

FINAL SECTION 4(f) EVALUATION

INTERSTATE 73

From I-95 to the Myrtle Beach Region

1.0 INTRODUCTION

Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303 requires that prior to the use of any land from a publicly owned park, recreational area, wildlife or waterfowl refuge, or historic property or archeological site on or eligible for the National Register of Historic Places (NRHP), it must be determined that there is no prudent or feasible alternative which avoids such use and that the project includes all possible planning to minimize harm to these resources.

According to the Federal Highway Administration's (FHWA) Section 4(f) Policy Paper a Section 4(f) resource is "used" as follows: (1) a direct use occurs when land from a Section 4(f) site is permanently incorporated into a transportation project, (2) a temporary use occurs when there is a temporary occupancy of Section 4(f) property that is adverse in terms of the statute's preservationist purposes, or (3) a constructive use occurs when the proximity impacts of the transportation project on the Section 4(f) site are so severe that the protected activities, features, or attributes that qualify the resources for protection under Section 4(f) are substantially impaired (USDOT, 1989).

While the FHWA and SCDOT are not required to replace Section 4(f) resources by the *Department of Transportation Act of 1966* or applicable regulations, it is normally done as a mitigation measure for direct project impacts during the right-of-way acquisition process.¹ Mitigation costs should be a reasonable public expenditure and take into the account the severity of the impact to the Section 4(f) resource.²

In order for a park, recreational area, or wildlife or waterfowl refuge to qualify for protection under Section 4(f), it must be publicly owned and officially designated as a park, recreational area, or wildlife or waterfowl refuge. When these areas are owned by private institutions and individuals, even if such areas are open to the public, Section 4(f) does not apply. The FHWA does however strongly encourage the preservation of such privately owned lands (USDOT, 1989).

Historic resources that are listed on or eligible for listing on, the National Register of Historic Places (NRHP) are not required to be publicly owned in order to be protected under Section 4(f). Archeological sites must also be on or eligible for the NRHP and important for preservation in-place in order to be considered a Section 4(f) site. Determinations of eligibility for the NRHP have been coordinated with the South Carolina State Historic Preservation Officers.

¹ FHWA, Office of Planning, Environment, and Realty, *Section 4(f) Policy Paper*. March 1, 2005. <http://www.environment.fhwa.dot.gov/projdev/4fpolicy.asp> (September 13, 2007)

² *Ibid.*

This Section 4(f) Evaluation describes resources affected by the construction of Interstate 73 and provides an estimate of impacts. Avoidance alternatives and measures to minimize and mitigate harm are discussed.

The South Carolina Department of Transportation (SCDOT) proposes to construct a new interstate highway, I-73, in Dillon, Marion, and Horry Counties, South Carolina. The facility would extend from I-95 in Dillon County to S.C. Route 22 in Horry County. The road would accommodate a six-lane facility with corridors for future multimodal (rail) facilities and allowances for frontage roads, where needed. The interim design, which is proposed to be constructed initially, would provide two lanes of traffic in each direction. In the future, when traffic volumes increase to a point that additional lanes are necessary in order to maintain an acceptable level of service, an additional lane in each direction could be added within the right-of-way corridor. An estimated 400-foot wide right-of-way would be acquired where frontage roads would be needed. Where frontage roads are not required, an estimated 300-foot wide right-of-way would be adequate. (Refer to Chapter 1, Section 1.1.2, page 1-2)

1.1 Purpose and Need

The purpose of the proposed project is to provide an interstate link between I-95 and the Myrtle Beach region to serve residents, businesses, and tourists while fulfilling congressional intent in an environmentally responsible and community sensitive manner.

The following primary needs have been identified in connection with the proposed federal action:

- **System Linkage** – Improve national and regional connectivity by providing a direct link between I-95 and the Myrtle Beach region.
- **Economic Development** – Enhance economic opportunities and tourism in South Carolina.

These secondary needs have also been identified:

- **Hurricane Evacuation** – Facilitate a more effective evacuation of the Myrtle Beach region during emergencies.
- **Relieve Local Traffic Congestion** – Reduce existing traffic congestion on roads accessing the Myrtle Beach region.
- **Multimodal Planning** – Allow for future provision of a multimodal facility within the Interstate Corridor.

