

FEASIBILITY STUDY

Lewisville

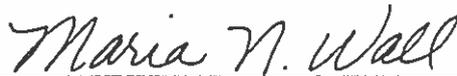
SR 1156 (Lewisville-Clemmons Road)

from SR 1001 (Shallowford Road)  
to SR 3617 (Dawnlea Drive)

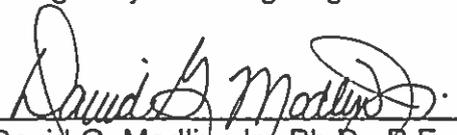
Forsyth County

U-3442

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



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2/14/96  
Date

## FEASIBILITY STUDY

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from SR 1001 (Shallowford Road)  
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### I. GENERAL DESCRIPTION

This is a feasibility study for the widening of SR 1156 (Lewisville-Clemmons Road), from SR 1001 (Shallowford Road) to SR 3617 (Dawnlea Drive), in Forsyth County (See Figure 1). The project is approximately 1.8 miles (2.9 km) in length. The recommended typical section is a five-lane, 68-foot (20.7-m) face-to-face, curb and gutter section with 8-foot (2.4-m) berms on a 100-foot (30.5-m) wide right-of-way with no access control. The estimated cost of the project is \$8,400,000 (\$4,000,000 for right-of-way and \$4,400,000 for construction).

### II. NEED FOR PROJECT

The studied improvements are needed to reduce traffic congestion on SR 1156. SR 1156 is classified as a major collector on the Statewide Functional Classification System, and a major thoroughfare on the Winston-Salem Thoroughfare Plan.

The existing SR 1156 is mainly a two-lane, 22-foot (6.7-m) wide roadway with 2 to 6-foot (0.6 to 1.8-m) wide shoulders. There are additional left-turn lanes at some subdivision entrances. Land use along the studied section of Lewisville-Clemmons Road is mixed; residential, institutional, and recreational.

The north terminal is located at the intersection of SR 1001 (Shallowford Road). The south terminal is located at the intersection of SR 3617 and SR 1156. This is also the north terminal of TIP Project U-3119. TIP Project U-3119 recommends widening Bridge Number 213 and SR 1103 and realigning SR 1156, south of SR 3617 to SR 1153.

SR 1156 is a signed bicycle route on the Winston-Salem/Forsyth Bike Map. It connects to the "Mountains to Sea" NC Bicycling Highways Route at

SR 1001. The Office of Bicycle and Pedestrian Transportation has recommended that bicycle accommodations be provided in the studied project.

Joanie Moser Memorial Park is located on the north side of SR 1156, between SR 1212 and SR 1160. There will be no impact on the park property. SR 1156 will be widened asymmetrically to the south in the park area.

A water tower is located on the west side of SR 1156, approximately 800' (243.9 m) south of the intersection with SR 1001. A fire station is located on the south side of the water tower. It is not anticipated that either of these structures would be impacted by the recommended project. Shallowford Presbyterian Church and Cemetery are located at the intersection of SR 1156 and SR 1001. Some gravesites, along SR 1156, may be impacted. Asymmetrical widening will be used to minimize these impacts.

Estimated 1995 average daily traffic (ADT) on SR 1156 ranges from 6,600 vehicles per day (vpd), near SR 1001, to 9,800 vpd, near SR 3617. In the design year 2020, the traffic volume is expected to range from 13,800 to 15,000 vpd. The existing SR 1156 is operating at a level of service (LOS) D, and is anticipated to operate at a LOS E in the design year 2020. With the recommended roadway widening, the traffic volumes along SR 1156 would operate at a LOS A, in 1995, and a LOS B in the design year.

During the period from April, 1992, through March, 1995, there were 34 accidents reported along the studied section of SR 1156. This resulted in an accident rate of 273.8 accidents per 100 million vehicle miles (acc/100mvm) compared to a statewide average of 317.3 acc/100mvm for this type of facility. Vehicles making left turns accounted for 44% of the accidents. Rear-end collisions accounted for 38% of the accidents. No fatalities were reported. The recommended improvements are expected to reduce the accident rate.

### III. RECOMMENDATIONS

It is recommended that SR 1156 (Lewisville-Clemmons Road) be widened to multi-lanes, from SR 1001 to SR 3617, a distance of approximately 1.8 miles (2.9 km). The recommended typical section is a five-lane, 68-foot (20.7-m) face-to-face, curb and gutter section with 8-foot (2.4-m) berms on a 100-foot (30.5-m) wide right-of-way with no access control. Widening would be both asymmetrical and symmetrical to the existing roadway to minimize right-of-way and construction costs. The Office of Bicycle and Pedestrian Transportation has recommended differential striping of the roadway to accommodate bicycle traffic along this signed bicycle route.

The recommended improvements would decrease traffic congestion and improve safety.

Moderate utility conflicts are expected.

Total project cost is estimated as follows:

Right-of-way	\$4,000,000
Construction	\$4,400,000
<u>Total</u>	<u>\$8,400,000</u>

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

It is estimated that this project would not require the relocation of any residences or businesses.

