# ENVIRONMENTAL ASSESSMENT FOR

CONTRACT NO. F 157-102-771

MARYLAND ROUTE 194 (WOODSBORO BYPASS)

From South of Woodsboro to North of Woodsboro

Frederick County, Maryland



prepared by

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

and

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

Report Number: FHWA-MD-EA-87-03-D

Federal Highway Administration Region III

> Maryland Route 194 from South of Woodsboro to North of Woodsboro

ADMINISTRATIVE ACTION

**ENVIRONMENTAL ASSESSMENT** 

U.S. Department of Transportation Federal Highway Administration and State of Maryland Department of Transportation State Highway Administration

42 U.S.C. 4332(2) (C) AND 23 U.S.C./28(a) CEQ SUBMITTED PURSUANT TO: REGULATIONS (40 CFR 1500 et seq)

> HAL KASSOFF **ADMINISTRATOR**

DATE Neil J. Pedersen, Director Office of Planning and Preliminary Engineering

Federal Highway Administration Division Administrator

DATE

# TABLE OF CONTENTS

Summ	ary		S-1
Envi	ronmer	ntal Assessment Form	S <b>-</b> 5
Ι.	Desci	ription of Proposed Action	I-1
	A. B. C.	Project Location Project Description Description of Existing Environment	I-1 I-1 I-1
		<ol> <li>Social, Economic and Land Use Characteristics</li> <li>Historic and Archaeological Resources</li> <li>Natural Environment</li> <li>Existing Air Quality</li> <li>Existing Noise Conditions</li> </ol>	I-1 I-4 I-5 I-8 I-8
II.	Need	for the Project	II-1
	C. D. E.	Purpose Project History Existing Roadway Traffic Conditions Accident Statistics Associated Improvements	II-1 II-1 II-2 II-2 II-3 II-3
III.	Alte	rnates Considered	III-1
	A. B.	Alternates Dropped from Consideration Alternates Retained for Detailed Studies	III-1 III-1
		<ol> <li>No-build Alternate</li> <li>Alternate 3</li> </ol>	III-1 III-1
IV.	Envi	ronmental Impacts	IV-1
	Α.	Social Impacts	IV-1
		<ol> <li>Relocation</li> <li>Public Parks and Recreational Areas</li> <li>Access to Services and Facilities</li> <li>Disruptions of Neighborhoods and Communities</li> </ol>	IV-1 IV-1 IV-2 IV-2
	B. C. D.	Economic Impacts Land Use Impacts Historic and Archaeological Site Impacts	IV-3 IV-4 IV-5

# TABLE OF CONTENTS (Continued)

		1.	Prime Farmland Soils	<u>PAGE</u> IV-5
		1.	Trime rurmrung 30113	
		2.	Floodplains	IV-5
		3.	Surface Water	IV-6
		4.	Habitat	IV-6
	F.	Air	Quality Impacts	IV-7
		1.	AnaTysis Objectives, Methodology, and Results	IV-7
		2.	Construction Impacts	IV-11
		3.	Conformity with Regional Air Quality Planning	IV-11
		4.	Agency Coordination	IV-12
	G.	Noi	se Impacts	IV-12
٧.	Com	nents	and Coordination	V-1
VI.	Appendices			V I - 1

# LIST OF FIGURES

<u>FIGURE</u>		<u>AFTER PAGE</u>
1	Location Map	I -1
2	Study Area Map	I-1
3	Election Districts .	I-1
4	Community Facilities	I-2
5	Existing Land Use	I-3
6	Future Land Use	I - 4
7	Prime Farmland Soils	I-6
8	Average Daily Traffic - No Build Alternate	II-2
9	Average Daily Traffic - Build Alternate 3	II-2
10	Alternate 3	III-2
11	Proposed Typical Section - Alternate 3	III <b>-</b> 2

# LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	Comparison of Alternates	S <b>-</b> 3
2	Noise Sensitive Area Description and Existing Noise Levels	. I-9
3	Noise Abatement Criteria and Land Use Relationships	I-10
4	Air Receptors	IV-9
5	CO Concentrations at Air Receptor Sites	IV-10
6	Noise Sensitive Areas, Ambient and Projected Levels	IV-14

#### **SUMMARY**

#### 1. Administrative Action

( ) Environmental Impact Statement

(X) Environmental Assessment

( ) Finding of No Significant Impact

) Section 4(f) Evaluation

#### 2. Additional Information

Additional information concerning this project may be obtained by contacting:

Mr. Edward Terry
District Engineer
Federal Highway Administration
The Rotunda - Suite 220
711 West 40th Street
Baltimore, Maryland 21211
PHONE: (301) 962-4010
HOURS: 7:45 a.m. to 4:15 p.m.

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division (Rm. 310)
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202
PHONE: (301) 333-1130
HOURS: 8:15 a.m. to 4:15 p.m.

#### 3. Description of Action

The proposed project consists of the relocation of a portion of Maryland Route 194 to the east of Woodsboro, in Frederick County, Maryland, for a distance of 1.8 miles. The project limits extend from south of Woodsboro to north of Woodsboro.

#### 4. Alternates Considered

Two alternates presented at an Alternates Public Meeting on September 24, 1986, in Woodsboro are being considered. The proposed No-build Alternate, Alternate 1, provides no improvements to Maryland Route 194 except for routine maintenance.

Alternate 2 proposed improving the existing facility through Woodsboro. Any improvements would have required prohibiting parking on Main Street in town. Widening the existing roadway was not feasible due to the proximity of storefronts and residences, mostly within the Woodsboro Historic District, and the need to retain the existing sidewalk widths. Through traffic would still be forced to use the existing street. For these reasons, Alternate 2 was rejected.

Alternate 3 consists of the relocation of Maryland Route 194 to bypass Woodsboro on the east, using, for the most part, existing State Highway Administration (SHA) right-of-way. The existing right-of-way leaves Maryland Route 194 south of Woodsboro and extends northward to Coppermine Road. North of

this point, additional right-of-way would be acquired. A connection from relocated Maryland Route 194 to Creagerstown Road (Maryland Route 550 West) north of Woodsboro is included.

#### 5. Summary of Environmental Impacts

Because Alternate 3 would be constructed almost entirely within SHA right-of-way, there would be minimal environmental impacts. No residential or business displacements are required and no impacts on handicapped or minority individuals or communities are anticipated. There would be no impacts to archaeological sites, and no property required from any historic sites eligible for listing on the National Register of Historic Places. There would be no impacts to public recreational areas.

Alternate 3 will encroach on the 100-year floodplain associated with Israel Creek. Strict enforcement of erosion and sediment control procedures and stormwater management would minimize impacts to the stream. The project area does not support any federally listed threatened or endangered animal or plant species. Two small impacted wetlands would be replaced.

No alternates being considered would exceed the 1-hour and 8-hour State or National Ambient Air Quality Standards (S/NAAQS) for carbon monoxide (CO). Federal Noise Abatement Criteria would not be exceeded at any of the eight noise sensitive areas (NSAs).

TABLE 1

COMPARISON OF ALTERNATES

	No-Build Alt. 1	Alternate 3
Social, Economic, and Land Use Impacts		
Residential Displacements Minority Displacements Historic Sites Adversely Affected Public Recreational Lands	0 0 0	0 0 0
Impacted	0	0
Consistent with Land Use Plans	No	Yes
Natural Environmental Impacts		
Wooded Habitat Loss Threatened or Endangered	0	3.8 acres
Species Affected	0	0
Stream Crossings	0 0	0 2.2 - 2.9 acres
Floodplain Encroachment Prime Farmland Affected	0	5.4 acres
Air Quality Impacts (sites	· ·	
exceeding S/NAAQS) Noise Level Impacts (NSA receptor sites exceeding Federal Noise Abatement	0	0
Criteria)	0	0
Wetlands	0	.5278 acres
<u>Costs</u>		
Engineering and Construction Right-of-Way	0 <u>0</u>	\$4,006.000 141.000
TOTAL	0	\$4,147.000

The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with the provisions of 1500.4(k) and 1506.2 and 1506.6 of the Council of Environmental Quality Regulations, effective July 31, 1979, which recommend that duplication of Federal, State, and local procedures be integrated into a single process.

The checklist identifies specific areas of the natural and social-economic environment which have been considered while preparing this environmental assessment. The reviewer can refer to the appropriate sections of the document, as indicated in the "Comment" column of the form, for a description of specific characteristics of the natural or social-economic environment within the proposal project area. It will also highlight any potential impacts, beneficial or adverse, that the action may incur. The "No" column indicates that during the scoping and early coordination processes, that specific area of the environment was not identified to be within the project area or would not be impacted by the proposed action.

## ENVIRONMENTAL ASSESSMENT FORM

		<u>Yes</u>	<u>No</u>	Comments
Land	Use Considerations			
1.	Will the action be within the 100-year floodplain?	X		Pages I-7, IV-5, IV-6
2.	Will the action require a permit for construction or alteration within the 50-year floodplain?		X	
3.	Will the action require a permit for dredging, filling, draining or alteration of a wetland?	X		Pgs, IV-5,6
4.	Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?		X	
5.	Will the action occur on slopes exceeding 15 percent?		X	****
6.	Will the action require a grading plan or a sediment control permit?	X		<u>Pgs, IV-5,6</u>
7.	Will the action require a mining permit for deep on surface mining?		X	
8.	Will the action require a permit for drilling a gas or an oil well?		X	
9.	Will the action require a permit for airport construction?		X	
10.	Will the action require a permit for the crossing of the Potomac River by conduits, cables or other like devices?		X	
11.	Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river, or wildland?		X	,

	<u>-</u> -	<u>Yes</u>	<u>No</u>	<u>Comments</u>
12.	Will the action affect the use of natural or man-made features that are unique to the county, state or nation?		X	
13.	Will the action affect the use of an archaeological or historical site or structure?		X	
B. <u>Water</u>	Use Considerations			
14.	Will the action require a permit for the change of the course, current, or cross section of a stream or other body of water?	X		<u>Pgs. IV-5,6</u>
15.	Will the action require the construction, alteration, or removal of a dam, reservoir, or waterway obstruction?		X	
16.	Will the action change the overland flow of stormwater or reduce the absorption capacity of the ground?	X		<u>Pgs. IV-5,6</u>
17.	Will the action require a permit for the drilling of a water well?	.———	X	
18.	Will the action require a permit for water appropriation?		X	
19.	Will the action require a permit for the construction and operation of facilities for treatment or distribution of water?		X	
20.	Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?		X	
21.	Will the action result in any discharge into surface or sub- surface water?	X		<u>Pgs. IV∸5,6</u>

			<u>Yes</u>	<u>No</u>	Comments
	22.	If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?		X	
С.	<u>Air U</u>	se Considerations			
	23.	Will the action result in any discharge into the air?	X		<u>Pgs IV-7-18</u>
	24.	If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?		X	Pgs IV-7-18
	25.	Will the action generate additional noise which differs in character or level from present conditions?	X		<u>Pgs IV-12-15</u>
	26.	Will the action preclude future use of related air space?		X	
	27.	Will the action generate any radiological, electrical, magnetic, or light influences?		X	
D.	<u>Plant</u>	s and Animals			
	28.	Will the action cause the disturb- ance, reduction, or loss of any rare, unique or valuable plant or animal?		X	Page I-8
	29.	Will the action result in the significant reduction or loss of any fish or wildlife habitats?		X	
	30.	Will the action require a permit for the use of pesticides, herbicides or other biological, chemical or radiological control agents?		X	
Ε.	Socio	o-economic			
	31.	Will the action result in a pre- emption or division of properties or impair their economic use?		X	Page IV-3

		<u>Yes</u>	<u>No</u>	Comments
32.	Will the action cause relocation of activities, structures, or result in a change in the population density or distribution?		X	Page IV-1
33.	Will the action alter land values?		X	
34.	Will the action affect traffic flow and volume?	X		Page IV-2
35.	Will the action affect the pro- duction, extraction, harvest or potential use of a scarce or economically important resource?		X	
36.	Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?		X	<del> </del>
37.	Is the action in accord with federal, state, regional and local comprehensive or functional plans, including zoning?	X	·	Page IV-4
38.	Will the action affect the employ- ment opportunities for persons in the area?	***************************************	X	
39.	Will the action affect the ability of the area to attract new sources of tax revenue?		X	
40.	Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?		X	
41.	Will the action affect the ability of the area to attract tourism?		X	
<u>Other</u>	Considerations			
42.	Could the action endanger the public health, safety or welfare?		Х	

F.

		<u>Yes</u>	<u>No</u>	Comments
43.	Could the action be eliminated without deleterious effects to the public health, safety, welfare, or the natural environment?		X	
44.	Will the action be of statewide significance?		X	-
45.	Are there any other plan or actions (federal, state, county or private) that, in conjunction with the subject action, could result in a cumulative or synergistic impact on the public health, safety, welfare or environment?		X	
46.	Will the action require additional power generation or transmission capacity?		X	
47.	This agency will develop a complete environmental effects report on the proposed action.		X*_	

<sup>\*</sup> An Environmental Assessment is being prepared in accordance with the U.S. Department of Transportation Order 5610.1c.
This satisfies the requirements of the National Environmental Policy Act.

