FEASIBILITY STUDY

Monroe, Northern Loop
From US 74 to SR 1751 at SR 1763
Union County, U-2549

Prepared by
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I. GENERAL DESCRIPTION

This report covers a preliminary study of the proposed Monroe Northern Loop. The project begins at US 74 on the west side of Monroe, runs around the northern part of the city, and ties into SR 1763 at SR 1751 (see Figures 1 & 2). The project is approximately 4.7 miles long. It is included in the 1990-1996 Transportation Improvement Program for feasibility study and/or right-of-way protection. It is not currently funded for design, right-of-way acquisition, or construction.

II. PURPOSE OF PROJECT

Route Characteristics

The proposed loop will provide a major east-west route through northern Monroe, relieving heavily travelled streets in Monroe including US 74-601. In combination with other roads, the Northern Loop will function as part of a loop facility encircling the City of Monroe, which will provide relief to many of the existing routes through town when it is completed. The Northern Loop is classified a major thoroughfare on the Monroe Thoroughfare Plan which was adopted in September, 1989.

Traffic Volumes and Capacity

The projected traffic volumes on the proposed Northern Loop range from 9,800 to 11,500 vehicles per day (vpd) in 2010 over most of the project length. The proposed Secrest Avenue extension, which is part of the loop facility, will divert the majority of the traffic from the eastern end of the project when it is built leaving the easternmost portion of the project with a projected traffic volume of 3500 vpd in 2010. With two lanes, the connector should operate at Level of Service C or better throughout much of the planning period. However; by the end of the period, all but the easternmost portion of the project will need to be widened to multi-lanes in order to maintain a desirable level of traffic servuce.

Need for Project

The proposed Northern Loop is a vital element in the City of Monroe's Thoroughfare Plan. It is part of a loop facility that will encircle the city when completed. The construction of the loop is also needed to provide relief for the growing problem of congestion on the existing routes, and US 74-601 in particular.

III. RECOMMENDATIONS AND COSTS

It is recommended a Northern Loop be built in Monroe from US 74 at Dickerson Boulevard to SR 1751 at SR 1763. The proposed alignment (shown on Figure 2) is on new location with the exception of a 0.85 mile section near the center of the project that utilizes Stafford Street (SR 1624). It is recommended the alignment of SR 1763 be shifted approximately 100 feet westward at its intersection with SR 1751 to allow the Loop to be shifted away from the potentially historic house located at this intersection. The recommended cross section is a four-lane divided roadway with a 30-foot depressed median except for the portion of the project utilizing Stafford Street where a five-lane cross section is recommended and the portion east of Secrest Avenue Extension where a two-lane cross section is recommended. Curb and gutter is recommended on the outside of the four and five-lane sections to minimize right-of-way requirements. A 130-foot right-of-way is anticipated for the median sections and a 100-foot right-of- way for the five-lane section. No reduction in right-of-way width is recommended on the two-lane portion of the project. If for any reason the Secrest Avenue extension is not built in the future, the easternmost portion of the project will need to be upgraded to a multi-lane cross section. It is anticipated new traffic signals will be needed at the intersection of the project with US 601, NC 200, and SR 1751. The existing signals at US 74 will need to be upgraded in conjunction with the project.

The estimated costs of the project are as follows:

Construction	$ 8,400,000
Right-of-Way	1,400,000
TOTAL	$ 9,800,000

The construction cost includes engineering and contingencies, and the right-of-way cost includes relocation, acquisition, and utility costs.

IV. ALTERNATIVES CONSIDERED

In addition to the four-lane divided alternative recommended above, a five-lane curb and gutter cross section was considered. The construction cost of this alternative is estimated to be the same as the recommended cross section. However; the reduced right-of-way required is estimated to cost $170,000 less. The traffic carrying capability of this alternative is similar to the recommended design. The primary differences are related to the control of left-turning traffic and aesthetics. The divided cross section is also less susceptible to pressure for strip commercial development. Due to the better control of development and improved aesthetics, it is felt the median was worth the relatively small increase in cost.

V. STAGING

If the total project cost is too high to build initially, the project could be staged as a two-lane roadway with sufficient right-of-way to contain the recommended cross section. The estimated construction cost for a two-lane roadway is $5,100,000.

