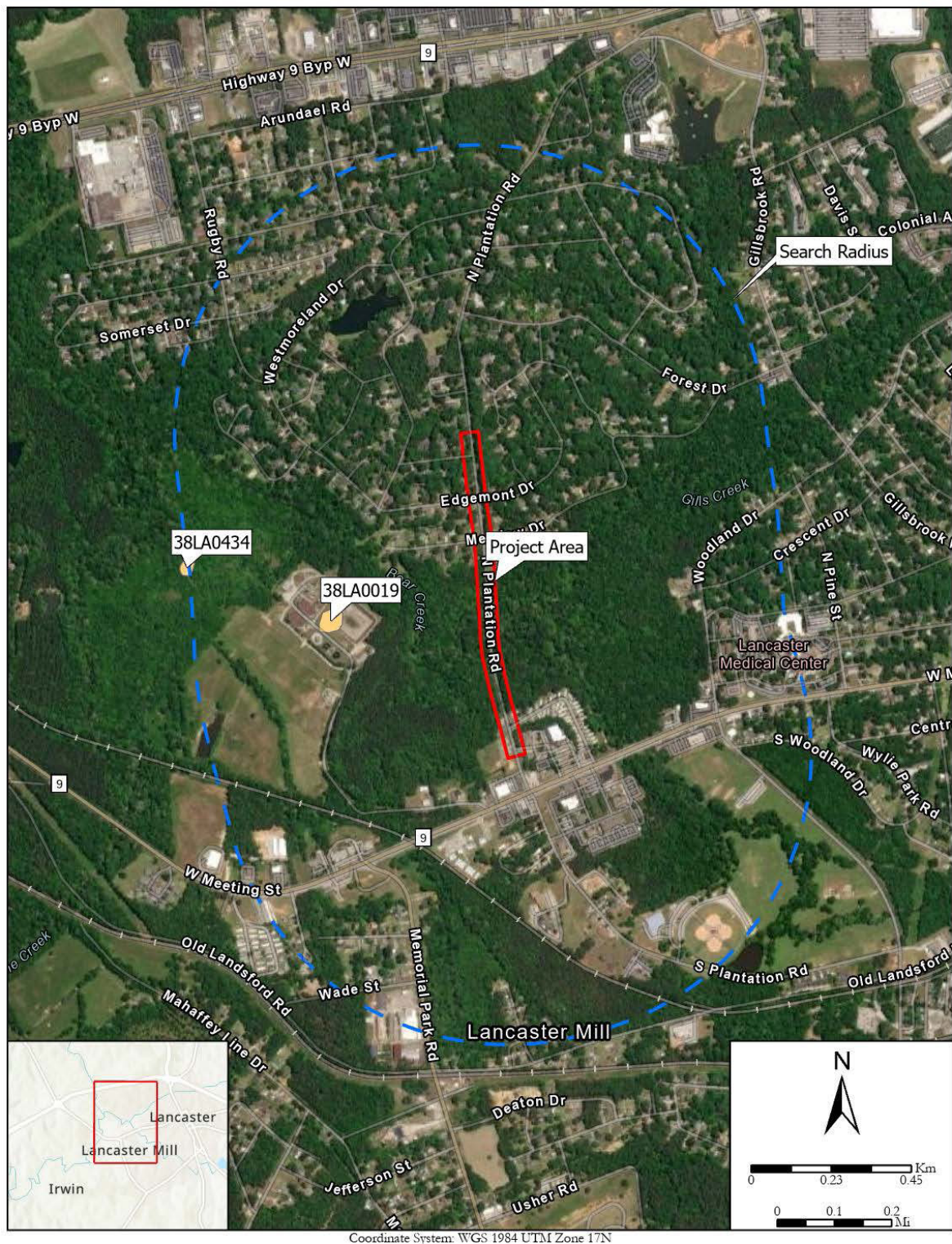


Figure 6.
Newly Recorded Cultural Resources within the Project Area Viewshed

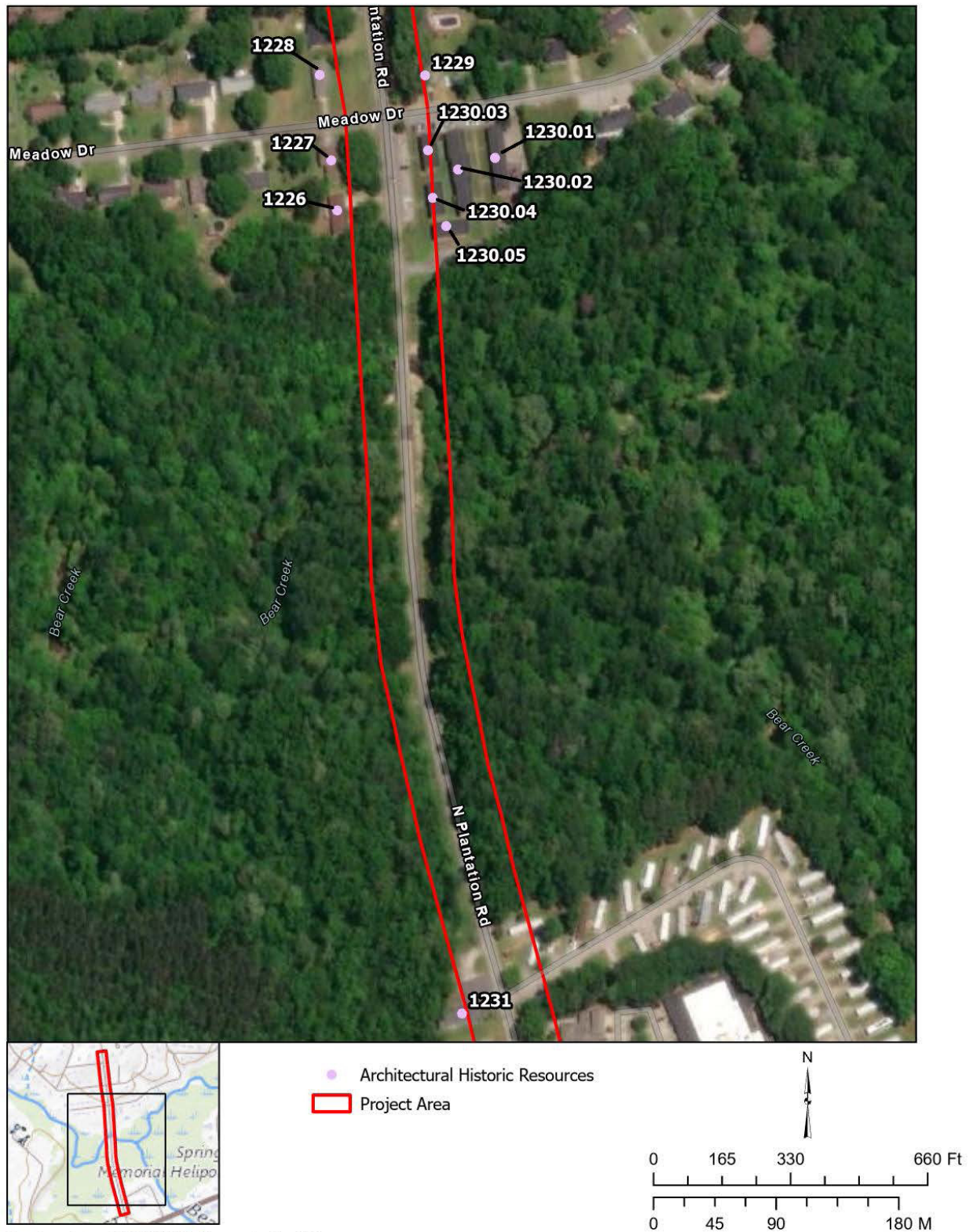


Figure 7.
Shovel Test Results

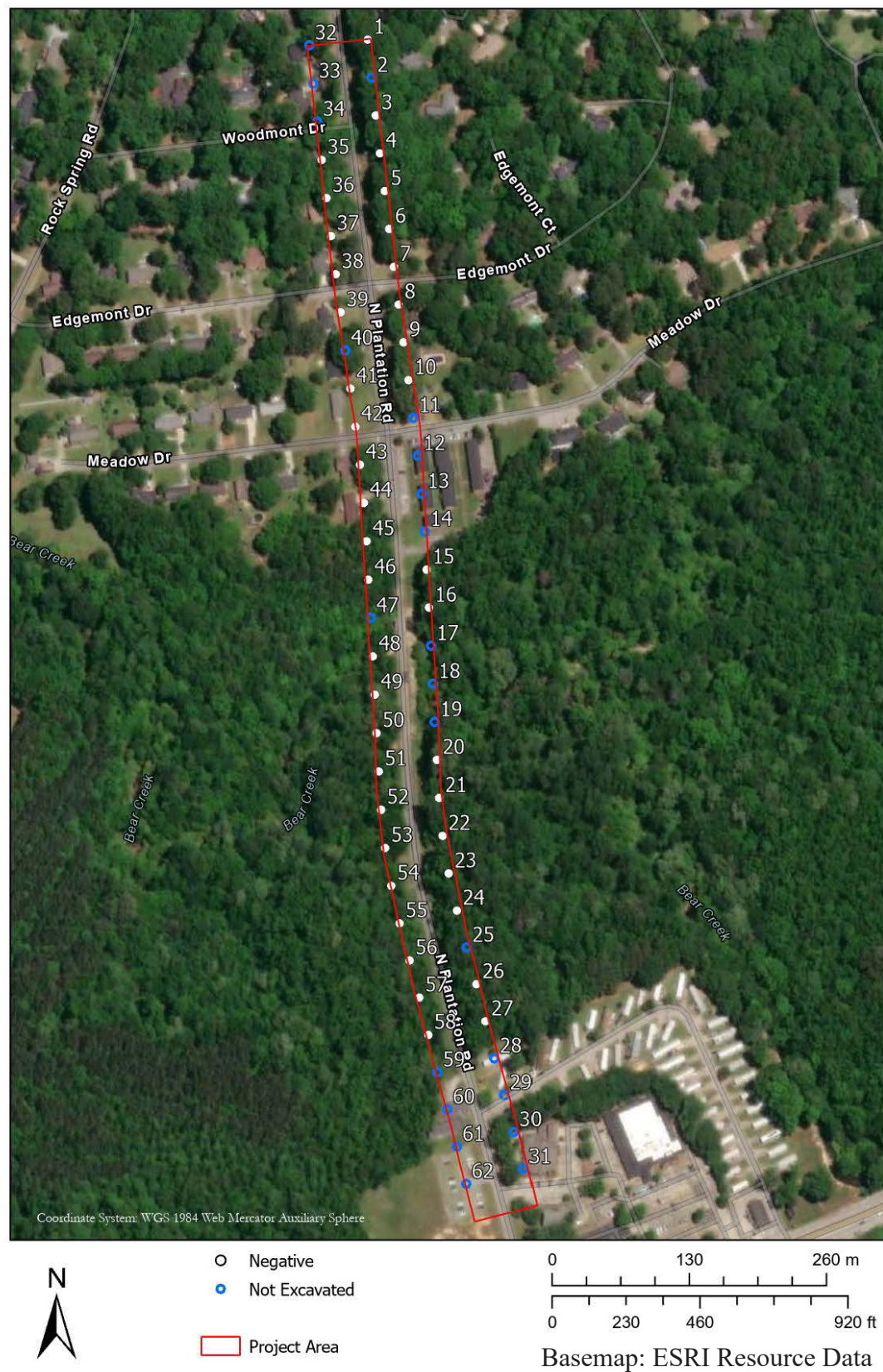


Figure 8.
Shovel Test Profile in Northern Portion of Project Area



Figure 9.
Shovel Test Profile in Central Portion of Project Area



Figure 10.
Bridge Carrying S-292 over Bear Creek



A. Superstructure and Decking

Basemap: ESRI Resource Data



B. Substructure

Figure 11.
Project Area on 1964 Aerial Photograph



Figure 12.
Resource 1226 (414 North Plantation Road)

A. Facing Northwest



B. Facing West



C. Facing Southwest



Figure 13.
Resource 1227 (418 North Plantation Road)

A. Facing West



B. Facing Southwest



C. Rear Oblique, Facing Southeast



Figure 14.
Resource 1228 (422 North Plantation Road)

A. Facing West



B. Facing Northwest



C. Rear Oblique, Facing Northeast



Figure 15.
Resource 1229 (421 North Plantation Road)

A. Facing East



B. Facing Southeast



C. Facing Southwest



Figure 16.
Resource 1230 (Wylie Arms Apartments)

A. Facing Southwest



B. Facing Northeast



C. Sign Detail



Figure 17.
Resource 1230.01 (Wylie Arms Aparments, Westernmost Building)



A. Facing Southeast



B. Facing Southwest

Figure 18.
Resource 1230.02 (Wylie Arms Apartments, Central Building)

A. Facing Southwest



B. Facing Southwest



C. Window Detail



Figure 19.
Resource 1230.03 (Wylie Arms Aparments, Northeastern Building)



A. Facing Southeast



B. Rear Elevation, Facing South

Figure 20.
Resource 1230.04 (Wyle Arms Apartments, Southwestern Building)

A. Facing Southeast



B. Facing Southwest



C. Facing East



Figure 21.
Resource 1230.05 (Wylie Arms Apartments, Southernmost Building)

A. Facing Northeast



B. Facing North



C. Facing Southeast



Figure 22.
Resource 1231 (111 North Plantation Road)

A. Facing Northwest



B. Facing Southwest



C. Facing West



Attachment B- Natural Resources Tech Memo



Natural Resources Technical Memorandum

S-292 (Plantation Road) Bridge Replacement over Bear Creek

SCDOT Project ID: P041170

May 31, 2023



**ROBBINS
& DEWITT**

Introduction

The South Carolina Department of Transportation (SCDOT) proposes to replace the S-292 (Plantation Road) bridge over Bear Creek in Lancaster County, South Carolina. Specifically, the project is located in the City of Lancaster, approximately 1.5 miles west of the center of the city. The project is also located in the Lower Catawba watershed (03050103 8-digit Hydrologic Unit Code) and the Carolina Slate Belt (45c) Level IV Ecoregion. Please see Attachment A, Figure 1 for a Site Location Map.

A Project Study Area (PSA) has been established, based on preliminary design, to encompass all potential impacts of the project. The PSA encompasses an area approximately 13.89 acres in size and approximately 3,000 feet (0.57 mile) in total length, generally centered on Bear Creek in either direction. Furthermore, the PSA is 165 feet in total width, generally centered on the centerline of Plantation Road.