OF PROPOSED ACTION

#### DESCRIPTION OF PROPOSED ACTION

#### A. Project Location

The project area is located in northeast Frederick County (see Figure 1). Maryland Route 194 in the vicinity of Woodsboro, runs in a north-south direction from Maryland Route 26 at Ceresville to Pennsylvania.

#### B. Project Description

The project consists of relocating Maryland Route 194 to the east of Woodsboro (see Figure 2).

#### C. Description of Existing Environment

#### 1. Social, Economic and Land Use Characteristics

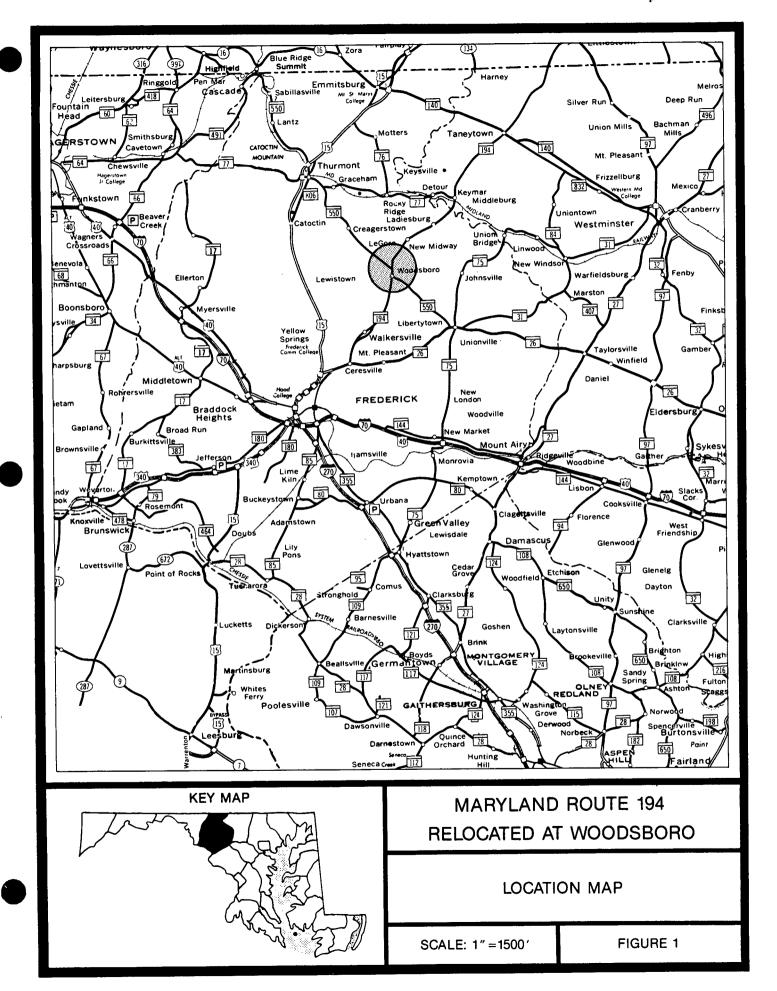
#### a. Social Environment

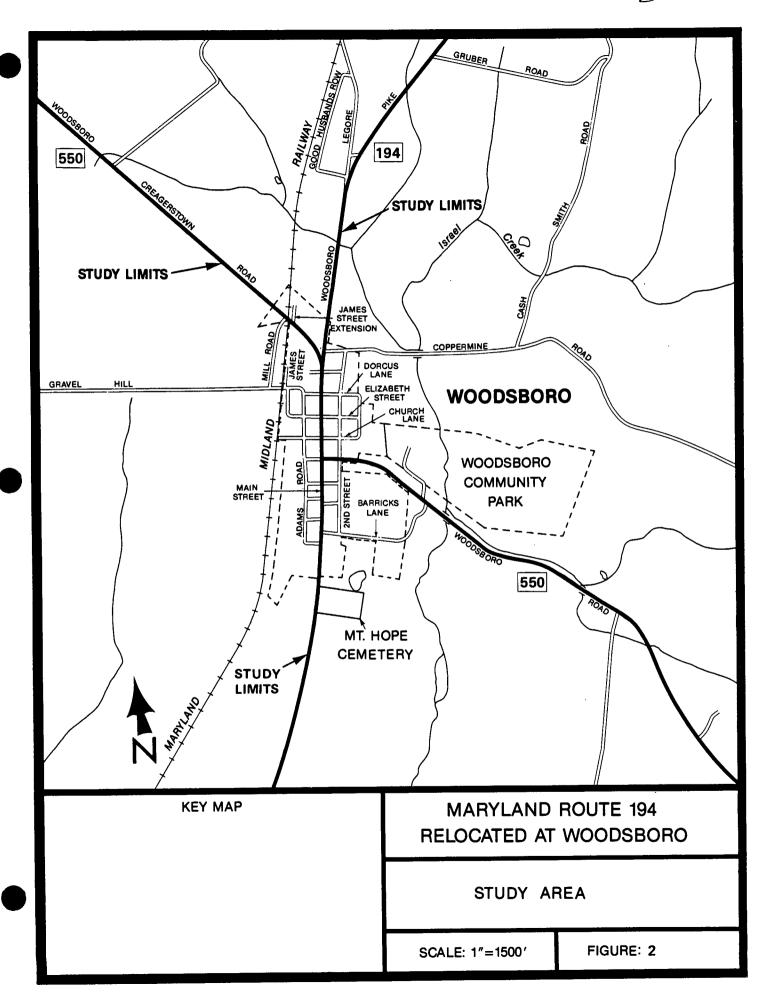
#### 1. Population

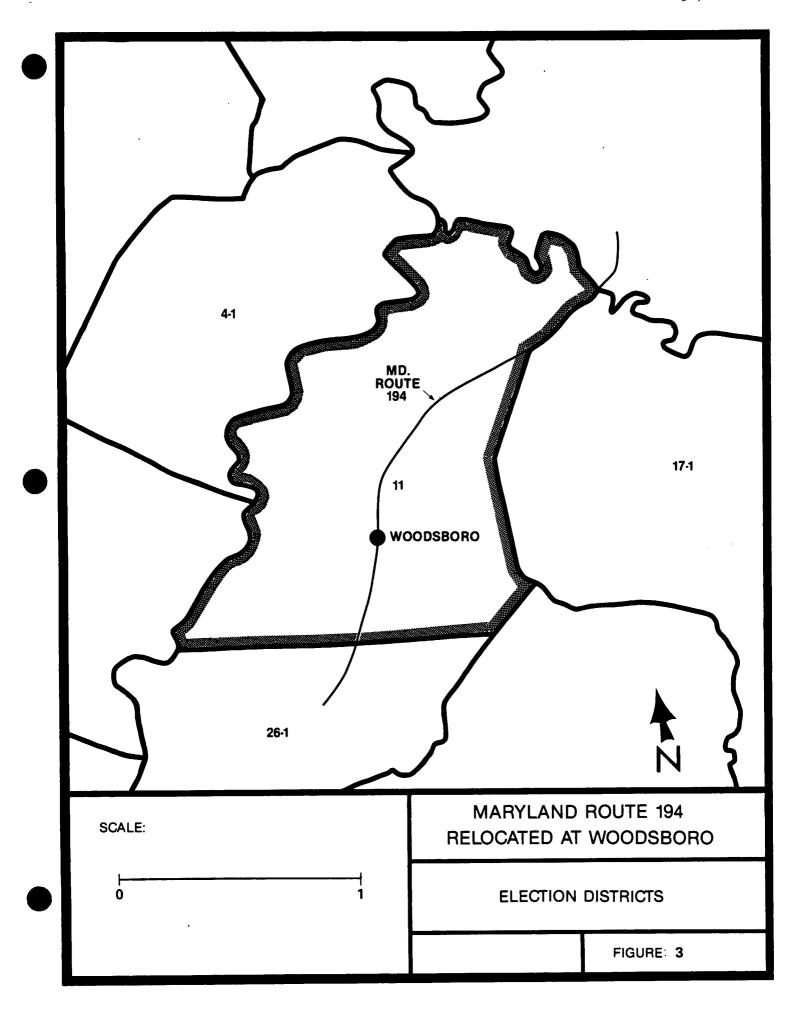
According to the 1980 U.S. Census, Frederick County's population increased approximately 35 percent from 1970 to 1980 (84,927 to 114,263 people). This increase was due more to in-migration than to natural population increase because the county became more developed and suburbanized as a result of its proximity to the Baltimore and Washington metropolitan areas. During this time, Frederick County was one of Maryland's fastest growing counties with a rate of population increase nearly five times greater than that of Maryland as a whole. Frederick County's population was ranked seventh among all Maryland counties in 1980. The Maryland Department of Economic and Community Development predicts that the county's population will increase by nearly 39 percent by the year 2000.

The central and eastern portions of the county (where the study area is located) exhibited the greatest population increase growth, in large part due to good access to the Baltimore and Washington employment areas and availability of public utilities and facilities.

The study area is located within the boundary of Election District 11-Woodsboro (see Figure 3). In the 1970's, the population within this election district grew by 12.8 percent (2,127 to 2,399 people). Its primary concentration of population is in the incorporated Town of Woodsboro, which experienced a population increase of 15 percent (439 to 506 people) during that period. This growth was slightly less than the 18 percent average increase experienced among all Frederick County municipalities. The town has maintained the character of a small rural community. The Frederick County Planning







Commission projects that Woodsboro's population will increase by 24.5 percent by the year 2000.

An analysis of the 1980 census data indicates that 99.3 percent of the population in Election District 11 was white and 0.7 percent was American Indian or of Oriental origin. Over 14 percent was age 60 or older. No concentration of elderly, minority or handicapped individuals was identified, although those older than age 60 comprise nearly a quarter of the population.

The 1979 median household income for those living in Election District 11 was \$17,741, which was lower than the countywide median of \$20,619.

In addition, Election District 11 experienced a 25 percent increase in the number of new housing units in the last decade.

## 2. Community Facilities and Services (Figure 4)

Woodsboro Elementary School is located in Woodsboro on Maryland Route 550. Two churches, Evangelical Lutheran and St. John's, are located in Woodsboro.

Police protection is provided by the Frederick County Sheriff's Department and the Maryland State Police, barracked in Frederick. The study area is in the Woodsboro fire district with fire and ambulance service provided by the Woodsboro Volunteer Fire Company, located east of existing Maryland Route 194.

The nearest hospital is Frederick Memorial in Frederick. The Frederick County Health Services division operates a clinic in Woodsboro, located just off Maryland Route 194, while the Woodsboro Medical Center offers a range of health services.

A branch of the U.S. Post Office is located in Woodsboro.

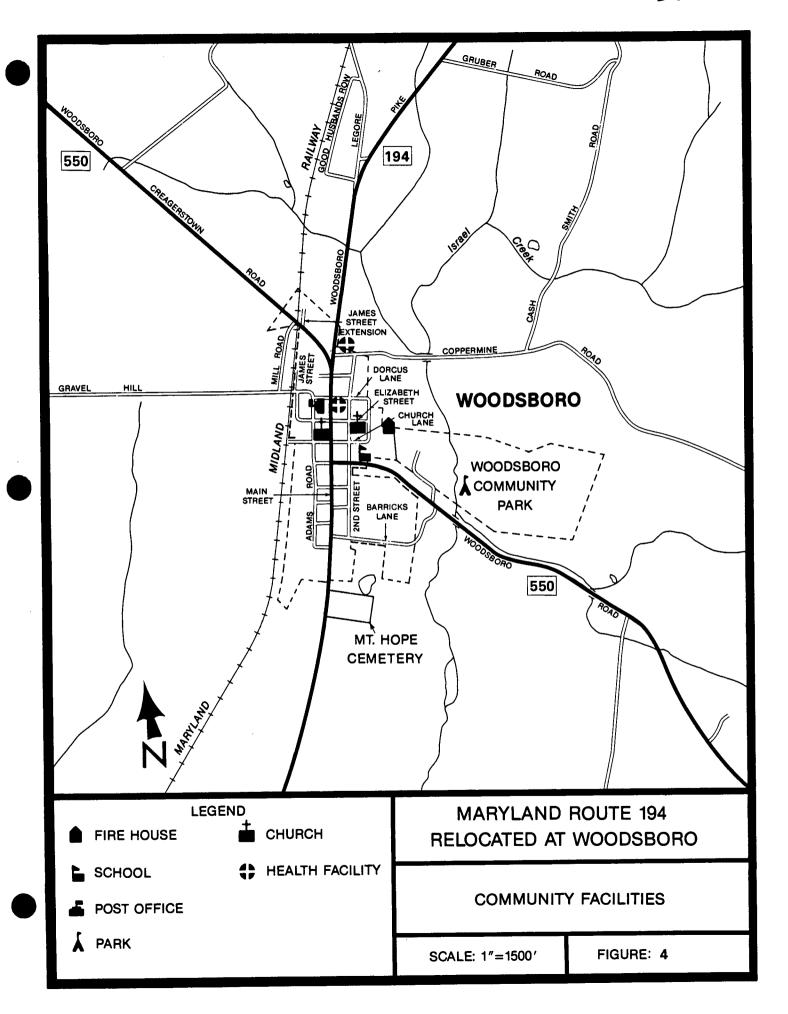
Woodsboro has its own public water and sewer system. A 0.1 million gallon-per-day community sewerage system was recently constructed in Woodsboro. Service is not planned to be extended outside the town's corporate limits. Further development is linked to these utilities.

