



South Carolina Department of Transportation
On Behalf of the Federal Highway Administration - South Carolina Division Office



PROCESSING FORM FOR PROGRAMMATIC CATEGORICAL EXCLUSIONS
NON MAJOR FEDERAL ACTIONS

State File #	DR-4241	Fed Project #		Project ID	PW# P029942	Route	SC-48 Bluff Rd	County	Richland
--------------	---------	---------------	--	------------	-------------	-------	----------------	--------	----------

Programmatic Type: CE-B

Project Name/Description

SC-48 (Bluff Road) experienced damage as a result of the 2015 flood event at Back Swamp, Cedar Creek and Dry Branch. The replacement bridges will be constructed with the following commitments:
 The pre-existing bridge will be replaced with a bridge on existing alignment.
 The bridge will be the same length or longer than the pre-existing bridge.
 The bridge will be the same height or higher than the pre-existing bridge.
 The contractor will minimize impacts to wetland area located on both sides of bridge.
 USACE 404 Permit will be the responsibility of the SCDOT Environmental Service Office.
 T&E Survey for Canby's dropwort prior to commencement of construction.
 SC-48 at Back Swamp: Historic Cemetery identified requires avoidance and monitoring.
 SC-48 at Back Swamp site 38RD1439 archaeological site be avoided during construction.

Categorical Exclusion Type B (Conditional Programmatic)

Projects of the type listed below would not automatically fall under the same programmatic clearance as the CE Type A. The regulations in 23 CFR Part 771.117(d) list additional types of projects which can meet the CE criteria only after FHWA approval. Several of these projects have been approved to be processed programmatically by FHWA-SC if certain conditions are met. These types are listed below.

Check appropriate project type:

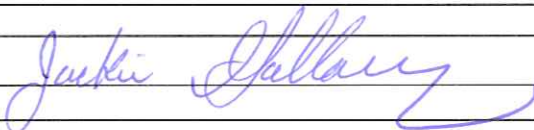
- Safety projects including but not limited to: placement of traffic barrier; energy attenuators; grading of slopes or gore areas to eliminate the need for guardrail, improve the clear zone, improve curves, or improve sight distance/removal of fixed objects such as boulders or trees; lighting; glare screens; delineators; and safety modification of drainage structures.
- Pavement resurfacing, restoration, rehabilitation, and reconstruction projects including related shoulder and ditch work.
- Traffic operation type projects including but not limited to: freeway surveillance and control systems; intersection channelization; turn lanes, acceleration or deceleration lanes; construction, modification or elimination of curbs, raised dividers or sidewalks; and widening less than a single lane width.
- Bridge and culvert rehabilitation work and bridge replacement at the same location.

CE-B Processing Form Continued:


To be processed as a Categorical Exclusion Type B (CE-B) the following conditions must be met in addition to the General Criteria (as outlined in the CE Programmatic Agreement (PA) between FHWA-SC and SCDOT). Place a "X" in the appropriate box below. If the answer is "Yes" to any of the below criteria, a Documented Categorical Exclusion (CE-C) must be prepared and forwarded to FHWA for approval.

1.	The acquisition of more than minor amounts of temporary or permanent strips of right-of-way and the acquisition will not require any residential or business relocations.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
2.	Use of Section 4(f) or 6(f) properties.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
3.	An adverse effect determination under Section 106 of the National Historic Preservation Act.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
4.	Individual U.S. Coast Guard Permits.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5.	Individual Corps of Engineer Permits, or an impact greater than three (3) acres of wetlands. a. Wetland impacts (acres): <input type="text"/>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6.	Impacts to planned growth or land use, or significant impacts on travel patterns.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7.	Work encroaching in a regulatory floodway, adversely affecting the base floodplain, or potentially adversely affecting a National Wild and Scenic River.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8.	Changes in access control.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
9.	Any known or potential major hazardous waste sites within the right-of-way.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

The above described project has been reviewed based on the information contained in the engineer's Project Planning Report (PPR), and it has been determined that the project meets the criteria set forth in the Programmatic Categorical Exclusion Agreement signed by FHWA and SCDOT. It is understood that any additions/deletions to the project may void environmentally processing the project as presently classified; consequently, any engineering changes must be brought to the attention of SCDOT Environmental Services immediately. The project's CE classification should be shown in the remarks section on the Letter of Request for Authorization Form (PS Form 39) for right-of-way and/or construction for concurrence by FHWA. A copy of this form is included in the project file and one (1) copy has been provided to FHWA.

