FHWA-MD-EIS 73-08-F
REGION III
THE NATIONAL FREEWAY
SECTION I
U.S. Route 48, Wolfe Mill to
M. V. Smith Road,

Allegany County, Maryland
FINAL
(Environmental Impact Statement)
and Section 4(f) Statement
U.S. Department of Transportation Federal Highway Administration
and
Maryland State Highway Administration
This action complies with Executive Order 11988, Flood Plain Management.


The following persons may be contacted for additional information concerning this document.

Mr. Edward Terry, Jr. District Engineer Federal Highway Admin. The Rotunda - Suite 220
711 West 40th Street Baltimore, Maryland 21211 Phone: (301)962-4010 Hours: 7:45 a.m. to 4:15 pom.

Eugene T. Camponeschi, Chief Bureau of Project Planning State Highway Admin. 300 West Preston Street Baltimore, Maryland 21201 Phone (301) 383-4327 Hours: 8:15 am. to 4:15 pom.

## Abstract

This document describes the expected environmental effects of construction of Alternate $\mathrm{AGBF}_{2}$ in Section I of the National Freeway, from East of Cumberland to M. V. Smith Road in Allegany County, Maryland. This alternate is primarily on new location and takes right of way from private properties, forest and historic resources (See Figures $1 \& 3$ ).

The Draft Environmental Impact Statement/Section 4(f) Involvement was circulated in 1973. A Final Environmental Impact/Section 4(f) Statement was circulated in June, 1977. That FEIS/Section 4 (f) Statement addressed the region-wide impacts of a completed high-standard highway between Hancock and Cumberland, Maryland and presented the selected alternate for Section II. Location approval was granted for Alternate AJA in Section II, the other missing link to the Interstate level facility. This document provides the rationale for the selection of the alternate for section 1 as described in the Draft Environmental Impact Statement and Final Environmental Impact Statement described above.

## TABLE OF CONTENTS

Page
i
I. Summary ..... i
II. Purpose and Need ..... II. 1
III. Alternates, including the selected action
A. Selected Alternate ..... III. 1
B. Others ..... III. 6
IV. Affected Environment
A. Social-Economic ..... IV. 1
B. Natural Resources ..... IV. 6
C. Historic Resources ..... IV. 30
V. Environmental Consequences
A. Natural Resource Impacts ..... V. 1 ..... V. 11
B. Energy Requirements
C. Socio-Economic/Land Use Considerations ..... V. 14
D. Air Quality ImpactsV. 19
E. Noise ImpactsV. 25
F. Historical and Cultural Site Impacts ..... V. 44
VI. Section 4(f) Statement ..... VI. 1
VII. List of Agencies, Organizations, Officials, ..... VII.l to whom copies of EIS are sent
VIII.Comments and Coordination ..... VIII.l
IX. List of Preparers ..... IX. 1
X. Appendicies
A. Memorandum of Agreement-Advisory Council ..... X.A-1
on Historic Preservation
B. Memorandum of Agreement-Department of ..... X.B-1
Natural Resources
C. Summary of Relocation Assistance ..... X.C-1Program
D. Bibliography - Natural Enviro-ment ..... X.D-1
Correspondence
E. Natural Resources ..... X.E-1
F. Concept TeamX.F-1
G. Historical Resources ..... X.G-1
XI. IndexXI. 1

## LIST OF FIGURES

| FIGURE |  | PAGE |
| :---: | :---: | :---: |
| 1 | Corridor of Appalachian Regional Development Program | II. 2 |
| 2 | Accident Location Diagram | II. 7 |
| 2A | Accident Location Diagram | II. 8 |
| 3 | Alternates Map | III. 2 |
| 4 | Typical Section | III. 5 |
| 5 | Lettered Alignment Segments through Study Corridor | III. 7 |
| 6 | Land Use Plan Map | IV. 4 |
| 7 | Topography and Slope Map | IV. 7 |
| 8 | Geology Map | IV. 8 |
| 9 | Soils Map | IV. 9 |
| 10A | Evitts Creek Floodplain | IV. 14 |
| 10B | Elk Lick Run Floodplain | IV. 15 |
| 10C | Town Creek Floodplain | IV. 16 |
| 10D | Fifteen Mile Creek Floodplain | IV. 17 |
| 11 | Natural Environmental Features Map | IV. 21 |
| 12 | Green Ridge State Forest | IV. 22 |
| 13 | Historic Resource Map | IV. 37 |
| 14 | Stream Relocation | V. 7 |
| 15 | Air Receptors | V. 21 |
| 15A | Air Receptors | V. 22 |
| 16 | Average Daily Traffic-Build Alternate | V. 23 |
| 17 | Average Daily Traffic-No-Build Alternate | V. 24 |
| 18 | Diurnal Traffic Curves | V. 26 |
| 19 | Noise Sensitive Areas | V. 31 |


| FIGURE |  | PAGE |
| :---: | :---: | :---: |
| 20a-20g | Noise Impact Corridor | V.33-V. 39 |
| 20h | Noise Level Zone increase of lodBA over present levels | V. 40 |
| 21 | Historic Site B-17 | V. 47 |
| 22 | Historic Sites B-19 and B-20 | V. 48 |
| 23 | Historic Sites B-28 and B-23 | V. 49 |
| 24 | Comparison Chart | VI. 9 |
| 25 | Town Creek Corridor - Green Ridge State Forest | VI. 11 |
| 26 | Historic Site 6 Property | VI. 13 |
| 27 | Historic Site 8 Property | VI. 14 |
| 28 | Historic Site 50 Property | VI. 16 |
| 29 | Historic Site 12 Property Mitigation | VI. 18 |
| 30 | Historic Site 12 Property | VI. 19 |
| 31 | Historic Sites B-2l, B-23, and B-24 Property | VI. 21 |
| 32 | Historic Site B-23 Property Mitigation | VI. 22 |
| 33 | Historic Site B-24 Property Mitigation | VI. 23 |
| 34 | Historic Site B-2l Property Mitigation | VI. 25 |
| 35 | Historic Site B-22 Property | VI. 26 |
| 36 | Historic Site B-22 Property Mitigation | VI. 27 |

## LIST OF TABLES

| TABLE |  | PAGE |
| :---: | :---: | :---: |
| 1 | Classification Hierarchy for the Riverine System | IV. 29 |
| 2 | National Freeway Historic Resources | IV.32-IV. 36 |
| 3 | Automobile Fuel Consumption | V. 13 |
| 3A | Relocation Impacts | V. 17 |
| 4 | Carbon Monoxide Background Concentrations | V. 19 |
| 5 | One and Eight Hour CO Levels | V. 27 |
| 6 | Design Noise Level/Activity Relationships | V. 29 |
| 7 | Project Noise Levels | V. 32 |
| 8 | Historic Sites/Noise | V. 42 |
| 8A | Diurnal Noise Analysis | V. 43 |
| 9 | Properties Affected Under Section 106 | V. 46 |
| 10 | Historic Property Involvement | VI. 29 |

## I. SUMMARY

1. The proposed action is the completion of the National Freeway, U.S. Route 48, in western Maryland. The Freeway is part of the Appalachian Regional Development Program authorized by Congress in 1965. This Federal program was intended to enhance transportation, industrial, and economic opportunities in the region of the U.S. known as Appalachia. The National Freeway is intended to provide a direct link between the Ohio Valley and the Atlantic Seaboard, and to serve as a major east-west travel corridor for the area traversed.

The proposed facility would significantly improve the fuel economy and reduce the travel time for trips between the Eastern Seaboard and the Ohio Valley. The coal industry in the Applachian region would be further encouraged by the proposed project which will benefit regional employment and improve domestic energy production.

Except for two sections between Cumberland and Hancock, the National Freeway is fully constructed. Both Section I and II were addressed in Draft and Final Environmental Impact Statements (1973 and 1977 respectively). Section II from Orleans Road to Woodmont Road is now being designed, with construction expected to begin in 1983.

This document addresses Section I, from Wolfe Mill to M. V. Smith Road in Allegany County. The recommended alternate, $\mathrm{AGBF}_{2}$, is approximately 16.9 miles long, and would be a minimum of four (4) lanes wide. The facility will be designed at freeway standards, and construction is programmed to begin in 1984.

Criteria of Section 106 of the National Historic Preservation Act of 1966, Section 4 (f) of the U.S. Department of Transportation Act of 1966, Floodplain Executive Order 11988, and National and Maryland Environmental policy Acts have been fulfilled. Bridge, water quality, and sedimentation control permits from State agencies will be required.
2. The selected alternate $A \mathrm{ABF}_{2}$, is the southernmost route of the major alternates considered (See Figure 3). Beginning east of Cumberland at Wolfe Mill, $\mathrm{AGBF}_{2}$ follows existing Route 40 to a point near the U.S. 220 connector, where it proceeds southeastward to Bush Ridge and then goes due east to Fifteen Mile Creek; the eastern terminus is northeast from the creek on existing U.S. Route 40. Access would be controlled, and interchanges will be provided at Wolfe Mill, U.S. 220, Williams Road, Town Creek Road, and U.S. 40 (existing road) near the eastern terminus.
3. Significant environmental impacts include:

- The reduction of traffic accidents by $50 \%$
- Enhanced regional and urban economic development potential
- Energy savings to the highway user
- Enhanced opportunities for energy resource (coal) developments
- Enhancement of Air Quality
- Intrusion into the State forest requiring 331 acres or $0.6 \%$ of the total anticipated area of the forest
- Relocation of 24 families, 1 businesses, and 4 farms
- Seven major stream crossings
- 400 feet of stream relocation
- 81 acres of right of way required from historically associated property.
- Traffic noise intrusion to forest and increases along present U.S. 40

4. Controversies associated with this project are: need, historic resources, and forest lands. Historic resources and forest lands controversies have been resolved and are addressed in Memorandum of Agreement (Appendix A and B). Need is addressed in the first chapter.
5. *Technical reports used in the preparation of this document include:
A) Natural Environmental Analysis
B) Engineering Technical Location Report
C) Historic Resource Identification
D) Energy Utilization Report
E) Project Files
*These technical reports are available for review and copying at the State Highway Administration, 300 West Preston Street, Baltimore, Maryland.

## NATIONAL FREEWAY

 SECTION IWOLF MILL TO M. V. SMITH ROAD COST EFFECTIVENESS ANALYSIS



CONSTRUCTION IMPACTS

| 1) Utilities | None | Severe | Minimal |
| :--- | :--- | :--- | :--- |
| 2) Local Road Circulation | None | Severe Minimal |  |

## RESIDENTIAL \& BUSINESS IMPACTS (SOCIO-ECONOMIC

1) Relocation

| a) Residences | 0 | 78 | 24 |
| :--- | :--- | :--- | ---: |
| b) Businesses | 0 | 11 | 1 |
| c) Farms | 0 | 3 | 4 |

[^0]| ANALYSIS ITEM | NO <br> BUILD | AGEA | AGBF2 |
| :---: | :---: | :---: | :---: |
| 2) Number of People Relocated | 0 | 412 | 72 |
| 3) Minority Groups Affected | 0 | 0 | 0 |
| 4) Affect on Area Integrity | 0 | 7.7 | 4.0 |
| a) County \& State Road Relocations |  |  |  |
| (Miles) |  |  |  |
| b) Service Roads for Local Continuity |  |  |  |
| (Miles) |  |  |  |

## HISTORIC \& RECREATIONAL

1) Breakneck Road Historic District (6200 Ac.)
a) No. of sites to be acquired $0 \quad 0 \quad 1$
b) No. of acres to be acquired
$0 \quad 23$
81
c) \% of total acreage
$0 \quad 0.4$
1.3
2) Hinkle Historic District
a) No. of sites to be acquired 0 0
b) No. of acres to be acquired $0 \quad 0$
c) \% of total acreage 000
3) Flintstone Historic District (l08Ac.)
a) No. of sites to be acquired $0 \quad 5$
b) No. of acres to be acquired
$\begin{array}{lll}0 & 12 & 0\end{array}$
c) \% of total acreage