#### 3. Parks

The Woodsboro Community Park is located east of Woodsboro. The land for the park was donated by the State Highway Administration in the early 1970's. Facilities in the park include ballfields, playgrounds, picnic areas, trails, ponds, and wooded areas.

#### b. Economic Environment

The Woodsboro area economy is historically linked to agricultural and quarried resources. In town, a small business district comprised of small shops, stores, and service facilities along Maryland Route 194 provides local



employment and serves the needs of the local population. Several industrial operations and scattered commercial uses are situated outside of Woodsboro.

An analysis of the 1980 census data indicates that a majority of those living in Election District 11 was employed in manufacturing, wholesale and retail trade, agriculture, and construction. Nearly 80 percent of the workers commuted to jobs in the county; most of the remainder worked in jobs outside the county in the areas of Washington, D.C., and Hanover, Pennsylvania.

Major employers in the Woodsboro region include the Rosebud Perfume Company located on Maryland Route 194 in town, the LeGore Lime Company and the S.W. Barrick and Sons Lime Company, located off Maryland Route 194 north of Woodsboro, as well as the Lehigh-Portland Cement Company, located on Maryland Route 550 east of town.

Rail service in the area is provided by the Maryland Midland Railroad, which operates the Frederick Secondary Track line from Frederick to Littlestown, Pennsylvania. This line, which runs through Woodsboro, is owned by the State Railroad Administration (SRA). Maryland Midland Railroad freight operations in Frederick and Carroll Counties are subsidized by SRA and these counties.

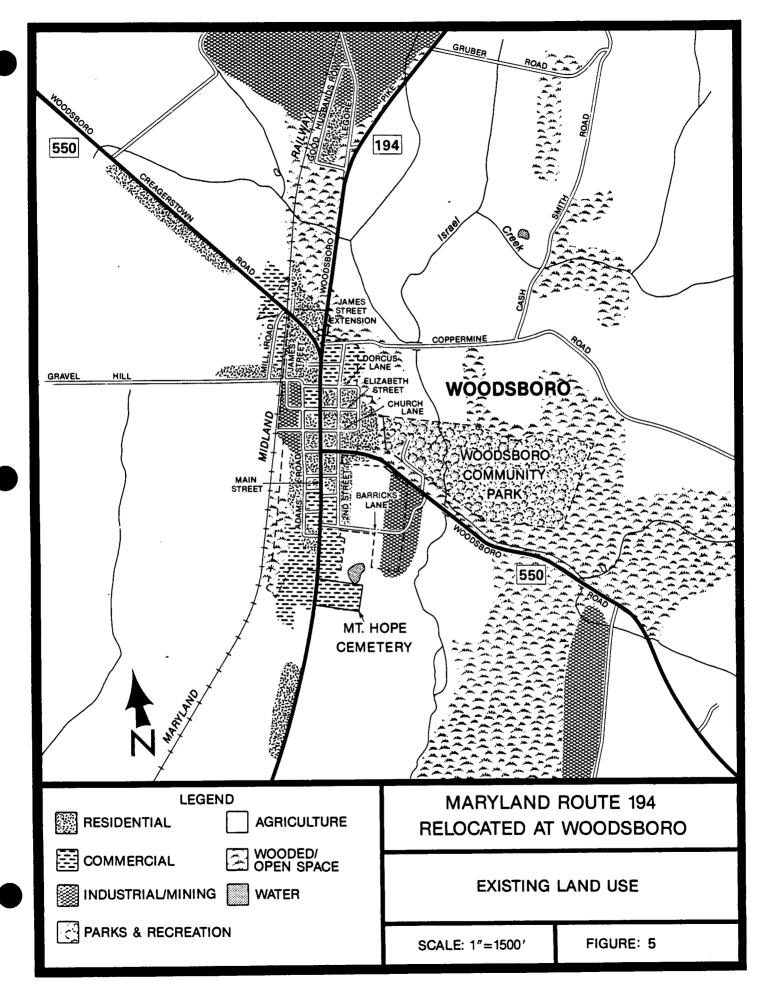
This railroad line and right-of-way have been designated by the Department of State Planning (DSP) as an Area of Critical State Concern. The intent of the designation and plan is that the right-of-way be preserved and rail operations be supported and encouraged by appropriate land use and planning to make the line self-sustaining. The rail line is believed to be important for the future industrial development of Frederick County and thus protected as an economic resource.

#### c. Land Use

### 1. <u>Existing Land Use (see Figure 5)</u>

Land use in Woodsboro primarily consists of medium density residential uses, a concentration of commercial uses near the middle of town along Maryland Route 194, and a community park. Some agricultural related industrial and scattered commercial uses are located near the corporate limits and along the railroad.

The study area outside of Woodsboro is primarily rural-agricultural and wooded. Agricultural is also the major land use in Frederick County. Very low density residential uses and several business are also located in the area surrounding Woodsboro. Limestone and other mineral quarrying is extensive north and east of the town.



## 2. Proposed Land Use (See Figure 6)

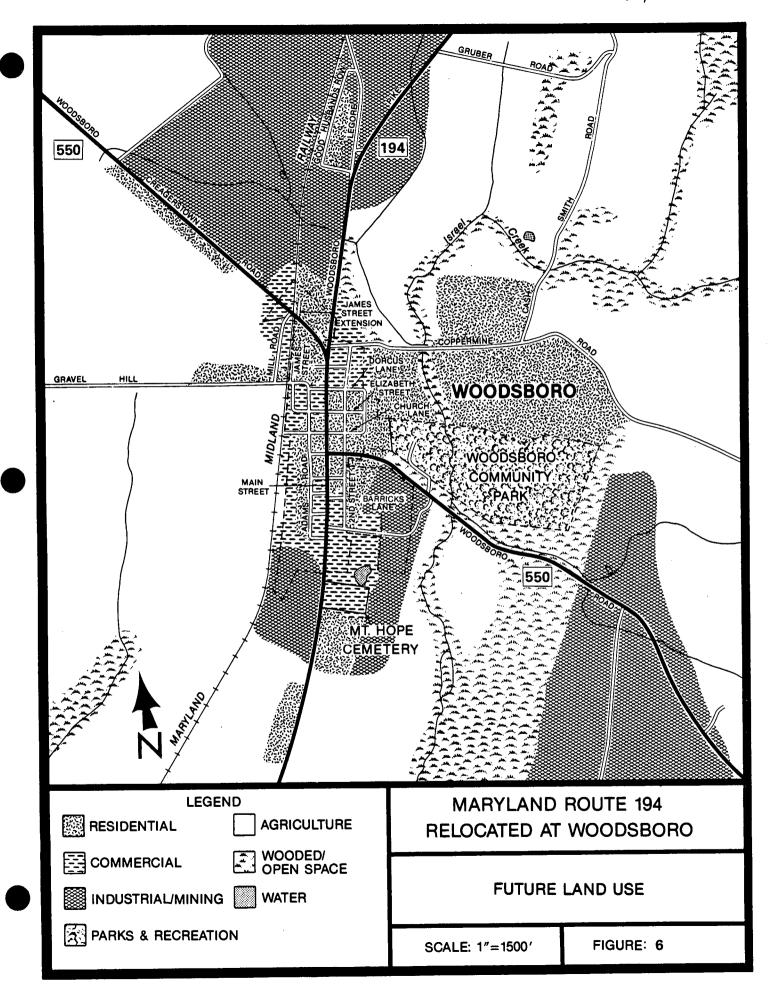
The Frederick County Comprehensive Plan (1984) recommends that residential, commercial, and industrial development be directed into planned, designated, compact growth areas. Regional and secondary growth centers focus future development activities, with the nature and scale of development less extensive with secondary growth centers. These secondary growth centers, designated District Communities, include Woodsboro, which is planned for limited expansion.

The Woodsboro Comprehensive Development Plan (1972) recommends the maintenance of medium residential and commercial uses in Woodsboro and lower density residential uses on the town's perimeter and outskirts. All future development would be clustered in and adjacent to Woodsboro. The presence of public water and sewer can help accommodate any future development in town. The restriction of water and sewer use to within the town's corporate limits will limit development occurring outside of Woodsboro. Nonetheless, the area east of Woodsboro along Coppermine Road has been designated for limited low density growth. Outside these developed areas, the agricultural and low density, rural residential character of the areas would be preserved.

Most general commercial development is planned to remain largely within the corporate limits of Woodsboro. Additional designated commercial areas are located on Maryland Route 194 south of Woodsboro. Other industrial and commercial uses would be concentrated along the Maryland Route 194 corridor immediately to the north and south of town for expanded industrial and commercial use because of its proximity and good access to the railroad and Maryland Route 194. Stream valleys and the park would remain in conservation and for open space use. Construction of existing mineral mining activities is anticipated at least through the end of this century. Areas designated for this use reflect current use and future expansions.

# Historic and Archaeological Resources

An historic sites reconnaissance of the study area was conducted. Seven sites, which may be potentially eligible for the National Register of Historic Places, are in the immediate vicinity of the proposed bypass (see the Alternate Mapping). The August 26, 1986, letter from the Maryland State Historic Preservation Officer listing these sites is included in Section V. These sites are described as follows:



- a. Quakers Good Will is architecturally significant. Parts of this large stone house may date to the eighteenth century. It is also significant historically for the association of the house with the founder of Woodsboro, Colonel Wood.
- b. Woodsboro Historic District is significant as a remarkably intact village founded and laid out by Joseph Wood in 1786. It was settled primarily by Germanic immigrants who built substantial log and brick dwellings.
- c. The Dorcus House retains considerable integrity and is architecturally significant for its traditional vernacular form. It is also historically significant for its association with the Dorcus family, who was among the early settlers of the area.
- d. The John Trout House is significant as a remarkably intact stone and log dwelling with fine architectural details. It is significant architecturally as well as historically for its association with Mr. Trout, the mid-nineteenth century resident who was the Constable of the area.
- e. Stoney Ridge is significant as an intact and traditional farmstead, which includes the original log dwelling, a newer mansion house, and a full complement of outbuildings.
- f. The Myers House is architecturally significant due to its style and form as a large, mansarded residence on the outskirts of Woodsboro. It was built in the late nineteenth or early twentieth century. A large bank barn with a stone foundation is located behind it.
- g. S.W. Barrick Company Worker Housing is significant as a remnant of a nineteenth century industrial village.

An archaeological reconnaissance of the study area was also undertaken, but no sites which might meet the criteria for inclusion in the National Register of Historic Places, will be impacted. One site, the Israel Creek Site (18FR607) is located outside the project area and therefore will not be impacted. Nonetheless, the site will be fenced during construction so that it will not be inadvertently disturbed. The November 3, 1986, letter from the State Historic Preservation Officer is attached.

#### 3. Natural Environment

#### a. <u>Topography/Physiography</u>

The proposed relocation of Maryland Route 194 is located entirely within the western division of the Piedmont Plateau Province. Low undulating hills gradually increase in elevation from the Fall Line and culminate in Parrs Ridge, which rises several hundred feet above the surface and has an average elevation of 800 feet to 900 feet. Slopes within the corporate limits are as much as 15 to 20 percent along the west ridge, limiting the feasibility of development and roadways.

#### b. <u>Geology</u>

The rocks in the western division of the Piedmont province are less metamorphosed and less deformed than those of the eastern division. The oldest rocks in the western division appear to be the Wokefield marble and a sequence of partially metamorphosed volcanic rocks that overlie it.

The Glade Valley consists predominantly of Frederick limestone (a thin bedded, dark blue limestone with dark, irregular clay partings) and Grove limestone (a thick bedded, fine grained, light to dark gray limestone). The composition of the north-south ridge just east of Woodsboro is a mixture of Anthelon quartzite and shale.

The predominant formation in the Woodsboro area, Grove limestone, produces relatively shallow, fertile soils and the bedrock is extremely stable and solid. Frederick limestone produces deeper soils and bedrock stability is not as well assured because of a greater possibility of cavities occurring within the bedrock. Quartzite and shale occur primarily in the Laurel Hill ridge.

#### c. Soils

The soils in the study area belong to one major soil association, Hagerstown silt loom, which consists of level to gently sloping (3 to 8 percent), moderately eroded soils. A portion of study area has been classified by the U.S. Department of Agriculture, Soil Conservation Service as <a href="Prime Farmland Soils">Prime Farmland Soils</a> (see Figure 7). There are no unique farmland or soils of statewide importance in the study area.

