

FEASIBILITY STUDY

US 117

from the Calypso city limits
to NC 55 in Mount Olive

Duplin and Wayne Counties

F.S. # 95-94-006

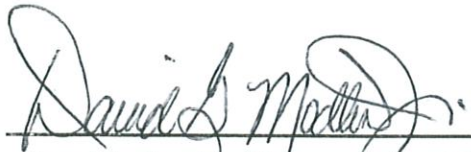
Prepared by
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US 117 is classified as an Other Principle Arterial on the Statewide Functional Classification System. The existing US 117 is a four-lane, 30-foot (9.1-meter) wide median-divided roadway with a 200-foot (61.0-meter) wide right-of-way with partial access control. Land use is predominantly agricultural and rural residential between Calypso and Mount Olive.

The estimated 1998 average daily traffic (ADT) on US 117 is 9400 vehicles per day (vpd). In the year 2018, anticipated traffic is estimated to be 19,400 vpd. The traffic on US 117 will experience a level of service (LOS) A throughout the year 2018. With the studied improvements, traffic on US 117 would continue to experience a LOS A throughout the year 2018.

During the period from October, 1990, through September, 1993, a total of 29 accidents were reported along the studied section of US 117. This resulted in an accident rate of 157.6 accidents per 100 million vehicle miles, compared to a statewide average of 89.1 for similar routes. Angle accidents accounted for 55% of the accidents. The studied improvements are expected to reduce the accident rate.

III. STUDIED IMPROVEMENTS

Based on projected traffic volumes and the estimated project cost, the studied improvements do not appear to be warranted at this time.

The studied improvements include upgrading the existing US 117 to a full control-of-access facility. Full control of access would be achieved by the addition of service roads, interchanges, and grade separations along the US 117 corridor (See Figure 3) as follows:

1. Access to US 117 via SR 1392 would be eliminated. SR 1405 would be extended on new location to intersect US 117 Alternate. The studied typical cross section is a two-lane, 24-foot (7.3-meter) wide roadway.
2. Access to US 117 via SR 1393 and the driveways along the west side of US 117 in this area would be eliminated. SR 1143 would be extended on new location between SR 1144 and SR 1393. The existing SR 1143 would be paved. SR 1407 would be extended to provide access to properties adjacent to the west side of US 117 in this area. The studied typical cross-section is a two-lane, 24-foot (7.3-meter) wide roadway.

3. The Mount Olive Thoroughfare Plan proposes the construction of a Mount Olive Outer Loop that would cross US 117 between SR 1144 and SR 1147/SR 1157. A half-cloverleaf interchange was considered for the north side of the junction of US 117 and the proposed Mount Olive Outer Loop. The half-cloverleaf interchange would minimize relocations in this area. Access to US 117 via SR 1144 would be eliminated. SR 2041 would be extended to the south to provide access to parcels on the east side of US 117. The studied typical cross-section is a two-lane, 24-foot (7.3-meter) wide roadway.
4. The intersection of US 117 with SR 1147/SR 1157 would be shifted approximately 200 feet (61 meters) north of its existing location. A grade separation is recommended to carry the realigned SR 1147/SR 1157 over US 117.
5. A half-clover leaf interchange was considered for the south side of the junction of SR 1144 and US 117. SR 1144 may have to be shifted approximately 200 feet (61 meters) to the south to minimize right-of-way cost.

The studied improvements to US 117 are expected to reduce angle accidents by eliminating the at-grade intersections. These improvements would not substantially improve the traffic capacity through this corridor.