Robbins & DeWitt conducted a desktop analysis, scientific literature review, and field surveys for natural resources associated with the proposed bridge replacement. This technical memorandum provides a summary of methods and findings related to natural resources and potential project related impacts. Attached to this memorandum are supporting figures, a SCDOT Permit Determination Form and South Carolina Department of Health and Environmental Control (SCDHEC) Watershed and Water Quality Information Report, and a Biological Evaluation for federally protected species.

Desktop Analysis Methods

A desktop analysis was completed as part of an initial evaluation of the PSA to identify key environmental resources to be considered for permitting and/or avoidance and minimization by the design team. The potential resources identified in the desktop evaluation were field verified by Robbins & DeWitt to ensure that critical regulatory items will not be adversely impacted by the Project. The following resources were consulted during the desktop analysis:

- Federal Emergency Management Agency (FEMA) Map Service Center (<https://msc.fema.gov/portal>)
- South Carolina Department of Health and Environmental Control (SCDHEC) Watershed Atlas (<https://gis.dhec.sc.gov/watersheds>)
- South Carolina Department of Natural Resources (SCDNR) and South Carolina Natural Heritage Program (SCNHP) (<https://schtportal.dnr.sc.gov/portal/apps/sites/#/natural-heritage-program>)
- SCDNR Digital Elevation Mapping (DEM) and Light Detection and Ranging (LiDAR) (<https://www.dnr.sc.gov/GIS/lidar.html>)
- SCDNR Open Source Geospatial Data (<https://data-scdnr.opendata.arcgis.com/>)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (<https://websoilsurvey.nrcs.usda.gov/app/>)
- U.S. Fish and Wildlife Services (USFWS) Environmental Conservation Online System (ECOS) (<https://ecos.fws.gov/ecp/>)
- USFWS Information for Planning and Consultation (IPaC) (<https://ecos.fws.gov/ipac/>)
- USFWS National Wetland Inventory (NWI) (<http://www.fws.gov/wetlands>)
- U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (<http://nhd.usgs.gov/>)
- USGS Topographic Quadrangle Maps (1:24,000-scale) – Lancaster, SC Quadrangle

Jurisdictional Waters of the U.S.

After completing the desktop analysis, Robbins & DeWitt performed field reviews to determine the boundaries of jurisdictional waters of the U.S., including wetlands, in the PSA. Field reviews were conducted on May 3rd and 4th, 2023. A summary of jurisdictional features identified in the PSA is provided in Tables 1 and 2.

Table 1 - Summary of Delineated Wetlands in the Project Study Area

Wetland	Latitude	Longitude	Area (acres)
Wetland A	34.71754930	- 80.79676129	1.18
Wetland B	34.71766705	- 80.79720365	1.52
Wetland C	34.71965086	- 80.79741589	0.11
Total			2.81 acres

Table 2 - Summary of Delineated Streams and Non-Wetland Waters in the Project Study Area

Stream	Latitude	Longitude	Centerline Length (feet)	Area (acre)
Stream A	34.719255	- 80.797095	436	0.43
Total			436 feet	0.43 acre

Permitting Considerations

Based on the conceptual bridge design, impacts to jurisdictional waters may occur during construction but are expected to remain below the SCDOT U.S. Army Corps of Engineers General Permit impact thresholds. A completed SCDOT Permit Determination Form and SCDHEC Watershed and Water Quality Information Report are provided in Attachment B.

Federally Protected Species

Environmental scientists performed literature and field reviews to determine the likelihood of protected species within the PSA and the potential for project-related impacts. Field reviews were conducted on May 3rd, 4th, and 25th, 2023. The SCDNR South Carolina Natural Heritage Species Viewer was also reviewed to determine the presence of known populations of protected species within the vicinity of the project. Based on the literature and field reviews it is determined that the proposed project will have a biological conclusion of no effect on federally protected species. A Biological Evaluation is provided in Attachment C.

Vegetation

Land use in the PSA includes undeveloped bottomland hardwood forest and medium-density residential with maintained lawns and sparse vegetation. The only natural community observed within the PSA

consists of bottomland forested wetlands (i.e., bottomland hardwoods). Refer to the Biotic Communities section in Attachment C for a detailed description of vegetation observed in the PSA.

Soils

According to the (USDA-NRCS) Soil Survey Geographic (SSURGO) data, seven Soil Map Units (SMU) are mapped within the PSA. Each SMU is included in Table 3 below.

Table 3 - Soil Map Units (SMU) in the Project Study Area

SMU	SMU Name	Area (acres)	Percentage of PSA
Ch	Chewacla soils	5.8	41.6%
DaB2	Davidson clay loam, 2 to 6 percent slopes, eroded	6.2	44.7%
GeB2	Georgeville silt loam, 2 to 6 percent slopes, moderately eroded	0.0	0.3%
GIB2	Gills silt loam, 2 to 6 percent slopes, eroded	1.0	7.3%
HdB2	Herndon silt loam, 2 to 6 percent slopes, eroded	0.8	5.6%
MaB	Masada and altavista soils, 2 to 6 percent slopes	0.0	0.2%
TaD2	Tarrus loam, 10 to 15 percent slopes, moderately eroded	0.0	0.3%

If you have any questions, or if Robbins & DeWitt can be of additional assistance, please feel free to contact Matt DeWitt at (864) 201-8446 or matt.dewitt@robbins-dewitt.com.

Respectfully Submitted



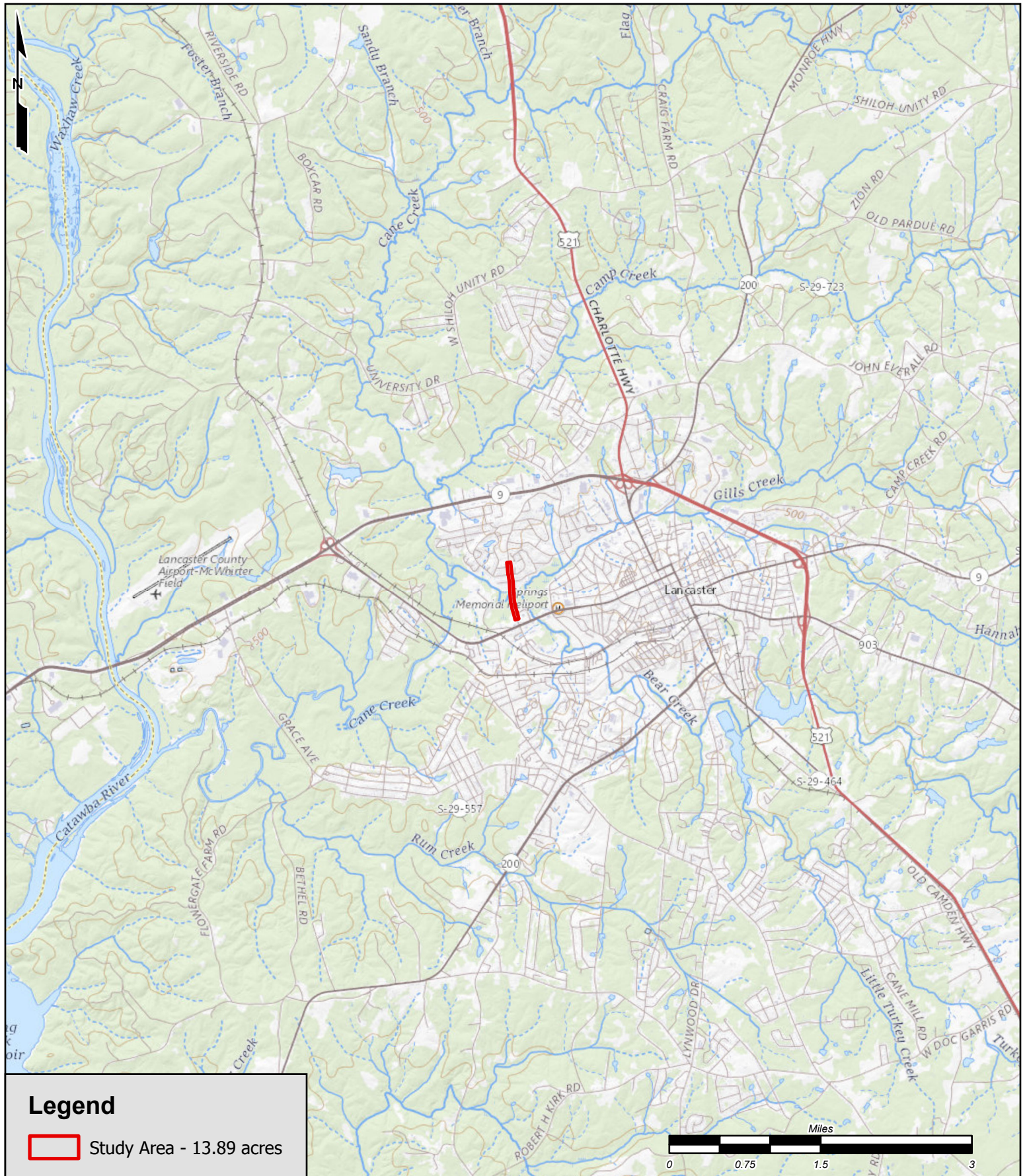
Matt DeWitt, AICP
Robbins & DeWitt, LLC

Attachment A

Figures



ROBBINS
& DEWITT



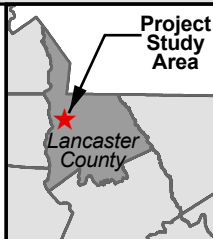
Legend

Study Area - 13.89 acres



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**Project
Study
Area**

Lancaster
County

S-292 BRIDGE REPLACEMENT OVER BEAR CREEK PROJECT ID: P041170

LANCASTER COUNTY, SOUTH CAROLINA

Source: USGS The National Map (2023); USGS Lancaster Quadrangle (2020); SC Geodetic High Resolution 6-inch, RGB Aerial Imagery [Statewide, South Carolina (2020)]