0
11
0
4) Individual Sites, not part of a District

## RECREATIONAL

1) Rocky Gap State Park
a) Acres to be acquired
b) \% of total acreage
2) Greenridge State Forest
```
\begin{tabular}{lll} 
NO & * & \\
BUILD & AGEA & AGBF \(_{2}\)
\end{tabular}
a) Acres to be acquired \(0 \quad 155 \quad 331\)
b) \% of total acreage \(0 \quad 0.5 \quad 1.0\)
c) Memorandum of Agreement No No Yes between MD.SHA \& MD.DNR addresses Methods to Mitigation Impacts

NATURAL ENVIRONMENTAL IMPACTS
1) Stream Relocations
a) Number
0
10
1
b) Total Length
\(0 \quad 16,350\)
400
2) Loss of Natural Habitat None Yes Yes
3) Effect on Water Quality None Severe Moderate
4) Effect on Wildife Populations None Moderate Short term Adverse
5) Effect on Endangered Species None None None

NOISE IMPACTS
Design Year (2005) Levels at Selected Receptors
1) Range Predicted (dBA) 59/82 59/82 59/82
2) Number with severe Noise Impact
a) Residences
30
30
12
b) Businesses
c) Historic
2 2
0
3) Number Exceeding Design Noise Levels
a) Residences
96
96
4
b) Businesses
11
11
c) Historic
32
32
3

ATTENUATION OF NOISE IMPACTS WILL BE INVESTIGATED
**These sites were not identified in previous studies.


\footnotetext{
*AGBF-2 has a \(30 \%\) Reduction in Fuel Consumption Over the No-Build.
}

\section*{II. PURPOSE AND NEED}

The National Freeway is an integral part of the Appalachian Regional Development Program, authorized by Congress in 1965. The Program, which is administered by the Appalachian Regional Commission, has a mandate and supporting appropriations to provide and upgrade basic infrastructure needs of the Area, including transportation (Appalachian Development Highway Program).

Appalachian Maryland is a long, narrow region oriented in the east-west direction. It is traversed by numerous mountain ridges which generally run southwest to northeast. The area is predominantly rural, with forest, agriculture, and mining operations occupying most of the land.

The National Freeway traverses Appalachian Corridor E. It extends from Morgantown, West Virginia eastward through Monongalia and Preston counties into Western Maryland. Corridor E connects with Interstate 79 near Morgantown and with Interstate 70 at Hancock. The interrelationship of Corridor \(E\) with other corridors of the Appalachian Development Highway Program was discussed in the 1977 FEIS/4(f) Statement. Briefly summarized, Corridor E (National Freeway) connects with Corridor O (U.S. 220) to Pennsylvania and points north and Corridor N (U.S. 219) also to the north into Pennsylvania. The joint studies for corridors \(O\) and \(N\) have been deferred indefinately because of the lack of matching funds in Pennsylvania. Therefore, Corridor E (National Freeway) has increased import to the development potential of the 3 western most counties of Maryland.

The State of Maryland is committed to provide a modern transportation facility to serve the people of the Western Maryland Region (Garrett, Allegany, and Washington Counties) along the approximately 80 miles of Appalachian Corridor E, the National Freeway.

Western Maryland is located nearly equi-distant between the major economic centers of Pittsburg and Baltimore/Washington, D. C. This area is also centrally located between the industrial mid-west and eastern seaboard. A wide range of market goods and opportunities are available to the Western Maryland Counties. Unfortunately, the potential for economic development and access to these markets have been unobtainable in the past. This reflects in the high unemployment rate and underdevelopment of Western Maryland economic potential, due in part to the lack of a convenient and efficient transportation link to these areas. The National Freeway will help connect the Ohio River Valley and other parts of the Mid-west to Maryland, the Port of Baltimore, and the Eastern Seaboard.

Future economic growth of Western Maryland and Allegany County, hinges on several development factors. Three areas of potential economic development are greater employment diverisifications, energy development (coal reserves) and tourism. These factors all rely on adequate transportation opportunities, and are specifically reflected in the plans and goals of Allegany County and Western Maryland as well as occurring in their past planning activities.

With the exception of two segments, the National Freeway is completed. These two segments lie between Cumberland in Allegany County and Hancock in Washington County, Maryland (See Figure 1). The unimproved


FIGURE-I
portion nearest Hancock, Section II, lies between Orleans Road on the eastern side of Town Hill and Woodmont Road near Little Tonoloway Creek.

A Draft Environmental Impact Statement for both Section I and Section II was circulated in 1973. Public hearings were held December 12, and 13, 1973. Alternates were selected for both Sections I and II.

Initially, the preferred alternate for Section \(I\) was \(A G B F_{2}\). The Maryland Department of Natural Resources, (DNR), however, opposed the use of any State Forest property for a highway. A compromise alternate, AGEENA, was presented. By 1975, impacts to historical resources had become the paramount issue for Section I.

When it became apparent that Section II, the Sideling Hill portion, had no unresolveable controversial environmental issues, an FEIS for that Section alone was circulated in August 1977. That FEIS recommended a specific alternate (AJA) for Section II. The general and regional impacts for an improved highway corridor for the entire length of the National Freeway (including Section I and II) were presented in that FEIS, although no alternate was recommended as preferred for Section I.

Subsequently, a supplemental location public hearing was held in January, 1978 to inform the public as to the status of studies on Section I and present a forum for comment.

A determination by the U.S. Advisory Council on Historic Preservation in 1979 precluded further consideration of the compromise AGEENA alternate.

Alternate AGEENA would have traversed and adversely impacted the Breakneck Valley Historic District - a National Register historic district. Impacts included the taking of 2 historic structures and fourteen other individual historic properties. Also, line AGEENA required 310 acres from the entire Breakneck Valley Historic District. The Advisory Council determined that these adverse impacts could not be satisfactorily mitigated. inally, AGEENA may have impacted the natural Warm Springs along arm Springs Road. Although no land would have been required from the Rocky Gap State Park, 224 acres would have been required from Green Ridge State Forest.

Given DNR's initial opposition to any use of State Forest property, an extensive mitigation effort was begun. This effort recognized the fact that the state of the art for environmental mitigation had progressed since 1973, and culminated in an agreement with the Maryland Department of Natural Resources. This agreement provides for considerable mitigation of Alternate \(\mathrm{AGBF}_{2}\) 's impacts on the Green Ridge State Forest. This final FEIS/4(f) statement addresses the \(\mathrm{AGBF}_{2}\) alignment, for which location approval is now being sought.

\section*{Description of the Existing Road}
U.S. Route 40 within the study Corridor is in serviceable condition. The design speed from Wolfe Mill to Polish Mountain is 50 mph with a posted speed of mph. From Polish Mountain to M. V. Smith Road, the design speed is 60 mph . The roadway has a well maintained high type bituminous concrete surface and stabilized shoulders varying in width from six to twelve feet.

The right of way varies from approximately one hundred to three hundred feet.
a. U.S. Route 40 from Wolfe Mill to Martin Mountain is a four lane dualized section of uncontrolled access highway (See Figure 3). This section varies in the types of dualization. From Wolfe Mill to Hinkle Road the highway is a four lane urban section, which is a curbed section of roadway consisting of two twenty four foot lanes, ten foot shoulders, and a sixteen foot raised median. The length of this section is approximately two miles. There are nine median breaks within the limits of this section. Approximately eight hundred feet of service road lies within this section of highway. Between Wolfe Mill and tinkle Road there are eighteen private entrances entering directly onto U.S. Route 40. The maximum degree of horizonal curvature in the above mentioned segment is five degrees and the maximum percent of vertical grade is four percent.
b. From Hinkle Road to approximately one half mile east of Johnson Road, a distance of one mile, U.S. Route 40 is a four lane divided open section bifurcated roadway. The typical roadway section is twenty five feet wide with twelve feet shoulders and four feet of backing behind the shoulders. Along this segment of U.S. Route 40, the majority of residences, and businesses are located on the south side of the highway. The north side has a scattered area of growth just east of Johnson Road. The Pleasant Grove Church and a one and one half story frame building are located within the median section along this segment of highway. Elk Lick Run also flows in the median through this section. The cemetery to the Pleasant Grove Church is located along the eastbound roadway across from the church. The maximum horizontal curvature is one degree and the maximum grade is four percent in this segment.

Continuing eastward the next three thousand feet of U.S. Route 40 is an open four lane divided highway with a four foot raised median a center quadrail, and twelve feet shoulders including four feet behind shoulders. This area of U.S. Route 40 is scarcely populated. There are no median breaks, however, four entrances intersect this highway section. The roadway is on a tangent and the vertical grade is six percent. Due to the steep grade, there are sections of two cable guardrails along both sides of the highway.
c. Thirteen hundred feet west of Rocky Gap State Park Road to one-half mile east of Breakneck Road, U.S. Route 40 changes from the above mentioned highway section to a four lane divided highway with a wide median. The roadway is twenty five feet wide with twelve feet stabilized shoulders and four feet graded area behind shoulders. There is a service road on the north side of U.S. Route 40 along this section of the highway. The entrance to Rocky Gap State Park is located on the western segment of this stretch of highway. There are three grade crossings along U.S. Route 40 in this area, located at Rocky Gap State Park Road, Breakneck Road, and the service road connection east of Breakneck Road. The bulk of the populated area is located near the entrance to Rocky Gap State Park. The maximum horizontal curvature is one degree thirty minutes and the maximum vertical grade is seven percent occurring in the westbound lane.
d. The succeeding segment of U.S. Route 40 eastward for approximately thirty four hundred feet traverses Martin Mountain. It is a four lane
divided highway, which narrows to a three lane rural highway approximately one thousand feet east of Martin Mountain. This roadway section consists of two twenty five feet roadways with a twenty four feet median, twelve feet stabilized shoulders, and four addtional feet behind the shoulders. The populated area is to the north side of U.S. Route 40 along this section. There is a Look-Out Tower located on the south side of Route 40 at the top of the mountain. The maximum horizontal curvature is two degrees and the maximum vertical grade is six percent.

From the east slope of Martin Mountain to Odd Fellows Cemetery Road, a distance of approximately two and one half miles, U.S. Route 40 is a two lane rural highway with an added truck lane making the overall pavement width thirty six feet with twelve foot shoulders throughout the entire section, and two additional feet of grading beyond the shoulders. The maximum horizontal curvature is eight degrees with a maximum vertical grade of six percent. Along this section of highway the populated area is very light.

Continuing eastward from odd Fellows Cemetery Road to Gilpin, U.S. Route 40 is a two lane twenty four foot rural highway with twelve foot shoulders. The maximum horizontal curvature is six degrees and maximum vertical grade is four percent. The town of Flintstone which lies to the south of U.S. Route 40 in this area makes up most of the population in this section. U.S. Route 40 crosses Flintstone Creek with a bridge approximately one hundred feet long. The town of Flintstone is an historic district probably eligible for inclusion in the National Register of Historic Places.
e. From Gilpin to east of Merten Avenue, U.S. Route 40 is a two lane twenty four foot rural highway with truck lanes. The width varies from twenty to forty-eight feet. The normal roadway has twelve foot shoulders and where there are truck lanes, the shoulders are six feet wide. From the edge of the shoulder to the hinge point for the cuts and fills there is an additional eight feet of grading on the normal section and two feet where there are truck lanes. The maximum horizontal curvature is five degrees thirty minutes and the maximum vertical grade is approximately eight percent. There is practically no population at all along this section of highway due to the Polish Mountain terrain and Green Ridge State Forest on the South of the road.
f. The next segment of U.S. Route 40 from Merten Avenue to Davis Road is a two lane rural highway with a truck lane making the total pavement width thirty-six feet wide with ten foot shoulders and six feet of additional grading beyond the shoulder. The maximum vertical grade is \(6 \%\) and the maximum horizontal curvature is three degrees thirty minutes. The Old National Pike lies to the south of U.S. Route 40. Residences in this area are situated along the Old National Pike. The design speed increases from fifty miles per hour to sixty miles per hour through this section of highway.
g. The final segment of U.S. Route 40 through the study corridor extends from Davis Road to M. V. Smith Road. It is a 2 lane dual rural highway with a twenty four foot median and ten feet shouldes with six feet of grading beyond the shoulder. The maximum horizontal curvature is four
degrees thirty minutes and the maximum grade is six percent. U.S. Route 40 crosses Fifteen Mile Creek approximately one half mile east of Davis Road.

\section*{SAFETY}

The development of the interstate system has demonstrated the importance of providing facilities of continuous standards. Gaps or substandard links in a highway network, create unsafe conditions, impede efficiency of travel, and act as a barrier or disincentive to travel in the surrounding area.

About half of the existing facility between Wolfe Mill and M. V. Smith Road is a divided section. Some areas have climbing lanes. No control of access is provided, resulting in numerous driveways and intersections along the roadway. Passing capabilities on the two lane segments are poor.

The right of way along the existing U.S. Route 40 within the study corridor in some areas is bounded by historic property with the two main areas being around Martin Mountain and through the town of Flintstones. Approximately seventy five percent of the property bordering the right of way line from Polish Mountain eastward to M. V. Smith Road is owned by the Maryland Department of Natural Resources. Four streams and three major mountains are crossed by U.S. Route 40 within the study corridor.

There is an added element affecting the safety statistics for this highway. This is the fact that existing U.S. Route 40 in this area is both a local street and a highway carrying interstate traffic. Approximately \(35 \%\) of the accidents between Cumberland and Hancock involve out-of-state passenger vehicles or trucks.

Also, Allegany County experiences considerable snowfall each winter, and the mountainous terrain often is blanketed by fog. Of all accidents reported along U.S. Route 48, nearly half (49\%) cited inclement weather as a contributing factor. Existing U.S. 40 does not provide maximum recovery distance to minimize the effects of poor weather.

Accident frequency demonstrably increases in areas of residential or commercial development. While the accident rates in the developed areas tend to manifest the hazard they represent, accident rates prepared for the entire study area tend to be underestimated due to the diluting effect of the safer open stretches of highway. As shown in the accompanying accident cluster diagrams, Figures \(2 \& 2 a\), there are locations where accident frequencies warranting a corrective response are being experienced.

Any attempt to conform to the existing plans to upgrade existing U.S. Route 40 to a modern multi-lane rural divided highway with the capability to service 55 mph vehicular traffic, reveals two major safety concerns. There is not sufficient space within the existing right of way for safety grading (a minimum \(30^{\prime}\) distance from the outside edge of the roadway to any obstruction) and 9.6 miles of the existing road plans do not allow for a minimum median width of \(24^{\prime}\) which would provide for a median barrier with adjacent shoulders. The most severe adverse geometric conditions occur at the top of Martin Mountain where a series of sharp horizontal curves


prohibit a posted 55 mph speed limit, and the west slope of Polish Mountain which has a vertical grade that exceeds the recommended grade for 55 mph by 2\%. 1

A detailed discussion of the safety deficiencies of constructing a dual highway within the right of way owned by the SHA to serve as the last link of the National Freeway, is in the Technical Location Report. \({ }^{2}\)

The chart below provides the Maryland Statewide Accident Rates by each highway class. These rates have been prepared from data collected over a 10 year period including of 435,000 accidents and over 130 billion vehicle miles of travel. They illustrate the degree of safety provided by each highway design type, and serve as an estimate of the acident rate likely for a similarly designed road. It is anticipated that \(A_{G B F}^{2}\) would experience accidents at the lowest rate shown.
\begin{tabular}{lccc} 
& Urban Areas & Rural Areas \\
& & 142.26 & \\
Divided -Full Control-4 lanes & 114.48 \\
Divided-Part Control-4 lanes & 346.69 & 169.00 \\
Divided-No Control-4 lanes & 570.92 & 242.28 \\
Non-Divided-No Control-4 lanes & 574.92 & 543.66 \\
Non-Divided-No Control-2 lanes & 638.10 & 326.07
\end{tabular}

The accident rate on existing U.S. Route 40 is 118.22 Million Vehicle Miles (MVM). If no action is taken, the accident rate on existing U.S. 40 is estimated to approach the statewide average of 321 accidents per 100MVM for similarly designed highways under state maintenance, with the corresponding accident cost estimated to be \(\$ 1,527,000\) per 100 MM.

\footnotetext{
1 It is important to note that the construction plans for the existing U.S. Route 40 were approved between 1955 to 1965, prior to the publication of "Highway Design and Operational Practices Related to Highway Safety"; a report of the special Amercian Association of State Highway and Transportation (AASHTO) Safety Standards Traffic Safety Committee 1967.

2 Technical Location Report - U.S. 48 National Freeway, Section I - Wolfe Mill to M. V. Smith Road.
}
III. ALTERNATES

\section*{A. Selected Alternate}

The selected alternate for construction of Section I of the National Freeway is line \(\mathrm{AGBF}_{2}\). This route is the southern most and shortest alignment for the corridor. (See figure 3). It was selected after review and discussion of numerous environmental concerns in the area. Mitigation measures were developed through the cooperative efforts of the Governor's Office and the Maryland Departments of Transportation and Natural Resources. Governor Harry Hughes announced the selection of the southern route at a press conference (See Section VIII) on May 10, 1979 in Cumberland, Maryland. The above indicated agencies determined that this alignment \(\left(\mathrm{AGBF}_{2}\right)\) represents the most appropriate, feasible, and acceptable of all alignments considered from the point of view of service, engineering, and impacts to the forest and the proposed wildland in the Town Creek area (SHA/DNR Agreement).

The termini of this alternate extend from Wolfe Mill to M. V. Smith Road, a distance of approximately seventeen miles. It is the most southerly route of all the alternates, and is located approximately two miles south of the existing U.S. Route 40 through the study corridor.

\section*{Description of Selected Alternate}
a. Beginning at Wolfe Mill just east of Christie Road the alignment continues eastward along the existing U.S. Route 40 for approximately one and one half miles through Cumberland. Approximately \(1300^{\prime}\) east of the proposed interchange with U.S. Route 220 north, the alignment leaves the existing U.S. 40 and traverses in a southeasterly direction towards Jeffries Road, crossing Jeffries Road approximately one half mile south of U.S. Route 40. Jeffries Road will be relocated in the vicinity where the \(\mathrm{AGBF}_{2}\) alignment crosses it, eliminating the bad curves and providing for a feasible bridge location carrying Jeffries Road over the \(\mathrm{AGBF}_{2}\) alignment.
b. The alignment continues in a southerly direction to the draw span between Little Knob and Big Knob and crosses tinkle Road approximately 4000' feet north of Twiggtown. Approximately \(1200^{\prime}\) east of tinkle Road, the alignment curves left, continues in an easterly direction crossing Williams Road approximately one mile north of Twiggtown. Approximately one half mile of Williams Road will be relocated \(400^{\prime}\) north of the existing Williams Road. The purpose of the relocation is to provide for the diamond interchange proposed at this location. The \(\mathrm{AGBF}_{2}\) alternate will bridge relocated Williams Road.
c. The alignment continues in an easterly direction approximately one quarter of a mile south of the existing Williams Road for about two miles before crossing the existing Williams Road on the peak of Warrior Mountain. Williams Road will be relocated for approximately one mile eastward from the peak of Warrior Mountain. Relocated Williams Road parallels the north right of way line of the \(\mathrm{AGBF}_{2}\) alignment approximately thirty-five feet north or south of the right of way line.

d. The alignment continues eastward crossing Town Creek Road and Town Creek for approximately one half mile south of the intersection of Town Creek Road and Williams Road. Town Creek Road will be relocated approximately one half mile to the west of the existing town Creek Road. A diamond interchange with the \(\mathrm{AGBF}_{2}\) alignment will be at this location carrying the main line over relocated Town Creek Road. The existing Town Creek Road will be left open and carried under the main line by the bridge carrying the alignment over Town Creek.

Continuing due eastward for approximately three thousand feet the alignment then turns in a southeasterly direction towards Boyer Knob. However before reaching Boyer Knob, the alignment turns in a northeasterly direction intersecting Jacobs Road approximately 600 feet south of the Merten Avenue and Jacobs Road intersection. Jacobs Road will be relocated to the south of proposed alignment approximately thirty five feet from the south right of way line of the alignment.

The Jacobs Road relocation will begin approximately 1700 feet south of the Merten Avenue and Jacobs Road intersection. This relocation of approximately 2800 feet will tie into Marten Avenue one-half mile east of the Merten Avenue and Jacobs Road intersection. The existing Marten Avenue east of the intersection will be closed from that area to the point where relocated Jacobs Road ties into Marten Avenue. There will be a connection just east of the Marten Avenue and Jacobs Road intersection which will go under the \(\mathrm{AGBF}_{2}\) alignment and connect into the relocated Jacobs Road south of the proposed alternate.

From Jacobs Road the selected alignment turns in a southeasterly diretimon for about 3000 feet and back in a northeasterly direction traversing into George Road about 1500 feet north of White Sulphur Road. Continuing in a eastward direction the alignment crosses Black Sulphur Road about 100 feet north of George Road and Black Sulphur Road intersection. George Road will be relocated to the south of this alignment generally following the south right of way line of the proposed alignment. The relocation of about 4000 feet begins approximately 700 feet north of White Sulphur Road and ties back into existing George Road 700 feet east of the Black Sulphur Road and George Road intersection. Black Sulphur Run Road will go under the proposed alignment in its existing location and tie into the relocated George Road.
e. Continuing eastward the selected alignment crosses Black Sulphur Run approximately 1800 feet east of Black Sulphur Road traversing eastward and staying to the south of Sugar Bottom Road except for two rather short areas where the alignment crosses Fifteen Mile Road and Fifteen Mile Creek approximately 700 feet south of the Sugar Bottom Road and Fifteen Mile Creek Road intersection. Sugar Bottom Road will be relocated in the two sections where the selected alignment encroaches upon the existing road.

From Fifteen Mile Creek the alignment turns northeastward, traverse across Green Ridge Mountain and ties, by a directional interchange, into U.S. Route 40 just west of M. V. Smith Road.

\section*{SAFETY FEATURES}

The design speed of Alternate \(\mathrm{AGBF}_{2}\) is 70 mph with a proposed posted speed of 55 mph , while several sections of existing U.S. 40 have design speeds which vary widely between 25 and 60 mph .

The design speed of a highway is defined by the American Association of State Highway and Transportation Officials (AASHTO) as "the maximum safe speed that can be maintained over a specific section of highway when conditions are so favorable that the design features of the highway govern". The design speed allows a margin for safe operation under less than ideal conditions, such as rain and snow, night time or low visibility driving, and allows adequate space for passing or accident avoidance maneuver. The accident rate decreases as the design speed increases, when posted speed remains constant. Listed below are the results of a 1975 Maryland State Highway Administration study of the relationship between design speed and the accident rate.
\begin{tabular}{cr} 
DESIGN SPEED (MPH) & \\
\cline { 1 - 1 } & ACCIDENT RATE \\
\(35-40\) & 861.42 \\
50 & 349.64 \\
60 & 166.21 \\
70 & 140.27
\end{tabular}

A higher design speed is especially beneficial in areas experiencing inclement weather, such as affects Western Maryland.

The proposed typical section (See Figure 4) consists of an initial 58' median, two \(4^{\prime}\) median shoulders, two \(24^{\prime}\) roadways, two 12 foot graded shoulders ( 10 feet paved) 18 feet of safety grading, and contained within a minimum of \(300^{\prime}\) of right of way. There will be a 12 foot truck climbing lane provided where the plus grades are \(4 \%\) or steeper. Fills over 15 feet will have \(2: 1\) slopes and guard rails. There will be sections where the cuts and fills exceeds fifty feet. The maximum percent of grade will be \(6 \%\) which will occur where the proposed alignment crosses polish Mountain. The maximum degree of horizontal curvature is \(3^{\circ} 15^{\prime}\). Truck lanes for the eastbound traffic will be located five hundred feet east of Elk Lick Run to approximately one thousand feet west of relocated tinkle Road, Collier Run eastward for approximately one mile and from Town Creek to Polish Mountain. Truck lanes for the westbound traffic will be located from Jacobs Road to Polish Mountain and from Town Creek to Williams Road.

There will be four interchanges on the selected alignment. A directional interchange is proposed at U.S. Route 220 and U.S. Route 40 the design of which is subject to the U.S. 220 DEIS (FHWA-MD-EIS-80-0-D) on the west end of this project and a directional interchange at U.S. Route 40 on the east end of the project. Diamond interchanges are proposed to be located at Williams Road and Relocated Town Creek Road.

In the areas where there are grade separations, two of the secondary roads,Jeffries Road and M. V. Smith Road, will go over the selected alignment. There will be four grade separations where the secondary road goes under the main alignment. This will occur at Hinkle Road, Marten Avenue,


Black Sulphur Road and Fifteen Mile Creek Road. The structures that carries the selected alignment over Fifteen Mile Creek will take Fifteen Mile Creek Road under.

There will be seven (7) stream crossings associated with this alternate. Evitts Creek which is located just within the western limits of this project and on the existing road section will utilize the existing structure. Elk Lick Run will have approximately four hundred (400) feet of relocation and utilizes the same structures that carries the Relocated Old National Pike under this alignment. Twin box culverts will take Collier Run under this alignment. Jown Creek and Town Creek Road will utilize the same structures. The same situation occurs at Fifteen Mile Creek Road and Fifteen Mile Creek. Black Sulphur Run is the only stream crossing requiring its own independent structures. The total number of roadway and stream structures required for this project is twenty four (24) which does not include the mitigation structures for hikers, loggers, fire control and animal trails.

Throughout the eastern half of this project, the selected alignment traverses entirely through Green Ridge State Forest. The Maryland Department of Natural Resources and the Maryland Department of Transportation entered into an agreement as to what engineering and environmental design features would have to be accomplished to minimize the impact to the park. (See Appendix B, the Memorandum of Agreement).

\section*{B. Other Alignments}

Three other major alternates were considered for Section I during the environmental process. Two were also at freeway standards while the third was the No-Build. One, AGEA, generally followed the route on U.S. Route 40 at freeway standards. AGEENA, involved a primarily new location between AGEA and \(\mathrm{AGBF}_{2}\). The No-Build proposed no new construction or improvement beyond normal maintenance. All alignments were addressed in previous Environmental Documents. In response to public suggestions following the January 1978 public hearing, a fourth alternate was also investigated. The Fourth Alternate involved the dualization of the existing highway, but not to freeway standards.

Numerous variations of the \(A^{2 G B F} 2\), AGEA, and AGEENA were also studied. The letters, in fact, represent separate segments. The alternate names were derived by combining the lettered designations. A map depicting all the routes (lettered segments) can be found in the earlier environmental document, and is shown in Figure 5.

Following is a brief description of the alternates and their associated impacts. A comparison chart for the relocation alternates, including the selected, \(\mathrm{AGBF}_{2}\), is found at the end of this discussion on page III.12.

AGEENA - Line AGEENA was the mid-corridor alternate, between existing U.S. 40 and \(A^{2} \mathrm{ABF}_{2}\). This alternate had been a "compromise" line developed in the early \(1970^{\prime}\) 's. It minimized much of the Forest land requirements of \(\mathrm{AGBF}_{2}\) as well as housing relocations of AGEA. AGEENA required no property from Rocky Gap State Park, but did require the relocation of 36 families, 4 businesses and 10 farms. Historical resource identification in the Section I corridor revealed a National Register historic district(Breakneck Valley)

which AGEENA would traverse and adversely effect. The impacts to the Breakneck Valley Historic District were found to be unmitigable to any degree of satisfaction to the Advisory Council on Historic Preservation. The U.S. Department of the Interior also expressed concern about an alignment with such an adverse impact on historic resources. (See Historic Impact Section). Hence, this alternate was dropped from further consideration.

No-Build - The No-Build alternate would have involved no construction except for normal maintenance to the existing road. This alternate would have impeded travel efficiency and fostered the unsafe and hazardous conditions that are presently considered. Also, this section of Corridor E would have presented a substandard link in the highway network. Accidents costs would continue increasing. Energy consumption would have remained at a high level and the economic growth potential to the economy of Western Maryland would not be attainable. The No-Build Alternate would not be consistent with local, county, or regional plans for the Appalachian region.

AGEA- Line AGEA was the northernmost alternate in the Section I corridor. This alternate would have maximized utilization of the existing U.S. Route 40 roadway surface and right of way. Unfortunately, this corridor coincides with the highest residential concentration in the corridor. This alternate was not selected because a total of 78 families would have been relocated, as would 11 businesses, and 3 farms. Implicit in freeway design standards is controlled access. Service (or frontage) roads would have to be supplied. These in turn would contribute to the high number of houses which would be taken. AGEA had other undesirable features. Land from both Rocky Gap State Park and Green Ridge State Forest would have been required in the amounts of 22 and 133 acres, respectively. The right of way through the forest, in fact, involved a potentially designated Wildland. (described under Natural Environment). Ten historic structures would have been removed by AGEA, 23 acres from the Breakneck Road Historic District and 12 acres from the Potential Flintstone Historic District would also have been required. AGEA would also have required \(16,350^{\prime}\), or 4 miles of streams relocations. Noise impacts for this alternate would have been more severe for the most number of residences, located adjacent to the present roadway. The AGEA line was dropped because of severe relocation impacts, historic district impacts, and the amount of stream relocations described in the preceding discussion.

\section*{Upgrading Existing U.S. Route 40}
1. The original study alignment for upgrading existing U.S. Route 40 was Alternate A (See Figure 5). This alternate addressed the upgrading of the existing U.S. Route 40 as a fully controlled access highway with a design speed of 60 mph . Although this alternate had the cheapest construction cost, the relocation of 91 dwellings, 15 businesses, 3 farm operations 3 non-profit organizations and the relocation of 4 miles of existing streams caused this alternate to be dropped from further consideration. Alternate A is fully described in the Draft Environmental Impact Statement FHWA-MD-EIS-73-08-D.
2. During preparation for the Supplemental Public Hearing in January, 1978, the SHA was notified that a group of citizens known as the Coalition for a Fourth Alternate would be presenting a position statement. This position statement indicated that the Fourth Alternate was a safe urban
dual highway, adequate for a posted speed limit of 55 mph , with no control of access, and could be constructed within right of way now owned by the State Highway Administration.

A detailed feasibility study conducted by SHA personnel revealed the following data:
a. The existing highway was constructed in seven separate contracts. Construction Plans were approved 1955 to 1965. Five of these Construction Plans indicate a design speed of 50 mph . Two are listed for 60 mph .
b. The existing plans and right of way are not adequate to allow expansion for safety grading for desirable median width. \(52 \%\) of the plans show a median width less than 24 '.
c. Accident Considerations indicate that approximately \(50 \%\) of all accidents occur in close proximity to the intersections, and that \(36 \%\) of all accidents involved out of state vehicles.
d. Expansion of right of way to include safety considerations would require acquisition of 29 dwellings, 1 church and 8 businesses.
e. The same amount of stream relocation as indicated with Alternate A would be affected; (4 miles).
f. Expansion of the right of way for median widening and safety grading would require 22 acres from Rocky Gap State Park and 215 acres from Green Ridge State Forest, 12 acres from the Flintstone Historic District, 23 acres from the Breakneck Valley Historic District, and impact 13 other historic sites.

Additional information on the basis for rejecting this Alternate is in the Technical Location Report. \({ }^{1}\)
3. Another feasibility study was conducted on the concept of partial control of acces. The study was accomplished by using Alternate \(A\) as the base alternate. The main line right of way needed for Alternate A cannot be reduced. The relocation of homes, business etc,. and streams has been explained in the discussion of Alternate A.

There are currently 30 intersections of County and State roads with existing U.S. Route 40. The effect of leaving all these intersections open was explained in the discussion of the fourth alternate. Alternate A had limited access to eight locations. These were Maryland Route 385, U.S. Route 220, Pleasant Valley Road, 2-partial interchanges in top of Martin Mountain, Murley's Branch Road, and Top of Polish Mountain. The major effect of eliminating the interchanges and replacing them with at-grade intersections, is the reduction of construction costs. Only a minimal number of homes and businesses ( \(10-15\) ) would be saved. It would still be

\footnotetext{
I On file at SHA Office, Baltimore, Maryland.
}
necessary to construct 5.5 miles of service or frontage roads for continuity of local traffic. These service roads, in two areas, Jeffries Road to Hinkle Road and Johnson Road to Rocky Gap State Park require the acquisition of approximately 30 to 40 homes and businesses. An investigalion of these areas show that the terrain prohibits moving the service roads to reduce the relocation impacts. \({ }^{2}\)

\section*{AGBF2Variations}

Three variations to the mainline of the selected \(\mathrm{AGBF}_{2}\) alternate were investigated as possible mitigation alternatives to the taking of State Forest. They all followed the \(\mathrm{AGBF}_{2}\) alignment from Cumberland eastward to Warrior's Mountain where they then diverged northeasterly to tie in at varying points with the AGEENA and AGEA alignments. Essentially, by their juxtaposition with Town Creek, only the northwest "corner" of the Green Ridge State Forest would have been traversed, leaving the majority of the Forest intact.

Of the Town Creek alternates, shown in Figure 3. Alternate A required 210 acres of forest; Alternate B, 195 acres; and, Alternate C, 225 acres. (In each case, about 140 acres are actually owned by the DNR with the remaining affected acres designated for future Forest acquisition). The last variation, C., traveled along the east side of Warriors Mountain and tied into the AGEENA alternate in the vicinity of Warm Springs and Town Creek. The acreage from the forest for this alignment, then, is the same as for AGEENA.

Project Planning studies included preliminary engineering for these three alternates. Cost estimates were:
\$174 million for Alternate \(\mathrm{AGBF}_{2}\) - A - AGEENA;
\$159 million for Alternate \(\mathrm{AGBF}_{2}\) - B - AGEENA; and
\(\$ 137\) million for Alternate \(\mathrm{AGBF}_{2}-\mathrm{C}\) - AGEENA.
Other factors, however, eliminated alternates \(A, B\), and \(C\) from selectimon. The Secretary of the Maryland Department of Natural Resources objected to Alternates A and B because the portion of the Green Ridge State Forest to be traversed represented a potential Wildland. This area, one of the few in the State, was to be left undisturbed. The wooded tract satisfied the criteria of a Wildland (roadies tract of state-owned land in excess of 500 acres), and would be designated as an area where no forestry management would be practiced. Alternates \(A \& B\) each affect 36 dwellings, 11 farms, 4 businesses, and one non-profit organization.

The third Town Creek Alternate, C , was considered an undesirable selectimon due primarily to the following factors. One is that the soil and rock conditions on the west side of Warriors Mountain are not desirable for roadway construction. The mountain is riddled with caves and caverns, which add an element of uncertainty about the stability/foundation of any proposed major facility. This location would leave an unaesthetic scar, which would be cut along Warriors Mountain. The soil, erodible and shalelike, would require slopes of \(3: 1\) or \(4: 1\) or more. These slopes would require several million cubic yards of earth removal and greater right of way requirements leaving a wide scar the length of the mountain. This

\footnotetext{
2 Location Study Report
}
scarring effect would be highly visible from the Green Ridge Forest, on the opposite side of Town Creek. Town Creek Alternate \(C\) also would have involved the taking of 39 residences, 11 farms, 5 businesses, and 1 non-profit organization.

SELECTED RELOCATION
ALTERNATE ALTERNATES
\(\underline{A G B F}_{2}\) AGES
\(16.9 \quad 19.11\)
GENA
18.02
\(\$ 157.6\)
\(\frac{2.6}{}+159.6+\)
\(\$ 97.1\)
\$ 105.6
2.8
\(\$ 118.4\)

Relocation
Residential
24
78
36
11
3
1
10
Farms
4
0
\(625 \quad 890\)
\(0 \quad 250\)
\(625 \quad 640\)
125
16.350' 11.650'

Stream Relocation
Service Rd. Construction
Co. \& St. Road Relocation
Cut/Fill 50' (total length)
\(400^{\circ}\)
0.2 miles
4.0 miles 5 miles

Historic Sites Taken 2
Historic Properties Affected
10
Historic Acres Required
Breakneck Rd. H. District 81
Flintstone H. Districts
Others

Forest and Park Acres Req'd. Rocky Gap State Park Green Ridge State Forest Existing 176 Designated 155

10

22
133
82
1.25 miles
7.0 miles
2.2 miles

\section*{2}

14

23
310
12
--

\section*{0}

132 92
\(+\$ 18.5 \mathrm{M}\) required for mitigation of environmental impacts.

\section*{IV. AFFECTED ENVIRONMENT}

\section*{A. Social-Economic}
1. Demographic

Western Maryland
Population, in total numbers, has been nearly static for several years in Western Maryland. Only in Washington County has there been an appreciable overall growth since 1940, and in Allegany County the total population has actually declined in the past several years.

\section*{Allegany County}

The socio-economic structure of Allegany County differs from that of Maryland as a whole. In two areas, the county falls below the standard for Maryland. The median educational level is lower and the median family income is significantly lower.

Median income in Dollars Median Education in years
State of Maryland \(\$ 16,403 \quad 12.1\) years
Allegany County \(10,499 \quad 11.6\) years

\section*{Population Characteristics}

The population of Allegany County has decreased since 1950, showing a loss of 6\% from 1950-1960 and again a loss of 0.1\% from 1960-1970 compared to an increase of \(28.9 \%\) from 1950-1960 and 32.38 from 1960-1970 for the State of Maryland. Prior to 1950 the growth rate was 38 per 10 year period. Earlier population estimates had shown an expecteed \(6.8 \%\) increase from 1970 through 1980, due to expected growth in primary centers (egg. Frostburg, Cumberland) however, these were not realized due to out-migration from the county. A net loss of \(3.6 \%\) occurred from 1970 1977.
\begin{tabular}{rcccc} 
& \multicolumn{4}{c}{ POPULATION OF ALLEGANY COUNTY } \\
1950 & 1950-1980 \\
89,556 & 84,169 & 84,044 & 1977 \\
81,100
\end{tabular}

Characteristics of the population indicate that \(1.8 \%\) of the population is non-white compared to \(18.4 \%\) for the State of Maryland.
2. Economic

Western Maryland
In response to the habitual high unemployment rates, the Tri-County Council and Allegany County have established priorities to alleviate this economic problem. The first priority is "greater employment diversification". This is envisioned to develop new industry which is locally owned and controlled, relatively small sized and displays growth characteristics.

The second priority of the Region is "energy development". Recent energy shortages, have led the President of the U.S. A. to name coal as the primary source of energy supply for future years. It is acknowledged that vast reserves of coal and modern technologies are available to convert coal to liquid fuels as well as creating cleaner burning coal facilities. Price increases of other fuel have made this conversion to coal uses more realistic to the consumer. Western Maryland has the only significant amounts of coal deposits in the State and is prepared to use this resource as an economic stimulus. Allegany County in 1975 produced approximately 949,800 tons of coal. This amount can be significantly increased as the need warrants.

Another important facet of the economy of Allegany and Western Maryland is tourism. Over \(3 \%\) of all jobs in Western Maryland are generated by tourism. Recognizing this, Western Maryland Counties consider adequate access to its many natural and scenic resources as being necessary to promote continued tourism and increase same. While much pessimism was apparent during the past fuel shortages, as they relate to travel, an optimistic outlook has maintained relating to availability of fuel. Recent studies project an annual 38 increase of autmobile travel, while seeing an annual \(3 \%\) decrease in fuel consumption. This is reflected in the new gas mileage requirements from EPA, coupled with the 55 mph speed limit, not to mention the use of new fuel sources now on the foreseeable horizon.

\section*{Allegany County}

The economic base of Allegany County is manufacturing with retail trade also being important. Manufacturing activities produce \(31.8 \%\) of total personal income in Allegany County compared to \(16.7 \%\) in the State of Maryland. Trade and service combined account for \(19 \%\) of Personal Income.

The high degree of specialization and dependance on the manufacturing sector and especially a few large firms, relative to other private non-farm sectors, suggests an imbalance in local economy and special vulnerability to national economic cycles. This was evidenced in the economic recession in late 1974, which was harmful to the local economy of Allegany County. The official unemployment figures for April, 1975 showed an unemployment rate \(0 f 7.7 \%\) for the State of Maryland as compared to a \(17.3 \%\) rate for Allegany County. The unemployment rate for 1978 was \(10 \%\) for Allegany County as compared to \(5.6 \%\) for Maryland. The unemployment rate of Allegany County has been higher than the statwide rate in recent years. The high unemployment rate coupled with a high number of non-workers compared to workers, indicates that county residents have relatively few job opportunities, but an adequate labor force for future employment centers.

The property tax for Allegany County is based on an assessed value which is \(50 \%\) of actual value. The tax rate for the county is \(\$ 2.19\) per \(\$ 100\) of assessed value.

In summary, Allegany County residents do not have the same opportunities in terms of income and jobs as the average Maryland resident. Recognizing this the County and Tri-County Area have initiated an agressive program toward Economic Development.

\section*{3. Land Use}

The table shows that Allegany County is highly rural in nature. Only \(7 \%\) of the County may be considered urban (incorporated areas, industrial, comercial, and residential) where as, over 938 is non-urbanized (consisting of recreation, open space, rural and undeveloped land).
\begin{tabular}{lrr} 
Urban & \(\frac{\%}{8}\) & Acres \\
Transportation, Utilities & 3.0 & \(\frac{8,179}{}\) \\
Industrial & .5 & 1,361 \\
Commercial & .5 & 1,363 \\
Residential & \(\frac{3.0}{}\) & \(\frac{8,179}{19,084}\) \\
\hline Total Urban & & \\
& & \\
Non-Urban & 22 & 59,980 \\
Recreation and Open Space & 54 & 147,225 \\
Rural and Undeveloped & 17 & 46,348 \\
Agricultural and Resource & & \\
& 93 & 253,553 \\
Protal Non-Urban & \(100 \%\) & 272,637
\end{tabular}

Urbanization in Allegany County is determined mostly by topography and follows transportation routes. A substantial portion of development consists of strip and linear development that follows existing highways, which in turn follows streams, valleys and flood plain areas.

The most heavily urbanized section of the county is the western section of Allegany County, which includes Cumberland and adjoining areas to the north and south. The transportation loop of urbanization extends from Cumberland to Frostburg, down Georges Creek and along the Potomac River back to Cumberland.

Outside the urbanized area, public and private forests cover many of the steep mountains and ridges. Agriculture is carried out along the Potomac River and in relatively fertile stream valleys. Oldtown and Flintstone are rural centers serving the resource producers, farmers, and orchardists.

Two other important land uses exist in non-urbanized portions of the County. Strip mining is increasing on the mountain sides along Georges Creek and around Frostburg and Mt. Savage while residential development for commuters to out county employment and second home owners is increasing in the eastern part of the County.

\section*{4. Future Land Use/Planning}

Development of Allegany County in the past has been slowed by topography and the lack of public water and sewer facilities. The county hopes to develop latent economic potentials of the county and to provide service facilities to accommodate new development as well as improve existing facilities. Future land use plans recommend that prime development lands in the County first be considered for industrial uses, primarily industrial park complexes (See Figure 6). Currently, 10 areas are developed as industrial sites, of which 4 are in operation. The

recognized need to expand Allegany County's economic base is reflected in this concept.

Residential development is planned in two forms; urban service residential and rural residential. Urban service residential is designed for a density of 2 or 3 dwellings per acre, serviced with public water and sewerage. Rural residential is planned to be a lower density with 1.5 dwellings per acre and generally not served by public water and sewer. Much of the rural residential use is planned to serve commuters in eastern Allegany County.

A third category of land use development is that of recreation and tourist related uses. The county recommends that existing parkland in urban areas should be developed for intensive recreation uses, while larger tracts should make use of limited portions of its forests and wildlife lands for vacation type recreation. The use of the natural resources of the area would continue to support the important function of tourism to the economy.

The Appalachian Development Highway System's Plan provided for future access to major market areas to the North, South, East, and West. The Comprehensive Master Plan for Allegany County also states that it is necessary that interregional access be multidirectional and more fully developed.

The major highways planned will consist of high quality primary and secondary roadways, which will interconnect with the Federal Interstate System. This system will bring the benefits of high speed, interregional access closer to the people and industries of Allegany County and Western Maryland as a whole.

\section*{Socio-Economic Bibliography}

Income Characteristics: Maryland Social Indicator Series, Volume III. Maryland Department of State Planning. Pub. No. 202, April 1974, p.B-5.

Educational Characteristics: Maryland Social Indicator Series, Volume I. Maryland Department of State Planning. Pub. No. 200, November, 1973, p. B-4.

Population of Maryland by Election Districts 1930-1970: Department of State Planning, August 1973, p.8.

Population Estimates: Current Population Reports. Series P-26, No. 78-20. August 1979.

Appalachian Maryland Development Plan: Tri-County Council for Western Maryland, Inc., July, 1975, pp. 2 \& 17.

\section*{B. Natural Environment}
1. Physiography Route 48

Geographically, this section of U.S. 48 is located in north central Allegany county with its east-west axis connecting Cumberland with M. V. Smith Road at the Green Ridge State Forest. This area of Western Maryland is considered the Valley and Ridge section of the Appalachian Highlands and consists of synclines and anticlines which were formed (Figure 7) during the Tertiary period approximately 7 to 65 million years ago. These northeasterly trending ridges and valleys have been created by geologic folding and erosional processes.

Most of the corridor is drained by the Potomac River and its tributaries (Figure 7). A few large streams drain the synclinal valleys' Fifteen Mile Creek, Town Creek, and Evitts Creek.

The valleys are generally cultivated due to the richer bottomland, alluvial type soils, while the ridges are forested. Many of the ridges have a very thin overburden underlain by non-resistant shale.

\section*{2. Topography and Geomorphology}

Eight prominent geomorphological features occur in the study area. From east to west, they are: Town Hill (a synclinal ridge), Fifteen Mile Creek (a complex anticlinal valley), Green Ridge (an anticlinal ridge), Polish Mountain (a synclinal ridge), Town Creek (a synclinal valley), Warrior Mountain (an anticlinal ridge), Bush Ridge (an anticlinal ridge), and Evitts Creek (a synclinal valley).

The most prominent ridges are Warrior and Polish Mountains with their highest elevations being \(2020^{\prime}\) and 1607 ' respectively. The eastern face of Warrior Mountain and the western face of Polish Mountain have slopes greater than \(20 \%\) (see Figure 7). Another ridge of lesser vertical rise but greater slopes (50\%) is Green Ridge. It measures approximately 1200 ' at its crest with slopes exceeding \(35 \%\) on its western face.

Genetically, this landscape is in the mature part of the geomorphic cycle. The maximum relief has been reached with elevations from \(600^{\prime}\) to \(200^{\prime}\) above sea level. Streams cut through the elevated areas create highly variable slopes from 5 to 40\%.

\section*{3. Geology}

The National Freeway corridor crosses an area of folded paleozoic sediments which appear repetitively across the study area (figure 8). The sediments consist of a series of sandstones, siltstones, whales, mudstone and limestones. The youngest formation exposed in the corridor is the Pocono group of Early Carboniferous (Mississippian - 345 million years ago) age. This formation ranges from massive conglomerates containing milky quartz to micaceous sandstones and shales. The pocono outcrops at the crest of Town Hill and is separated by Fifteen Mile Creek gorge and east at Sideling Hill. These beds of shale may contain thin layers of coal.

The Hampshire Formation forms the base of Town Hill approximately three miles wide running norhteast to southwest. Massive sandstones and fine


grained agrillaceous shale make up the Hampshire which outcrops at Fifteen Mile Creek and at the Potomac River. These shale make up most of the upper part of the formation. They are distinguished by their lack of grittiness and their fissility. These clastic rocks split very easily on their bedding planes and weather readily. This formation was the last layed down during the Devonian period ( 395 million years ago).

Proceeding west, the Jennings Formation has the greatest areal distribution of any formation in Allegany County. It forms Green Ridge, Polish Mountain, and most of the area in between. The deposits of this formation are almost wholly arenaceous. Sandy shale predominate with quarzose sandstones interbedded in no regular sequence in the lower and middle parts. In the upper part, heavy quartzitic sandstones predominate, though the sandy shales are in considerable abundance. The heavy quartzitic beds may contain important beds of fossiliferous conglomerate. The thickness of the Jennings Formation varies from 3500' at Jennings Run to 5000 ' along the Potomac at the mouth of 'Town Creek.

The eastern face of Warrior Mountain and the depression between Green Ridge and Polish Mountain contain the Romney Shale. This formation is an agrillaceous fissile shale which weathers into fine angular fragments. Do to its lack of hard materials, the formation is prominent in the valleys, where it forms low ridges or rounded hills. Iron-ore pockets have been found in various localities along the eastern base of Warrior Mountian.

The Oriskany Formation appears on the eastern slope and much of the western slope of Warrior Mountain. It enters largely into the structure of Martin Mountain and covers completely the central and southern portions of Collier Mountain. This formation consists of two well-marked lithological divisions which grade into each other. The lower part rests conformably upon the Helderberg and is a blue-black chert in nodules and layers, separated by thin beds of dark gray arenaceous shale. The upper part of the formation is a grayish-white sandstone, which is often calcereous.

The chert in an unweathered condition is in hard, deep blue-black masses and shows a great tendency to break into small-sized nodular blocks. Weathered specimens are almost invariably light-colored while unweathered surfaces have at times a pearly white appearance. The Helderberg-Oriskany contact line can often be easily followed by the chert fragments even if all the traces of contact are gone. These may be found in some of the fields near the top of Warrior and Martin Mountains. The thickness of the Oriskany ranges from 300 'on the south of Monster Rock near Keyser, West Virginia to \(150^{\prime}\) thick, \(21 / 2\) miles east of Cumberland.

The Helderberg formation completes the Devonian geologic time period. It makes up a large part of Warrior and Martin Mountains and flanks Evitts Mountain. Lithologically, the Helderberg is a limestone formation with agrillaceous impurities occurring in some beds. The tentaculite limestone of New York is part of the Helderberg formation in Maryland and is over \(400^{\prime}\) thick. This limestone makes up the lower part of the formation, being a dark blue thin-bedded rock which in breaking gives a decided ring. The upper part is characterized by thin bands of chert, white to yellowish white in color, heavily bedded and highly fossiliferous. The thickness of the whole formation is nearly 800 .

The Silurian system contacts some of the study area but is not quite as important as the Devonian. Some controversy exists placing the Helderberg formation in the beginning of the Devonian or the end of the Silurian period. It may be split between both.

The last formation to appear in the Silurian peiod is the Tonoloway limestone outcropping on the eastern and western slopes and circling the base of Martin Mountain. This formation consists of a sequence of limestones and calcareous shales sometimes separated by a sandstone member that is hard, dense and resistant to weathering. This makes a prominent ledgemaking member. The limestones in the upper part of this member are sufficiently pure to have been quarried. The limestone members of the Tonoloway are highly fossilized and about 30 species of ostracods have been identified in it. The thickness of the formation ranges from \(600^{\prime}\) to 700 '.

The Wills Creek Shale lies conformably upon the Tonoloway limestone around Martin Mountain and also outcrops on the eastern slope of Evitts Mountain. It contains interbedded shale and limestone and is around 450'.

The McKenzie formation and the Rose Hill formation cap off Evitts and Martin Mountains. The McKenzie consists of interbedded grey shales and muddy limestones with some intercalated red shales and sandstones. About \(240^{\prime}\) of strata occur in this section.

The Rose Hill formation consists of olive to drab shales and some thin sandstones with two layers of purple-red iron-cemented sandstone near the middle. At Cumberland, this formation is around \(522^{\prime}\) thick.
4. Soils

The soil survey of Allegany County published by the U.S. Department of Agriculture Soil Conservation Service provides the following general information (see Figure 9). From Green Ridge to the east side of Warrior Mountain and from Evitts Mountain to Cumberland, soils are in the Weikert-Gilpin association (Photo 1) a shaly silt loam.

The Weikert soils are made up completely from dry shale, are less than 20 inches to bedrock, are excessively drained and have the lowest supply of mosture in the county.

The Gilpin soils are a little less shallow and shaly than the Weikert. Both soils are considered a shaly silt loam. About \(60 \%\) of this association is Weikert soils, \(13 \%\) Gilpin and \(27 \%\) minor soils. The Weikert-Gilpin surfaces again in the area from Evitts Mountian to Cumberland.

The gently sloping to rolling areas of the Weikert-Gilpin association are used for general farming and pasture. The soils in these areas are generally less productive than those in other parts of the county because of the shallow, droughtiness of the Weikert Soils.

The Eliber-Dekalb-Opequon association, which lies between the west side of warrior Mountain and the east side of Evitts Mountain is the only other division of soils in the study area. The percentages of soils in this association are as follows: Eliber-27\%, Dekalb-20\%, Opequon-10\%.

The Eliber soils, which usually make up the tops and sides of ridges,



Photo l: Typical unstable soil structure incurred throughout study corridor AGBF2.
consist of deep, well-drained, cherty soils. Water capacity of these soils is moderate. A sample profile of these soils may be about 13 inches of cherty silt loam on the surface, a 29 -inch cherty loam subsoil, and an underlying at a depth of \(42^{\prime \prime}-50^{\prime \prime}\) of yellowish-brown chert-loam consisting mainly of chert fragments. Hard limestone is at a depth of around 50". The soils are mainly used for orchards.

The Dekalb series consists of moderately deep, well-drained soils formed from sandstone with occasionally a thin layer of shale or siltstone.

The opequon series consists of shallow, well-drained soils that are formed from hard limestone. They contain many coarse fragments of limestone, and are usually located on limestone ridges. These soils are high in natural fertility and highly productive when managed properly.

Approximately \(2 l\) acres of prime agricultural land will be required for the construction of \(\mathrm{AGBF}_{2}\). (See Figure 6).

\section*{5. Water Resources Surface Water}

The valley and ridge physiographic province encompasses the Minor Atlantic Drainage basin. Two water provinces are associated in this drainage basin, Warrior-Evitts Mountain, and Sideling Hill-Town Creek Water Province. The Minor Atlantic basin drains eastward via the Potomac. Major streams in this basin include Evitts Creek, Town Creek, and Fifteen Mile Creek. There are thirty-two smaller tributaries, the most important being Elk Lick Run, Collier Run, Marley Branch and Black Sulfur Run.

The potomac and the smaller tributaries flowing along or within the boundaries of Allegany County receive the runoff from precipitation which has fallen upon steep and undulating surfaces covered with trees for the most part. There are very few ponds and no marshes to retain the water in its course from the hillsides to the various creeks. The runoff is rapid and the amount of water that percolates into the soil to reappear as springs and to feed the summer flow is relatively small. In times of deficient rainfall, these streams shrink to a small percentage of their original size. This seasonal diminution has prevented the use of the flowing water for the production of power.

The 100 -year floodplains, for each of the major streams crossed, vary from very broad to narrow. Figures 10a-10d shows the limits of these floodplains for Evitts Creek, Elk Lick Run, Fifteen Mile Creek, and Town Creek. Black Sulphur Run, and Collier Run floodplains are delineated by elevation data supplied through FIA, HUD studies for the streams involved (Available at SHA). The waters in the study area are out of the zone of influence of the Maryland Coastal Zone Management Program.

\section*{Surface Water Quality}

The water of the north branch of the Potomac River is naturally somewhat dark in color. The discoloration is further increased by the effluents of sawmills, tanneries, and coal mines mostly west of the study area. At the point of confluence with Evitts Creek, the Potomac is already highly polluted from its 75 mile journey beginning at Fairfax Stone. Acid


REFERENCE: DEPT. OF HOUSING \& URBAN DEVELOPMENT FIA. FLOOD HAZARD MAP FLOOD ELEVATION 668

FIGURE-IO A



REFERENCE: DEPT. OF HOUSING \& URBAN DEVELOPMENT FIA. FLOOD HAZARD MAP
FLOOD ELEVATION 660


REFERENCE: DEPT. OF HOUSING \& URBAN DEVELOPMENT FIA. FLOOD HAZARD MAP FLOOD ELEVATION 720

FIGURE-IOC


REFERENCE: DEPT. OF HOUSING \(a\) URBAN DEVELOPMENT FlA. FLOOD HAZARD MAP
FLOOD ELEVATION 700
mine drainage and sewage treatment plant effluent seem to be its major problems.

Beginning with Evitts Creek and then continuing on to Collier run, Town Creek and Fifteen Mile Creek, the Potomac becomes involved in a natural flushing and diluting action. The high standards both chemically and bacteriologically of the tributaries plus the large volumes of water help to clean out the Potomac.

The north branch of the Potomac, before connecting with Evitts Creek, does not meet water quality standards. From Evitts Creek east, the Potomac meets those standards through Allegany County. Water quality parameters such as dissolved oxygen, temperature and pH are met by all three major streams. Bateriological standards are not met periodically during periods of low flow.

Fifteen Mile Creek, Town Creek, and Collier Run have been designated as Class III -natural trout waters while Evitts Creek and the Potomac River are designated as Class IV - recreational trout waters. Except for broader changes in temperature, these standards are identical to the water quality standards promulgated for Class I Waters; Water Contact Recreation and Aquatic Life.

Many of these streams, such as Murley Branch, which originate in limestone, combine to make very fine trout streams. Their naturally high pH values and usual swiftness create ideal situations for trout, except during periods of low flow. Fifteen Mile Creek has been said to be one of the finest trout streams in Maryland and is the only one that is entirely within the limits of Maryland.

\section*{Groundwater}

A region's geology, topography, and soils all influence the subsurface movement of water. The Sideling Hill-Town Creek water province reservoirs are recharged chiefly by local precipitation. The area's soils have a low moisture-holding capacity, a low permeability and storage capacity. Much of the ground water recharge takes place in this area in the late fall or early spring. The water table in the province parallels the topography in a subdued fashion, and is closest to the surface in the valleys and at the Potomac River. Groundwater occurs chiefly under water table conditions, although locally artesian conditions exist.

The yield of most wells in the area is low, averaging 1-15 g.p.m. with the high 36 g.p.m.

The chemical quality of the groundwater is sufficient for most domestic and farm purposes. The water from these shales is generally hard and alkaline.

The Warrior-Evitts Mountain water province is characterized by a mature topograpy, then soil, rocky outcrops and only a few square miles of flat land. The groundwater recharge is estimated to be about one-fourth of the annual precipitation. The storage capacity of the rocks is relatively low so the water table rises rapidly during periods or groundwater recharge. During drought periods, the water table declines. Therefore, springs may fail and the yield of wells may decline substantially.

Generally, the limestone and sandstone units are the best aquifers and have the greatest capacity for groundwater storage. Groundwater discharge to the streams declines near the end of the summer. Some southerly flowing streams such as Collier Run and Mill Run drain the Oriskany and Romney formations and most have no flow at the end of the summer. However, Marley Branch, draining limestone, has a flow of more than \(2000 \mathrm{~g} . \mathrm{p} . \mathrm{m}\). at the end of the summer. This indicates a high storage capacity of the limestone rocks drained by Marley Branch.

Based on information available at the time of this report, there are no sole source aquifers in this area as defined by the Safe Drinking Water Act, Section 1424 (e) PL 93-523.

\section*{6. Climate}

A middle latitude locality with a general atmospheric flow of west to east and four well-defined seasons generally comprises Allegany County's climate. The average annual temperature is \(52.9^{\circ} \mathrm{F}\). Temperatures of \(32^{\circ}\) F. and lower occur approximately 115 days a year in this area. Allegany county's growing season averages about 170 days.

The average annual precipitation of 37.33 inches is evenly distributed through the year. Seasonal snowfall averages around 32 " with maximum of \(75^{\prime \prime}\) and a minimum of 11 ". Thunderstorms occur on the average of about 35 days per year, are most frequent between May and August, and account for most of the heaviest rainfall.

\section*{7. Vegetation}

Vegetation along the \(\mathrm{AGBF}_{2}\) study corridor is almost totally forest cover with the exception of some small farming operations. Farm size appears to be restricted by existing topography and economic feasibility.

Four recognized forest associations occur along the study corridor (Brush, 1977): Chestnut Oak - Bear Oak Association (Green Ridge Forest), - Hemlock-Birch Association (Town Creek floodplain); Sugar Maple-Basswood Association (Twiggtown-Murley Branch area); and Chestnut Oak Association (Cumberland terminus). The stability of the forest ecosystem especially within Green Ridge State Forest has produced a stable community of associated forest vegetation including: an abundant array of native shrubs and wildflowers.

Farming activities in the study corridor are geared toward small scale livestock production for subsistence and/or supplemental income. Crops grown for this purpose include corn and feed grains. The interspersion of cropland and wood lots buffered on the mountain slopes by extensive tracts of undisturbed forest makes the entire area extremely productive for a wide variety of wildlife species. (Photo 2).