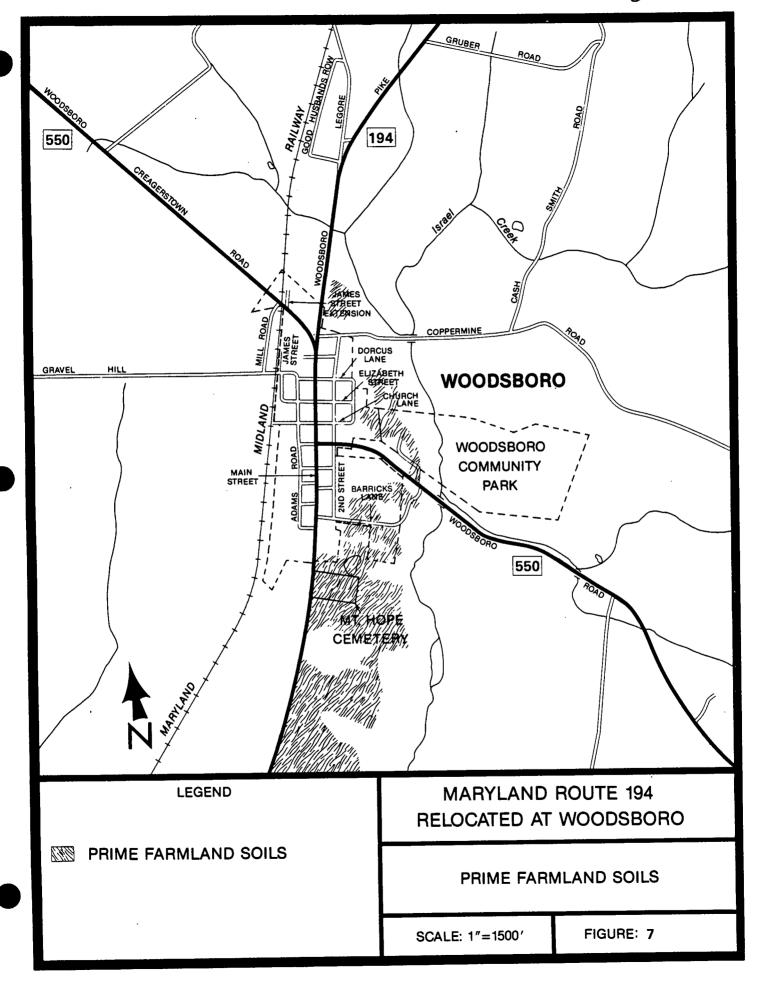
#### d. Surface Water

Woodsboro is located in the Monocacy River watershed. The primary surface streams in the area are the Monocacy River, Israel Creek (a tributary of the Monocacy) and the headwaters of Glade Creek. River and streambanks are not steep and water is relatively slow flowing over the flat land.

The Maryland Department of Natural Resources (DNR), Water Resources Administration, has classified all surface waters of the state into four categories, according to desired use. These categories are:

Class I - Water Contact Recreation, Aquatic Life and Water Supply

Class II - Shellfish Harvesting Waters



Class III - Natural Trout Waters

Class IV - Recreational Trout Waters

All waters of the state are Class I, with additional protection provided by higher classifications. All waters in the study area are designated as Class IV - Recreational Trout Water.

#### e. Floodplain

The 100-year floodplain associated with Israel Creek is shown on the Alternates Mapping. These floodplains are based on the U.S. Department of Housing and Urban Development (HUD) floodplain mapping.

#### f. Ecology

#### 1. Terrestrial

The Maryland Route 194 study area includes the Tulip Poplar Association. This association consists of red maple, flowering dogwood, Virginia creeper, black gum, white oak, sassafras, black cherry, grape, mockernut hickory, southern arrowwood, Japanese honeysuckle, pignut hickory, black oak, poison ivy, beech, spicebush, northern red oak, mapleleaf viburnum, early low blueberry, choke cherry, and greenbrier.

This area also supports such bird and mammal species as sparrow hawk, killdeer, screech owl, barred owl, red-headed woodpecker, catbird, and ovenbird. Mammals include red fox, weasel, striped skunk, and white-tailed deer.

#### 2. Aquatic Habitat

The wetlands within the study area have been identified by using the U.S. Department of the Interior National Wetlands Inventory Maps and by field inspection with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Maryland DNR/Tidewater Administration/Coastal Resource Administration. Minutes of the field meeting are in Section V (comments and coordination). The wetlands are shown on the Alternates Mapping in Section III.

Site W-1 is a wetland area about 350 feet x 20 feet. Vegetation includes cattails (40 percent), rushes (20 percent), Canadian goldenrod (5 percent), willow herb (5 percent), black willow (5 percent) and bulrush sedge (5 percent). Site W-2 is an area approximately 200 feet x 50 feet. Vegetation includes ashes, willows, and cattails. Site W-3 is a wetland area, but will not be impacted by the proposed build alternate.

#### g. Endangered Species

Correspondence with the U.S. Fish and Wildlife Service, Maryland DNR and Forest, Park and Wildlife Administration indicates that there are no known

populations of threatened or endangered species in the study area. See the letter dated April 16, 1986, in the Comments and Coordination Section.

#### 4. Air Quality

The Maryland Route 194 project is located within the Central Maryland Intrastate Air Quality Control Region. The Environmental Protection Agency's (EPA's) carbon monoxide attainment status designation for this region is classified as "cannot be classified or better than national standards."

#### 5. Existing Noise Conditions

Eight NSAs have been identified in the Maryland Route 194 study area. Descriptions of the NSAs are provided in Table 2. The location of the NSAs are shown on the Alternates Mapping. A copy of the Technical Analysis Report is available at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

Highway traffic noise is usually measured on the "A" weighted decibel scale "dBA", which is the scale that has a frequency range closest to that of the human ear. In order to give a sense of perspective, a quiet rural night would register about 25 dBA, a quiet suburban night would register about 60 dBA, and a very noisy urban daytime would register about 80 dBA. Under typical field conditions, noise level changes of a 2-3 dBA can barely be detected, with a 5 dBA change readily noticeable. A 10 dBA increase is judged by most people as a doubling of sound loudness. (This information is presented in the "Fundamentals and Abatement of Highway Traffic Noise" by Bolt, Beranek and Newman, Inc., for FHWA, 1980).

The Federal Highway Administration has established, through Federal-Aid Highway Program Manual (FHPM) 7-7-3, noise abatement criteria for various land uses (see Table 3).

The noise levels in this analysis are expressed in terms of an  $L_{eq}$  noise level, which is the energy-averaged noise level for a given time period. All ambient and predicted noise levels in this report are  $L_{eq}$  exterior noise levels unless otherwise noted.

TABLE 2

NOISE SENSITIVE AREA DESCRIPTION

AND EXISTING NOISE LEVELS

Noise Sensitive Area	Description/Location	Land Use Category	Ambient <sup>L</sup> eq
1	Main Street Residence, House Number 12	Residence	71*
2	Residence on Present Alignment of MD 194	Residence	62
3	Residence on Present Alignment of MD 194	Residence	62
4	Woodsboro Elementary School	School	53
5	Woodsboro Regional Park	Park	51
6	Residence	Residence	50
7	Residence on James Street off Route 550	Residence	50
8	Residence	Residence	47

<sup>\*</sup> Exceeds Federal Highway Administration Noise Abatement Criteria.

TABLE 3

NOISE ABATEMENT CRITERIA AND LAND USE RELATIONSHIPS
SPECIFIED IN FHPM 7-7-3

ACTIVITY CATEGORY	<u>L<sub>eq</sub>(h)</u>	DESCRIPTION OF ACTIVITY CATEGORY
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
В	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
С	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D		Undeveloped lands.
E .	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

In an acoustical analysis, measurement of ambient noise levels is intended to establish the basis for impact analysis. The ambient noise levels as recorded represent a generalized view of present noise levels. Variations with time of total traffic volume, truck traffic volumes, speed, etc. may cause fluctuations in ambient noise levels of several decibels. However, for the purposes of impact assessment, these fluctuations are usually not sufficient to significantly affect the assessment.

It was determined that for most of the NSAs, the most typical noise conditions occur during daytime hours (7:00 a.m. - 7:00 p.m.). During this time, the highest noise levels are experienced for the greatest length of time.

Calibration of the STAMINA 2.0/OPTIMA noise prediction model was performed utilizing simultaneous traffic data collected at three noise monitoring sites along Maryland Route 194. Traffic counts taken during the 15-minute monitoring periods were adjusted to represent hourly traffic flows and were input into the computer model accordingly. The predicted  $L_{eq}$  noise levels generated at the three sites as a result of this calibration exercise differed from their actual ambient noise levels by 1.5, 2.4, and 3.0 dBA. These fluctuations in noise levels can be attributed to extraneous noise sources pertinent to the modeled site (i.e., low aircraft flyovers), as well as the site's specific location, topographical features, and natural and man-made components (i.e., buildings, ground cover, etc.), and are within the range of normal modeling calibration ( $\pm$  3 dBA).

The results of the ambient noise levels measured at each NSA are included in Table 2.

II NEED FOR THE PROJECT

#### NEED FOR THE PROJECT

# A. Purpose

II.

Woodsboro currently experiences a high percentage of truck traffic which creates high noise levels while contributing to deterioration of Maryland Route 194/Main Street. Large trucks turning right from Maryland Route 550 northbound onto Maryland Route 194 encroach into the other lane used by oncoming traffic, creating safety problems. The trucks have to travel through the residential area of Woodsboro creating a dangerous situation for pedestrians. Problems are also caused by the mix of local and through trips, side friction from on-street parking serving the commercial development along both sides of Maryland Route 194 in town, and friction resulting from residential areas bordering Maryland Route 194.

Traffic volumes are expected to increase further as the town and surrounding areas continue to experience residential and commercial growth. The central and eastern portions of Frederick County, where the study area is located, are growing rapidly because of good access to the Washington and Baltimore employment areas.

The proposed bypass would improve in-town traffic circulation and relieve congestion, thus resulting in improved operating conditions and fewer delays. It would also serve to separate local and through purpose trips, thereby diverting almost all through trips destined for locations outside of the areas, such as Thurmont, Westminster, Frederick, and Hanover, Pennsylvania. The separation of through trips from in-town traffic would alleviate the side friction from on-street parking and residential access as well as improving access to the county seat. In addition, the bypass will serve to increase the capacity of the town's roadway network, thus providing for the expected residential and commercial growth. Most heavy truck traffic would be diverted to the bypass, and the attendant noise, dust, and vibration would be decreased.

# B. Project History

Maryland Route 194 Relocated, the Woodsboro Bypass, was first listed in the 1964 Highway Needs Study and has appeared in all subsequent studies since that time. It is presently included in the 1984 Highway Needs Inventory from south of Woodsboro to north of Woodsboro, a total distance of 1.8 miles, as an initial two-lane improvement with an ultimate four-lane roadway construction.

Maryland Route 194 Relocated first appeared in the 1974-1978 Secondary Construction Program with an improvement of "two-lane highway-construct." The project continued to be included in the Secondary portion of the Program through the 1976-1980 publication. The project was deleted from the 1978-1982 Consolidated Transportation Program and did not reappear until the current 1986-1991 document. It is listed as a study for a new roadway on new location replacing existing Maryland Route 194 from south of Woodsboro to north of Woodsboro.

A bypass of Woodsboro conforms with Frederick County's needs as expressed in local planning documents. This includes the 1984 Frederick County Comprehensive Plan, and the 1972 Comprehensive Development Plan for Woodsboro, Maryland. The project is identified by State and local elected officials as the number one priority on Frederick County's Secondary Highway Priority List.

