

FEASIBILITY STUDY

Clinton
US 701 Business
from US 421/US 701 (Clinton Bypass) to SR 1924
Sampson County
R-2821

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



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Date



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I. GENERAL DESCRIPTION

This is a feasibility study for the widening of US 701 Business for 1.0 mile from the US 421/US 701 bypass of Clinton to the multilane section at SR 1924 (See Figure 1). This study recommends symmetrically widening a two-lane shoulder section to a five-lane, 68-foot curb and gutter section with 8-foot berms on 100 feet of right-of-way. Estimated cost is \$2,200,000 (\$800,000 for right-of-way and \$1,400,000 for construction).

A feasibility study presents recommended cross sections for improvements, general alignments of improvements, and estimated cost of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues which deserve consideration in the planning and construction stages.

This study is not an exhaustive environmental investigation.

II. NEED FOR PROJECT

This project was requested by the City of Clinton in the 1990 Transportation Improvement Program hearings. It will provide a continuous north-south, multilane facility through Clinton, to US 421. Widening to five lanes will provide continuity of section and open US 701 Business to development near the US 421/US 701 interchange. US 701 Business is a primary approach to the Clinton business district from northbound US 421 and US 701, and is also the principal north-south thoroughfare on the east side of Clinton. Within the city limits, US 701 Business is either a five-lane or a seven-lane curb and gutter section. Considerable development has occurred on both sides of the highway, attracting additional traffic.

The studied section of US 701 Business is a two-lane shoulder section with 24 feet of pavement and 6-foot usable shoulders on 60 feet of right-of-way with no control of access. The section begins at the north-side ramps of the US 421/US 701 interchange, and ends at the existing 68-foot, five-lane curb and gutter facility at SR 1924. Land use along the southern 0.5 mile of the section is primarily agricultural and light density rural residential, while the northern half supports approximately 15 small businesses and 15 individual homes.

This section of US 701 Business is classified as a Rural Major Collector in the statewide functional classification system, and is classified as a Major Thoroughfare in the 1980 mutually adopted Clinton Thoroughfare Plan. US 701 Business is a Federal Aid Secondary route.

US 701 Business in Clinton is listed as an "Unmet Need" in the Bicycle Program of the FY 1992-1998 Transportation Improvement Program. The City of Clinton and the North Carolina Bicycle Program have requested wider outside lanes to accommodate bicycle traffic.

The 1990 Average Daily Traffic (ADT) is 5,200 vehicles per day (vpd) traveling through the section, with an estimated 11,000 ADT in the design year of 2012. The existing road configuration currently experiences a Level Of Service (LOS) C, and is expected to experience a LOS D in the design year. If US 701 Business is widened to a five-lane curb and gutter section, level of service at current traffic demand should increase to a LOS B rating, with a LOS B expected in the design year.

During the period from January 1, 1989 through December 31, 1991, a total of 15 accidents were reported along the studied portion of US 701 Business. This resulted in an accident rate of 152 accidents per 100 million vehicle miles, compared to a statewide average of 177. No fatalities were reported. Most prevalent accident types were rear-end collisions (33%) and turning movements (20%). The recommended cross-section and center left-turn lane should reduce accident rates by providing safer and more efficient turning movements via the sheltered center left-turn lane.

III. RECOMMENDATIONS

It is recommended that US 701 Business be widened to a five-lane, 68-foot curb and gutter section with 8-foot berms on 100 feet of right-of-way. Total project length is 1.0 mile, beginning at the north-side ramps of the interchange with US 421/US 701, and ending at the existing US 701 Business multilane facility at SR 1924. The typical section is to contain a center 12-foot left-turn lane, 12-foot inside travel lanes, and 14-foot outside travel lanes to accommodate bicycle traffic. No control of access is recommended. This five-lane section will provide a continuous multilane highway through Clinton. It will open development on US 701 Business north of the US 421/US 701 interchange, and ensure future capacity for increased traffic volumes as development occurs.

Widening should be carried out both symmetrically and asymmetrically as desirable to minimize adverse impacts. The

existing alignment of the highway should be retained and utilized to the extent possible.

A new, actuated traffic signal may be required at the intersection of US 701 Business and SR 1924. The Sampson County office complex is located on SR 1924 just east of the city limits.

Total project cost is estimated at:

Right-of-Way	\$ 800,000
Construction	\$ 1,400,000
Total Project Cost	\$ 2,200,000