1.2 Description of the Proposed Action (Preferred Alternative)

Alternative 3 (Preferred Alternative) starts at the southernmost interchange with I-95, and from there extends southeast on the western side of Latta where it would have an interchange with U.S. Route 501, crosses to the east immediately north of Temperance Hill, then extends southeast where it would interchange with S.C. Route 41A. It continues southeast and would have an interchange with U.S. Route

76 on the western side of Mullins. Once south of Mullins it angles slightly east and crosses the Little Pee Dee River at the existing S.C. Route 917 crossing. It would have an interchange with Road S-308, then continues southeast on new alignment to an interchange with S.C. Route 22 near Bakers Chapel, about two miles west of the existing S.C. Route 701/S.C. Route 22 interchange. The interchange with S.C. Route 22 would be designed so that the traffic movement from I-73 to S.C. Route 22 would be the predominant movement through the interchange. Like all of the Build Alternatives, it would follow S.C. Route 22 to its terminus with U.S. Route 17 near Briarcliff Acres. (Refer to Figure 1)

The Preferred Alternative is one of three alternatives, in addition to Alternatives 5 and 7, indicated as preferred by SCDNR and USFWS. The SHPO has indicated this route is their preferred because of the lack of impacts to cultural resources.

2.0 SECTION 4(f) RESOURCES

2.1 Parks, Recreation Areas, or Wildlife Refuges

One site, the Little Pee Dee River Heritage Preserve, was identified within or adjacent to the Preferred Alternative. No other parks, recreational facilities, or wildlife refuges were found within or adjacent to the Preferred Alternative.

2.1.1 Little Pee Dee River Heritage Preserve is a property owned by SCDNR's Heritage Trust Program (Figure 1). The preserve can be used by the public for various activities including fishing, hunting, boating, hiking, camping, and wildlife viewing. Due to the location of the preserve in relation to the Little Pee Dee River system, the property also protects wetlands and species' habitats. The Preserve contains approximately 10,238 acres and is split into five tracts of land: Dargan, Vaughn, Tilghman, Ward, and Johnson. The Vaughn Tract constitutes 3,846 acres of the approximately 10,238 acre Preserve, and is situated on both sides of existing S.C. Route 917 roadway and the Preferred Alternative corridor (Refer to Figure 1).

Impact - The Preferred Alternative would impact the Vaughn tract portion of the Little Pee Dee River Heritage Preserve around the S.C. Route 917 crossing of the Little Pee Dee River. Approximately 30 acres of the Vaughn Tract would be taken to construct a crossing of the Little Pee Dee River that would parallel the existing S.C. Route 917 crossing on the south side. Public access to the preserve would be maintained; however, some recreational activities that utilize the river may be temporarily disrupted during construction.

Mitigation – A mitigation plan was developed in coordination with SCDNR, which agreed upon a 10:1 mitigation ratio for the 30 acres of Heritage Trust property impacted by the project. SCDOT would provide a monetary compensation for the 300 acres at a value of \$2,500 per acre, totaling \$750,000. SCDNR would use these monies to identify and purchase replacement property.

