

FEASIBILITY STUDY

Winston-Salem

Diggs Boulevard  
from Vargrave Street to  
US 311/NC 109 (Martin Luther King Drive)

Forsyth County

U-2925

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

Maria N Wall

Maria N. Wall  
Highway Planning Engineer

4/28/93

Date

M. B. Mustafa

Mohammed B. Mustafa  
Highway Planning Engineer

Whitmel H. Webb, III

Whitmel H. Webb, III, P.E.  
Head of Feasibility Studies

## FEASIBILITY STUDY

Winston-Salem

Diggs Boulevard  
from Vargrave Street to  
US 311/NC 109 (Martin Luther King Drive)

Forsyth County

U-2925

### I. GENERAL DESCRIPTION

This is a feasibility study for the widening of Diggs Boulevard from Vargrave Street to US 311/ NC 109 (Martin Luther King Drive) in Winston-Salem, a distance of approximately 0.6 miles (See Figures 1 and 2). The recommended typical cross-sections are a two-lane, 40-foot, face-to-face, curb and gutter section with 8-foot berms on 80-foot wide right-of-way and a two-lane, 24-foot roadway with 8-foot usable shoulders (4-foot paved), on a 100-foot wide right-of-way. Estimated cost of the project is \$1,500,000 (\$1,100,000 for right-of-way and \$400,000 for construction).

This study is not a detailed planning/environmental investigation. 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.

### II. NEED FOR PROJECT

This project was requested by the City of Winston-Salem to provide improved access from the US 52/Vargrave Street Interchange to the Winston-Salem State University campus (See Figure 2). Diggs Boulevard is not a part of the state maintained road system.

The existing Diggs Boulevard consists of a two-lane, 26-foot, face-to-face, curb and gutter section, from Vargrave Street to approximately 100 feet east of Bruce Street. There is on-street parallel parking along this section of Diggs Boulevard. From approximately 100 feet east of Bruce Street to US 311/NC 109, Diggs Boulevard consists of a two-lane, 18 to 26-foot pavement with 2 to 6-foot shoulders. Land use is predominantly residential and recreational.

The west terminal of the project is located at the unsignalized intersection of Vargrave Street, the US 52 southbound ramp, and Diggs Boulevard (See Figure 2). The US 52 southbound ramp is west of the intersection. Land use is residential around this intersection.

The east terminal of the project is located at the unsignalized intersection of US 311/NC 109 (Martin Luther King Drive) and Diggs Boulevard (See Figure 2). US 311/NC 109 is a five-lane curb and gutter section. Land use around this intersection is recreational.

Traffic counts and turn movements are not available for the study area at this time. The recommended improvements are based on estimated traffic demand along the studied roadway, and are anticipated to accommodate traffic demand through 2013.

During the period from November 1, 1989 through October 31, 1992, a total of 16 accidents were reported along the studied section of Diggs Boulevard. This resulted in an accident rate of 2,424.2 accidents per 100 million vehicle miles, compared to a statewide average of 1508.0. The recommended improvements will reduce the accident rate.

### III. RECOMMENDATIONS

The recommended typical section for Diggs Blvd, from Vargrave Street to approximately 100 feet east of Bruce Street is a two-lane, 32-foot, face-to-face, curb and gutter section with 8-foot berms on an 80-foot wide right-of-way (See Figure 2). From approximately 100 feet east of Bruce Street to US 311/NC 109, Diggs Blvd, will consist of a two-lane, 24-foot roadway with 8-foot usable shoulders (4-foot paved) on a 100-foot wide right-of-way (See Figure 2). The additional 4 feet of pavement on each side of the travelway will be provided to enhance bicycle safety along this corridor. Parking will be prohibited on Diggs Boulevard.

The recommended widening of Diggs Boulevard will provide improved access to Winston-Salem State University, Civitan Park, and Bowman Gray Stadium which are served by the project corridor.

Total project cost is estimated at:

Right-of-way	\$1,100,000
Construction	\$ 400,000
Project Cost	\$1,500,000

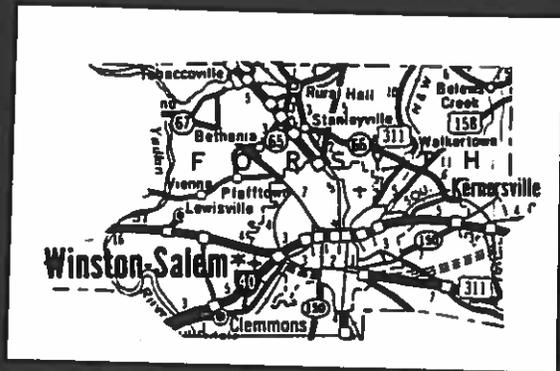
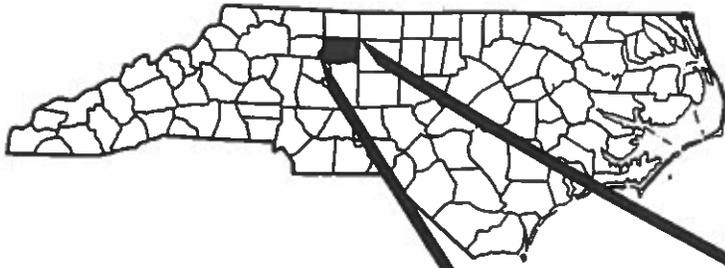
High utility conflicts are expected.