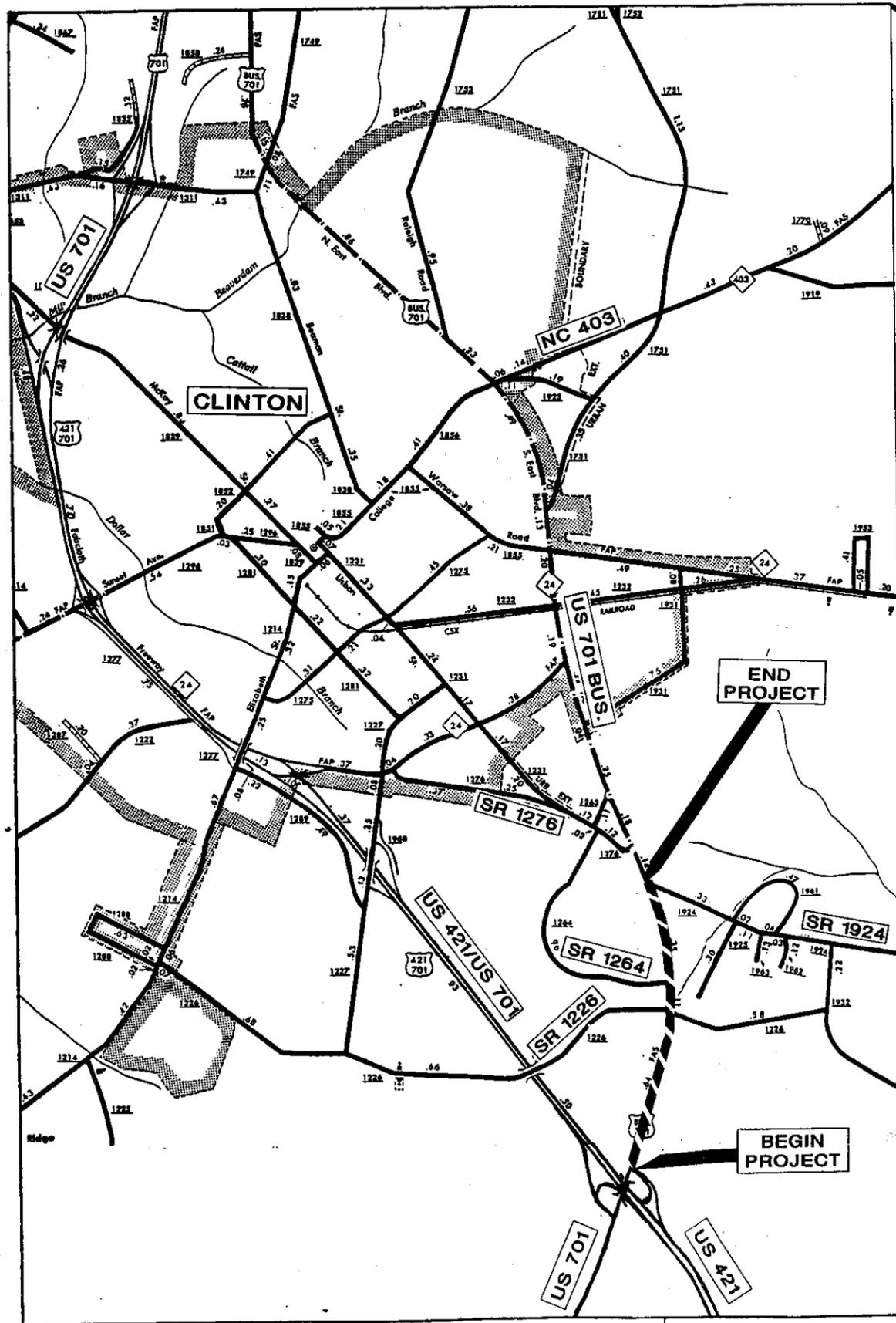
Low utility conflicts are expected.

IV. OTHER COMMENTS AND CONCERNS

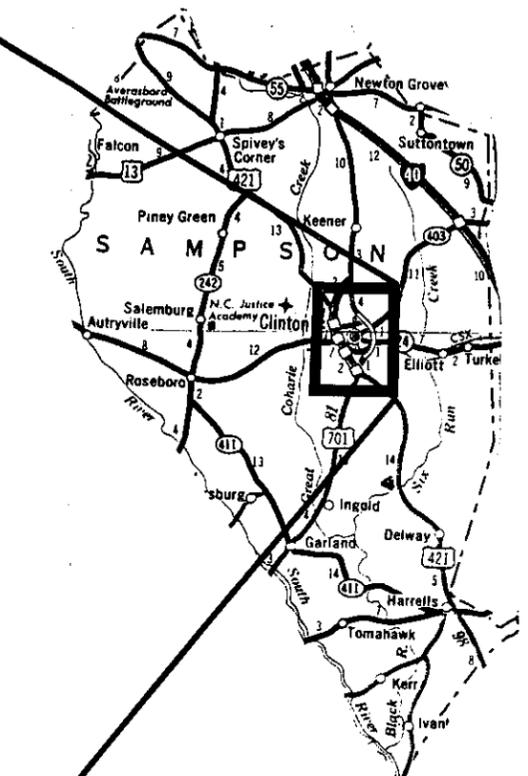
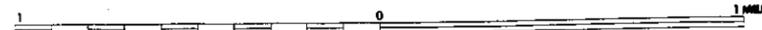
An environmental screening was not conducted for this study. However, the widening of US 701 Business may require placing fill in a small amount of wetlands just north of the US 421/US 701 interchange. A Corps of Engineers Nationwide Permit may be required.

Consideration was given to widening bridge number 41, which carries US 701 Business over US 421/US 701 at the interchange of the two highways. Bridge 41 has a roadway width of 34 feet and a sufficiency rating of 71. This option is not recommended, due to low projected traffic counts for north and southbound US 701, and low turning movements from the US 421/US 701 Clinton Bypass. Therefore, the project should begin on the north-side of the ramps of this interchange.

No business or residential relocations are expected.



SCALE



**US 701 BUSINESS
FROM US 421 SOUTH OF CLINTON
TO EXISTING FIVE LANE FACILITY
SAMPSON COUNTY
R-2821**

DATE: FEB 1992

FIGURE 1