

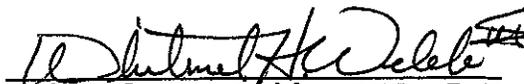
FEASIBILITY STUDY

US 64
From SR 1677 to SR 1533
Macon County
R-2701

Prepared by
Feasibility Studies Unit
Division of Highways
N. C. Department of Transportation



W. J. Watson, P. E.
Highway Planning Engineer


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

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Date

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I. GENERAL DESCRIPTION

This preliminary study describes proposed improvements to US 64 in Macon County. For a location map see Figure 1. It is proposed to widen US 64, on the north side only, from SR 1677 to SR 1533, a length of 0.9 miles, in order to provide an additional 12 foot wide westbound travel lane (See Figure 2). Approximately 30 feet of additional right of way measured from the existing north right of way line will be required. This improvement is estimated to cost \$1,270,000.

This study is the initial step in the planning and design process for this project and is not the product of an exhaustive environmental investigation or design effort. The purpose of this study is to describe the problem and an attainable solution, and provide cost estimates for the right of way and construction required to realize the solution.

II. NEED FOR PROJECT

This project was requested by the Mayor of Highlands. The purpose of this improvement is to provide improved passing opportunities for motorists traveling from Highlands to Franklin, the county seat of Macon County. During times of peak tourist travel and due to the presence of large trucks and mountainous terrain, opportunities for motorists to pass slower vehicles are infrequent. This project will provide a nearly mile long passing opportunity for westbound traffic at the end of the mountainous and winding 10 mile segment from Highlands to SR 1533.

US 64 is a two lane roadway with a 20 to 24 foot wide pavements and grass shoulders approximately 3 to 8 feet wide. The existing right of way width is 60 feet. Development is rural residential and roadside commercial. The terrain, in the vicinity of the recommended improvements is relatively flat.

To the east of SR 1533 towards Highlands, US 64 traverses the Cullasaja Gorge, and rises from an elevation of approximately 2000 feet near Gneiss to an elevation of approximately 3800 feet near Highlands. See Figure 1. US 64 between Gneiss and Highlands is characterized by steep grades, winding "hairpen" horizontal curves, narrow shoulders, and precipitous slopes both left and right.

The Average Daily Traffic (ADT) volumes on US 64, in the study area, for the years 1991 and 2015 are estimated to be 7,800 vehicles per day (vpd) and 16,300 vpd respectively. Capacity analysis based on the 1991 ADT indicates US 64 is currently providing a Level of Service (LOS) D where the terrain is relatively flat and LOS E where the terrain is more mountainous. If traffic volumes grow as projected, the LOS will continue to deteriorate.

During the period from January 1, 1988 through December 31, 1990 there were 91 accidents reported on US 64 between Franklin and Highlands. This resulted in an accident rate of 123 accidents per 100 million vehicle miles (ACC/100 MVM), compared to a statewide average of 183 Acc/100 MVM for all rural US routes during the same period. There were no fatal accidents, but 41 of the accidents resulted in injuries. The most prevalent accident types were ran-off-road (46%) and sideswipe (19%).

III. RECOMMENDATIONS

It is proposed to widen US 64 from SR 1677 to SR 1533, a length of 0.9 miles. This will provide an additional 12 foot wide travel lane in the westbound direction. Additional right of way and construction easements on the north side of US 64 will be required. Three businesses will likely be required to relocate, however no residences are expected to be relocated. The cost for these improvements is estimated to be \$ 1,270,000 as follows:

