FEASIBILITY STUDY

Monroe

Secrest Avenue Extension from SR 1751 (Walkup Ave.) to SR 1006 (Olive Branch Rd.) Union County

Division 10

U-3619

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 constructing Secrest Avenue Extension from SR 1751 (Walkup Ave.) to SR 1006 (Olive Branch Rd.), a distance of 1.6 miles (2.6 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane curb and gutter section, 64 feet (19.5 m) wide from face-to-face of curbs, with 10-foot (3.0-m) berms. This project will include the construction of a diamond interchange with the proposed US 74 Monroe Bypass (TIP Project R-2559). The recommended right-of-way will vary between 100 feet (30.5 m) and 200 feet (61.0 m) with full access control in the vicinity of the Monroe Bypass interchange. It is anticipated that there will be no residences or businesses relocated due to this project. The total cost of the project, including construction and right-of-way, is estimated to be $12,900,000.

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 provide area industrial sites access to the US 74 Monroe Bypass. This project is supported by Union County, the Union County Chamber of Commerce, the City of Monroe and the Towns of Stallings, Waxhaw, Weddington and Wingate.

Secrest Avenue Extension is designated as a proposed major thoroughfare in the Monroe Thoroughfare Plan.

South of Richardson Creek, development consists of several active industrial sites and businesses. North of Richardson Creek, there is very little development, with the exception of several single-family residences along SR 1764 (Helms Pond Rd.). Most of the undeveloped property surrounding this project is zoned for industrial development.

From SR 1751 (Walkup Ave.) to Bravo Place, Secrest Avenue is currently a two-lane roadway with a pavement width of 24 feet (7.3 m) with soil shoulders. At the project termini, both SR 1751 and SR 1006 (Olive Branch Rd.) are two-lane roadways with pavement widths of 24 feet (7.3 m).

TIP Project R-2559 will construct the US 74 Monroe Bypass as a four-lane divided facility with a 68-foot (20.7-m) median. It is currently scheduled for right-of-way acquisition in April 1999 and for construction in September 2000.

The 1996 projected Average Daily Traffic (ADT) along Secrest Avenue Extension varies from 5,400 vehicles per day (vpd) north of the US 74 Bypass to 15,100 vpd south of the bypass. For the design year 2020, the estimated traffic volumes along the project will range between 9,800 vpd north of the US 74 Bypass to 27,600 vpd south of the bypass. Truck traffic is estimated to make up fourteen percent of daily traffic.

If Secrest Avenue Extension is constructed as a five-lane curb and gutter section, the facility will operate at LOS B in the current year and at LOS C in the design year 2020.

III. Recommendations

It is recommended to construct Secrest Avenue Extension from SR 1751 (Walkup Ave.) to SR 1006 (Olive Branch Rd.), a distance of 1.6 miles (2.6 km). The project location is shown on Figure 1. The recommended cross-section is a five-lane curb and gutter section, 64 feet (19.5 m) wide from face-to-face of curbs, with 10-foot (3.0-m) berms.

This project will include the construction of a diamond interchange with the proposed US 74 Monroe Bypass (R-2559). This will carry Secrest Avenue Extension over the US 74 Bypass with a structure 74 feet (22.6 m) wide and 155 feet (47.3 m) long.

A structure will also be required to cross Richardson Creek and its surrounding flood-plain. This structure would be 74 feet (22.6 m) wide and 380 feet (115.9 m) long.

It is recommended to install traffic signals at the intersection with SR 1751 (Walkup Ave.) and at the intersections with both ramp terminals at the US 74 Monroe Bypass interchange. It is also recommended to align the northern terminus with Zephyr Circle to create a four-leg intersection at SR 1006 (Olive Branch Rd.)

The recommended right-of-way will vary between 100 feet (30.5 m) and 200 feet (61.0 m) with full access control in the vicinity of the Monroe Bypass interchange.

It is anticipated that no residences or businesses will be relocated due to the project. The total cost of the project is as follows:

Construction	$ 12,400,000
Right-of-way	$ 500,000
Total Cost	$ 12,900,000

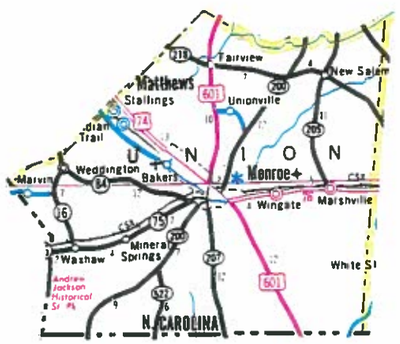
IV. Other Comments

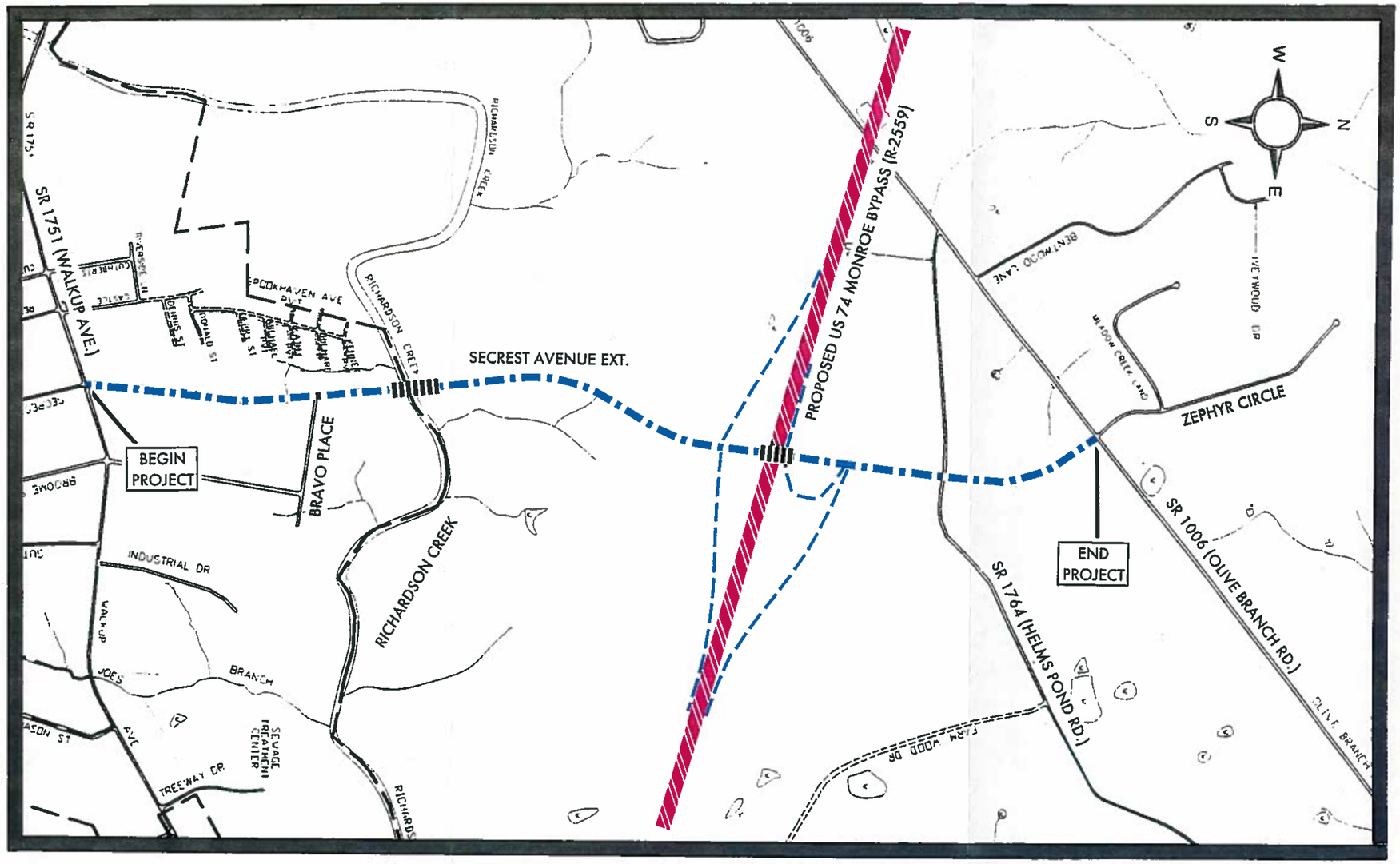
An environmental screening was not conducted for this study. However, no impacts to historic properties are anticipated.

Based on maps at the Department of Environment, Health & Natural Resources - Natural Heritage Section, no threatened or endangered species were identified in the project corridor.

Impacts to wetlands are expected in the vicinity of Richardson Creek and a Corps of Engineers Section 404 Permit is anticipated. This section of Richardson Creek within the project corridor is classified C and is part of the Yadkin-Pee Dee River Basin.

No special accommodation for bicycles is recommended on this project.





LEGEND

- PROPOSED FIVE-LANE SECTION
- PROPOSED RAMPS
- PROPOSED STRUCTURE

0 1000′ 2000′

NC DEPARTMENT OF TRANSPORTATION
FEASIBILITY STUDIES UNIT

U-3619
SECREST AVENUE EXTENSION
FROM SR 1751 (WALKUP AVE.)
TO SR 1006 (OLIVE BRANCH RD.)
MONROE

DIVISION 10	UNION COUNTY	FIGURE 1