

FEASIBILITY STUDY

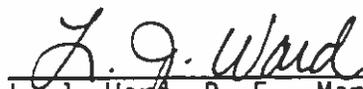
US 74 Relocation  
From East of SR 1959  
To North Rutherford Street  
In Wadesboro, Anson County, R-2556

Prepared by  
Planning and Research Branch  
Division of Highways  
N. C. Department of Transportation



\_\_\_\_\_  
R. B. Davis, P. E.  
Unit Head, Project Planning

2-19-91  
Date



\_\_\_\_\_  
L. J. Ward, P. E., Manager  
Planning and Environmental Branch

US 74 Relocation  
From East of SR 1259  
To North Rutherford Street  
In Wadesboro Anson County, R-2556

I. GENERAL DESCRIPTION

This report covers a preliminary study of the proposed relocation of US 74 on the western entrance to Wadesboro. The project extends from just east of SR 1259 to North Rutherford Street and is approximately 1.2 miles in length (see Figures 1 & 2). It is included in the 1991-1997 Transportation Improvement Program (T.I.P.) 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

Existing Route Characteristics

US 74 is a major east-west route through southern North Carolina. In the project area, US 74 serves the multiple functions of being a radial route into Wadesboro, a local cross-town route, and a through route for east-west travel in the area. The existing highway is primarily a five-lane curb and gutter cross section. A future US 74 bypass of Wadesboro is intended to serve through traffic leaving the existing route to serve local traffic. The future bypass is included in the T.I.P. for right-of-way protection (R-2411). The proposed US 74 relocation is classified a major thoroughfare on the recommended 1989 Wadesboro Thoroughfare Plan which has not yet been adopted. It was not shown on the adopted 1965 Thoroughfare Plan.

Other Projects Affecting US 74 Relocation

There is a project (R-2013) to relocate US 52 - NC 742 from existing US 74 to the intersection of US 52 and NC 742 (see Figure 2). Right-of-way acquisition is presently underway and construction is scheduled to begin in FY 1992.

Traffic Volumes, Capacity, and Accident Record

The current traffic volumes on existing US 74 range from a low of 13,300 vehicles per day (vpd) near the western end of the project to a high of 20,400 vpd near the center of the project. The projected traffic volume on the proposed US 74 relocation is 2,100 vpd in 2010 assuming the US 74 bypass is built. If the bypass is not constructed, the projected traffic volume on the project is estimated to range from 8,000 to 10,000 vpd. With the current traffic volumes, US 74 is operating at an acceptable level of service. However; without improvements, the level of traffic service will soon deteriorate as traffic volumes continue to grow. The future problem with congestion on US 74 through Wadesboro will best be

relieved by the construction of the proposed bypass of town (project R-2411). If the bypass is not built, the US 74 relocation will provide relief to a lesser degree.

During the period from January 1, 1986 through November 30, 1989, a total of 245 accidents were reported on existing US 74, including 2 fatal accidents and 96 injury accidents. This resulted in an accident rate of 667.6 accidents per 100 million vehicle miles (acc/100mvm), compared to a statewide average of 396.2 acc/100mvm for all four-lane or wider, undivided, urban US routes over a similar period. The most common accident types were rear-end collisions, angle accidents, and accidents involving left turns.

### Need for Project

The US 74 relocation project will provide an improved entrance into Wadesboro from the west and eliminate the existing sharp turn at eastern end of the project. The project will also relieve the growing problem of congestion on the existing route and enhance safety for motorists in Wadesboro.

### III. RECOMMENDATIONS AND COSTS

The recommended alignment for the proposed relocation of US 74 is shown on Figure 2. The proposed improvement should be a four-lane, divided roadway with a 30-foot median. In conjunction with the relocation of US 74, a connector to relocated US 52 - NC 742 (R-2013) should also be built. The recommended cross section for this connector is a 36-foot pavement with 12-foot shoulders to match project R-2013 and provide left-turn lanes at existing and relocated US 74. A 120-foot right-of-way is anticipated for the proposed US 74 relocation, and a 100-foot right-of-way is anticipated for the connector to US 52 - NC 742. It is anticipated traffic signals will be needed at the junction the proposed project with existing US 74 west of town, the US 52 - NC 742 connector, existing US 74 in town, and Rutherford Street.