8. Unique/Sensitive Natural Areas

Green Ridge State Forest (Figures 11 and 12) is one of the largest public land holdings on the east coast. \({ }^{1}\)

\footnotetext{
1 Maryland Forest Service
}


Photo 2: Typical habitat west of Town Creek. Farmfields, ecotones and forested hilltops benefit those species under management in Green Ridge State Forest and Warrior Mountain Wildlife Management Area.


SCALE \(-1^{\prime \prime}=1\) MILE


NATURAL ENVIRONMENTAL FEATURES MAP

KEY
LAND CURRENTLY OWNED BY the MARYLAND STATE FOREST SERVICE
LAND PLANNED FOR FUTURE STATE
upland natural areas
various caves


Currently, the forest is 32,000 acres in size with the ultimate acquisition goal of an additional 20,000 acres. The forest's proximity to the Baltimore and Washington urban areas ( 3 hour driving time) helps account for the more than 60,000 visitors per year. Expectations are that this number will steadily increase, especially with increased acreage acquisition. The forest is used for low density/dispersed recreational activities that include hunting, fishing, camping, hiking, nature studies, etc.

In order to maximize the multiple use aspects of lands in public ownership, the Maryland Department of Natural Resources has begun to implement the featured species concept of wildlife management in the forest. Under this concept, guidelines based upon the habitat requirements and mobility of a featured species direct the coordination of timber and wildlife management within forest compartments (Holbrook, 1974).

Within the area, the wild turkey has been chosen as the designated featured species, (although deer, squirrel, and grouse are also abundant). The turkeys need a wide range and a diverse hardwood forested area such as the Green Ridge area affords. Approximately 13,000 turkey hunters worked the available range for this species in Maryland (approximately 1,200 sq. mi.). A great number of these hunters utilize Green Ridge State Forest. This places a pressure of approximately ll hunters per square mile of turkey range in Maryland compared to a state such as West Virginia which has a pressure of about 4 hunters per square mile. Preservation of prime range land is important Maryland sportsmen. The wild turkey needs extensive range (approximately l,000 acres) with diverse hardwood species, a diverse and productive understory and freedom from human disturbances.
b. Warrior Mountain Wildlife Management Area

Warrior Mountain Wildlife Management Area (Figure ll) will not be impacted by the proposed alignment, however, its proximity to the study area is important in terms of the contribution this area makes to the quality and abundance of wildlife species.

\section*{c. Upland Natural Areas}

As part of an effort to inventory and designate areas of distinction within the state of Maryland, the Energy and Coastal Zone Administration of the Maryland Department of Natural Resources and the Maryland Department of State Planning have established a listing of such areas for Allegany County. Several of these areas occur within the study corridor and will be impacted either directly or indirectly by the \(\mathrm{AGBF}_{2}\) alignment (See Section VA).

\section*{1. Fifteen Mile Creek}

This part of Green Ridge State Forest (3,640 acres) is a highly dissected mountainous area with diversely vegetated meandering coves and drier ridges of predominently oak canopy (Photo 3). Forest access roads run throughout the site. Designated camping areas are located along the roads and run along Deep Run and Town Hill. Vistas of the stream valley and the diversity of the flora in the coves add to the forest's scenic quality.


Photo 3: Fifteen Mile Creek Area

\section*{2. White Sulphur Springs}

The White Sulphur Springs Area (ll acres) is located within Green Ridge State Forest just south of Sugar Bottom Road. The northern part of this natural area is a small clearcut with thick regeneration of oak, hickory, and pine. To the southwest toward Black Sulphur Run, older stages of the same species occur. Black Sulphur Run has a cobble bottom to shale bedrock.

\section*{3. Polish Mountain}

The Polish Mountain Area (900 acres) is located within Green Ridge State Forest and has the potential for being incorporated into the Maryland Wildlands Preservation System. Ultimate land acquisition would make this area approximately l,250 acres.

Bordered on the east by dirt roads, this area drops over a thousand feet to its western boundary, Town Creek. The steep slopes make walking difficult, but there are a few deer trails running across the slope.

\section*{d. Various Caves}

Franz and Slifer (1971) have inventoried seven cave sites which are close to the \(\mathrm{AGBF}_{2}\) alignment (Figure ll). These caves are attractive to outdoor recreational enthusiasts and provide a unique habitat for a limited but varied array of cave fauna.

\section*{9. Wildlife \\ a. Terrestrial Ecosystem}

The wildlife diversity and abundance within the study area are due to the excellent environmental conditions that exist within the ecosystem and the sound wildlife and forest management practices which have been employed over the years.

The crop land planted primarily in feed grains is an added source of food in time of biological stress. The interfaces between cultivated land and adjacent wood spots and streams have created ecotone (edge) which add cover for many of the more open land wildlife species which inhabit the study area. Rabbit and fox utilize areas such as these along with species of small rodents which form the base of a food chain for the predatory feeders such as fox, bobcat, birds of prey, etc. (Photo 4).

Fur bearing animals are abundent within the ecosystem. Fox, raccoon, and rabbit are present. The major stream systems provide habitat for healthy populations of muskrat, beaver, and mink (See Photo 5)

Breeding bird surveys (Bystrak 1970-8) reveal a high diversity of songbirds adapted to fill niches within heavily wooded ecosystems.

The wooded slopes and hollows throughout Green Ridge State Forest support healthy populations of many game species such as wild turkey, deer, grouse, and squirrel. Under the featured species concept of wildlife management, large stable populations of these species plus proximity to large urban areas make Green Ridge State Forest a major attraction for an ever increasing number of hunters as well as other outdoor enthusiasts.


Photo 4: Foreground:
Farmland exibiting typical interspersion of cropfields \& ecotones beneficial to openland wildiffe.
Background: Extensive managed forest ecosystem of Green Ridge State Forest.


Photo 5: Town Creek Area

\section*{b. Aquatic Ecosystems}

Four watersheds (Evitts Creek, Collier Run, Town Creek, and Fifteen Mile Creek) which include 7 major stream channels (Evitts Creek, Elk Lick Run, Collier Run, Murley Branch, Town Creek, Black Sulphur Run, and Fifteen Mile Creek) are encountered along the length of the study corridor (Figure 11). These streams are the major receptors of groundwater and surface water runoff and ultimately flow into the Potomac River. The long-term stability of the ecosystem reflects itself in the excellent quality of the water flowing in these streams and in the numerous small tributaries which feed them. This high water quality combined with low siltation has helped produce a highly diverse benthic community which forms the base of the food chain for larger fish species.

Because of naturally occuring low summer flow rates, the streams are best suited on a year-round basis for warm water species such as smallmouthed bass. However, an active trout stocking program is carried out in both Evitts Creek and Fifteen Mile Creek. In the past twenty years, over 100,000 trout have been stocked in Evitts Creek for the purpose of satisfying the spring trout season demand by fishermen from throughout the region. Fifteen Mile Creek was stocked with trout for the first time in 1979 and indications are that this will take place on a yearly basis into the forseeable future.

These streams can be classified as an upper perrenial subsystem of the Riverine System of Wetlands (Cowardin, 1977). A diagram of the classification hierarchy for the Riverine System is shown in Table l.
c. Wetlands

There are no wetlands that will be impacted by the selected alternate.
10. Endangered/Rare Species

No species of wildlife which are protected by either State or Federal laws have been documented to be present in the study area. Although the entire study area presents possible habitats, none have been identified to positively provide an active colony of species.

TABLE 1
DIAGRAM OF THE CLASSIFICATION HEIRARCHY FOR THE
RIVERINE SYSTEM


\section*{C. Historic Resources}

In 1973, when the Draft Environmental Impact Statement for the National Freeway was circulated, only seven historical sites had been identified. These were:

Site 6 - Turkey Flight Manor (Inn of National Pike)
Site 13 - Beall Log Cabin
Site B-2 - Martin Gordon Farm
Site 62 - Devils Den
Site Bl - E. Stonestreet Farm
Site 37 - Six-Mile House(Habeeb House)
Site B-5 - Patterson Farm
Subsequently, a more comprehensive but partial survey revealed a total of 61 sites, including three possible National Register districts: Flintstone, Breakneck Valley, and Williams Road (See Figure li). Another partial, survey further identified twelve sites.

Finally, in early 1977, the State Highway Administration and the Maryland Historical Trust entered into an agreement whereby the State Highway Administration would fund full time professional historic site surveyors. One of their major tasks was the compilation of historical resource information along Section \(I\) of the National Freeway. By September, 1977, the survey was complete.

Seventy individually signficant sites not affiliated with any collective grouping were identified. Of these, 25 have been determined by the State Historic Preservation Officer to probably meet the criteria for inclusion in the National Register of Historic Places, while four are presently listed on the National Register.

Another 59 identified sites have been consolidated into one of three groups, the most farreaching of which is the Breakneck Valley Historic District.

The Breakneck Valley Historic District comprises a total of 31 sites, over an area of 6,270 acres. This district combined and expanded the previously identified Breakneck Valley and Williams Road district. This rural, basically agrarian unit is one that has hardly been altered for in excess of 100 years. The Keeper of the National Register determined the Breakneck Valley Historic District eligible for the National Register in November of 1977 (second survey).

The Flintstone Historic District was another district identified by the historic sites survey, Although generally consistent with the previously identified district, detailed investigation revealed twenty-five individually signficant sites.

The third and final grouping identified is known as the tinkle Group. Three sites comprise this area, totalling approximately 245 acres in size. This group was determined eligible by the Keeper of the Register in December, 1977.

All of the historic sites are listed in Table 2. The reader is requested to note that the Letter "B" in front of the sites listed denotes their location within the Breakneck Valley Historic District. The district has been highlighted on Figure 13. Sites which had been identified in the 1976 survey have their respective survey number in parentheses, or adjacent to them.

Archeological reconnaissance surveys similarly have been performed for the Section I corridor. The Maryland Geological Survey identified several sites, some Indian, some historic. Many represented very small finds, ie. only an occassional artifact, and the State Historic Preservation Officer stated that further archeological investigation was not required. See Appendix A.

TABLE 2
NATIONAL FREEWAY
HISTORIC RESOURCES, SECTION I
BREAKNECK ROAD HISTORIC DISTRICT
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { B-1 Earl Stonestreet } \\
& \text { Farm (37) }
\end{aligned}
\] & C. 1840 & B-18 & Big Spring (44) & \\
\hline B-2 Martin Gordon Farm (36) & C. 1830 & B-19 & Rush Church (45) & c. 1850 \\
\hline B-3 Messick Log House & c. 1790 & B-20 & Rush School (45) & c. 1875 \\
\hline B-4 Green Meadows Cemetery (35) & & B-21 & Scott Robinette House & C. 1830 \\
\hline B-5 Patterson Farm (34) 5A & C. 1840 & B-22 & Wilson House (46) & \\
\hline B-6 Fletcher House (26) & C. 1840 & B-2 3 & May Long House (50) & C. 1870 \\
\hline B-7 Shipley House & C. 1910 & B-2 4 & Tewell Stone House (49) & C. 1820 \\
\hline B-8 Wilision House & C. 1900 & B-2 5 & Moyer House & c. 1825 \\
\hline B-9 Kolb House & C. 1900 & B-2 6 & Justin Heavner House & C. 1900 \\
\hline B-10House Farm (27) & 1798 & B-27 & Ericson House & \[
\begin{aligned}
& \text { late } \\
& \text { l9th } c .
\end{aligned}
\] \\
\hline B-llB.M. Hinkle House (32) & c. 1870 & B-2 8 & Browning Farm (41) & C. 1845 \\
\hline B-12Riggleman House (31) & c. 1850 & B-29 & Lillier House (47) & C. 1845 \\
\hline \begin{tabular}{l}
B-13Summerville Hinkle \\
House (33)
\end{tabular} & 1902 & B-30 & Heavner Farm (38) & \[
\begin{aligned}
& 1837- \\
& 1840
\end{aligned}
\] \\
\hline B-14Wilson Mill Property & & (B-31 & is no site) & \\
\hline B-15Gay Stonestreet House (39) & C. 1842 & B-32 & Warm Springs (29) & \\
\hline B-16Rush Town Center (40) & & & & \\
\hline B-17Luther Macelfish House (44) & C. 1870 & & & \\
\hline
\end{tabular}

B-designates the site as being part of the Breakneck Valley Historic District.
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
\[
1978
\] \\
Survey \\
Site \\
Number
\end{tabular} & Site Name & \begin{tabular}{l}
\[
1976
\] \\
Survey Site Number
\end{tabular} & Eligibility for National Register* \\
\hline 1 & The Aerie (signpost, iron, corithian Col.) & & No \\
\hline 2 & Barn, Christie Road South of 40 , near Masons & & No \\
\hline 3 & Concrete Block House & & eligible (11/27/78) \\
\hline 4 & Bower Garden Center (especially the barn) & & No \\
\hline 5 & Folck's Mill Ruins & 3 & probably eligible (P.E. \\
\hline 6 & Turkey Flight Manor Colonial Manor Motel Folck's Mill Battle site & 2 & on National Register \\
\hline 7 & Hillcrest Memorial Funeral Chapel & 1 & No \\
\hline 8 & Carlton Farm & 5 & P.E. \\
\hline 9 & Farmhouse (3 bay) & & No \\
\hline 10 & House (Stone and frame, 2 Story) & & No \\
\hline 11 & House (White frame with red metal roof) & & No \\
\hline 12 & Liller-Geiger House & 9 & eligible 11/27/78 \\
\hline 13 & Beall Log House & 11 & P.E. \\
\hline 14 & Pleasant Grove Church \& Cemetery & 12,13 & P.E. \\
\hline 15 & Old Bucy House & 16 & P.E. \\
\hline 16 & House & & No \\
\hline 17 & House & & No \\
\hline
\end{tabular}

\footnotetext{
*As determined by State Historic Preservation Officer and historical surveyor and/or Keeper of Register.
}

\begin{tabular}{|c|c|c|c|}
\hline & & & 6 \\
\hline 1978 & & 1976 & \\
\hline Survey & & Survey & \\
\hline Site & & Site & Eligibility for \\
\hline Number & Site Name & Number & National Register* \\
\hline 40 & Harrison/Drake Farm & & No \\
\hline 41 & Old Sawmill Site & & No \\
\hline 42 & Rice Farm & & P.E. \\
\hline 43 & Stickley Farm & & P.E. \\
\hline 44 & Mt. Fairview Church & & No \\
\hline 45 & House (2 story frame on Big Knob) & & No \\
\hline 46 & Barn and Smoke House & & No \\
\hline 47 & House (2 story frame) & & No \\
\hline 48 & Cemetery & & No \\
\hline 49 & Log Barn and Outbuildings & & No \\
\hline 50 & Grabenstein House (2 story frame) & & No \\
\hline 51 & White Frame House & & No \\
\hline 52 & Twiggtown & & P.E. \\
\hline 53 & Pair of Iron Bridges & & P.E. \\
\hline 54 & House (2 story frame) & & No \\
\hline 55 & P. Bloss house \& barn & & No \\
\hline 56 & Farmhouse & 43 & No \\
\hline 57 & Lawerence Smith House & & No \\
\hline 58 & Ricker House & 24 & No \\
\hline 59 & Tannery Managers House & 25 & No \\
\hline 60 & Wallizer Chimney Ruins & & No \\
\hline 61 & Four Bay, two story house & & No \\
\hline 62 & Devil's Den & 30 & P.E. \\
\hline
\end{tabular}

1978
Survey
Site Number Site Name

64 Kisamore Log Barn
65 Flintstone Historic**
District
66 National Pike
Minke House
Hess Brick House
Hendrickson House
Leonard Hinkle House
55
Twigg/Hinkle House (Blockhouse Site)

Robey/Hinkle Log House (Hinkle Farm Group includes 70-72)

73
Warrior's Path
57
No
65. Flintstone Historic District
(Maryland Historical Trust Inventory Numbers)
AL-II-038
AL-II-038
AL-II-039
AL-II-039
AL-II-040
AL-II-040
AL-II-041
AL-II-041
AL-II-042
AL-II-042
AL-II-043
AL-II-043
AL-II-044
AL-II-044
AL-II-045
AL-II-045
AL-II-046
AL-II-046
AL-II-047
AL-II-047
AL-II-048
AL-II-048
AL-II-049
AL-II-049
AL-II-050
AL-II-050
AL-II-051
AL-II-051
AL-II-052
AL-II-052
AL-II-053
AL-II-053
AL-II-054
AL-II-054
AL-II-054
AL-II-055
AL-II-055
AL-II-055
AL-II-056
AL-II-056
AL-II-056
AL-II-057
AL-II-057
AL-II-057
AL-II-058
AL-II-058
AL-II-058
AL-II-059
AL-II-059
AL-II-059
AL-II-064
AL-II-064
AL-II-064
AL-II-067
AL-II-067
AL-II-067
AL-II-001
AL-II-001
AL-II-001


\section*{V. ENVIRONMENTAL CONSEQUENCES}
A. Natural Resources Impact
1. The Department of Transportation, State Highway Administration and the Department of Natural Resources (DNR), decided that alignment \(\mathrm{AGBF}_{2}\) was the most acceptable of all the alignments considered, from the point of view of service, engineering, impact on the forest, and the proposed wildland in the Town Creek area. These agencies drafted a Memorandum of Agreement (Appendix B) which was signed on Feburary 1, 1980, by James B. Coulter and James J. O'Donnell, secretaries of the respective departments.

The conditions set forth in the Memorandum of Agreement (hereafter called the DNR Memo) describe concepts of design and construction that DNR believes necessary to mitigate the impacts of construction on Green Ridge State Forest.

Conditions enumerated in the DNR memo are summarized in the following list:
a. DNR and the interdisciplinary experts will review the project on a continuous basis through construction.
b. To mitigate noise impacts, DNR and the State Highway Administration shall acquire replacement lands.
c. Roadway illumination will not be used, except as indicated in the DNR Memo.
d. Retention ponds will be used where necessary.
e. Signing along the highway will be kept to a minimum.
f. DNR will assist in determining the limits of construction contracts.
g. Construction activities will be guided by seasonal restrictions.
h. Flexible hose by-pass systems will be used in smaller stream areas.
i. Revegetation should blend with the surrounding forest area.
j. Proposed sites for waste disposal must be submitted to DNR for review. Borrow sites will not be located in any unique or sensitive natural areas, including the Green Ridge State Forest. Aesthetic treatment of all structures with Green Ridge State Forest shall be jointly developed between DNR and SHA.
k. DNR's environmental inspector shall have salary and expenses paid by the SHA.

Mitigation measures are described in the following sections and a copy of the DNR Memo is included in Appendix.

\section*{2. Physical Resources}

Geologic, edaphic (soils) and water resources are usually closely interrelated. The ridge and valley section of Maryland illustrates this point well. The short term impact of siltation and sedimentation, would be created because of shallow, loose soils and overburden. Shallow soils (2-6") and steep slopes (50-55\% grades) will make erosion control very difficult. In an area such as this where the root mat is torn, from the soil by walking on it, construction will create conditions conducive to severe erosion. This could create long range problems with siltation in damaged areas that won't revegetate quickly.

Siltation is a potential problem to the 32 perennial or intermittent streams, which the proposed alignment would cross. However, extraordinary mitigation measures will be taken to help protect the streams. Flexible hose by-pass systems, similar to the Vail Pass, Colorado approach, along with retention ponds would be used where practicable to minimize sedimentation and erosion. These measures are desirable because siltation would cause a decrease in dissolved oxygen, (a measurement of the available oxygen for fish and plant life), and an increase in turbidity (a measurement of undissolved solids). During construction at times of rain these factors would combine to block off sunlight, diminishing respiration in aquatic plants and fish.

Erosion would be minimized and maximum protection provided for the floodplains, streams and slopes by maintaining forest cover and existing vegetation except where construction access or piers are needed. (see INR Agreement Memo, Appendix B).

Because the construction of forestry access roads could prove to be environmentally damaging to stream areas and floodplains, the location and construction of access roads will be planned and controlled carefully. The Department of Natural Resources will assist in determining construction access routes and inspecting restoration work as per the DNR Memo. Full utilization of present access roads will be considered.

The AGBF \(_{2}\) alignment crosses parallel ridges and streams almost perpendicularly, and would create some very large cuts and fills. Much of the excavation would take place on steep inclines where shale and siltstone are the parent rock. This rock may be loose and very fragmented, especially in the shaley areas. To avoid problems with rock slides and erosion, the angle of highway side slopes would be developed with the intent to eliminate or minimize these conditions.

Chemically, the erosion of the exposed rock and the character of the diverted springs may cause changes in pH levels for the streams. Further study of soil borings and measures to avoid any adverse impacts on water quality will be undertaken in the design phase. Mid-term reduction of tree canopy and understory could increase the temperature of the water in the streams. This factor along with the higher turbidity and lower dissolved oxygen may create conditions which will increase an already seasonally, high coliform bacteria count.

Construction of the highway could result in a minimal decrease in the total area available for groundwater recharge. Large cuts may expose springs thus reducing the total of water in that aquifer. This could lower the water table in certain areas.

\section*{3. Vegetation}

The selection of Alternate \(\mathrm{AGBF}_{2}\) would over its total proposed length and right of way boundaries utilize approximately 965 acres of upland forest and agricultural land. The loss of land within Green Ridge State Forest would be approximately 176 acres out of 32,000 acres which are currently owned, and an additional 155 acres out of 29,000 acres which are currently in private ownership but due to be acquired by the State Forest Sevice in the proposal to expand Green Ridge State Forest. A minimum of approximately 155 acres of this total ( 965 acres) would involve the construction of the road surface and shoulders. Approximately 212 acres would be utilized for a highway median. Vegetation would include grasses and shrubs tolerant to the area and suitable for the median. The balance of the total acreage from the shoulder of the highway to the fenced right of way line will include a clear recovery area. The ground vegetation will be selected for its effectiveness in soil stabilization, erosion control, and aesthetic and habitat support capabilities.

Specific environmental conditions in the study area would be impacted by the conversion to a transportation related land use. These include species diversity, species abundance interspersion and habitat quality.

In the case of Alternate \(A G B F_{2}\), alteration of species diversity should not result in an increase in the variety of species present but, more likely, a shift in the relative abundance of those species already present throughout the ecosystem resulting in a probable permanent loss of mature hardwood forest species. It has been estimated by the Maryland Forest Service that approximately \(\$ 56,000\) worth of marketable timber exists within the right of way for the alignment through Green Ridge State Forest. The loss of mature, mast producing hardwood species represents an adverse impact in terms of forest management strategies. This will be offset by the additional acreage brought into the forest under the mitigation program, which will replace approximately three to four acres for every public and privately owned acre utilized by the right of way. As much right of way will be left undisturbed as is possible to further mitigate this loss.

In the \(A^{\prime} \mathrm{ABF}_{2}\) study area interspersion is already high due to the farming and forest interfaces which currently exist. In Green Ridge State Forest the presence of fire trails, lumber haul roads and wildlife management techniques have served to create an interspersion of vegetation and ecotone (edge) areas which are of sufficient quantity and quality to be compatible with the overall objectives of both forest and wildlife management.

While edge creation increases cover for various small mammals and has an overall beneficial impact on birds of prey, forest and wildlife management strategy is geared towards maintenance and stability of healthy forest wildlife species such as deer, wild turkey, squirrel, and grouse. The increased ecotone (edge) created by the highway's construction may permanently alter the pattern of interspersion of these forest wildlife species, resulting in adverse impacts in this section of Green Ridge State Forest.

To compensate for the forest resources lost to construction of the highway as well as the aesthetic intrusion, replacement acreage would be
purchased for the Maryland State Forest Service. This commitment is included in the DNR Memo (Appendix B).

To the west of Town Creek, 634 acres of mixed agricultural and forest land will be altered into managed right of way and median vegetation. Of the total 634 acres, 95 acres would be permanently altered to roadway surface. Food crop vegetation and existing ecotones would be reduced in favor of an increase in the ground cover, shrub, and tree species common to managed rights of way.

This change will eliminate an additional food source for the large wildlife species in times of biological stress. This food source consists of a portion of the fall crop harvest which remains on the ground and to some degree remains available during the winter months when nutritional requirements are high and food availability is low.

Vegetation lost will be partially replaced through landscaping of the rights of way.

\section*{4. Wildlife \\ a. Terrestrial}

The selected Alternate would intrude upon high quality wildlife habitat for upland game available to sportsmen and wildife enthusiasts, especially those who wish to travel only a short distance ( 3 hours) from major metropolitan areas.

The "featured species approach" to wildlife management in this forest indicates that the area for the \(\mathrm{AGBF}_{2}\) alternate is suited for the management of wild turkey. While studying the effects of highway (Route 48) on wildlife in Cooper's Pock State Forest in northern West Virginia, Michael (1976) noted that turkey avoided the area adjacent to the highway but did utilize the area 0.2 mile from the highway at levels unchanged during the study period (1971-1975). Thus the actual loss of turkey habitat due to the avoidance behavior is more than actual right of way as the alignment passes through Green Ridge State Forest which has the highest density of wild turkey in Maryland.

White-tailed deer is another species which is intensively managed in Green Ridge State Forest. The construction of Alternate AGBF 2 would open up previously forested acres and replace it with right of way vegetation of grasses and ground covers. During the spring of the year, these areas are attractive to deer because they represent an abundant food source. The fall mating season also represents a period during the year when deer movement becomes more active (Jahn 1959) and could become a hazard to traffic on the new alternate. To mitigate this factor, fencing and underpasses will be utilized.

With respect to the small mammal populations which benefit from an extensively forested ecosystem, the placement of a new four-lane divided highway alignment can have a barrier effect. Oxley (Oxley et al, 1974) states that this effect created by the placement of a major highway may have important effects on small mammal populations due to the fragmentation of gene pools. However, numerous crossing will be provided as recommended by wildlife biologists to mitigate this tendency.

To mitigate the direct loss of productive widlife habitat, the State

Highway Administration is committed to replace lands impacted through Green Ridge State Forest. Comparable habitat value has been one of the criteria used in determination of replacement lands.

Some established wildlife trails will be crossed by the \(A^{\prime G B F} 2\) alignment. In order to maintain the wildlife movements, underpasses would be provided. The placement of these underpasses would conform to those procedures put forth in the DNR Memo. These underpasses which follow existing drainage courses will lessen the impact of habitat and potential gene pool fragmentation and will mitigate sedimentation and drainage impacts.

While the direct impacts of road mortality and population fragmentation are of biological concern, other more subtle impacts upon the food chain can be expected. Maintenance operations associated with Alternate AGBF 2 including the use of herbicide have been reduced sharply in recent years both in terms of quantities and overall toxicity. House et al (1969) have provided an assessment of ecological effects of extensive or repeated use of herbicides.

Deicing chemical compounds present a more noticeable impact on highway-wildlife relationships. While it is necessary to provide safety for the highway user, salt laden snow plowed onto the right of way may serve as abundant salt licks attracting deer into close proximity with moving traffic (Hans et al, 1970). This impact can be reduced through well maintained fencing and animal crossing structures as described in the DNR Agreement.

Because of the lack of supportive data the magnitude of such impacts cannot be quanitified at this time. The State of the art concerning these issue of biological significance is relatively new with most efforts focused on quantifying the problems. Impacts to terrestrial systems, food chains, and animal behavior caused by salt deposition, metal contamination and noise cannot be effectively mitigated.
b. Aquatic

Four watersheds and seven major stream channels, including thirty-two subdrainages, would be crossed by Alternate \(\mathrm{AGBF}_{2}\). These streams are of high water quality (Class III Natural Trout Waters and Class IV Recreational Trout Water) and support a diverse benthic community.

Evitts Creek (a receptor of impacts to Elk Lick Run) and Fifteen Mile Creek are stocked with trout in the Spring. Construction during this period could affect the recreational opportunity in areas of these streams close to or immediately downstream from the construction site.

The state of the art for mitigating highway impacts to stream systems and floodplains has increased greatly in the past few years, and it is felt that through proper design and location of the proposed alternate along with a multidisciplinary approach to recommend construction
techniques, many of the historical problems related to highway construction can be mitigated or avoided. During construction, SHA's erosion and sedimentation control specifications will be strictly enforced to minimize potential impacts.

During operation and maintenance of the highway, impacts associated with road runoff will be the primary concern in terms of maintaining the existing excellent water quality. In this area of impact analysis the state of the art is extremely limited.

\section*{5. Floodplains}

As indicated the floodplains of Evitts Creek, Elk Lick Run, Fifteen Mile Creek, and Town Creek will be crossed by the selected alternate. Construction of \(A G B F_{2}\) requires that \(400^{\prime}\) of Elk Lick Run be relocated (See Figure 14). Conceptual studies have been evaluated in accordance with FHPM 6-7-32.

The Maryland State Highway Administration will prepare a detailed hydrologic and hydraulic study to determine the existing discharge rate and floodplain elevation caused by a 100 year storm. This will provide a data base for determining changes that could be caused by the selected alternate. Stormwater management will then be incorporated into the design of the roadway and its associated drainage structure to avoid increasing the downstream discharge rate or headwater pool elevation upstream. This will prevent any increase in the flooding characteristics of the study area, both upstream and downstream of any roadway improvement, due to the construction of the selected alternate.

The preliminary conceptual design studies have indicated that none of the alternates have significant floodplain encroachment. The build actions would not entail risks to human activity, would not damage floodplain values, nor support direct or indirect development in the base floodplain.

This preliminary determination was based on the fact that the areas under consideration are not currently and are not proposed to be areas of human activity or development. The majority of the infringements on the floodplains are located in low areas and valleys with steep vertical grades on either side. The steep grades of the topography will stop the floodplain from expanding horizontally.

As discussed above, all structures will be designed to accommodate the 100 year storm and will not significantly change the downstream discharge rate. This will eliminate any change in the floodplain either upstream or downstream of the proposed structures.

Specific mitigation for the crossings are identified below and in the DNR Memo, Appendix B. All hydraulic considerations will be developed during final design activities.

\section*{6. Endangered Species}

No direct or indirect impacts are expected to occur.
Coordination with the Department of Natural Resources and the U.S. Fish and Wildlife Service is being maintained on a continuing basis regarding any developments concerning ongoing studies of these species. coordination would also be maintained throughout the design and construction phases of this project.
7. Unique/Sensitive Natural Areas


DASHED ALIGNMENT SEPARATE
FROM NATIONAL FREEWAY CONTRACT

\section*{a. Green Ridge State Forest}

The most environmentally sensitive and affected areas will be:
1). Fifteen Mile Creek and the western slope of Green Ridge -- A shallow overburden exists on the west slope (50\%) of Green Ridge with a very loose ground cover. The floodplain is wide and very sensitive. A maximum of two piers for the bridge will be placed on the floodplain with access to them. No construction will occur on the west slope below clorition 840.
2). Black Sulphur Run -- This area has a shallow overburden. Long and short term impacts on the streams are possible.
3). Polish Mountain, deep cut and Boyer Knob -Probable erosion and possible opening of underground water exists in this area.
4). Town Creek -- Large, wide floodplain with piers and access roads through it.
5). Warrior Mountain -- A deep cut which could create erosion problems.
6). Collier Run -- Siltation and pollution could affect the headwaters of this stream.
7). Evitts Creek -- Siltation could occur in areas near Evitts Creek and reach the creek resulting in an adverse impact.
8). Potomac River -- This river will be affected by minimal amount of siltation from its tributaries. The overall good quality of these tributaries definitely improves the quality after the potomac exits the acid mine drainage areas of Western Maryland. The overall impact on this river should be minimal.

Mitigation to the above effects through Green Ridge State Forest is proposed in the DNR memo. Generally, the mitigation will include:
1. DNR and SHA will determine limits of construction contracts, construction access routes, and mobilization sites.
2. Seasonal restrictions will be placed on construction activities.
3. Flexible hose by-pass systems will be used in small stream areas helping to prevent sedimentation.
4. Specified low areas in terrain will be bridged by structural plate arches and natural bottoms for passage of water and wildlife.
5. Specific mitigation for Fifteen Mile Creek, Black Sulphur Run, Town Creek, and the east slope of Polish Mountain has been devised for these sensitive areas and are delineated in the DNR Memo.

The preceding principals and selected Vail pass concepts will be utilized throughout the entire project. Rounding treatment at the
beginning and end of cut slopes, and the use of detail for molded valley and ridge fill on sections that have waste material are Vail Pass mitigation measures to be implemented. Landscaping techniques include hardwood seeding and selective thinning. Hard rock projections will also be left in place.

The greatest impact to the public and private lands in Green Ridge State Forest will be the loss of approximately 330 acres which are currently owned or planned for future acquisition. This figure represents the total land required for road construction and right of way acquisition.

Alternate \(\mathrm{AGBF}_{2}\) will divide a parcel of land approximately 6,700 acres in size, out of the 50,000 acres proposed as limits to the forest, confining it between existing U.S. 40 to the north, Town Creek to the west, and U.S. 48 to the south.

The effects of this division will involve prime wildlife and hunting habitat, habitat will be reduced; pristine areas for hiking and camping which previously had extremely low ambient noise levels will now be influenced by noise from the traffic (especially trucks) to be routed through this alignment (Figure \(3 \& 11\) ).

To mitigate the conversion of a portion of land from a managed forest to a transportation corridor, the State Highway Administration will pay for and help facilitate the purchase of replacement lands. This is one of the terms of the DNR Memo. These lands (Appendix B) will be within the ultimate acquisition boundaries established for Green Ridge State Forest.

The joint agreement on mitigation procedures does provide for the design and construction of wildlife underpasses which will reduce the fragmentation of animal
populations.
Noise impacts on wildlife have been studied by Memphis State University (1971). While there is an overall absence of information on the effects of noise on wild animal populations, the Memphis State study did indicate that noise may have a detrimental effect on the breeding efficiency of bird species such as bobwhite quail (or wild turkey).

\section*{b. Fifteen Mile Creek Natural Areas}

Fifteen Mile Creek is the only stream which is completely owned ( and thus protected) by the state of Maryland from one state border (Pennsylvania) to another (West Virginia). This natural area pristine and of high scenic quality was inventoried by the Department of Natural Resources and encompasses the floodplain and much of the surrounding watershed of Fifteen Mile Creek south of Route 40. This area would be crossed at its northern boundary by the proposed facility.

Aesthetic design features are proposed to lessen the visual impact created by the highway. The features are specified in the agreement between the Maryland State Highway Administration and the Maryland Department of Natural Resources (See Appendix B).
c. White Sulphur Springs Natural Area

This upland natural area is a relatively small (114 acres) area of streams and surrounding forest. Since the area is small, the location of alignment \(A^{\prime} \mathrm{SBF}_{2}\), would alter the aesthetic qualties which make the site of special significance to the forest user.

Visual and auditory impacts cannot be mitigated for this particular site due to the nature of its size.

\section*{d. Polish Mountain Natural Area}

This area is one of the few sites in the Ridge and Valley Province of Maryland which has been retained for possible inclusion into the Maryland Wildlands System.

It is noted that the only negative aspect of this site as it currently exists is the presence of noise from U.S. Route 40, the northern boundary. The federal design \(\mathrm{L}_{10}\) noise criteria of 70 dBA is presently exceeded at a distance out approximately 150 feet from the centerline of U.S. Route 40 . Noise would still be generated into the northerly section of the proposed wildland due to the continued presence and use of existing U.S. 40. However, the level of noise will be reduced through the diversion of a large proportion of existing and future traffic on to the National Freeway alignment. The federal design criteria would be exceeded at a distance out approximately 90 feet from the centerline of U.S. Route 40. Being a significant distance from the from the southern boundary of the proposed wildland area (Figure 20 H ), traffic noise from the new road would become a part of the overall background noise levels which currently are experienced in this area.

\section*{e. Various Caves}

The seven cave sites located in proximity to the \(A^{\prime} G B F_{2}\) alignment may be impacted by activities associated with road construction. Since these caves offer a unique recreational opportunity as well as a unique habitat, the methods of construction and the potential effects from long term vibration associated with high truck traffic volumes will be investigated.

Any significant potential impacts such as those mentioned above will be discussed as part of the interdisciplinary coordination maintained throughout the current and future phases of project development.

\section*{8. Visual Quality}

Visual quality is very subjective. When a highway is placed through previously undeveloped land, as in the case of alignment \(\mathrm{AGBF}_{2}\), the observer's view of and from the road must be compared with his view of the landscape before the road was there. The more the setting is disturbed, the greater the visual impact caused by the highway.

To give a visual overview of the study area is to characterize the physical landscape with the most distinct natural and man-made landforms, waterforms, rock formations, vegetation patterns, architectural and cultural elements.

The proposed project study area is a natural landscape moderately steep to rolling. The most prominent elements are the steep ridges forming a
wall of vegetation consisting of mixed deciduous hardwood and evergreens.
As the ridges slope toward the valley, the view becomes more defined with exposed rocks, rock outcroppings, large stands of uniform tree cover and smaller groups of vegetation breaking the continuous open space.

The view from the valley, in many areas, is along open landscape of well maintained farmsteads, cropland, pastureland, and vegetation types. A number of distinct structures, churches, and cemetaries are found here to give cultural, historic, and architectural significance to the area.

Because of the strongly dissected valley and ridge terrain, a number of ponds, springs, and feeder streams are found in the project area carrying water to Evitts, Town, and Fifteen Mile Creek. As the creeks and streams meander through the forestland and farmsteads, they attract the attention of farm animals, wildlife, and recreational enthusiasts.

To fully appreciate and characterize the physical landscape of this area, it is imperative that each of the various elements be viewed collectively in terms of function. By doing this, one can visualize a sense of unity and harmony that now exists in this natural setting.

\section*{Visual Impacts Associated with Construction}

Construction would affect many of the elements, either natural or man-made, of the physical landscape as it now exists. Alignment \(\mathrm{AGBF}_{2}\) would be a visual intrusion to Green Ridge State Forest. Construction would traverse the State Forest, affecting acreage now used for recreation. Construction of \(\mathrm{AGBF}_{2}\) would also introduce a very good view in some areas, new structures, new landforms, and new vegetation types and patterns creating a new landscape for the highway traveller.

Impacts to mitigate visual impacts within Green Ridge State Forest are contained in the DNR Memo. These measures include slope revegetation, aesthetic treatment of structures, limits on signing and replacement lands to compensate for visual impact.

\section*{B. Energy Requirements}

The Maryland Department of Transportation estimated the construction and vehicular energy consumption attributable to highway location alternatives in a corridor topographically similar to section \(I\) of the National Freeway. This analysis indicated that a major construction alternative on new alignment (such as \(\mathrm{AGBF}_{2}\) ) would have a net long term energy savings when compared with an alternative which conserved more of the existing roadway and involved less new construction ( such as Alternative A). Although the new alignment alternative would consume more energy during construction, the annual vehicular energy savings to its users would be sufficiently large to offset the higher construction energy consumption within a period of two to three years.

The analysis and conclusions supporting the paragraph above are contained in pages 89 through 97 of Transportation Energy, Final Report, prepared by Hittman Associates, Inc. for Maryland DOT in August, 1977.

A major beneficial impact of building alternate AGBF 2 will be reduction in the energy consumption rate (in gallons per mile of the
vehicles operating on the new facility. This energy efficiency improvement will result from a reduction in grades (in comparison with the existing U.S. 40), elimination of sharp curves, provison of passing lanes for trucks, and elimination of bottlenecks -- all of which will lead to smoother traffic flow.

The three tables in Table 3 illustrate the positive energy impact of a reduction in grade. An automobile ascending a \(8 \%\) grade (the maximum grade on existing U.S. 40) at a uniform speed of 40 miles per hour consumes 0.124 gallons per mile, while the same automobile climbing a \(5.5 \%\) grade \({ }^{1}\) at 40 miles per hour consumes only 0.091 gallons per mile. The consumption rate on the smaller grade is \(22 \%\) less than on the steeper grade. Similar results hold for autos traveling at speeds other than 40 mph , as well as for two-axle and semi-trailer trucks.

These savings will be reduced slightly, in the case of autos and two-axle trucks, by the increased consumption rate of these vehicles traveling down a \(5.5 \%\) grade rather than a \(7 \%\) grade. For example, an auto traveling down a \(5.5 \%\) grade at 50 miles per hour consumes gasoline at the rate of 0.016 gallons per mile, while the same car traveling down a \(7 \%\) grade at 50 miles per hour consumes gas at the slightly lower rate of 0.013 gallons per mile.

Similarly, energy savings will result from the improved horizontal alignments of alternate \(\mathrm{AGBF}_{2}\). The maximum degree of curvature on the existing U.S. 40 is \(8^{\circ}\), while the maximum on alternate \(\mathrm{AGBF}_{2}\) will be \(5^{\circ}\) 50. Moreover, \(\mathrm{AGBF}_{2}\) will have only 3 curves greater than \(3^{\circ} 15^{\prime}\). For constant speeds, gasoline fonsumption rates in gallons per mile increase with increasing curvature. \({ }^{2}\)

\section*{C. Accident Rate and Cost Savings}

Modern design standards result in the lowest accident rates for highway facilities.

After construction of alternate AGBF \(_{2}\) an accident rate of 197 per 100 Million Vehicles Miles (MVM) is estimated for the corridor, with a corresponding accident cost of \(\$ 978,000\) per 100 MM . As stated before, the accident rate on existing U.S. 40 is predicted to approach the statewide average of 321 accidents for similarly designed state roads, with the corresponding accident cost estimated to be \(\$ 1,527,000\) per 100 MMM .

\footnotetext{
\(1_{\text {For most of }} A^{\prime} \mathrm{AGFF}_{2}\) 's length the maximum grade will be \(5.5 \%\) although there will be short stretches ( 800 feet) of \(6 \%\) grade.
 Running Costs of Motor Vehicles as Affected by Road Design and Traffic.
}

TABLE 3
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|l|}{AUTOMOBILE FUEL CONSUMPTION AS AFFECTED BY SPEED AND GRADIENTSTRAIGHT HIGH-TYPE PAVEMENT AND FREE-FLOWING TRAFFIC'} \\
\hline \multirow[t]{2}{*}{f.Nifura: SPI:TD ( APH )} & \multicolumn{11}{|l|}{gasoline consumption (gpm) on gradt: of:} \\
\hline & \multicolumn{11}{|c|}{(a) Plas grades} \\
\hline 10 & 0.072 & 0.080 & 0.087 & 0.096 & 0.1113 & 0.112 & 0.121 & 0.132 & 0.143 & 0.150 & 0.179 \\
\hline 20 & 0.050 & 0.0 .58 & 0.070 & 0.076 & 0.1.6x, & 0.1194 & 0.10 .4 & 0.116 & 0.128 & 0144 & 0.100 \\
\hline 30 & 0.0.14 & 0.051 & 0.060 & 0.0618 & 0.078 & \(11.0 \times 7\) & 0.096 & 0.110 & 0.124 & -1.38 & 0.154 \\
\hline 40 & 0.046 & 0.054 & 0.062 & 0.070 & 0.1078 & 0.057 & 0.096 & 0.111 & 0.124 & 0140 & a. 156 \\
\hline 50 & 0.152 & 0.059 & 0.070 & 0.076 & 0.083 & 0.093 & 0.104 & 0.118 & 0.130 & 0.145 & 0.162 \\
\hline 60 & 0.058 & 0.067 & 0.076 & 0.084 & 0.093 & 0.102 & 0.112 & 0.126 & 0.138 & 0.152 & 0.170 \\
\hline 70 & \(0.16,7\) & 0.075 & 0.084 & 0.093 & 0.102 & 0.111 & 0.122 & 0.135 & 0.148 & 0.162 & 0.180 \\
\hline & & & & \[
(b)
\] & - Minus & grades & & & & & \\
\hline 10 & 0.072 & 0.060 & 0.04.5 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 \\
\hline 20 & 0.050 & 0.040 & 0.027 & 0.022 & 0.021 & 0021 & 0.021 & 0.021 & 0.021 & 0.0121 & 0.021 \\
\hline 30 & 0.044 & 0.033 & 0.022 & 0.016 & 0.014 & 0.013 & 0.013 & 0.013 & 0.013 & 0.013 & 0.013 \\
\hline 40 & 0.046 & 0.035 & 0.025 & 0.018 & 0.014 & 0.012 & 0.012 & 0.012 & 0.012 & 0.012 & 0.012 \\
\hline 50 & 0.052 & 0.041 & 0.030 & 0.025 & 0.021 & 0.018 & 0.014 & 0.013 & 0.010 & 0.010 & 0.008 \\
\hline 60 & 0.058 & 0.048 & 0.036 & 0.037 & 0.030 & 0.027 & 0.022 & 0.018 & 0.014 & 0.011 & 0.008 \\
\hline 70 & 0.067 & 0.058 & 0.048 & 0.043 & 0.039 & 0.036 & 0.031 & 0.027 & 0.022 & 0.016 & 0.013 \\
\hline \multicolumn{12}{|l|}{iThe composite passenger car represented here reflects the foilowing vehicle distibution: Large cars, 20 per. cent; standard cars. 65 percent; compact cars, 10 pefeent: smali cars, 3 percent.} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{12}{|l|}{\begin{tabular}{l}
TWO-AXLE SIX-TIRE TRUCK FUEL CONSUMPTION AS AFFECTED BY SPEED AND GRADIENT-STRAIGHT HIGH-TYPE PAVEMENT \\
AND FREE.FLOWING TRAFFIC \({ }^{1}\)
\end{tabular}} \\
\hline \multirow[t]{2}{*}{UNIFORM SPEEO (MPH)} & \multicolumn{11}{|l|}{GASOLINE CONSUMPTION (GPM) ON GRADES OP:} \\
\hline & Level. & \(1 \%\) & 2\% & 3\% & 4\% & 5\% & 6\% & 7\% & 8\% & 9\% & 10\% \\
\hline \multicolumn{12}{|c|}{(a) Plus 8 rades \({ }^{2}\)} \\
\hline 10 & 0.074 & 0.094 & 0.120 & 0.143 & 0.175 & 0.195 & 0.225 & 0.255 & 0.289 & 0.324 & 0.357 \\
\hline 20 & 0.059 & 0.080 & 0.112 & 0.140 & 0.167 & 0.190 & 0.214 & 0.254 & 0.295 & 0.344 & 0.394 \\
\hline 30 & 0.067 & 0.094 & 0.121 & 0.150 & 0.181 & 0.206 & 0.232 & 0.268 & 0.305 & & \\
\hline 40 & 0.082 & 0.112 & 0.141 & 0.173 & 0.210 & 0.228 & & 0.268 & & & \\
\hline 50 & 0.101 & 0.130 & 0.159 & 0.194 & & & & & & & \\
\hline 60 & 0.122 & 0.150 & & & & & & & & & \\
\hline \multicolumn{12}{|c|}{(b) Minus 8 rades} \\
\hline 10 & 0.074 & 0.064 & 0.055 & 0.053 & 0.051 & 0.051 & 0.051 & 0.051 & 0.051 & 0.051 & 0.051 \\
\hline 20 & 0.059 & 0.049 & 0.039 & 0.034 & 0.030 & 0.030 & 0.030 & 0.030 & 0.030 & 0.030 & 0.030 \\
\hline 30 & 0.067 & 0.054 & 0.041 & 0.034 & 0.027 & 0.026 & 0.025 & 0.025 & 0.024 & 0.024 & 0.024 \\
\hline 40 & 0.082 & 0.071 & 0.051 & 0.041 & 0.032 & 0.029 & 0.025 & 0.023 & 0.021 & 0.020 & 0.020 \\
\hline 50 & 0.101 & 0.090 & 0.072 & 0.058 & 0.045 & 0.038 & 0.031 & 0.025 & 0.020 & 0.020 & 0.020 \\
\hline 60 & 0.122 & 0.110 & 0.090 & 0.075 & 0.062 & 0.052 & 0.043 & 0.035 & 0.025 & 0.020 & 0.020 \\
\hline \multicolumn{12}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
\({ }^{1}\) The composite tworaxle slx-tire truek represented here reflects the following vehicle distribution: \\
Two-xxle trucks at \(8,000 \mathrm{lb}\) G.V.W. \\
50 percem \\
Two-axle trucks at i \(6,000 \mathrm{lb}\) G.V.W. \(\quad 30\) percent \\
'Operation is in the hiphest gear possible for the grode and speed (No. 4, No. 3, or No. 2). When vehicle approach speed exceeds the maximum sustainable speed on plus erades, speed is reduced to this maximum as woon as the vehicte geta on the grade.
\end{tabular}}} \\
\hline & & & & & & & & & & & \\
\hline & & & & & & & & & & & \\
\hline \multicolumn{12}{|l|}{TRACTOR SEMI-TRAILER FUEL CONSUMPTION AS AFFECTED BY SPEED AND GRADIENT-STRAIGHT HIGH-TYPE PAVEMENT AND FREE-FLOWING TRAFFIC} \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
UNIFORM \\
SPEED \\
(MPH)
\end{tabular}} & \multicolumn{11}{|l|}{GASOLINE CONSUMPTION (GPM) ON GRADES OF:} \\
\hline & level. & 1\% & 2\% & 3\% & 4\% & \(5 \%\) & 6\% & 7\% & 8\% & 9\% & 10\% \\
\hline \multicolumn{12}{|c|}{(a) Plus grudes:} \\
\hline 5 & - & & & - & 0.720 & 0.825 & 0.925 & 1.115 & 1.290 & 1.440 & -1.605 \\
\hline 10 & 0.355 & 0.405 & 0.475 & 0.540 & 0.615 & 0.735 & 0.858 & 1.027 & 1.195 & 1.340 & 1.490 \\
\hline 20 & 0.208 & 0.289 & 0.364 & 0.462 & 0.555 & 0.685 & 0.813 & & - & & \\
\hline 30 & 0.164 & 0.253 & 0.3 .12 & 0.474 & 0.618 & 0.800 & - & - & - & - & - \\
\hline 40 & 0.163 & 0.275 & 0.390 & 0.560 & - & - & - & - & - & - & \\
\hline 50 & 0.195 & 0.344 & 0.485 & & - & - & - & - & - & & \\
\hline \multicolumn{12}{|c|}{(b) Minus grades} \\
\hline 10 & 0.355 & 0.247 & 0.145 & 0.132 & 0.120 & 0.120 & 0.120 & 0.120 & 0.120 & 0.120 & 0.120 \\
\hline 20 & 0.208 & 0.140 & 0.069 & 0.062 & 0.055 & 0.055 & 0.055 & 0.055 & 0.055 & 0.055 & 0.055 \\
\hline 30 & 0.164 & 0.115 & 0.066 & 0.053 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 \\
\hline 40 & 0.163 & 0.128 & 0.091 & 0.065 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 \\
\hline 50 & 0.195 & 0.164 & 0.131 & 0.095 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 & 0.040 \\
\hline \multicolumn{12}{|l|}{\begin{tabular}{l}
\({ }^{2}\) Tractor semi trater truck cambinations sepresented here ruflet the following velisise distribution: \\
2.S2 tractor semi-tiailer truck cumbinations at \(40,000 \mathrm{lb}\) \\
3-S2 tractor seni-trater truck combinations at \(\mathbf{5 0 , 0 0 0}\) lb
\[
\begin{aligned}
& 50 \text { percent } \\
& \frac{50}{100} \text { percent }
\end{aligned}
\] \\
: Operation is in the highest gear possible (or the grade and apeed. When vebicle approach speed exeteds the matimum suatainabie speed on pits grades, speed is reduced to this ma:imum as soon as the veniele eets on the zrade.
\end{tabular}} \\
\hline
\end{tabular}

SOURCE: NCHRP Report 111, Running Costs of Motor Vehicles As Affected By Road Design and Traffic, by Paul J. Claffey, Highway Research Board, National Academy of Sciences, 1971, pages 17, 14, and 27.

The difference between these estimates is considerable -- an estimated reduction of 126 accidents and \(\$ 550,000\) for each 100 million vehicles miles of travel. In the design year \(1,112,837,000\) annual vehicle miles of travel are forecast to occur on both the existing and relocated highway.

Other cost savings would be realized by construction of the \(\mathrm{AGBF}_{2}\) alignment. Travel time between Wolfe Mill and M. V. Smith road would be reduced by approximately 10 minutes due to the shorter distance and constant travel speed. Associated operating cost savings for the projected number of users would equal \$16 million annually by 1995.

At this level of travel an accident savings of \(\$ 6,110,491\) per year would be realized. At this rate an \(\$ 86,000,000\) savings could be realized in a little over 14 years.

\section*{D. Socio-Economic/Land Use Considerations}

The selected alternate, \(\mathrm{AGBF}_{2}\) will have positive general economic impacts to the region. The overview of associated impacts for a freeway facility was discussed in the earlier Final Environmental Impact/4(f) Statement. (1) Similarly, social conditions are anticipated to be far-reaching and improved as the result of construction of the facility.

It was pointed out that diversion of non-local traffic from the existing highway will significantly improve travel conditions on U.S. Route 40 . Both hazards and associated accident costs will be reduced by the completion of the southern freeway.

General and specific social impacts from \(\mathrm{AGBF}_{2}\) were identified in the FEIS/4(f) Statement. (1) Some of the specific impacts will be briefly discussed here. Approximately 625 acres are required for right of way and construction of the \(\mathrm{AGBF}_{2}\) alternate. Some of this amount is presently owned by the State Highway Administration, and is along existing U.S. Route 40 at either end of the project.

Construction of alternate \(\mathrm{AGBF}_{2}\) would divert most out-of-state passenger vehicles and trucks from existing U.S. 40, thereby separating local and through movements and thereby alleviating this crucial safety problem. It is estimated that up to \(50 \%\) of the accidents on U.S. 40 would be eliminated by construction of \(\mathrm{AGBF}_{2}\). Furthermore nightime travel and accidents on U.S. 40 would be reduced due to the local nature of the traffic. Reduced traffic will both reduce the risk of accidents, as well as make future minor engineering and maintenance adjustments easier and more effective. An immediate option would be the reduction of the speed limit.

The economic development of Allegany County and Western Maryland hinges on many factors, one of which is improved transportation facilities to and among many markets. The National Freeway is an integral part of the Appalachian Region's development. The portion between Cumberland and M. V. Smith Road represents the last link in the National Freeway, which will tie Baltimore and its Port with the Ohio Valley by a direct, modern highway corridor.

The benefits from a completed National Freeway are sought not only by Appalachian Commission, and Allegany County, but also by the State of

Maryland. The Legislature has repeatedly promoted completion of the facility as an integral element to the continued economic vitality of the State. The Mayor and City Council of Baltimore have also endorsed the proposed highway section as a significant aid to the economy of the State and the Port of Baltimore (See Correspondence Section in Chapter VIII).

The completion of the National Freeway would afford a more timely and safer access to eastern markets. The completed roadway would reduce the trip time approximately 30 minutes or 16.6 miles from the Port of Baltimore and its Metro Areas to Cumberland for trucks. Any industrial expansion in Allegany County, would continue to occur in the Cumberland vicinity. New industrial sites are not expected to occur along the proposed National Freeway, due to topographical constraints and the conflict with the natural resources of forested areas.

The highway would increase the desireability of the non-forested areas around the centers of Cumberland and Hancock as new industrial sites. A modern transportation facility, is a vitally important ingredient to site locations, however, local zoning regulations, tax bases, water supply, cultural amenities, available working force, also influence industrial and commercial location. The National Freeway would provide a single ready opportunity upon which the region may capitalize, along with other available resources.

\section*{Recreation and Tourism}

Tourists and travel services would be affected by the road improvement. Total traffic in the corridor is expected to increase significantly in two decades, with a similar increase expected in demand for services for the motorist and a developing tourist industries. Generally, the construction of Line \(\mathrm{AGBF}_{2}\) would provide improved access to the outdoor recreational resources and tourist attractions within the corridor area and would enhance the economic development goals of the County and Western Maryland as a whole.

The Maryland Outdoor Recreation and Open Space Plan has recommended the development of a multi-purpose recreation area - Town Creek Recreation Area with a combination public/private land ownership and overall land controls on Town Creek. This recreation area is in preliminary stages of planning and could be placed in a number of areas accessible to Alignment \(\mathrm{AGBF}_{2}\).

Some second homes would be constructed in the corridor area, but it is not anticipated to be a significant amount. However, the development of several motels is likely. The motels would service business travelers and tourists as well as aid the county in its quest for convention type meetings. The motels would most likely locate in the Cumberland area.

\section*{Energy Resources}

Western Maryland has become a focal point for coal development in Maryland. The availability of this resource is concentrated in Garrett and Allegany counties. In a recent study forcasting the impact of energy development in Maryland, Allegany County was expected to receive some benefits from coal extraction. In an intermediate forecast scenario, total increase in employment in Allegany County by 1990 would be approximately

603 jobs generating a total income of approximately 10.5 million dollars. Garrett County would receive somewhat greater benefits in employment and dollars. These figures, although not significant over a 10 year period, indicate economic development in Allegany County. Secondly, impacts from this could lead to additional industries and services related to coal production, such as possible coal gassification plants, etc. As experienced in the past, in order for new industry or trades to locate in this area, adequate transportation is necessary for workers and transporting of goods. Coal haul roads will be the primary need for coal trucks, however related products would need adequate interregional transportation, which would be provided by the National Freeway.

The development of coal production and the completion of National Freeway could act as catalysts in creating the proper environment for the much needed development of Allegany County, and Western Maryland.

\section*{Land Use Planning}

As part of the regional and local development of Western Maryland, the National Freeway has been a central part of any Plan of the area.

A controlled access, four-lane divided highway has been endorsed by the Allegany County Planning and Zoning Commission, and the concept of a modern highway corridor is included in the Allegany County Comprehensive Plan (Revision) dated November 1978.

Alternate \(\mathrm{AGBF}_{2}\) provides the interstate/and intrastate requirements of the region and is in accordance with adopted master plans for local, county, and regional goals.

\section*{Relocation Impacts}

The most adverse impact of any highway project is the displacement of residents or commercial establishments. The area affected is basically a rural residential area with land use being primarily agricultural. Incomes are in the lower to middle class range.

Line \(A^{\prime} \mathrm{ABF}_{2}\) would cause the displacement of approximately 24 families, 4 farms, and 1 business. (See Table \(3 A\) following this discussion). Four of these families are located on the displaced farms. These displacements are substantially fewer, than other alternates considered. Upgrading U.S. 40 to a non-control access highway would cause displacement of 29 dwellings and 1 church, while line AGEENA would cause displacement of 36 dwellings, 10 farms and 4 businesses.

Of the 24 families to be displaced, there are five tenant families ( 3 in mobile homes) and nineteen owner occupant families. Six cattle farms are affected. Four of these cattle farms will be displaced as they will no longer be able to function as an economic unit. The one business is a conmercial trucking firm.

A relocation plan was developed from newspapers and local realtors. There are no other projects in the a which will affect the supply and demand for housing. Currently 23 houses with 1-4 bedrooms, are for sale in the area. The houses are available for rent, three of which would be suitable for the displacees. While rental housing is somewhat limited in
this area, three of the families live in mobile homes, which can probably be moved. Land is available for sale and some families may build their own replacement housing. Five familes, one tenant and four owner-occupants will require Housing of Last Resort. Housing of Last Resort is administered whenever a sufficient supply of comparable housing is not available on location for affected residents.

Land is available on which the trucking business may relocate. However, only one farm is currently for sale in the area, and most, if not all, of the farms may discontinue their operations. In these cases, an "in lieu of moving cost" option can be provided if farms qualify. Because of the scope of this project, it will probably be broken into smaller segments (From wolfe Mill Road to Williams Road, Williams Road to Town Creek Road; and Town Creek Road to M. V. Smith Road). The lead time necessary for the relocation is expected to be 18 to 24 months for each segment from the initiation of negotiations for the project. An orderly and satisfactory relocation plan can be carried out in that time. Decent, safe, and sanitary housing will be made available to all persons being displaced by the project. State Highway Administration Projects comply with the provisons of the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970". (Public Law 9l-646) (See Appendix C).

According to the relocation report, neither the elderly and handicapped or minorities are adversely affected by this alignment. No community facilities or services are affected.

TABLE SA SUMMARY OF RELOCATION IMPACTS
\begin{tabular}{lcccc}
\hline \begin{tabular}{l} 
Occupancy \\
Status
\end{tabular} & Dwellings & \begin{tabular}{c} 
Dwelling \\
Units
\end{tabular} & \begin{tabular}{c} 
Businesses \\
\cline { 4 - 5 } \\
Owner
\end{tabular} & 19
\end{tabular}

Title VI Statement
"It is the policy of the Maryland State Highway Administration to insure 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, religion, national origin, physical or mental handicap in all State Highway program projects funded in whole or in part by the Federal Highway Administration. The State Highway Administration will not discriminate in highway planning, highway design, highway construction, the aoquisition 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 be given to the social, economic, and environmental effects of all highway projects. Alledged discrimination actions should be addressed to the State Highway Administration for investigation".

\section*{D. Air Quality Impacts}

The proposed project is located within the Cumberland-Keyser Interstate Air Quality Control Region. Air pollution monitoring is conducted at the Maryland Department of Health and Mental Hygiene's Airmon 8 station in Cumberland. No carbon monoxide violations of the National Ambient Air Quality Standards were monitored for 1978.

Air quality analysis was conducted for the selected alternate to determine potential air quality impacts from its proposed construction. The following assumptions were used in the analysis:
1. The EPA HIWAY line source model was used to derive near-field carbon monoxide concentrations.
2. Motor vehicle emission factors were determined utilizing the EPA MOBILE 1 program with the March, 1978 emission factors.
3. The Cumberland, Maryland carbon monoxide data published in the 1978 Maryland Department of Health and Mental Hygiene Air Quality Data Report was used to determine background carbon monoxide concentration in the corridor. Levels for 1985 (E.T.C.) and 2005 (design year) were derived using the rollback method. The resulting data is shown in Table 4.
4. Inspection/Maintenance (I/M) was assumed to be in effect in 1982 including mechanic training, 30 stringency and benefits applied to all post-1965 model vehicles.

TABLE 4
Carbon Monoxide Background concentration -- Cumberland \(\mathrm{mg} / \mathrm{m}^{3}\)

One-Hour Eight-Hour
\begin{tabular}{lll}
19781 & 11 & 7 \\
19852 & 4.5 & 2.9 \\
\(2005^{2}\) & 4.8 & 3.1 \\
\hline
\end{tabular}

1 From 1978 Maryland Air Quality Data Report.
2 Data from roll back calculations
5. It was assumed that all vehicles are in the hot-stabilized mode based upon the fact that the proposed project is a freeway and vehicles will have been operating for more than 505 seconds prior to entering the facility. A worst-case temperature of \(0^{\circ} \mathrm{F}\). was used. Assumptions regarding use of catalyst, control of truck emissions, and deterioration are those inherent in the MOBILE 1 program.
6. Worst-Case Meteorology

One-Hour
Wind Speed \(=1 \mathrm{~m} / \mathrm{sec}\)
Stability Class - F
Wind Direction \(=\) that which will produce maximum concentration at receptor of concern.
Mixing Ht. 350 m (From Holzworth, 1972)

\section*{Eight-Hour}

Wind Speed \(=2 \mathrm{~m} / \mathrm{sec}\) before 17:00
\(1 \mathrm{~m} / \mathrm{sec}\) after 17:00
Stability Class - D before 17:00
F after 17:00
Wind Direction \(=\) same as 1 -hour
Mixing Ht - same as l-hour
Eight areas were analysed to determine the impact of the project on microscale carbon monoxide levels. All eight are near the western terminus of the project as this section is expected to carry the heaviest volumes of traffic and right of way is the narrowest along the project. Each of the eight areas is described below. The location of these receptors is shown on Figures 15 and 15a.

Receptor 1 - A single family residence right of Station 983+50土.

Receptor 2 - A single family residence right of Station \(991+00 \pm\).

Receptor 3 - Mason's Barn Restaurant south of U.S. 48.
Receptor 4 - Office of the Colonial Manor Motor Lodge.
Receptor 5 - Motel unit of the Colonial Manor Motor Lodge closest to U.S. 48.

Receptor 6 - Three story residence right of Station 1033+.

Receptor 7 - A single family residence right of Station 1038..

Receptor 8 - Edge of right of way of Station \(973+75 \pm\).
The microscale carbon monoxide analysis utilized the following traffic data which was prepared by the Maryland State Highway Administration's Bureau of Highway Statistics.

Traffic Parameters
Average Daily Traffic (ADT) See Figure 16 \& 17
Design Hour Volume (DHV)
\(9 \%\) of ADT
Directional Distribution \(51 \%\)
In Peak Hour
Truck Mix
138 of ADT
148 of DHV
Heavy Duty Gas (ADT) -- \(2.3 \%\)
Heavy Duty Diesel (ADT)-6\%
Heavy Duty Gas (DHV) -- 2.4\%
Heavy Duty Diesel (DHV)-9\%
```