Prepared By:  Date

Primavera: Yes No

Date: <input type="text" value="05/09/2016"/>	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	
---	---	--

Project ID: <input type="text" value="29942,29943,2994"/>	County: <input type="text" value="Richland"/>	District: <input type="text" value="District 1"/>	Doc Type: <input type="text" value="CE-B"/>	Total # of Commitments: <input type="text" value="9"/>
---	---	---	---	--

Project Name:

The Environmental Commitment **Contractor Responsible** measures listed below are to be included in the contract and must be implemented. It is the responsibility of the Program Manager to make sure the Environmental Commitment **SCDOT Responsible** measures are adhered to. If there are questions regarding the commitments listed please contact:


CONTACT NAME: Jackie Galloway **PHONE #:** (803)_737-1078

ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Non-Standard Commitment	Responsibility: <input type="text" value="CONTRACTOR"/>
<input type="text" value="Cultural Resources"/>	
<p>SC-48 at back Swamp Historic Resource #463-3679(Myers Cemetery) should be avoided and an archaeological monitor should be present during any ground disturbing activities conducted within 50 feet of the cemetery wall. SCDOT will provide monitoring during construction activities, and the Contractor shall coordinate with SCDOT to ensure that appropriate monitoring is provided.</p>	

Non-Standard Commitment	Responsibility: <input type="text" value="CONTRACTOR"/>
<input type="text" value="Cultural Resources"/>	
<p>Site 38RD1439 is a prehistoric (primarily Early to Middle Woodland Deptford Phase) archaeological site located on a rise above Myers Creek (Back Swamp). The site consists of a moderately dense scatter of ceramics and lithics found to a depth of approximately 70 centimeters below current ground surface. The NRHP eligibility of the site was not determined during the current survey. It is recommended that Site 38RD1439 be avoided during construction activities associated with the replacement of the Myers Creek bridge (Back Swamp). If avoidance is not possible then additional archaeological testing is recommended to more precisely define the site boundaries and to determine if intact subsurface archaeological deposits are present. The boundaries of the archaeological site should be identified on the final construction plans and clearly marked in the field to ensure protection of the site during construction.</p>	

Non-Standard Commitment	Responsibility: <input type="text" value="SCDOT"/>
<input type="text" value="T&E Survey for Canby's dropwort"/>	
<p>SCDOT Environmental Services will survey for the Canby's dropwort (<i>Oxypolis canbyi</i>) prior to commencement of construction activities. The USFWS' recommended survey time begins in mid-July.</p>	

Project ID : <input style="width: 90%;" type="text" value="29942,29943,2994"/>	SCDOT NEPA ENVIRONMENTAL COMMITMENTS FORM	
ENVIRONMENTAL COMMITMENTS FOR THE PROJECT		

Migratory Bird Treaty Act (all bridge and box culvert projects)	Responsibility: <input style="width: 90%;" type="text" value="CONTRACTOR"/>
<p>The federal Migratory Bird Treaty Act, 16 USC § 703-711, states that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.</p> <p>The Department will comply with the Migratory Bird Treaty Act of 1918 in regard to the avoidance of taking of individual migratory birds and the destruction of their active nests. At least four (4) weeks prior to construction/demolition of the bridges, the Resident Construction Engineer (RCE) will coordinate with SCDOT Environmental Services Compliance Office to determine if there are any active nests on the bridge. After this coordination, it will be determined whether construction/demolition can begin. After construction/demolition has begun, measures can be taken to prevent birds from nesting, such as screens, noise producers, and deterrents etc. If during construction or demolition a nest is observed on the bridge that was not discovered during the biological surveys, the contractor will cease work and immediately notify the RCE, who will contact SCDOT Environmental Services Compliance Office. SCDOT biologists will determine whether the nest is active and the species utilizing the nest. After this coordination, it will be determined whether construction/demolition can resume or whether a temporary moratorium will be put into effect. All costs for determining the need for, the placing of deterrents, and applying of all special actions including, but not limited to, removing nests and any costs associated with conducting work in compliance with the Migratory Bird Treaty Act as stated herein will not be paid for separately but will be considered to have been included with other items of work.</p>	

