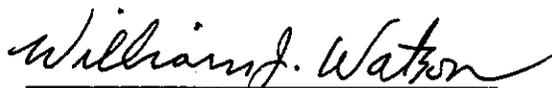
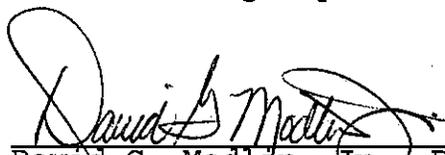


FEASIBILITY STUDY

New Connector Road  
From NC 211/133 to NC 87/133  
Brunswick County  
R-3324

Prepared by  
Program Development Branch  
Division of Highways  
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3/13/95  
Date

## II. NEED FOR PROJECT

The purpose of this project is to make a more direct connection between the existing NC 211/133 intersection and NC 87/133. This will eliminate the circuitous nature of the NC 133 corridor in this area. This connector was requested by the Town of Yaupon Beach, and a connector following the alignment of Alternate 1 is shown on the Brunswick County Thoroughfare Plan.

The Division Engineer, Division 3, requested that an alignment similar to that shown by Alternate 2 be studied and that the relocation of the access road to Sunny Point Army Terminal be studied as a safety improvement at the intersection of the access road with NC 87/133. During the 3 year period between September 1, 1991, and August 31, 1994, there were 3 accidents reported at this intersection. There were no fatal accidents reported during this period; however, 2 accidents resulted in 6 injuries. A traffic signal was installed at this intersection in the summer of 1994.

Land use along both alternate alignments, and in the area of the proposed access road relocation, is mainly undeveloped woodland. At the southwest project terminal (for both alternates) there is commercial development on all legs of the intersection. At the northeast terminal of Alternate 1, the proposed alignment passes through a mobile home park.

Both alternates appear to have extensive wetland involvement.

Traffic volume estimates for the proposed connector for the years 1994 and 2020 are 5,600 vehicles per day (vpd) and 13,500 vpd respectively. The Level of Service (LOS) is estimated to be Level C in 1994 and Level D in 2020.

## III. RECOMMENDATIONS

It is recommended that a connector be built between NC 211/133 and NC 87/133 in Brunswick County, following the alignment of Alternate 1 as shown on Figure 1. Alternate 1 is recommended because it is estimated to be \$1,700,000 less costly than Alternate 2. Also, based on the accident history at the intersection of NC 87/133 and the access road to Sunny Point Army Terminal, and based on the recent traffic signal installation at this location, it appears that the proposed relocation of the access road is not justified at this time.

Alternate 1 begins at the intersection of NC 211 and NC 133 and runs for 1.2 miles (1.9 km) on new location to the intersection of NC 87/133 and SR 1525. The proposed cross-section is a 2-lane rural section with a total pavement width

New Connector Road  
From NC 211/133 to NC 87/133  
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I. GENERAL DESCRIPTION

This preliminary study describes a proposed connector between NC 211/133 and NC 87/133 in Brunswick County. Two alignments were studied; both on new location. The location of the alternates is shown on Figure 1.

**Alternate 1 begins at the intersection of NC 211 and NC 133 and runs for 1.2 miles (1.9 km) on new location to the intersection of NC 87/133 and SR 1525.** The proposed cross-section is a 2-lane rural section with a total pavement width of 32 feet (9.8 m) including paved shoulders 4 feet (1.2 m) wide. The total shoulder width including paved shoulders will be 8 feet (2.4 m). It is anticipated that 8 residential and no business relocations will be required by this alignment. The required right-of-way width is 100 feet (30.5 m). The total cost including construction and right-of-way is estimated to be \$2,900,000.

**Alternate 2 begins at the intersection of NC 211 and NC 133 and runs for 2.0 miles (3.3 km) on new location to NC 87/133.** The proposed cross-section is a 2-lane rural section with a total pavement width of 32 feet (9.8 m) including paved shoulders 4 feet (1.2 m) wide. The total shoulder width including paved shoulders will be 8 feet (2.4 m). Also under Alternate 2, it is proposed to relocate the access road leading to Sunny Point Army Terminal. No residential or business relocations are anticipated as a result of this alignment. The required right-of-way width is 100 feet (30.5 m). The total cost including construction and right-of-way is estimated to be \$4,600,000.

This study is the initial step in the planning and design process for this project and is not the product of exhaustive environmental or design investigations. The purpose of this study is to describe the needs, recommend a treatment including costs, and identify potential problem areas that require consideration in the planning and design phases.