Operating Speeds -- No Build 1985 Peak - 30mph
Off Peak - 55mph
2005 Peak - 30mph

```







\begin{tabular}{cc} 
Off Peak - 55 mph \\
Build & \\
& Off Peak - 55 mph \\
& Off \\
& Off Peak -35 mph \\
& Off Peak -55 mph \\
& SEE FIGURE 18
\end{tabular}

Diurnal Curve
SEE FIGURE 18
The microscale analysis calculated worst-case one and eight-hour carbon monoxide concentrations for the estimated year of completion (E.T.C.) and the design year for both the build and no-build alternates. The eight-hour analysis determined that the period of \(2-10\) p.m. represents the worst consecutive eight hours based upon traffic volumes and meteorlogical data. Table 5 presents the anticipated one and eight-hour carbon monoxide levels for the no-build and build alternates.

No violations of either the one or eight-hour standards are anticipated from the proposed project. All concentrations are substantially below standards with a slight increase with the Build Alternate. This is due to the significant increases in traffic with the build conditions, based upon anticipated diversion from existing facilities when the proposed project is constructed.

\section*{Consistency With the State Implementation Plan}

Location of the project within the Cumberland-Keyser Interstate Air Quality Control Region requires the consideration of microscale carbon monoxide concentrations and construction impacts in determining consistency with the Maryland State Implementation Plan.

The consistency of the project was addressed through consultation with the Maryland Bureau of Air Quality and Noise Control. The State Highway Administration has established Specifications for Materials, Highways, Bridges, and Incidental Structures which specify procedures to be followed by contractors involved in State work. The Maryland Bureau of Air Quality and Noise Control has reviewed these Specifications and has found them consistent with the Regulations Governing the Control of Air Pollution in the State of Maryland. A copy of the technical air analysis is available for review at the State Highway Administration and will be provided to the Allegany County Planning and Zoning Commission.

The Project Air Quality Analysis assessed the microscale carbon monoxide impact of the facility. This analysis determined that no violation of State or Federal Ambient Air quality Standards for carbon monoxide will occur adjacent to the project during the completion and design years. This project has been coordinated with the Environmental Protection Agency and the Bureau of Air Quality of the Maryland Department of Health and Mental Hygiene. The analysis of this project concluded that the project is consistent with the State Implementation Plan.
E. NOISE IMPACTS

Noise impact analysis is based upon predicted changes in ambient noise levels affected by proposed highway construction or improvement actions. The FHWA Highway Traffic Noise Prediction Model (FHWA Model) was utilized

DIURNAL TRAFFIC CURVES
U.S. Route 49 - National Freeway
(Section I)
\(\mathrm{AGBF}_{2}\)


TABLE 5
Carbon Monoxide Concentrations \({ }^{1}\)
\(\mathrm{mg} / \mathrm{m}^{3}\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Receptor} & \multicolumn{4}{|c|}{1985} & \multicolumn{4}{|c|}{2005} \\
\hline & \multicolumn{2}{|l|}{No-Build} & \multicolumn{2}{|r|}{Build} & \multicolumn{2}{|r|}{No-Build} & \multicolumn{2}{|r|}{Build} \\
\hline & 1 hr & 8 h & 1 h & 8 h & 1 h & 8 h & 1 h & 8 h \\
\hline 1 & 5.7 & 3.2 & 6.9 & 4.0 & 5.5 & 3.3 & 6.7 & 3.6 \\
\hline 2 & 6.5 & 3.4 & 8.5 & 4.7 & 5.9 & 3.4 & 7.9 & 4.0 \\
\hline 3 & 6.6 & 3.4 & 8.6 & 4.8 & 6.0 & 3.4 & 8.0 & 4.0 \\
\hline 4 & 7.3 & 3.6 & 10.2 & 5.4 & 6.4 & 3.5 & 9.3 & 4.3 \\
\hline 5 & 8.6 & 3.9 & 12.7 & 6.4 & 6.1 & 3.5 & 11.2 & 4.8 \\
\hline 6 & 7.1 & 3.5 & 9.7 & 5.1 & 6.3 & 3.5 & 8.9 & 4.2 \\
\hline 7 & 6.5 & 3.4 & 8.6 & 4.8 & 6.0 & 3.4 & 8.0 & 4.0 \\
\hline 8 & 7.4 & 3.6 & 10.2 & 5.4 & 6.4 & 3.5 & 9.3 & 4.5 \\
\hline
\end{tabular}
\({ }^{1}\) Concentrations include background levels from Table One-Hour National Ambient Air Quality Standard- \(40 \mathrm{mg} / \mathrm{m}^{3}{ }^{3}\) Eight-Hour National Ambient Air Quality Standar-10mg/m \({ }^{3}\)
to predict future noise levels from the selection alternate. The following criteria has been established:

L10 Change Over Ambient Degree of Impact
Decrease over ambient
Positive
0-5 ABA Increase
6-10 ABA Increase
11-15 ABA Increase
Negligible
over 15 dBA Increase
Minor
Significant
Severe
Also, impact is based on comparison of predicted noise levels and established Federal design noise levels shown in Table 6.

\section*{IMPACT}

Twenty-four (24) individual noise sensitive areas were identified in the project area. Most of the areas consist of l-3 single family residences. Also, one church, a private Beagle club, and a motel were identified. All of these areas are classified as Category "B" activities (See Table 6). The locations of each area are shown in Figure 19.

The following dicussion does not commit the implementation of specific abatement measures, the corridor location studies have identified that portions of the proposal will require the disposal of excess quantities of excavation. During the design phase, the construction of earth berms to utilize portions of the excess material will be considered. As noted in the 106 Memorandum of Agreement, specific earth berms have already been identified and will be studied.

In addition, the Green Ridge State Forest was studied for potential noise impacts. The forest contains primitive camping areas and hiking trails, picnic areas, public fishing areas, game management areas, etc., designed for low intensity recreational use. No undeveloped regular use areas were noted adjacent to the selected alignment of \(\mathrm{AGBF}_{2}\).

During construction of the proposal, the construction activities will periodically cause short term noise impacts to the sensitive areas in the vicinity of the activity. The noise levels will be dependent upon the type of equipment and distance to the receptor.

TABLE 6
DESIGN NOISE LEVEL/ACTIVITY RELATIONSHIP


Noise Abatement measures for lands which are undeveloped on the date of public knowledge of the proposed highway project.
a. Noise abatement measures are not required for lands which are undeveloped on the date of public knowledge of the proposed highway project (except as provided in paragraph llb).
b. For lands which are undeveloped on the date of public knowledge of the highway project, the highway agency should treat the activity or land use as developed land in the following situations.
1) The development was planned, designed, and programmed before the highway studies and there is firm evidence that the development has been only temporarily delayed, or
2) The development is planned, designed, and programmed during the highway project planning and design; there is a very high probability of the development being constructed; and the developer has considered the noise impacts to the extent reasonable and practicable.
c. A highway agency may request Federal-Aid participation in the cost of providing noise abatement measures for undeveloped lands along type IA and IB projects when the noise analysis demonstrates a need in the following situations:
1) Development occurs between the date of public knowledge of the proposed highway project and the actual construction of the project, or
2) The probability of development occurring within a few years is very high and a strong case can be made in favor of providing noise abatement measures as part of the highway project based on consideration of need, expected long term benefits to the public interest, and the difficulty and increased cost of later incorporating abatement measures into either the highway or the development.
* * * * * * * * * * * * * * * * *

Ambient \(L_{10}\) noise levels were measured at each of the sensitive areas and a projection of the design year \(\mathrm{L}_{10}\) noise levels was made based upon SHA traffic forecasts The results are shown in Table 7. Because of its large area and varying topographic features, noise level contours were generated along the entire section of \(\mathrm{AGBF}_{2}\) that would pass through Green Ridge State Forest. Figures \(20 \mathrm{a}-\mathrm{g}\) show the corridor within which the Federal \(L_{10}\) design noise levels criteria of 70 dBA would be exceeded. Within this corridor, noise levels would increase more than 30 dBA over present levels. Figure 20 H shows an impact zone where noise levels are predicted to increase by at least 10dBA over present levels. A 10dBA increase in noise results in an approximate doubling of the perceived "loudness" of the noise or sound.

TABLE 7

*Federal Design Noise Level Exceeded












Of the twenty-four sensitive areas, eight (8) would experience noise levels in excess of Federal design noise levels. They are NSA's l-7 and 23. Minor to severe increases would occur at these areas. Eight (8) historic sites were identified in the study area and are listed in Table 8. Severe impacts would occur at six (6) of the eight areas. Three (3) sites would experience noise levels exceeding design noise levels. A copy of the technical Noise Report has been provided to Allegheny County for their use in planning activities.

\section*{MITIGATION}

Noise control potential was investigated for NSA's 1-7, and 23 where design year \(L_{10}\) noise levels would exceed Federal design criteria. Except for NSA 5, all these areas consist of 1-3 individual residences. Noise abatement for 1-3 residences would not be cost-effective. Abatement costs estimated for each area are listed as follows:
\begin{tabular}{ccc} 
NSA & ABATEMENT COSTS & COST PER RESIDENCE \\
& & \(\$ 180,000\) \\
2 & 210,000 & \(\$ 60,000\) \\
\(2 \& 3\) & 70,000 & 70,000 \\
4 & 180,000 & 70,000 \\
\(6 \& 7\) & & 90,000 \\
23 & 140,000 & 140,000
\end{tabular}

At NSA 5, the Colonial Manor Motel, noise abatement measures would not be warranted. Based on an analysis of the diurnal variation of the \(\mathrm{L}_{10}\) noise levels (interior and exterior) at this area, no adverse impact to human activities associated with the motel would occur.

Special study was warranted at NSA 5, Colonial Manor Motel, because the \(L_{10}\) noise level projected for the design hour (peak hour), is not representative of the "worst-case" noise impact. Noise level projections were made based on the diurnal traffic curve (Figure 18) for various times of the day. In addition, computations of interior noise levels were made using the method described in the FHWA report TS-77-202, "Insulation of Buildings Against Highway Noise." The results are given in Table 8A.

Exterior and interior design noise level criteria (categories "B" and "D" respectively) would be exceeded during the design hour and throughout the day; from approximately 7:00 adm. - 8:00 pom. However, there are no exterior use areas associated with the motel that require reduced noise levels and interior occupancy of the motel rooms during the day (9:00 am. - 8:00 pom.) is negligible. During nighttime hours (8:00 pom. - 7:00 a.m.), when interior usage of the motel rooms is common, interior design criteria would not be exceeded. From 7:00 a.m. - 9:00 p.m. (morning rush hour), interior criteria would be exceeded. Overall noise impacts would be minor at NSA 5 and would apply for 12 hours out of 24 .

At NSA 5, full noise abatement measures would not be warranted. Exterior design criteria would be exceeded throughout the day and night, however, there are no exterior use areas associated with the motel that would require reduced exterior noise levels.

Though interior design noise levels would be exceeded at various times of the day, for those hours during which the greatest adverse impact could
\begin{tabular}{l} 
SITE \\
NAME/DESCRIF \\
\hline Turkey Fligt \\
Colonial Mar \\
Concrete Blc \\
Carlton Farn \\
Tewell Stone \\
May Long Hou \\
Scott Robine \\
Rush Church \\
Rush School \\
House (2-sto \\
2 Site within
\end{tabular}
be realized (8:00 p.m. - 7:00 a.m.) design criteria would be satisfied (see

State Historic Preservation Officer will participate in regular reviews of design activities. Some can only be determined as design progresses.

The resources addressed by the Historic Memorandum are those National Register (eligible) sites which would be adversely affected by the selected alternate. After careful consideration by the State Historic Preservation Officer and highway representatives, nine such individual properties were placed into the adverse effect category. Eight of the properties lie within the Breakneck Valley Historic District; the ninth is the Liller-œiger Farm. The sites are listed in Table 9. Although all of these would incur an adverse impact, the Memorandum provides several stipulations which will satisfactorily serve to mitigate the impacts.

TABLE 9
Properties Affected Under Section 106 by \(\mathrm{AGBF}_{2}\), National Freeway, Section I
\begin{tabular}{|c|c|c|}
\hline Site \# & Name & Date \\
\hline B-17 & Luther McElfish & c. 1870 \\
\hline & House (44) & \\
\hline B-19 & Rush Church (45) & c. 1850 \\
\hline B-20 & Rush School (45) & c. 1875 \\
\hline B-21 & Scott Robinette House & c. 1830 \\
\hline B-22 & Wilson House (46) & \\
\hline B-23 & May Long House (50) & c. 1870 \\
\hline B-24 & Tewell Stone House (49) & c. 1820 \\
\hline B-28 & Browning Farm (41) & c. 1845 \\
\hline 12 & Liller-Geiger House & \\
\hline
\end{tabular}

Specific mitigation measures are cited in the Historic Memorandum for the individual resources to be affected.

Site B-17, Lather MCElfish House is located 1200 feet north of the proposed \(\mathrm{AGBF}_{2}\) alignment. No property from the parcel on which this house, and the Big Spring are located, will be required for right of way and no specific mitigation measures are equired. As figure 21 . shows, the distance to the freeway; and topography combine to produce an effective buffer from visual and acoustical impacts.

Site B-19 and B-20, the Rush Church and Rush School are located 700 feet north of the proposed freeway and are hidden from view by natural terrain. As shown in Figure 22, the roadway would be in cut thereby producing satisfactory buffer. No property associated with these structures is required.

Site B-28, the Browning Farm is the last of the individual sites within the Breakneck Valley Historic District in the range of impact from the preferred highway alternate. The house is on the north side of Williams Road, just west of Warriors Mountain. The proposed alternate will run along existing contours, parallel to Williams Road; the closest lane of travel will be 900 feet from the Browning House (See figure 23). Mitigation proposals include the retention of the woods between the edge of

TABLE 8A
DIURNAL NOISE ANALYSIS
Noise Sensitive Area 5 (Colonial Manor Motel)

\section*{Hour (s)}
\begin{tabular}{lllrr} 
8:00 A.M. - 8:00 P.M. & Negligible & \(79-81 \mathrm{dBA}\) & \(56-58 \mathrm{dBA}\) \\
8:00 P.M. - 9:00 P.M. & Rest/Sleep & 78 dBA & 55 dBA \\
9:00 P.M. - 10:00 P.M. & Rest/Sleep & 77 dBA & 54 dBA \\
10:00 P.M. - 12:00 M & Sleep & 75 dBA & 52 dBA \\
12:00 M - 6:00 A.M. & Sleep & 71 dBA & 48 dBA \\
6:00 A.M. - 7:00 A.M. & Sleep & 77 dBA & 54 dBA \\
\(7: 00\) A.M. - 8:00 A.M. & Sleep & 79 dBA & 56 dBA
\end{tabular}
\({ }^{1}\) Types of indoor activities that would typically occur at this area during the hour(s) shown.
\({ }^{2}\) Based on estimated 23 dBA exterior-to-interior noise reduction for the two motel rooms closest to highway.
be realized (8:00 p.m. - 7:00 a.m.) design criteria would be satisfied (see Table V). Abatement measures for, at most, 2 hours of the day (i.e. during which interior human activities could be disturbed) would not be cost-effective. Abatement alternatives such as a noise barrior would range in cost from \(\$ 40,000-\$ 50,000\).

Abatement at the historic sites identified in the study area is not feasible. Each of the sites consist of only one structure and abatement for single structures would not be cost-effective. Natural features, however, will provide a visual buffer zone between the historic sites identified as part of NSA's \(6,7,12,14,17, \& 22\) (see Table 8).

The feasibility of full or partial noise abatement measures was also investigated for NSA's 8-22 and 24 where severe noise impacts would occur but design noise levels would not be exceeded. Full noise abatement measures (noise barriers) would not be feasible at any of these areas because none of the structures would be less than \(400^{\prime}\) from the proposed highway. At such a distance, potential noise reductions from any type of barrier system would be limited to a maximu of 5dBA (negligible reduction).

Landscape screening as a partial noise abatement measure would be feasible in some locations. Plantings would be placed within the right of way in the vicinity of NSA's \(1 \& 11\) (historic). At these areas, there is little or no existing mature vegetation between the sensitive area and the proposed highway to provide a visual buffer zone.

No partial abatements would be implemented for any other noise sensitive areas. Natural features such as existing vegetation and topography provide a visual buffer zone between the highway and NSA's 2, 3, 6, 7, \& 12-24. Also, at NSA's \(8,9, \& 10\) cut or fill sections of the proposed highway act as visual barriers for the areas.

The noise impact corridor shown on Figure 20 H for the Green Ridge State Forest lands represents that area in which the character of the land would be altered by the introduction of traffic noise. Within this zone, traffic noise will be the dominant noise source, masking the natural sounds.

\section*{F.Historic/Cultural Site Impacts}

\section*{1. Background Data}

The State Historic Preservation Officer and his staff at the Maryland Historical Trust have been directly involved in the environmental analysis development of the section I corridor for several years. As mentioned, increasingly since the circulation of the Draft Environmental Impact Statement, the Trust has provided successively more complete historical inventory data. A complete inventory was finally accomplished in September 1977.

As instructed in the National Historic Preservation Act of 1966, all federal lead agencies (here, the Federal Highway Administration) must include impacts to historical resources in the impact analysis of their proposed actions. Section 106 of the National Historic Preservation Act, 36 Code of Federal Regulations (CFR) Part 800 and Executive Order 11593 authorizes the State Historic Preservation Officer and Advisory Council on Historic Preservation to review all proposed actions which would have an
effect on properties on or eligibile for inclusion on the National Register of Historic Places. These adverse impacts must be resolved before the proposed action may proceed. The resolution is usually embodied in a Memorandum of Agreement.

During the preliminary inventories, the State Historic Preservation Officer rendered preliminary opinions of effect on those properties he considered likely to be eligible for the National Register.

While the historical site inventory was evolving, the preferred highway alternate was Line AGEENA. AGEENA represented a compromise between the displacing of an inordinate number of households were AGEA constructed, and the taking of the Green Ridge State Forest lands were \(\mathrm{AGBF}_{2}\) constructed. It gradually became evident that the primary concern against the AGEENA line would involve historical resources.

As there was every indication that several sites in the Breakneck Valley would meet criteria for inclusion on the National Register, the State Historic Preservation Officer requested that means to mitigate AGEENA through the valley be investigated.

A preliminary case report was submitted to the Advisory Council on Historic Preservation in 1978. Unable to render a favorable opinion on the AGEENA impacts, the Council held a public information meeting in Cumberland in August, 1978. Following review of the material provided by the highway representatives and the public testimony at their informational meeting, the Council advised the Federal Highway Administration that the AGEENA alternate was unacceptable. The impacts to the Breakneck Valley Historic District would be so severe as to be unmitigable to any level of satisfaction. However, the Council would entertain review of another alternate. A copy of the September 1978 letter from the Council is in Appendix G.

During the fall of 1978, a route satisfactory to historical interests was one south of the center of the Breakneck Valley. The southernmost, \(A G B F_{2}\) line, as well as some modification to it near Town Creek, were negotiable. A Memorandum of Agreement, hereafter called Historic Memorandum, for the entire \(\mathrm{AGBF}_{2}\) corridor, or for possible Town Creek modifications to \(\mathrm{AGBF}_{2}\), was executed in February 1979. A copy of this Agreement is included in the Appendix. Parties to this Agreement are the Advisory Council on Historic Preservation, Maryland State Historic Preservation Officer, Federal Highway Administration, and the Maryland State Highway Administration. The Department of the Interior also preferred the selection of \(\mathrm{AGBF}_{2}\) from the historical resource perspective.

Another regulation oriented to historic resources is Section 4(f) of the U.S. DOT Act of 1966. The properties affected under this act will also be discussed later in this chapter and in the Section 4(f) Statement of this Document (page VI.I).

\section*{2. Section 106 Impacts}

In general, the freeway will be designed using a conscientious interdisciplinary design effort. Concepts of landscape architecture, historic preservation, environmental planning, and highway and bridge engineering will be incorporated throughout design and construction. The

State Historic Preservation Officer will participate in regular reviews of design activities. Some can only be determined as design progresses.

The resources addressed by the Historic Memorandum are those National Register (eligible) sites which would be adversely affected by the selected alternate. After careful consideration by the State Historic Preservation Officer and highway representatives, nine such individual properties were placed into the adverse effect category. Eight of the properties lie within the Breakneck Valley Historic District; the ninth is the Liller-Geiger Farm. The sites are listed in Table 9. Although all of these would incur an adverse impact, the Memorandum provides several stipulations which will satisfactorily serve to mitigate the impacts.

TABLE 9
Properties Affected Under Section 106 by AGBF \(_{2}\), National Freeway, Section I


Specific mitigation measures are cited in the Historic Memorandum for the individual resources to be affected.

Site B-17, Luther McElfish House is located 1200 feet north of the proposed \(\mathrm{AGBF}_{2}\) alignment. No property from the parcel on which this house, and the Big Spring are located, will be required for right of way and no specific mitigation measures are equired. As figure 21. shows, the distance to the freeway; and topography combine to produce an effective buffer from visual and acoustical impacts.

Site B-19 and B-20, the Rush Church and Rush School are located 700 feet north of the proposed freeway and are hidden from view by natural terrain. As shown in Figure 22, the roadway would be in cut thereby producing satisfactory buffer. No property associated with these structures is required.

Site B-28, the Browning Farm is the last of the individual sites within the Breakneck Valley Historic District in the range of impact from the preferred highway alternate. The house is on the north side of williams Road, just west of Warriors Mountain. The proposed alternate will run along existing contours, parallel to Williams Road; the closest lane of travel will be 900 feet from the Browning House (See figure 23). Mitigation proposals include the retention of the woods between the edge of



\(\stackrel{4}{4}\)
right of way and Williams Road. Further visual and acoustical attenuation may be implemented via a bifurcated section of highway in this area. Bifurcation would allow greater flexibility in the design of side slopes and earthern berms. No property from the associated Browning parcel would be required. For a description of specific noise impacts on each affected historic site see Table 8 on page V. 42.

\section*{3. Section 4(f) Impacts on Historic Resources}

Other historical resources than those eligible for the National Register and "effected" would incur impacts from the \(A G B F_{2}\) alternate. Two Maryland Inventory quality sites of local significance would be taken by the proposed right of way: Sites 23 and 50. Site 23 is a frame house north of Williams Road, just east of the eastern boundary of the Breakneck Valley Historic District. Site 50 is the Grabenstein House which is located west of Jeffries Road just south of the proposed AGBF 2 centerline. Other historical resources would have associated property required for highway use. The properties are:
\begin{tabular}{ll} 
No. & Name \\
6 & Turkey Flight Manor \\
8 & Carlton Farm \\
66 & Old National Pike \\
73 & Warriors Path \\
& Breakneck Valley Historic \\
& District
\end{tabular}

The Turkey Flight Manor, Site 6, is one of the original inns of the National Pike.

The Carlton Farm, Site 8, is a frame (facade farmstone) two story farm typical of the area. Site 66, old National Pike in the vicinity of Turkey Flight Manor and at the eastern terminus of Section would be impacted by the selected alternate. Site 73 the Warriors Path is an old Indian trail. Acreage is also required from the Breakneck Valley Historic District. A description of the sites and impacts to these properties can be found in the 4 (f) statement.

\section*{Monitoring the Decision}

In accordance with the CEQ regulations and implementing regulations, the mitigations that have been suggested and agreed upon are subject to follow-up action by the State Highway Administration. These agreements as far as mitigation for both cultural and forest land properties are listed in detail in both Memoranda of Agreement with the Advisory County on Historic Preservation and the Maryland Department of Natural Resources (Appendicies A \& B). In general terms, all decisions are monitored by the State Highway Administration through the requirements of the Maryland Action Plan, Chapter V, the Certified Acceptance Procedures for Design Activities, and the individual project "Special Provision Section" to the State Highway Administration Construction Contract Specifications, the Environmental Compliance checklist which is provided to design, and the normal construction permit activities.

The review and compliance provisions for all mitigation requirements are a part of normal day to day coordination activities between, the
responsible District Engineer, the Division of Design and the Environmental Evaluation offices of the Office of Planning, and Preliminary Engineering. For this project a special task force team has also been assigned to carry out the provisions of the Agreements (See Appendix F).

All the above documents are available for review at the State Highway Administration and have been approved by the Federal Highway Administration.
VI. SECTION 4(f) STATEMENT

\section*{I. INTRODUCTION}

Section \(4(f)\) of the U.S. Department of Transportation Act of 1966 states that for any use of publicly owned park or recreation land, or properties of local, state or national historical significance, (l) no prudent and feasible alternative exists to that use, and (2) all possible planning to minimize harm is undertaken.

The selected alternate, Line \(\mathrm{AGBF}_{2}\) requires land from the Green Ridge State Forest, and historic resources.

A Section \(4(f)\) Involvement document for the National Freeway was included in the Draft Environmental Impact Statement (circulated 1973) discussing the involvement with the Green Ridge State Forest. All build alternates considered in Section I, between Cumberland and M. V. Smith Road, required land from Section 4(f) resources.

At the time of the circulation of the Draft Environmental Impact Statement, only eight historical sites were identified. Subsequently, three tentative historic districts and several individual sites were identified (totalling 61 sites). Based on that reconnaissance, a Section 4(f) Involvement Supplement to the Draft Environmental Impact Statement was circulated in October, 1976. Impacts from Lines AGEA, AGEENA, and AGBF 2 were addressed.

It should be noted that the Draft Environmental Impact Statement/Section 4(f) Involvement concerned alternate alignments for the entire National Freeway corridor between Cumberland and Hancock. As environmental engineering and public participation factors became more refined during the study process, it became evident that historical concerns on the Cumberland side of the project could possibly involve considerable additional delays in the schedule of the entire corridor. Therefore, the corridor was divided into two distinct and independent sections: Section I from Wolfe Mill Road (East of Cumberland) to M. V. Smith Road, and Section II from Orleans Road to Woodmont Road (west of Hancock).

A Final Environmental Impact Statement for the entire corridor was distributed in the Fall of 1977. Regional and other general impacts for both Sections I and II were discussed with the AJA Line for Section II being the only recommended alternate at that time. Location approval was received for Section II in August, 1977 (See Figure 1).

This Section \(4(f)\) Statement and Final Environmental Impact Statement address the specific impacts anticipated from the selected alternate, \(\mathrm{AGBF}_{2}\), for Section I , the final remaining link in the National Freeway.

Both historic resources and state forest lands would be required for the construction of Line \(\mathrm{AGBF}_{2}\). This section will address the historic properties individually, as well as collectively where applicable; and the forest as a unit.
II. DESCRIPTION OF 4(f) RESOURCES
A. Historical Resources

Property would be required from eleven individual sites by construction of the selected alternate. From west to east, they are:
\begin{tabular}{ll}
\(\frac{\text { Site }}{6}\) & \multicolumn{1}{c}{ Name } \\
66 & Turkey Flight Manor (Fig. 26) \\
8 & Old National Pike (Fig. 26) \\
50 & Carleton Farm (Fig. 27) \\
12 & Grabenstein House (Fig. 28) \\
B-23 & Liller-Gieger Farm (Fig. 29 \& 30) \\
B-24 & May Long House (Fig. 31 \& 32) \\
B-21 & Scott Robinette House (Fig. 34) \\
B-22 & Wilson House (Fig. 35 \& 36) \\
23 & Frame House on Williams Road \\
& (Fig. 23) \\
73 & Warriors Path
\end{tabular}

See Figure 13 for general site numbers. More detailed figures are indicated in the text. Also, the taking in general from the Breakneck Valley Historic District will be addressed.

Site 6, Turkey Flight Manor, now Colonial Manor Motel, is listed on the National Register, of Historic Places as one of the inns of the Old National Pike. The original entrance is the southern exposure, but with the 1940 construction of U.S. 40, the northern exposure was elaborated into the principle facade. The large brick, federal style inn is dated in the early 1800 's. It is a two story five bay structure with central entrances. Two motel wings were added during the 1940 's. It is situated near Wolfe Mill, between U.S. 40 and Old 40, on approximately 2 acres. The present entrance is from the west.

The Inn was identified as an historical resource in both the Draft Environmental Impact Statement and supplemental Section 4(f) Involvement, (Site \#2), although no property acquisition was anticipated. Subsequently, the relationship between the proposed right of way and the site's boundaries was clarified.

Site 66 , The Old National Pike, not eligible for the National Register, was the first Federally funded highway. Since the late 18 th century the general path of the Old National Pike has been a major route west of Baltimore; consequently, going through a number of changes, the most drastic of which was the construction of U.S. 40. Several segments of the original 1830 highway remain, paved and repaved, with the inns and towns that it made possible, intermittently entwined with modern roads. The inns are on the National Register, and a number of milestones may still be found along side stretches of the old and upgraded road.

The Old National Pike was identified in the Section 4(f) Involvement document (Site \#58), but not itself considered to have Section 4(f) Impacts. 1 One of the milestones (\#125) was addressed for impacts from the AGEA alternate. Site 8, The Carleton Farm is probably eligible for the National Register and is located south of Old National Pike opposite

1-FHWA-MD-EIS-73-08-D
the proposed U.S. 220 connection. Approximately 2.5 acres are historically associated with the site. The house is a two story frame ell-shaped farmhouse, typical of the area. James Pierce Carleton local businessman who decended from early settlers built the house in the latter 19th century and called it Buena Vista.

Although identified as site 5 in the 1976 survey and in the supplemental Section 4 (f) document, no Section \(4(f)\) involvement was anticipated. Detailed examination of possible rights of way revealed the minor taking to be
discussed shortly.
Site 50, The Grabenstein House a structure of local significance, is located west of Jeffries Road on a 175 acre parcel, the majority of which is wooded. Along Jeffries Road is virtually the only cleared and flat land. The frame structure has an L-shaped plan with a steeply sloping single shed roof which high point is the front of the house. The house is three bays wide on the facade, has beaded clapboard siding with corner posts, and windows in simple frames \((2 / 2\) and \(6 / 6)\) with three shed roof porches. The Keeper of the Register indicated that the structure did not meet the criteria for inclusion in the National Register; this opinion received concurrence by the State Historic Preservation Officer.

Site 12, Stylistically dating from the 1870 's the Liller-Geiger house is of unusual size and pretension for the area and is eligible for the National Register. It is a large, two story frame I-shaped structure with a complex roof of intersecting gables. The entrance facade consists of five bays, with a single slope of gable above (i.e. a ridge parallel to the facade). A small entrance porch is covered by a hipped roof.

Numerous fine details are painted blue in contrast to the white clapboard siding. The windows are \(2 / 2\), taller on the first story than on the second. The window frames are Greek revival, as are the attic ventilator panels, gable-end barge boards, and eave mouldings. The house sits on a 104.5 acre parcel, the majority of which is mountainous and wooded.

This site was numbered 9 in the 1970 historic sites survey. The inclusion of the entire parcel as potentially historically associated property was the result of the 1977 survey. The site is privately owned by a member of the filler family.

Breakneck Valley Historic District in the vicinity of Breakneck and Williams Roads, is composed of several historic farm properties which exemplify a rural grouping of farms in the County. Four sites as described below are within the district and would impacted by \(\mathrm{AGBF}_{2}\).

Site B-23, The Long house, is located north of Williams Road. It is a frame dwelling of three sections (apparently built at different times) arranged more or less telescopically, the largest at the northwest end, the smallest at the southeast along the long axis. The jogs of the walls are most extreme on the southwest. The northeast wall is nearly planar. The house is of two storys, with a standing seam metal roof which is hipped at the southeast end and gabled at the northwest. There is a porch around three sides of the front of the building, its roof sloping toward the house on all three sides, echoing the hip of the main roof above. The porch is
enclosed along the flanks. On the open end, the roof is supported by simple posts, embellished with jigsaw brackets. The house, circa 1870 on land acquired from Argyle Twigg, abuts the Tewell Stone house property. The little altered frame house served as a dwelling for a simple farmstead.

This house, part of the Breakneck Valley Historic District, was identified in the supplemental Section \(4(f)\) document as site 50 .

Site B-24, The Tewell Stone House is located north of Williams Road on an 88 acre parcel shared with B-23. The Tewell house is the only site within the Breakneck Road Historic District constructed of stone. The oldest portion, circa 1820, is the southern, of two bays and two storyes, entrance in the south bay, with a splayed flat arched lintel on the first story of limestone and an upper story of log, now covered with aluminum siding. There is a recent one-story addition at the south end, with a garage in the foundation. The gable roof is continuous over both two story sections and is covered in standing seam metal. There are two small square windows in the gables. The stone chimney was once an exterior feature of the north wall, and is now an interior chimney by virtue of the first addition. The masonry of the structure is the excellent coursed rubble of the area, with large dressed stones at the quions.

As with B-23, the Tewell house was identified as a Section 4(f) issue in the 1976 supplemental document. The site was named "Old Twigg Stone House", although Marshall Tewell was identified as the present owner. This site was numbered 49 in the early survey.

Site \(\mathrm{B}-21\), The Scott Robinette House was constructed circa 1830. It is located north of Williams road on 104.5 acres. The house is linear, five-bays long and two storys tall. The original \(18^{\prime} \mathrm{X} .18^{\prime} \log\) house exists under the aluminum siding at the north end. There is a small shed porch addition along the west wall at the southend, and a two story porch under the gable roof of the main house, set within the block. There is a hipped roof entrance porch on the east wall, with turned baluster railings.

This site was not identified until the 1977 survey; however, its name was placed on the Wilson House, Site B-22 in the 1976 survey.

Site B-22, Located on the south side of Williams Road, the Wilson House was constructed in the early 19th century. There are 10 rooms, each with fireplace, in this two story house. A two story porch covers the back of the house. A former slave quarters and summer kitchen are associated with the main house.

Part of the National Register eligible Breakneck Valley Historic District following the 1978 historic sites survey, the Wilson House had also been identified in the 1976 survey. In the earlier reconnaissance the site was numbered 46 and labelled the Scott or Powl Robinette House. The present owner is Paul Robinette; Wilson had been the name of the family who had lived in the house when they operated the kiln/quarry on the opposite side of Williams Road. The site was included in a potential historic district along Williams Road that was incorporated into the expanded Breakneck Valley District during the 1978 historical research.

The property associated with B-22 is 100 acres in size. Most of it is used for crops or pasture.

Site 23, a frame house of local significance is located along Williams Road just east of the Breakneck Valley Historic District. The house is a two story, frame, metal-roofed structure with a visible stone foundation. Two chimneys are contained in this dwelling, built in the mid-to-late 1800 's. Original wood siding has been replaced by aluminum.

The house sits on a 33 acre parcel owned by B. G. Moore. Around the house and up to Williams Road is cleared of woods.

The site was identified as site 42 in the supplemental 4 (f) document. Tax parcels and owners have changed since the circulation of the document.

Site 73, the Warriors Path was one of three known Indian trails from Bloody Run (Everett, Pa.) to King Opessah's Town (Old-town, Maryland). This path linked with others, providing the Five Nations a lengthy network for seasonal migration, hunting or warring expeditions.

The portion in Maryland is approximately 13 miles long, and ran along Iron Ore Ridge, through the Flintstone Gap, along Warriors Mountain, eastward through the Warm Springs (a.k.a. Murley's) Gap, then southwesterly along the southwest side of Warrior's Mountain, and then descended to the Shawnee town along the Cohongoranta (Potomac) River.

The exact path has not been relocated, nor is it anticipated that it could be. Archeological surveys have been conducted, but only documentary evidence is found. The Keeper of the Register has indicated that the lack of physical remains renders the Path ineligible for the National Register.

The Path was addressed in the Supplemental 4 (f) document as number 57.

\section*{B. Green Ridge State Forest}

Green Ridge State Forest, presently comprising approximately 32,000 acres, is owned by the State of Maryland and managed by the Department of Natural Resources. Hiking, picnicking and hunting of deer, turkey, squirrel, rabbit and other small game are presently the major recreational activities. Logging and wildlife management are also significant activities within the Forest.

The projected size of the Green Ridge State Forest is about 52,000 acres. Approximately \(80 \%\) of the forest is south of existing U.S. 40. The acquisition program is projected to be completed by 1990. The prime difficulty in advancing the schedule of acquisition rests in the checkerboard pattern of numerous small privately owned lots and poor deed records (See Figure 12). Some of these had been orchard tracts from the Civilian Conservation Corps era.

Acquisition has been provided via fox sales, donations, state operating fund, general construction loans, and outdoor recreation land funds. All monies involved have been and will continue to be from state sources.

Existing U.S. 40 provides primary access to the forest, with Little Orleans Road, Green Ridge Road and Williams Road (the latter two being dirt-gravel roads) providing secondary access. Mertens Avenue, also a dirt road, provides major east-west access to and within the forest. Maryland

Route 51 at the southern end of the forest provides major access for residents of Cumberland.

There are several logging and forestry maintenance access roads throughout the area. Periodically, these roads are cleared of saplings and fallen trees.

The topography of the land varies greatly throughout the forest, thereby enhancing its attraction and value as a wildlife area. In fact, the northwest portion of the Forest has been designated a potential Wildland (see Figure 3). This specially designated area is a roadies tract of land consisting of 700 acres within 1400 acres that are bounded by U.S. Route 40 on the north, Town Creek on the west, Mermen Avenue on east and Williams Road on the south. In 1981, unless otherwise determined by the Maryland General Assembly, this parcel will become an official Wildland as per the Maryland Wildlands Act of 1972. No forestry or wildlife maintenance or unnatural activities (e.g. logging) will be permitted within the perimeter.

All other areas of the forest will continue to be used for low intensity recreation. An estimated 60,000 persons per year visit the forest, with approximately \(50 \%\) from the Cumberland area. Primitive camp sites are scattered throughout the forest and additional sites are planned, primarily in the Green Ridge Mountain area.

The hunting is especially good for deer and turkey. Green Ridge Forest area reportedly has the highest wild turkey density in the state.

Fishing is permitted in season, with Fifteen Mile Creek providing the greatest opportunity for such varieties as trout, pickeral, small mouthed bass, and blue gills. Other named streams include Black Sulphur Run, White Sulphur Run, Terrapin Run, Deep Run, and Pine Lick Hollow. Some of these are located in the portion of the Forest north of existing U.S. 40.

Green Ridge State Forest is the largest of six publicly owned recreation areas in the vicinity of the proposed project. The others are Rocky Gap State Park, Belle Grove Wildlife Management Area, Warrior Mountain Wildlife Management Area, Bill Meyer Wildlife Management Area, and Sideling Hill Wildlife Management Area. These areas are depicted in the area wide map in Figure 11. All were discussed in the previous environmental impact documents cited.

Rocky Gap is located north of U.S. 40 , six miles east of Cumberland, and encompasses 3,500 acres. The park provides opportunities for hiking, fishing, picnicking, swimming, boating, horseback riding, hunting, camping, birdwatching and sight-seeing. An estimated 700,000 people use the facility each year.

Belle Grove Wildlife Management area is located northwest of Sideling Hill Wildlife Management Area between Scenic U.S. 40 and improved U.S. 40. Access to the wildlife area is provided by one road which bisects the area. The area comprises 360 acres and no additional acquisition is contemplated.

The topography, flora, and fauna of Belle Grove Wildlife Management Area are essentially the same as those attributes of Green Ridge State Forest and the Sideling Hill Wildlife Management ARea. Turkey, deer, grouse, and squirrel are heavily hunted by many state residents. During
the off-season, many people visit the area to hike and sight-see.
Belle Grove Wildlife Management Area was acquired in 1950 for the explicit purpose of propagating game, primarily wild turkey. The game farm activities were abandoned in recent years since wild turkeys have adapted well to the mountain environment which typifies Western Maryland. A parking area is the only actively used facility on the land and no additional facilities are planned. There are no deed restrictions on Belle Grove Wildlife Management Area.
A. ALTERNATES

\section*{General}

As shown on Figure 25, the Green Ridge State Forest is continuous from the Pennsylvania State Line to the West Virginia State Line. Thus only the No-Build alternate would avoid requiring property from the Green Ridge State Forest. Similarly because of the extensive number of historic resources in the corridor, only the no-build would avoid property taking from these resources. General alternates considered for section 1 included two other build alternates and the no-build. The no-build was eliminated because it failed to address the identified need and may worsen the existing safety record. These reasons are identified briefly in the Alternates section of this document, page III. 8.

The two other prominent build options were AGEA, and AGEENA. Line AGEA substantially followed existing U.S. Route 40 and would have required 78 residences, eleven businesses and three farms. Ten historic structures would be taken and part of other historically associated properties would have been required. A total of 551 acres would have been needed for AGEA, including 155 acres of Green Ridge State Forest, 22 acres of Rocky Gap State Park, 23 acres of Breakneck Valley Historic District, and 12 acres of the Flintstone District. The impacted area of the Green Ridge State Forest would have been part of the potential Wildland area.

Line AGEENA was the middle route, between AGEA and AGBF 2 . Until the Advisory Council on Historic Preservation indicated they would not be a party to a Memorandum of Agreement on Line AGEENA, this was the preferred alternate. However, in September, 1978, following extensive coordination, meetings, and two public hearings (one a supplement location hearing in January 1978 held by State Highway Administration, and one in August 1978 held by the Council), the Council determined that the adverse impacts to the Breakneck Road Historic District were unmitigable. AGEENA required 36 residences, 4 businesses and affected 10 farms. Historical impacts included two structures and fourteen other individual historic properties. An adverse effect under Section 106 was found for the entire Breakneck Valley Historic District, of which 310 acres would have been required. Additionally, Line AGEENA may have irreversibly affected the natural Warm Springs in the narrow draw along Warm Springs Road. Although no land would have been required from the Rocky Gap State Park, 224 acres would have been taken from Green Ridge State Forest, along the same alignment as AGEA.

A comparison chart for line AGEA, AGEENA and AGBF \(_{2}\) can be found in Figure 24. Based on the overall impacts, the SHA and FHWA have concluded that \(\mathrm{AGBF}_{2}\) is the only feasible and prudent altemate.
B. Green Ridge State Forest

Right of way for the selected \(\mathrm{AGBF}_{2}\) alternate will require approximately 331 acres from the (projected) Green Ridge State Forest. This represents \(0.6 \%\) of the total anticipated area of the forest. As shown in Figure 31, approximately 7 miles of the freeway would be contained in the forest. The selected route would leave 8,115 acres to the north and 23,885 acres to the south. None of the build alternates avoid Green Ridge

\(+\$ 18.5 \mathrm{M}\) required for mitigation of environmental impacts.

FIGURE -24
VI. 9

Since October 1978, the Maryland State Highway Administration has been closely coordinating with the Maryland Department of Natural Resources regarding mitigating the impacts to the forest. Although mitigating measures will be discussed shortly, the identified impacts included: disruption to wildlife habitat and paths; animal kills from vehicular contact; degradation of stream/water quality; erosion and sedimentation problems; hiking and hunting disruptions; noise, reduction of logging and forestry maintenance access roads.

Other major routes considered during the draft environmental planning stages of this project included some variations to \(\mathrm{AGBF}_{2}\), which would have avoided some of the individually noted historic structures but taken others. Furthermore, none of these variations altered the mainlines of AGEA, AGEENA, and AGBF 2 through the forest. AGEA required 22 acres from Rocky Gap State Park and 215 acres from Green Ridge State Forest (See Figure 24).

Following elimination of the AGEENA alignment, due to its insurmontable historical involvement and conflict, a possible "compromise" corridor was developed for \(A_{G B F}^{2}\) in an attempt to reduce impact upon the Green Ridge State Forest.

This corridor was termed the Town Creek Corridor and included three relatively specific alignments, \(A, B\), and \(C\) (See Figure 25). The alternate would have followed the \(\mathrm{AGBF}_{2}\) line from Cumberland to Warriors Mountain, where it turned northeasterly to link into the AGEA/AGEENA alternates) on the west side of Polish Mountain.

The Town Creek alternates swerving north around Warriors Mountain diverged approximately 2200 feet northwest from the Williams Road/ Town Creek Road intersection. Alternates A and B proceeded to cross Town Creek, approximately 1000 feet apart, and roughly parallel each other to Milepost 15 of the AGFA/AGEENA alternate. Alternate A would have involved the taking of approximately 656 acres of potential wildland, mentioned before. Alternate \(B\) would have required 440 acres. These takings were totally unacceptable (because of the area's potential incorporation into the Maryland Wildland's Preservation System) to the Maryland Department of Natural Resources although both Alternate A and B met engineering and other environmental requirements. \({ }^{2}\)

Town Creek Alternate \(C\), in turn swung around Warriors Mountain from the AGBF \(_{2}\) line, continued approximately along the \(900^{\prime}\) contour on the east side of Warriors Mountain to swing easterly to Warm Springs Road, crossing Marley

\footnotetext{
2 Stated by the Maryland Secretary of Natural Resources, James M. Coulter, at a meeting with Maryland Secretary of Transportation, James J. O'Donnell and State Highway Administrator, M. S. Caltrider, on January 30, 1979.
}


Branch and tying into the AGEENA Route at AGEENA station number 1578 just west of Town Creek. This alternate presented aesthetically undesireable visual scars to Warriours Mountain, in addition to the cavernous and geologically undesireable qualities of the mountain which would have presented particular engineering proglems. Furthermore, this alignment required 256 acres from the northern edge of the Wildland area.

The \(\mathrm{AGBF}_{2}\) line also avoids the Section \(4(f)\) involvement with Rocky Gap State Park. AGEA would have required 22 acres from this State Park. AGEENA also avoided this park.

For the reason described above AGEA and AGEENA do not represent feasible and prudent alternatives to the use of Green Ridge State Forest.
C. Historic Resources

Site 6 - Approximately 10 feet of right of way and/or easement on three sides of the Turkey Flight (a.k.a. Colonial) Manor will be required for construction of the freeway. The proposed taking is shown in Figure 26. The inn already is surrounded by roadways on the three sides involved; the present entrance/exit would not be relocated; and no building or part thereof would be required. The typical section has been minimized to the extent possible to meet traffic demand and maintain access to the historic sites. Safety, drainage, and feasibility must all be considered. Similar concerns apply to the other two sides of the property. If \(\mathrm{AGBF}_{2}\) were located further north, property from historic site 5 (probably eligible for the National Register) and the Cumberland Motel would be required. Also, Site 66 would be further modified. An alternative to right of way acquisition is easement; this may also be accomplished. The State Historic Preservation Officer rendered a determination of no effect on this property, based on the facts that no structure would be effected, the entrance would remain, the site had always served highway travelers and had accommodated several highway changes in its past. The property requirements are identical for AGEA, AGEENA and AGBF 2 .

Site 66 - The often realigned and repaved Old National Pike would again receive slight modifications under the proposed freeway construction. The right of way would be widened on the northern edge in the vicinity of wolfe Mill to accommodate a right turning lane near the Colonial Manor (Site 6) See figure 26. Further east, near the Carleton Farm (Site 8) the Pike would be relocated southward then constructed to parallel Elk Lick Run before connecting with existing U.S. 40 near its present intersection on east of the U.S. 220 spur. This relocation involves a distance of approximately 2000 feet of the 13 miles considered to be significant as part of the old National Pike (See figure 27). The final area for impact to the pike, a historical resource which is significant as a corridor concept, is near the eastern terminus of the project. The \(\mathrm{AGBF}_{2}\) alternate will reconnect with existing U.S. 40 which overlays some of the old road.

To avoid any use of the Old National Pike, Site 66, is impossible. It is travelled everyday and requires maintenance just as every road. The minor relocation near the U.S. 220 spur will be a two lane facility, as it presently is. To maintain the existing Pike would involve raising the elevation of the proposed \(\mathrm{AGBF}_{2}\) facility 40 or more feet above the



DASHED ALIGNMENT SEPARATE
FROM NATIONAL FREEWAY CONTRACT
existing grade which is not a feasible and prudent alternative. This would necessitate reconstruction of the U.S. 220 interchange and existing U.S. 409 each for a distance of approximately 2000 feet east, west, and north so that these facilities could connect. Impacts from the slopes would probably encroach on the Pike. The present plan for \(\mathrm{AGBF}_{2}\) is to avoid these complications and minimize impacts by having the relocated old Pike pass beneath the mainline near Elk Lick Run. The other two major build alternates involved similar land requirements.

Site 8 - A width of approximately 20 feet of right of way from the Carleton Farm yard will be required for a modification to Old National Pike. The strip taking would be approximately 100 feet long along the existing frontage. The edge of pavement, now about 75 feet from the porch, would be five to ten feet closer. The distances and gradients will be determined during design. The estimated 0.05 acres required represents less than \(2 \%\) of the historically associated property. (See Figure 27). Both AGEA and AGEENA would have the same impact. To further minimize impacts, easements will be considered in lieu. The SHPO has determined that the Carlton From will not be affected by the proposed construction. (See 12/22/78 letter in Appendix A).

The Carleton Farm property requirements originally included 6 acres, even the taking of the house and property from the neighboring concrete Block House. However a two lane facility as proposed under the selected alternate, has been found adequate to accommodate the anticipated traffic. Thus, the property requirement has been reduced to 0.05 acres. As outlined in the discussion about not relocating the Old National Pike, there would be obvious associated disadvantages from that alternate. Also, if the alignment were moved north or south of its proposed location, the existing graded connector with U.S. 220 would not be utilized. As with the Turkey Flight Manor, the added possibility of further minimizing impacts through the use of easement rather than purchasing as right of way will be fully explored during the design phase. Both AGEA and AGEENA would have involved the same impacts.

Site 50 - The Grabenstein house, of local significance, would be taken by the \(\mathrm{AGBF}_{2}\) alternate. Both the mainline and the Jeffries Road relocation necessitate it's removal. Furthermore, about 14 acres (8\%) are required from the 175 acre parcel. The property is roughly north/south oriented, averaging about 2000 feet in width and 4000 feet north/south. The \(\mathrm{AGBF}_{2}\) alternate would traverse it east/west in the northern third. In an effort to minimize harm to the remaining property, the \(A^{\prime} \mathrm{ABF}_{2}\) alternate runs along a natural draw in the topography (see figure 28). This reduces the visual intrusion of the facility and acts as a natural noise barrier.

Similar to all the sites above, the Grabenstein property and house would be required regardless of the relocation alternate selected. By not relocating the proposed mainline facility would involve severe socioeconomic impacts along the existing U.S. 40 due to the necessity to bring that facility to freeway standards and the numerous homes on either side. The desired degree of curvature along the existing road would also result in substantial cuts into the knob south of U.S. 40 with a resulting visual scar and substantial amount of fill, already a material in excess for this project. For these reasons AGEA and AGEENA do not represent feasible and prudent alternatives.


Site 12 - Approximately 20 acres from the 104.5 acre Liller-Geiger parcel which is eligible for the National Register, would be required by the \(A G B F_{2}\) alternate. Virtually, all of the land involved is wooded. Therefore no impact to crop or pasture land is anticipated. To minimize noise and visual impacts, the roadway would be in cut along the ridges, causing almost no visual intrustion to the site and acting as a natural noise barrier (See figure 29). This places the farmhouse over 650 feet from the closest edge of pavement. (See Figure 30 ).

Both the AGEENA and AGEA lines would have avoided the Liller-Geiger property. However, 10 acres from the property of Site 69, the Hendrickson House of local significance would be required. Further north, and east, AGEA would have impacted the properties listed below, most of which are on or eligible for the National Register:
```