Non-Standard Commitment	Responsibility: <input style="width: 90%;" type="text" value="CONTRACTOR"/>
<p><input style="width: 95%;" type="text" value="Minimization of wetland impacts condition"/></p> <p>The contractor will minimize impacts to wetland area located on both side of bridge.</p>	

Non-Standard Commitment	Responsibility: <input style="width: 90%;" type="text" value="CONTRACTOR"/>
<p><input style="width: 95%;" type="text" value="Bridge alignment condition"/></p> <p>The pre-existing bridge will be replaced with a bridge on existing alignment.</p>	

Project ID : 29942,29943,2994

SCDOT
NEPA ENVIRONMENTAL COMMITMENTS
FORM



ENVIRONMENTAL COMMITMENTS FOR THE PROJECT

Non-Standard Commitment

Responsibility: CONTRACTOR

Bridge length condition

The bridge will be the same length or longer than the pre-existing bridge.

Non-Standard Commitment

Responsibility: CONTRACTOR

Bridge height condition

The bridge will be the same height or higher than the pre-existing bridge.

Non-Standard Commitment

Responsibility: SCDOT

SC-48 (Bluff Road) Bridge over Back Swamp :

During a recent underwater inspection of the SC-48 Bridge over Back Swamp concluded that the timber bents supporting the bridge were severely damaged by the 2015 storm. The 100'x 46.6' existing bridge will be replaced on existing alignment at the existing length or longer and at the same height or higher. Repairs will restore shoulder/slopes by shoring up with rip rap to help with stabilization and reestablishing the Erosion Control Features (permanent vegetation) to pre-disaster conditions.

SC-48 (Bluff Road) Bridge over Cedar Creek:

During a recent underwater inspection of the SC-48 Bridge over Cedar Creek concluded that the timber bents supporting the bridge were severely damaged by the 2015 storm. The 151'x 46.6' existing bridge will be replaced on existing alignment at the existing length or longer and at the same height or higher. Repairs will restore shoulder/slopes by shoring up with rip rap to help with stabilization and reestablishing the Erosion Control Features (permanent vegetation) to pre-disaster conditions.

SC-48 (Bluff Road) Bridge over Dry Branch :

During a recent underwater inspection of the SC-48 Bridge over Dry Branch concluded that the timber bents supporting the bridge were severely damaged by the 2015 storm. The 76'x 47.8' existing bridge will be replaced on existing alignment at the existing length or longer and at the same height or higher. Repairs will restore shoulder/slopes by shoring up with rip rap to help with stabilization and reestablishing the Erosion Control Features (permanent vegetation) to pre-disaster conditions.



South Carolina
Department of Transportation

May 11, 2016

Ms. Elizabeth Johnson
Deputy State Historic Preservation Officer
South Carolina Department of Archives & History
8301 Parklane Road
Columbia, South Carolina 29223-4905

Re: SCDOT Cultural Resources Survey of Areas Potentially Affected by the Emergency Replacement of the SC 48 (Bluff Road) Bridge over Myers Creek (Back Swamp), Richland County, South Carolina

Dear Ms. Johnson:

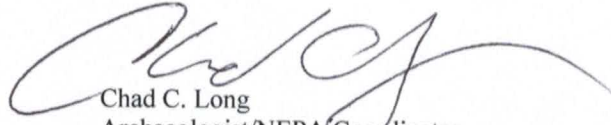
The South Carolina Department of Transportation's consultant has completed a cultural resources survey of the above-referenced emergency bridge replacement project in Richland County, South Carolina. Site 38RD1439 is a prehistoric archaeological site that was documented during the current survey. Because the eligibility of this site is currently unknown, the Department will require the contractor to avoid the site during construction. If avoidance is not possible then additional archaeological testing will be required to assess the eligibility of this site. Historic Resource # 463-3679 (Myers Cemetery) is a previously recorded family cemetery dating to the 19th century. The cemetery has been assessed as potentially eligible for inclusion in the National Register of Historic Places (NRHP). The Department will require the contractor to avoid the cemetery during construction. In addition, an archaeological monitor shall be present during any ground disturbing activities that occur within 50 feet of the cemetery.

Based on the results of field investigations and the proposed measures to protect archaeological site and the historic cemetery, the Department has determined that the proposed undertaking will have **no adverse effect upon historic properties.**

Per the terms of the Section 106 Programmatic Agreement executed on August 18, 2014, 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 with SCDOT findings, thus completing the Section 106 consultation process. Please respond within 30 days if you have any objections or if you have need of additional information.


Sincerely,



Chad C. Long
Archaeologist/NEPA Coordinator

CCL:ccl

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

Signed:  Date: 12 May 2016

ec: Shane Belcher, FHWA
cc: Wenonah G. Haire, Catawba Nation THPO
Russell Townsend, EBCI
Lisa Larue-Baker, United Keetowah

File: ENV/CCL





Cultural Resources Project Screening Form

File Number: PIN: Route: County:

Project Name:

Type 1: Resurfacing, installation of fencing, signs, pavement markings, traffic signals, passenger shelters, railroad warning devices, construction of bicycle/ped lanes, installation of rumble strips, landscaping)

Project Type

Type 2: Off-system bridge replacement, intersection improvements that involve turn lanes and/or realignment of roads no greater than 300' in length)

Type 3: Projects that do not fall into Type 1 and Type 2 categories (e.g. road widening)

Comments

The proposed project involves replacing the SC 48 bridge over Cedar Creek on existing alignment. The bridge was damaged during the October 2015 flood event and closed to traffic in the spring of 2016. A cultural resources survey was conducted by SCDOT archaeologists on April 2015, 2016. Dr. Adrienne Daggett (SHPO Transportation Liaison) assisted the Department with the field survey. The study area examined for the project measures 100' to each side of the road centerline and extends 1000' from each end of the bridge. The majority of the project corridor consisted of wetlands/hydric soils and was not subjected to shovel testing. Moderate to high probability areas were observed at the eastern and western ends of the corridor. These areas were shovel tested at approximately 30-meter intervals. Eleven shovel tests were excavated in total. No artifacts were recovered and no cultural features were observed in any of the shovel tests or on the surface. No additional fieldwork is necessary unless the proposed work extends outside the boundaries examined during the archaeological survey.