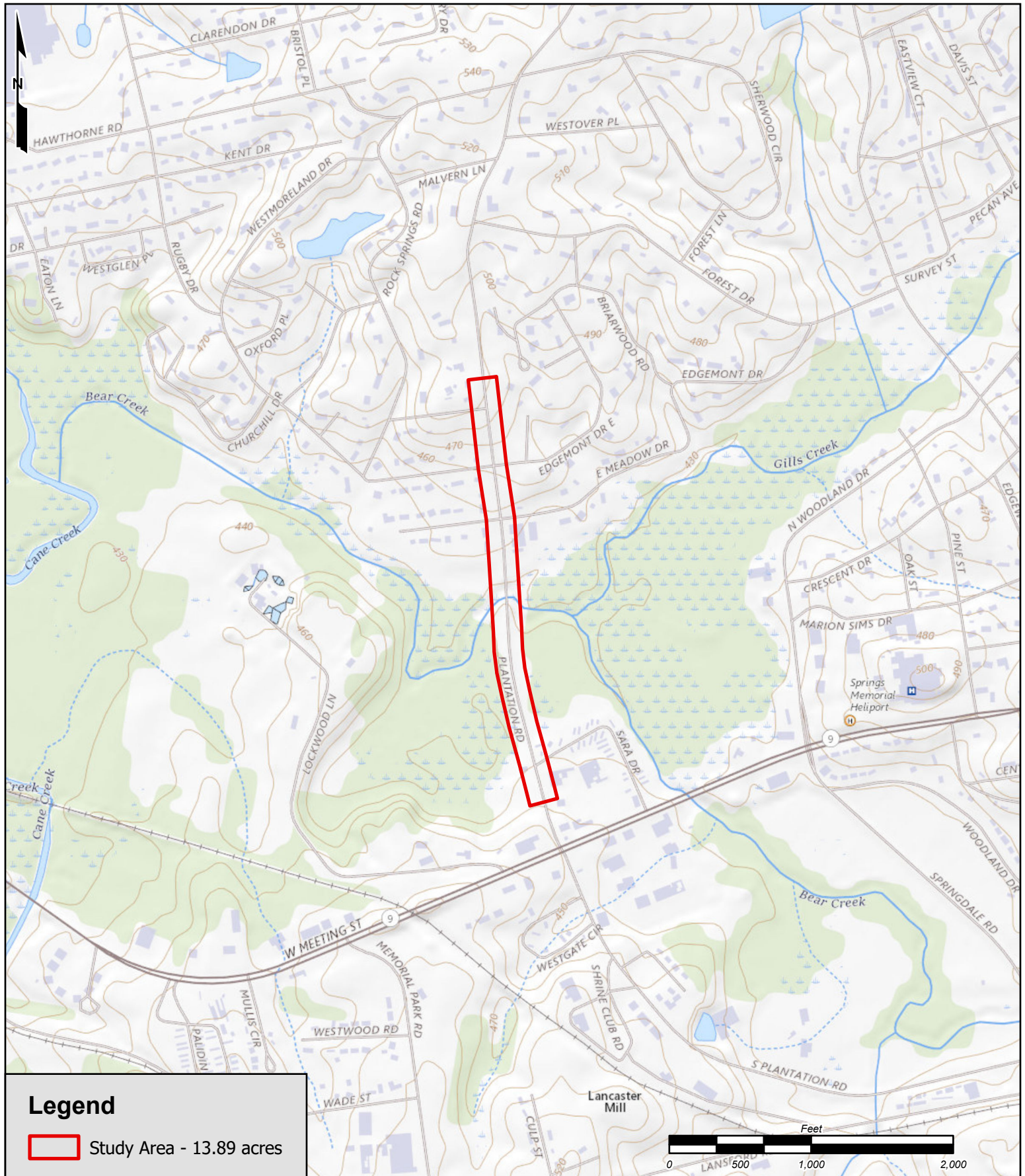


DRAWN BY: TRC

DATE: 05/26/2023

PROJECT VICINITY

FIGURE 1



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Project Study Area

Lancaster County

**S-292 BRIDGE REPLACEMENT
OVER BEAR CREEK
PROJECT ID: P041170**

LANCASTER COUNTY, SOUTH CAROLINA

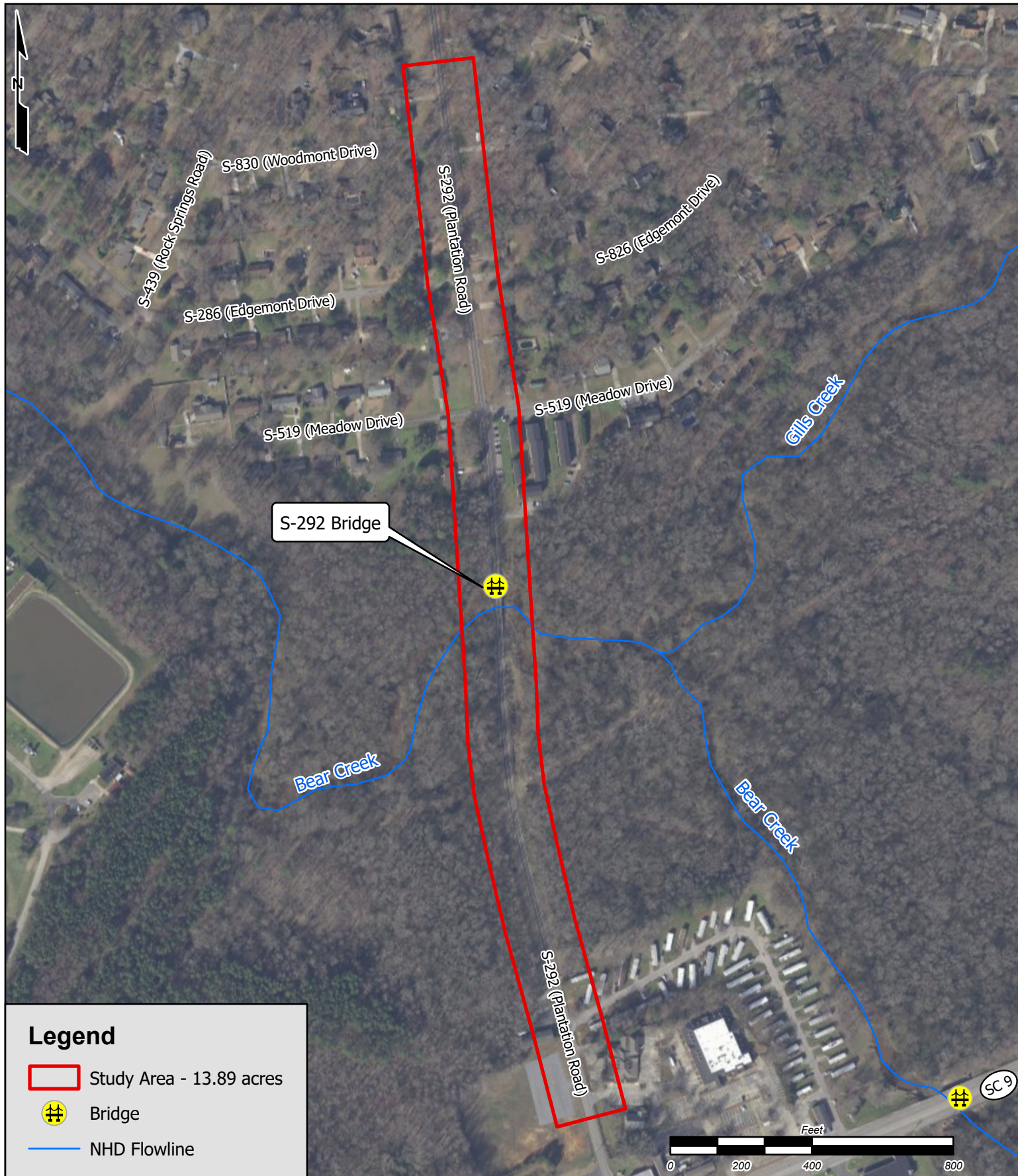
Source: USGS The National Map (2023); USGS Lancaster Quadrangle (2020)

SCDOT
South Carolina Department of Transportation

DRAWN BY: TRC DATE: 05/26/2023

USGS TOPOGRAPHIC MAPPING

FIGURE 2



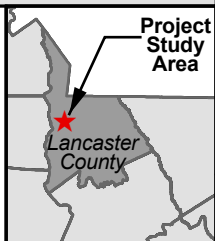
Legend

- Study Area - 13.89 acres
- ⚙ Bridge
- NHD Flowline



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S-292 BRIDGE REPLACEMENT OVER BEAR CREEK PROJECT ID: P041170

LANCASTER COUNTY, SOUTH CAROLINA

Source: USGS NHD Flowlines (2018); SC Geodetic High Resolution 6-inch, RGB Aerial Imagery [Statewide, South Carolina (2020)]



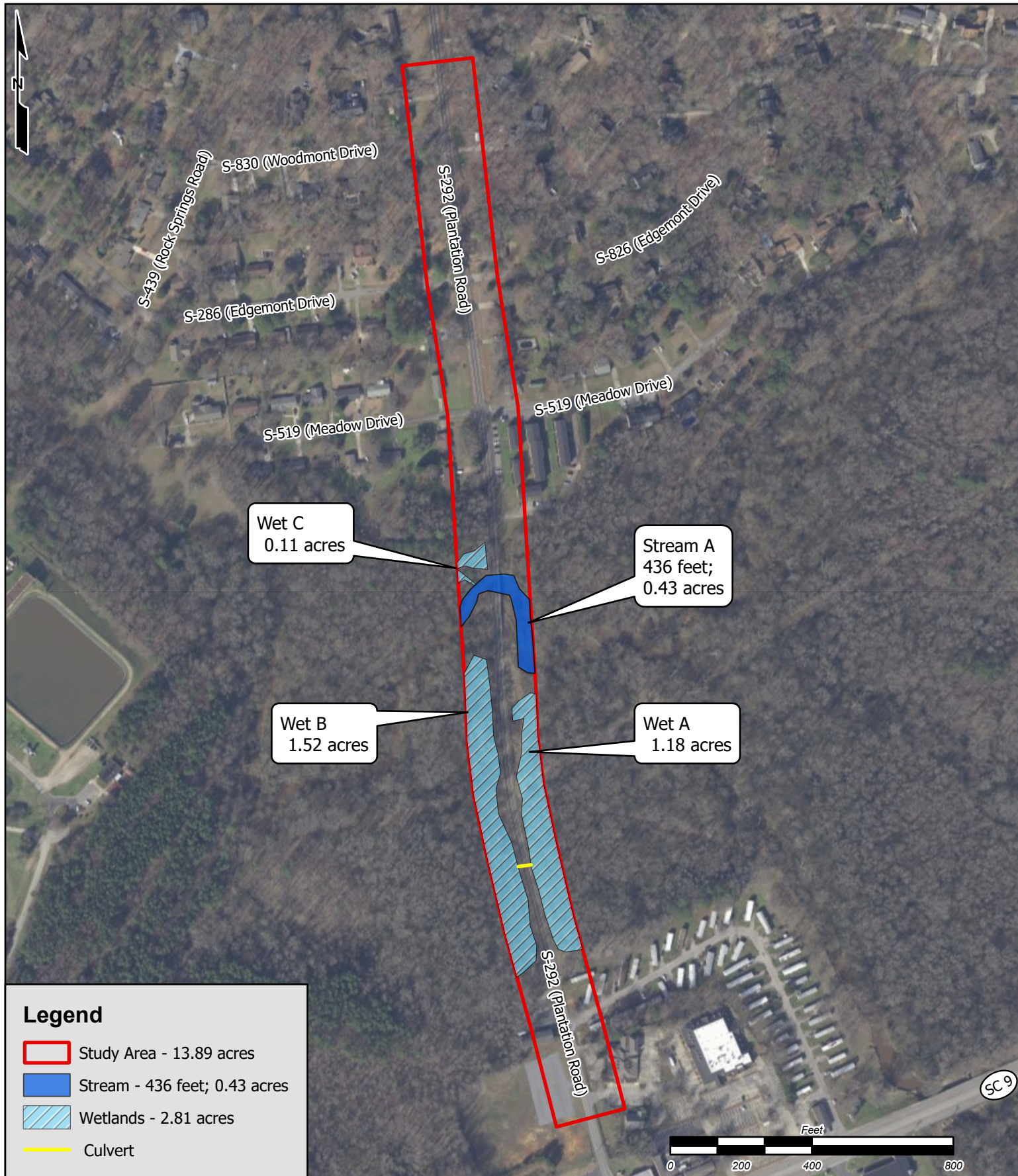
South Carolina Department of Transportation

DRAWN BY: TRC

DATE: 05/26/2023

AERIAL IMAGERY

FIGURE 3



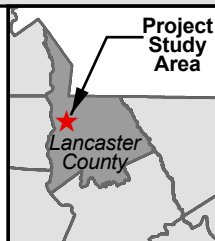
Legend

- Study Area - 13.89 acres
- Stream - 436 feet; 0.43 acres
- Wetlands - 2.81 acres
- Culvert



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S-292 BRIDGE REPLACEMENT OVER BEAR CREEK PROJECT ID: P041170

LANCASTER COUNTY, SOUTH CAROLINA

Source: Approximate boundaries of WOTUS were delineated on May 3 & 4, 2023; SC Geodetic High Resolution 6-inch, RGB Aerial Imagery [Statewide, South Carolina (2020)]



South Carolina Department of Transportation

DRAWN BY: TRC

DATE: 05/26/2023

APPROXIMATE BOUNDARY OF WOTUS

FIGURE 4

Attachment B

SCDOT Permit Determination Form & Water Quality Information Report



**ROBBINS
& DEWITT**

Date: 5/26/2023

PERMIT DETERMINATION

FROM Russell Chandler COMPANY Robbins & DeWitt

CONTACT INFO (phone and/or email) 803-360-5197

SCDOT PROJECT ENGINEER Michael Pitts

TO Will McGoldrick - Design Build Coordinator

Project Description S-292 Bridge Replacement over Bear Creek

Route or Road No. S-292 County Lancaster

CONST. PIN P041170 OTHER PINS or STRUCTURE # _____

RESPONSE:

☐ It has been determined that no permits are required because:

☒ The following permit(s) is/are necessary:
(Please check which type(s) of permit the project will need)

USACE Permit ☒ GP ☐ IP ☒ 401 ☒ JD

OCRM Permit ☐ CAP ☐ CZC

Navigable ☐ SCDHEC NAVGP – if checked a USCG and/or USACE navigable permit may also be required, but will be determined during the NEPA and Permitting stages.

Other _____

Water Classification: FW *Print and attach the SCDHEC water quality report*

303(d) listed ☐ no ☒ yes, for * DO, pH

TMDL developed ☐ no ☒ yes, for * Fecal

*List all that apply using the SCDHEC abbreviations

Comments: _____

The determination above was based on the most recently available information at the time. This is a preliminary determination and is subject to change if the design of the project is modified.

T Russell Chandler
Biologist, SCDOT/Consultant

05/31/2023
Date



Watershed and Water Quality Information

General Information

Applicant Name: SCDOT

Permit Type: MS4

Address: 409 N PLANTATION RD, B,
LANCASTER, SC, 29720

Latitude/Longitude: 34.719346 / -80.797118

MS4 Designation: Not in designated area

Monitoring Station: CW-210

Within Coastal Critical Area: No

Water Classification (Provisional): FW

Waterbody Name: BEAR CREEK

Entered Waterbody Name:

Parameter Description

NH3N	Ammonia	CD	Cadmium	CR	Chromium
CU	Copper	HG	Mercury	NI	Nickel
PB	Lead	ZN	Zinc	DO	Dissolved Oxygen
PH	pH	TURBIDITY	Turbidity	ECOLI	Escherichia coli (Freshwaters)
FC	Fecal Coliform (Shellfish)	BIO	Macroinvertebrates (Bio)	TP	(Lakes) Phosphorus
TN	(Lakes) Nitrogen	CHLA	(Lakes) Chlorophyll a	ENTERO	Enterococcus (Coastal Waters)
HGF	Mercury (Fish Tissue)	PCB	PCB (Fish)		

Impaired Status (downstream sites)

Station	NH3N	CD	CR	CU	HG	NI	PB	ZN	DO	PH	TURBIDITY	ECOLI	FC	BIO	TP	TN	CHLA	ENTERO	HGF	PCB
CW-210	X	X	X	X	X	X	X	X	X	N	X	X	X	X	X	X	X	X	X	X
CW-017	X	F	F	F	F	F	F	F	N	A	F	InTN	X	X	X	X	X	X	X	X

F = Standards full supported
N = Standards not supported

A = Assessed at upstream station
X = Parameter not assessed at station

WnTN = Within TMDL, parameter not supported
InTN = In TMDL, parameter not supported

WnTF = Within TMDL, parameter full supported
InTF = In TMDL, parameter full supported

Parameters to be addressed (those not supporting standards)

PH - pH

DO - Dissolved Oxygen

ECOLI - Escherichia coli (Freshwaters)

Fish Consumption Advisory

Waters of Concern (WOC)

TMDL Information - TMDL Parameters to be addressed

In TMDL Watershed: Yes

TMDL Site: CW-131

TMDL Report No: 07-03

TMDL Parameter: Fecal

TMDL Document Link: https://www.scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/tmdl_cane1.pdf

Report Date: May 26, 2023

Attachment C

Biological Evaluation - Section 7 of the Endangered Species Act



**ROBBINS
& DEWITT**

Introduction

The proposed project consists of replacing the S-292 (Plantation Road) bridge over Bear Creek, and associated road work, in Lancaster County, South Carolina.

Pursuant to Section 7 of the Endangered Species Act (ESA), a field survey was conducted within the Project Study Area (PSA) for the project. A review of the USFWS South Carolina List of At-Risk, Candidate, Endangered, and Threatened Species, dated March 29, 2022, identifies eight (8) federally protected species known to occur or to have formerly occurred in Lancaster County. A Resource List was also requested from the USFWS Information for Planning and Consultation (IPaC) in May 2023, to detail protected species under USFWS jurisdiction that are known or expected to be on or near the project area. Table 1 below includes the species that appear on at least one of these resources.

Federally Protected Species

Species with the federal classification of Endangered (E) or Threatened (T) or Threatened due to Similarity of Appearance (T [S/A]) are protected under the ESA of 1973, as amended (16 U.S.C. 1531 et seq.). Although Section 7 of the ESA does not provide protections for Candidate species, they are listed in Table 1 in the event of a status changes prior to completion of the project. Additionally, species that are proposed for listing are not subject to Section 7 compliance until the time they are formally listed. The bald eagle is protected by the Bald and Golden Eagle Protection Act (BGEPA) and is included in this evaluation.

Table 1: Threatened and Endangered Species

Category	Common Name	Scientific Name	Protection Status
Bird	Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA
Insect	Monarch butterfly	<i>Danaus plexippus</i>	Candidate
Mammal	Tri-colored bat	<i>Perimyotis subflavus</i>	Proposed Endangered
Mollusk	Carolina heelsplitter	<i>Lasmigona decorata</i>	Endangered, Critical Habitat
Plant	Black-spored quillwort	<i>Isoetes melanospora</i>	Endangered
Plant	Little amphianthus	<i>Amphianthus pusillus</i>	Threatened
Plant	Schweinitz's sunflower	<i>Helianthus schweinitzii</i>	Endangered
Plant	Smooth coneflower	<i>Echinacea laevigata</i>	Endangered

Methodology

Environmental scientists performed literature and field reviews to determine the likelihood of protected species within the PSA and the potential for project-related impacts. Field reviews were conducted on May 3rd, 4th, and 25th, 2023. The SCDNR South Carolina Natural Heritage Species Viewer was also reviewed to determine the presence of known populations of protected species within the vicinity of the project.

