

**FEASIBILITY STUDY**

**Access Road**

**from SR 1613 (Beaverdam Road) to  
SR 1004 (Newfound Road) north of Canton**

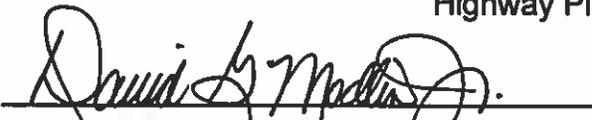
**Haywood County**

**R-3328**

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 construction of an access road, from SR 1613 (Beaverdam Road) to SR 1004 (Newfound Road), north of Canton in Haywood County (See Figure 1). This project is approximately 1.0 mile (1.6 kilometers) in length. The recommended cross-section is a two-lane, 24-foot (7.3-meter) wide roadway with 8-foot (2.4-meter) wide shoulders, including 4-foot (1.2-meter) paved shoulders, on a 100-foot (30.5-meter) wide right-of-way with no access control. The estimated cost of the project is 1,400,000 (\$400,000 for right-of-way and \$1,000,000 for construction).

This study is not a detailed planning/environmental investigation. A feasibility study presents studied cross-sections for improvements, general corridors of improvements, and estimated costs of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or other observed issues that deserve consideration in the planning and construction stages.

### II. NEED FOR PROJECT

This project was requested by Haywood County. The studied improvements are needed to provide safer access between the I-40 interchange with SR 1004 and the developing Beaverdam Creek Industrial Park along SR 1613, north of I-40. Presently, vehicles travel on SR 1613, south of I-40, to get to the industrial park. At the intersection of SR 1004 and SR 1613 vehicles must negotiate a sharp right turn from southbound SR 1004 and a sharp left turn from eastbound SR 1613 (See Figure 1). Between SR 1631 and SR 1004, SR 1613 has several sharp curves.

During a three year period, from March, 1991, through February, 1994, there were seven accidents along SR 1613, between SR 1631 and SR 1004.

This resulted in accident rate of 617.8 accidents per 100 million vehicle miles (acc/100mvm) compared to a statewide average of 184.6 acc/100mvm for similar routes. Sixty percent of the accidents occurred along the sharp curves on SR 1613. The recommended improvements are expected to reduce the accident rate along this corridor.

Land use along the studied corridor is rural residential and woodland. SR 1632 is a two-lane, 28 to 32-foot (8.5 to 9.8 meter) wide roadway on a 60-foot (18.3-meter) wide right-of-way. SR 1631 is a two-lane, 18-foot (5.5-meter) wide roadway on a 60-foot (18.3-meter) wide right-of-way.

The estimated 1994 average daily traffic (ADT) for the access road is 600 vehicles per day (vpd). In the design year 2020, anticipated traffic is estimated to be 3,000 vpd. The traffic on the access road would experience a level of service (LOS) A in 1994 and a LOS B in 2020. Truck volumes are expected to increase from 4% of the average daily traffic in 1994 to 6% in 2020 along the access road.

### III. RECOMMENDATIONS

It is recommended that an access road be constructed, from SR 1613 (Beaverdam Road) to SR 1004 (Newfound Road), north of I-40, utilizing SR 1631 and SR 1632 (See Figure 1). The recommended cross section is a two-lane, 24-foot (7.3-meter) wide roadway with 8-foot (2.4-meter) wide shoulders, including 4-foot (1.2-meter) paved shoulders, on a 100-foot (30.5-meter) wide right-of-way with no access control.

SR 1631 would be reconstructed for a length of approximately 0.15 miles (0.24 kilometers). Next, SR 1631 would be extended approximately 0.65 miles (1.05 kilometers) on new location to SR 1632. SR 1632 would be widened for a length of approximately 0.2 miles (0.3 kilometers) to the recommended cross-section. A culvert would be used to carry the Beaverdam Creek under the access road. A signal is recommended at the intersection of the access road with SR 1613, due to limited sight distance. The intersection on SR 1004 with the access road would be stop sign-controlled.

The recommended improvement would provide safer access to the industrial park located along SR 1613, north of I-40.