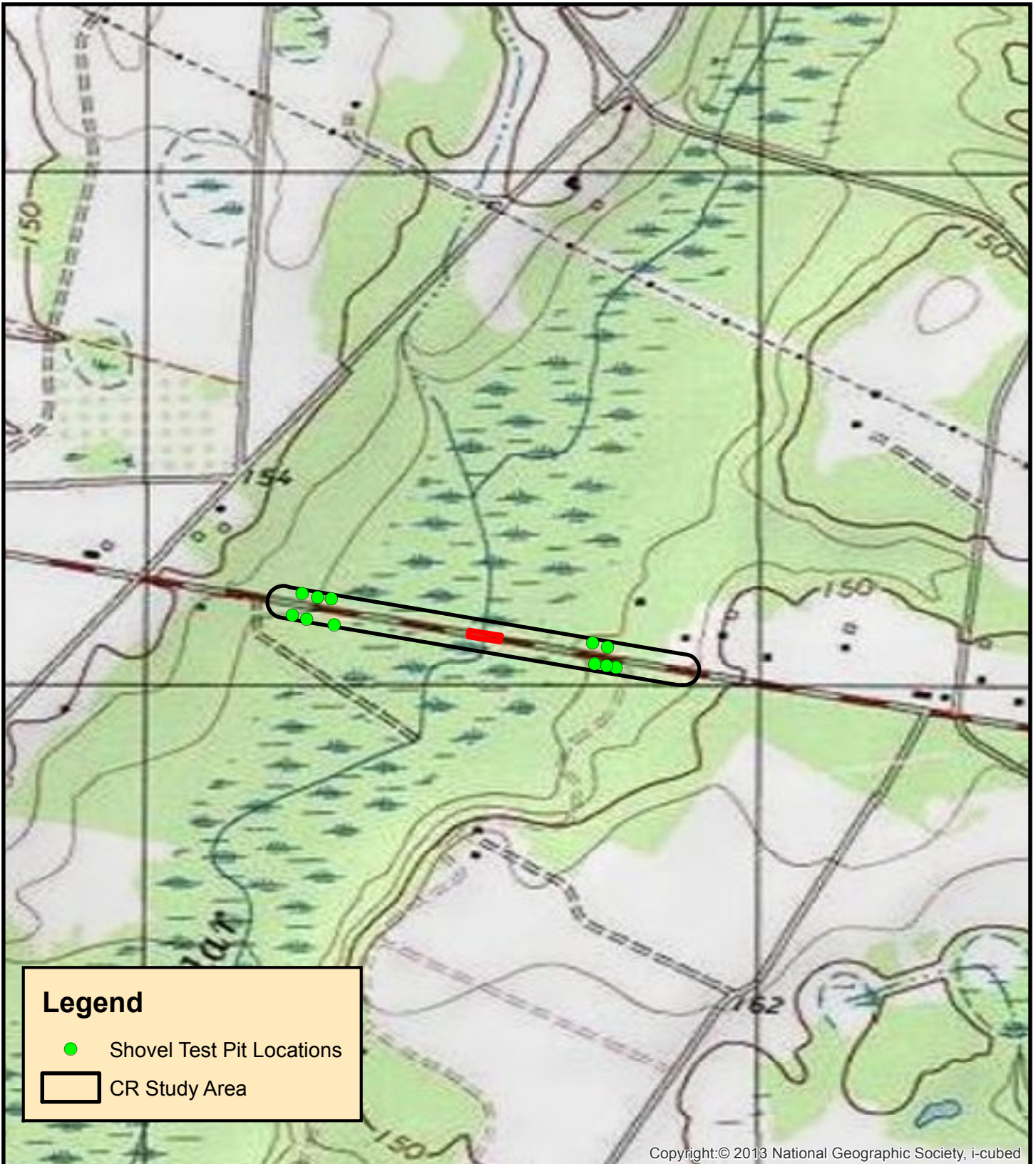
Effect Determination:

*SHPO consultation is required for all Type 3 projects and any project with a No Adverse or Adverse Effect Determination.

This screening form was developed to satisfy documentation requirements for Type I and Type II projects under a Programmatic Agreement between the Federal Highway Administration, the South Carolina State Historic Preservation Office, and the South Carolina Department of Transportation. For Type I and Type II projects that have no effect on historic properties, the completion of this screening form with supporting documentation (e.g. ArchSite Map) provides evidence of FHWA and SCDOT's compliance with Section 106 of the National Historic Preservation Act.

Prepared by:

Review Date:



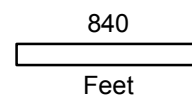
Date:
May 3, 2016



South Carolina Department of Transportation

TITLE

**Emergency Bridge Replacement
SC Route 48 over Cedar Creek
Richland County, SC**



**Project ID: P029943
FHWA ER# SC16-1**



Cultural Resources Project Screening Form

File Number: PIN: Route: County:

Project Name:

Type 1: Resurfacing, installation of fencing, signs, pavement markings, traffic signals, passenger shelters, railroad warning devices, construction of bicycle/ped lanes, installation of rumble strips, landscaping)