The estimated costs of this project are as follows:

	US 74 Relocation	US 52 Connector
Construction	\$4,100,000	\$ 600,000
Right-of-Way	1,600,000	700,000
TOTAL	\$5,700,000	\$1,300,000

The construction cost includes engineering and contingencies and the right-of-way cost includes relocation, acquisition, and utility costs. The cost estimates were based on using curb and gutter on the outside. The alternative of using shoulders and a wider right-of-way should also be considered during the planning of the project.

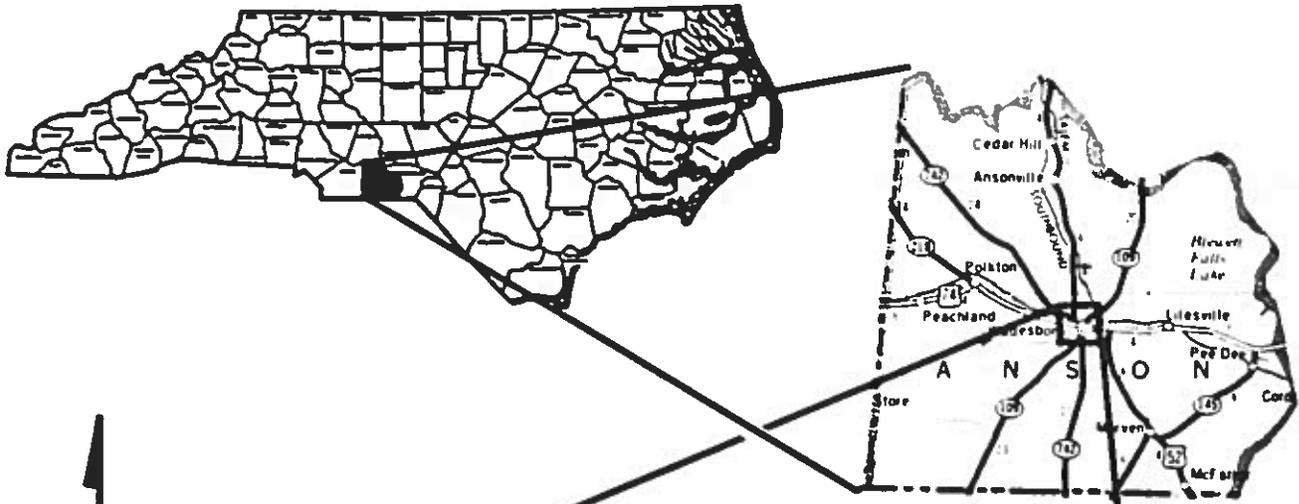
#### IV. ENVIRONMENTAL EFFECTS

The implementation of the proposed project is not expected to result in any significant impact on the environment. The US 74 relocation will require the relocation of an estimated 5 residences and 1 business, and the US 52 connector will require the relocation of an additional business. The project will also result in increased noise levels for development near the proposed roadways. Wetland involvement can be expected where the project crosses Culpepper Creek. 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.