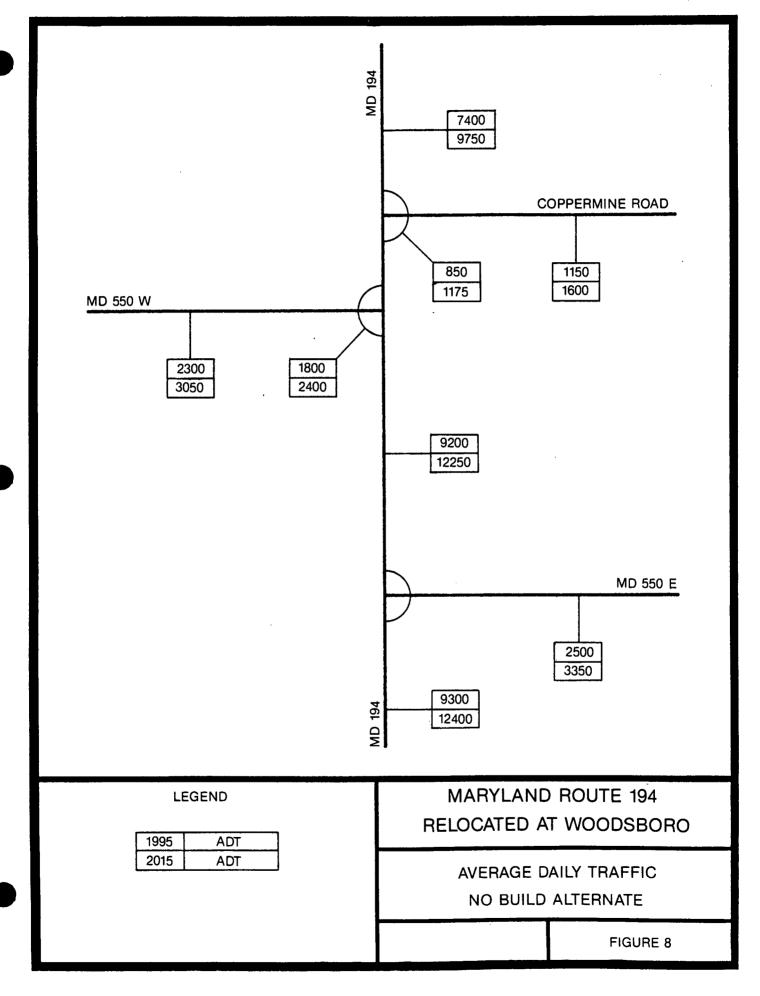
# C. Existing Roadway

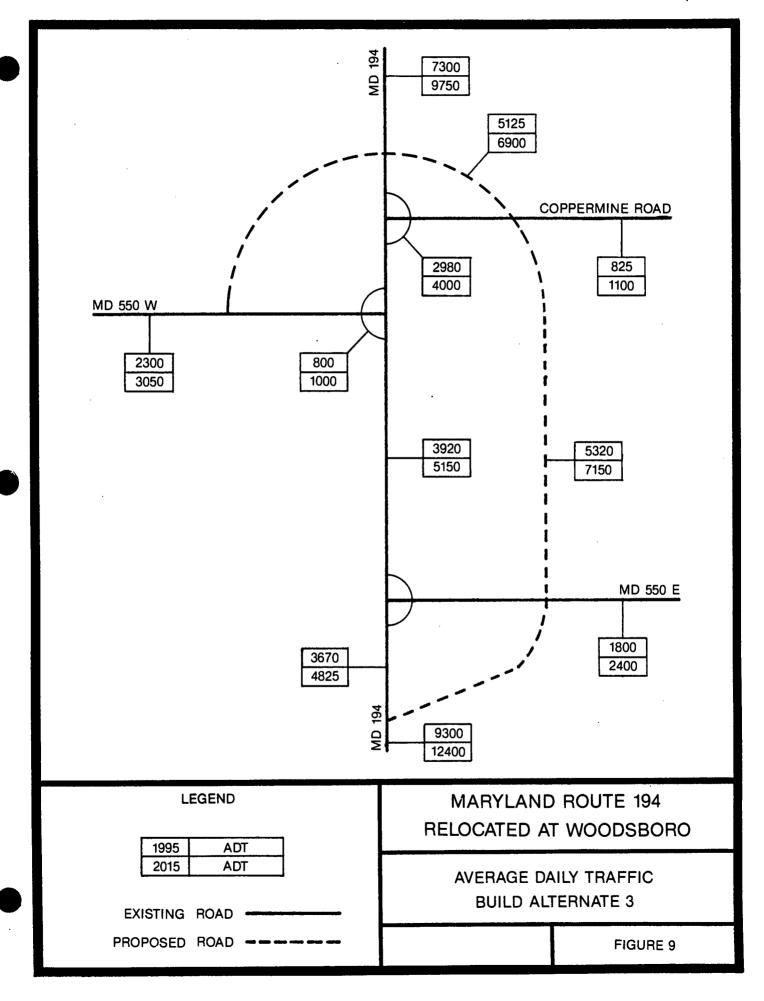
Maryland Route 194, also known as Main Street in Woodsboro, extends from Maryland Route 26 at Ceresville to the Maryland/Pennsylvania state line, a distance of approximately 25 miles. Within Woodsboro, Maryland Route 194 is a curbed roadway which varies between 30 to 33 feet wide. Parking is permitted at all times on the southbound side, and a nominal width sidewalk exists on both sides. This portion of Maryland Route 194 is posted at 25 mph. Both north and south of Woodsboro Maryland Route 194 is posted at 50 mph.

Currently, Maryland Route 194 is a 24-foot roadway with 10-foot shoulders along its entire length. In the 1950's it was planned as the southbound roadway of a future divided highway. South of Woodsboro, the right-of-way for the planned northbound roadway lies to the east of the existing roadway. A 150-foot wide right-of-way for this planned highway, extending from south of Woodsboro to Coppermine Road, was purchased in the late 1950's and early 1960's. North of Woodsboro, wide right-of-way was not purchased and Maryland Route 194 is in the center of an 80-foot wide right-of-way.

# D. Traffic Conditions

Average Daily Traffic (ADT) on Maryland Route 194 within Woodsboro (Main Street) was 7,650 vehicles per day in 1985, with an estimated ADT increase of 60 percent or approximately 4,600 additional vehicles by the design year 2015. Figures 8 and 9 show the ADT volumes for the No-build Alternate and Alternate 3 for the completion year (1995) and the design year 2015.





Traffic service assessments indicate that the bypass would handle over 50 percent of the projected traffic volumes. This would decrease in-town traffic volumes by design year 2015 to less than the 1985 traffic volumes.

# E. Accident Statistics

There are no high accident locations or intersections in the study corridor. The accident rate of 17.75 accidents per 100 million vehicle miles (MVM) is less than the statewide average of 20.5 per 100 MVM.

Though accidents are not currently a problem, the accident rate can be expected to rise in future years because of increased traffic volumes with a Nobuild Alternate. The proposed bypass could be expected to reduce the projected accident rates for the design year. In particular, projected increases in collision types normally associated with congestion and increased traffic volume (i.e., angle, left turn, rear end) would be reduced or avoided with the build alternate.

# F. Associated Improvements

Recent improvements completed in the Woodsboro area include the resurfacing of Maryland Route 194 in Woodsboro, completed in 1982, and the resurfacing of Maryland Route 550 from Maryland Route 194 to Maryland Route 26, completed in 1983. The resurfacing of Maryland Route 550 from Maryland Route 194 to south of the Monocacy River and the resurfacing of Maryland Route 194 from Maryland Route 550 to the Carroll County line are both currently under construction.

III ALTERNATES CONSIDERED

#### III. ALTERNATES CONSIDERED

# A. Alternates Dropped from Consideration

Alternate 2, a preliminary alternate, was eliminated from further consideration prior to the Alternate Public Meeting on September 26, 1986. This alternate proposed improving the existing Main Street (Maryland Route 194) through Woodsboro. This improvement would have required the prohibition of parking on Main Street.

Widening of the existing roadway is not feasible due to the proximity of storefronts and residences along Main Street. Impacts to the Woodsboro Historic District, which is eligible for listing on the National Register of Historic Places, would occur. It is also not feasible because of the need to retain the existing sidewalk widths. With Alternate 2, through traffic would still be forced to use the existing street, and thus the air pollution, noise levels, and vibration about which the residents now complain would be increased.

# B. Alternates Retained for Detailed Study

# 1. No-build Alternate

With this alternate, there would be no expenditure of funds other than for routine maintenance. It will not improve traffic operations, safety, or the capacity of the existing road. Large vehicles would continue to experience difficulty in negotiating certain movements at the two intersections of Maryland Route 194 and Maryland Route 550. This is not a desirable alternate because it does not offer the means to improve the operating characteristics of the existing road.

# 2. Alternate 3

As shown on Figure 10, this alternate bypasses Woodsboro on the east using a 150-foot wide State Highway right-of-way. This alternate leaves existing Maryland Route 194 approximately one-half mile south of Mt. Hope Cemetery. Going north it passes east of the cemetery and through an open field. Enough right-of-way was purchased to provide an access road for farms, residences, and commercial structures south of Maryland Route 550. It continues one half-mile and intersects Maryland Route 550 just east of the Woodsboro Elementary School. The alignment passes between the elementary school and the Woodsboro Community Park. There is a 200-foot wide clear area of state owned land between the right-of-way and the park adjacent to the State Highway right-of-way on the east. To

accommodate pedestrians likely to cross the highway between the elementary school and the park, SHA is investigating the installation of appropriate safety devices. The alignment passes behind the Woodsboro Volunteer Fire Company and intersects Coppermine Road approximately 500 feet east of Maryland Route 194 before rejoining existing Maryland Route 194 about 1,000 feet north of Coppermine Road.

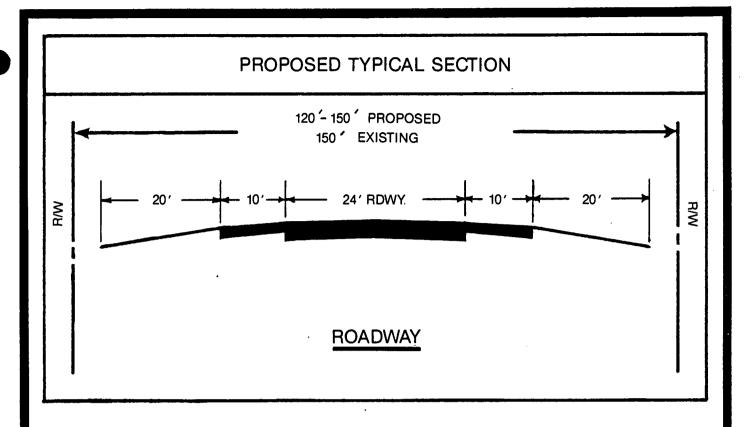
A portion of Maryland Route 550 West would be relocated in the area where relocated Maryland Route 194 rejoins existing Maryland Route 194. It would proceed westward crossing the Maryland Midland Railroad 'at-grade' and rejoin existing Maryland Route 550 approximately 1,000 feet west of the existing Maryland Route 550 railroad crossing. This relocation will remove the through traffic on Maryland Route 550 from Main Street in Woodsboro, leaving Main Street and the portions of Route 550 just east and west of Main Street for locally oriented traffic. Just south of the proposed intersection of the bypass and relocated Maryland Route 550 Main Street would be barricaded. Access to the bypass from Main Street would be via Coppermine Road as shown on Figure 10.

As shown on Figure 11, the proposed relocations of both Maryland Routes 194 and 550 would consist of 24-foot roadways, 2 to 10-foot shoulders, and 20 feet of safety grading. The 10-foot shoulders would be sufficient to accommodate bicycles. The design criteria for the bypass would permit it to have a posted speed of 50 mph.

Access to relocated Maryland Route 194 would be controlled. Access would be provided at existing Maryland Route 194 south of Woodsboro at Maryland Route 550 east of the school and at Coppermine Road. Private entrances and driveways would not be permitted direct entry to the new road.

In consideration of this access control, a 74-foot wide strip of right-of-way adjacent to the eastern right-of-way line was purchased to provide a means of ingress and egress for those properties whose current access to existing Maryland Route 194 would be severed. This right-of-way begins directly opposite the southernmost property line of the Mt. Hope Cemetery and extends northerly for approximately one-half mile to Maryland Route 550.





THE DIMENSIONS ARE FOR THE PURPOSE OF DETERMINING COST ESTIMATES AND ENVIRONMENTAL IMPACTS AND ARE SUBJECT TO CHANGE DURING THE FINAL DESIGN PHASE.

MARYLAND ROUTE 194
RELOCATED AT WOODSBORO

**ALTERNATE 3** 

FIGURE 11

IV ENVIRONMENTAL IMPACTS

#### IV. ENVIRONMENTAL IMPACTS

# A. Social Impacts

# 1. Relocation

Alternate 1 (No-build) and Alternate 3 would not require the acquisition of any residences or businesses. Although most of the right-of-way needed for Alternate 3 was previously purchased by SHA, an additional  $8 \pm$ acres of unimproved land currently designated for commercial and residential uses, plus wooded, open areas, would be acquired for the proposed improvements.

No significant changes in population density or distribution are expected to occur as the result of the relocation of Maryland Route 194. Property values are expected to remain at current levels.

No minority, handicapped, or elderly individuals would be affected by the proposed project.

# Title VI Statement

It is the policy of the Maryland SHA to ensure compliance with the provisions of Title VI of the Civil Rights Act of 1964, and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age, religion, physical or mental handicap in all SHA program projects funded in whole or in part by the Federal Highway Administration. The SHA will not discriminate in highway planning, highway design, highway construction, the acquisition of right-of-way, or the provision of relocation advisory assistance. This policy has been incorporated into all levels of the highway planning process in order that proper consideration may be given to the social, economic, and environmental effects of all highway projects. Alleged discriminatory actions should be addressed to the Equal Opportunity Section of the Maryland State Highway Administration for investigation.

# 2. Public Parks and Recreational Areas

No public parkland property or recreational facilities would be acquired under either alternate.

For people on the west side of the bypass, access to the park will be via local intersection streets that cross the proposed bypass. Alternate 3 would pass adjacent to the recreation area of Woodsboro Elementary School. Fencing along the school property will be provided.

# 3. Access to Services and Facilities

Alternate 1 (No-build) does not address Woodsboro's truck traffic problems on Maryland Routes 194 and 550, or the presence of through, Consequently, both motorists and pedestrians would commuter traffic. encounter continued unsafe travel conditions, conflicts between local and through traffic, and access and congestion problems associated with the slower movement of larger trucks on smaller streets. Traffic delays will continue as these large trucks, making turns at intersections, encroach into the opposing lane of traffic. Most of this truck traffic originates from the local quarrying and industrial operations near Woodsboro. lack of available right-of-way within Woodsboro's corporate limits to construct turn lanes will contribute to the congestion and accessibility In addition, vehicular access from and to residential problems. development on Maryland Route 194 in town causes dangerous conflicts with passing vehicles.

Alternate 3 would improve local and through access, travel safety, and travel times by separating local traffic from most through and truck traffic. Reducing the number of trucks and other vehicles on streets in Woodsboro would decrease the potential for vehicular and/or pedestrian conflicts, travel delays, and congestion as well as facilitate mobility.

The proposed bypass would also provide route and speed continuity for intercounty travelers and truck traffic between local industrial sources and travelers' destinations.

Emergency services would be generally unaffected, other than some improvement in local access and response times for the local fire department. Access would be maintained to all properties in the area.

# 4. Disruptions of Neighborhoods and Communities

Alternate 3 would not disrupt the integrity and cohesion of the existing community, nor cause changes to patterns of social interaction and behavior. It may actually improve the community's integrity and reduce disruptions due to the removal of much of the truck and through traffic from within the town's residential area.



