

FEASIBILITY STUDY

NC 211, Red Springs Bypass
Robeson County
R-2593

Prepared by
Planning and Environmental Branch
Division of Highways
N. C. Department of Transportation

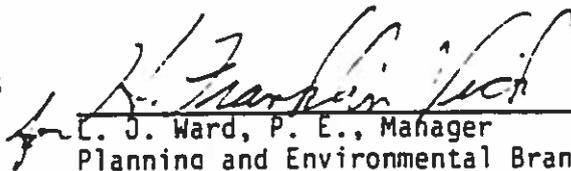


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I. DESCRIPTION

This report covers a preliminary study of a NC 211 bypass in the Red Springs area of Robeson County. This project is included in the 1990-1996 Transportation Improvement Program for feasibility study and/or right-of-way protection. It is not currently funded.

II. PURPOSE OF PROJECT

Existing Conditions

The proposed Red Springs Bypass would be constructed entirely on new location. The recommended alignment is shown on Figure 1. It closely follows the alignment of the proposed loop as shown on the mutually adopted Red Springs Thoroughfare Plan (see Figure 2).

The project is designated a rural major collector in the North Carolina Functional Classification System and a major thoroughfare on the Thoroughfare Plan.

NC 211 is a 2 lane 22' pavement with 9-10' foot grassed shoulders on 60 feet of right-of-way.

The proposed bypass would begin on NC 211 east approximately .5 mile east of the intersection of SR 1500 and NC 211. It would traverse in a northerly direction passing west of the sewage disposal plant, intersecting SR 1176 just south of SR 1777. The bypass would cross NC 71 between SR 1700 and Shannon Road and continue to tie into NC 211 approximately .5 mile west of NC 71. A logical extension of the project would be to extend the bypass at its eastern intersection with NC 211 to NC 72 at SR 1303. (See Figure 1).

Land development in the area of the bypass includes strip commercial development along NC 211 to agricultural and woodlands with scattered residential development along the intersecting secondary roads. Some wetlands are encountered in the vicinity of SR 1777 where Little Raft Swamp is crossed.

Initial (1990) and projected (2010) traffic volumes on NC 211 are as follows:

	1990*	2010*
must be existing NC 211 by 1990	6400	10,000
Proposed Extension to NC 72	4800	7,000

* traffic volumes in vehicles per day (VPD).

It is estimated if the bypass were open to traffic now it would attract approximately 3000 VPD which would increase to 5000 VPD by the year 2010.

Need for Project

Implementing the project would complete a segment of the Red Springs Thoroughfare Plan by providing an important link in the outer loop thoroughfare system.

The proposed bypass is expected to serve the through traffic currently using NC 211 through town. The through town route is encumbered by speed zone restrictions, turning traffic, slow travel speeds and road-side interference due to abutting development. The project is also intended to serve local traffic generated by abutting properties and future subdivisions developed near the bypass. The project is envisioned as being a suburban type facility serving through traffic as well as local traffic generated by nearby development.

The project has received strong support from the town of Red Springs.

III. RECOMMENDATIONS AND COSTS

Implementing the NC 211 bypass is recommended due to increasing traffic volumes along NC 211 and the increase of industrial and manufacturing plants in the area.

A 24-foot pavement with 10-foot shoulders, including 2-foot paved, is the recommended cross section for the project.

A 100-foot right of way width was used for cost estimating purposes. This width would allow widening to a multilane curb and gutter section if needed in the future. Partial control of access is recommended (one access per property).

Railroad signals and gates are recommended at the intersection of the project and the Laurinburg Southern Railroad.

Shannon Road is recommended to "T" into NC 71 (see Figure 2) to allow maximum intersection spacing between SR 1700, the bypass, and Shannon Road.

The extension of the bypass at NC 211 south to NC 72 at SR 1303 is recommended as a part of the project to give the increasing truck traffic on NC 72 access to the bypass enroute to NC 211 and NC 71 north. The 1989 traffic count on NC 72 within the town limits is 6500 VPD.

The project has a total length of 3.2 miles including the extension of the bypass from NC 211 south to NC 72 south. The NC 211 Bypass is 2.2 miles long and the proposed extension is 1.0 miles long.

The estimated cost of the project is as follows:

	<u>Construction Cost</u>	<u>Right-of-Way Cost</u>	<u>Total Cost</u>
NC 211 Bypass	\$1,900,000	\$350,000	\$2,250,000
Proposed Extension to NC 72	\$ 900,000	\$500,000	<u>\$1,400,000</u>
			<u>\$3,650,000</u>

The construction cost includes engineering and contingencies and the right-of-way cost includes relocation, acquisition and utility costs.