Biotic Communities

Land use in the PSA includes undeveloped bottomland hardwood forest and medium-density residential with maintained lawns and sparse vegetation. The only natural community observed within the PSA consists of bottomland forested wetlands (i.e., bottomland hardwoods).

Bottomland hardwoods are typically found on floodplains of rivers and streams in the Piedmont region. Typical trees species found in these communities include sweetgum (*Liquidambar styraciflua*), loblolly pine (*Pinus taeda*), hackberry (*Celtis laevigata*), overcup oak (*Q. lyrata*), water oak (*Q. nigra*), willow oak (*Q. phellos*), laurel oak (*Q. laurifolia*), swamp chestnut oak (*Q. michauxii*), cherrybark oak (*Q. falcata* var. *pagodafolia*), white ash (*Fraxinus americana*), sycamore (*Platanus occidentalis*), American holly (*Ilex opaca*), and American elm (*Ulmus americana*). The subcanopy of young canopy species and many tall shrubs including pawpaw (*Asimina triloba*), southern arrowwood (*Viburnum dentatum*), and blackhaw (*V. prunifolium*). Vine species are typically common and can include poison ivy (*Toxicodendron radicans*), summer grape (*Vitis aestivalis*), and crossvine (*Bignonia capreolata*). The herb layer contains false nettle (*Boehmeria cylindrica*), cardinal flower (*Lobelia cardinalis*), longleaf lobelia (*L. elongata*), Nepalese browntop (*Microstegium vimineum*), netted chainfern (*Woodwardia areolata*), royal fern (*Osmunda regalis*), and eastern marsh fern (*Thelypteris palustris*).

Overstory trees common in residential areas include willow oak and northern red oak (*Q. rubra*). In addition to residential areas, maintained overhead powerlines extend along the western side of S-292 in the southern portion of the PSA, cross the roadway south of the Bear Creek bridge, and extend along the eastern side of S-292 in the central and northern portions of S-292. A maintained sewerline easement also bisects the PSA, approximately 575 feet south of the existing bridge.

Results

The SCDNR South Carolina Natural Heritage Species Viewer does not identify any protected species within the PSA or within a one-mile radius of the PSA.

Field reviews of the PSA found no suitable habitat for bald eagle, black-spored quillwort, or little amphianthus.

SCDOT performed freshwater mussel surveys in Spring of 2022. The survey did not identify any mussels, nor habitat for Carolina heelsplitter. Please see SCDOT coordination email in Attachment D.

Marginally suitable habitat exists for smooth coneflower in maintained uplands in the PSA. No individuals of the species or the Echinacea genus were observed during field reviews.

The PSA is unlikely to support Schweinitz's sunflower. The species grows best in well-drained soil with full sun. The habitat within the PSA is mostly wet and is not likely to support the species. The uplands present in the PSA are residential and appear to be routinely maintained. Additionally, according to the USFWS IPaC, the PSA is outside of the range for the species.

Suitable habitat for tri-colored bat exists in the PSA. Roosting habitat exists under the existing Bear Creek bridge and in cavities and crevices of trees within the PSA. A structure survey of the existing Bear Creek bridge found no evidence of bat roosting. Additionally, a visual inspection and borescope review of cavities and crevices in trees within the PSA did not indicate the presence of any bat species. A Structures Survey Data Sheet and Habitat Assessment Data Sheet are included in Attachment D.

Conclusions

Based on the literature and field reviews, it is determined that the proposed project will have a biological conclusion of 'no effect' on federally protected species.

If you have any questions, or if Robbins & DeWitt can be of additional assistance, please feel free to contact Matt DeWitt at (864) 201-8446 or matt.dewitt@robbins-dewitt.com.

Respectfully Submitted



Matt DeWitt, AICP
Robbins & DeWitt, LLC

Attachment D

Biological Evaluation Attachments



**ROBBINS
& DEWITT**

LANCASTER COUNTY

CATEGORY	COMMON NAME/STATUS	SCIENTIFIC NAME	SURVEY WINDOW/ TIME PERIOD	COMMENTS
Bird	Bald eagle (BGEPA)	<i>Haliaeetus leucocephalus</i>	October 1-May 15	Nesting season
Insect	Monarch butterfly (C)	<i>Danaus plexippus</i>	August-December	Overwinter population departs; March-April
Mammal	Tri-colored bat (ARS)	<i>Perimyotis subflavus</i>	Year round	Found in mines and caves in the winter
Mollusk	Carolina heelsplitter (E, CH)	<i>Lasmigona decorata</i>	March 1-September 30	Optimal survey window
Plant	Black-spored quillwort (E)	<i>Isoetes melanospora</i>	May-October	
Plant	Georgia aster (ARS*)	<i>Symphyotrichum georgianum</i>	Early October-mid November	
Plant	Little amphianthus or Pool sprite (T)	<i>Amphianthus pusillus</i>	Late March-April	
Plant	Schweinitz's sunflower (E)	<i>Helianthus schweinitzii</i>	Late August-October	
Plant	Smooth coneflower (E)	<i>Echinacea laevigata</i>	Late May-October	

Note: There are no federally protected species found in this county in the amphibian, crustacean, fish, and reptile family categories.

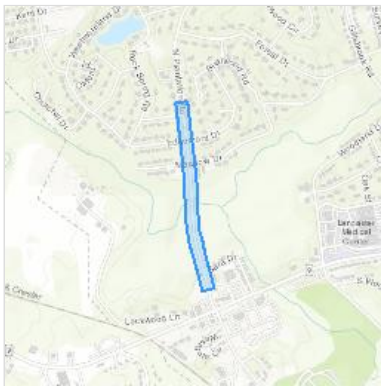
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Lancaster County, South Carolina



Local office

South Carolina Ecological Services

☎ (843) 727-4707

📠 (843) 727-4218

176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

Clams

NAME	STATUS
Carolina Heelsplitter <i>Lasmigona decorata</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3534	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Smooth Coneflower <i>Echinacea laevigata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3473	Threatened

Ferns and Allies

NAME	STATUS
Black Spored Quillwort <i>Isoetes melanospora</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6315	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the

relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events

- and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
 - The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

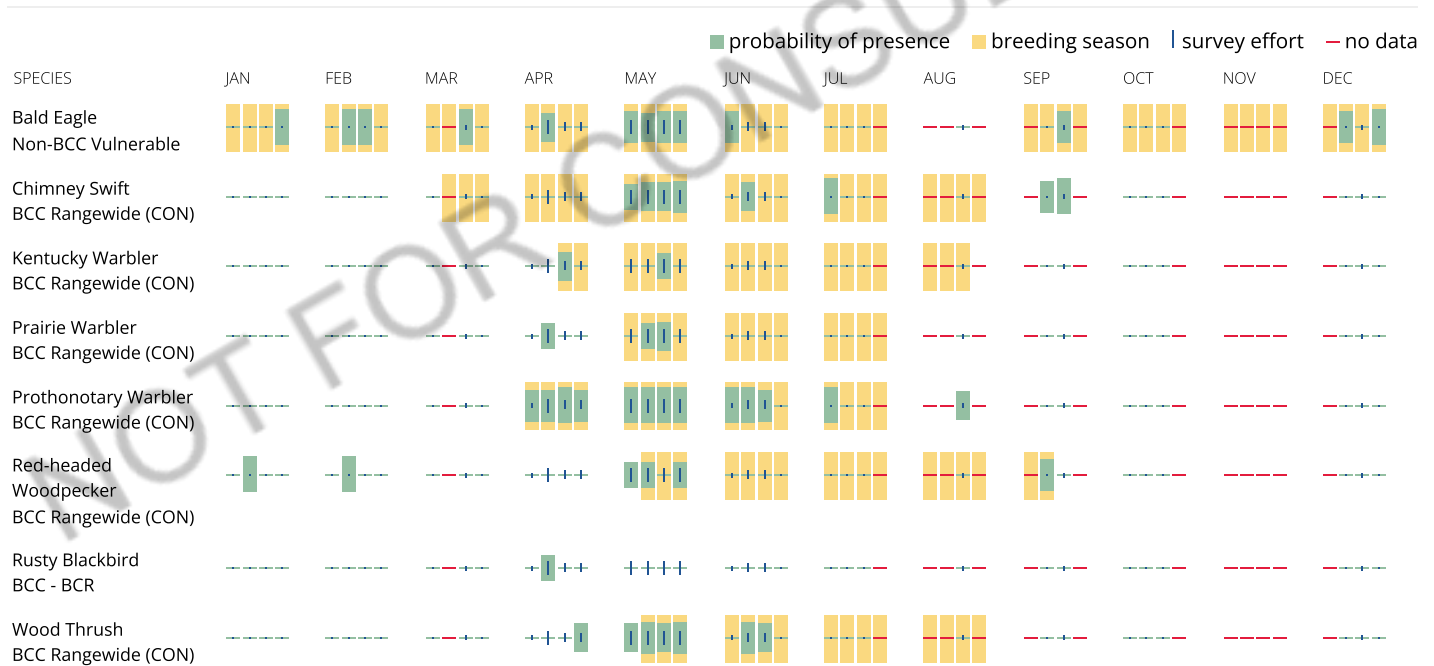
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing

when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1A](#)

[PFO1C](#)

RIVERINE

[R2UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

From: [Altman, Ann-Marie](#)
To: [McGoldrick, Will](#)
Subject: the rest of your NLEBs packages 18-20
Date: Thursday, April 7, 2022 2:08:47 PM
Attachments: [S-197 NLEB.pdf](#)
[S-31 NLEB.pdf](#)
[S-51 NLEB.pdf](#)
[S-133 NLEB.pdf](#)
[S-160 NLEB.pdf](#)
[S-32 NLEB.pdf](#)
[S-195 NLEB.pdf](#)
[S-998 NLEB.pdf](#)
[S-1086 NLEB.pdf](#)

The two bridges that needed mussel surveys had no mussels and did not have good habitat.

STRUCTURES SURVEY DATA SHEET

Investigator Names(s): A. Chandler

Date: 5/4/2023





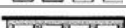
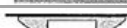

County: LANCASTER

Lat Long/w3w: 34.71947, -80.79721

Project Name: S-292 (PLANTATION ROAD) OVER BEAR CREEK

SCDOT Structure ID: 04157

SCDOT Project No.: P041170

Structure Type:			Underdeck Material:
<input type="checkbox"/> Parallel Box Beam		<input type="checkbox"/> Steel I-Beam	
<input type="checkbox"/> Pre-Stressed Girder		<input checked="" type="checkbox"/> Flat Slab / Box	
<input type="checkbox"/> Cast in Place		<input type="checkbox"/> Trapezoidal Box	
		<input type="checkbox"/> Other:	
Note:			
<input type="checkbox"/> Culvert - Box			
<input type="checkbox"/> Culvert - Pipe/Round			

Road Type:			
<input type="checkbox"/> Interstate	<input type="checkbox"/> US Highway	<input checked="" type="checkbox"/> State Road	<input type="checkbox"/> County Road
		S-292	

Surrounding Habitat (check all that apply):				
<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Commercial	<input type="checkbox"/> Pine Forest	<input type="checkbox"/> Grassland
<input checked="" type="checkbox"/> Riparian	<input checked="" type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mixed Forest	<input checked="" type="checkbox"/> Bottomland Hardwood	
<input type="checkbox"/> Other:				

Conditions Under Bridge (check all that apply):			
<input checked="" type="checkbox"/> Bare Ground/Sediment	<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Rip Rap	<input checked="" type="checkbox"/> Flowing Water
<input type="checkbox"/> Standing Water	<input checked="" type="checkbox"/> Open Vegetation (not obstructing flight path)	<input type="checkbox"/> Closed Vegetation (may obstruct flight path)	<input type="checkbox"/> Two Lanes
<input type="checkbox"/> Four (+) Lanes	<input type="checkbox"/> Unpaved Road	<input type="checkbox"/> Railroad	<input type="checkbox"/> Other:

Bats Present:	
<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

Bat Indicators (check all that apply):				
<input type="checkbox"/> Visual	<input type="checkbox"/> Smell	<input type="checkbox"/> Sound	<input type="checkbox"/> Staining	<input type="checkbox"/> Guano

- Deceased bat on roadside – 5/3/2023 by M. DeWitt and R. Chandler

Species Present:	
<input type="checkbox"/> Big brown (<i>Eptesicus fuscus</i>)	<input type="checkbox"/> Northern long-eared (<i>Myotis septentrionalis</i>)
<input type="checkbox"/> Brazilian free-tailed (<i>Tadarida brasiliensis</i>)	<input type="checkbox"/> Northern yellow (<i>Lasiurus intermedius</i>)
<input type="checkbox"/> Eastern red (<i>Lasiurus borealis</i>)	<input type="checkbox"/> Rafinesque's big-eared (<i>Corynorhinus rafinesquii</i>)
<input type="checkbox"/> Eastern small-footed (<i>Myotis leibii</i>)	<input type="checkbox"/> Silver-haired (<i>Lasionycteris noctivagans</i>)
<input type="checkbox"/> Evening (<i>Nycticeius humeralis</i>)	<input type="checkbox"/> Southeastern (<i>Myotis austroriparius</i>)
<input type="checkbox"/> Hoary (<i>Lasiurus cinereus</i>)	<input type="checkbox"/> Seminole (<i>Lasiurus seminolus</i>)
<input type="checkbox"/> Little brown (<i>Myotis lucifugus</i>)	<input type="checkbox"/> Tri-colored (<i>Perimyotis subflavus</i>)
	<input type="checkbox"/> UNKNOWN

Roost Description (if known, check all that apply):			
<input type="checkbox"/> Day Roost	<input type="checkbox"/> Nursery Roost	<input type="checkbox"/> Night Roost	<input type="checkbox"/> UNKNOWN
Number of Roosts:			

Roost Design (check all that apply):			
<input type="checkbox"/> Crack/Crevise/Expansion Joint: Under Bridge		<input type="checkbox"/> Crack/Crevise/Expansion Joint: Top of Bridge	
<input type="checkbox"/> Plugged Drain	<input type="checkbox"/> Under/Along Main Bridge Structure	<input type="checkbox"/> Rail	<input type="checkbox"/> Other:

Human Disturbance or Traffic Under Bridge or at Structure?		
<input checked="" type="checkbox"/> High	<input type="checkbox"/> Low	<input type="checkbox"/> None

Areas Inspected (check all that apply):			
<input type="checkbox"/> Vertical Surfaces on I-Beams	<input checked="" type="checkbox"/> Vertical Surfaces between Concrete End Walls and Bridge Deck		
<input checked="" type="checkbox"/> Expansion Joints	<input checked="" type="checkbox"/> Rough Surfaces	<input checked="" type="checkbox"/> Guardrails	<input checked="" type="checkbox"/> Services
<input type="checkbox"/> Other:			
Areas NOT Inspected because of Safety or Inaccessibility: North underside of bridge – steep slopes, low clearance			

Evidence of Migratory Birds Using the Structure?	
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

- Active nest with young

Additional Information:

BAT HABITAT ASSESSMENT DATA SHEET

Project Name: S-292 (PLANTATION RD) OVER BEAR CREEK

Date: 5/4/2023

Township/Range/Section: LANCASTER

Lat Long: 34.71947, -80.79721

Surveyor: A. CHANDLER

Brief Project Description

Replacing the S-292 (Plantation Rd) bridge over Bear Creek and associated roadway approach work.