In general, less commuter and truck traffic in Woodsboro as a result of Alternate 3 would improve the residents' quality of life by reducing the noise, vibration, and air pollution associated with this traffic.

Under the No-build Alternate, the residential area in Woodsboro would continue to be adversely affected and disrupted by truck traffic and increasing volumes of commuter traffic. This alternate does not address the problems of noise, dust, and vibrations associated with trucks, heavy trucks in residential areas, and vehicle conflicts.

# B. **Economic Impacts**

Commercial activity in Woodsboro is geared more to serving the needs of the local community. Only a small number of potential customers would be directed away from the town's commercial area along Maryland Route 194 under Alternate 3. The separation of local and through traffic would improve circulation and safety, reduce delays and conflicts with vehicles parking on Maryland Route 194, and make businesses more accessible and convenient to potential local clientele. Those people using the bypass will generally have no reason for stopping in Woodsboro.

Under Alternate 3, access would be maintained to all business and industrial properties. Access to the bypass would be limited only to intersecting Coppermine Road and Maryland Route 550. The town's and county's future land use plans indicate that commercial activity is to remain in town along Maryland Route 194, with some expansion of the industrial areas on the east side of town near the bypass. The closer proximity of the bypass to these industrial areas will afford these businesses better access and help keep their truck related traffic out of Woodsboro's core area.

Truck traffic originating from the area mineral mining and quarrying operations would also be better served by the proposed bypass. These trucks would benefit from improved route and speed continuity between these industries and their destinations. Agricultural activities within the SHA right-of-way for the proposed bypass would be affected by construction of the roadway. No active farms would be bisected by the proposed improvements, although right-of-way would be required from the outer edges of several of these areas. No farming operations are expected to be put out of business.

Although the proposed improvements under Alternate 3 would result in one additional crossing of the Maryland Midland Railroad, this would not interfere with its operations or preclude its development as an economic resource for the region.

A portion of state-owned right-of-way near the firehouse is used by the Fire Department for its fund-raising activities. Construction of the bypass near the firehouse will inhibit these activities and require that they be continued on a smaller scale.

Under the No-build Alternate, increasing volumes of truck and commuter traffic may discourage potential customers (who must contend with delays, unsafe travel and turning conditions, and congestion) from patronizing businesses in town.

# C. Land Use Impacts

The proposed relocation is consistent with the Frederick County Comprehensive Plan (1984) and Woodsboro Comprehensive Development Plan (1972), both of which identify a bypass on the eastern side of Woodsboro as a necessary element of their transportation plans.

The No-build Alternate is not consistent with these comprehensive plans.

In addition, since the proposed bypass would be a limited access facility, it would have no significant impact on land use patterns or spur growth incompatible with current land use or future planning efforts.

# D. <u>Historic and Archeological Site Impacts</u>

Stoney Ridge and the Barrick Lime Works Company Housing are too far away to be affected by Alternate 3. Determinations of the effect have been requested from the State Historic Preservation Officer. The Myers house, the Dorcus House, John Trout House, and the Woodsboro Historic District may be affected, but not adversely. Quakers Good Will, on the other hand, would be immediately adjacent to the bypass and incur proximity impact. A no adverse effect determination conditioned on SHA, providing landscaping within the right-of-way in the vicinity of the property, was requested from the State Historic Preservation Office. The landscaping plan would be submitted to the State Historic Preservation Officer for his review during the design phase of the project.

One archaeological site, Israel Creek (18FR607) is located outside the project limits and therefore will not be impacted. Nonetheless, it is recommended by the State Historic Preservation Officer that the site be fenced during construction so that it will not be disturbed.

# E. Natural Environmental Impacts

# 1. Prime Farmland Soils

The proposed build alternate would affect 5.4 acres of prime farmland soils located east of Woodsboro and adjacent to residential property. None of these prime farmland soils are planned for future agricultural use according to the Frederick County Comprehensive Plan.

There are no unique farmland soils present within the study area.

This project was coordinated with Soil Conservation Service in accordance with the National Farmland Protection Act.

#### 2. Floodplains

Alternate 3 will encroach on the 100-year floodplain associated with Israel Creek. Approximately 2.2 acres of fill would be required in the floodplain of Israel Creek. Approximately 0.71 acre of additional fill would be required if the service road is selected.

In accordance with the requirements of FHPM 6-7-3-2, and Executive Order 11988, each encroachment was evaluated to determine its significance. A significant encroachment would involve one of the following:

- a significant potential for interruption or termination of a transportation facility needed for emergency vehicles or which provides a community's only evacuation route;
  - a significant risk; or
  - a significant adverse impact on natural and beneficial floodplain values.

None of the proposed floodplain encroachments would significantly affect upstream water-surface elevations or storage capacity.

The use of standard hydraulic design techniques for all waterway openings would incorporate structures to limit upstream flood level increases and approximate existing downstream flow rates. Use of state-of-the-art sediment and erosion control techniques and stormwater management controls will ensure that none of the encroachments would result in risks or impacts to the beneficial floodplain values or provide direct or indirect support to further development within the floodplain.

Therefore, all floodplain encroachments were determined to be non-significant. In accordance with Executive Order 11988 and FHPM 6-7-3-2, a floodplain finding will not be required.

# 3. Surface Water

The proposed build alternate for the relocation of Maryland Route 194 would not require the crossing of Israel Creek. Culverts will allow two ditches, part of the stormwater management system for Woodsboro, to continue their function of transporting stormwater.

The increase of impervious surfaces resulting from the proposed improvements would produce a proportionate increase in the amount of roadway runoff carrying vehicle generated pollutants (i.e., oil, coolants, brake lining, rubber, etc.). Stormwater runoff would be managed under the DNR Stormwater Management Regulations. These regulations will require stormwater management practices in the following order of preference:

- on-site infiltration;
- flow attenuation by open vegetated swales and natural depressions;
- stormwater retention structures; and
- stormwater detention structures.

It has been demonstrated that these measures can significantly reduce pollutant loads and control runoff.

Final design for the proposed improvements will include plans for grading, sediment and erosion control, and stormwater management, in accordance with State and Federal laws and regulations. They will require review and approval by the Maryland DNR, Water Resources Adminstration and the Department of Health and Mental Hygiene - Office of Environmental Programs.

# 4. Habitat

#### a. <u>Terrestrial</u>

Alternate 3 would require approximately 3.8 acres of wooded area.

## b. Aquatic

Approximately 0.52 acre of wetland impacts would occur with Alternate 3 and an additional 0.21 acre of impact would occur with a service road (see the Alternates Mapping). Lack of adequate drainage has resulted in non-tidal wetlands emerging in several depressed areas. Avoidance of all non-tidal wetlands would have resulted in either substandard roadway design or stream crossings, resulting in additional floodplain impacts. An Army

Corps of Engineers Permit will be required.

Due to the nature of the study area, avoidance of the wetlands is not feasible because of physical constraints along the alignment.

# F. Air Quality Impacts

# 1. Analysis Objectives, Methodology, and Results

The objective of the air quality analysis is to compare the CO concentration estimated to result from traffic configurations and volumes of each alternate with the S/NAAQS. The NAAQS and SAAQS are identical for CO: 35 PPM (parts per million) for the maximum 1-HR period and 9 PPM for the maximum consecutive 8-HR period.

A microscale CO pollution diffusion analysis was conducted using the third generation California Line Source Dispersion Model, CALINE 3. This microscale analysis consisted of projections of 1-HR and 8-HR CO concentrations at sensitive receptor sites under worst case meterological conditions for the No-build and Build Alternates for the design year (2015) and the estimated year of completion (1995).

# a. Analysis Inputs

A summary of analysis inputs is given below. More detailed information concerning these inputs is contained in the Maryland Route 194 Air Quality Analysis available for review at the Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

# Background CO Concentrations

In order to calculate the total concentration of CO that occurs at a particular receptor site during worst-case meteorological conditions, the background CO concentrations are considered in addition to the levels directly attributable to the facility under consideration. The background concentration resulting from area-wide emissions from both mobile and stationary sources was assumed to be the following:

(	^	n	- 1	D	P	М	l
				_	_	•	

	<u>1-HR</u>	<u>8-HR</u>
1995	2.0	1.0
2015	2.0	1.0

# Traffic Data, Emission Factors, and Speeds

The appropriate traffic data, as supplied by the Bureau of Highway Statistics (October 1985 and December 1986) of the Maryland SHA, were utilized.

The composite emission factors used in the analysis were derived from the EPA's <u>Mobile Source Emission Factor</u>, and were calculated using the EPA MOBILE 3 computer program. An ambient air temperature of  $20^{\circ}$  F was assumed in calculating the emission factors for the 1-HR and  $35^{\circ}$  F was used for the 8-HR analysis in order to approximate worst-case results for each analysis case.

Average vehicle operating speeds used in calculating emission factors were based on the capacity of each roadway link considered, the applicable speed limit, and external influences on speed through the link from immediately adjacent links. Average operating speeds ranged from 25 mph to 35 mph depending upon the roadways and alternate under consideration.

# Meterological Data

Worst-case meterological conditions of 1 meter/second for wind speed and atmospheric stability Class F were assumed for the 1-HR calculations. For the 8-HR calculations, a combination of Class D and Class F stability classes and 1 meter/second and 2 meters/second wind speeds were used as appropriate.

The wind directions utilized as part of the analysis were rotated to maximize CO concentrations at each receptor location. Wind directions varied for each receptor and were selected through a systematic scan of CO concentrations associated with different wind angles.

#### b. Sensitive Receptors

Site selection of sensitive receptors was made on the basis of proximity to the roadway, type of adjacent land use, and changes in traffic patterns on the roadway network. Eight receptor sites were chosen for this analysis, consisting of six residences, a school, and a park. The receptor site locations were verified during study area visits by the analysis team. The receptor sites are shown on Figure 10 and listed in Table 4.

TABLE 4
AIR RECEPTORS

SITE NO.	DISTANCE FROM CENTERLINE OF ALT. 3 - BYPASS	DESCRIPTION/LOCATION
1	960	Residence - Main Street
2		Stone and Frame Dwelling (Historic Site - Dorcus House) MD. 194
3	24	Farm-MD. 194
4	120	Woodsboro Elem. School-MD. 550
5	330	Woodsboro Regional Park-MD. 550
6	120	Quakers Good Will (Historic Site)
7	220	Residence - Woodsboro Historic District James Street
8	200	Residence- MD. 194

TABLE 5
CO CONCENTRATIONS \* AT EACH RECEPTOR SITE, PPM

		1995			2015				
REC.	NO-B	NO-BUILD		<u>BUILD</u>		NO-BUILD		<u>BUILD</u>	
#	1-HR	8–HR	1-HR	8 <del>-</del> HR	1-1	IR 8	8-HR	1HR	8-HR
1	6.9	1.6	4.0	1.3	. 7.2	2 :	1.7	4.5	1.3
2	4.2	1.3	4.0	1.2	4.2	2 :	1.3	4.5	1.3
3	2.7	1.1	2.8	1.1	2.8	3 :	1.1	3.0	1.1
4	2.3	1.0	2.5	1.1	2.4	<b>,</b>	1.0	2.7	1.1
5	2.2	1.0	2.2	1.0	2.2	2 :	1.0	2.3	1.0
6	2.4	1.0	2.5	1.0	2.4	<b>1</b> :	1.0	2.6	1.0
7	2.5	1.0	2.3	1.0	2.	5 :	1.0	2.4	1.0
8	2.3	1.0	2.4	1.0	2.4	<b>1</b> :	1.0	2.5	1.0
*Including Background Concentrations  Background Concentrations (1995-2015): 1-HR = 2.0 PPM					SAAQS/NAAQS = 35 PPM (1-HR) SAAQS/NAAQS = 9 PPM (8-HR)				

8-HR = 1.0 PPM

57

# c. Results of Microscale Analysis

The results of the calculations of CO concentrations at each of the sensitive receptor sites for the No-build and Alternate 3 are shown on Table 5. The values shown consist of the predicted CO concentrations attributable to traffic on various roadway links plus projected background levels. The projected CO concentrations vary between alternates depending on receptor locations as a function of the roadway locations and traffic patterns associated with each alternate. A comparison of the values in Table 3 with the S/NAAQS shows that no violations will occur for the Nobuild or Build Alternate 3 in 1995 or 2015 for the 1-HR or 8-HR concentrations of CO.

The maximum 1-HR concentration associated with Alternate 3 is 21 percent of the 1-HR S/NAAQS, while the maximum 8-HR concentration is 20 percent of the 8-HR S/NAAQS. The concentrations remain well below the S/NAAQS for all alternates under consideration.

In conclusion, the No-build Alternate and Build Alternate 3 will not result in violations of the 1-HR or 8-HR S/NAAQS in 1995 or 2015.

# 2. Construction Impacts

The construction phase of the proposed project has the potential to impact the ambient air quality through such means as fugitive dust from grading operations and materials handling. The SHA has addressed this possibility by establishing <u>Specifications for Materials</u>, <u>Highways</u>, <u>Bridges and Incidental Structures</u>, which specifies procedures to be followed by contractors involved in state work.

The Maryland Bureau of Air Quality Control was consulted to determine the adequacy of the specifications in terms of satisfying the requirements of the <u>Regulations Governing the Control of Air Pollution in the State of Maryland</u>. The Maryland Bureau of Air Quality Control found that the specifications are consistent with the requirements of these regulations. Therefore, during the construction period, all appropriate measures (Code of Maryland Regulations 10.18.06.03D) will be taken to minimize the impact on the air quality of the area.