Beall Log House - Site 13
Pleasant Grove Church - Site 14
Old Bucy House - Site 15
Exxon Station - Site 19
Cloverhill Farm - Site 20
Hartstock House - Site 26
Robosson Log House - Site 28
Hobart Walinger House - Site 33
Habeeb/Plummer Tavern - Site 37
Milestone 125 - See \#66
Flintstone Historic District - 65 (12 acres)
Breakneck Valley Historic District (23 acres)
House - Site 16
House - Site 17
House - Site 21
Old Wolford House - Site 22
Double House - Site 32
Town Creek Road Bridge - Site 38
Ricker House - Site 58

```

Of these, five houses within the Flintstone Historic District would be taken, as would the Robosson Log House, the Old National Pike Milestone, the Pleasant Grove Church, the Old Bucy House and the Town Creek Road Bridge.

Not quite so far north, the AGEENA alternate also would have involved, several Section 4(f) issues on other historic properties, most of which are on or eligible for the National Register in addition to Sites 6, 66, 8 and 50:

Hobart Walinger House - Site 33
Twigg/Hinkle House - Site 71
Rogey/Hinkle Log House - Site 72
Double House - Site 32
Breakneck Road Historic District-310 Acres
East Stonestreet - B-1
M. Gordon - B-2
B. M. Hinkle - B-11

Riggleman - \(\mathrm{B}-12\)
Moyer - B-25
J. Heavner - B-26


E


Of these, the B.M. Hinkle house would be required. Returning to the Liller-Geiger property involvement with line \(\mathrm{AGBF}_{2}\), to relocate the alternate to the northeast would only serve to impact the historic site. To shift the line southwestard, would eliminate the natural advantage of a saddle in the topography. Additionally, a southward shift would begin to encroach on two other historic properties of local significance, the Drake Farm and Saw Mill (Sites 40 and 41). For these reasons, AGEA and AGEENA do not represent feasible and prudent alternatives.

Breakneck Valley Historic District - As depicted in the historic sites map of the Section I corridor, the Breakneck Valley Historic Distrct would have property required by the \(\mathrm{AGBF}_{2}\) alternate. Specific takings from the four historically significant sites within the district are addressed below. In addition to the estimated 38 acres involved from these properties, 43 more acres from the designated boundaries of the District are required despite the fact that all effort has been made to reduce the right of way required for \(\mathrm{AGBF}_{2}\).

The selected alternate roughly corresponds with the southern edge of the District, thereby minimizing intrusion and severence.

Alternate AGEENA traversed the Hinkle historic grouping and the Breakneck Valley Historic District. Impacts were unmitigable to any degree of satisfaction according to the Advisory Council.

Line AGEA would have required 12 acres from the Flintstone historic district and 23 acres from the Breakneck Valley Historic District. This alternate would also have required 4 miles of stream relocations as well as 22 acres from Rocky Gap State Park and 133 acres from Green Ridge State Forest.

Because of the preceding impacts, both AGEA and AGEENA were considered not feasible or prudent.

Sites \(B-23\) and \(B-24\) are situated on a single 88 acre parcel. Approximately 25 acres, which represents only \(28 \%\) of the property, would be required. The \(\mathrm{AGBF}_{2}\) alternate was designed to minimize harm to these resources. Both associated yards and outbuildings would remain intact, and no structures would be required. Figure 31 shows that the proposed right of way would be approximately 300 feet north of the Maryland house, while the closest edge of pavement would be the eastbound exit ramp for the Williams Road interchage, 400 feet away. The Tewell Stone House would have proposed edges of right of way and pavements 350 and 400 feet respectively to the south.

From the Maryland House, only the exit ramp would be visible; however, the view would be obscured by the tree stand which would remain between the southern edge of right of way and the house. (See Figures 32 and 33).

From the Tewell House, the mainline \(\mathrm{AGBF}_{2}\) would be visible. The situation created by the separating of the May Long and Tewell Stone houses, Sites B-23 and B-24, could be partially minimized by eliminating the interchange at Williams Road. This plan is not a feasible and prudent alternate recommended due to the proposed spacing of interchanges and denial of access to local residents. The mainline could be swang southward, to attempt to avoid the Breakneck Valley District altogether.

\section*{泮,}


FIGURE-3I



However, the curvature would have to begin before Hinkle Road in order to obtain any natural topographical advantage. Unfortunately, the most promising separation of ridges is near the Hinkle Road/Williams Road intersection. Historic Sites 40, 41, 45, of local significance and Site 52 which is probably eligible for the National Register would incur property impacts were such a southerly route intended. Alternatively, to shift the \(\mathrm{AGBF}_{2}\) line north of the Tewell/Long property would involve a similar loss of a topographical advantage on Bush Ridge. Because a more northern route would also cross Williams Road, the "dividing impact" would simply occur to another historical resource. For these reasons the alignment shifts do not repreent feasible and prudent alternatives.

The proposed \(A^{\prime} \mathrm{ABF}_{2}\) line comes almost exactly equi-distant from Sites B-23 and B-24 and minimizes harm to each site. A shift of two or three hundred feet from one would involve tremendously greater impact to the other.

Site B-21 - Only approximately 5 acres of the 104.5 acre parcel would be required for \(\mathrm{AGBF}_{2}\) right of way. As shown in Figure 28, the property requirements result from the proposed relocation of Williams Road and its interchange with the Freeway. The edge of the Williams Road right of way would be approximately 200 feet south from the house, while the nearest edge of pavement would be 250 feet away. To the east, Williams Road would be no closer than at present. The mainline for \(\mathrm{AGBF}_{2}\) would be nearly 800 feet south from the structure. A stand of trees exist and would remain along the proposed northern edges of Williams Road and the majority of the mainline's right of way.

As shown in Figure 34, extension of easement or right of way for both Williams Road and the mainline would permit additional visual and acoustical attenuation devices.

For avoiding use of the B-2l parcel, the proposed relocated Williams Road and interchange must be eliminated. This would result in more local road relocation and impact to site B-22. To provide a connection with the freeway, on the other side of Williams Road, the roadway would be closer to B-22. A substantially higher amount of earthwork would be required to provide the grading for both the mainline and Williams Road resulting in a visual scar on the terrain. Furthermore, two additional houses would be required for right of way and slope easement. Thus, this alternate is not feasible and prudent.

Site B-22 - Only approximately 3 acres are required by the \(A^{\prime} \mathrm{ABF}_{2}\) alignment of the 100 acres associated with the Wilson House. The proposed right of way would be 800 feet from the house, while the highway would be another 100 feet south introducing noise and visual impacts. The sheds to the rear of the house would serve as a partial visual and noise buffer (See Figure 35). Greater acoustical and visual mitigation may be accomplished along the northern edge of right of way due to local topography as shown on Figure 36. For avoiding the B-22 parcel, a southward shift would reduce impact to the house and Breakneck Historic District. Such a shift is feasible at that parcel, but when analyzed in connection with the approach alignment to Warriors Mountain is not feasible and prudent alternate as described below. The steepness and height of Warriors Mountain demands practical solutions at its crossing. A draw exists along Williams Road at the eastern edge of the Historic District, and near Site 23. The freeway



FIGURE- 35

alignment paralleling Williams Road must negotiate that pass.
A northward shift in the \(\mathrm{AGBF}_{2}\) mainline near Site \(\mathrm{B}-22\) would impact sites \(B-21\) and \(B-24\) severely as well as involve an especially tight curvature of road, either not up to freeway standards or else involving a sizeable cut into Collier Ridge creating a significant visual scar, having foregone a natural draw.

Site 23 is the frame house on Williams Road and will be required by AGBF2. Of the 33 acres on the parcel, approximately 2 would be required for right of way. All of the parcel except the acre cleared between the house and Williams Road is wooded and would act as a visual barrier to the remaining property. (See Figure 23).

As has been mentioned, the topography along Warriors Ridge renders little opportunity for a feasible east-west crossing. Such an opportunity only exists along existing Williams Road, which runs through a saddle near Site 23. Although the right of way has been minimized to the extent possible, this house is required for both mainline right of way and relocated Williams Road right of way, with Williams Road being placed north of the mainline.

Site 73, the Warriors Path would be traversed by any alternate, including the No-Build. Known to have existed somewhere on Warriors Mountain, the north-south trail must be crossed by any east-west movement through Allegany County, Maryland.

The following table summarizes the historic property impacts of Alternate \(\mathrm{AGBF}_{2}\).

TABLE 10
Section 4 (f)
Historic Property Involvement
\(\mathrm{AGBF}_{2}\)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { SITE } \\
& \text { NO. } \\
& \hline
\end{aligned}
\] & NAME & \[
\begin{aligned}
& \text { NAT. } \mathrm{a} \\
& \text { REG. }
\end{aligned}
\] & \[
\begin{gathered}
\text { SIZE } \\
\text { (Acres) } \\
\hline
\end{gathered}
\] & AMOUNT REQUIRED & PERCENT REQUIRED \\
\hline & Turkey Flight & & & & \\
\hline 6 & Manor & Yes & 2+ & \(10^{\prime} \mathrm{x} 600^{\prime}\) & 7\% \\
\hline 8 & Carlton & E & \(2.5 \pm\) & \(20^{\prime} \times 100^{\prime}\) & 2\% \\
\hline 66 & Old Nat'l. Pike & No & N/A & Widen, Overlay & N/A \\
\hline 50 & Grabenstein & No & 175 & H, 21 acres & 12\% \\
\hline 12 & Liller-Geiger & E & 104.5 & 20 acres & 19\% \\
\hline B-23 & May Long & Yes & \(88{ }^{\text {b }}\) & 25 acres & 28\% \\
\hline B-24 & Tewell & Yes & & 25 acres & 28\% \\
\hline B-21 & S. Robinette & Yes & \(104.5^{\text {b }}\) & 5 acres+ & 5\% \\
\hline B-22 & Wilson & Yes & 100 b & 3 acres \({ }^{-} \pm\) & 3\% \\
\hline 23 & Frame House & No & 33 & H, 2 acrēs \(\pm\) & 6\% \\
\hline 73 & Warriors Path & No & N/A & cross & N/A \\
\hline -- & Breakneck H.D. & Yes & 6,200 & 81 & 1.3\% \\
\hline & Total & & 6,517 \({ }^{\text {c }}\) & \(125+^{\text {c }}\) & \\
\hline
\end{tabular}
a-National Register of Historic Places, yes means on it, no means not eligible, and E means eligible.
b-These figures are included in the Breakneck Valley Historic District, i.e., these properties and their impacted areas are not counted twice in the totals for historic properties.
c -See explanation of b .
H-Structure Required.

MITIGATION MEASURES
A. Historic Resources

A Memorandum of Agreement was reached with the Advisory Council on Historic Preservation concerning impacts by \(\mathrm{AGBF}_{2}\) to National Register (eligible) sites which might incur loss of historical integrity. The sites involved were: the Breakneck Valley Historic District, B-17, B-19, B-20, \(B-21, B-22, B-23, B-24, B-28\), and 12. Of these no property (ie. 4(f)) involvement was required from \(\mathrm{B}-17, \mathrm{~B}-19, \mathrm{~B}-20\), or \(\mathrm{B}-28\). Mitigation measures were identified in the Memorandum in general concepts, as already discussed in the body of the Final Environmental Impact Statement. To reiterate briefly, landscaping treatment for the highway construction will endeavor to minimize visual and acoustical impacts to the indicated sites, including all portions of the proposed freeway in or near the Breakneck boundaries.

Specific proposals for several sites include construction of earthern berms between the edge of the proposed facility and the noted historic site. Unless the design and topography combine to provide a "natural" berm or barrier, such a device would probably involve acquisition of additional right of way. The possibility of acquiring the land as revertible easement would also be investigated.

Revegetation of slopes in keeping with present species of flora or requests of the owners and State Historic Preservation Officer, is anticipated.

Existing stands of trees would be retained wherever feasible between the historic resources and the proposed roadway. Rechannelization of streams would be accomplished with minimal disruption to the existing characteristics and access. Mitigation techniques would be similar to the Vail Pass, Colorado approaches.

In the vicinity of the \(4(f)\) properties, design of the roadway has minimized right of way requirements where practical.

Near the Carleton Farm, Site 8, the improvements to Old National pike would be removed as far from the \(4(\mathrm{f})\) property as possible. Existing hedges, trees, embankments, would be spared from the path of construction wherever possible.

Relocation of the Grabenstein House, site 50, elsewhere on to the associated 175 acre parcel is possible, but has not been recommended by the State Historic Preservation officer because the condition of the house is quite poor, and does not represent a unique or extremely significant historical resource. Coordination with the State Historic Preservation Officer indicates that replacement of the structure would be of little historical value.

Relocation of the house along Williams Road, Site 23 is more feasible, given the condition of the structure. The difficulty presented by the taking of this site, is the land associated with the structure. The 33 acre parcel is wooded, and on relatively steep terrain, except for the area on which the house sits and which \(\mathrm{AGBF}_{2}\) and Williams Road (relocated) are proposed to traverse. Replacement housing would be provided in the area
should relocation of the structure not be prudent or feasible, or contrary to the owners and/or State Historic Preservation Officer's request.

Mitigation for crossing the Warriors Path would include erection of a sign along the highway at the safest point closest to the estimated location of the Indian trail. Appropriate archeological investigations and salvage, as necessary, will be conducted should artifacts be uncovered during the course of highway construction.

Concepts of preservation, landscape architecture, aesthetic highway and bridge engineering and environmental planning will all be incorporated into the design and construction of the AGBF2 alignment. The impacts associated with the other major alternates, as well as localized shifts to the recommended alternates, are not considered prudent or feasible to the use of \(\mathrm{AGBF}_{2}\).

\section*{B. Green Ridge State Forest}

Mitigation measures of the \(\mathrm{AGBF}_{2}\) incurred impacts on the Green Ridge State Forest have been discussed in substantial detail with the Maryland Department of Natural Resources staff. A Memorandum of Agreement between the Maryland State Highway Administration and the Maryland Department of Natural Resources has been executed. A signed copy of this Agreement appears in the Appendix of this Final Environmental Impact Statement /4(f) document. The overriding concept of the Memorandum is the commitment to provide sensitive landscaping and design techniques, with highway and natural resource concerns being satisfied jointly. Specific measures include:
-Construction of \(24^{\prime}\) high steel arches in the natural draws crossed by the proposed alignment. These high pipes would permit continued use of wildlife and hiking trails. Natural bottoms would be used.
-Reconstruction of effected logging and maintenance access roads at functional grades.
-Minimal use of the Fifteen Mile Creek floodplain. This includes a crossing which would involve only two piers in the floodplains, and a minimum elevation of \(840^{\prime}\) on the eastern steepest slope bordering the floodplain. Furthermore, access to and in the floodplain would meet with Department of Natural Resources approval.
-Other streams in the forest, notably Black Sulphur Run, would be spanned, not altering their present channelization. Slopes would not be constructed within \(100^{\prime}\) of the run.
-Replacement land would be provided, at a rate of four times the value of the land required for \(\mathrm{AGBF}_{2}\) right of way through the forest. This amount was derived by State Highway Administration noise and wildlife experts who estimated that "acceptable" noise levels would extend another \(300^{\prime}\) to \(500^{\prime}\) but beyond the proposed rights of way, depending upon immediate topographical characteristics.

\section*{SUMMARY}

This section sets forth the basis that there is no feasible or prudent alternative to the taking of historic propeties or the use of land from the

Green Ridge State Forest for the proposed project. This project includes all possible planning to minimize harm resulting from the use of land from the historic areas and the state forest.

\section*{Coordination}

Section \(4(f)\) coordination and consultation was provided for the project. The Department of the Interior, Department of Agriculture and Department of Housing and Urban Development were sent copies of the Draft Environmental Impact Statement (1973) for Sections I and II and copies of the Supplemental 4(f) Involvement in 1976 and the Final Environmental Impact Statement (1977) for Section II.

Nb objection was received from Department of Agriculture \& HUD. Responses were received from the Department of the Interior from the historic and recreational viewpoint.

Review and consultation meetings were held with the Department of the Interior on November 18, 1977. In addition the preliminary Final Environmental Impact Statement Section I was sent to the Department of the Interior and the Environmental Protection Agency (EPA) on March 24, 1980. Additional consultation meetings were held on April 24, 1980 and the results of the consultation are outlined in EPA's letter dated May 1, 1980. The Department of Interior responded (May 30, 1980). (See Comments and Coordination Section of this document.)

\section*{VII. LIST OF AGENCIES/ORG/OFFICIALS TO WHOM ELS ARE SENT (* COMMENTED)}

AGENCY
FEDERAL
U.S. Department of the Interior*
U.S. Department of Housing and Urban Development
U.S. Department of Agriculture (Soil Conservation)
U.S. Department of Commerce

National Marine Fisheries Service
Appalachian Regional Commission
U.S. Department of Health, Education and Welfare

Environmental Protection Agency*
Office of Economic Opportunity
Corps of Engineers
U.S. Department of Energy

National Capital Planning Commission
Urban Mass Transit Administration
STATE
Local Governments
Department of State Planning
Appalachian Regional Commission
Tri-County Council
Maryland Historical Trust*
Department of Transportation
State Archeologist - Maryland Geological Survey*
Department of Natural Resources*
Department of Budget and Fiscal Planning
Department of General Services
Department of Economic Community Development*
Department of Education
Department of Health and Mental Hygiene*
Interagency Committee for School Construction
Maryland Environmental Trust
Department of Public Safety and Correctional Services
COUNTY
Allegany
County Engineer
Planning and Zoning*
Board of Education
Economic Development Commission*
State Highway Administration
District Engineer
Members of Advisory Committee
Clyde E. Ayers, Chairman
Director, Division of Systems Planning and Development
Maryland Department of Transportation
Edward I. Heath, Executive Director
Tri-County Council for Western Maryland
Lowell W. Frederick
Federal Programs Coordinator
Department of Economic and Community Development
Anthony Abar, Chief
Program Planning and Evaluation
Department of Natural Resources
Charles Pixton, Planner
Department of State Planning
John D. Bushby, District Engineer
State Highway Administration
Interested Groups
Western Maryland Chamber of Commerce*
Citizens Coalition for Improvement of U.S. 40
Allegany County Farm Bureau, Inc.
Western Maryland Central Labor Council
Soil Conservation Service.
Elected Officials - Federal and State*
Elected Officials - County*
VIII. COMMENTS AND COORDINATION SUMMARY OF TESTIMONY AT NATIONAL FREEWAY SUPPLEMENTAL CORRIDOR PUBLIC HEARING OF JANUARY 24 , 1978

Comments received from all sources have been thoroughly studied. Changes recommended by various commenting entities have been incorporated into the body of the Final Environmental Impact Statement. In addition, this section summarizes and responds to written and verbal comments received at the public hearing and during the commenting period. Many comments merely state an alternative preference to which a response is not required. Other comments raise specific issues which necessitate factual responses.

> COMMENTS RECEIVED AT THE PUBLIC HEARING
> Tuesday, January 24, 1978
> 7:30 pom.
> Fort Hill School
> Cumberland, Maryland

one hundred citizens, agency representatives, and elected officials attended this meeting.

The first seven speakers identified themselves as members of "The Coalition for a Fourth Alternate". The Fourth Alternate is a statement that upgrading U.S. Route 40 to a modern dual highway without control of access, and within right of way now owned by the State Highway Administration, is a viable alternate to construction of a fully controlled access facility.
1. Mr. Robert Crater - Mr. Creter identified himself as having a dual role. He spoke as Regional Chief Water Resources Administration and as a private citizen -Objected to relocation of U.S. Route 40 and favored Fourth Alternate.

NOTE: Correspondence received from Department of Natural Resources after the Public Hearing stated Mr. Crater was not authorized to speak for the Water Resources Adminsitration, and they restated their former acceptance of Alignment AGEENA.
2. Mr. Martin Gordon - Opposed AGEENA Alignment due to land damage and Impact on Historic Sites. Favored Fourth Alternate.
3. Mrs. Snow - Mrs. Snow read a report prepared by Mr. David Morris. This report objected to the concept of a highway on relocation offered the Fourth Alternate as a viable alternative.
4. Dr. Mastrangelo - Recommended Fourth Alternate.
5. Mrs. Wanda J. Braun - Objected to AgEENA on the basis of possible damage to streams, springs, and wells.
6. Col. Charles Patterson - Favors Fourth Alternate.
7. Mrs. William Henkel - Gave brief history of properties in the Breakneck Road Historic District.
8. Mr. Robert Creter - (speaking as a citizen affected by AGEENA) Objected to consideration of a controlled access highway, once again favored fourth alternate.
9. Mrs. Braun - Objected to possible damage to springs in Warm Springs Area. Responses to Speakers

It is important to note that all of these speakers own property that was directly affected by the AGEENA alignment. Since the preferred alignment is now \(\mathrm{AGBF}_{2}\) which is approximately 1 to \(11 / 4\) miles south of AGEENA, the comments concerning the impacts of AGEENA on the Historic District and the Natural Environment of the area are no longer valid.

In regard to the statements regarding upgrading U.S. Route 40 to an uncontrolled dual rural higwhay a detailed report rejecting this concept is in the Technical Location Report. The fourth alternate was rejected mainly on the basis of Safety Considerations. In general, these include facts that show the majority of the accidents occur at or in close proximity to the intersections. The plans for the present road were approved in the 1950-1960 period. There are no provisions for safety grading throughout, and approximately \(50 \%\) of the proposed expansion does not have adequate median width. Additional right of way would be required throughout the project.
10. Mr. Joe Freeno - President of the Teamsters UnionRejected Coalition for a Fourth Alternate, and claimed a new highway is needed for safety and increased transport.
11. Mr. Robert C. Petterson - Chairman of the National Freeway Coordinating Committee - Rejected fourth alternate -Stressed to speed up project.
\[
\frac{\text { WRITTEN }}{\text { COMMENTS }} \frac{\text { RECEIVED }}{\text { MAY } 10}, \frac{\text { FROM }}{1979 \text { PRESS }} \text { RELEASE OF PUBLIC } \text { HGBF2 } 2 \text { HEARING UNTIL THE }
\]

\section*{Citizens}
-Five letters received favoring \(\mathrm{AGBF}_{2}\).
-Three letters received favoring Fourth Alternate.
-Mr. David Morris submitted the report read by Mrs. Snow during the Public Hearing. (Petition of Approximately 200 signatures with submittal.)

Elected Officials
-Six letters received favoring AGEENA or AGBF \(_{2}\).
Agencies and Businesses
-Seven letters received favoring AGEENA or AGBF \(_{2}\) •

COMMENTS RECEIVED AFTER GOVERNOR HUGHES MAY 10, 1979 PRESS RELEASE IN SUPPORT OF ALITERNATE AGBF2

\section*{Citizens}
-24 letters received opposing \(\mathrm{AGBF}_{2}\) based mainly on Impacts to Green Ridge State Forest.
-167 form printed Post Cards stating:
Dear Governor Hughes:
I wish you to preserve Green Ridge State Forest as your predecessors have done before you. Please do not destroy our wilderness for Seventeen Miles of Concrete.

Response:
All letters received were addressed to Governor Hughes. The Governor's response has emphasised two items:
A. The Memorandum of Agreement between the DNR and the SHA adequately addresses any negative impacts to Green Ridge State Forest.
B. It is extremely important to complete this last section of the National Freeway as an aid to increasing the economic base for the entire State of Maryland.

NOTE: \(\quad 142\) Post Cards received from residents of Baltimore City and Baltimore County. 25 Post Cards received from residents of Anne Arundel County, Cecil County, and Carroll County. No post cards were received from Washington County, Allegany County, or Garrett County (Appalachian Area).
in REPLY REFER TO
ER-76/997

\title{
United States Department of the Interior
}

\section*{HERITAGE CONSERVATION AND RECREATION SERVICE} NORTHEAST REGION

600 Arch Street - Room 9310
Philadelphia, Pennsylvania 19106

\section*{may 301980}

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda, Suite 220
Baltimore, Maryland 21211
Dear Mr. Elinsky:
This is in response to your agency's request for Heritage Conservation and Recreation Service comments on the pre-final Section \(4(f)\) statement for the National Freeway, Allegheny County. Our comments are provided on a technical assistance basis only and should hot be construed as reflecting a position on the project or the environmental/Section 4 (f) statement by the Secretary of the Interior. Any formal or official comments on this project by the Department of the Interior are to be initiated through the Office of Environmental Project Review, United States Department of the Interior.

The April 24, 1980 meeting at the Maryland State Highway Administration was helpful in reviewing the history of the National Freeway and its current status. We appreciate this opportunity to comment informally on the project and anticipate that this letter will clarify our concerns.

The Department of the Interior letter of December 10, 1976 focused on the adequacy of the draft document with regard to the impact of the National Freeway on historic and archeological sites. We believe that the pre-final statement now sufficiently meets our concerns on the historic sites and the mitigation measures for those properties.

Significant modifications which have been made since the draft statement include:
1. rejection of the proposed alignment AGEENA by the Advisory Council on Historic Preservation.
2. development of a Memorandum of Agreement for alignment AGBF 2 between the Advisory Council, the Federal Highway Administration, and the Maryland State Historic Preservation Officer.
3. development of a Memorandum of Agreement between the Maryland Department of Natural Resources (DNR) and the Maryland State Highway Administration for replacement of land for the right of way needed in Green Ridge State Forest (Section 4(f) land) and use of the Vail Pass concept along the entire right of way to minimize environmental damage.

However, we believe that there are several issues that should be resolved or clarified prior to the issuance of a final environmental statement and review by the Department of the Interior.

\section*{GREEN RIDGE STATE FOREST}

The impact of the National Freeway will extend throughout the forest and despite mitigation efforts, the presence of the highway will severely reduce the recreational, habitat and esthetic value of the area.

Much of the damage to the resources in Green Ridge State Forest will be irreparable and this Service has reservations regarding the land replacement for the three hundred and thirty-one acres required from the forest (p. 29). We recognize the sensitivity of disclosing the exact location of the proposed replacement lands. in the environmental/Section \(4(f)\) statement, but we believe that the statement should contain documentation by DNR that the replacement lands are comparable to, or exceed the recreation and wildlife values of the impacted lands. It is also important that if these lands are isolated parcels, that they are manageable units of the State Forest and capable of providing for forest uses, including recreation. The final statement should address the location of the replacement lands, the value in terms of recreation and habitat, and the proximity to Green Ridge State Forest.

\section*{I-70 VAIL PASS CONCEPTS}

The "Vail Pass concepts" referred to at several points in the pre-final statement as the technique for mitigation of natural and historic resources should be further explained. Although the Council on Environmental Quality November 1979 regulations urge incorporation of material by reference to other projects (1502.21), the Vail Pass activities are not, without explanation, analogous to the National Freeway.

We view the I-70 Vail Pass experience as an example of cooperation for a transportation project as a state of the art form at that time, and as a collection of engineering and mitigating techniques designed to minimize impact to the alpine environment.

It is our understanding that the three important elements in the Colorado project were the design, the extensive mitigation involving private and public sectors, and the immediate revegetation. We would expect advances in construction techniques since Vail Pass that could or will be applied to the National Freeway. These adaptations should be specifically addressed in the final statement to clarify the relevance of the Vail Pass concepts to Maryland.

Finally there appear to be some project differences in recreation developments. Picnic/rest areas are excluded as a form of mitigation in the Maryland Memorandum of Agreement for natural resources. The Colorado project incorporated a recreational trail, constructed over the pass and planned by a consortium of public and private agencies, organizations, and individuals. The mitigation emphasis in Maryland does not seem to be as innovative as the Vail Pass was for its time, and we would therefore appreciate more detailed explanation of the areas where the Vail Pass is cited as an example of work to be done in the National Freeway. We would definitely support joint use of the right of way for recreational development and improved access if a need exists for such facilities.

\section*{ARCHEOLOGICAL RESOURCES}

We are unclear as to how the Federal Highway Administration and the Maryland State Highway Administration are defining the use of archeological resources and the means for their protection. ?

We contend that Section \(4(f)\) is applicable to archeological resources when a site is used and it is of National, State or local significance. A site may be locally significant and yet not eligible for inclusion in the National Register. Use occurs when a transportation project is placed on, through, over, under, or immediately adjacent to such a site. The use is the actual taking of land (including air and subsurface rights) from the site and/or the disturbance or alteration of the archeological material/land complex and its immediate surroundings. The final statement should address the use of any archeological resources in the project plans and Section 4 (f) should be applied accordingly. This will clarify the ambiguity of the Memorandum of Agreement between the State Historic Preservation Officer and the Federal Highway Administration which implies that Section 106 of the National Historic Preservation Act will be applied to sites, but that Section 4(f) requirements are not applicable.

We suggest that the final statement include more information regarding the archeological reconnaissance report prepared by the Maryland Geological Survey
 final environmental statement due to the sensitivity of revealing their location to the public, we would be willing to review the report. This would enable us to determine if the archeological sites are within the selected alignment and if a more intensive field survey is necessary.

Finally, if archeological resources are identified, a determination should be made if they are eligible for inclusion in the National Register, pursuant to 36 CFR 800.

\section*{RECREATIONAL RESOURCES}

Fifteen Mile Creek, Evitts Creek, and Black Sulfur Run have been identified by the Heritage Conservation and Recreation Service as potential national recreational rivers as part of the nationwide rivers inventory. The Wild and Scenic Rivers Act (P.L. 90-542, as amended) authorized a national inventory of rivers to:
1. Identify a balanced representation, in terms of physiographic provinces and sections, of the most significant river. segments in the nation.
2. Identify for the President and the Congress the parameters of a basic National Wild, Scenic and Recreational Rivers System.
3. Identify those rivers which may be considered under the provisions of Section 5(d) of P.L. 90-542, as amended.

Fifteen Mile Creek, Evitts Creek, and Black Sulfur Run are in the preliminary evaluation of the recreation system study. Rivers on the preliminary list of recreational rivers have passed the initial study phase, are five miles or more in length, and are of state, multi-state or national significance. Each of these rivers is being considered under the following criteria of Public Law 90-542 which specifies that an eligible river:
1. Be a free-flowing river or stream (rivers may have undergone some impoundment or diversion in the past).
2. Be generally undeveloped (river corridors may be developed for the full range of agricultural uses and can include small communities as well as dispersed or cluster residential housing).
3. Be readily accessible by road or railroad.
4. Be adjacent to or within a related land area that possesses an outstandingly remarkable geologic, ecologic, cultural, historic, scenic, botanical, recreation or other similar value.

Also it should be noted that those rivers meeting the criteria of the Wild and Scenic Rivers Act will be placed on the National Inventory. Rivers on this list will be considered under the provisions of the President's Environmental Message of August 2, 1979 which directed that: "all Federal agencies shall avoid or mitigate adverse effects on rivers identified in the National Inventory."

Our specific concerns relate to the impact of the National Freeway project on the free-flowing character of the Fifteen Mile Creek, Evitts Creek and Black Sulphur Run, and those qualities which support their possible
designation as national recreational rivers. Although Vail Pass Concept techniques will be used and stream crossings are "special mitigation
areas" addressed in the Memorandum of Agreement with DNR, we believe more analysis is appropriate in the environmental statement because of the recreational significance of these streams. For example four hundred feet of stream relocation is required, but no further information is given as to location or impact (p. 29).

OTHER COMMENTS
The final statement should also further address traffic projections to better ascertain the need and feasibility of the proposed project. As noted in the April 24th meeting, the Maryland State Highway Administration and Federal Highway Administration support the National Freeway based on economic reasons and information on traffic projections, particularly for commercial vehicles are important for our evaluation.
The environmental statement graphics suggest that the National Freeway might have an adverse impact on the proposed Potomac National Scenic Trail. At the April 24, 1980 meeting, Mr. Branch indicated that the National Freeway was not in the Potomac Trail area; however, we are still uncertain about the possible intersection of the project with the Potomac Trail at Cumberland and have enclosed a map of the trail to help you address our concerns.

The seventeen sites described as "probably eligible" for the National Register, and treated as such in this report, should be submitted to the Keeper of the National Register for a formal determination through 36 CR 63.3 by the State Historic Preservation Office and the Maryland Department of Transportation.

Again, thank you for the opportunity to comment on this pre-final statement. If you have further questions, I would be pleased to discuss them with you.



\section*{RESPONSE:}
1. We acknowledge impacts to Green Ridge State Forest, however, we do not believe that recreational use will be severely hampered as the area in question is used for passive recreation. Comparable habitat value has been one of the criteria used in the selection of replacement lands and new aesthetic vistas will be opened up to travellers. See Section V, Page 11, and Section 4 (f), Part II-B.
2. Replacement lands are located contiguous to Green Ridge State Forest and are valuable in terms of passive recreation and habitat. This was the criteria on which DNR identified the replacement parcels.

\section*{I-70 Vail Pass Concepts}
3. Copies of the "I-70 in a Mountain Environment - Vail Pass Colorado" were sent to DOI.
4. A special Vial Pass Concept Team has been assigned to implement various techniques used in constructing I-70 in Colorado. This committee has recommended the following general design applications of Vail Pass Concept. Additional features meeting the terms of the agreement with DNR will be developed as final design proceeds, and determinations made about which concepts are relevent to Maryland.

Applications of Vail Pass concepts include:
a) Slope treatment of cut and fill slopes

The rounding treatment at the beginning and end of cut slopes will be shown on the plans. On those sections that have waste material, the detail for molded valley and ridge fill will be used. The concept of meandering ditches and cuts will not be used in U.S. Route 48 because of geologic formations.
b) Cuts and Benches

Hard rock projections will be allowed to stay in place regardless of slope ratio. Costly sculpturing of rock cuts will not be generally practiced. A concept of using part of the \(30^{\prime}\) safety grading as a portion of the rock fall bench will be considered to provide natural setting.
c) Rock Placement

Rock placement as practiced on I-70 in Colorado gave an artifical appearance therefore rock placement will not be used on U.S. Route 48.

\section*{d) Landscaping}

An item for selective thinning will be included in the U.S. Route 48 contacts. It was further recommended that \(\mathrm{R} / \mathrm{W}\) for buffer Zone be acquired in undeveloped wooded areas only. Hardwood seeding will be provided. Details for landscape items, plans, quantities,
and specifications will be furnished by the Bureau of Landscape Architecture as final design proceeds.
e) Type of Walls

Retaining walls, where provided will be of the IECO type. Also, see Section V, Page 8.
5. The Department of Natural Resources (DNR) did not desire joint development or a consortium. That concept was not considered appropriate by State Forest Management.

\section*{Arcehological Resources}
6. There is no ambiquity in the Section 106 Process or \(4(f)\) Policy as indicated in the Memorandum of Agreement.
7. Report sent to DOI for their information. The decision regarding intensive work rests with the State Archeologist and the State Historic Preservation Officer and will be undertaken, if appropriate.

\section*{Recreational Resources}
8. We are aware of the program, and work with DNR, the Maryland DOT, and DOI on establishing the inventory.
9. There will be no significant recreational impact on the three rivers potentially eligible for the National Recreational Rivers inventory program. 15 Mile Creek and Black Sulphur Run are included in the Maryland SHA/DNR MOA. Mitigation for Evitts Creek are discussed on pages V.6-V. 10 of this FEIS.
10. Elk Lick Run requires \(400^{\prime}\) of stream relocation. See Figure 14. Relocation is required for the bridging of this stream.

\section*{OTHER COMMENTS}
11. See pages III.4 and V.14. A copy of the traffic data was sent to DOI.
12. Discussions with the Heritage Conservation and Recreation Service, and with the superintendent of the C \(\$ O\) Canal National Historical Park, indicate that \(A G B F_{2}\) would have no adverse impact on the routing of the proposed Potomac Heritage Trail. The trail will follow the existing C\&O Canal towpath to its terminus in southwest Cumberland city before proceeding west through the Cumberland Narrows. \(\mathrm{AGBF}_{2}\) begins on the northeast side of Cumberland.
13. The FHWA SHA and SHPO are in agreement as to the potential eligibility of these 17 sites. The 17 sites determined to be "probably eligible" were identified and included in the EIS because of the wide range of corridors being considered for this project. However, even though the 17 sites are not located within the area of the project's potential environmental impact, they will be submitted to the Keeper of the Register at same future time.

\section*{MAY 231980}


In an effort to keep you informed on progress for this project, mi j staff and members of the peatral Highway Gerinistration met with U.S. Fish and wildlife service representatives or may 22,1980 , to again go over their concerns retarding the selection of \(h G B E 2\). lion new areas of significance surfaced, other than those already discusses and relayed to you and to the Congressional delegation at cur hay 5, 1980 meeting. (Conference memo attacnea).
further discussions with the Federal lighway Aiministretion have indicated that although we have requested "expedited and concurrent" review procedures by the Regional and Washington offices of the Federal Hirhway Aaninistracion, and office of the secretary of Transportation, Fer?eral Department of Transportation, this may not happen as quickly as we nave supposed. mIne maryland Division and the Regional Offices of the Federal llicwnay Administration have expedited their internal processes so that the document will "officially" te forwarder to the washington offices of the Federal !!ighway moministration during the weak of fay 26 , loin. However, the local Federal Highway Administration office feel that it may take the fecieral Highway Achinistration Washington Office from 2-3 vecis additional tire before they formally comment on the aciecuacy of our sumisesor. Then only after their comacnte are received ane editing hide, will the document be forwarder to the office \(0 \dot{0}\) the secretary of transportation for their review: and concurrence. info office of the Secretary of transportation review, comment, ane aproroval process could take arouther 2-3 months, before aprovoil could we forthcorime. This could
 Gate, to possibly ser"terimer or octoiser, lugo.

We will make every effort to expedite these structured revien processes from our level of contact. It might be to our acvantace to aoain reçuest assistance fron our delecetion in washington when we are informed thet the review and concurrence process is "boaging down" in the Marnington offices.

NSC:rer
fittachment
\begin{tabular}{llll} 
bcc: & Mr. Hal Kassoff & \multicolumn{2}{c}{ (w/attach.) } \\
Mr. Thomas Cloonan & " & " \\
Mr. J. Haifley & \("\) & " \\
Mr. Charles Adams & " & " \\
Mr. E. T. Camponeschi & \("\) & " \\
Mr. R. S. Krolak & " & " \\
Mr. Frank Koller & " & " \\
Ms. Cynthia Simpson & " & "
\end{tabular}

\section*{MEMORANDUM OF CONFERENCE}

Contract No. A 519-033-670
F.A.P. No. APD-155-1(42)

On May 12, 1980, a meeting was held in the Bureau of Landscape Architecture offices at 10:00 arm. to discuss the preliminary Final Environmental Impact Statement with Mr. Robert Kep of the U.S. Fish and Wildlife Service. The following persons were in attendance:

> Mr. Robert Zepp--U.S. Fish \& Wildlife Service
> Mr. Tim Hall--U.S. Fish \& Wildlife Service
> Mr . Ed Terry-FHWA, Maryland Division
> Mr . Dennis Merida--FHWA, Maryland Division
> Ms . Cynthia Simpson--SHA, Bureau of Project Planning
> Mr . Frank Koller--SHA, Bureau of Project Planning
> Mr . Charles Adams--SHA, Bureau of Landscape Architecture Mr . William Branch--SHA, Bureau of Landscape Architecture Mr . Jack Hett--SHA, Bureau of Landscape Architecture

The following is a summary of the comments and discussions which arose during the meeting:
1. Mr. Kep pointed out that the mapping in the FEIS was confusing in that the numerous areas of special concern were not presented on the same map, making it difficult to relate them to one another.
2. Next, a fairly lengthy discussion of historic impacts ensued. Bob Kep did not feel the FEIS contained enough pertinent data about the historic resources along existing U.S. Route 40. This made it

\begin{abstract}
difficult for him to interpret the direct impact upgrading the existing route would have on each and why Alternate \(A G B E 2\) was a better selection． It was noted that a technical report discussing the upgrading of U．S． 40 was prepared which contained this data．
\end{abstract}

3．The potential impact upon wild turkey habitat was discussed at some length．U．S Fish \＆Wildlife asked if any map depicting general turkey habitat in the study area was available．No data base of this type is available．The discussion indicated SHA／DNR coordination on the topic of habitat in Green Ridge State Forest and Warrior Mountain and the＂featured species＂management concept employed by DNR．The area of Green Ridge Forest to be traversed by Alternate AGBF2 is considered＂prime＂ turkey habitat and is so managed．Impacts upon turkey population were discussed．U．S．F．\＆W．stated that the impacts upon turkey habitat were one of the reasons they felt Alternate AGBF2 was a poor choice． Also discussed was the potential for vehicle／deer collisions with \(\mathrm{AGBF}_{2}\) and the severence of habitat with the completed highway acting as a barrier to wildife movement．

The SHA／DNR mitigation agreement calls for construction of numerous underpasses through Green Ridge Forest．The general feeling is that these will not provide for passage of larger animals， deer，turkey，etc．It was pointed out that this underpass concept was initially considered as a means to continue existing drainage courses after completion of the highway．These could also serve as wildife passages．