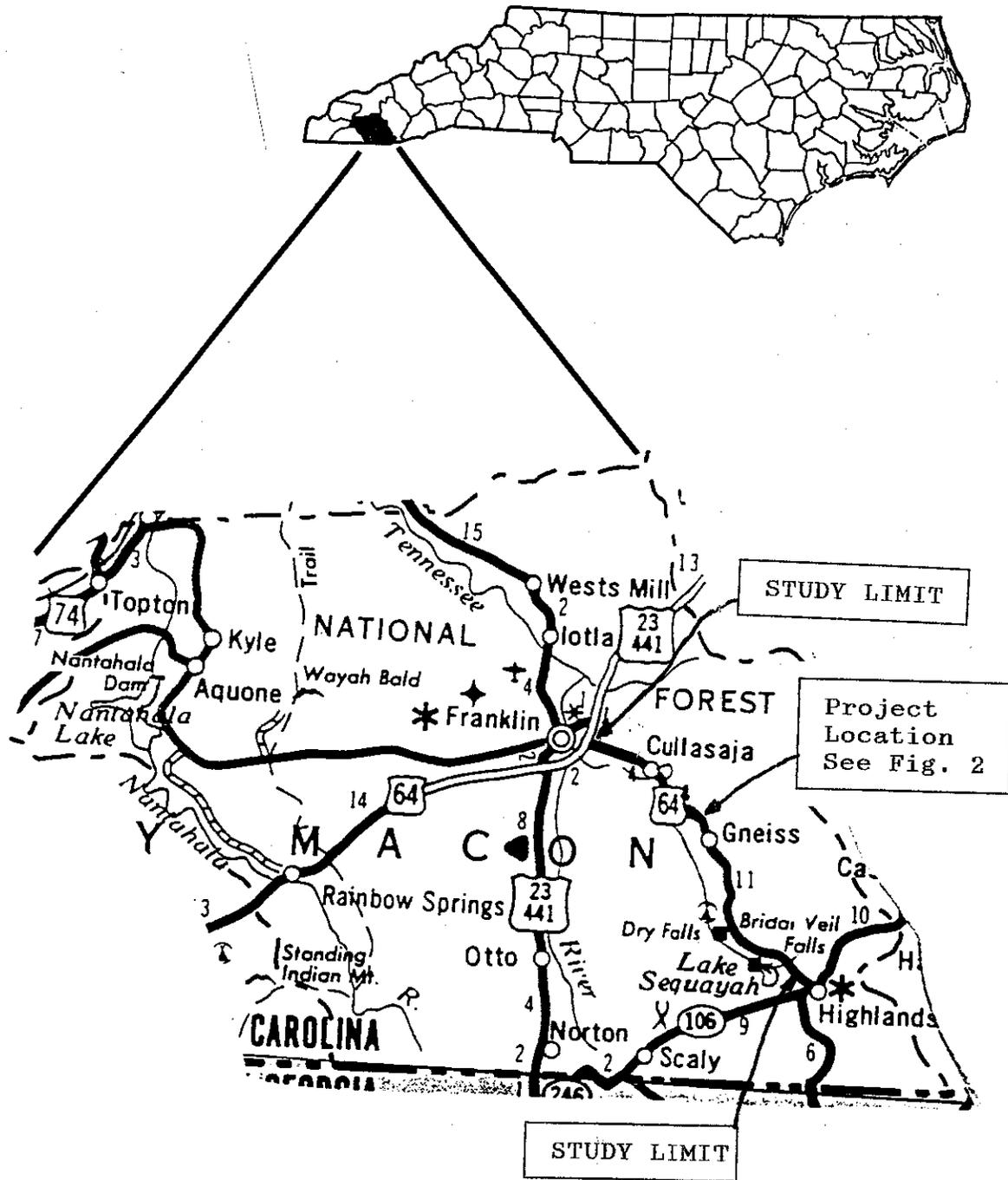
Construction:	\$ 850,000
Right of Way :	420,000
Total	: \$1,270,000