# 3. Conformity with Regional Air Quality Planning

The project is in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, with the exception

of the construction procedures, the conformity requirements of 23 CFR 770 do not apply to this project.

# 4. Agency Coordination

Copies of the technical Air Quality Analysis are being circulated to the U.S. EPA and the Maryland Air Management Administration for review and comment.

# G. Noise Impacts

The method used to predict the future noise levels from the proposed improvements was developed by the Federal Highway Administration (FHWA) of The FHWA Highway Traffic Noise the U.S. Department of Transportation. Prediction Model (FHWA Model) incorporates data pertaining to normal traffic volume increases over time, utilizes an experimentally and statistically determined reference sound level for three classes of vehicles (auto, medium duty trucks, and heavy duty trucks), and applies a series of adjustments to each reference level to arrive at the predicted sound level. The adjustments include: 1) traffic flow corrections, taking into account the number of vehicles, average vehicle speed, and a specified time period of consideration; 2) distance adjustment comparing a reference distance and actual distance between receiver and roadway, including roadway width and number-of traffic lanes; and 3) adjustment for various types of physical barriers that would reduce noise transmission from source (roadway) to receiver.

The prediction calculations were performed utilizing a computer program adaptation of the FHWA Model, STAMINA 2.0/OPTIMA.

The determination of environmental noise impacts is based on the relationship between the predicted noise levels, the established noise abatement criteria, and the ambient noise levels in the project area. The applicable standard is the FHWA's noise abatement criteria/activity relationship (see Table 3) published in the Federal Highway Program Manual 7-7-3.

When design year  $L_{eq}$  noise levels are projected to exceed the abatement criteria (Table 6) or increase ambient conditions by 10 dBA or more, noise abatement measures (in general, noise barriers) are considered to minimize impacts. Consideration is based on the size of the impacted area (number of structures, spatial distribution of structures, etc.), the predominant activities carried on within the area, the visual impact of the

control measure, practicality of construction, feasibility, and reasonableness. Table 6 summarizes the ambient measurements and the predicted noise levels.

An effective barrier should, in general, extend in both directions to four times the distance between receiver and roadway (source). In addition, an effective barrier should provide a 7-10 dBA reduction in the noise level, as a preliminary design goal. For the purpose of comparison, a total cost of \$27 per square foot is assumed to estimate total barrier cost. This cost figure is based upon current costs experienced by Maryland SHA and includes the costs of panels, footings, drainage, landscaping, and overhead. Generally, noise barriers are considered reasonable if the cost per residence is less than \$35,000-\$40,000.

# No-Build Alternate

Evaluation of the No-Build Alternate was performed to serve as a base case from which to assess the specific noise level increases resulting from the proposed improvements. The No-Build Alternate assumes that no highway improvements, other than normal maintenance, will occur within the project area.

The results of the modeling reveal one site condition where the predicted noise level is actually lower than an existing ambient level. Such an occurrence is attributable to fluctuations in traffic volumes by time of day, vehicle mixes, vehicle speeds, and other extraneous influences from non-highway sources (i.e., aircraft flyovers). One of the eight noise sensitive sites (NSA 1) will experience design year noise levels which will exceed the FHWA noise abatement criteria of 67 dBA. The level of NSA 1 under the No-build Alternate is 70 dBA.

#### **Build Alternate**

Construction of the proposed relocation would necessarily place traffic closer to five of the eight noise sensitive areas, with two areas maintaining their present relationship to traffic. NSA 1 would have its traffic exposure reduced. Table 6 presents the unabated peak-hour  $\mathsf{L}_{eq}$ 

TABLE 6
NOISE SENSITIVE AREAS
AMBIENT AND PROJECTED LEVELS

NOISE		LEQ NOISE LEVEL, dBA			
SENSITIVE AREA	AMBIENT	NO-BUILD	BUILD		
1	*71	*70	62		
2	62	67	*70		
3	62	64	67		
4	53	63	63		
5	51	61	62		
6	50	53	65		
7	50	62	62		
8	47	47	59		

<sup>\*</sup> Exceeds Federal Highway Administration Noise Abatement Criteria.

values predicted for the Build Alternate at each of the eight noise sensitive areas.

One of eight sites modeled for the Build Alternate exceeds the Category B abatement criteria of 67 dBA. NSA 2 has a  $L_{eq}$  value of 70 dBA. Five sites (NSAs 4-8) would experience an increase over its ambient level that exceeds the allowable increase over its ambient noise level criteria. Site 6 would have a resulting  $L_{eq}$  value of 65 dBA depicting an increase of 15 dBA.

In general, with the relocation of traffic closer to many of the sites and the increase in traffic expected, many of the sites will experience significant increases over their ambient levels.

The analysis involved consideration of noise barriers for the following seven noise sensitive areas:

# NSA 2

This site is a residence located on Maryland Route 194 north of the proposed relocation. The predicted peak-hour  $L_{eq}$  for this site modeled under the Build Alternate is 70 dBA, which is an increase over the ambient noise level of 8 dBA. A barrier approximately 400 feet in length at an average height of 9 feet would lower the  $L_{eq}$  to 65 dBA, a 7 decibel attenuation. This barrier would require the relocation of the access to the residence from Maryland Route 194 as to allow for an opening in the barrier would negate any benefit received from the barrier. The construction cost of the barrier, as well as the cost-per-residence, would be approximately \$91,100.

#### NSA 3

As was the case with NSA 2, NSA 3 also consists of a single residence. With a predicted future-year  $L_{eq}$  of 67 dBA, a 7 decibel attenuation could be furnished by a noise barrier 12 feet in height and 500 feet in length. Access to this site would also be affected to maintain barrier efficiency. The ambient noise level was 62 dBA. Construction costs, as well as the cost-per-residence, would be approximately \$155,700.

# NSA 4

NSA 4, the Woodsboro Elementary School, would experience a design year peak-hour  $L_{eq}$  of 63 dBA, a 10 decibel increase over its ambient noise level. A barrier with an 12-foot average height, 650 feet long would provide an attenuation of 5 decibels. Construction costs for the barrier

would be approximately \$203,200. Counting the school as ten equivalent residences produces a cost-per-residence of approximately \$20,300.

# NSA 5

NSA 5, the Woodsboro Regional Park, has a predicted future-year  $L_{eq}$  of 62 dBA, an increase over its ambient noise level of 11 decibels. To achieve an attenuation of 7 decibels a barrier 700 feet in length at an average height of 13 feet would be needed. The construction cost of such a barrier would be approximately \$241,300. The park would count as five equivalent residences. A park is equal to one equivalent residence for each 125 foot of frontage. This produces a cost-per-residence of approximately \$48,300.

## NSA 6

NSA 6 would experience a future-year noise level of 65 dBA, a 15 decibel increase over its ambient noise level. To obtain a 7 decibel attenuation and lower the increase to 10 decibels would require a barrier 400 feet in length at an average height of 14 feet. The construction cost and cost-per-residence would be approximately \$153,200.

# NSA 7

Representing three residences along James Street, this NSA received a peak-hour  $L_{eq}$  value of 62 dBA. A barrier approximately 400 feet in length along the north connector of Maryland Routes 194 and 550 would give a resultant noise level of 58 dBA. Better attenuation is not possible due to the location of the residences between the proposed Maryland Route 550 connector and the existing alignment of Maryland Route 550. The construction cost of the 58 dBA barrier would be approximately \$197,170 or \$65,800 per residence.

# NSA 8

NSA 8 represents a farm residence near the south end of relocated Maryland Route 194. A build future year noise level of 59 dBA, an increase above its ambient level of 12 dBA, could be reduced 6 dBA to 53 dBA with the presence of a barrier. The barrier would need to be approximately 1,000 feet in length at a height of 18 feet. The approximate construction cost and cost-per-residence would be approximately \$429,650.

# CONSTRUCTION IMPACTS

An increase in project area noise levels would occur during the construction of the proposed improvements. Construction noise differs significantly from that generated by normal traffic due to its unusual spectral and temporal nature. The actual level of noise impact during this period will be a function of the number and types of equipment being used, as well as the overall construction procedure.

Generally, construction activity would occur during normal working hours on weekdays. Therefore, noise impacts experienced by local residents as a result of construction activities should not occur during sleep or outdoor recreation periods.



Soil Conservation Service 10 W. College Terrace Room 230 Frederick, Maryland 21701

December 19, 1986

Ms. Cynthia D. Simpson Chief, Environmental Management Maryland Dept. of Transportation State Highway Administration P. O. Box 717 707 N. Calvert St.

Baltimore, MD 21203-0717

DEVELOPHENT DEVELOPHENT

Re: Farmland Protection Policy Act Form AD-1006 for MD Rt. 194 relocation at Woodsboro-Contract No. F 157-101-771

Dear Ms. Simpson:

I reviewed the land-use map and the proposed construction map. I believe only the "property to be acquired" portion of the project is currently applicable under FPPA. In applying soils information to this area, I found 6 acres qualifying as prime or statewide important farmland.

The completed AD-1006 is attached. If there are any questions, please contact me at 694-6822.

Sincerely,

CARL E. ROBINETTE Soil Scientist

Attachment: AD-1006

cc:

Tom Sierzega, SCS, District Conservationist, Frederick, MD

U.S. Department of Agriculture

# **FARMLAND CONVERSION IMPACT RATING**

			Date Of Land Evaluation Request October 28, 1986				
Name Of Project Federa			eral Agency Involved ederal Highway Admin./Md. SHA				
Proposed Land Use County						<u> </u>	
See Attachment 1 Fre				ounty, M	<u>laryland</u>		
PART II (To be completed by SCS)	Request Received	Nov.	7,1984	<u>,                                     </u>			
Does the site contain prime, unique, statewid			Yes N		ted Average Far	_	
(If no, the FPPA does not apply - do not con				- /////	16'	7	
Major Crop(s)	Farmable Land I	n Govt, Jurisdi		i	Farmland As Def		
Name Of Land Evaluation System Used	Acres: 275	7,400	% 64.5		75,400		
Name Of Land Evaluation System Used	Name Of Local S		System		Evaluation Return	ed By SCS	
Frederick Co. Land Evaluate	on Use o	-PPH	12/19/86				
PART III (To be completed by Federal Agency)			Build Alternate Alternative Site Rating  -Site A Site B Site C Site D				
A. Total Acres To Be Converted Directly			10.45				
B. Total Acres To Be Converted Indirectly		_					
C. Total Acres In Site							
PART IV (To be completed by SCS) Land Eval	uation Information						
A. Total Acres Prime And Unique Farmland			5.4				
B. Total Acres Statewide And Local Import			0.6				
C. Percentage Of Farmland In County Or Lo		Converted	0.003				
D. Percentage Of Farmland In Govt. Jurisdiction			37				
PART V (To be completed by SCS) Land Evalu							
Relative Value Of Farmland To Be Con		100 Points)	85				
	ı						
PART VI (To be completed by Federal Agency Site Assessment Criteria (These criteria are explained in		Maximum Points					
1. Area In Nonurban Use							
2. Perimeter In Nonurban Use	•						
3. Percent Of Site Being Farmed							
4. Protection Provided By State And Local	Government						
5. Distance From Urban Builtup Area							
6. Distance To Urban Support Services							
7. Size Of Present Farm Unit Compared To	Average						
8. Creation Of Nonfarmable Farmland							
9. Availability Of Farm Support Services							
10. On-Farm Investments							
11. Effects Of Conversion On Farm Support	Services						
12. Compatibility With Existing Agricultura							
TOTAL SITE ASSESSMENT POINTS	·						
PART VII (To be completed by Federal Agency	·)						
Relative Value Of Farmland (From Part V) 100							
Total Site Assessment (From Part VI above of	or a local						
site assessment)					+		
TOTAL POINTS (Total of above 2 lines)	<u> </u>	260	<u> </u>	Was A Local S	ite Assessment Us	ed?	
Site Selected:	Date Of Selection					No 🗆	
Page A For Salaguage							

Reason For Selection:



# Department of Natural Resources MARYLAND FOREST, PARK & WILDLIFE SERVICE Tawes Office Building

TORREY C. BROWN. M.D.

SECRETARY

Tawes Office Building

Annapolis, Maryland 21401

DONALD E. MACLAUCHLAN DIRECTOR

DEVELOPMEN DIVISION APR 24 | 1 48 PM

April 21, 1986

Ms. Cynthia D. Simpson, Chief Environmental Management MD Department of Transportation P.O. Box 717 707 North Calvert Street Baltimore, Maryland 21203

> RE: Maryland Route 194 Relocated Woodsboro By-Pass Frederick County, Maryland

Dear Ms. Simpson:

Your request for any information we may have concerning threatened or endangered species was reviewed by Gary J. Taylor.

There are no known populations of threatened or endangered species within the area of project influence in Frederick County.

