

White



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT, JR.
GOVERNOR

DIVISION OF HIGHWAYS
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SAM HUNT
SECRETARY

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May 18, 1993

MEMORANDUM TO: Larry R. Goode, Ph.D., P.E.
Chief Engineer-Programs

FROM: Calvin W. Leggett, P.E. *[Signature]*
Manager of Program Development Branch

SUBJECT: NC 16, from NC 150 to the bridge over
C. & N. W. Railroad in Newton,
Catawba County.

This is in response to your request regarding improvements to the subject section of NC 16. The 12.1-mile portion of NC 16 was divided into 5 sections (please see the attached map) for study, and/or scheduling. This estimate is based on widening NC 16 to a multi-lane roadway from NC 150 just north of the Lincoln County Line to several possible termini along the existing roadway.

A feasible north terminal is at SR 1800, which is the proposed crossing site for the future Newton-Conover Loop (U-2404) and NC 16. This would link the proposed multi-lane NC 16 (R-2206) from Lucia in Gaston County, to NC 150; and the Newton-Conover Loop. The estimated cost of this 10.7-mile improvement is \$30,600,000 (\$11,300,000 for right of way, and \$19,300,000 for construction). This improvement corresponds to Sections 1,2, and 3 outlined below. The two additional sections (Sections 4, and 5) were considered since Section 4 would offer a multi-lane roadway to NC 10, and Section 5 would extend it further, to serve adjacent development.

The five study sections for the subject roadway are as follows:

Section 1: From NC 150 to the existing NC 16 alignment north of SR 1846. This section would consist of constructing a 4-lane, 46-foot median-divided freeway on a new location. The estimated right-of-way width is 250 feet, with full control of access. The new 1.8 miles of roadway would connect the future NC 150 / NC 16 interchange proposed as part of project R-2206, to the existing alignment of NC 16. The estimated cost of Section 1 is \$7,000,000 (\$1,300,000 for right-of-way, and \$5,700,000 for construction).



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Section 2: Along existing NC 16, from north of SR 1846 to SR 1801. The recommended improvements include widening this 8.3-mile section to a 5-lane, 60-foot pavement with 8-foot shoulders (including 4-foot paved shoulders). The estimated required right-of-way width is 150 feet without access control. The estimated cost of Section 2 is \$22,000,000 (\$9,400,000 for right-of-way, and \$12,600,000 for construction).

Section 3: Along existing NC 16, from SR 1801 to SR 1800 (SR 1800 is within the proposed corridor for the Newton-Conover Loop, project U-2404). The recommended improvements include widening this 0.6-mile section to a 5-lane, 64-foot, curb and gutter section on 100-foot wide right-of-way, without access control. The estimated cost of Section 3 is \$1,600,000 (\$600,000 for right-of-way, and \$1,000,000 for construction).

Section 4: Along existing NC 16, from SR 1800 (proposed corridor for the future Newton-Conover Loop, project U-2404), to just north of the intersection with NC 10. The recommended improvements include widening this 1.0-mile section to a 5-lane, 64-foot, curb and gutter section on a 100-foot wide right-of-way, without access control. It is also recommended that the NC 16/NC 10 intersection be realigned, and rechannelized. The estimated cost of this section is \$3,200,000 (\$1,100,000 for right of way, and \$2,100,000 for construction)

Section 5: Along existing NC 16, from just north of the intersection with NC 10, to the bridge over C. & N.W. railroad in Newton. The recommended improvements include widening this 0.4-mile section to a 5-lane, 64-foot, curb and gutter section on 90-foot wide right-of-way, without access control. The estimated cost of section 5 is \$1,500,000 (\$600,000 for right-of-way, and \$900,000 for construction).