Project Area

	Total Acres	Forest Acres	Open Acres
Project	13.89 acres	4.80 acres	9.09 acres
	Completely Cleared	Partially Cleared (Will Leave Trees)	Preserve Acres – No Clearing
Proposed Tree Removal	< 1 acre (anticipated)	None	> 3.80 acres (anticipated)

Vegetation Cover Types

Pre-Project	Post-Project
Bottomland Hardwood Forest, Maintained lawns and sparse vegetation Maintained right-of-way	Bottomland Hardwood Forest, Maintained lawns and sparse vegetation Maintained right-of-way

Landscape within 5-mile Radius

Flight corridors to other forested areas?

S-292 Roadway and powerline easement, Bear Creek, Sewer Easement SW of bridge ~575 ft, Driveway NE of bridge

Describe Adjacent Properties (e.g., forested, grassland, commercial or residential development, water sources)

Forested, Residential areas north of bridge along S-292, Bear Creek

Proximity to Public Land

What is the distance from the project area to forested public lands (e.g., national or state forests, national or state parks, conservation areas, wildlife management areas)?

Katawba Valley Land Trust – owns property on both sides of S-292

Sample Site Description

Sample Site No. (s): Project Study Area (13.89 acres)

Water Resources at Sample Site			
Stream Type (# and length)	Ephemeral	Intermittent	Perennial
			Stream A – 436 lf
Pools/Ponds (# and size)	N/A	Open and accessible to bats?	
Wetland (approx. acres)	Permanent		Seasonal
	Wet A – 1.18 ac		
	Wet B – 1.52 ac		
	Wet C – 0.11 ac		
Describe existing condition of water sources: Perennial stream and riparian wetlands			
Forest Resources at Sample Site			
Closure/Density	Canopy (> 50')	Midstory (20-50')	Understory (< 20')
	6 (81-100%)	6 (81-100%)	3 (21-40%)
Dominant Species of Mature Trees	Oak spp., Poplar, Cottonwood, Pine, Sweetgum, Sycamore, Holly, Elm		
Exfoliating Bark (%)	5%		
Size Composition of Live Trees (%)	Small (3-8 in)	Med (9-15 in)	Large (> 15 in)
	2 (11-20%)	3 (21-40%)	2 (11-20%)
No. of Suitable Snags	5% – borescope used, no evidence of bat use		
Standing dead trees with exfoliating bark, cracks, crevices, or hollows. Snags without these characteristics are not considered suitable.			
1 = 1-10%, 2 = 11-20%, 3 = 21-40%, 4 = 41-60%, 5 = 61-80%, 6 = 81-100%			

IS THE HABITAT SUITABLE FOR NORTHERN LONG-EARED BATS?

PSA is outside known range of NLEB

IS THE HABITAT SUITABLE FOR TRI-COLORED BATS?

Yes

Additional Comments:

See Attachment A, Figure 3 for an Aerial Photography Map, and Attachment C for description of forested habitat.

Attach aerial photo of project site with all forested areas labeled and a general description of the habitat.

Photographic Documentation: habitat shots at edge and interior from multiple locations; understory/midstory/canopy; examples of potential suitable snags and live trees; water sources



Photograph 1

Date: 5/4/2023

Taken by: R. Chandler

Snag along sewer easement, outside of PSA – borescope used, no evidence of bats



Photograph 2

Date: 5/4/2023

Taken by: A. Chandler

Hollow tree, NW of bridge – borescope used, no evidence of bats



Photograph 3

Date: 5/4/2023

Taken by: A.Chandler

SW bank of Bear Creek,
facing S-292 bridge



Photograph 4

Date: 5/4/2023

Taken by: M.DeWitt

West of bridge along
Bear Creek



Photograph 5

Date: 5/4/2023

Taken by: M. DeWitt

East of bridge along
Bear Creek



Photograph 6

Date: 5/4/2023

Taken by: A. Chandler

North of Bear Creek
bridge, facing south

Attachment C- Bridge Replacement Scoping Risk Assessment Form

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

COUNTY: _____

DATE: _____

ROAD #: _____

STREAM CROSSING: _____

Purpose & Need for the Project:

I. FEMA Acknowledgement

Is this project located in a regulated FEMA Floodway? ☐ Yes ☐ No

Panel Number: _____ Effective Date: _____ (See Attached)

II. FEMA Floodmap Investigation

FEMA Flood Profile Sheet Number _____ illustrates the existing 100 year flood:

- ☐ Passes under the existing low chord elevation.
- ☐ Is in contact with the existing low chord elevation.
- ☐ Overtops the existing bridge finished grade elevation.

III. No Rise/CLOMR Preliminary Determination

- ☐ Preliminary assessment indicates this project may be constructed to meet the "No-Rise" requirements. A detailed hydraulic analysis will be performed to verify this assessment.

Justification:

- ☐ Preliminary assessment indicates this project may require a CLOMR/LOMR. Impacts will be determined by a detailed hydraulic analysis.

Justification:

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

IV. Preliminary Bridge Assessment

A. Locate Existing Plans

a. Bridge Plans ☐ Yes File No. _____ Sheet No. _____ (See Attached)
☐ No

b. Road Plans ☐ Yes File No. _____ Sheet No. _____ (See Attached)
☐ No

B. Historical Highwater Data

a. USGS Gage ☐ Yes Gage No. _____ Results: _____
☐ No

b. SCDOT/USGS Documented Highwater Elevations
☐ Yes Results: _____
☐ No

c. Existing Plans ☐ Yes See Above
☐ No

V. Field Review

A. Existing Bridge

Length: _____ ft. Width: 28 ft. Max. span Length: _____ ft.

Alignment: ☐ Tangent ☐ Curved

Bridge Skewed: ☐ Yes ☐ No Angle: _____

End Abutment Type: _____

Riprap on End Fills: ☐ Yes ☐ No Condition: _____

Superstructure Type: _____

Substructure Type: _____

Utilities Present: ☐ Yes ☐ No

Describe:

Debris Accumulation on Bridge: Percent Blocked Horizontally: _____ %

Percent Blocked Vertically: _____ %

Hydraulic Problems: ☐ Yes ☐ No

Describe:

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

V. Field Review (cont.)

B. Hydraulic Features

a. Scour Present: ☐ Yes ☐ No Location: _____

b. Distance from F.G. to Normal Water Elevation: _____ ft.

c. Distance from Low Steel to Normal Water Elev.: _____ ft.

d. Distance from F.G. to High Water Elevation: _____ ft.

e. Distance from Low Steel to High Water Elev.: _____ ft.

f. Channel Banks Stable: ☐ Yes ☐ No

Describe:

g. Soil Type: _____

h. Exposed Rock: ☐ Yes ☐ No Location: _____

i. Give Description and Location of any structures or other property that could be damaged due to additional backwater.

C. Existing Roadway Geometry

a. Can the existing roadway be closed for an On-Alignment Bridge Replacement

☐ Yes ☐ No

Describe:

If "yes", does the existing vertical and horizontal curves meet the proposed design speed criteria?

If "No", will the proposed bridge be:

☐ Staged Constructed

☐ Replaced on New Alignment

BRIDGE REPLACEMENT SCOPING TRIP RISK ASSESSMENT FORM

VI. Field Review (cont.)

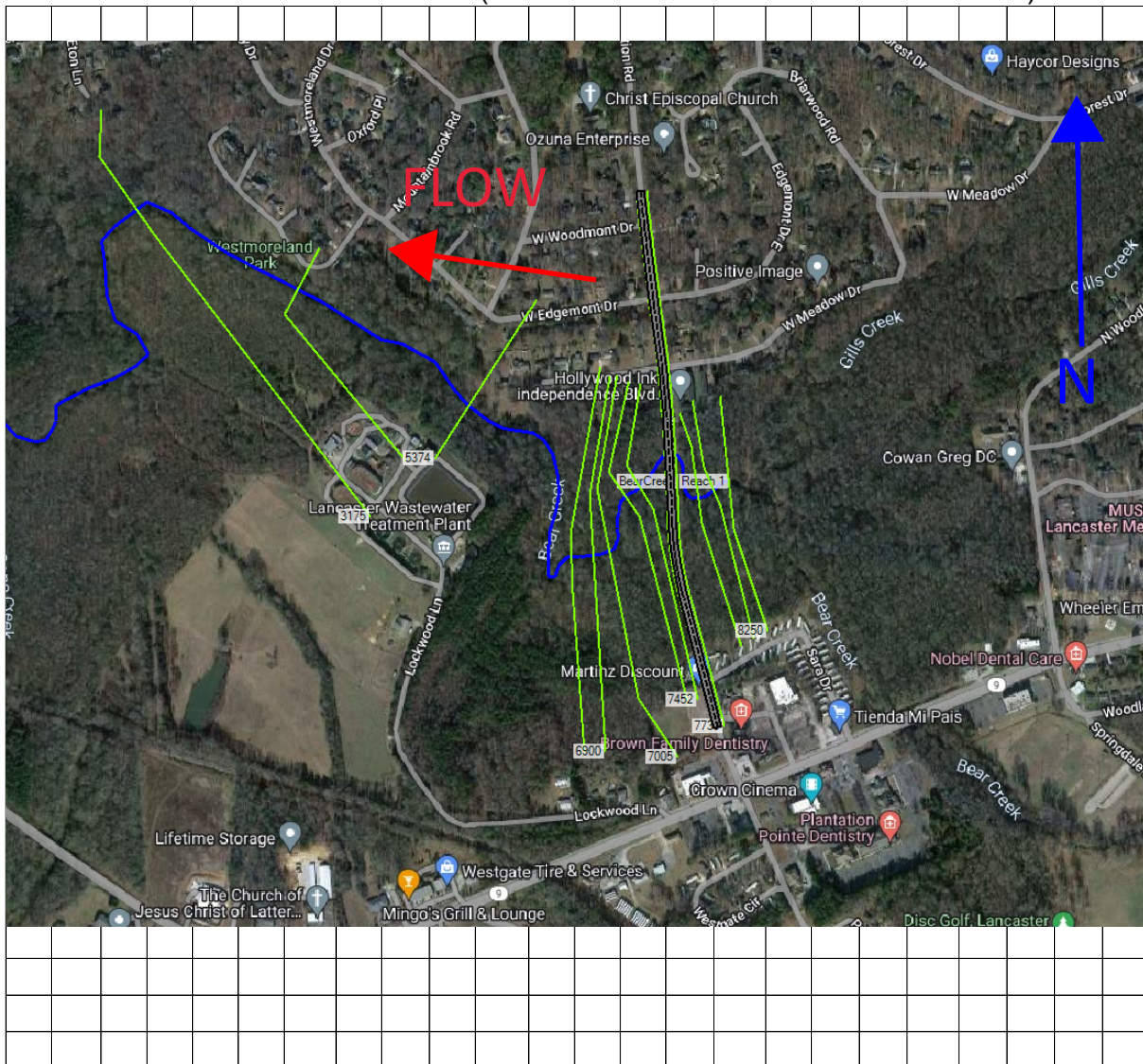
A. Proposed Bridge Recommendation:

Length: _____ ft. Width: 42 ft. Elevation: _____ ft.

Span Arrangement: _____

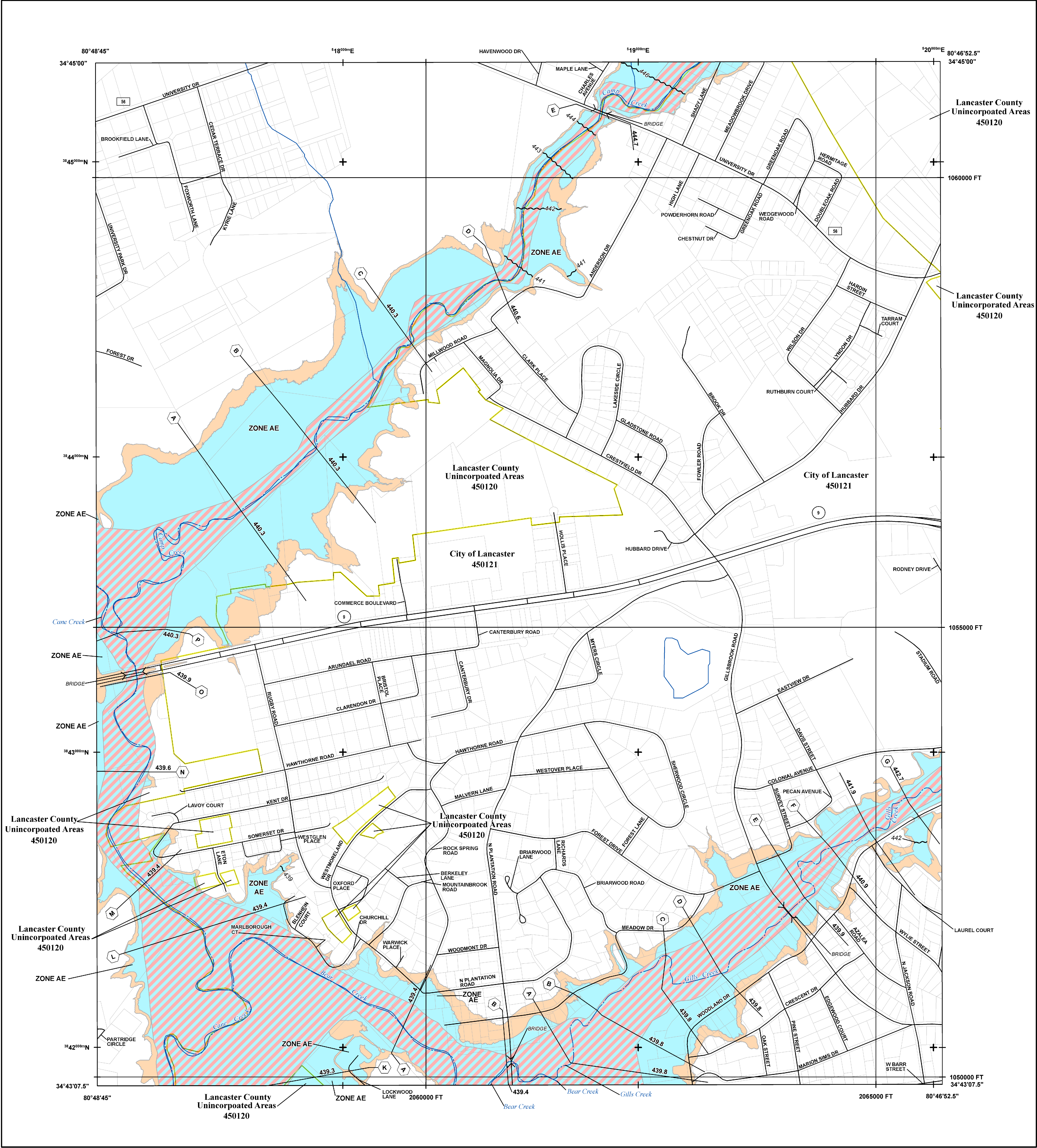
Notes: _____

BRIDGE SITE DIAGRAM: (Show North Arrow and Direction of Flow)