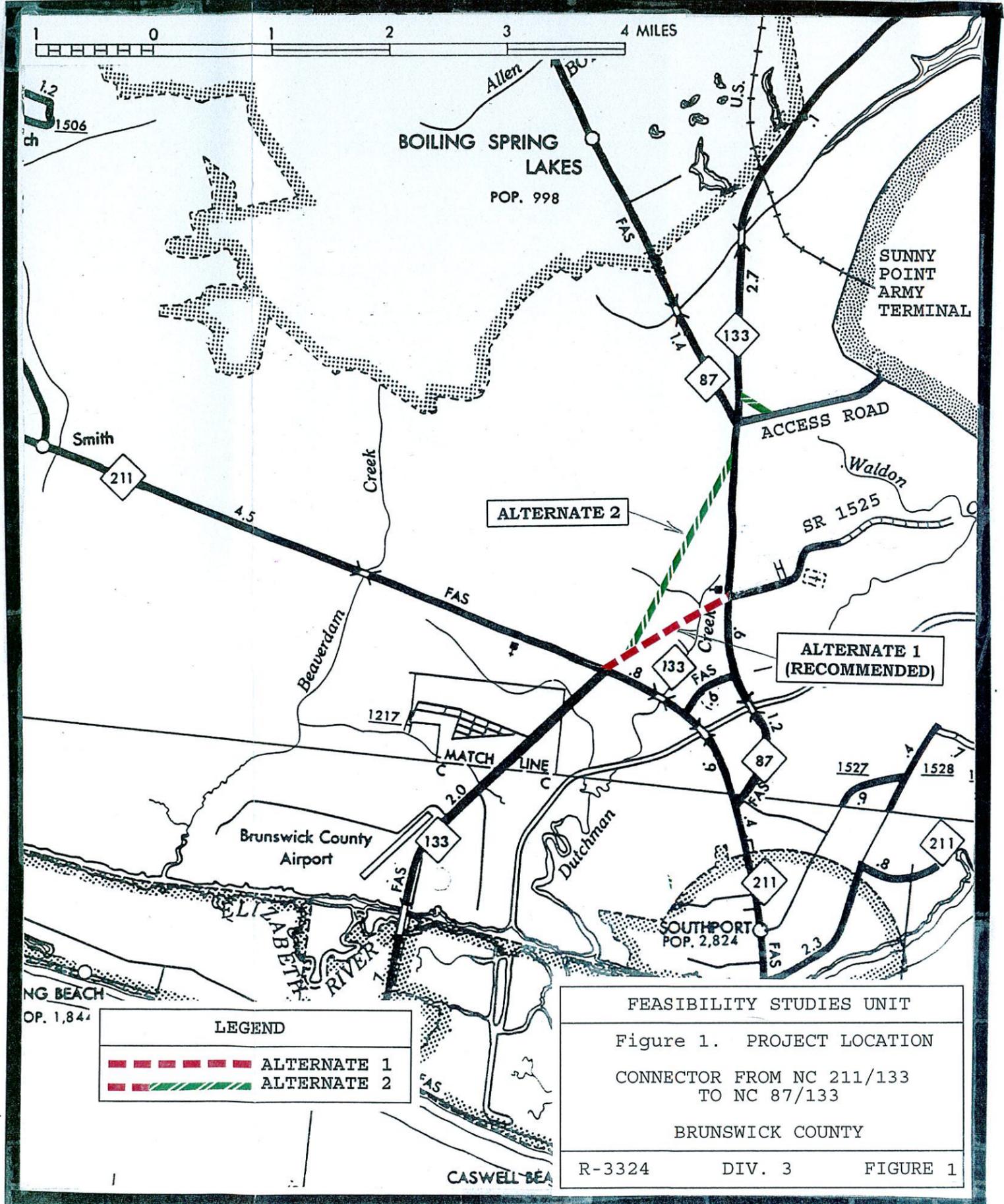
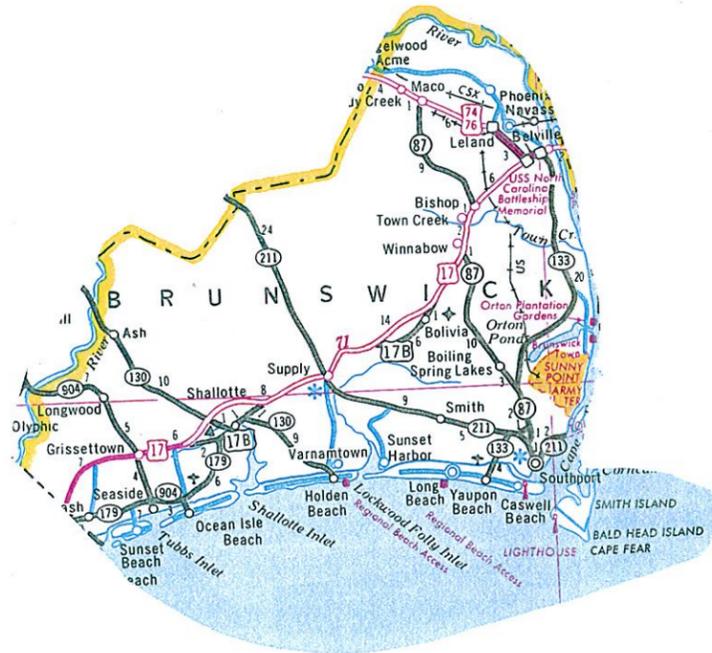
of 32 feet (9.8 m) including paved shoulders 4 feet (1.2 m) wide. The total shoulder width including paved shoulders will be 8 feet (2.4 m). It is anticipated that 8 residential and no business relocations will be required by this alignment. The required right-of-way width is 100 feet (30.5 m). The total cost including construction and right-of-way is estimated to be \$2,900,000.

Construction.....	\$2,200,000
Right-of-Way.....	700,000
Total Cost .....	\$2,900,000

#### IV. OTHER COMMENTS

An environmental screening was not conducted for this study. Both alternate alignments appear to have extensive wetland involvement, and a Corps of Engineers 404 Permit may be required. There were no historic properties identified. According to information from the Natural Heritage Program (Department of Environment, Health, and Natural Resources) two plant species may be located in the study corridor area that are likely to be listed as Endangered or Threatened.

For purposes of information, cost estimates were prepared for both alternate alignments, using a 5-lane rural cross-section. The right-of-way width for these estimates is 100 feet, the same used with the recommended, 2-lane cross-section. The total cost including construction and right-of-way, using the 5-lane cross-section, for Alternate 1 and Alternate 2, are \$4,400,000 and \$6,600,000 respectively.



LEGEND	
	ALTERNATE 1
	ALTERNATE 2

FEASIBILITY STUDIES UNIT

Figure 1. PROJECT LOCATION

CONNECTOR FROM NC 211/133  
TO NC 87/133

BRUNSWICK COUNTY

R-3324      DIV. 3      FIGURE 1