

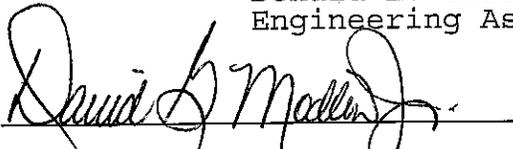
FEASIBILITY STUDY

Rocky Mount  
North-South Corridor  
SR 1250 and SR 1400  
From SR 1407 to US 64  
Edgecombe County  
U-3327

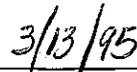
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## I. GENERAL DESCRIPTION

This preliminary study describes proposed improvements to a "North-South Corridor" in Rocky Mount. It is proposed to widen SR 1250 from US 64 to NC 97 and SR 1400 from NC 97 to SR 1407, a distance of approximately 6.4 miles (10.3 km). Please see Figure 1 for the project location. A two-lane roadway with 24 feet (7.3 m) of pavement and 8-foot (2.4-m) shoulders including 2-foot (0.6-m) paved shoulders, with improved alignment in three locations, on a 100-foot (30.5-m) wide right of way was studied.

The total estimated cost for the project including construction and right of way is \$ 8,200,000 (\$3,300,000 for construction and \$4,900,000 for right of way).

Improvements to SR 1250 and SR 1400 considered in this preliminary study would primarily improve safety in the corridor. Capacity of the existing roadway is expected to be Level of Service D based on design year 2020 traffic. The studied improvements would result in a design year 2020 Level of Service C. It is estimated that there will be 16 residences and 1 business relocated as a result of improving SR 1250 and SR 1400 to 24 feet (7.3 m) of pavement with 8-foot (2.4-m) shoulders.

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 problem, recommend a treatment including costs, and identify potential problem areas that require special consideration in the planning and design phases.

## II. NEED FOR PROJECT

The purpose of this study is to improve the traffic carrying capacity and accident experience on SR 1250 and SR 1400. The project was requested by Edgecombe County.

SR 1250 and SR 1400 are designated major thoroughfares on the Rocky Mount Thoroughfare Plan. Within the study limits, the "corridor" is classified as a minor arterial within the Rocky Mount City Limits and a minor collector outside the City Limits according to the North

Carolina Statewide Functional Classification System. Development on SR 1250 and SR 1400 is mostly residential, with very little commercial development.

The existing north-south corridor of SR 1250 and SR 1400 is a two-way, two-lane roadway. Pavement widths vary from 18 to 24 feet (5.5 to 7.3 m) with 4 to 6-foot (1.2 to 1.8-m) soil shoulders.

There are two structures requiring alterations in this project. Bridge Number 007 carries SR 1250 over the Tar River. It has a length of 238 feet (75.6 m), a clear deck width of 24 feet (7.3 m), and a sufficiency rating of 37.3 out of a possible 100. A rating of less than 50 warrants replacement. Bridge Number 128 is a double 10 x 12 box culvert with a sufficiency rating of 99.5. The culvert carries Beech Branch Creek under SR 1400. The culvert can be extended to accommodate the new roadway width.

The Average Daily Traffic (ADT) on SR 1250 and SR 1400 is estimated to be 5,300 vehicles per day (vpd) in 1994, and 7,200 vpd in 2020.

SR 1250 and SR 1400 currently operate at a Level of Service (LOS) C based on the 1994 traffic volumes. Without the proposed improvements, SR 1250 and SR 1400 will operate at a LOS D based on 2020 traffic projections. With the proposed improvements, a LOS C will be attained for 1994, and will be maintained through the design year 2020.

During the period from April 1, 1991, through March 31, 1994, there were 33 accidents reported on SR 1250. This resulted in a total accident rate of 365 accidents per 100 million vehicle miles (Acc/100 MVM). During the same period, there were 39 accidents reported on SR 1400, resulting in a total accident rate of 412 Acc/100 MVM. The statewide average for secondary roads is 311 Acc/100 MVM. The most prevalent accident types for SR 1250 and SR 1400 were "ran off road" (15% & 44% respectively) and "angle" (21% & 13% respectively). The wider cross section and improved alignment will reduce the potential for these type accidents.

### III. STUDIED ALTERNATE

The studied alternate was to widen SR 1250 from US 64 to NC 97 and SR 1400 from NC 97 to SR 1407, a distance of approximately 6.4 miles (10.3 km). A two-lane roadway with 24 feet (7.3 m) of pavement and 8-foot (2.4-m) shoulders including 2-foot (0.6-m) paved shoulders, with improved alignment in three locations, on a 100-foot (30.5-m) wide right of way was the studied cross-section. Widening was considered symmetrical about the existing centerline.

It is estimated that there will be 16 residences and 1 business relocated due to this project. The total estimated cost including construction and right of way is \$ 8,200,000 and is broken down as follows:

Construction .....	\$ 3,300,000
Right of Way .....	4,900,000
Total Cost .....	\$ <u>8,200,000</u>

#### IV. OTHER COMMENTS

An environmental screening was not conducted for this study; however, no historic properties or wetlands are anticipated.