Project Type

Type 2: Off-system bridge replacement, intersection improvements that involve turn lanes and/or realignment of roads no greater than 300' in length)

Type 3: Projects that do not fall into Type 1 and Type 2 categories (e.g. road widening)

Comments

The proposed project involves replacing the SC 48 bridge over Dry Branch on existing alignment. The bridge was damaged during the October 2015 flood event and closed to traffic in the spring of 2016. A cultural resources survey was conducted by SCDOT archaeologists on April 2015, 2016. Dr. Adrienne Daggett (SHPO Transportation Liaison) assisted the Department with the field survey. The study area examined for the project measures 100' to each side of the road centerline and extends 1000' from each end of the bridge. Moderate to high probability areas were observed at the eastern and western ends of the corridor and were shovel tested where not impacted by previous residential development. The only artifact recovered during the investigation consisted of a small orthoquartzite Palmer projectile point. Shovel tests were excavated at 5 meter intervals surrounding the positive STP in cardinal directions but no artifacts were recovered. No additional fieldwork is necessary unless the proposed work extends outside the boundaries examined during the archaeological survey.

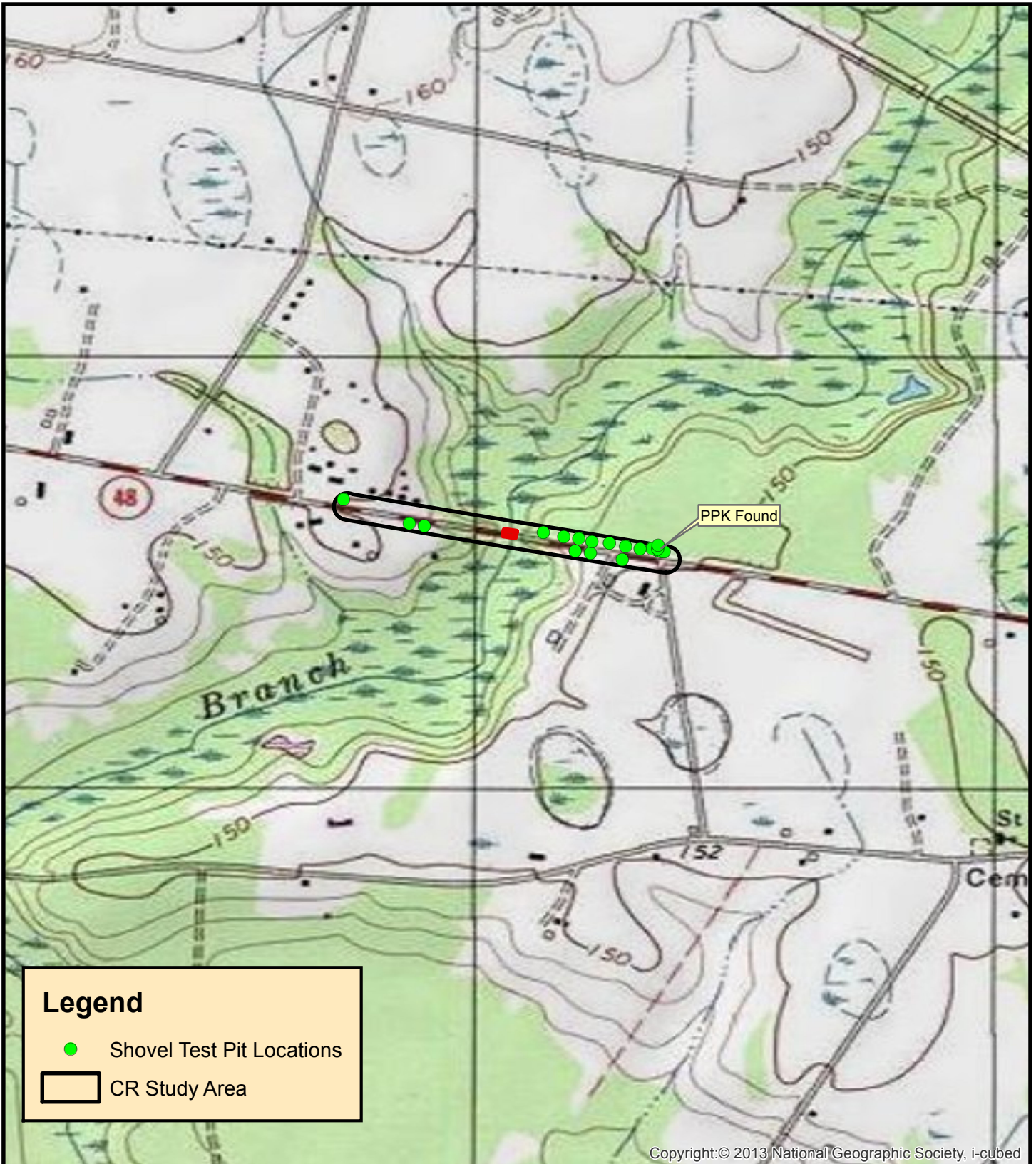
Effect Determination:

*SHPO consultation is required for all Type 3 projects and any project with a No Adverse or Adverse Effect Determination.

This screening form was developed to satisfy documentation requirements for Type I and Type II projects under a Programmatic Agreement between the Federal Highway Administration, the South Carolina State Historic Preservation Office, and the South Carolina Department of Transportation. For Type I and Type II projects that have no effect on historic properties, the completion of this screening form with supporting documentation (e.g. ArchSite Map) provides evidence of FHWA and SCDOT's compliance with Section 106 of the National Historic Preservation Act.

Prepared by:

Review Date:



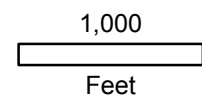
Date:
May 3, 2016



South Carolina Department of Transportation

TITLE

**Emergency Bridge Replacement
SC Route 48 over Dry Branch
Richland County, SC**



**Project ID: P029944
FHWA ER# SC16-1**

Biological Survey of Three Emergency Bridge Replacements on
S.C. Route 48 over Back Swamp,
Cedar Creek and Dry Branch in
Richland County, S.C.
May 9, 2016

Pursuant to Section 7 of the Endangered Species Act a field survey was conducted on the proposed new right of way. The following list of threatened (T) and endangered (E) species was obtained from the U.S. Fish and Wildlife Service:

Bald and Golden Eagle Protection Act (BGEPA)

Bald eagle (*Haliaeetus leucocephalus*)

Animals

Red-cockaded woodpecker (*Picoides borealis*) – E
Shortnose sturgeon (*Acipenser brevirostrum*) - E
Atlantic sturgeon (*Acipenser oxyrinchus*) - E
Wood stork (*Mycteria americana*) - T

Plants

Canby's dropwort (*Oxypolis canbyi*) - E
Rough-leaved loosestrife (*Lysimachia asperulaefolia*) - E
Smooth coneflower (*Echinacea laevigata*) - E
Michaux's sumac (*Rhus michauxii*) - E

At-Risk Species

Chamberlain's dwarf salamander (*Eurycea chamberlaini*)
Broad River spiny crayfish (*Cambarus spicatus*)
American eel (*Anguilla rostrata*)
Blueback herring (*Alosa aestivalis*)
Robust redhorse (*Moxostoma robustum*)
Rafinesque's big-eared bat (*Corynorhinus rafinesquii*)
Tri-colored bat (*Perimyotis subflavus*)
Bog spicebush (*Lindera subcoriacea*)
Carolina-birds-in-a-nest (*Macbridea caroliniana*)
Ciliate-leaf tickseed (*Coreopsis integrifolia*)
Georgia aster (*Symphotrichum georgianum*)
Purple balduina (*Balduina atropurpurea*)
Sandhills lily (*Lilium pyrophilum*)
Savannah lilliput (*Toxolasma pullus*)
Spathulate seedbox (*Ludwigia spathulata*)
Wire-leaved dropseed (*Sporobolus teretifolius*)
Southern hognose snake (*Heterodon simus*)

Methods

The project area was examined by GIS and reconnaissance methods on April 25 and May 6, 2016. Habitats analyzed were determined by each species' ecological requirements.