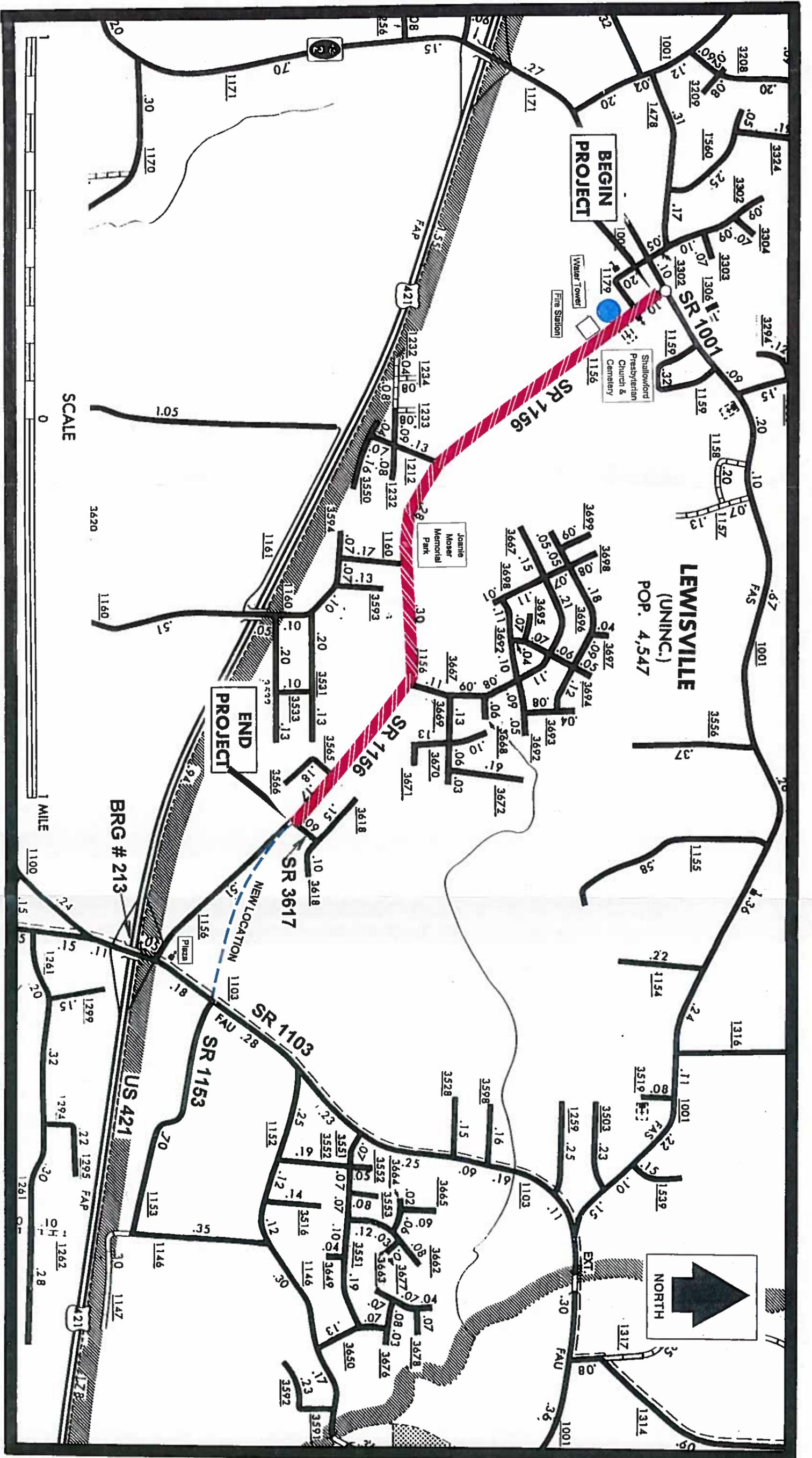
This study is not a detailed planning/environmental investigation. A feasibility study presents studied cross-sections for improvements, general corridors of improvements, and estimated costs of construction and right-of-way. This study attempts to identify any potential environmental, permitting, or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

It is not anticipated that there would be any impact to Joanie Moser Memorial Park, the water tower, the fire station, or Shallowford Presbyterian Church. The impacts to the cemetery will be minimized.

No historical or architecturally significant sites are known to be impacted.

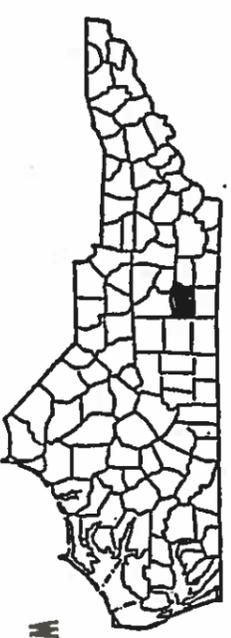
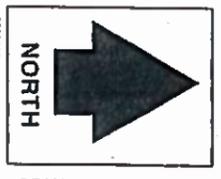
#### **V. OTHER ALTERNATES CONSIDERED**

The Town of Lewisville and the Winston-Salem MPO, requested that SR 1156 be improved by adding additional left-turn lanes at five intersections. A three-lane, 40-foot (12.2-m) face-to-face, curb and gutter section, with 8-foot (2.4-m) berms on the existing right-of-way, was also studied (Estimated construction cost of \$2,800,000). These alternates were rejected, because they would not provide a significant improvement in traffic capacity.

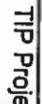


SCALE

1 MILE



**LEGEND**

	TIP Project No. U-3442 (Studied Project)
	TIP Project No. U-3119

Program Development Branch
Feasibility Studies Unit
<b>U-3442</b>
Lewisville
SR 1156 (Lewisville-Clemmons Road)
from SR 1001 (Shallowford Road) to
SR 3617 (Dawlea Drive)
Forsyth County
DIV. 9
FIGURE 1