Total project cost is estimated at:

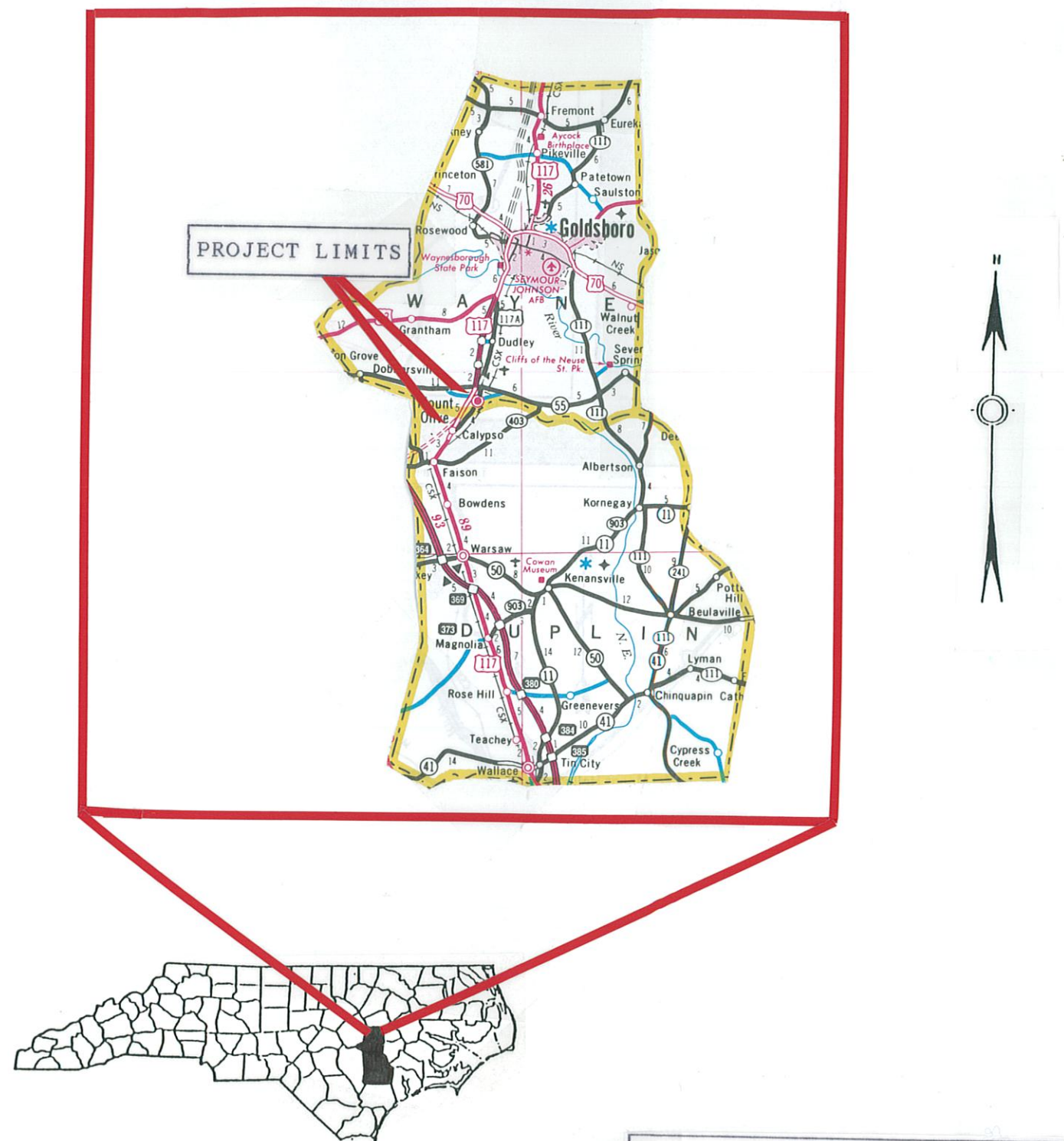
Right-of-way	\$ 3,000,000
Construction	\$11,400,000
Project Cost	\$14,400,000

Low utility conflicts are expected.