```

-j-
\becauseay i - - - >80

```

Fencing of the completed highway will be accomplished, but no decision on fence type has been made. The potential for deer kills will be one of the considerations which comprise a design decision.
4. The area nominated for "wildland" status on Polish Mountain was discussed along with the criteria used by DNR for designation, present impacts on the area (primarily traffic noise from U.S. Route 40), impacts from \(A G B F_{2}\), and a brief review of other alternates studied that would have bisected the wild lands uni=. The unit would not be directly impacted by AGBF2. Traffic noise from the highway would become part \(0=\) the background noise environment.
5. U.S.F.\&W. took exception to the replacement land concept, particularly the decision by DNR to use the money from Maryland D.O.T. to purchase lands already within their "take" limits. They feel that this is not considered as mitigation since no new acreage would be acquired for the forest area. Several points were made regarding this:
1) The limits of Green Ridge Forest have been set by the Maryland Legislature and, therefore, their options regarding land purchase are limited.
2) The agreement as written will allow DNR to concentrate acquisition on priority areas and incorporate these into the forest earlier than might otherwise be possible.
6. Potential erosion and sedimentation impacts are considered to be severe by U.S.F.\&W. given soil and rock conditions along \(A \mathrm{ABF}_{2}\). It was pointed out that this does present a major challenge but the methodology to design controls into the project is available. A design team comprised of SHA/DNR/EPA personnel will be utilized in this and other critical areas. U.S.F.\&W. was invited to become a member of the team and accepted.

SHA recognizes that there will be impacts from sedimentation but the intent is to minimize these through involvement of the design team and participation of an inspector from DNR throughout construction.
7. U.S.F.\&W. asked the status of the DNR Indiana Bat study. To date, DNR has completed location and preliminary investigation into use of caves in the area as a hibernaculum. The second phase of the study will involve mist netting at cave entrances through the summer of 1980. No evidence of the presence of Indiana Bat has been found to date. Proximity of Devils Hole Cave to \(\mathrm{AGBF}_{2}\) was discussed. An alignment shift in the area to obtain a 200-300' offset from the entrance appears feasible and will be pursued in the design phase.
8. U.S.F.\&W. has been added to the project mailing list in order that they may receive a copy of the FEIS earlier in the review process than through the circulation to D.O.I. This will allow for more timely review and comment.
```