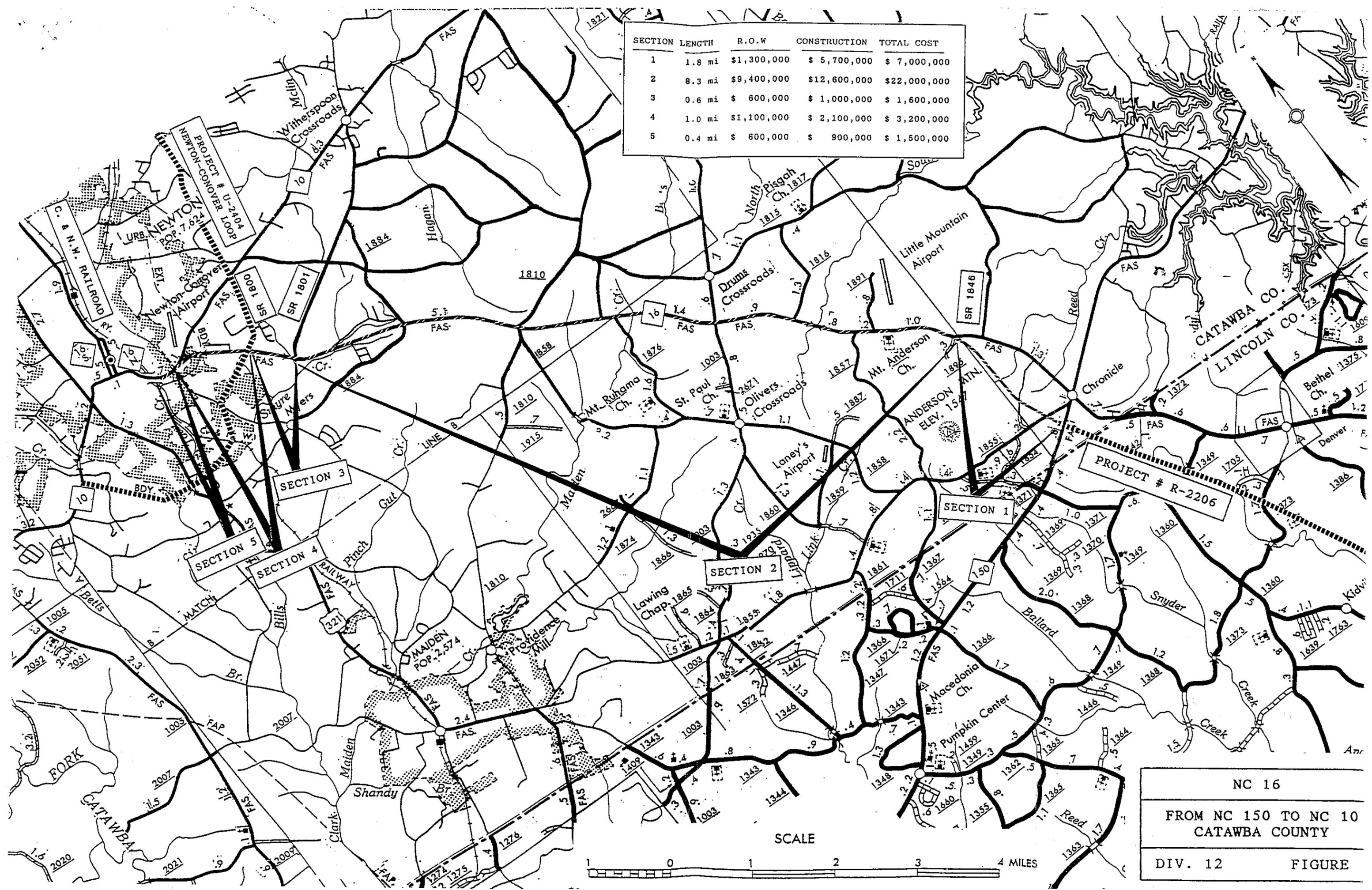
- Please let me know if you need any additional information regarding these estimates.

CWL/mm

Attachment

cc: W. H. Webb, P.E.

SECTION	LENGTH	R.O.W	CONSTRUCTION	TOTAL COST
1	1.8 mi	\$1,300,000	\$ 5,700,000	\$ 7,000,000
2	8.3 mi	\$9,400,000	\$12,600,000	\$22,000,000
3	0.6 mi	\$ 600,000	\$ 1,000,000	\$ 1,600,000
4	1.0 mi	\$1,100,000	\$ 2,100,000	\$ 3,200,000
5	0.4 mi	\$ 600,000	\$ 900,000	\$ 1,500,000



NC 16
 FROM NC 150 TO NC 10
 CATAWBA COUNTY
 DIV. 12 FIGURE