Sincerely,

James Burtis, Jr. Assistant Director

JB:emp

cc: C. Brunori

G. J. Taylor

Telephone <u>V-3</u>
TTY FOR DEAF: STATEWIDE 1-800-492-5062; BALTIMORE 269-2609



TORREY C. BROWN, M.D.
SECRETARY

JOHN R. GRIFFIN
DEPUTY SECRETARY

STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES FRED L. ESKEW
ASSISTANT SECRETARY
FOR CAPITAL PROGRAMS

#### (

CAPITAL PROGRAMS ADMINISTRATION
TAWES STATE OFFICE BUILDING

ANNAPOLIS, MARYLAND 21401

April 17, 1986

DEVELOPMENT DEVELOPMENT DIVISION 71 4 32 FN '86

Mr. Louis H. Ege Bureau of Project Planning State Highway Administration 707 North Calvert Street Baltimore, Maryland 21203

Subject: Maryland Route 194 Relocated, Woodsboro By-pass - Frederick County

Dear Mr. Ege:

The Maryland Natural Heritage Program has no record of any rare species, unique habitat or other significant natural feature at, or in the vicinity of this project site. However, in the absence of a recent site review, we cannot show that such species or features are not present.

Sincerely,

Arnold W. Norden

Maryland Natural Heritage Program

mallw. Naden

AWN:st

cc: Cynthia Simpson



# PROJECT DEVELOPMENT DIVISION

Nov 19 2 17 PH '86

# Maryland Historical Trust

November 13, 1986

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
State Highway Administration
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. F157-101-771
MD Rt. 194 relocated from soth
of Woodsboro to north of Woodsboro
P.D.M.S. No. 103141
Frederick County, Maryland

Dear Mr. Ege:

Thank you for sending us the executive summary of the Phase I archeological survey of the above-referenced project area conducted by the Maryland Geological Survey.

Based upon the survey results, we concur that sites 18FR608 (Barrick site) and 18FR609 (Town Dump site), which are both located within the proposed right-of-way, do not meet the criteria for eligibility on the National Register of Historic Places. The remaining site 18FR607 (Israd Creek site) is situated outside the project impact area, and therefore will not be affected by construction. Additional archeological investigations are not warranted for these three sites, for this particular project. However, we do recommend that the project areas in the vicinity of 18FR607 be temporarily fenced during construction, in order to avoid any construction-related impacts to the site.

If you have any questions or require additional information, please contact Ms. Beth Brown of our staff at (301) 757-9000.

Thank you for your cooperation and assistance.

Sincerely,

Richard B. Hughes State Administrator of Archeology

RBH/BCB/mmc

cc: Ms. Rita Suffness

Mr. Tyler Bastian Mrs. Glenn Michel

Mrs. Glenn Michel
Mr. G. Bernard Callan

Mr. Raymond L. Compton

V-5



Maryland Historical Trust

DEVELOPMENT DEVELOPMENT BE

August 26, 1986

Ms. Cynthia Simpson, Chief
Environmental Management
Maryland Department of
Transportation
State Highway Administration
P. O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Contract No. F 157-101-771
Maryland Route 194 Relocated
Woodsboro Bypass
Frederick County, Maryland
P.D.M.S. No. 103141

Dear Ms. Simpson:

Thank you for your letter of August 20, 1986 concerning the abovereferenced project.

Our office concurs with your evaluation of the following sites as Inventory Level:

- 1. Stein Property
- 2. Ramsbing Property
- 3. Gooberson Property
- 4. Lewis Farm
- 6. Kirkpatrick House

Our office also concurs with your evaluations of the following sites as being possibly National Register eligible:

- 5. Myers House
- 7. Woodsboro Historic District
- 8. Quakers Good Will
- 9. Stone & Frame Dwelling (Dorcus)
- 10. John Trout House
- 11. Stony Ridge

Ms. Cynthia Simpson, Chief August 26, 1986 Page 2

We concur with the proposed boundaries for the above list with a single exception - #10 the John Trout Hosue, which we feel does not provide a sufficient buffer for the structures. An alternative proposal is enclosed.

Finally, our office disagrees with SHA's evaluation of the Barrick Lime Works. We feel that with further evaluation some of the worker's housing might possibly be National Register eligible. A proposal boundary is enclosed for the housing within the project boundary.

We appreciate your cooperation on this project and look forward to your response. Questions can be directed to Al Luckenbach at 269-2438.

Sincerely,

J. Rodney Little

Director

State Historic

Preservation Officer

JRL/AHL/mmc Enclosures

CC: Rita Suffness

Mrs. Glenn Michel

Mr. G. Bernard Callan

ped 194 73



# United States Department of the Interior

FISH AND WILDLIFE SERVICE DIVISION OF ECOLOGICAL SERVICES 1825B VIRGINIA STREET ANNAPOLIS, MARYLAND 21401

April 16, 1986

DEVELOPHENT DIVISION APR 18 11 22 AN '86

Ms. Cynthia D. Simpson
Maryland Dept. of Transportation
P.O. Box 717
707 N. Calvert Street
Baltimore, Maryland 21203

Dear Ms. Simpson:

This responds to your letters of April 3 and April 7, 1986, requesting information on the presence of Federally listed endangered or threatened species within the area of the following projects:

Bridge Replacement No. 03070, Baltimore County Bridge Replacement Nos. 20016 and 20017, Talbot County MD Route 194 relocation, Frederick County

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 Consultation is required with the Fish and Wildlife Service (FWS). Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to endangered species under our jurisdiction. It does not address other FWS concerns under the Fish and Wildlife Coordination Act or other legislation.

Thank you for your interest in endangered species. If you have any questions or need further assistance, please contact Judy Jacobs of our Endangered Species staff at (301) 269-6324.

Sincerely yours,

G. A. Mose

Glenn Kinser
Supervisor
Annapolis Field Office



# Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff

Administrator

December 16, 1986

**MEMORANDUM** 

TO:

Mr. Louis H. Ege, Jr.

Deputy Director

Project Development Division

FROM:

Cynthia D. Simpson, Chief

Environmental Management

SUBJECT: Maryland Route 194 Relocated

Field Review Agency Meeting

Regarding Wetlands and Floodplain Impacts

ATTENDEES:

Mary Dircks

Corps of Engineers Diane Eckles U.S. Fish & Wildlife Service

Mike Hollins

MD DNR/Tidewater Admin./Coastal Resources Division

Howard Johnson

State Highway Administration

A field review meeting to discuss the impacts of the proposed Maryland Route 194 relocation on the non-tidal wetlands, floodplain, fisheries, and wildlife habitat was held on November 11, 1986. A map of the project area is attached.

The wetlands, which are palustrine emergent and forested with a temporarily flooded water regime, are associated with Israel Creek, which is located in the Monocacy River Watershed. These wetlands and floodplains are medium to low quality wildlife habitat, nutrient traps, and provide sediment and soil erosion control and stormwater dissipation (see attached checklists).

To minimize impacts to the floodplain area, the representatives of the various agencies made the following comments:

DNR confirmed the presence of three wetland sites within the study area and identified the vegetation of the area.

75

/Mr. Louis H. Ege, Jr. December 16, 1986 Page Two

B. U.S.F.W.S. suggested steepening the fill slopes to minimize impacts. The best mitigation would be to bridge the wetlands. It was also recommended that impacts would be minimized by replacing the existing wetland on the downstream side of Israel Creek, located approximately 500' to 700' away. This compensation can be achieved prior to ordering the grading operation. At the end of the discussion, the Corps of Engineers, U.S.F.W.S. and DNR agreed that wetland impacts could be mitigated by replanting.

#### CDS:tlh

Attachments (3)

cc: Mr. Robert E. Schneider

Mr. Charles Adams (w/attachment)

Mr. Steve Drumm

Mr. Steve Sharar

Ms. Rita Suffness V

VI APPENDICES

#### APPENDIX A

- Frederick County Planning Commission. <u>Frederick County Comprehensive Plan-Volumes I and II</u>. July 1984.
- Maryland Department of Economic and Community Development. <u>Brief Economic Facts</u>
   Frederick County. 1985.
- Maryland Department of State Planning. <u>Areas of State Critical Concern:</u>
  <u>Designation Report.</u> January 1981.
- Woodsboro Planning Commission and Frederick County Planning Commission.

  Comprehensive Development Plan. 1972.

Attachment for Environmental Impact Documents Revised: November 29, 1985 Bureau of Relocation Assistance

# "SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE

# STATE HIGHWAY ADMINISTRATION OF MARYLAND"

All State Highway Administration projects must comply with the provisions of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (Public Law 91-646) and/or the Annotated Code of Maryland, Real Property, Title 12, Subtitle 2, Sections 12-201 thru 12-212. The Maryland Department of Transportation, State Highway Administration, Bureau of Relocation Assistance, administers the Relocation Assistance Program in the State of Maryland.

The provisions of the Federal and State Law require the State Highway Administration to provide payments and services to persons displaced by a public project. The payments that are provided include replacement housing payments and/or moving costs. The maximum limits of the replacement housing payments are \$15,000 for owner-occupants and \$4,000 for tenantoccupants. Certain payments may also be made for increased mortgage interest costs and/or incidental expenses, provided that the total of all housing benefits does not exceed the above mentioned limits. In order to receive these payments, the displaced person must occupy decent, safe and sanitary replacement housing. In addition to the replacement housing payments described above, there are also moving cost payments to persons, businesses, farms and non-profit organizations. Actual moving costs for residences include actual moving costs up to 50 miles or a schedule moving cost payment, including a dislocation allowance, up to \$500.

The moving cost payments to businesses are broken down into several categories, which include actual moving expenses and payments"in lieu of" actual moving expenses. The owner of a displaced business is entitled to receive a payment for actual reasonable moving and related expenses in moving his business, or personal property; actual direct losses of tangible personal property; and actual reasonable expenses for searching for a replacement site.

The actual reasonable moving expenses may be paid for a move by a commercial mover or for a self-move. Generally, payments for the actual reasonable expenses are limited to a 50 mile radius. The expenses claimed for actual cost commercial moves must be supported by receipted bills. An inventory of the items to be moved must be prepared in all cases. In self-moves, the State will negotiate an amount for payment, not to exceed the lowest acceptable bid obtained. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business' own vehicles or equipment, wages paid to persons who physically participate in the move, the cost of actual supervision of the move, replacement insurance for the personal property moved, costs of licenses or permits required, and other related expenses.

In addition to the actual moving expenses mentioned above, the displaced business is entitled to receive a payment for the actual direct losses of tangible personal property that the business is entitled to relocate but elects not to move. These payments may only be made after an effort by the owner to sell the personal property involved. The costs of the sale are also reimbursable moving expenses. If the business is to be reestablished, and the personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement cost minus the net proceeds of sale (or trade-in value) or the estimated cost of moving the item. If the business is being discontinued or the item is not to be replaced in the reestablished business, the payment will be the lesser of the difference between the value of the item for continued use in place and the net proceeds of the sale or the estimated cost of moving the item. When personal property is abandoned without an effort by the owner to dispose of the property for sale, unless permitted by the State, the owner will not be entitled to moving expenses, or losses for the item involved.

The owner of a displaced business may be reimbursed for the actual reasonable expenses in searching for a replacement business up to \$1,000. All expenses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, within the maximum limit.

In lieu of the payments described above, the business may elect to receive a payment equal to the average annual net earnings of the business. Such payment shall not be less than \$2,500 nor more than \$10,000. In order to be entitled to this payment, the State must determine that the business cannot be relocated without a substantial loss of its existing patronage, the business is not part of a commercial enterprise having at least one other establishment in the same or similar business that is not being acquired, and the business contributes materially to the income of a displaced owner during the two taxable years prior to displacement.

Considerations in the State's determination of loss of existing patronage are the type of business conducted by the displaced business and the nature of the clientele. The relative importance of the present and proposed locations to the displaced business, and the availability of suitable replacement sites are also factors.

In order to determine the amount of the "in lieu of" moving expenses payment, the average annual net earnings of the business is considered to be one-half of the net earnings, before taxes, during the two taxable years immediately preceding the taxable year in which the business is relocated. If the two taxable years are not representative, the State may use another two-year period that would be more representative. Average annual net earnings include any compensation paid by the business to the owner, his spouse, or his dependents during the period. Should a business be in operation less than two years, the owner of the business may still be eligible to receive the "in lieu of" payment. In all cases, the owner of the business must provide information to support its net earnings, such as income tax returns, for the tax years in question.

For displaced farms and non-profit organizations, the actual reasonable moving costs generally up to 50 miles, actual direct losses of tangible personal property, and searching costs are paid. The "in lieu of" actual moving cost payments provide that the State may determine that a displaced farm may be paid from a minimum of \$2,500 to a maximum of \$10,000, based upon the net income of the farm, provided that the farm has been discontinued or relocated. In some cases, payments "in lieu of" actual moving costs may be made to farm operations that are affected by a partial acquisition. A non-profit organization is eligible to receive "in lieu of" actual moving cost payments, in the amount of \$2,500.

A more detailed explanation of the benefits and payments available to displaced persons, businesses, farms, and non-profit organizations is available in Relocation Brochures that will be distributed at the public hearings for this project and will also be given to displaced persons individually in the future along with required preliminary notice of possible displacement.

In the event comparable replacement housing is not available to rehouse persons displaced by public projects or that available replacement housing is beyond their financial means, replacement "housing as a last resort" will be utilized to accomplish the rehousing. Detailed studies must be completed by the State Highway Administration before "housing as a last resort" can be utilized.

The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any persons, or proceed with any construction project, until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons will be satisfactorily relocated to comparable decent, safe, and sanitary housing within their financial means or that such housing is in place and has been made available to the displaced person.