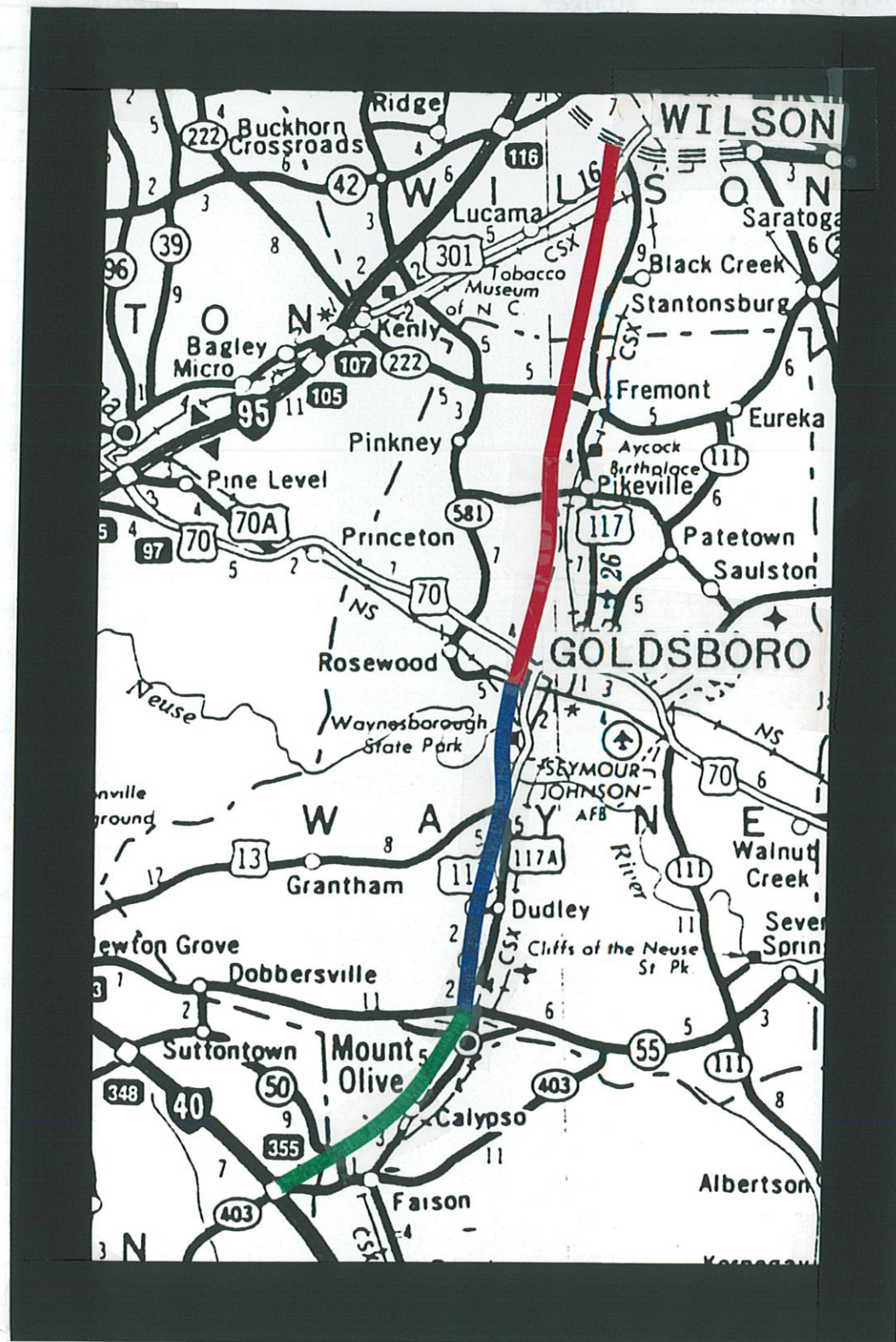
IV. OTHER COMMENTS AND CONCERNS

The studied improvements would require the relocation of 21 residences and 1 business.

This project may involve placement of fill in wetlands, and may require a Corps of Engineers, Section 404 Permit. No historical or architecturally significant sites are known to be in the limits of the proposed project. No public parks are located in the project corridor.



FEASIBILITY STUDIES UNIT	
FS # 95-94-006	
US 117	
from Calypso city limits to NC 55 in Mount Olive	
Duplin and Wayne Counties	
DIV. 3 & 4	FIGURE 1



LEGEND	
—	R-1030
—	U-3125
—	R-606

FEASIBILITY STUDIES UNIT	
US 117 CORRIDOR IMPROVEMENTS FROM I-40 TO WILSON	
DIV. 3 & 4	FIGURE 2