4E\becauseOE:こここの OE COMFERENCE -5ー
Aay 13, 1ミミ0

```

9．In summary，U．S．F．\＆W．conveyed the thought that they feel \(\mathrm{AGBF}_{2}\) is a poor choice from a natural environmental viewpoint based upon conflict with wildlife habitats， water quality impacts，loss of state forest land，etc． They also stated that no conclusion has been made regarding official disposition of their comments．

If those present at the meeting feel there have been any omissions or inaccuracies in this summary，please contact the writer．
－

Charks＇B．Ales＇
Charles B．Adams，Chief \(\because\) Environmental Design Section Bureau of Landscape Architecture State Highway Administration

CBA：cls
cc：attendees

MItMen, vouma, m. Dak.
ant O matritlo onas.

 Ginnamo b. Cimworrm. An
 Lowrle mincmen. Ah.. comor sance a me counc town Pall Laxal. wry. care anmm. Vina mannisom memmitr, in mex.

May 5, 1980

Honorable Neil Goldschmidt Secretary
U.S. Department of Transportation 400-7th Street, S.W. Washington, D.C. 20590

Dear Neil:


One of Maryland's highest transportation priorities is the completion of the National Freeway in Western Maryland. This facility, which is part of the Appalachian Development System, is essential to our hopes for stimulating economic activity in this part of our State. Our reason for writing is to reauest that you expedite the final Environmental Impact Statement (EIS) for the remaining 17 mile gap of the Freeway which has been submitted to the Federal Highway Administration.

This document represents years of negotiation, restudies, delays, and finally, agreement on how this essential highway gap can be closed in a manner consistent with environmental concerns. An extensive environmental mitigation program has been developed by the Maryland Department of Transportation and the Department of Natural Resources to address these concerns. Similarly, an agreement has been reached with the Federal Advisory Council on Historic Preservation which addresses long-standing issues concerning the relationship of the proposed highway to historic resources in the area.

There is widespread support for this project throughout Maryland. Labor groups, business groups, elected officials and citizens have strongly supported the completion of the National Freeway. The Mayor of Baltimore, noting the importance of the roadway to the Port of Baltimore, has also been a very strong advocate.

It has taken many years to address and resolve the problems that have been raised concerning this last section of the National Freeway. Now that the final EIS has been submitted, you can understand why we are extremely anxious to insure its prompt approval. lie are advised by the Maryland Department of Transportation that location approval for the project can be achieved by July 1980. Given this, we would like to know whether you foresee any difficulties in having this project approved.. If there are any such problems which would cause delay, we would like to meet with you to discuss them at the earliest possible date.

We hope you will understand the urgency of the matter and give it your prompt attention.

With best wishes,
Sincerely,


\title{
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III
}

\author{
6TH AND WALNUT STREETS \\ PHILADELPHIA, PENNSYLVANIA 19106
}

\section*{MAY}

Mr. Eugene T. Camponeschi, Chief
Bureau of Project Planning
Maryland State Highway Administration
300 West Preston Street
Baltimore, Maryland 21203
Re: National Freeway, U.S. Route 48, Section 1
Dear Mr. Camponeschi:
Thank you for sending us a copy of the preliminary-Final EIS for Section 1 of National Freeway. We have reviewed the document, and a member of my staff, Mr. Eric Johnson, attended an informal project meeting at the FHWA Baltimore office on April 24, 1980. Our primary concern at this point is the impact that the proposed project will have on water quality. We do not believe that the pre-Final EIS adequately addresses such issues as stream relocation and erosion and sedimentation control procedures. Since the proposed alignment will cross areas of steep slope, and will impact several streams that are currently of high quality, we believe that the EIS should include a more detailed examination of the water quality impacts of the project. Our specific comments on this, and other issues, are included below:
1. It is indicated on page 21 that construction of the proposed highway would require 400 feet of stream relocation, but there is no further discussion of this subject. EPA does not generally comment favorably on a Section 404 permit for a stream relocation unless it can be shown that it is absolutely necessary. We believe that the FEIS should include more detailed information documenting the need for the relocation, as well as their location, length and the anticipated water quality impacts.
2. There is some question concerning the actual number of major stream crossings, and this issue should be clarified in the FEIS.
3. The major stream crossing over Elk Lick Run is not addressed in the EIS, and it should receive substantial attention in the final document.
4. The discussion of water quality issues on pages 79 (erosion of road cuts) and (mitigation measures) does not include enough information the adequately techniques. The FEIS should include a more complete discussion of the potenttia impacts of roadway construction and operation, and should identify what measures will be used to protect nearby streams.
5. We believe that the traffic parameter for truck mix, estimated at \(13 \%\) of ADT (p. 105), should receive further documentation. Since stimulating economic development by providing an improved highway facility is one of the major reasons for this project, we believe that this estimate of truck traffic may be too low. This issue is of concern to us because the noise analysis already shows significant impacts in several locations along the proposed alignment. Additional truck traffic would aggravate this situation, and may change the conclusions of the noise analysis.
6. It is apparent that noise levels will increase substantially in several areas along the proposed alignment. Although noise barriers may not be feasible in these areas, we encourage the continuation of efforts to reduce these noise impacts through landscaping and plantings.

We hope that these comments will be of assistance during the preparation of the Final EIS.

Sincerely yours,


John R. Pomponio
Chief
EIS \& Wetlands Review Section
1) The location, length, and water quality impact have been discussed in Chapters 3.5. The absolute necessity will be further documented during final design activities. EPA will be consulted in these activities.
2) These questions and issues further clarified in Chapter 3 and 5 .
3) Discussion has been expanded, Consultation with DNR and EPA will continue during design phases.
4) Traffic Report Analysis provided to EPA.
5) We will continue to address the feasibility of partial abatement techniques during final design.

April 30, 1980
MEMORANDUM
TO: Mr. Hal Kassoff, Director Office of Planning and
Preliminary Engineering
FROM: Eugene T. Camponeschi, Chief Bureau of Project Planning


SUBJECT: Contract No. A 519-033-619
Preliminary Final Environmental
Impact Statement - National Freeway
Section I, Wolfe Mill to M. V. Smith Road
SUMMARY OF MEETING

A meeting to discuss the subject document was held on April 24, 1980 at the Federal Highway Administration offices at the Rotunda. Attendees are listed on the attached sheet.

After distributing handouts, which summarized the project's status, Richard Krolak opened the meeting with a brief discussion of the project's need, history, and present schedule. Agency comments were requested after a discussion of prior Agency positions and comments on previous Environmental Documents.

Environmental Protection Agency (EPA) - Eric Johisison questioned:
1. The relationship of the National Freeway to U.S. Routes 219 and 220.

Response: Mr. Krolak - The State Highway Administration does not plan to conduct further studies on the USS. 219 corridor and location studies are presently being conducted on U.S. 220. Also, this relationship of other ARC corridors will be discussed in the final document.
2. The 400 feet of stream relocation and the rationale for the relocation. This was not discussed in the document.

Response: Mr. Krolak - The location of and a discussion of stream relocation will be included in the final document. Further, coordination with the Department of Natural Resources will insure that only necessary relocation will be undertaken. Also, Vail Pass mitigation concepts will be implemented throughout the entire corridor, not just in Green Ridge State Forest.
\begin{tabular}{l} 
VIII 23 \\
My toteptone avarber be \(\quad 222-4327\) \\
\hline
\end{tabular}

Further, the EPA was invited to serve in an advisory capacity to the interdisciplinary team that oversees the project.
3. Water Quality Impacts

Response: Bill Branch commented on the actual streams to be crossed and reiterated that Vail Pass concepts would be adhered to. Also, the SHA will send Mr. Johns on a copy of the Erosion and Sedimentation Plan for Maryland, adapted by SHA/DNR.
4. How the traffic figures were derived and the effects the percentage of trucks would have on noise levels. Mr. Johnson felt that the percentage of trucks was low if a justification for the construction of the National Freeway is economic development.

Response: The SHA will provide Mr. Johnson a copy of the Action traffic data for this project, including the truck percentages.
truck percentages.

May 1900
DOI - Heritage Conservation and Recreation Services (HCRS) -
Barbara Becker questioned:
1. The reason historic sites could not be completely avoided.

Response: Ms. Miller, Ms. Ballard, Mr. Kroyak - Moving the alignment in either direction is hindered by other historical sites and properties, mountains, and conditions of the terrain. Earthen berms, forests, and other natural features will be used to mitisgate historical site impacts.
Alternate \(A G B F\), was selected because it had the least impacts on the Breakneck Valley Historic District. Mitigation to minimize impacts to indievidual sites in the district were then considered. The MOA with ACḨP covers these historic impacts in an adequate fashion.
2. Whether we knew that Evicts Creek and Fifteen Mile Creek were being considered as part of the recreation river system or if
- \(\mathrm{AGBF}_{2}\) were near the Warrior Mountain Wildlife area on the Potomac Trail.
| Response: Investigations will be conducted to determine impacts, if any, to these sites.

This project and mitigation proposed vil U.S. Fish and Wildlife Service (U.S.F.H.S.) - not hare aborts Robert Repp was unable to comment because he did effect on Concept of.
not receive a copy of the preliminary document. It had been assumed that DOI would have made internal distribution. Charles Adams, Bill Branch, Dick Krolak, and Ed Terry will meet with him during the week of April 28,1980 to discuss his comments.
Both EPA and HCRS will provide written comments on the pre-FEIS as soon as possible (first week of May, 1980).

ETC:CS:bh
cc: Attendees
VIII. 25

\section*{ATTENDEES}

William Sageman
Dennis L. Merida
Edward Terry
Tommy L. Beatty
Barbara E. S. Becker
Robert Zepp
Eric Johnson
Nancy Miller
Margaret Ballard
Richard S. Krolak
Charles Adams
Francis J. Koller
William Branch
Cynthia D. Simpson

Federal Highway Administration, Region 3
\begin{tabular}{ccccc}
\("\) & \("\) & \("\) & \("\) & Md. Division \\
\("\) & \("\) & \("\) & \("\) & \("\) \\
\("\) & \("\) & \("\) & \("\) & \("\)
\end{tabular}

DOI' - Heritage Conservation \& Recreation Service U.S. Fish and Wildife Service

Environmental Protection Agency
Maryland Historical Trust, Deputy SHPO
Washington Regional Office, MDOT
Bureau of Project Planning, SHA
Bureau of Landscape Architecture, SHA
Bureau of Project Planning, SHA
Bureau of Landscape Architecture, SHA Bureau of Project Planning, SHA

GOVERNOR: I'd like to open the press conference by saying that I'm delighted to be back in Allegany and also Garrett County. It'a bern sometime since I was here. I was here during the primary and was just re:: minded of the fact that the last time \(I\) was here I was at the Lions Club and they had a drawing of fifty-fifty and they asked me to draw and guess who won --- I won. I haven't been back since. My wife, Pat, and I spent the last two days in Garrett County and here in Allegany and I might say that I'm very much impressed with what I see in the way of local efforts to improve the economic situation in this region of the State. I have seen evidences of tremendous cooperation between government; all levels, Federal, State, and local, and the private sector and labor. As we were saying a while ago, trying to pull themselves up by the bootstrap --- you could see real e:1dences of it. But we are also aware of the fact that there are tremendous economic needs in this region of the State and I have assured the people here that I am concerned about it as they are and that my Administration will do whatever it can to help through State government to improve the employment situation in this region of the State. I think one of the things that has impressed me as much as anything in addition to what I have already said, are some of the things that \(I\) have seen in the way of the Thomas B. Finan Center, what's going on at the Garret. County Comirnity College with the mining technology center, the Allegany Community College. All of these things are important from a lot of standpoints, but one is economic development standpoint because industry looks at a lot of things in making the determination as to where it's going to locate. It doesn't look at any one thing. It doesn't look at just tax structure or just labor market. It looks at a lot of things and some of those things are the amenities of the community in the way of educational facilities, in the val of cultural facilities, medical facilities, and it's very obvious to me that in this region of the State you are doing an excellent job in providing the. \(s\) kinds of amenities that are very helpful to the community at large and certain:s titipful to any economic development effort. oran促 20. great.
- a dea

 other section, Section One, is the one that is giving the most problem. As Secretry of Transportation, I guess it's been three or four years ago, when we made the selection of what I consider to be the middle route and as you know since then that's run into some problems, most of which are due to circumstances over which the State of Maryland has really no control, in the rigid requirements to comply with, oh, the environmental rules end regulations and laws primarily of the Federal government. In the past few weeks I have met with the Department of Transportation, State lifghay officials, Department oi Natural Resources ard the two Secretaries of those two departments in an effort to get them to come together with a common point of view on the selection of what you might call, I guess, an alternate route over the one that was selected three or four years ago
more CTin

保 As you may know, in the past two or three weeks, representatives from each of those two departments have waiked the line to personally look at and address the environmental problems involved in that line with particular reference to the wildiffe. The result of that is that they have reached agreement on several items which will be implemented 1.2 the construction that will mitigate some of those problers --the biggest one, I suppose is Fifteen M1le Creek and they have reached agreemert on that. So what this all means is that the State of Maryland and the agencies of the State government that are involved in this project have reached total agreement on selecting the southern route and I will be continuing my efforts with them and anyplace else that \(I\) can move this project along as rapidly as possible now that we have that agreement. With that \(I\) think I'll just open it up to questions.
REPORTER:
Governor, is that the route that goes through the State forest and how many milies in that State forest would . . .

\section*{GOVERNOR:}

My recollection is that it. touches a small corner of the State fcrest maybe in two spots, as I recall. I think the important thing is that this has been a cooperative effort in a positive way of two State departments to look at a problem and come up with a single solution. Fo: too long we've had not enough of that, we've had too much of the lack of coordination between State departments, too much of a lack of a positive effort to reach a comin goal. That has been reached.

\section*{ENERGY PLAN - PHASE II}

REPORTER: Mr. Hughes, late reports have indicated that it is likely that you will begin the second phase of your energy plan next week and will you do this, ard as the situation progresses, how far will you carry that?
GOVERYOR:
Well, the second phase of my energy plan was a plan that I have sent. to governcrs of all fifty states with the idea that if there were enough of the other states willing to go along with that kind of program, then we should luplerent it. Uy reason for that is that I disn't want business. in Miryland, for example, to be singled out for harm or injury that would not be ellso shared by businesses in other states. So far we haven't had much response, to be very frank with you. The District of Columbia has said that if they are going to impose an energy plan and Virginia has really said this also, that they would impose the same one that we have --- I think that's important from a regional standpoint --- not saying when they would do it. I haven't made any decision yet as to whether or not to take that second step. That depends upon what response we get in the next few days.

MEETI:S WITH LABOR-MANAGE ENT CO:RITTTEE
REPORTER: Govemor, right before your news conference today you met with individuals
ROGEFT J. RUSELMAIN,
ADMINISTRATE:
CHARLESM.FRISEIE
DEPUTY ADMINISTRATOR

March 20, 1979

MEMO TO: Carlo Brunori
Environmental Review Information MARYLAND WILDLIFE ADMINISTRATION

FROM: David E. Woronecki
Non-Tidal Fisheries
MARYLAND WILDLIFE ADMINISTRATION
SUBJECT: NATIONAL FREEWAY SOUTHERN ROUTE - ALLEGANY COUNTY

Since an early week meeting was not scheduled for the matter; I now have additional time to provide input relative to the projects possible effect upon the aquatic resources of the area which will be affected.

To the best of our present knowledge, there are no natural trout populations within any of the streams affected by the proposed road construction. Significant game fish populations are probably limited the the main stem of Town Creek in the form of smallmouth bass.

Adverse impact upon the aquatic resources of the area can be minimized if this route is selected by completely spanning the two major streams which are crossed (Town Creek and Fifteen Mile Creek) with bridges, designed structures for all other stream crossings which do not block the passage of fish at any level of flow, and requiring adequate sediment and erosion provisions within the permit to assure minimal damage to the stream. Special consideration should be given to Town Creek during the period when smallmouth bass spawning takes place in the spring as well as when trout are being stocked into Fifteen Mile Creek which is also in the spring.

One benefit which might be derived from this road construction project is the possibility of building parking areas for fishermen along Town Creek and Fifteen Mile Creek where secondary access roads cross the construction right-of-way.

DEW /dI
cc: David A. Wharton *See pages IV28andV. 5 in the document.

MEMO TO: Carlo Brunori
Environmental Review Information MARYLAND WILDLIFE ADMINISTRATION

FROM: David E. Woronecki
Non-Tidal Fisheries
MARYLAND WILDLIFE ADMINISTRATION

SUBJECT: NATIONAL FREEWAY ROUTE THROUGH ALLEGANY COUNTY

I did not have much time to review the proposed route of the National Freeway through Allegany County. I have circled in red every serm crossing that \(I\) could find. The following is a summary of these crossings:

Roll \#1
Starting grid 315 to 338 -- 23 grids
4 grids have potential sediment problems. One major stream crossing - Collier Run (330-332). Concerned with sediment only.

Roll \#2
Starting grid 338 to 365 -- 27 grids
11 grids have potential sediment problems.
One major stream crossing - Town Creek (359-360). Concerned with providing fisherman access to stream (including parking) and potential sediment damage.

MEMO TO: Carlo Brunori March 18, 1979

Roll \#3
Starting grid 365 to 395 -- 30 grids.
22 grids have potential sediment problems. One major stream crossing - Fifteen Mile Creek (389-390). Concerned with providing fisherman access to stream (including parking) and potential sediment damage.

Natural trout populations do not exist in any of the streams affected by this proposed route of the National Freeway. Smallmouth bass are known to exist within Town Creek. They are very likely to also be present within Fifteen Mile Creek and may also be present within Collier Run. From a fishery point of view, I have no major objection to this proposed route for the National Freeway. However, special emphasis should be placed upon sediment and erosion control at all stream crossings and headwater areas to protect them during construction. Fisherman access and parking should be provided at Fifteen Mile Creek and Town Creek. If this route is selected, detailed ecological studies of the affected streams should be undertaken as soon as possible.

If you should desire additional information relative to the fishery resource of the area, or the possible impact of road construction upon this resource, please advise and we will attempt to provide it as soon as possible.

DEW/dl
cc: David A. Wharton
Throughout the study process, every effort will be made to address the concerns of the Maryland Department of Natural Resources, Fisheries Administration.


August 17, 1978

Dr. Clement M. Silvestro, Chairman
Advisory Councilon Historic Preservation
1522 K. Street, Suite 530
STATE HiY Abashington, D.C. 20005
Dear Dr. Silvestro:
21 AUS - 11820
With respect to the public information meeting in Cumberland on August 22 on the National Freeway completion, the Maryland Chamber of Commerce wishes to go on record in support * of the Freeway route through Breakneck Valley. The Maryland State Highway Administration has been working on this vital road since 1973 , and its great economic benefits demand earliest possible approval and construction.

The highway connection of Baltimore with economically depressed Western Maryland and with the Ohio Valley is essential. Any adverse action by your Council will mean at least a two year delay. Meanwhile, inflation causes the cost to go up by \(\$ 6.5\) million for each year construction is postponed.

We are totally sympathetic with the goals of your Council, but you must balance your thinking with the great economic factor.

We ask that you approve the Breakneck Valley route as soon as possible.

Sincerely,
Cu'dthomi 7 Aolis
William F. Holin
Vice President - Public Affairs
WFH:cls

\author{
cc: \\ Mr. M. Slade Caltrider State Highway Administrator
}
*The Memorandum of Agreement with the Advisory Council specifies mitigation measures in the Breakneck Valley Historic District. See Page X.A-8 to X.A.-10.

Tawes State Office Building Annapolis. Maryland 21401

301-269-3776

October 9, 1978

Mr . Eugene T. Camponeschi, Chief
Bureau of Project Planning Maryland Department of Transportation P. O. Box 717

300 Viest Preston Street
Baltimore, Maryland 21203
Dear Mr. Camponeschi:
Reference is made to your letter of September 29 , in which you request certain information about Green Ridge State Forest.

Regarding Program Open Space funds used for state forest land acquisition, I am informed that these are 100 percent state funds. I cannot find that federal funds were used in purchasing state forest lands in the Green Ridge area. In adition, no donations of land were received from the federal governmen:, As near as I can determine, all Green Ridge State Forest tracts were acquire by the state in fee simple, with no restrictions of any significance. Regardin: the Maryland Wildlands Act, no state wildlands have been designated on the forest yet. However, several areas are presently under consideration as potential wildlands. Review of these potential wildlands is presently under way. Once designated as a state wildland, no modification of the area is permitted by lar. I would deen this to mean that potential and designated wildland areas would not be available for purchase.

I hope the foregoing will answer your questions adequately. If you require additional information, please advise.

1. Polish.Mountain has potential for incorporation into the Maryland Wildands Preservation System.

Office of the Secretary
2525 Riva Road, Annapolis, Maryland 21401• 301-269-3174

Blair Lee III
Acting Governor
Herbert B. Cohan Secretary

February 6, 1978

Mr. Frederick Gottemoeller
Director, Office of Planning
and Preliminary Engineering
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201
REFERENCE: State Project No. A-519-033-619, National Freeway, Section I, Supplemental Corridor Public Hearing January 24, 1978

Dear Mr. Gottemoeller:
The Department of Economic and Community Development wishes to add to the public record this letter which states its serious concern with the delay in construction and completion of the National Freeway, Section I in Allegany County, Maryland.

The State, in cooperation with the Appalachian Regional Commission, has been working for over 12 years to complete a modern highway between Hancock and West Virginia State line in western Garrett County. The highway becomes part of the thirteen state Appalachian Development Highway system and helps to reduce the isolation of Maryland's western counties by providing a modern highway link with the rest of the State, with the rest of the Appalachian Region and with the Midwest.

The completion of this highway has been and continues to be the highest priority project for the State of Maryland in the Appalachian Region. The Appalachian Maryland Development Plan (AMDP) has, as its highest priority goal, the development of a balanced transportation system which is supportive of economic growth and investment potential in the region. The AMDP is a product of the efforts of many professional planners and the elected officials of Allegany, Garrett and Washington Counties.

The basic concept of the Appalachian Regional Development Act of 1965 was to assist the region in addressing its special problems, to promote its economic development, and to establish a framework for joint Federal and State efforts toward providing the basic


In Appalachian Maryland the Federal investment toward meeting the above goal has been over \(\$ 50\) million in non-bighway and \(\$ 69,000,000\) in highmar funds.: The Tri-County Council of Hestern Marylanc, composed of elected officials, professionals and laymen have been directing their energies to strike an effective balance of investments. Projects are designed to provide the region \(F i t h\) tie needed physical and transportation facilities and to develof its human resources. It is intended that the network of investments created by the fiestern Maryland development process rill, through its synergy, result in more than the sur. of its parts for the benefit of all the citizens.

It should be remembered that the National Freeway Corridor Study proceeded in tro stages. First, a preliminary analysis, started in August, 1972, studied all feasible locations for the Freeway between Fancock and Cumberland, and including identification of economic development opportunities. That portion of the Studs developed 19 alternative bighway alignments and was concluded in April bf:1973.

The State Highray Administration then began intensive efforts to collect and analyze historical, social, economic, environmental, engineering, legal and other data for this corridor. Economic development sites associated with each alternative were identified. A series of community meetings were held to acquaint citizens with the project and finally a formal public hearing was conducted in December, 1973. The selection of the best alternative route (AGEENA) \(\pi a s\) made by Maryland's Secretary of Transportation in Lecember, 1974 anc was recommended to the U.S. Department of Transportation.

Notrithstanding any current objections to accepting the AGEENA alignment, this alignment was agreed upon through a proper sequence of actions including public involvement.

During 1975 a study entitled "Sites and Program for Development in Kestern Yaryland" was completed. This study provided new insights into potential opportunities in Western Maryland as accessibility to the region was improved. From approximately 50 potential opportunities identified, four specific economic dereiopment opportunities were examined in detail and presented to City, County and State officials for consideration. The analysis included industry, second homes, tourist/recreational facilities, travelers' services and natural resources development. All foré casts were based on the Appalachian Maryland Development plan and the new accessibility that would be afforded by completion of the National Freeway.

This Department must go on record as opposing any further dejays in completing this final link in Karyland's Developmental

Highway. Each month of delay further increases the cost of construction and continues to keep Appalachian Maryland from benefiting from continuation of the increased economic activity which has already begun to be felt as a result of the completed portions of the bighway.
-


WAP:paj

This document addresses the impacts of completing Section I of the National Freeway and is a requirement of the process which leads to location approval.

Page -2-
having already completed its section of the National Freeway from Morgantown to the West Virginia-Maryland line. Will Maryland now deny access to its own Port by refusing to build the type of highway agreed upon by both states? If it does do so, the Port will suffer, the industrial area of Western Maryland will continue to decline and the Appalachian Development Highway Program in Maryland will have become a dismal failure.

Data regarding Maryland's economic decline in the last five years (loss of 45,000 manufacturing jobs) require that steps be taken to reverse these unfavorable trends. Decisions regarding the completion of this highway are not solely within the province of a small group of people in Allegany County or any county. This road concerns the vital interests of the State of Maryland, and while certainly no one objects to the articulation of all views, yet when the time comes to build the road it should represent the best interest of the entire State. The arguments raised by the highly organized and well-financed group of Flintstone area residents are both captious and specious and should not be allowed to strangulate the economy of Western Maryland and the State as a whole.

\section*{Sincerely,}

Francis A. Kenney, Chairman
Transportation Comittee
Greater Cumberland Chamber of Commerde
1. Feasibility studies by the State Highway Administration revealed that existing plans and right of way are inadequate for upgrading U.S. 40 to interstate standards. Also, the expansion of right of way to include safety considerations would require the acquisition of 29 dwellings, 8 businesses and one church.
2. See letters from the Mayor and City Council of Baltimore.
VIII. 37

\title{
NATIONAL FREEWAY COORDINATING COMMITTEE OF MARYLAND
}
an economic life-line from the midwest to the Port of Baltimore

Bell Tower Building City Hall Plaza Cumberland, Md. 21502

Telephone No.
301-722-2820

STATEMENT OF POSITION
National Freeway - Cumberland to Hancock, Corridor E Section 1 from Relocated U.S. 220 to M.V. Smith Road Federal Aid No. APD 155-1 (42) State Project No. A519-033-619

In the past, highway building was decided on need, available funds and engineering. Now the issue is clouded by extraneous material and personality clashes.

The Hearing conducted at Fort Hill High School on January 24, 1978 was taken over completely by opponents to highway building. Nearly three hours had elapsed by the time the opponents had stated their case. The testimony of Mrs. Snow, in marticular, was actually a dissertation by David Morris, contains numerous errors, overstatements and simple expressions of opinion, masquerading as fact.

Mr. Morris is a co-director of a consultant firm in Washington, who purchased 115 acres in tinkle Hollow in 1970. The property includes a house and five buildings, assessed at \(\$ 5,055.00\).

In going through the details of the fifteen page "Fact Sheet" which Mr.Morris wrote and Mrs. Snow read at the Hearing, one gets an uneasy feeling that Mr. Morris could use the same reports to prove either side of the case. In fact, if you did not misinterpret a number of the facts that he lists from the EIS Reports, it would support the two southern routes.

The most telling statement made during the Hearing however, was made by Dr. Mastrangelo, Pathologist at Sacred Heart Hospital tho was a property owner in the general line of the BF2 Route. He stated with no equivocation that if road proponents choose BF2, it would go to Court. He certainly is able to make good on that promise with the help of the National Wildlife Federation and, presumably, the Environmental Protection Agency. At the same time, Dr. Mastrangelo threatened a suit by Dr. Snow, Pathologist at Memorial Hospital and a property owner in the area of the AGEENA line, if the State Highway Administration chooses to go that route.

That really leaves no choice other than some version of Route A, presumably already eliminated by SHA for good and sufficient reasons.

While these people, all tied into a group advocating an "Historic District", try to sound sincere in convincing us that they are not trying to stop a highway from being built, there can be no doubt that that is exactly what they are doing. Some of these people, certainly Dr. and Mrs. Snow, Mr. Creeder and Mr. Morris were fully aware when they purchased their property, that they were possibly in line with the proposed highway.

\section*{Dedicated To A Highway Built To Interstate Specifications}
from


Page -2-
The chief opponents, Dr. Snow, Dr. Mastrangelo, Colonel Patterson, the Hinkles and Mr. Morris are not farmers. None of them, we believe, earn a substantial part of their income from farming. Should they, or anyone who subsequently ouns these properties, decide to replace any of these homes with a modern house, no one can stop them.

Let's not repeat the mistake we made on the Crosstown Bridge, trying to avoid the Queen City Hotel. Have you tried explaining the hook in that structure around a building that isn't there? A few years from now you will have to come up with similarly unacceptable explanations for an inadequate decision on Section 1.

But such arguments only question the selfish motives of a few people. It does not treat the main issue of which is the best route.

Addressing that issue, it is clear that the SAA proved that BF2 was the best route, but because of objections from the EPA, took a second alternative AGEENA even though the figures as to stream damage, etc., favored the SHA choice. No allowance was made for the fact that the southernmost route (BF2), would have created two fine recreational lakes in the process of building the road, that it was, engineering, cost and time-wise, the best choice.

The 4 F clause of the Federal Highway Act was presumably an insurance policy that no valuable forest would be disturbed for the unnecessary purpose of building highways. This is a laudable and understandable concern. Where it falls apart is that the same clause used to save a giant redwood from harm, is used to save the scrawny Pin Oak and Jack Pine and other species in the contested property. With 196,000 acres ( \(72 \%\) of total acres in County) of forest in Allegany County, the few (3-400) acres, only. 2 of \(1 \%\) of the County's total acreage, proposed for the road would be unmissed. In fact, as in the road westward to Morgantown, a new route would open up vistas otherwise unseen by the travelling public. It is pertinent to the argument that the Skyline Drive through the South would not be permissible with these regulations, nor would most of the roads through other National Parks. Beauty is in the eye of the beholder! A view, unseen, is valueless.

Concerning the West Virginia segment, the concept of the National Freeway connecting Hancock to Morgantown was born in Maryland. Marylanders sold the idea to West Virginians with the assurance that our section would be built to the specifications of interstate as was their section. Governor Lee, then Lt. Governor, reiterated these assurances at the ribbon-cutting of the final section of the West Virginia portion at a Dedication and Luncheon in the Morgantown area on November 13, 1975. West Virginia certainly completed their road in record time and with the expectation that Maryland would observe its commitment.

All the arguments as to property damage, families and businesses removed, restrictions to improvement of horizontal and vertical grades, restrictions of development have been made. They are in your file. One point that may not be, is an estimate of the additional cost of trying to improve any part of the old route while maintaining traffic. The expense and time can be greatly cut by building a completely new route and simply tying it in on each end. The cost of this facet is hard to judge, but the time delays of rebuilding a travelled highway are annoying to the travelling public and the occupants of adjoining properties.

In the final analysis, the SHA and Department of Natural Resources have spent far too much time already in arriving at this point in the decision making. Perhaps never before have such a small handful of people held up a major project desired by so many. Never have such weak arguments hung on such thin strands of

Page -3-
bureaucratic decision. Our elected representatives are unanimously in support of moveing ahead with the construction as proposed by the SHA. THEY REPRESENT THE PEOPLE! WHY, THEN, SHOULD THEY BE DENIED?

The organizations, both management and labor groups, which support the Freeway have never attempted to tell the SHA what Route to take. We do not do so now. We ask only that you move ahead on a construction program, using the Route you have already decided upon after extensive study. DO IT WITH NO FURIHER DELAY.

We remind you that the only excuse for the delay to date has been the stated purpose that your case would hold up in Court if it became necessary. The attempt by the Mastrangelo-Snow-Patterson-Hinkle-Creeder-Morris group to confuse the issue at this late date, with a new proposal is so transparently an attempt to scuttle the Highway that it would be ludicrous, if it were not disastrous to the State of Maryland.

We ask that you act immediately on the studies you have already developed. BUILD THE HIGHWAY ON EITHER BF OR AGEENA, BUT BUILD IT.....NOW!


Pres. W. Md. Bldg. Trades
Bus. Mgr. Local \#307, I.B.E.W.

maryland State Employees Council
A?SCME, AUL-CIO


Field Representative, United Rubber Workers

pres \& Business Mgr. Teamsters Local Union \#453


Robert C. Petersen, Chairman National Freeway Coordinating Committee \&
President, Greater Cumberland Chamber of Commerce

\section*{Page 3 of 3 Pages}

February 3, 1978

Maryland Department of Transportation.

February 17, 1978
```

RE: National Freeway Section I Contract No. A 519-033-619

```

Mr. Robert C. Petersen, Chairman
National Freeway Coordinating Committee and President, Greater Chamber of Commerce
Bell Tower Building
City Hall Plaza
Cumberland, Maryland 21502
Dear Mr. Petersen: .
Thank you for your letter of February 3, 1978 stating your opinion as well as an endorsement by Union Leaders in the area advocating either the AGEENA or the \(\mathrm{AGBF}_{2}\) alignmint.

Be advised that your letter will be made part of the record and available to the public as soon as the Public Hearing Transcript of January 24 is published.

Very truly yours,

Frederick Gottemoeller Director, Office of Planning and Preliminary Engineering

FG:FJK:jef
```

cc: Mr. Eugene T. Camponeschi
Mr. John D. Bushby

```


Mr. Dale Hilliard
Room 406
State Highway Administration 300 West Preston Street Baltimore, Maryland 21201

ALLEGANY COUNTY PLANNING \& ZONING COMMISSION
, County Office Building - 3 Pershing Street CUMBERLAND, MARYLAND 21502

October 18, 1979


Dear Mr. Hilliard:
Re: Allegany County Comprehensive Plan - Route 48
As I mentioned to you verbally, it is the intent of the Allegany County Comprehensive Plan 1978 Revision to include the construction of U.S. 48 between Cumberland and Hancock as a four-lane limited access divided highway.

Although the map accompanying the Plan shows Route 48 following basically the AGEENA alignment, this map was drawn at a time when it was thought this alignment would be used for construction of the road. However, nowhere in the plan is it spelled out that the AGEENA alignment is the preferred alignment and the designation of the map primarily indicates that the missing link in the roads system should be completed regardiess of the final alignment chosen.

It is my opinion that the Plan is basically conceptual in nature, and is not intended to tie down specific road alignments, just as much as it does not attempt to tie specific water line and sewer line locations. These things should be decided in actual design of such improvements.

VIII. 42

BRS:mb


\section*{}

February 2, 1978

John J. Coyle, President

\section*{Arthur T. Bond} Linde A. Golden

Mr. Frederick Gottemoeller
Director, Office of Planning
and Preliminary Engineering
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201
Dear Mr. Gottemoeller:
The Board of Commissioners of Allegany County requests the following statement be included with the testimony recorded in the January 24, 1978, Supplemental Corridor Public Hearing, National Freeway, Section I:

The Board of Commissioners of Allegany County favor the most expeditious completion of the National Freeway, choosing the alignment that the State Highway Administration and the Federal Department of Transportation deem in the best interest of the public.

The County Commissioners favor a modern highway that will meet the accepted standards of the national interstate system.

> Sincerely,

COUNTY COMMISSIONERS OF ALLEGANY COUNTY, MARYLAND

PLANHING \& Preliminaiy Emunilamite
ACC: eb
P.O. Box 1439

CUMBERLAND, MARYLAND 21502 Teleohone 301-77-6911


DRAECTOR, OTicis a

FEB 61978



CASPER R. TAYLOR, JR ALLEGANY-WASHINGTON COUNTIES

COMMITTEE ON ECONOMIC MATTERS

CHAIRMAN, COMMITTEE
ON COMPULSORY AUTO
INSURANCE
JOINT COMMITTEE ON ENERGY
ALLEGANY COUNTY
GOVERNMENTAL STUDY COMMISSION

Home: 3i6 PRINCE GEORGE'S STREET CUMBERLAND. MARYLAND 21502

722-7874

Cumberland office: 501 N. MECHANIC STREET

724-9234
ANNAPOLIS OFFICE: 429 LOWE BUILDING 269-3289

Mr. Frederick Gottemoeller
Office of Planning and Preliminary Engineering
State Highway Administration
P. O. Box 717

Baltimore, Maryland 21203

Reference: National Freeway-Cumberland to Hancock, Corridor E Section 1 from Relocated U.S. 220 to M.V. Smith Road

Federal Aid No. APD 155-1 (42)
State Project No. A519-033-619
Dear Mr. Gottemoeller:

Due to the General Assembly being in session, I was unable to attend the recent public hearing held at Fort Hill High School to consider alternate alignments. for the above referenced project. It is my purpose in writing to implore the State Highway Administration to proceed as rapidly as possible to completion of the National Freeway.

During all the years of alignment studies the State Highway Administration has held the position that the BF2 alignment creates the best engineered highway, and does the least amount of damage. This highway will be in existence for a long time, and therefore your original position should not be compromised.

This entire project is located within my legislative district. No one is more vitally concerned about its completion. As a Western Maryland businessman as well as a member of the General Assembly, I

 the Port of Baltimorqult 4

FEB 1: 197


Mr. Frederick Gottemoeller February 9, 1978 Page 2

I apologize for the delay in sending this statement to be recorded as part of the record of the project. Thank you for your continued cooperation.


\section*{CRT: Im}

February 6， 1978

Mr．Frederick Gottemoeller
Office of Planning and Preliminary Engineering
State Highway Administration
P．O．Box 717
Baltimore，Maryland 21203
Reference：National Freeway－Cumberland to Hancock， Corridor E Section 1 from Relocated U．S． 220 to M．V．Smith Road Federal Aid No．APD 155－1（42） State Project No．A519－033－619

Dear Mr．Gottemoeller：
I have received rather disturbing reports concerning the failure to present more than one distinctly minority viewpoint at the re－ cent public hearing held at Fort Hill High School to consider al－ ternate alignments for the key segment of the National Freeway between Cumberland and Hancock．It is my purpose in writing to implore the State Highway．Administration to move ahead toward implementing this project as rapidly as possible．

A handful of individuals should not be permitted to sidetrack a project which is so vital to our State＇s economy．The Port of ． Baltimore enjoys a natural geographical advantage over its com－ petitors to the north and south．This advantage is only meaningful so long as access to and from the port is adequate．We must be in a position to move cargo to the nation＇s midwestern industrial heartland．Under current conditions，the lack of satisfactory highway linkage is hampering our ability to compete for tonnage． Key heqisions by industry on which port to utilize often turn on层扬㨁解 variables like adequacy of highway access．To impose undue deldy completing the National Freeway is to handicap the State＇s single most important economic entity，the Port of Baltimore．
```

Mr. Frederick Got* noeller
February 6, 1978
Page 2

To consider a fourth alternate alignment at this late date is to jeopardize a properly reasoned and deliberative process. The time to, present a fourth alternate was in 1973 when the process began. Some years ago, the States of Maryland and West Virginia jointly agreed to accelerate the development of that link of the National Freeway connecting Morgantown and Baltimore. West Virginia has honored its commitment. Maryland continues to wrestle with its. portion. Further delay only means more time lost and additional expense.

It is time to select a final alignment. The City of Baltimore supports either the Ageena or BF2 alignments. Both have been. determined by the State Highway Administration to be cost effficient with minimal impact on the surrounding environment.


## cc: The Honorable Blair Lee, III

The Honorable Charles MacC. Mathias
The Honorable Paul S. Sarbanes
The Honorable Goodloe E. Byron
The Honorable Edward J, Mason
The Honorable Victor Cushwa
The Honorable William B. Byrnes
The Honorable Thomas B. Cumiskey
The Honorable Casper R. Taylor, Jr.
The Honorable DeCorsey E. Holden
The Honorable John J. Coyle
The Honorable F. Perry Smith; Jr.

Mr. Frederick Gottemoeller, Director
Office of Planning \& Preliminary Engineering
State Highway Administration
P. O. Box 717

Baltimore, Maryland 21203
Reference: National Freeway - Cumberland to Hancock, Corrider E Section 1 from Relocated U.S. 220 to M.V. Smith Road Federal Aid No. APD 155-1 (42) State Project No. A519-033-619

Dear Mr. Gottemoeller:
For more years than one would care to remember, this road known as the National Freeway has been under discussion and review. Extensive studies have been made on every conceivable impact this road may have.

It is generally agreed that Ageena Route is the best possible alternative balancing all factors including those of the environment. At this late date; it seems manifestly wrong for opponents to argue for some new route setting off once more a series of delays in this national road link.

Historically, America's seventh largest city was founded on its ability to link its port with the heartland of America. This linkage spawned a series of cities in Maryland, including Frederick, Hagerstown, and Cumberland; and this formed the basis for Maryland's manufacturing and commercial economy. It also enabled Americans in the Midwest to trade effectively with the rest of the world. Whatever changes in modes of transportation may have taken place, the Port is still there and essential not only to Maryland, but to this nation's ability to trade with the world in a cost effective manner.

The advent of trucks as a major form of transportation has made it imperative that this vital road link be built in order to retain the vitality not only of Maryland's economy, but of our national ability to trade competitively with the rest of the world.


FEB 91978
 VIII. 48

BALTIMORE CITY COUNCIL

I am sorry that this letter is late, but the notice of right to
comment has just been called to my attention. I am also enclosing
a copy of the Baltimore City Council's Resolution urging the prompt
completion of this road. I hope you will consider my comments in
making a final judgment on this matter.


## WSO/scc

cc: Mr. Robert C. Petersen, President Greater Cumberland Chamber of Commerce

Enclosure
Fhit

# CITY COUNCIL OF BALTIMORE  <br> Walter S. Orlinsky, President and Councilpersons DiPietro, Hammen, Schaefer, Gureft Clarde, jrby, Curran, Fitzgerald, Gallngher, Adams, Julian, Mitchell, Capidn; sjector, Waater, Della, Murphy and Myers 

LNTRODUCED DECEJGER 8, 1977
fy: in Unf 10 :
(Read and Axtersentili :

## A BILL ENTITLED

Resolution of the Baltimore City Council endorsing the prompt Completion of the National Freeway.
Werreas, the National Freeway represents that vital economic link between the Midwestern United States and the Port of Baltimore, and

Whereas, the economy of Maryland has suffered and continues to suffer as a result of the failure to complete this vital segment of Interstate-70 which stretches from Hancock, Mlaryland westward into West Virginia and the Midwestern United States; and

Whereas, the need for the completion of the National Freewray has been recognized by officials of the City of Baltimore and Western Maryland and the National Freeway Coordinating Comvittee of Maryland; and

Whepeas, due to the passage of time, the cost of completion of the National Freeway has risen and continues to rise; therefore, be it

Resolved by the City Courcil of Baltimore, That the City Council urges the government of the State of Maryland and the government of the United States of America to act promptly for the completion of the National Freeway so that the economic interests of the State of Diaryiand and the United States can be protected and strengthened; and be it further

EXPLANATION: Italies indicate new matter added to exinting tav: [Brackets] indicate matter atricken from oxioting lor.
(Page 2-No. 1343)
23 Resolved, That a copy of this Resolution be sent to the
24 President of the United States, Jimmy Carter, Secretary of
25 Transportation Brock Adams. Secretary of Agriculture
26 Cecil Andrus, Acting Governor Blair Lee, and Maryland 2 Secretary of Transportation Hermann Intemann.

