

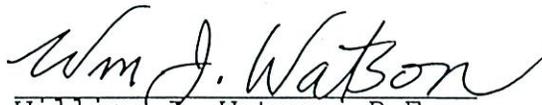
FEASIBILITY STUDY

Kinston
Carey Road (SR 1571) Extension
From US 258 To Rouse Road (SR 1572)
Lenoir County

Division 2

U-3618

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


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I. GENERAL DESCRIPTION

This preliminary study describes the proposed extension, on new location, of Carey Road (SR 1571) from US 258 to Rouse Road (SR 1572) in Kinston. The project location is shown on Figure 1. The proposed cross-section is a five-lane, curb-and-gutter section, 64 feet (19.5 m) wide from face-to-face of curbs, for the entire project length of 1.74 miles (2.15 km), except that at each project terminus the approaches will be widened to provide additional turn lanes as described below. The required right-of-way width is 100 feet (30.5 m).

Also, near the west project terminus SR 1557 (Hull Road) will be relocated to intersect Carey Road Extension, as shown on Figure 1.

The existing traffic signal at the west project terminus will require minor revisions and a new traffic signal will be required at the east project terminus.

This project will likely require 1 business relocation and 2 residential relocations. The total cost including construction and right-of-way is estimated to be \$ 7,700,000.

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

II. NEED FOR PROJECT

The purpose of this project is to enhance current and future east-west traffic flow in the northwest section of Kinston. This project was requested by the Lenoir County Chamber of Commerce, the City of Kinston, and the Lenoir County Development Commission. This project is in an area of potential rapid growth due to the proximity of the Global Transpark which is located approximately 2 miles (3.2 km) north. Carey Road is not classified in the North Carolina Statewide Functional Classification System, and is a Major Thoroughfare on the Kinston Thoroughfare Plan. Land along the project corridor is open farmland and undeveloped woodland.

Existing Carey Road is a 4-lane curb-and-gutter street, and is 44 feet (13.4 m) wide from face-to-face of curbs. The Carey Road-Rouse Road intersection is controlled with a stop sign on Carey Road. Rouse Road is a 2-lane paved road, approximately 24 feet wide (7.3 m), which has been widened at the Carey Road intersection to a width of approximately 33 feet (10.1 m) to provide a left-turn lane for southbound Rouse Road traffic. Hull Road is a 2-lane shoulder section with a 24-foot (7.3-m) wide pavement.

Traffic volume estimates for Carey Road Extension, between relocated Hull Road and Rouse Road, for the years 1996 and 2020 are 16,000 vehicles per day (vpd) and 32,000 vpd respectively. The Level of Service (LOS) based on the years 1996 and 2020 respectively are LOS B and LOS C. Between US 258 and relocated Hull Road, the 1996 and 2020 traffic volume estimates are 20,000 vpd and 39,000 vpd. Based on these traffic volumes the respective Levels of Service are LOS B and LOS D. It is estimated that the US 258 intersection and the Rouse Road intersection will operate at LOS D in the 2020 design year.

III. RECOMMENDATIONS

It is proposed to extend Carey Road, on new location, from US 258 to Rouse Road. The project location is shown on Figure 1. The proposed cross-section is a five-lane, curb-and-gutter section, 64 feet (19.5 m) wide from face-to-face of curbs, for the entire project length of 1.74 miles (2.15 km), except that at each project terminus the approaches will be widened to provide additional turn lanes as described below. The required right-of-way width is 100 feet (30.5 m).

At the west project terminus, the Carey Road approach will provide 2 exclusive right-turn lanes, 1 exclusive thru lane, and 2 exclusive left-turn lanes. There will be 2 eastbound lanes exiting the intersection. The SR 1001 approach will provide 1 exclusive right-turn lane, 1 exclusive thru lane, and 1 combination thru and left-turn lane. There will be 1 westbound lane exiting the intersection. The southbound approach on US 258 will provide 1 combination thru and right-turn lane, 1 exclusive thru-lane, and 2 exclusive left-turn lanes. There will be 2 northbound lanes exiting the intersection. The northbound approach on US 258 will provide 2 exclusive right-turn lanes, 1 exclusive thru lane, and 1 exclusive left-turn lane. There will be 2 southbound lanes exiting the intersection. The existing traffic signal will require revisions. Also, near the west project terminus SR 1557 (Hull Road) will be relocated to intersect Carey Road Extension, as shown on Figure 1. The Hull Road approach will provide 1 right-turn lane, 1 left-turn lane, and 1 lane exiting the intersection.

At the east project terminus, the eastbound Carey Road approach will provide 1 combination thru and right-turn lane, 1 exclusive thru lane, and 2 exclusive left-turn lanes. There will be 2 westbound lanes exiting the intersection. The westbound Carey Road approach will provide 1 exclusive right-turn lane, 2 exclusive thru lanes, and 1 exclusive left-turn lane. There will be 2 eastbound lanes exiting the intersection. The southbound approach on Rouse Road will provide 1 exclusive right-turn lane, 2 exclusive thru-lanes, and 2 exclusive left-turn lanes. There will be 2 northbound lanes exiting the intersection. The northbound approach on Rouse Road will provide 1 combination right, thru, and left-turn lane. There will be 2 southbound lanes exiting the intersection. A new traffic signal will be required.

This project will likely require 1 business relocation and 2 residential relocations.

