

FEASIBILITY STUDY

New Connector
from SR 1909 (Hylan Avenue)
to US 74 in Hamlet

Richmond County

Division 8

U-3807

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



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2/26/98

Date

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I. GENERAL DESCRIPTION

This feasibility study describes the proposed connector from SR 1909 (Hylan Avenue) to US 74 in Hamlet, Richmond County (see Figure 1). The project is approximately 0.5 miles (0.8 km) in length. The studied typical section is a two-lane, 28-foot (8.5-m) face-to-face, curb and gutter section with 10-foot (3.0-m) wide berms on both sides. A 100-foot (30.5-m) wide right-of-way with no control of access is recommended. The estimated cost of the project is \$3,850,000 (\$ 450,000 for right-of-way and \$3,400,000 for construction).

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.

II. NEED FOR PROJECT

This project was requested by the City of Hamlet. The studied connector would provide Hamlet residents living south of the CSX railroad a direct access to US 74 (see Figure 1). Presently, these residents travel to the commercial areas on US 74 by going through either Marlboro Street in the center of Hamlet, or the congested Biltmore Drive in Rockingham which is approximately 2.4 miles (3.9 km) north of the proposed connector. This connector would divert some traffic from Biltmore Drive and reduce the congestion potential. The connector is consistent with the Rockingham-Hamlet Thoroughfare Plan.

SR 1909 (Hylan Avenue) is classified as a Minor Arterial and US 74, an Other Principal Arterial on the Statewide Functional Classification System. This connector is part of a proposed loop classified as a Major Thoroughfare on the Rockingham-Hamlet Thoroughfare Plan.

Hylan Avenue is a two-lane shoulder section, and US 74 is a four-lane, median-divided, shoulder section.

Land use along the studied corridor consists of residential development and undeveloped property.

Estimated 1997 average daily traffic (ADT) on the proposed connector is 6100 vehicles per day (vpd). In the design year 2020, the traffic volume is estimated to be 9500 vpd. The proposed connector would operate at level of service (LOS) C at the estimated 1997 traffic volume and at LOS D with the design year 2020 traffic volume.

The CSX Railroad has one track crossing the project corridor. The track carries 21 trains per day at an average speed of 50 miles per hour (80 kmh). The exposure index, a product of the design year traffic and the number of trains per day, at this location is 199,500, which exceeds the threshold of 30,000 that warrants a grade separation in an urban area.

III. STUDIED ALTERNATE

It is proposed to construct a two-lane connector from SR 1909 (Hylan Avenue) to US 74. The length of the project is approximately 0.5 miles (0.8 km). The location of the recommended connector is shown on Figure 1. The studied typical section is a two-lane, 28-foot (8.5-m) face-to-face, curb and gutter section with 10-foot (3.0-m) wide berms on both sides. A 100-foot (30.5-m) wide right-of-way is recommended with no access control.

It is recommended that the railroad crossing at CSX Railroad be grade separated. The recommended structure would have a deck width of 28 feet (8.5 m) with 5-foot (1.5-m) wide sidewalk on both sides.

It is anticipated that signals would be required at the project termini. Hylan Avenue at the project terminus would be widened to include a turn lane, and US 74 at the project terminus would be widened to allow for a exclusive right-turn lane.

Low utility conflicts are expected.

It is estimated that this project would require the relocation of 2 residences and no businesses.

Total project cost is estimated as follows:

Right-of-Way	\$ 450,000
Construction	<u>\$ 3,400,000</u>
Total Cost	\$ 3,850,000

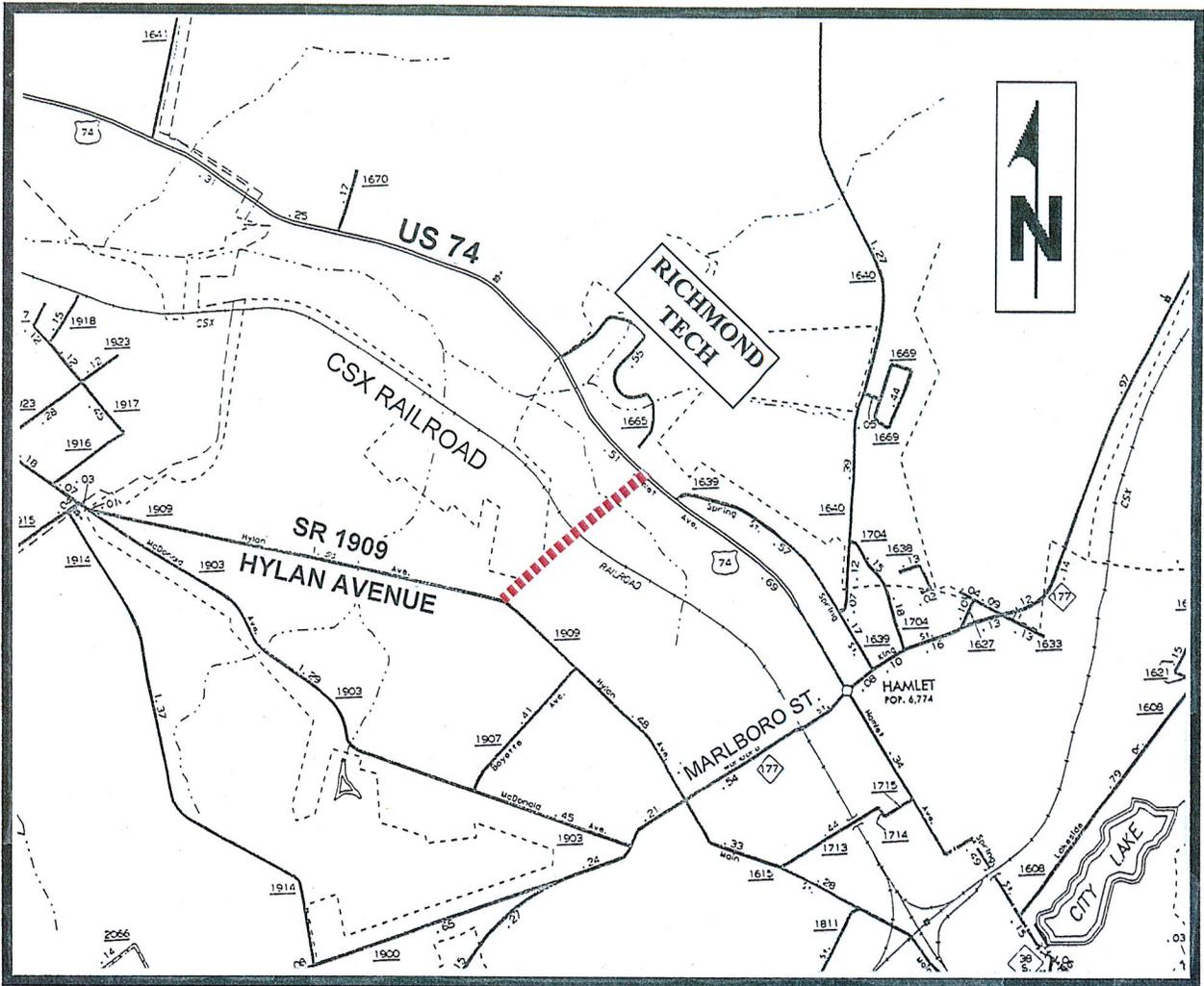
IV. OTHER COMMENTS AND CONCERNS

Based on maps available at the Department of Environment, Health, and Natural Resources - Natural Heritage Section, no threatened or endangered species were identified in the project corridor.

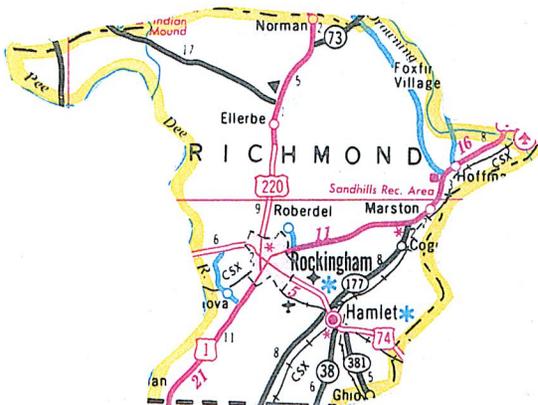
A preliminary historical screening was not conducted; however, no potentially historic or architecturally significant properties were observed during site investigation.

A small quantity of wetland is impacted by this project. The costs of wetland mitigation is not included in the total cost of the project.

No recommendation for bicycle accommodations was received from the NCDOT Office of Bicycle and Pedestrian Transportation.



SCALE



N C DEPARTMENT OF TRANSPORTATION
FEASIBILITY STUDIES UNIT

U-3807

**New Route from SR 1909
(Hylan Avenue) to US 74**

Hamlet
Richmond County

Division 8

Figure 1