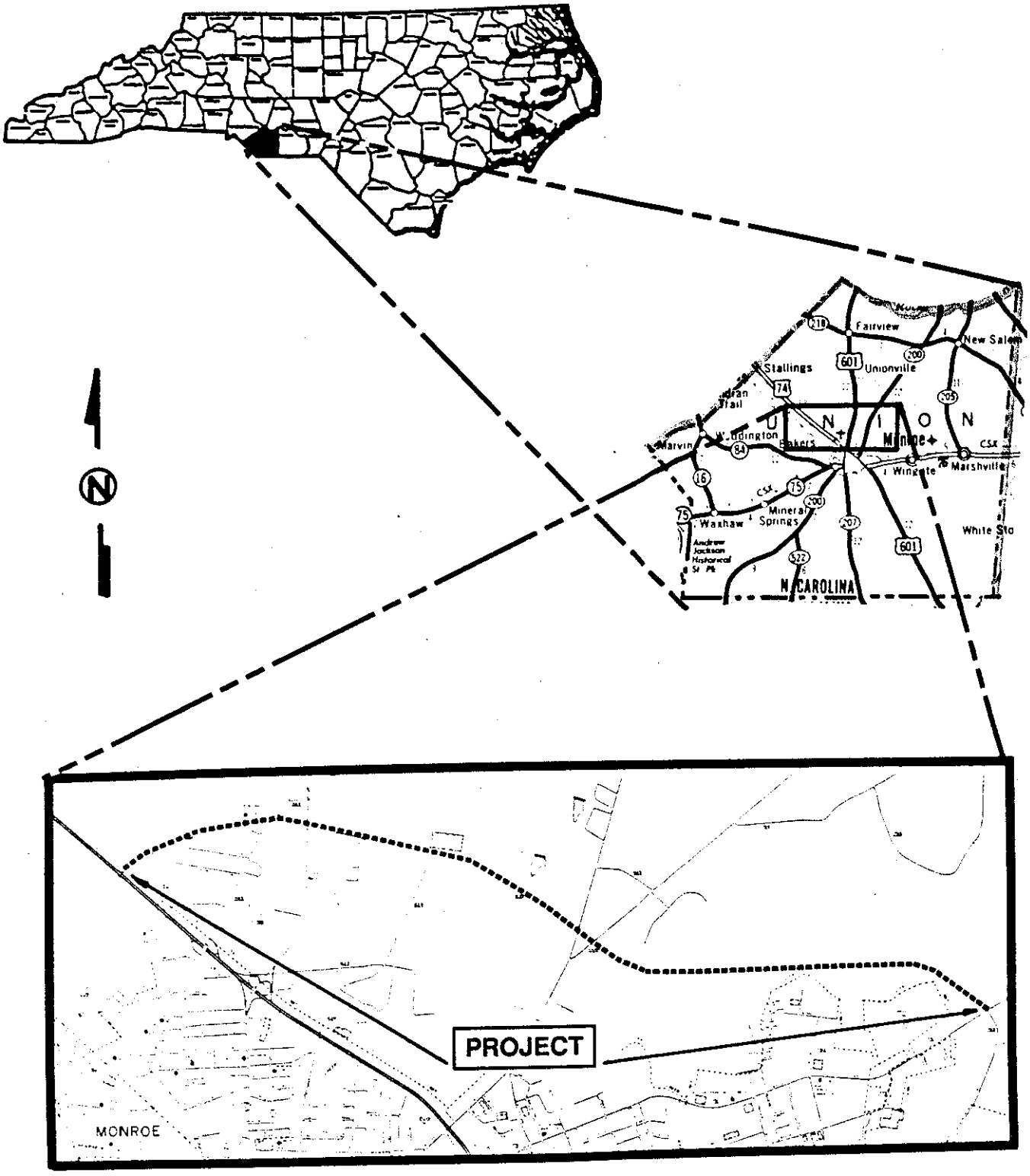
VI. ENVIRONMENTAL EFFECTS

The implementation of the proposed project is not expected to result in any significant impact on the environment. The project will require the relocation of 4 residences and 2 businesses regardless of which alternative is used. The project will result in increased noise levels for development near the proposed roadway. Limited wetland involvement can be expected at the crossing of several small streams. Although the recommended alignment is shifted away from the potentially historic house located at the eastern end of the project, the project may have an impact on this site. Other impacts will be primarily related to the actual construction of the proposed roadway. These include minor erosion and siltation and increased noise levels from construction machinery.

VII. FUTURE ACTIVITIES

If the project is to be implemented at a future date, all feasible alternatives and their associated impacts will need to be evaluated in a planning/environmental document prior to that time, and a decision made as to the most appropriate improvement.

RBD/plr



	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANNING AND ENVIRONMENTAL BRANCH
MONROE' NORTHERN LOOP FROM US 74 TO SR 1751 AT SR 1763 UNION COUNTY, U-2549	
0 mile 1/2	FIG. 1


LAKE STEWART
PROJECT
STAFFORD STREET
SECREST AVENUE EXTENSION
POTENTIALLY HISTORIC HOUSE
DICKERSON BOULEVARD
MONROE
SEWAGE PLANT
GOLF COURSE
STEWARTS
CREEK
BEARSKIN
RICHARDSON
SEABOARD COAST LINE
RAILROAD
CITY LIMIT
SHOPPING CENTER
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