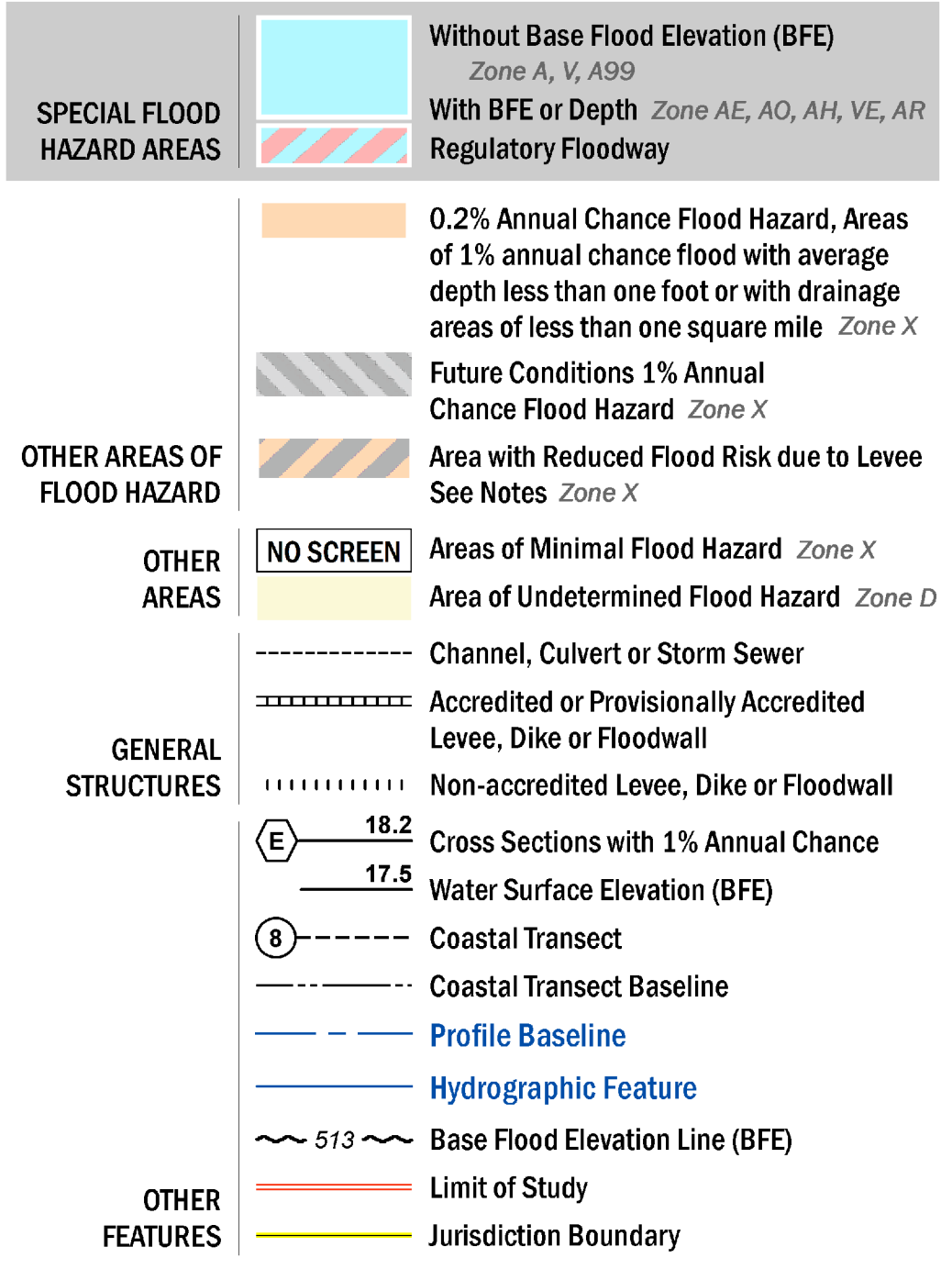
Performed By: Sharon Jones

Title: _____



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://MSC.FEMA.GOV](http://MSC.FEMA.GOV)



NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-338-2627) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM index. These may be ordered directly from the Map Service Center at the number listed above.

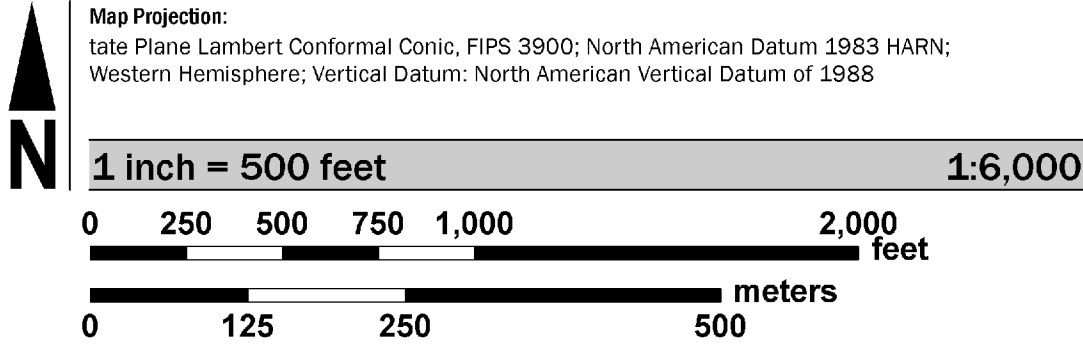
For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

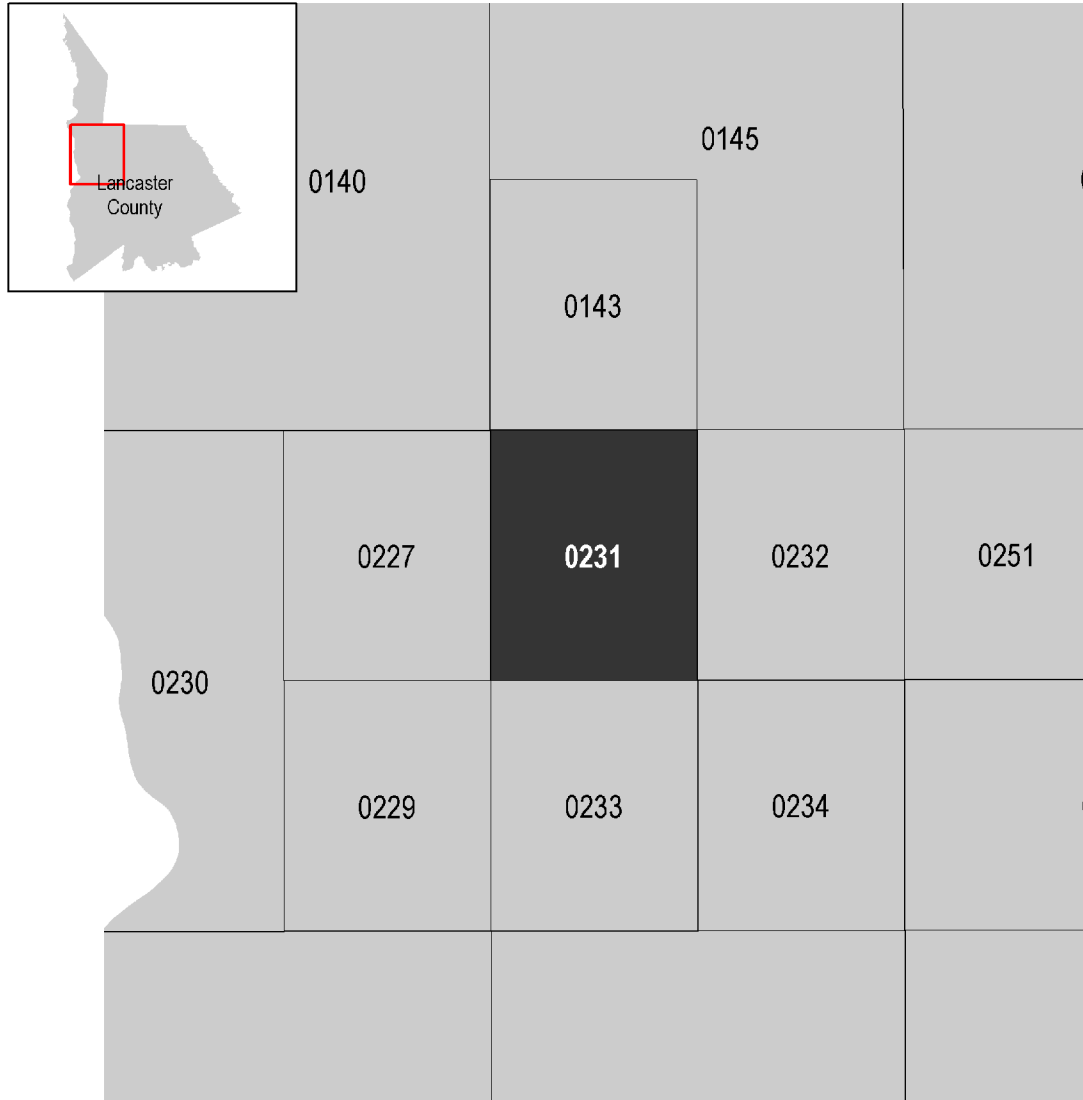
Base map information shown on this FIRM was provided in digital format by Lancaster County, South Carolina and Catawba Regional Council of Governments, dated 2011.

The digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of South Carolina and the Federal Emergency Management Agency (FEMA). The State of South Carolina has implemented a long term approach of floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain areas at the local level. As a part of this effort, the state of South Carolina has joined in a Cooperating Technical State agreement with FEMA to produce and maintain this digital FIRM. <http://dnr.state.sc.us>

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

LANCASTER COUNTY, SOUTH CAROLINA
and Incorporated Areas

PANEL 231 OF 550

Panel Contains:
COMMUNITY
LANCASTER COUNTY
LANCASTER, CITY OF

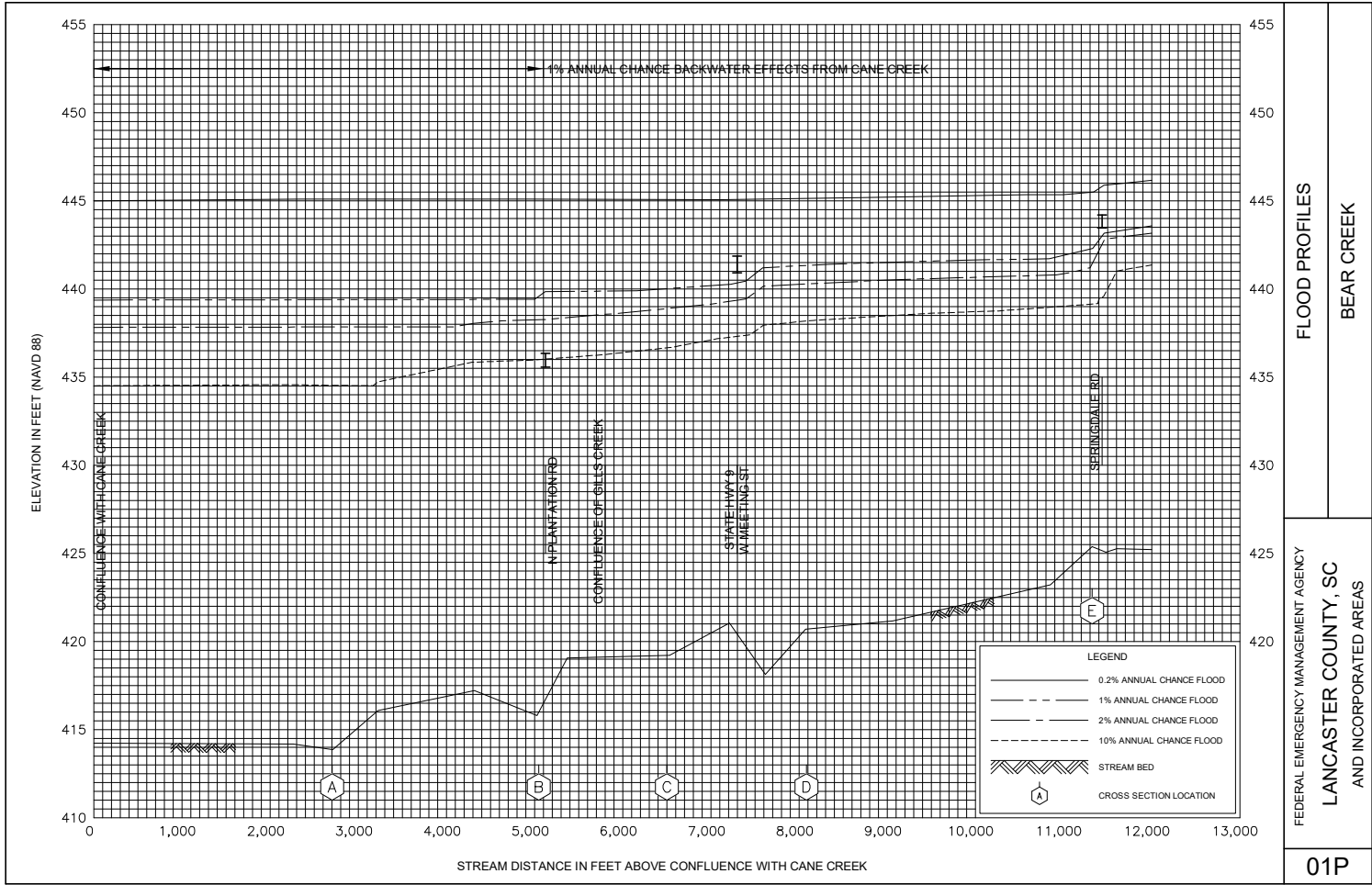
NUMBER	PANEL	SUFFIX
450120	0231	E
450121	0231	E

DNR

VERSION NUMBER
2.3.2.1

MAP NUMBER
45057C0231E

MAP REVISED
MAY 16, 2017



FLOOD PROFILES

BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LANCASTER COUNTY, SC

AND INCORPORATED AREAS

01P

Attachment D- Floodplain Checklist

South Carolina Department of Transportation
Location and Hydraulic Design of Encroachments on Floodplains Checklist

23 CFR 650, this regulation shall apply to all encroachments and to all actions which affect base floodplains, except for repairs made with emergency funds. Note: These studies shall be summarized in the environmental review documents prepared pursuant to 23 CFR 771.