IV. ALTERNATIVES

An alternative location further out from Red Springs was looked and rejected due to the lower volume of traffic it would attract and the higher cost involved.

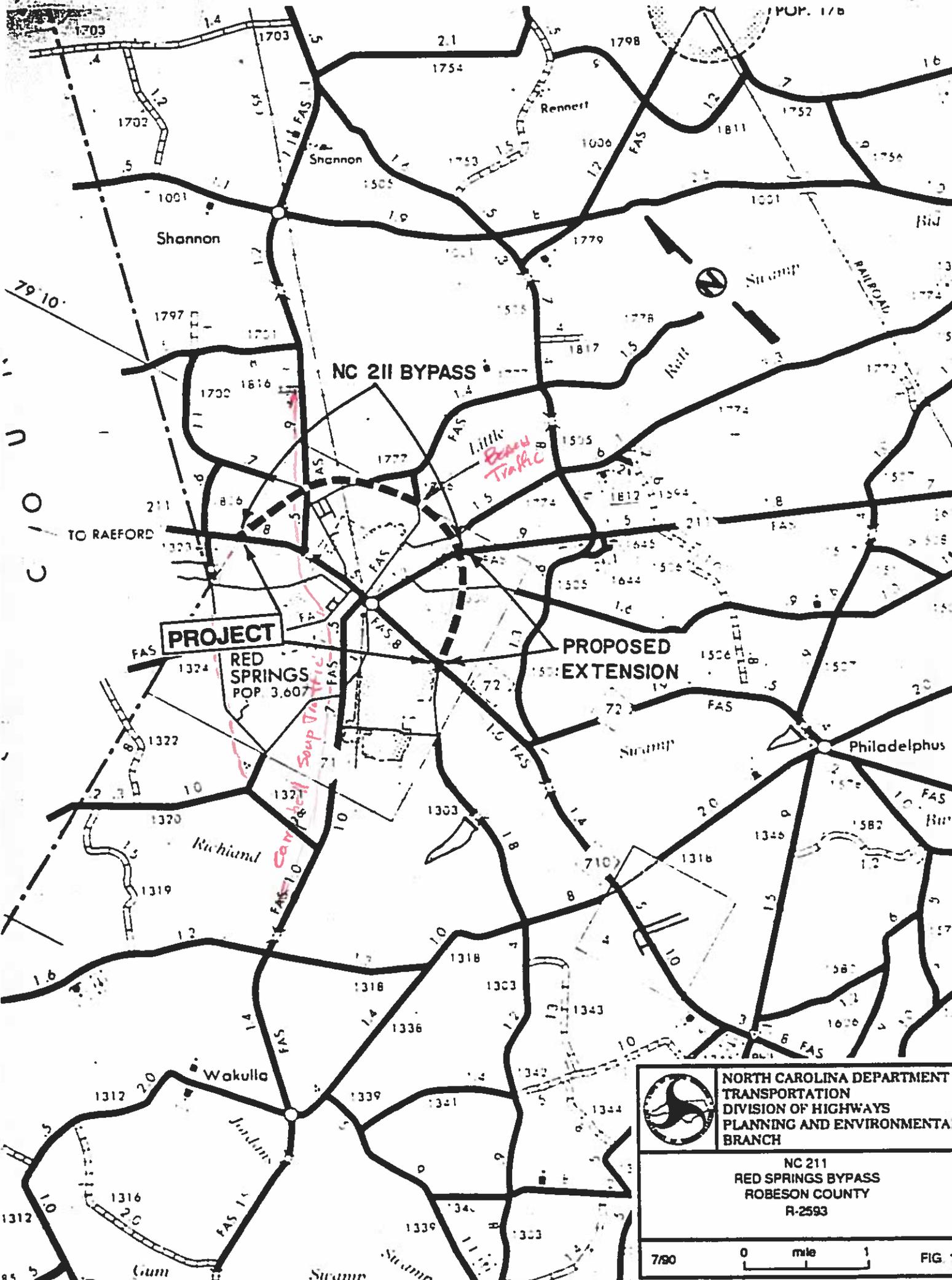
V. ENVIRONMENTAL EFFECTS

The most significant impact to the environment is the relocation of 5 residences and 1 business. Other impacts will be primarily related to the actual construction of the project and will cease upon completion of the project. These include minor erosion and siltation, increased noise levels from construction machinery, and delay and inconvenience to motorists.

VI. FUTURE ACTIVITIES

If the project is to be implemented at a future date, all feasible alternatives and their associated impacts will need to be evaluated in a planning/environmental document prior to that time, and a final decision made as to the most appropriate improvement.