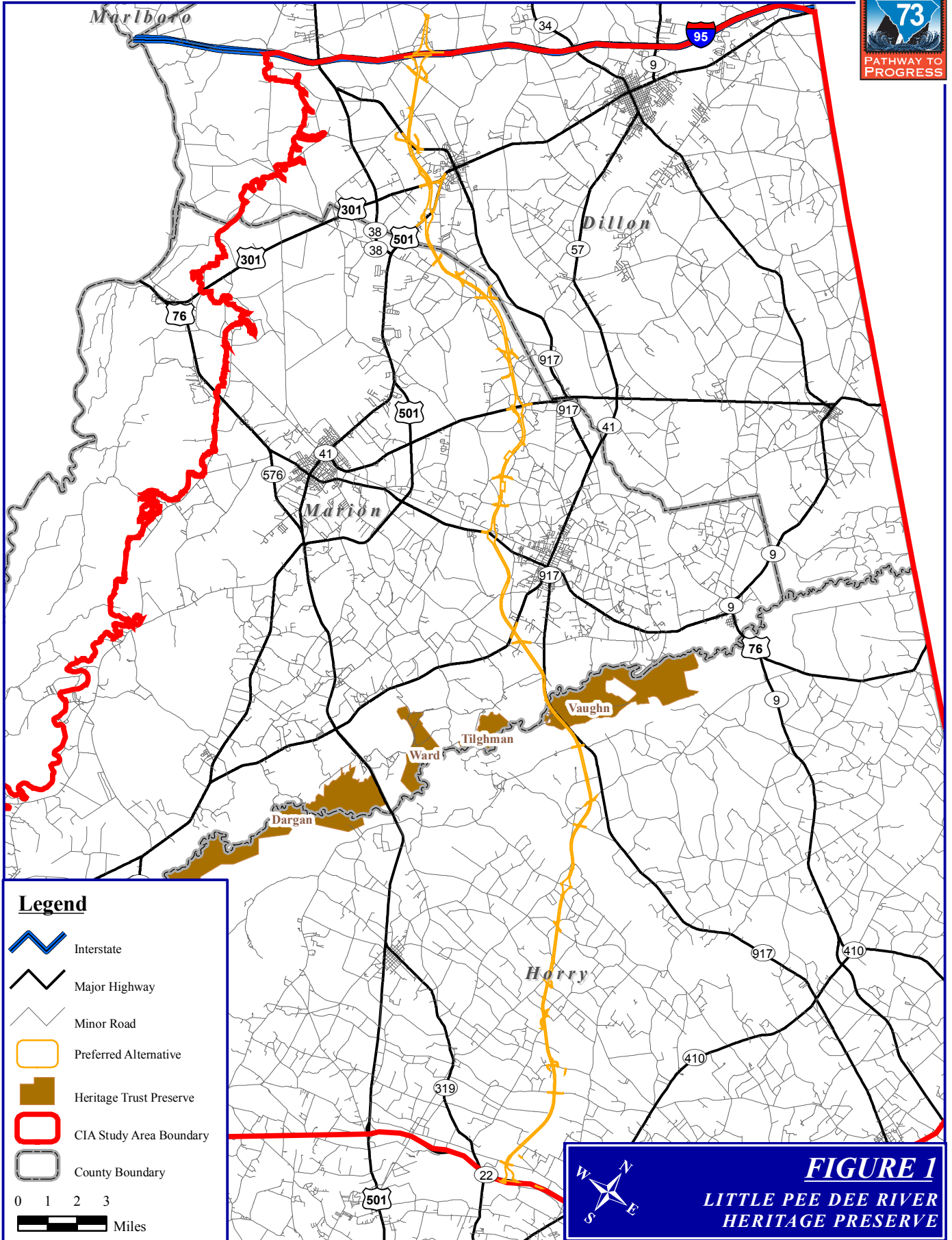


FIGURE 1
LITTLE PEE DEE RIVER
HERITAGE PRESERVE

3.0 ALTERNATIVES AND FINDINGS

3.1 Development of Alternatives at the Little Pee Dee River Crossing

In coordination with federal and state regulatory and resource agencies, the Corridor Analysis Tool (CAT) was used to develop corridors that took into consideration various factors including environmental (refer to Chapter 2, Section 2.4, page, 2-4). The corridors were composed of 63 segments that could be combined in various combinations to form 141 build alternatives.

Within the study area, the CAT consistently designated two suitable areas for crossing the Little Pee Dee River: one area just south of the S.C. Route 917 crossing, avoiding the Vaughn Preserve Tract and an area just north of the existing U.S. Route 501 crossing, which avoided several Carolina Bays, the Dargan Preserve Tract, and the Galivants Ferry Historic District (refer to Chapter 2, Figure 2-1, page 2-9).