Results

The project consists of replacing three bridges on S.C. Route 48 in Richland County. The bridges are over Back Swamp, Cedar Creek and Dry Branch. The bridges were damaged by severe flooding in October 2015 and are currently closed due to safety concerns. The bridges will be replaced on existing location to reduce the footprint and impacts. The grades may be raised slightly which will require an additional 1' expansion of the toe of slope for approximately 200' on either side of each bridge. Minor amounts of streams or wetlands may be impacted by the bridge replacements.

This area of southern Richland County consists of a mixture of rural forest, residential development and farms. A disturbed power line right of way extends adjacent to each bridge either on the north or south side of the roadway. All three bridge projects will impact mature and immature forest, primarily palustrine forested wetlands along with uplands. Dominant species include the following: tupelo gum (*Nyssa aquatica*), red maple (*Acer rubrum*), box elder (*Acer negundo*), sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), black gum (*Nyssa sylvatica*), winged elm (*Ulmus alata*), loblolly pine (*Pinus taeda*), slippery elm (*Ulmus rubra*), black cherry (*Prunus serotina*), Chinese privet (*Ligustrum sinense*), aralia (*Aralia* sp.), cherry (*Prunus* sp.), arrowhead (*Peltandra virginica*), lizard's tail (*Saururus cernuus*), pickerelweed (*Pontederia cordata*), cane (*Arundinaria gigantea*), narrow-leaved chainfern (*Woodwardia* sp.), and blackberry (*Rubus argutus*).

According to the Heritage Trust database of endangered, threatened and rare species, there are no such species located in the vicinity of the project. The bald eagle nests near large bodies of water where it can fish, which do not exist in the immediate vicinity of the project. The red-cockaded woodpecker nests and forages in mature open pine forests, and the project will not impact any potential foraging habitat for the red-cockaded woodpecker. Wetlands in the project corridor provide wood stork habitat, however there are no known colonies nearby and no wood storks were observed. The Atlantic and shortnose sturgeons are found in estuarine and nearshore waters of the Atlantic Ocean and the river systems that drain into it. There is no riverine habitat in the project corridor that would provide habitat for the Atlantic and shortnose sturgeons. The streams that are traversed are too small to support these two species.

Canby's dropwort and rough-leaved loosestrife are found in or near wetlands, which exist in the project corridor. Rough-leaved loosestrife was not observed during project surveys. According to the USC Herbarium records, Canby's dropwort has been

found in Richland County, however, surveys were conducted too early in the growing season to observe Canby's dropwort. Smooth coneflower lives in open areas usually associated with circumneutral soils. There is no habitat for smooth coneflower in project right-of-way, since the soils in the area are acidic, the grass is well-maintained and the native herbaceous layer is greatly reduced, all of which would not allow smooth coneflower to survive. Smooth coneflower was not observed during project surveys. Michaux's sumac lives sandy or rocky open woods, possibly associated with basic soils. The project corridor is poor habitat for Michaux's sumac and none was observed. No endangered or threatened species were observed during the survey.

Based on lack of suitable habitat and/or no observations of the listed species during field surveys, results of the threatened and endangered species study indicate that the proposed action will have no effect upon any threatened or endangered species or critical habitats currently listed by the USFWS except for Canby's dropwort. Since there is suitable habitat for Canby's dropwort and historical occurrence of the species in the area, to ensure that the project will not affect this species, a future survey for Canby's dropwort should be conducted during its flowering season after mid-July. Due to the limited impacts of the bridge replacements on potential habitat for Canby's dropwort, the project may affect, but is not likely to adversely affect Canby's dropwort. SCDOT agrees to conduct another survey for Canby's dropwort during its flowering season before the project is under construction to ensure that the project will not affect Canby's dropwort. Concurrence of this biological conclusion must be obtained from USFWS.

Jeffrey West

May 9, 2016