RJB/rm



PROJECT

RED SPRINGS
POP. 3,607

NC 211 BYPASS

PROPOSED EXTENSION

Philadelphia

Richland

Wakulla

Judans

Gum

Swamp

Little Bee Heavy Traffic

Sampled Soup Traffic



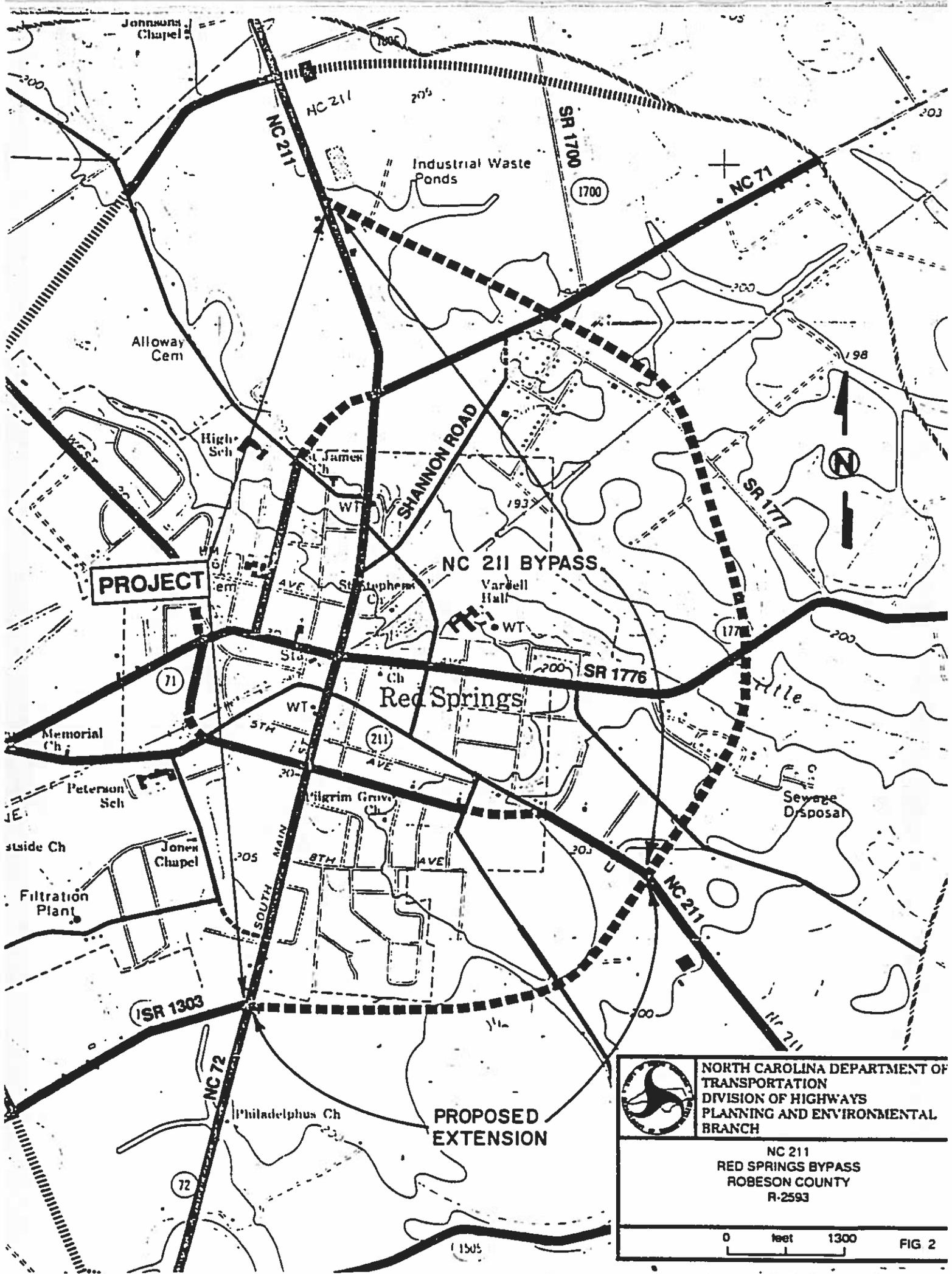
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANNING AND ENVIRONMENTAL BRANCH

NC 211
RED SPRINGS BYPASS
ROBESON COUNTY
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780

0 mile 1

FIG.



PROJECT

NC 211 BYPASS

Red Springs

PROPOSED EXTENSION



**NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION
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**NC 211
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0 feet 1300 **FIG 2**