I. PROJECT DESCRIPTION

The purpose of the project is to correct the load restriction placed on the bridge and restore all components to good condition. The existing bridge is posted for load restrictions and has one or more components in poor condition.

A. Narrative Describing Purpose and Need for Project

- a. Relevant Project History:
- b. General Project Description and Nature of Work (attach Location and Project Map):
- c. Major Issues and Concerns:

The purpose of the project is to correct the load restriction placed on the bridge and restore all components to good condition. Roadway improvements are limited to those associated with accommodating the new structure.

The project crosses Bear Creek which is shown on the Flood Insurance Rate Map (FIRM) Panel 45057C0231E. Bear Creek is within a designated Special Flood Hazard Area Zone AE with a regulatory floodway in the vicinity of the Project. The project is not expected to be a significant or longitudinal encroachment as defined under 23 CFR 650A, nor is it expected to have an appreciable environmental impact on the base flood elevation. In addition, the project would be developed to comply with all appropriate floodplain regulations and guidelines.

B. Are there any floodplain(s) regulated by FEMA located in the project area?

Yes ☒ No ☐

C. Will the placing of fill occur within a 100-year floodplain?

Yes ☒ No ☐

D. Will the existing profile grade be raised within the floodplain?

The roadway grade will be raised to accommodate the larger bridge structure.

- E. If applicable, please discuss the practicability of alternatives to any longitudinal encroachments.

Minor longitudinal encroachments are expected based on the revised roadway profile. The bridge will be constructed on existing alignment to reduce longitudinal impacts.

- F. Please include a discussion of the following: commensurate with the significance of the risk or environmental impact for all alternatives containing encroachments and those actions which would support base floodplain development:

- a. What are the risks associated with implementation of the action?

Risks are minimal; the project will replace the existing bridge with larger bridge opening. The increased opening will have a negligible impact on the BFE's along the floodplain.

- b. What are the impacts on the natural and beneficial floodplain values?

The project is not expected to impact the floodplain values, as the hydraulics will be retained/improved.

- c. What measures were used to minimize floodplain impacts associated with the action?

A similar bridge size will be used and constructed on the existing alignment.

- d. Were any measures used to restore and preserve the natural and beneficial floodplain values impacted by the action?

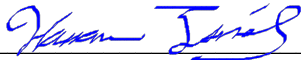
Not Applicable

- G. Please discuss the practicability of alternatives to any significant encroachments or any support of incompatible floodplain development.

The impacts are not considered significant encroachments and would not support incompatible floodplain development. The proposed project will have no significant impact to base flood elevations along the stream and will not impact the potential for development within the floodplain

- H. Were local, state, and federal water resources and floodplain management agencies consulted to determine if the proposed highway action is consistent with existing watershed and floodplain management programs and to obtain current information on development and proposed actions in the affected? Please include agency documentation.

All analysis for the project was performed in accordance with SCDOT, FEMA, and local regulations.
As the project progresses to final construction plans, the hydraulic modeling will be updated based on the final bridge layout



SCDOT Hydraulic Engineer

21 June 2023

Date

Attachment E – Public Involvement

Meeting Summary:

Project:	SCDOT Closed and Load Restricted Bridge Projects- Package 20
Subject:	Public Information Meeting
Date:	Thursday, July 20, 2023 6:00 p.m. – 8:00 p.m. (S-292) Thursday, July 27, 2023 5:00 p.m. – 7:00 p.m. (S-998)
Location:	Springdale Recreation Center (S-292) Legion Collegiate Academy (S-998)

Package 20 Overview:

The South Carolina Department of Transportation (SCDOT) proposes to replace seven bridges in Package 20. The projects include replacing the existing bridge structures and constructing the roadway to meet current design and safety standards. The proposed facilities are comprised of two and four lane roadways with 12-foot travel lanes and paved shoulders. The seven proposed bridges are shown below (bridges with in-person public meetings are bolded):

S-46-998 (Robertson Road)	WILDCAT CREEK
S-29-292 (Plantation Road)	BEAR CREEK
S-46-1086 (Dacusville Rd)	BEAVERDAM CREEK
S-130 (Rudolph Sikes Road)	THOMPSON CREEK
S-20 (Camp Welfare Road)	HOGFORK BRANCH/BIG WATEREE CREEK
S-296 (Old Creek Road)	BLACKWELL MILL STREAM
S-531 (Henry Funderburk Road)	IRIS HILLS CREEK

The purpose of these projects is to replace the bridges to correct the load restriction placed on them as well as restore all bridge components to good condition. The proposed work involves replacing the current bridges with a new bridge on existing or shifted alignments.

Public Information Meeting Overview:

On July 20, 2023, SCDOT held a public information meeting regarding proposed improvements to the S-292 (Plantation Road) bridge over Bear Creek. The meeting was held from 6:00 PM until 8:00 PM at Springdale Recreation Center, located at 260 S. Plantation Rd., Lancaster, SC 29720 in Lancaster County.

On July 27, 2023 SCDOT held a public information meeting regarding proposed improvements to the S-998 (Robertson Rd) bridge over Wildcat Creek from 5:00 PM until 7:00 PM. The meeting was held from at Legion Collegiate Academy located at 3090 Long Meadow Road Rock Hill, SC 29730 in York County.

The meetings were open to the public and provided an opportunity for the public to submit formal comments and ask project-related questions to SCDOT and consultants.

The comment period for the projects began July 5 and ended on August 11, 2023. Information about the projects, including meeting displays, was available on the website throughout the duration of the comment period. A comment form was also available. The project website can be accessed at:

https://scdotgis.online/CLRB_2022_Package20.

Meeting Outreach:

Leading up to the two public meetings and comment periods for all 7 bridges, the project team executed several outreach strategies to maximize public participation. The outreach activities completed are listed in the table below.

Bridge Project	Outreach Type	Number of Recipients	Type of Recipients	Date Sent
All Package 20 Bridges	Postcard	581	General Public Mailed via Every Door Direct Mail (EDDM) Service Sent to all postal routes surrounding the project areas.	July 1, 2023
S-292 Over Bear Creek	Road Signs	N/A	General Traveling Public; Posted on both entrances of each bridge and adjacent intersections to alert regular bridge users of the public meeting and comment period.	Early July Placement

Meeting Participation

Statistics regarding public participation in the public information meetings are shown in the table below.

Public Information Meeting Results: S-292 Bear Creek

Total Attendees	In person attendance: 10
Total Comments	Website Comments: 0; In-person Comments: 2 Demographic Forms: 1
Total Comments Received	2

Sign in sheets for each meeting can be found in Appendix A. Comment forms for each meeting, as well as a table of online comments, can be found in Appendix B.

Meeting Content

The meeting was comprised of four meeting display boards (welcome board, project overview, a project plan view, and a map of the proposed detour) and a project information handout. Meeting outreach included sending the surrounding community postcards via EDDM and placing yard sign on either end of the bridge and nearby intersections in early July. A comment station was available for in-person project comments and demographic forms. Information about the bridge was made available on the project website for the entire comment period. Comments could be submitted via the in-person comment form, website comment form, email, mail, or phone. Display board content can be found in Appendix C. Meeting photos can be found in Appendix D.

Bridge Replacement Package 20

Design-Build Projects

Counties: Chesterfield, Fairfield, Lancaster and York

Share Your Feedback

Project Description

SCDOT proposes to replace seven existing bridge structures in Chesterfield, Fairfield, Lancaster and York counties. This card is to let you know about the bridge replacement near your residence or business. Public meeting information can be found on the reverse side of this card. Please visit the website for more details about the project and other sites.



Scan QR code to visit
project web page.

Estimated Project Schedule

- Construction start: Early 2024
- Construction duration: ~24 Months

Project Manager

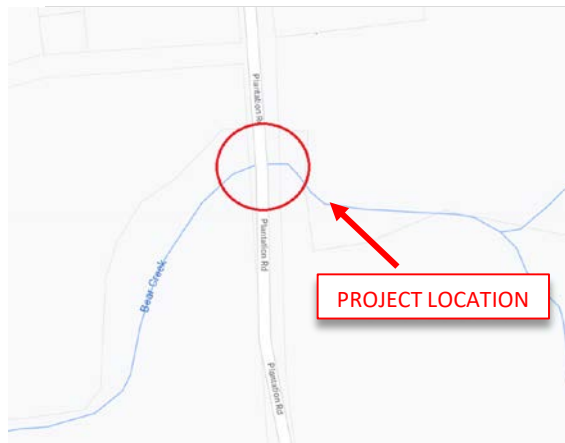
Michael Pitts, PE

Phone: 803-737-2566

Email: pittsME@scdot.org

Comments for S-292 proposed bridge replacement will be accepted until **Aug. 11, 2023.**

S-292 Bear Creek Project Area





South Carolina Department of Transportation



SCDOT is hosting an **in-person public meeting** for the Design-Build bridge replacement project (Package 20).


Attend a Public Meeting for S-292 over Bear Creek

Location: Springdale Recreation Center (260 S. Plantation Rd)

Date: 7/20/23 6-8 PM

Comment Period: 7/5/23 - 8/11/23

Contact Us!

 803-737-2566

 PittsME@scdot.org

 www.scdotgis.online/CLRB_2022_Package20

PLACE
STAMP
HERE

SCDOT Environmental Services Offices

PO Box 191

Columbia, SC 29202



Appendix A – Sign-In Sheets
S-292 Bear Creek Sign-in Sheets

SCDOT
South Carolina Department of Transportation

SCDOT Public Meeting
Bridge Replacement Project
Lancaster County • 07/20/2023 • Springdale
Recreation Center, 260 S. Plantation Road,
Lancaster, SC 29720

Sign In Form

Name (please print)	Address (please print)
Mike Barnes	362 Common, 431
Matthew Horner	518 Bannock Ln
Julie Ferguson	20 N. Roosevelt St., York, SC 29745
Alston DeVenney	1006 Westover Pl. Lancaster SC



South Carolina Department of Transportation

SCDOT Public Meeting

Bridge Replacement Project


Lancaster County • 07/20/2023 • Springdale
Recreation Center, 260 S. Plantation Road,
Lancaster, SC 29720

Sign In Form

Name (please print)	Address (please print)
BRIAN CARNES	LANCASTER COUNTY COUNCIL
KEN WILSON	LANCASTER CONSTR. SCDOT
Jordan Hunter	518 Rock Springs Rd
Will McBrat	3437 Victoria Hills Dr. Rock 3, SC 29729
HENRY GUSTAFSON	SC Senate
EARL CARPIS	LETC

Appendix B – Comments and Demographic Forms

S-292 Bear Creek Comment Sheets


South Carolina Department of Transportation

Public Comment Form

Public Involvement

SCDOT appreciates your participation and involvement in this project. Your thoughts and comments are important to us!

Contact Information:

Name: JO ANN HUNTER

Phone Number: 803-320-9925

Email Address: jobyhunter@gmail.com

Street Address: 518 ROCK SPRINGS Rd.

Interest in this Project (Please check one):

Business Owner___ Community Group___ Resident/Property Owner ☒ Roadway Traveler___

Please provide any comments or questions below:

Very Heavy rains Has over flow bridge

Not looking forward to having to detour.

Hopefully short downtime.



South Carolina Department of Transportation

Public Comment Form

Public Involvement

SCDOT appreciates your participation and involvement in this project. Your thoughts and comments are important to us!

Contact Information:

Name: Alston DeVenny
Phone Number: 803 320 1512
Email Address: adevenny@fkdlattorneys.com
Street Address: 1006 Westover Pl. Lancaster SC 29320

Interest in this Project (Please check one):

Business Owner ☒ Community Group ☐ Resident/Property Owner ☒
Roadway Traveler ☐

Please provide any comments or questions below:

Provide design + construction of
walkway under the bridge
for Lindsey Cethus Greenway expansion
Light either end of bridge.
Build as quickly as possible after road closure.
Alston DeVenny



South Carolina Department of Transportation

S-292 Bear Creek Demographic Forms

SCDOT PUBLIC MEETING DEMOGRAPHIC SURVEY

Completing this form is **strictly voluntary and anonymous**. You are not required to provide the information requested in order to participate in this meeting. Completing this form will only assist SCDOT with our Title VI data collection, and also improve the way we serve our public.

All forms will remain on file at SCDOT

County Name: <i>Lancaster</i>		Gender You Identify As: <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female <input type="checkbox"/> Non-binary	
Street Address (i.e. 123 Main Street) <i>518 Rock Springs Road</i>		Age Group: <input type="checkbox"/> Less than 18 <input type="checkbox"/> 45-64 <input type="checkbox"/> 18-29 <input checked="" type="checkbox"/> 65 and older <input type="checkbox"/> 30-44	
Total Household Income: <input type="checkbox"/> Less than \$12,000 <input checked="" type="checkbox"/> \$47,000 – \$69,999 <input type="checkbox"/> \$12,000 – \$19,999 <input type="checkbox"/> \$70,000 – \$93,999 <input type="checkbox"/> \$20,000 – \$30,999 <input type="checkbox"/> \$94,000 – \$117,999 <input type="checkbox"/> \$31,000 – \$46,999 <input type="checkbox"/> \$118,000 or greater		Do You Have a Disability? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Did You Request Special Accommodations For This Meeting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If Yes, Were The Accommodations Received? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Race/Ethnicity You Identify As: <input checked="" type="checkbox"/> White <input type="checkbox"/> Black/African American <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Hispanic/Latino/Spanish <input type="checkbox"/> Other (please specify): _____		How Did You Hear About This Meeting? <input type="checkbox"/> Mailing <input type="checkbox"/> Internet <input type="checkbox"/> Facebook <input type="checkbox"/> School Handout <input type="checkbox"/> Faith Based Organization <input type="checkbox"/> Flyer <input type="checkbox"/> Newspaper <input checked="" type="checkbox"/> Postcard <input type="checkbox"/> Newspaper <input type="checkbox"/> Radio Advertisement <input type="checkbox"/> Local News <input type="checkbox"/> Community Organization <input type="checkbox"/> Other (please specify): _____	
“What is Title VI? Based on Title VI of the Civil Rights Act, FHWA’s Title VI Program prohibits discrimination on the basis of race, color, national origin, sex, age, and disability.”			