Moderate utility conflicts are expected. The Town of Canton is in the process of connecting water and sewer lines along the recommended corridor.

The estimated project costs are as follows:

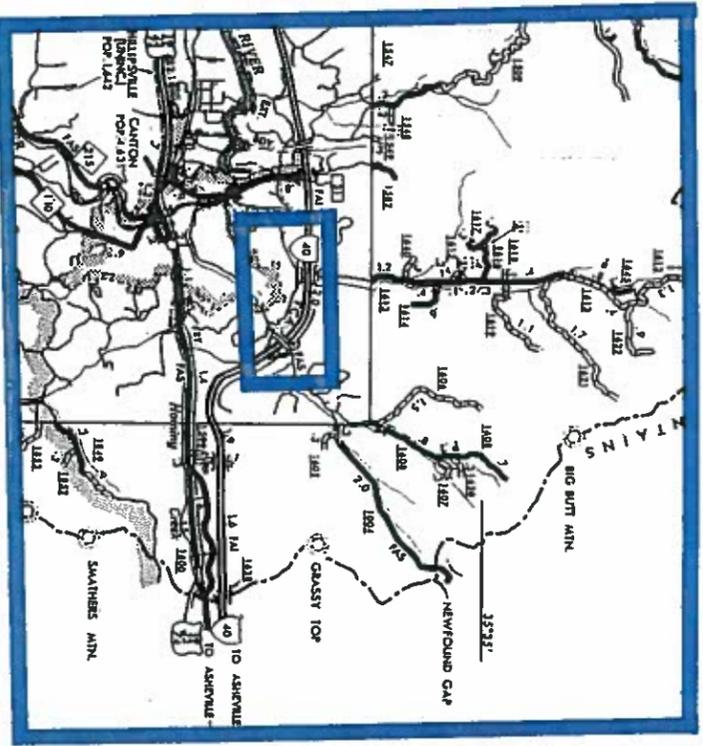
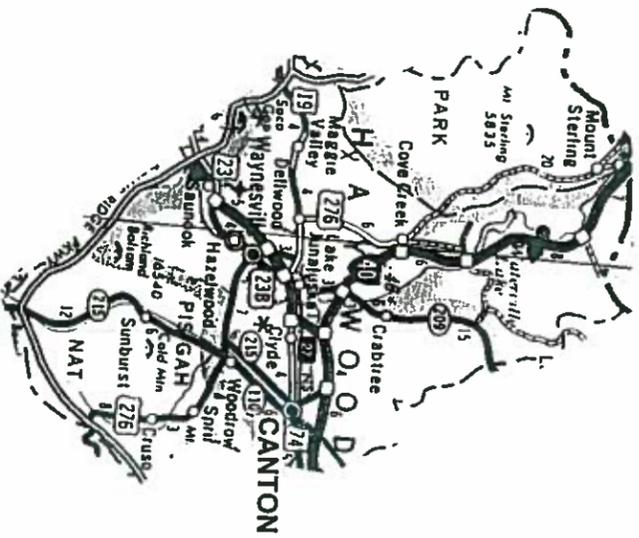
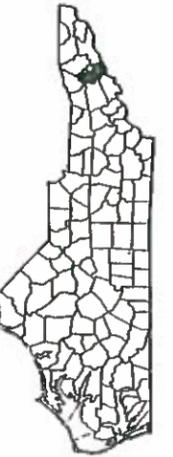
Construction	\$1,000,000
<u>Right-of-way</u>	<u>\$ 400,000</u>
Project Total	\$1,400,000