The total cost including construction and right-of-way is estimated to be \$ 7,700,000 as follows:

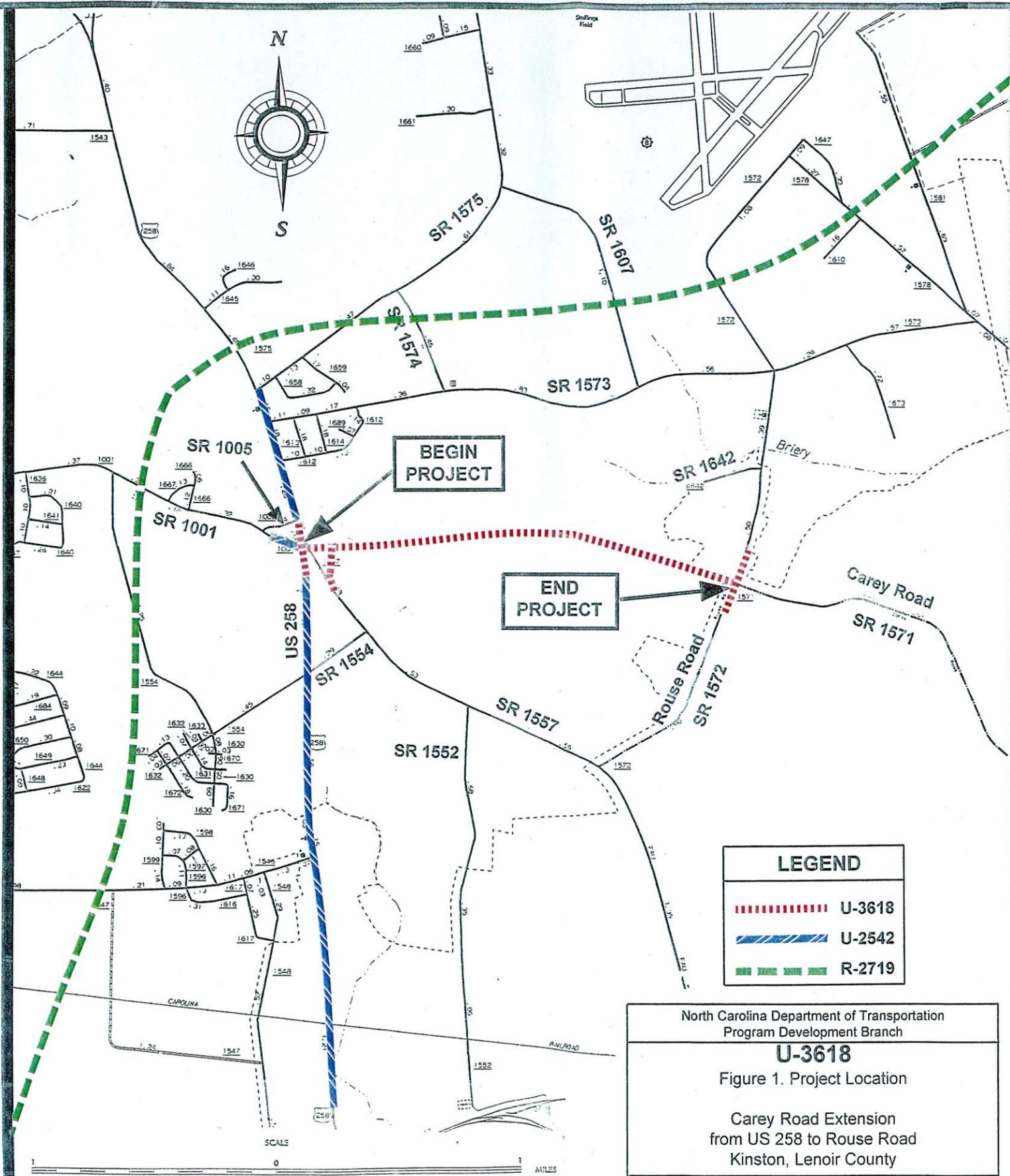
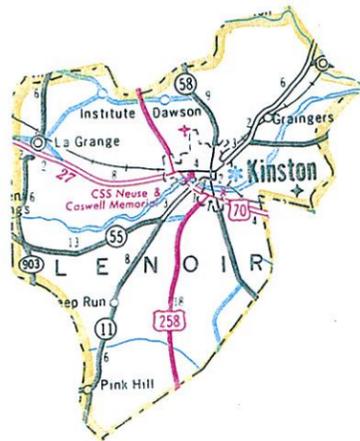
Right-of-Way	\$ 1,300,000
Construction	<u>6,400,000</u>
Total Cost	\$ 7,700,000

IV. OTHER COMMENTS

An environmental screening was not conducted for this study. No wetlands or endangered species are anticipated.

The intersection of Carey Road Extension and relocated Hull Road (SR 1572) may require a traffic signal. The cost for this signal has been included in the above construction cost.

US 258 is scheduled to be widened to a 5-lane curb-and-gutter section under Project R-2542 with construction beginning in spring of 1998. Under U-3618 it is recommended to widen US 258 at the west project terminus, in addition to the widening under R-2542, to provide an additional southbound left-turn lane and an exclusive northbound right-turn lane. The length of this additional widening is approximately 600 feet (183 m). Right-of-Way acquisition is now under way for R-2542 and will provide a right-of-way width in this area of approximately 109 feet (33.2 m). It is felt this width is sufficient for the proposed additional lanes under project U-3618. The construction cost for the widening on US 258 associated with U-3618 is based on widening from a 2-lane road, therefore the actual cost for this may be less than estimated, which is \$425,000.



LEGEND	
	U-3618
	U-2542
	R-2719

North Carolina Department of Transportation
 Program Development Branch

U-3618

Figure 1. Project Location

Carey Road Extension
 from US 258 to Rouse Road
 Kinston, Lenoir County

U-3618 DIVISION 2 FIGURE 1