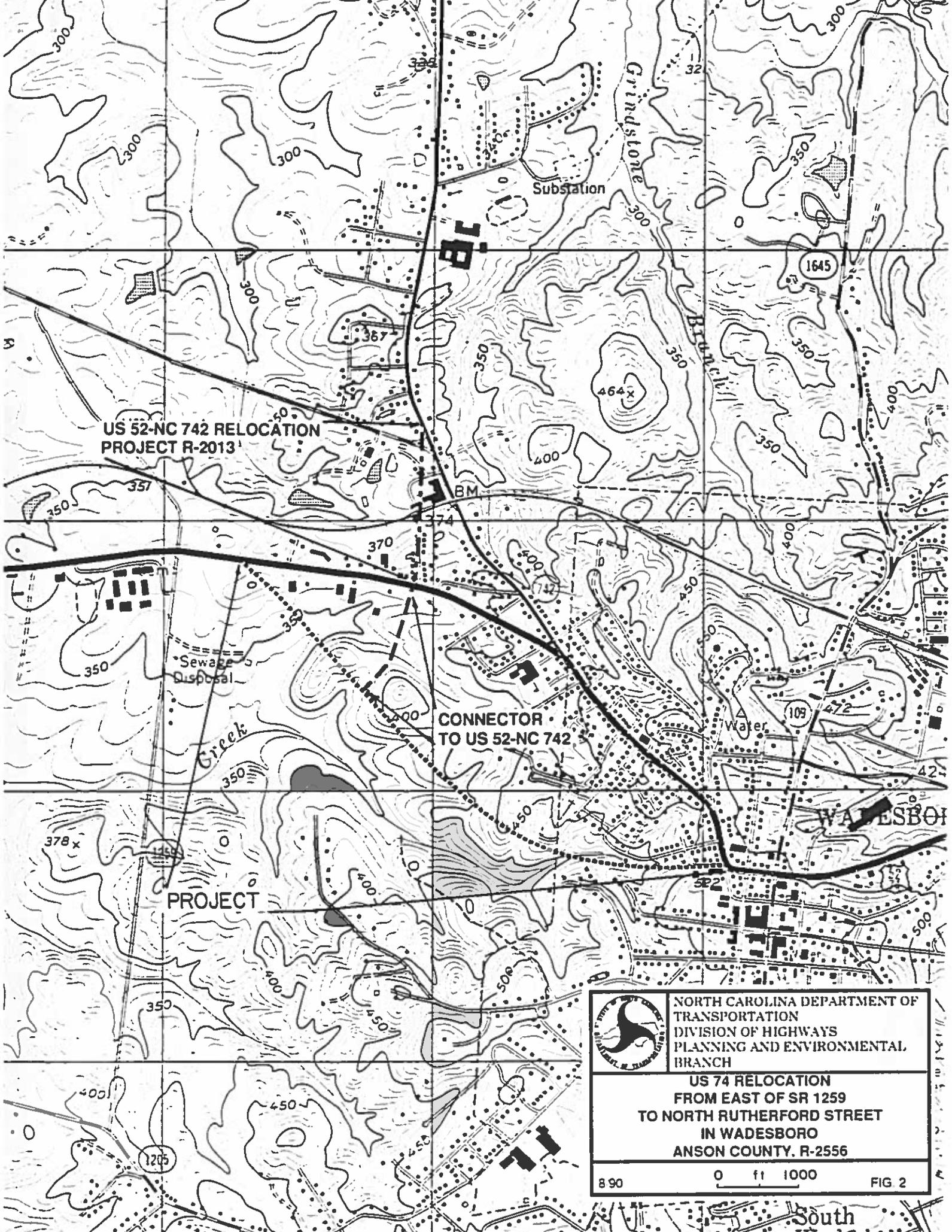
#### V. FUTURE ACTIVITIES

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/rfm



	<p>NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANNING AND ENVIRONMENTAL BRANCH</p>
	<p>US 74 RELOCATION FROM EAST OF SR 1259 TO NORTH RUTHERFORD STREET IN WADESBORO ANSON COUNTY, R-2556</p>
	<p>FIGURE 1</p>



US 52-NC 742 RELOCATION  
PROJECT R-2013

Substation

Sewage  
Disposal

CONNECTOR  
TO US 52-NC 742

PROJECT

WAILESBO



NORTH CAROLINA DEPARTMENT OF  
TRANSPORTATION  
DIVISION OF HIGHWAYS  
PLANNING AND ENVIRONMENTAL  
BRANCH

US 74 RELOCATION  
FROM EAST OF SR 1259  
TO NORTH RUTHERFORD STREET  
IN WAILESBO  
ANSON COUNTY, R-2556

8 90

0 ft 1000

FIG 2

South