#### **IV. OTHER COMMENTS AND CONCERNS**

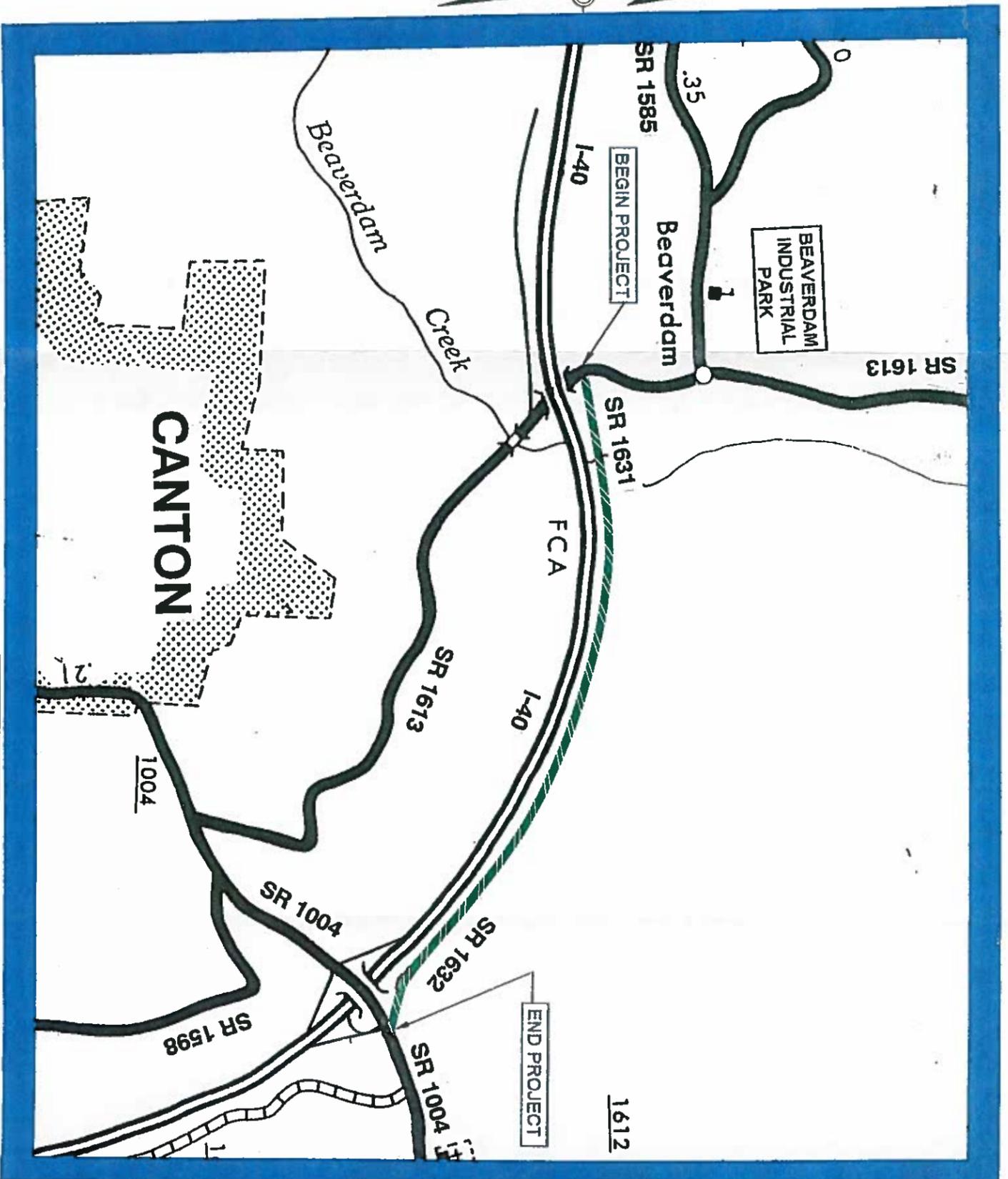
It is estimated that this project would require the relocation of one residence.

No historical or architecturally significant sites are known to be impacted. It is anticipated that no permits would be needed at the Beaverdam Creek crossing. A water depth of 1 foot (0.3 meters) was recorded approximately 100 feet ( 30.5 meters) downstream at the I-40 crossing. No wetlands were identified in the study area.





PROJECT LOCATION



FEASIBILITY STUDY UNIT

R-3328

Access Road

from SR 1613 (Beaverdam Road)  
to SR 1004 (Newfound Road)

Haywood County

Division 14 Figure 1