The segments developed by the CAT were further evaluated using the Alternative Evaluation Categories (refer to Chapter 2, Section 2.1, page 2-1) to eliminate segments that had the highest impacts to wetland acreage and value, among other categories. The result was 33 segments that could be combined to form 10 reasonable build alternatives (refer to Chapter 2, Figure 2-6, page 2-20).

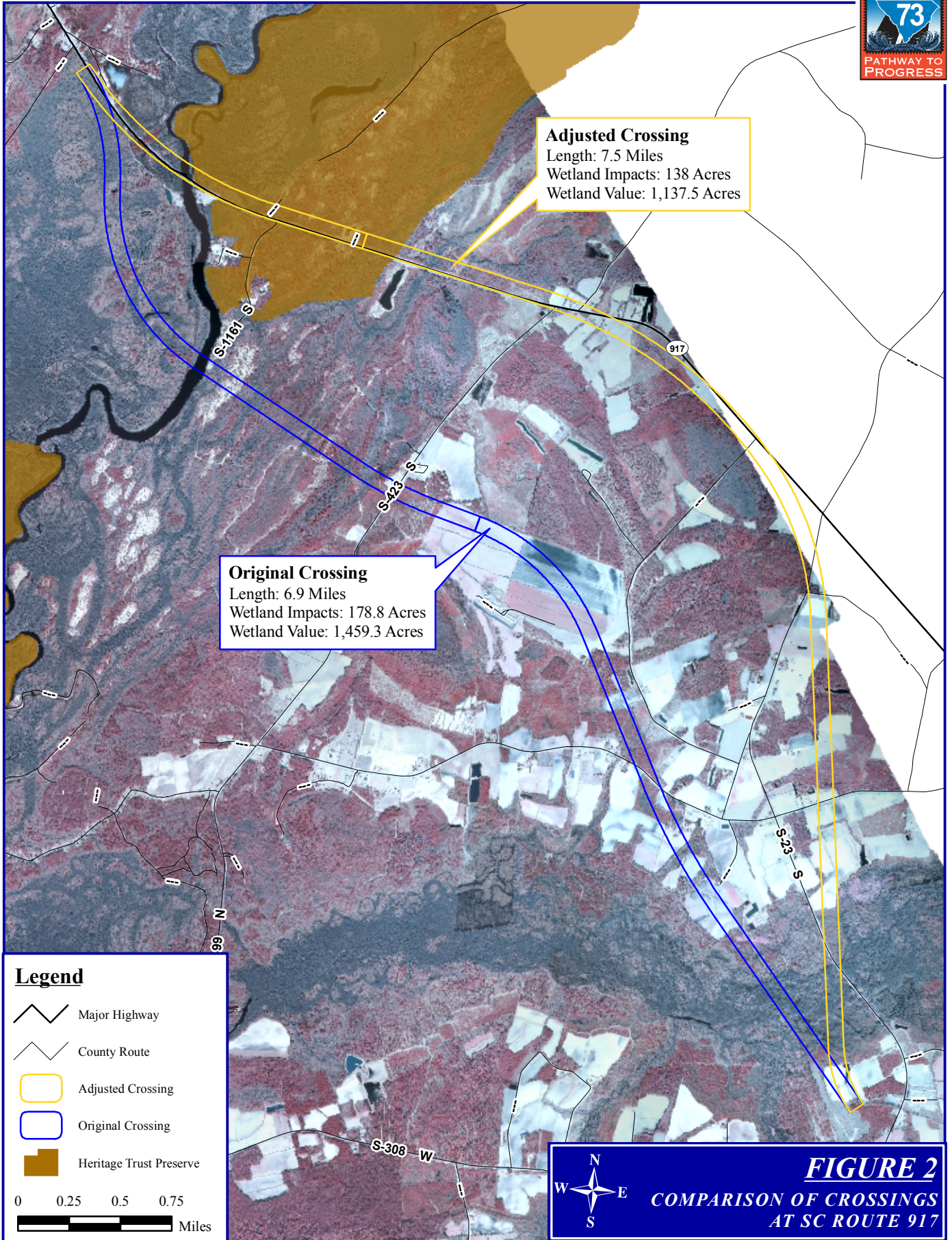
Additional categories were used to further evaluate the 10 alternatives and wetland information was modified to include ground-truthed (field-observed) wetland boundaries. In conjunction with the ACT, eight alternatives were carried forward to the DEIS, based upon potential impacts.