IV. OTHER COMMENTS

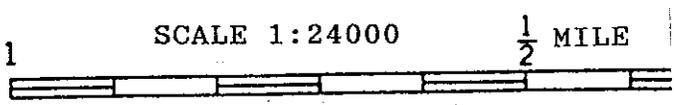
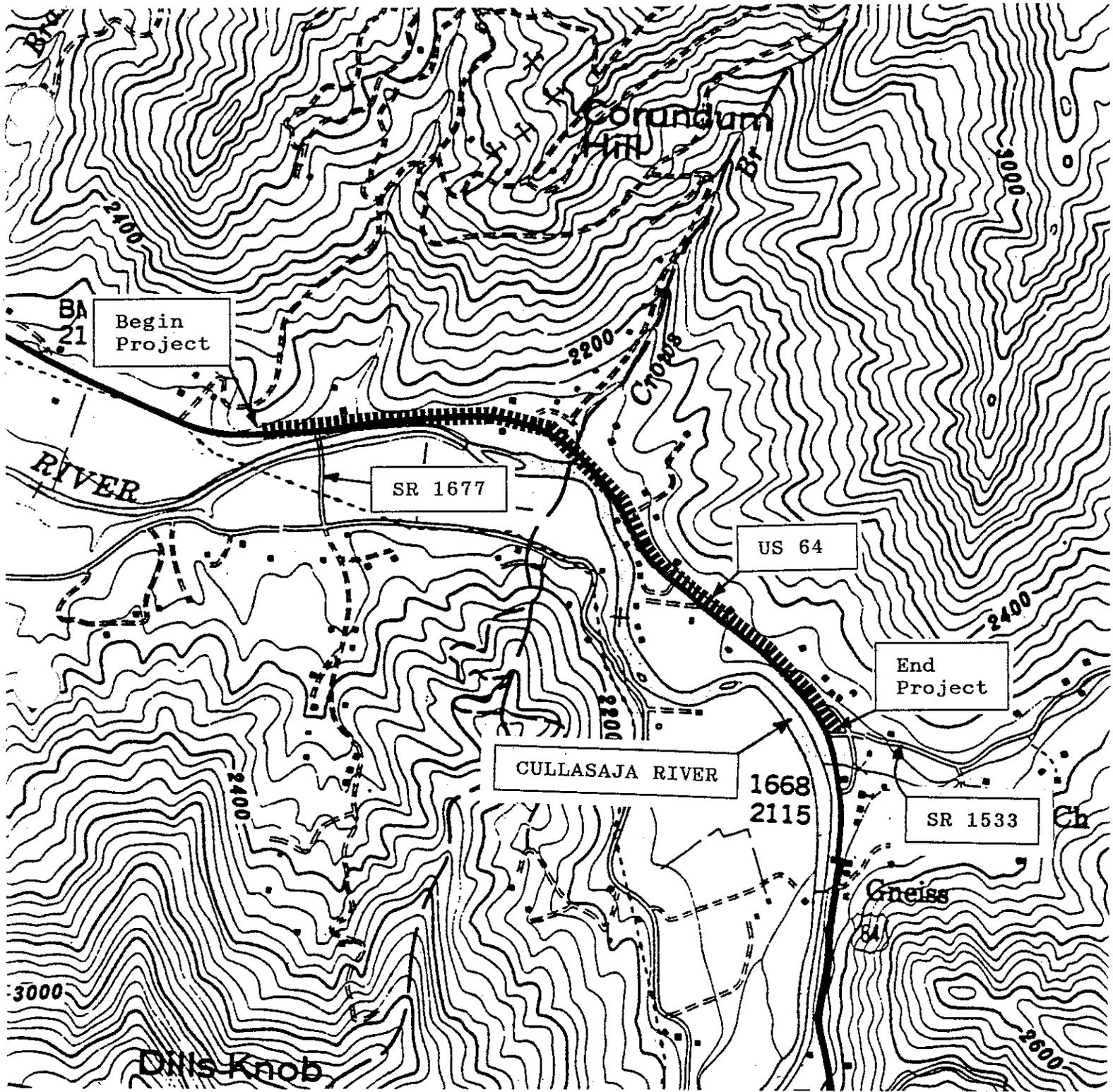
Although the recommended improvements are for only the 0.9 mile segment on US 64 between SR 1677 and SR 1533, this study considered the approximately 15 mile long segment of US 64 between Franklin and Highlands. The approximately 10 mile long segment between SR 1533 and Highlands is an extremely mountainous and scenic roadway running generally to the north of the Cullasaja River. The Cullasaja Gorge Area is part of the Highlands Ranger District, Nantahala National Forest. In this area there are four developed recreation areas and during the summer and fall seasons the Cullasaja River is the focal point for dispersed recreational activities. The projected traffic volumes indicate that some form of relief will be needed for this corridor in the future. However, to provide any significant improvement to the roadway capacity in this segment would require an expenditure of funds that is inappropriately high with respect to the current seasonal problem and would destroy the scenic beauty that is now this area's attraction. Also, if Federal funds are used, the recreational nature of the National Forest that borders the roadway would likely involve section 4(f) of the 1966 DOT Act. Therefore no improvements are recommended in this section of roadway.

Widening US 64 to 4 lanes was considered for the 4 mile segment west of the recommended improvements. The cost for right of way and construction was estimated to be 14 million dollars and is not recommended because it is not considered a cost effective improvement.

An environmental screening was not conducted, however, there are no significant environmental problems anticipated with regard to the recommended improvements.



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<p align="center">FIGURE 1. VICINITY MAP SHOWING STUDY LIMITS AND PROJECT LOCATION</p>	
<p align="center">US 64 from SR 1677 to SR 1533</p>	
Macon County	R-2701



CONTOUR INTERVAL 40 FEET

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FIGURE 2. LOCATION MAP	
US 64	
from	
SR 1677 to SR 1533	
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