FEASIBILITY STUDY

NC 65
from west of SR 2371 (Old County Home Rd.)
to NC 158-29 Business (Freeway Drive)
Rockingham County
R-3414

Prepared by the
Program Development Branch
Division of Highways
N. C. Department of Transportation

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Date

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I. General Description

This feasibility study describes widening NC 65 from 0.6 miles (1.0 km) west of SR 2371 (Old County Home Rd.) to US 158-29 Business (Freeway Drive), a distance of 5.5 miles (8.9 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane, 64-foot (19.5 m) curb and gutter section with 8-foot (2.4-m) berms on 100 feet (30.5 m) of right-of-way with no access control. It is anticipated that there will be 11 residences and 5 businesses relocated due to this project. The total cost of the project, including construction and right-of-way, is estimated to be $19,500,000.

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 proposed project including costs, and to identify potential problems that may require consideration in the planning and design phases.

II. Need for Project

The purpose of this project is to improve traffic flow and to accommodate growth between Reidsville and Wentworth. This project is supported by the City of Reidsville and the Rockingham County Economic Development Commission.

NC 65 is designated as a major thoroughfare in the Reidsville Thoroughfare Plan and as a minor urban arterial in the North Carolina Statewide Functional Classification System.

There is a high concentration of development in the vicinity of the intersection of NC 65 and NC 87. The largest generators of traffic are the Rockingham County Government Center, the Rockingham County Community College, and Rockingham Senior High School. There is also a correctional facility, a National Guard Armory, and a Division of Highways maintenance facility in this area. There is also a quarry operated by APAC-Martin Marietta located to the east of SR 1001 (Sandy Cross Rd.).

NC 65 is currently a two-lane, 24-foot (7.3-m) wide roadway with soil shoulders. The right-of-way throughout the project varies between 60 and 100 feet (18.3 and 30.5 m).

Bridge No. 126 carries US 158-29 Business over NC 65-87 at the eastern terminus of the project. This bridge is 125 feet (38.1 m) long and has an under horizontal clearance of 44 feet (13.4 m). Built in 1956, this structure has a sufficiency rating of 43.9.

TIP project U-2560 A is currently under construction in the vicinity of the intersection of NC 65 and NC 87. This project will construct a three-lane, 40 foot (12.2 m) curb and gutter section along NC 65 with additional turn lanes and a traffic signal at NC 87. This project will increase the current right-of-way along NC 65 to 80 feet (24.4 m). TIP project R-2580 A will make improvements along NC 158-29 Business and is scheduled for post-year construction.

There is a potentially historic graveyard located in the northwest quadrant of the intersection of NC 65 and SR 2371. The Old Rockingham County Home Cemetery has approximately 75 unmaintained graves marked with small headstones near the existing right-of-way. Rockingham County Veterans Memorial Park is located west of this cemetery on NC 65 and may also present a right-of-way conflict.

The 1995 Average Daily Traffic (ADT) along NC 65 varies from 7,100 to 12,600 vehicles per day (vpd). For the design year 2020, the estimated traffic volume on NC 65 will range between 14,400 and 25,600 vpd. Truck traffic is estimated to make up 7% of daily traffic.

Currently NC 65 is operating at Level of Service (LOS) D. If no improvements are made, it is projected that the roadway will operate at LOS E in the design year 2020. If NC 65 is widened to a five-lane curb and gutter section, the facility will operate at LOS A in the current year and at LOS B in the design year 2020.

During the three-year period from May 1992 to April 1995, there were 122 accidents reported on NC 65 within the project limits. There were 116 injuries reported as a result of these accidents. No fatalities were reported. The accident rate along NC 65 within the project limits is 190.12 accidents per 100 million vehicle miles (acc/100mvm). This compares with the 1994 statewide rate of 282.10 acc/100mvm for urban North Carolina routes.

III. Recommendations / Description of Project

It is recommended to widen NC 65 from 0.6 miles (1.0 km) west of SR 2371 (Old County Home Rd.) to US 158-29 Business (Freeway Drive), a distance of 5.5 miles (8.9 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane, 64-foot (19.5 m) curb and gutter facility with 8-foot (2.4-m) berms on 100 feet (30.5 m) of right-of-way with no access control.

The realignment of two intersections is recommended in order to improve safety conditions. SR 1001 (Sandy Cross Rd.) should be shifted westward to align with SR 1998 (Wentworth St.). Free-flow movements at this intersection should also be eliminated. The alignment of SR 2413 (Vance St.) should be shifted approximately 575 feet (175.3 m) to the east to eliminate the skewed intersection at NC 65-87. SR 2003 (Gibbs Rd.) should also be adjusted to intersect with the realigned SR 2413.

It is recommended to install a new traffic signal at the intersections with SR 2371 (Old County Home Rd.). A new signal is also recommended at the intersection of SR 1001 (Sandy Cross Rd.) and SR 1998 (Wentworth St.). The traffic signal that will be installed under U-2560 A at the NC 87 intersection should also be upgraded.

It is anticipated that 11 residences and 5 businesses will be relocated due to the project.