#### IV. OTHER COMMENTS AND CONCERNS

It is anticipated that this project will require the relocation of 14 residences.

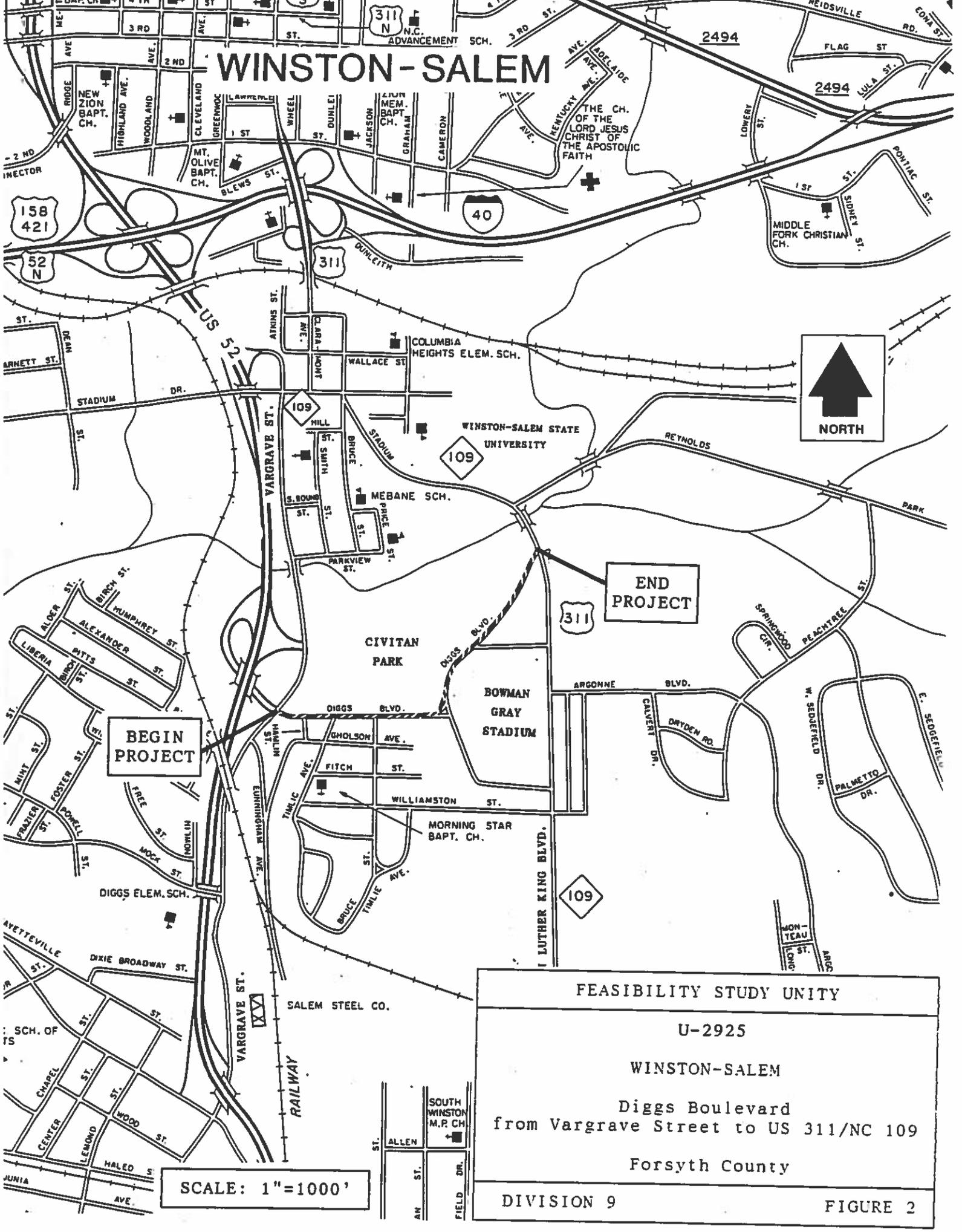
This project may require a Section 404, Corps of Engineers Nationwide Permit. No historical or architecturally significant sites are known to be within the limits of the recommended project.

Several community facilities are located in and around the project corridor. Civitan Park, a public park, is located on the north side of Diggs Boulevard. Bowman Gray Stadium is located southwest of the intersection of US 311/ NC 109 and Diggs Boulevard. Winston-Salem State University is located northeast of the intersection of US 311/NC 109 and SR 2740 (Reynold's Park Road). It is anticipated that these facilities will not be adversely impacted by the recommended improvements. The recommended improvements are not expected to require any right-of-way acquisition from Civitan Park, therefore, involvements with Section 4f of the DOT Act are not anticipated.



FEASIBILITY STUDY UNITY	
U-2925	
WINSTON-SALEM	
Digs Boulevard from Vargrave Street to US 311/NC 109	
Forsyth County	
DIVISION 9	FIGURE 1

# WINSTON-SALEM



BEGIN PROJECT

END PROJECT

SCALE: 1" = 1000'

FEASIBILITY STUDY UNITY	
U-2925	
WINSTON-SALEM	
Diggs Boulevard from Vargrave Street to US 311/NC 109	
Forsyth County	
DIVISION 9	FIGURE 2