Thank you for your participation!



The table below contains all transcribed comments for the S-292.

Full Name	Email	Phone Number	Comment
Jo Ann Hunter	jnbyhunter@gmail.com	8033209925	Heavy Rain on bridge causes overflow. Not looking forward to having to detour. Hopefully not much downtime.
Alston DeVenny (Mayor of Lancaster)	adevenny@fkdattorneys.com	8033201512	Provide design and construction of walkway under bridge for Lindsey Getter Greenway Expansion at the light at either end of the bridge. Would we be able to look at this quickly after road closure?

Appendix C- Meeting Boards

S-292 Bear Creek Yard Sign

Join Us For a SCDOT Public Meeting!

S-29-292 Bridge Replacement over Bear Creek

Project ID: P041170 | Lancaster County



www.scdotgis.online/CLRB_2022_Package20

Thursday, July 20, 2023
6-8 PM
Springdale Recreation Center

260 S. Plantation Rd
Lancaster, SC 29720



S-292 Bear Creek Meeting Boards

Design-Build Project – Public Meeting



Welcome!

Public meeting for **S-29-292 (Plantation Road)**
Bridge over Bear Creek in Lancaster County.

Thursday, July 20, 2023 | 6-8 PM
Springdale Recreation Center
260 S. Plantation Rd
Lancaster, SC 29720

We encourage you to **PLEASE SIGN-IN** before
viewing project displays.

Interested in learning more? Scan the QR code.

Published: Q3 2023
Project information is subject to change.

Project Name: S-29-292 (Plantation Road) Bridge over Bear Creek
Project ID: P041170



Proposed Project Overview

- The existing bridge was built in 1963, and currently has posted load restrictions.
- SCDOT proposes to replace the existing bridge structure so that it meets current design and safety standards.
- Proposed improvements will restore the functional and structural components to good condition, as well as correct the load restriction.
- An off-site detour may be utilized during construction.



Bridge shown from road



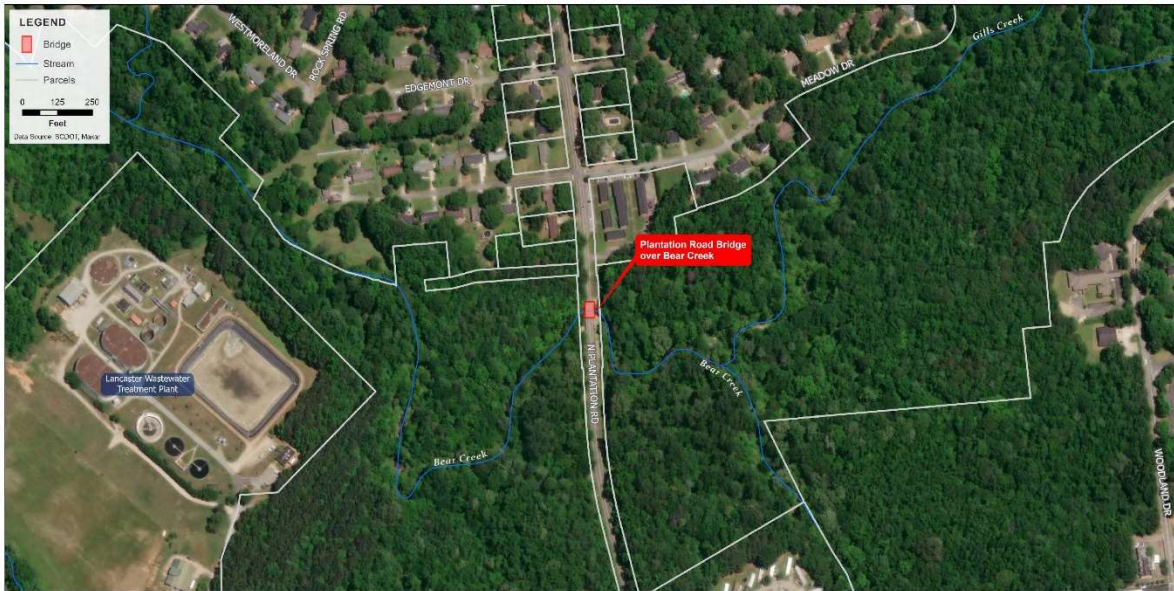
Bridge substructure

Published: Q3 2023
Project information is subject to change.

Project Name: S-29-292 (Plantation Road) Bridge over Bear Creek
Project ID: P041170



Proposed Improvement Plan View



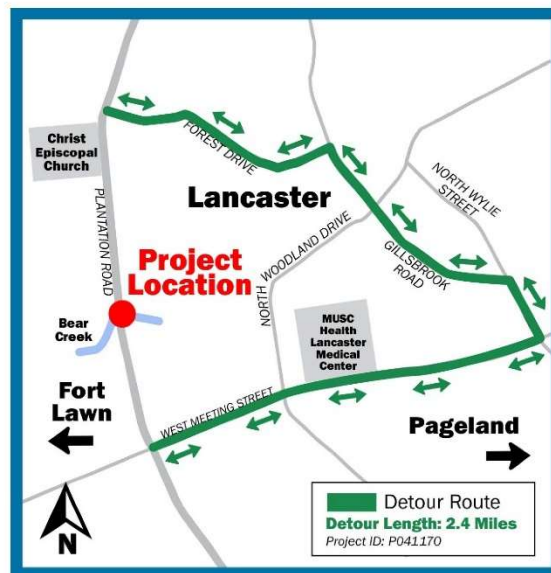
Published: Q3 2023
Project information is subject to change.

Project Name: Bridge Replacement over Bear Creek
Project ID: S-29-292



Proposed Detour Route

- During project construction of the S-29-292 (Plantation Road) Bridge over Bear Creek, the bridge would be temporarily closed to traffic for reconstruction.
- SCDOT proposes to utilize SC 9 (West Meeting Street), North Wylie Street, Gillsbrook Road, and Forest Drive as the potential detour.
- Proposed detour length: 2.4 miles
- Advance notice will be given to stakeholders and the public before closures occur.



Published: Q3 2023
Project information is subject to change.

Project Name: S-29-292 (Plantation Road) Bridge over Bear Creek
Project ID: P041170



Bridge Replacement over Bear Creek

Project ID: P041170 | Lancaster County
Part of the Design-Build Bridge Replacement Projects Package 20

PROJECT DESCRIPTION

SCDOT proposes to replace the S-29-292 (Plantation Road) Bridge over Bear Creek in Lancaster County. The existing bridge was built in 1963 and currently has posted load restrictions. The project will replace the existing bridge structure so that it meets current design and safety standards.

This project will be delivered as a Design-Build project and packaged as a bundle (Bridge Replacement Projects Package 20) for final design and construction. The bundle includes seven bridge replacements located in Chesterfield, Fairfield, Lancaster, and York counties.

PURPOSE AND NEED

The purpose of this project is to address the functional and structural components of the existing bridge. The proposed bridge replacement will correct the load restriction as well as restore all bridge components to good condition.

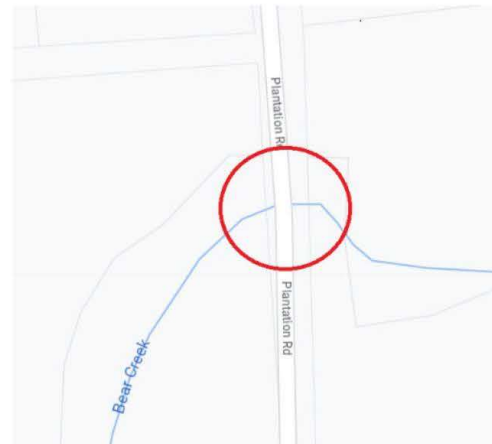
CONTACT US!

Michael Pitts, PE | SCDOT Project Manager
Phone: 803-737-2566
Email: PittsME@scdot.org
Website:
www.scdotgis.online/CLRB_2022_Package20

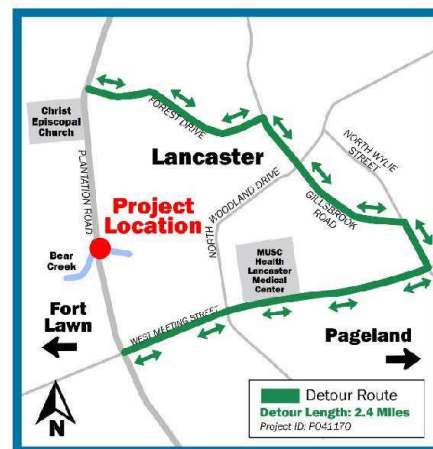


Scan QR code to visit
project web page.

PROJECT AREA



POTENTIAL DETOUR ROUTE



An off-site detour may be utilized during construction. The bridge is currently open to traffic.



Bridge Replacement over Bear Creek

Project ID: P041170 | Lancaster County

Part of the Design-Build Bridge Replacement Projects Package 20

PROJECT SCHEDULE



Construction start for
Bridge Bundle 20: Early 2024



Construction duration for
Bridge Bundle 20 contract: ~24 months



Anticipated construction duration for
S-29-292 bridge: 3-6 months

This bridge bundle includes seven bridge replacement projects that are being delivered using Design-Build construction. The anticipated contract duration for construction is ~24 months. Construction duration for each bridge will vary.

SHARE YOUR FEEDBACK

Comments for S-29-292 proposed bridge replacement will be accepted in a variety of formats.

Comments due by **August 11, 2023.**



Complete a Comment Form
before you leave



Submit a comment online on the
project website



Email a comment to
PittsME@scdot.org



Give us a call at 803-737-2566



Mail comments to SCDOT
Environmental Services Offices
PO Box 191
Columbia, SC 29202

EXISTING CONDITIONS



Bridge shown from road



Bridge substructure



Appendix D- Meeting Photos

S-292 Bear Creek Meeting Photos





Table shows all comments received and responses sent for S-292.

Date Received	Full Name	Email	Phone Number	Street Address	City	Zipcode	Comment	Response
7/20/2023	Jo Ann Hunter	jnbyhunter@gmail.com	8033209925	518 Rock Springs Road	Lancaster	29720	Heavy Rain on bridge causes overflow. Not looking forward to having to detour. Hopefully not much downtime.	Thank you for your comment. SCDOT will post signage when the construction is scheduled to take place and construction should take 3-6 months to complete. SCDOT intends for the closure to be brief with minimal traffic disruption and issues while the bridge is being replaced. You may refer to the project website for updates to the project timeline as information is available. www.scdotgis.online/CLRB_2022_Packag e20
7/20/2023	Alston Devenny (Mayor of Lancaster)	adevenny@fkdattoorneys.com	8033201512	1006 Westora Place	Lancaster	29720	Provide design and construction of walkway under bridge for Lindsey Getter Greenway Expansion at the light at either end of the bridge. Would we be able to look at this quickly after road closure?	Thank you for your public comment. SCDOT is evaluating the options to accommodate the Lindsey Getter Greenway Expansion.

SCDOT Closed and Load Restricted Bridge Package 20 (Chesterfield, Fairfield, Lancaster, and York Counties)



Pitts, Michael E. <PittsME@scdot.org>

To jnbyhunter@gmail.com

Retention Policy HNTB - Remove After 2 Years (2 years)

Expires 8/17/2025

[Reply](#) [Reply All](#) [Forward](#) [Share](#) [More](#)

Fri 8/18/2023 11:01 AM

Good Morning Ms. Hunter –

Thank you for your comment. SCDOT will post signage when the construction is scheduled to take place and construction should take 3-6 months to complete. SCDOT intends for the closure to be brief with minimal traffic disruption and issues while the bridge is being replaced. You may refer to the project website for updates to the project timeline as information is available. www.scdotgis.online/CLRB_2022_Package20

Thank you,



Michael E. Pitts, P.E., Assoc. DBIA

Alternative Delivery Program Manager

P 803.737.2566 M 803.413.9316 E pittsme@scdot.org

www.scdot.org 955 Park Street, P.O. Box 191, Columbia, SC 29202-0191

LET 'EM WORK. LET 'EM LIVE.



Pitts, Michael E. <PittsME@scdot.org>

To adevenny@fkdattoorneys.com

Retention Policy HNTB - Remove After 2 Years (2 years)

Expires 8/17/2025

[Reply](#) [Reply All](#) [Forward](#) [Share](#) [More](#)

Fri 8/18/2023 11:03 AM

Good Morning Mayor Devenny –

Thank you for your public comment. SCDOT is evaluating the options to accommodate the Lindsey Getter Greenway Expansion.

Thanks,



Michael E. Pitts, P.E., Assoc. DBIA

Alternative Delivery Program Manager

P 803.737.2566 M 803.413.9316 E pittsme@scdot.org

www.scdot.org 955 Park Street, P.O. Box 191, Columbia, SC 29202-0191

LET 'EM WORK. LET 'EM LIVE.

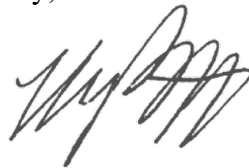
August 18, 2023

Dear Ms. Hunter:

Thank you for your interest in the Closed and Load Restricted Bridge Package 20 Project (Chesterfield, Fairfield, Lancaster, and York Counties). SCDOT will post signage when the construction is scheduled to take place and construction should take 3-6 months to complete. SCDOT intends for the closure to be brief with minimal traffic disruption and issues while the bridge is being replaced. You may refer to the project website for updates to the project timeline as information is available. (www.scdotgis.online/CLRB_2022_Package20)

If you have any questions, please contact me, the SCDOT Project Manager, by phone 803-737-2566, or via email at pittsme@scdot.org.

Sincerely,



Michael E. Pitts, P.E., Assoc. DBIA
Alternative Delivery Program Manager