The total cost of the above improvements is as follows:

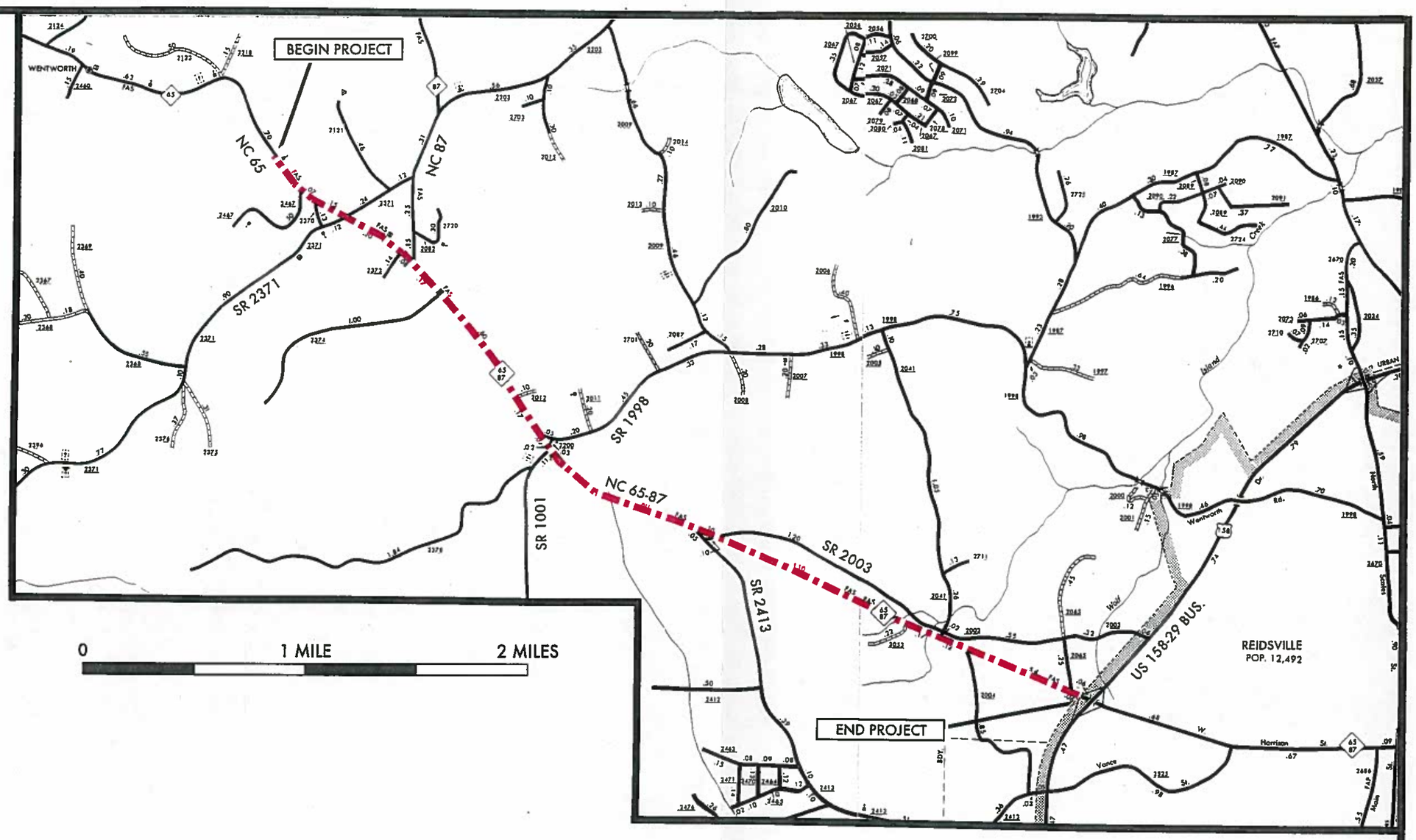
Construction	$ 13,300,000
Right-of-Way	$ 6,200,000
Total Cost	$ 19,500,000

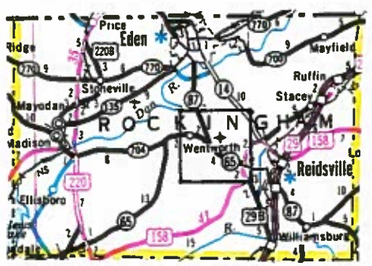
IV. Other Comments

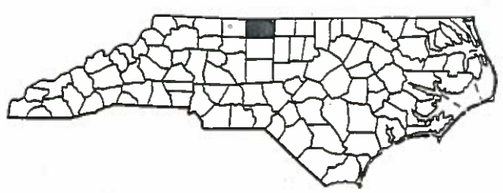
A five-lane shoulder section was not considered for this project due to the density of residential and commercial development on the western portion of the project. Design speed was not a factor in this decision since the current posted speed is 45 mph (70 kph) throughout most of the project.

An environmental screening was not conducted for this study.

No special accommodation for bicycles is recommended on this project.







FEASIBILITY STUDIES UNIT

R-3414
NC 65
FROM WEST OF SR 2371 (OLD COUNTRY HOME RD.)
TO US 158-29 BUSINESS (FREEWAY DRIVE)
REIDSVILLE

DIVISION 7	ROCKINGHAM COUNTY	FIGURE 1