3.2 Measures to Minimize Impacts of the Alternatives at the Crossings of the Little Pee Dee River

In an effort to minimize wildlife habitat fragmentation at the crossing of the Alternatives at the Little Pee Dee River and associated swamp, adjustments were made to Alternatives 3 and 6 at the S.C. Route 917 crossing and to Alternatives 1, 2, 4, 5, 7, and 8 at the U.S. Route 501 crossing. Habitat fragmentation occurs when large parcels of wildlife habitat are divided into smaller parcels. This can create barriers to wildlife movement, limit access to foraging and nesting habitat and create population isolation.

3.2.1 Adjustment to Crossing at S.C. Route 917:

The Little Pee Dee River swamp has a high value as recognized by the resource agencies who gave this area a value of 9 on a scale with the highest value being 10. ACT members stated that the areas of the swamp outside of the Heritage Preserve are rated as highly as the areas within the Preserve. To minimize fragmentation of this type of habitat in the Little Pee Dee River swamp, an alignment for Alternatives 3 and 6 that paralleled the existing S.C. Route 917 crossing was investigated (See Figure 2). The corridor originally crossed 0.9



miles downstream of the existing S.C. Route 917 bridge in order to avoid the Vaughn Tract of the Heritage Preserve. By moving the alignment adjacent to the existing S.C. Route 917 causeway and mirroring the existing bridges, the overall length of bridges would be reduced, which would substantially reduce the construction cost (\$118 million); the revised crossing also reduce wetland impacts by 40.8 acres. However, this new alignment for Alternatives 3 and 6 would impact the Vaughn Tract.

At the January 19, 2006 ACT meeting, nine out of ten ACT members voted to move the alignment for Alternatives 3 and 6 at the Little Pee Dee River crossing to be parallel to S.C. Route 917 in order to minimize habitat fragmentation and to reduce wetland impacts at this site. The SCDNR abstained from voting. It was understood that because Alternatives 3 and 6 would now impact a Section 4(f) resource and coordination with the governing body of the Heritage Preserve, the Heritage Trust Advisory Board, would need to take place.

3.2.2 Adjustment to Crossing at U.S. Route 501:

Several adjustments were made to the alignment of the U.S. Route 501 crossing during the development of the project. The original alignment crossed the river upstream of the existing U.S. Route 501 and then continued between two Carolina Bays within the Little Pee Dee River swamp. To avoid these bays and minimize habitat fragmentation, the resource and regulatory agencies requested that the alignment be moved adjacent to U.S. Route 501. An alignment was considered that ran parallel to U.S. Route 501 and used the existing road as a frontage road; this alignment then shifted off of the existing route to avoid the Galivants Ferry Historic District. This change would increase the length by 0.6 miles, increase wetland impacts by about 6.5 acres, and increase the relocations by 24.

An alignment within the median of existing U.S. Route 501 was proposed and investigated. This alignment would shift off of existing U.S. Route 501 prior to crossing the river to avoid the Galivants Ferry Historic District, which lies on both sides of U.S. Route 501 just east of the river. (See Figure 2) Ultimately, the alignment crossed the river 0.6 miles upstream of the existing crossing, reducing habitat fragmentation within the swamp but not at the river crossing. This alignment changed the impacts from the above-mentioned parallel alignment by increasing wetland impacts by 12 acres, reducing relocations by 11, and increasing the length by 0.3 miles. It would have no significant reduction in cost. This alignment also would require the use of the existing U.S. Route 501 as one-way frontage roads. This design feature could be inconvenient to local residents and businesses because it would require traveling in one direction to reach a place to make a U-turn to go in the opposite direction. This configuration is also unusual for the area/state, which is likely to affect drivers' expectations and the safety of the roadway.

The adjustment to the alignment of the U.S. Route 501 crossing of the Little Pee Dee River and swamp was presented to the ACT for discussion at the August 24,