January 23, 1978
Herman Intemann
Secretary of Transportation
P.O. Box 8755

Baltimore-Washington International Airport Maryland 21240

Dear Mr. Intemann:


I realize that you know relatively little about the National Freeway in Aliegany County. You inherited the problem from Secretary Hughes. You may be unaware that there is a great deal of opposition to the alignment recommended by the state and that much of this opposition comes from people who believe that there is a common sense solution to the problem. The recommended alignment of the state would take rich agricultural land, displace people's homes and businesses, go right through the middle of an historic district, create severe environmental problems with respect to local flooding, and would ignore the very dangerous conditions on existing route 40 .

May ci the people in this county would enthusiastically support Ii: 3 rapid construction of a modern divided 4 -lane highway. We want to - T ):Ore rcuice 40 , to such a highway where it is now 2 and 3 lanes. But I $\therefore$ :pros the overdesigned highway that now is recommended for route 40. I oppose requiring service roads, interchanges and a fully-controlled access : ighriay. A safe, dualized 4-lane highway would meet all the conditions necassary to support future traffic and would, at the same time, almost -iminate the need to ruin people's farms, businesses, and homes.

I know that the cost of this alternative, an alternative which has never been seriously presented to the people of this county, would be much lower than the present alternative. I strongly recommend that the savings to the state be used in Allegany County for transportation related job creation. This could provide a real push for economic development.

I think this is a viable alternative. People in this area want a highway, but don't think that the State Highway Administration has been flexible in taking into account the needs of the county, and the new situation created by the $55 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. speed limit.

I am enclosing a paper which I wrote on this alternative; it was prepared without state support and, I think, accurately reflects the reality of the fourth alternative.

> Sincerely, Lii, id Mien David Morris VIII. 52

Enc.


ENVIRONMENTAL HEALTH ADMINISTRATION

February 20, 1980

Mr. Charles R. Anderson, Chief
Burea:l of Landscape Architecture.
Joppa \& Falls Roads
Brookiandrille, Maryland 21022

Dear Mr. Anderson:

RE: Contract A 519-033-619 U.S. Route 48 East of Cumberland to M. V. Smith Road

We have reviewed the Air Quality Analysis for the a jove subject project and have found that it is not inconsistent with the Programs' plans and objectives.

Thank you for the opportunity to review this analysis.
Sincerely yours,


William K. Bonta, Chief Division of Program Planning \& Analysis Air Quality Programs

KTB: Dab

FE:

Mr. Charles R. Anderson, Chief
Bureau of Landscape Architecture
Maryland State Highway Administration 2323 West Joppa Road
Brooklandville, Maryland 21022
Re: U.S. Route 48, East of Cumberland to M.V. Smith Road
Dear Mr. Anderson:
We have reviewed the air quality analysis for the project referenced above, and we have no objections to the project from an alr quality standpoint.
Sinçrely yours,
Jobn R. Pomponio
Chief $\&$ Wetlands Review Section

Mr . Eugene T. Camponeschi, Chief Bur eau of Project Planning
 State Highway Administration

Dear Mr. Camponeschi:
This is in response to your letter of October 11,1976 to the Office of the Secretary, U. S. Department of Agriculture, Washington, D. C. regarding the "Supplement to Draft Environmental Statement 4(f) Statement for Historical Sites" for National Freeway, Section I in Allegany County, Maryland.

After reviewing the section $4(\rho)$ statement, our comments are the same as in our November 21,1973 letter regarding this draft impact statement.

We appreciate the opportunity to review this proposal.
Sincerely,


Gerald R. Calhoun
State Conservationist
cc: R. M. Davis, Administrator Office of the Coordinator of Envir. Quality Activities Council on Environmental Quality (5 copies)

VIII. 55

## LIST OF PREPARERS

| Charles B. Adams | Landscape Architect (Air), <br> SHA-MDOT |
| :--- | :--- |
| Margaret M. Ballard, M.S. $\quad$Environmental Specialist <br> (Historical/Cultural) <br> WRO-MDOT |  |
| William L. Branch | Environmental Specialist <br> (Biology, Wildlife) <br> SHA-MDOT |
| John W. Heth | Environmental Specialist <br> (Physical Resources) |
| SHA-MDOT |  |

## Technical Assistance Provided

Michael Petersilia Systems Design Concepts, Inc.
John Harris
Engineering Associate SHA-MDOT

Principal Reviewers from FHWA
Nelson Castellanos Area Engineer
Kathleen Liffey
Dennis Merida
Robert Nickerson
William Sageman
Right of Way Specialist
Division Environmental Engineer
Bridge Engineer
Regional Environmental Engineer
Frederick Skier
Noise Specialist

## X.APPENDIX MATERIAL

A. Memoranda of Agreement - Advisory Council
B. Memoranda of Agreement - Department of Natural Resources
C. Summary of Relocation Assistance Program
D. Bibliography

Correspondence
E. Natural Resources
F. Task Force
G. Historical Resources

February 27, 1979
Mr. Emil Elinsky
Division Administrator, Maryland Division
Federal Highway Administration
U.S. Department of Transportation

The Rotunda, Suite 220
711 West 40th Street
Baltimore, Maryland 21211
Dear Mr. Elinsky:
The Memorandum of Agreement for the construction of Section I of the National Freeway affecting the Breakneck Valley Historic District in Allegany County, Maryland, has been approved by the Chairman of the Council. This document constitutes the comments of the Council as required by Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Sec. 470f, as amended, 90 Stat. 1320) and completes the "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800). A copy of the Agreement is enclosed.

A copy of this Memorandum of Agreement should be included in any environmental assessment or statement prepared for this undertaking in compliance with the National Environmental Policy Act and should be retained in your records as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966. The Council appreciates your cooperation in reaching a satisfactory solution to the issues raised in this matter.

Sincerely,
Jordan E. Tannenbaum
Chief, Eastern Office
of Review and Compliance
Enclosure
X.A-1

## MEMORANDUM OF AGREEMENT

WHEREAS, the Federal Highway Administration (FHWA), Department of Transportation, proposes to provide Federal aid to the Maryland Department of Transportation, State Highway Administration (MDSHA), in the construction of the National Freeway between Cumberland and the M. V. Smith Road, Allegany County, Maryland; and,

WHEREAS, the FHWA, in consultation with the Maryland State Historic Preservation Officer (SHPO), has deternined that this undertaking as proposed would have an adverse effect upon the Breakneck Valley Historic District and the Liller-Geiger Farm, properties determined on the authority of the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places; and,

WHEREAS, pursuant to Section 106 of the National Historic Preservation Act of 1966 ( 16 U.S.C. Sec. 470f, as amended, 90 Stat. 1320), the FHWA has requested the comments of the Advisory Council on Historic Preservation (Council); and,

WHEREAS, pursuant to the procedures of the Council (36 CFR Part 800), representatives of the Council, the FHWA, and the Maryland SHPO have consulted and reviewed the undertaking to consider feasible alternatives to avoid or satisfactorily mitigate the adverse effect; and,

WHEREAS, the MDSHA was invited and participated in the consultation process;

NOW, THEREFORE, it is mutually agreed that implementation of the undertaking, in accordance with the attached stipulations of the Draft Memorandum of Agreement of December 22, 1978, from Mr. Emil Elinsky, Division Administrator, Maryland Division, Federal Highway Administration, with the exception of Point $I(E)$ for which the following stipulation will be substituted, will satisfactorily mitigate adverse effects on the above-mentioned properties.
X.A-2

Page 2
Mcuorandum of Agreement
Federal Highway Administration
Breakneck Valley Historic Distill

## Stipulation

An archeological reconnaissance report has been completed for the AGBF2 modified corridors and is described in the "Reconnaissance Report \#137" (Report).

FHWA will ensure that, to the maximum extent feasible, in the planning and study of alignments within the AGFB2 or AGBF2 modified corridors, the MDSHA will seek to avoid effects to those archeological properties already identified in the Report. If an alignment in the corridors is selected that affects archeological properties identified in the Report, the MDSHA will, in consultation with the FHWA and the Maryland SHPO, undertake the steps outlined in the Report, including further testing and survey. The MDSHA will then apply the National Register Criteria to each identified property. The FHWA will submit the documentation on these properties to the Keeper of the National Register for determinations of eligibility in accordance with 36 CFR Part 63 (Attachment 11 ). The MDSHA will treat those properties determined eligible by the Secretary of the Interior in accordance with the Council's "Guidelines for Making 'Adverse Effect' and 'No Adverse Effect' Determinatons in Accordance with 36 CFR Part 800"(Attachment \#2).


Maryland State Historic Preservation Officer
X.A-3

Page 3
Memorandum of Agreement
Federal Highway Administration Breakneck Valley Historic District


Concur:


## U. S. DEPARTMENT OF TRANSPORTATION <br> FEDERAL HIGHWAY ADMINISTRATION

REGION THREE
The Rotunda - Suite 220 711 West 40 th Street Baltimore, Maryland 21211

December 22, 1978

IN REPLY REFER TO:

Mr. Robert R. Garvey, Jr.
Executive Director
Advisory Council on Historic Preservation 1522 "K" Street, N.W. Washington, D.C. 22005

Attention: Ms. Amy Schlegel
Dear Mr. Garvey:
In September 1977, we requested the initiation of Advisory Council coordination and comment on the proposed completion of Section I of the National Freeway in Allegany County, Maryland. With that letter, we enclosed a number of documents as a preliminary case report. Further documentation was also submitted in March 1978, and a public informslion meeting was conducted in August 1978. Throughout this process, there has been continued coordination involving your staff, the Maryland State Historic Preservation Officer, the Maryland State Archeologist, the Maryland State Highway Administration and our office. This extensive discussion and coordination has now culminated in a Draft Memorandum of Agreement addressing potential highway alternatives along the $A G B F_{2}$ or modified $A_{2 B F}$ corridor. We believe that the content of this Memorandum is consistent with the position expressed in your September 22, 1978 letter on this matter. We have enclosed a copy of the Draft Memorandum of Agreement for your consideration. The Maryland SHPO has indicated in a November 29, 1978 letter (copy enclosed) his concurrence with this Draft.

We have enclosed with this submission a copy of the archeological reconnaissance report prepared by the Maryland Geological Society under the guidance of the State Archeologist. This report documents a complete reconnaissance of the entire $\mathrm{AGBF}_{2}$ and $\mathrm{AGBF}_{2}$ modified corridor and has been coordinated with the Maryland SHPO. A stipulation addressing the possible involvement with archeological resources is included in the Draft Memorandum. Should archeological resources be involved with the selected alignment, we expect to coordinate the effects in accordance with the Council's "No Adverse Effect" Archeological Guidelines.

National Freeway - Section I Draft Memorandum of Agreement Project APD-155-1(42)

Washington, D.C. 22005

In addressing other historical matters related to this facility, we have concurred with an opinion of the Marylard SiPO that the Old National Pike is not eligible for the National Register. We have also concurred with the SHPO that two other sites, the Cerleton Farm and the Concrete Block House, will both not be affected by the proposed construction.

Based upon these determinations and the extensive coordination among the various offices on this proposal, we have concluded that the enclosed Draft Memorandum of Agreement fully addresses the procedures for mitigation of all adverse effects anticipated by the construction of this facility. We hope that further processing of this Memorandum can proceed rapidly toward the completion of the Section 106 requirements under the National Historic Preservation Act.

Sincerely yours,


Enclosures

## MEMORANDUM OF AGREEMENT <br> NATIONAL FREEWAY, SECTION I

WHEREAS, the U.S. Department of Transportation, Federal Highway Administration, proposes to provide Federal-aid assistance to the Maryland Department of Transportation, State Highway Administration, in the construction of the National Freeway between Cumberland and M.V. Smith Road, Allegany County, Maryland; and,

WHEREAS, the U.S. Department of Transportation, Federal Highway Administration (FHWA), in consultation with the Maryland State Historic Preservation Officer (SHPO), has determined that this undertaking as proposed would have an adverse effect upon the Breakneck Valley Historic District (as a unit and eight sites individually), and the Liller-Geiger Farm, all located in Allegany County, Maryland, all determined on the authority of the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places; and,

WHEREAS, pursuant to Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f, as amended, 90 Stat. 1320), the Federal Highway Administration has requested the comments of the Advisory Council on Historic Preservation; and,

WHEREAS, pursuant to the procedures of the Advisory Council on Historic Preservation ( 36 CFR , Part 800), representatives of the Advisory Council on Historic Preservation, the Federal Highway Administration, the Maryland State Highway Administration (SHA) and the Maryland State Historic Preservation Officer have consulted and reviewed the undertaking to consider feasible and prudent alternatives to avoid or satisfactorily mitigate the adverse effects;

NOW, THEREFORE, it is mutually agreed that implementation of the undertaking in accordance with the following stipulations will satisfactorily mitigate any adverse effect on the above mentioned properties.

## Stipulations

## I. General Conditions

A. This Memorandum of Agreement addresses the construction of the proposed National Freeway along either the corridor designed as AGBF2, or a modification of this corridor, including portion of AGEENA, east of Tow Creek, previously

Page 2
Memorandum of Agreement
Federal Highway Administration
Nationel Freeway, Section I
described in the Draft Environmental Impact Statement, which does not involve adverse effects on other sites (on or eligible for the National Register) than those identified in this Memorandum. Selection of an alternate not fulfilling this stipulation will require the reapplication of the consultative process described under 36 CFR , Part 800.
B. Design of the Freeway will embody aesthetically pleasing concepts and sensitivity toward minimizing damage to natural and cultural environments. A design approach similar to that in the I-70, Vail Pass Colorado Report will be employed. The spirit and intent of this design approach will be ensured by the FHWA and SHA.
C. To formulate and incorporate aesthetic elements into the design, an interdisciplinary approach will be utilized. To accomplish this, expertise in the following areas will be involved: historical preservation, landscape architecture, environmental planning, and highway and bridge engineering. The Maryland SHPO will provide the historical preservation expertise; the FHWA and SHA will ensure that the meaningful input from these disciplines is incorporated into the design of this corridor.
D. The SHPO and other members representing the interdisciplinary approach will participate in the review of each phase of the design. In the event that agreement cannot be reached on the mitigation measures appropriate to a specific site, FHWA will request the comments of the Council pursuant to Section 800.4(e) et seq. of the Council's Procedures.
E. If an alignment in the corridor is selected which affects archeological resources identified by the archeological reconnaissance already completed for the corridor and described in the "Reconnaissance Report No. 137," the Maryland SHA, in consultation with the Maryland SHPO and the FHWA, will apply the National Register Criteria to each resource. FHWA will submit the results of these consultations in accordance with 36 CFR Part 63 to the Keeper of the Register for determinations of eligibility. Those sites determined eligible will be treated in accordance with the Council's "Guidelines for Making 'Adverse Effect' and 'No Adverse Effect' Determinations in Accordance with 36 CFR Part 800" (Council's Archeological Guidelines).
II. Specific Conditions
A. Breakneck Valley

Federal Highway Administration
National Freeway, Section I

The design of the Freeway will be developed to optimize maintenance of localized terrain, drainage ard vegetation. Acoustical and visual mitigation measures will be developed as appropriate for the historical sites identified below. Each of the potential mitigation measures indicated will be further refined and evaluated during the design process using the interdisciplinary approach. Final decisions specific to each site and throughout the corridor will be made through this process. The design will reflect the endeavor to maintain the rural character of local service roads.

1. May Long House, Sta. 1308, Site B-23.

Acoustical and visual measures appear warranted and will be developed with the design in this area. Additional easement toward the house may be taken to accomodate the aesthetic measure employed.
2. Tewell Stone House, Sta. $1307+50$, Site B-24.

Acoustical and visual measures appear warranted and will be developed with the design. Additional easement on the northern edge of the right-of-way may be required to accomodate the desired landscaping technique.
3. Scott Robinette House, Sta. 1324, Site B-21.

Acoustical and some visual attenuation may be effective along the northern edge of the mainline right-of-way. The existing terrain and vegetation will also influence the degree of mitigation necessary. The design approach will maximize the benefits of each factor.
4. Wilson House, Station 1350, Site B-22.

Acoustical and visual mitigation may be provided along the northern edge of the right-of-way. Existing structures and vegetation will influence the desirability, magnitude and type of measures employed.

5, 6. Rush Church and Rush School, Sta. 1368 and 1366+50, Sites B-19 and B-20.

No specific mitigation measures are required for these sites as the proposed facility will be primarily "hidden" from view by natural terrain.

Page 4
Memorandum of Agreement
Federal Highway Administration
National Freeway, Section I
7. Luther MacElfish House, Sta. 1380, Site B-17.

No specific mitigation measures are required for this site as the proposed facility will be "hidden" by an existing steep hill.
8. Browning Farm House, Sta. $1435+25$, Site B-28.

Acoustical and visual attenuation appear warranted. Natural contours of the affected ridge will also be maintained as much as possible, as will existing vegetation through a design approach aimed at balancing the required width of right-of-way with the needed blending of cut slopes.
B. Other sites.

1. Liller-Geiger House, Sta. 1112+25, Site 12.

Existing topography in relation to the roadway profile will result in acoustical and visual attentuation. Natural contours of the affected ridge to the rear of the structure will be maintained as much as possible, as will existing vegetation. Additional easement may be desireable to provide more "natural" side slopes.

Executive Director
Date
Advisory Council on Historic Preservation

Federal Highway Administration
Date

MD State Historic Preservation Officer
Date
Chairman
Advisory Council on Fistoric Preservation
I concur:

# MARYLAND DEPARTMENT OF TRANSPORTATION AND 

MARYLAND DEPARTMENT OF NATURAL RESOURCES AGREEMENT GOVERNING THE AGBF2 LINE FOR U. S. 48 IN GREEN RIDGE FOREST

## Introduction

Since the last segment of the National Freeway (Section I) in Western Maryland must pass through the Green Ridge Forest in some location, the Department of Natural Resources and the Department of Transportation, State Highway Administration, have had joint meetings, discussions, and field inspections in an attempt to determine conditions under which the highway could pass through the Forest. The decision has been made that the route should follow AGBF2. This decision is based upon the joint determination that this alignment represents the most appropriate, feasible and acceptable of all alignments considered, from the point of view of service, engineering, and impact on the forest, and the proposed wildland in the Town Creek Area. It is clearly understood that the following conditions do not supersede or obviate the need for any permits or approvals, but are intended to set forth those concepts of design and construction that the Department of Natural Resources, in its castodial responsibility for these lands, believes necessary to minimize the intrusive nature of the proposed freeway on the Forest. The purpose of this document is to set forth the areas of understanding between the two agencies concerning the alignment known as AGBF2. Financing the construction of this alignment and associated mitigation measures is, of course, contingent upon availability of funds through the State's normal budgeting process.

It is understood that the design of the freeway would embody aesthetically pleasing and environmentally sensitive design concepts that are appropriate to the Green Ridge State Forest. A design approach, similar to that documented in the I-70, Vail Pass Colorado report, would be the foundation on which to build these mitigative and mutually beneficial concepts.

With this goal in mind, the following stipulations form the basis of an understanding between the two agencies under the assumption that line AGBF2 would be implemented.

## STIPULATIONS

## I. General Conditions

A. To formulate and incorporate aesthetic and environmentally sensitive elements into the design, an interdisciplinary approach will be utilized. To accomplish this, expertise in the following areas will be involved: landscape architecture, total environmental planning, and highway and bridge engineering. The Maryland Department of Natural Resources and State Highway Administration environmental staff will provide expertise in the preservation of forests, drainage ccurses and stream protection, wildlife, vegetation, and other natural environmental factors. The Federal Highway Administration and State Highway Administration will ensure that the meaningful and sustained input from these disciplines is incorporated into the design of this corridor.
X.B-2
B. The Department of Natural Resources and other members representing the interdisciplinary approach will participate in the review of each phase of the design and problems arising during construction.
C. Traffic noise from the National Freeway will have an adverse effect upon land adjacent to the proposed right of way. To mitigate this disturbance the State Hignway Administration and the Department of Natural Resources shall acquire replacement land identified in Attachment $I$ to this agreement. The Administration shall attempt to negotiate a purchase of this land. If necessary, the SHA Office of Counsel and Office of Real Estat:e will implement condemnation proceedings in the name of the Department of Natural Resources for any or all of these parcels, in accordance with procedures to condemn property for other State agencies. The Administration shall pay for the land whether acquired by negotiated purchase or by condemnation. The maximum liability incurred by the Administration under this paragraph is One Million Dollars ( $\$ 1,000,000$ ). Acquisition of this land will begin in the first year that State Highway Administration advertises for construction within Green Ridge Forest. Provision of the replacement land is in addition to payment of the fair market value for the right of way for the National Freeway.
D. Consistent with existing SHA policy, roadway illumination will not be used, with the possible exception of interchange ramps at the eastern limit of the forest.
E. Retention ponds to minimize effects of this project will be used where necessary, as determined by INR/SHA during design phase.
F. All signing of the highway in the forest will be held to a minimum.
G. Department of Natural Resources will assist in determining limits of construction contracts, construction access routes, and in establishing mobilization sites and inspecting restoration work prior to final acceptance by SHA. Construction access points will be predetermined and included in the contract documents.
H. Construction activities will be guided by certain seasonal restrictions.
I. Steel to be weathered, but not painted, if so desired by DNR.
J. Flexible hose bypass systems, similar to Vail Pass Colorado approach, to be used in smaller stream areas in order to prevent sediment and erosion wash.
K. Revegetation other than for stabilization should blend with surrounding area of forest and be indigenous, subject to Department of Natural Resources concurrence.
L. Contractors will be required to submit proposed sites for waste disposal to the DNR for review prior to SHA issuance of notice to proceed to construction. DNR will not approve any sites within Green Ridge Forest or any 100 year floodplains.
M. Aesthetic treatment of all structures within the Green Ridge State Forest shall be jointly developed between DNR and SHA during the design phase. Stone Facing will be used wherever feasible and practical.
N. The State Highway Administration shall provide the funds necessary to pay the salary and expenses of a Department of Natural Resources' environmental inspector for the National Freeway. This person and associated DNR staff shall be responsible for direct liaison with SHA construction management personnel regarding the strict enforcement of, and adherence to, contract specifications in matters affecting DNR and the intent of this agreement during and, for a limited period (to be determined jointly by DNR and SHA), after the construction of the National Freeway in Green Ridge Forest. It is anticipated that this inspector will be used full-time during the construction phase and part-time during the jointly agreed upon period following construction.

0 . This Agreement shall be construed and interpreted in accordance with the law of Maryland; it shall be subject to ratification by the Board of Public Works, and it is subject to the budgetary constraints contained in the laws and Constitution of the State.

## II. Specific Mitigation Areas

A. Continuity of existing trails used to provide access for timber management, logging, fire control, emergency evacuation, wildlife access and hiker/campers. The following areas, identified by study line stations, indicate a need to provide access by means of structures over or under the main roadway. Stations $1804 \pm, 1777 \pm, 1610 \pm$, and $1597 \pm$. It is understood that these stations may change as more detailed identification (mapping field surveys) becomes available. It is also understood that access will be provided from the end of the structure at Station $1777 \pm$ to the trail located at Station $1781 \pm$, as well as a connection of the access crossing at Station $1804 \pm$ to the trail at Station 1797.. All trail road structures over or under mainline will be a minimum 15 feet wide. Trail road and crossing grades will not exceed $10 \%$, except where jointly agreed by SHA and DNR. It is anticipated that the services of experts in wildlife management will be used to ensure that provisions for wildlife crossings will be reasonably effective.
B. Continuity and Protection of Natural Drainage Courses

The following areas have been identified as low points in the terrain. It will be necessary to keep these areas open for unrestricted passage of water, wildlife, and hiker/campers at Stations $1861+, 1824+, 1815 \pm, 1793 \pm, 1786 \pm, 1771 \pm, 1740 \pm$, $1693 \pm, 1660 \pm, 16 \overline{5} 8 \pm, 16 \overrightarrow{5} 6 \pm$, and $1639 \pm$. Department of Natural Resources/State Highway Ādministration agree that structural plate arches (SPA) providing a 12 foot vertical clearance and a natural bottom will be used at these locations, except where DNR/SHA may agree in the design phase that such a measure may not be feasible. Where the use of SPA will be structurally unsound, concrete box culverts with a natural floor will be used.

## C. Major Stream Crossings

The purpose of these recommendations is to indicate the mitigating features necessary to minimize the impact of construction at the following stream crossings. They are not intended to supersede or exclude specific requirements that may, subsequently be included in Sediment Control Plans and Waterway Construction Permits as required by law. The additional mitigative measures and restrictions on construction activities will be implemented pursuant to conditions outlined in the plans and permits which may be issued by the Department of Natural Resources.

1. Fiften Mile Creek - The SHA will construct, and DNR accepts in concept, subject to further permit actions a four span segmental concrete girder structure (similar to Vail Pass) or, as an alternate subject to joint DNR/SHA concurrence, a steel box girder structure. The structure in this location will involve three piers, two of which would be on the valley floor, and a third adjacent to existing Fifteen Mile Creek Road. The profile grade line of the structure will be designed to a minimum elevation of 840 feet at the east slope of the fifteen mile creek valley. There will be no relocation of the road or the creek. In order to provide maximum protection for the floodplain, stream, mill race, and to prevent erosion and sediment problems, there will be no clearing and grubbing in the valley or the slopes leading to the valley throughout the length of the structure, with the exception of that required for construction access and the piers. Other mitigation measures and restrictions on construction activities will be implemented pursuant to conditions outlined in the Sediment Control Plan and Waterway Construction permit to be issued by the Department of Natural Resources. The design for access and restoration shall be included in SHA's design contract and subject to SHA/DNR design team concurrence. The construction of the access roads, as well as the restoration of the area upon completion of the work in the valley, shall be included in the contract for construction of the bridge. Any proposed changes by the contractor shall be subject to joint SHA/DNR approval.
2. Black Sulphur Run - This run and the entire 100 -year floodplain will be bridged. Piers may be placed in the floodplain but set back from the stream so as not to affect the channel. There will be no slope construction within 100 feet of the stream.
3. Town Creek - The crossing of Town Creek will have a high level, multi-span bridge with no box culverts. Actual length will be subject to final determination of the width of the 100 -year floodplain.
D. Eliminate relocation of Black Sulphur Road as shown in the existing study report and a portion of relocated George Road. Every attempt will be made to bridge the existing Black Sulphur Road. The existing intersection of Black Sulphur Road and George Road should remain undisturbed if possible.
E. Scenic Over: -looks and Picnic/Rest Area (not considered mitigation) The Picnic/Rest Area $1670 \pm$ is not considered as mitigation and will be removed from further consideration. Scenic overlooks such as the one at $1775+$ do not create adverse impacts and therefore may be retained.
F. A SPA with 6 foot vertical clearance should be used under relocated Jacob's Road. If the use of SPA at this location is structurally unsound, concrete box culvert with a natural floor will be used.
G. The natural drainage course on the east slope of Polish Mountain from Station $1620 \pm$ to $1640 \pm$ will be retained in its natural state. A minimum 100 foot buffer of natural ground will be kept between the centerline of the water course and the highway construction slopes. This also applies to the drainage course on the west slope of Polish Mountain, Station 1595 to to $1605 \pm$.
H. The State Highway Administration will build an acceptable game crossing along the Polish Mountain ridge. If no other access is available for logging operations in this area, the structure may have to be designed for truck loadings and tie into the existing road along the ridge.

I concur that the conditions noted in this document are adequate to mitigate the adverse effects regarding Location Approval of Alignment AGBF2 through Gree Ridge State Forest.

X.B-6

These properties are listed in order of priority. Acquisition shall proceed until the dollar limit in paragraph IC is reached.

| Current Property Oner | Acreage | Liber/Folio |
| :--- | :---: | :---: |
| Helen Rohman | 274 | $479 / 864$ |
| Samuel Goldberg | 108 a | $344 / 107$ |
| Walter A. McKinney | 300.00 a | $400 / 1$ |
| Louis C. Norris | 37.50 a | $470 / 344$ |
| A. L. Fanget McArthur | 187.50 E | $210 / 552$ |
| Jones A. Potts | $300 . \mathrm{a}$ | $?$ |
| Nellie Issacs | 457 a | $269 / 337$ |
| Ernest Slider | 132 a | $161 / 597$ |
| Sherman M. Wilson | 49.82 a P.T. | $404 / 448$ |
| Lena P. Struckman | 42.20 a | $292 / 37$ |
| Charles M. Evans | 250.0 a | $347 / 388$ |
| Estel K. McLaughlin | $685(?)$ | $60 / 509$ |

[^1]$$
4 / 13 / 27
$$
"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, Article 21, Sections 12-201 thru 12-209. The Maryland Department of Transportation, State Highway Administration, Bureau of Relocation Assistance, administers the Relocation Assisrance 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 tenant-occupants. In addition, but within the above limits, certain payments may be made for increased mortgage interest costs and/or incidental expenses. 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 moving expenses are limited
X.C-1
to a 50 mile radius. In both cases, the expenses must be supported by receipted bills. An inventory of the items to be moved must be prepared, and estimates of the cost may be obtained. The owner may be paid an amount equal to the low bid or estimate. In some circumstances, the State may negotiate an amount not to.exceed the lower of the two bids. The allowable expenses of a self-move may include amounts paid for equipment hired, the cost of using the business's vehicles or equipment, wages paid to persons who physically participate in the move, and the cost of the actual supervision of the move.

When personal property of a displaced business is of low value and high bulk, and the estimated cost of moving would be disproportionate in relation to the value, the State may negotiate for an mount not to exceed the difference between the cost of replacement and the amount that could be realized from the sale of the personal property.

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 personal property is not moved but is replaced at the new location, the payment would be the lesser of the replacement costs minus the net proceeds of the sale 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.

If no offer is received for the personal property and the property is abandoned, the owner is entitled to receive the lesser of the value for continued use of the item in place or the estimated cost of moving the item and the reasonable expenses of the sale. When personal property is abandoned without an effort by the owner to dispose of the property by sale, 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 $\$ 500$. All experses must be supported by receipted bills. Time spent in the actual search may be reimbursed on an hourly basis, but such rate may not exceed $\$ 10$ per hour.
X.C-2

In lieu of the payments described above, the state may determine that the owner of a displaced business is eligible 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
 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.

Considerations in the State's determination of $108 s$ 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 rocations 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, with approval of the Federal Highway Administration, may use another two-year period that would be more representative. Average annual net earnings include any compenstation 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, but for twelve consecutive months during the two taxable years prior to the taxable year in which it is required to relocate, the owner of the business is 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, 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 paymints provide that the State may determine that a displaced farm may be paid 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 $\$ 2,500$.
X.C-3

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.

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 will be completed by the- State Highway Administration and approved by the Federal Highway Administration before "housing as a last resort" could be utilized. "Housing as a last resort" could be provided to displaced persons in several different ways although not limited to the following:

1. An improved property can be purchased or leased.
2. Drelling units can be rehabilitated and purchased or leased.
3. New dwelling units can be constructed.
4. State acquired dwellings can be relocated, rehabilitated, and purchased or leased.

Any of these methods could be utilized by the State Highway Administration and such housing would be made available to displaced persons. In addition to the above procedure, individual replacement housing payments can be increased beyond the statutory limits in order to allow a displaced person to purchase or rent a dwelling unit that is within his financial means.

The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of $1970^{\prime \prime}$ requires that the State Highway Adminiotration shall not proceed with any phase of any project which will cause the relocation of any person, or procesd vith any construction project until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons till be satisfactorily relocated to comparable decent, safe and sanitary housing *ithin their financial means or that such housing is in place and has been made available to the displaced person.
X.C-4

Literature Cited (Biotic Enc.)

Adams ( ) Highway salt: social and environmental concerns. Penn State Univ. pub. unknown

Asking (1978) Personal communication
Brush et al (1977) The natural forests of Maryland: an explanation of the vegetation map of Maryland. Johns Hopkins University, Baltimore, Md. for Md. Power Plant Citing Program.

Bystrak D. (1970-;8) Field data sheets for a breeding bird survey route in Allegany County. US Dept. of Interior unpublished

Bystrak D. (1979) Personal communication. US Dept. Of Interior
Cowardin et al (1977) Classification of wetlands and deep water habitats of the United States (an operational draft). US Dept. of Interior Fish \& Wildlife Service.

Davis, R.M. '(1974) Key to the fresh water fishes of Maryland. Md. Dept. of Natural Resources, Annapolis, Md.

Davis and Enamait (1975) Job progress report: upper Potomac River investigations. Maryland Dept. of Natural Resources, Annapolis, Md.
Dietemann (1976) Proposed list of endangered and threatened fishes of Maryland (unpublished).

Eddy S. (1969) How to know the fresh water fishes. Wm. C. Brown Co.,
Dubuque, Iowa. Debuqua, Iowa.

Field et al (1974) Water pollution and associated effects from street salting. Transportation Research Record 506. In Highway Wildlife Relationships Vol. 2, Federal Highway Administration, Washington, D.C.

Franz and Slifer (1971) Caves of Maryland educational series no. 3, Maryland Geological Survey.

Giles et al (1973) Evidence for the accumulation of atmospheric lead by insects in areas of high traffic density. Environmental Entomology 2(2). In Highway Wildlife Relationships Vol. 2, Federal Highway Administration, Washington, D.C.

Gish and Christiansen (1973) Cadmium, nickel, lead, and zinc in earthworms from roadside soil. Environmental Science and Tectinology 7:1060-1062. In Highway Wildlife Relationships Vol. 2, Federal Highway Administration, Washington, D.C.
X.D-1

Hanes et al (1970) Effects of deicing salts on water quality and biota. NCHRP Report 91. Highway Research Board, Washington, D.C.

Hockman et al (1977) Recent records of bobcats (lynx rufus) from Maryland. (Research Note) Proceedings of the Pennsylvania Academy of Science 51:185-186.

Holbrooke H.L. (1974) A system for wildlife habitat management on sou'hern national forests. Wildlife Society Bulletin 2(3): 119-123.

House et al (1968) Assessment of ecolocıcal effects of extensive or repeated use of herbicides. Advanced Research Projects Agency. U.S. Dept. of Defense. In Highway Wildife Relationships Vol. 2, Federal Highway Administration, Washington, D.C.

Jahn L.R. (1959) Highway mortality as an index of deer population change. Journal of Wildiffe Management 12(2): 187-196. In Highway Wildiffe Relationships Vol. 2, Federal Highway Administration, Washington; D.C.
Md. Wildife Acim. (1973) Internal memorandum Jan. 15, 1973. Md. Dept. of Natural Resources.

Memphis State Univ. (1971) Effects of noise on wildife and other animals. U.S. EPA Office of Noise Abatement Contrcl, Washington, D.C.

Michael E.D. (1976) Effects of highways on wildife. West Virginia Dept. of Highways Research Project No. 42. West Virc,inia University, Morgantown, W. Virrginia.

Oxley et al. (1974) The effects of roads on populations of small mammals. Journal of Applied Ecology 11(1): 51-59. In Highway Wildlife Relationships Vol. 2, Federal Higl.way Administration, Washington, D.C.

Paradiso J.L. (1969) Mammals of Maryland. N. American Fauna 66. USDI Bureau of Sport Fisheries and Wildlife.
$\begin{aligned} & \text { Price et al (1974) Lead in terrestrial erthropods: evidence of } \\ & \text { biological concentration. Environmental Entomology } \\ & 3(3): 370-372 \text { In Highway Wildife Relationships } \\ & \text { Vol. 2, Federal Highway Administration, Washington, D.C. }\end{aligned}$
X.D-2

Robbins C.S. 11973) Rare or endangered breeding birds of Maryland. USDI Bureau of Sport Fisheries and Wildlife.
-
Sartor \& Boyd (1972) Water pollution aspects of street surface contaminant. In Highway Wildlife Relationships Vol. 2. Federal Highway Administration, Washington, D.C.

Shaheen D.G. (1975) Contributions of urban roadway useage to water pollution. U.S. EPA Technology Series EPA 600/ 2-75-004. In Highway Wildlife Relationships Vol. 2, Federal Highway Administration, Washington, D.C.

Staffer et al (in press) The zoogeography of the fresh water fishes of the Potomac River basin. Appalachian Environmental Lab. Frostburg, Maryland.

Trainer \& Karstad (1960) Salt poisoning in Wisconsin wildlife. Journal of the American Veterinary Medical Association 136(1): 14-17. In Highway Wildlife Relationships Vo. 2, Federal Highway Administration, Washington, D.C.

Trippensee R.E. (1953) Wildlife management Vol. II. McGraw Hill, New York, New York.

## Literature Cited

U.S.D.I. Department of Geology, Mines and Water Resources, The water Resources of Alleqany and Wasfington Counties, Bulletin 24 Baltimore: Waverly Press, Inc., 1962.

Vokes, Harold E. and Edwards, Jonathon Jr., Geoaraphy and Geology of Maryland, Bulletin 19 Baltimore: Maryland Geological Survey. 1974.
U.S.D.A. Soil Conservation Service, Soil Survey of Allegany County, Maryland, issued January 1977.
U.S.D.C. Weather Eureau, Climate of Cumberland, Marvland: Julv 1947June 1965, Baltimore: Baltimore-Washington International Airport.

Maryland Dept. of State Planning, Geology, Aquifers and Minerals, Baltimore: M.D.S.P., 1974.

Maryland Department of State Planning, Natural Soil Groups of Maryland, Baltimore: M.D.S.P., 1973.

Foster, Robert J., Physical Geoloay, San Jose State University, 1979.

Butzer, Karl W. Geomorphology from the Earth, University of Chicago, 1976.

APPENDIX E

BERNARD F. HALLA DIRECTOR
EARL H. HODIL DEPUTY DIRECTOR

TAWES STATE OFFICE 8UILDING ANNAPOLIS, MARYLAND 21401
(301) 269-3195

January 21, 1980

Mr. William L. Branch
State Highway Administration Bureau of Landscape Architecture Joppa \& Falls Roads Brooklandville, Maryland 21022

Dear Bill:

The status of our western Maryland Cave Dwelling Bats Investigation, specifically for those caves located adjacent to the proposed AGBF2 alignment for the National Freeway, is as follows:

1. Athey's Cave: no bat use as hibernaculum.
2. Murley Branch Spring Cave: permission not yet secured from owner to investigate cave. Anticipate investigation will be accomplished within next 30 days.
3. Teweil Caves: not yet surveyed. Survey anticipated within 30 days.
4. Devils Hole Cave: several surveys accomplisined from October 1979 through last week. Moderate use primarily by Eastern pipistrelles, but 2 little brown bats also documented.
5. Stegmaier Caves: access not yet secured. Survey anticipated within 30 days.
6. Twiggs Cave: entrance permanently sealed by landowner who denied permission anyway to survey cave.
7. Horse Cave: entrance not yet located. Survey anticipated within 30 days.

I'11 keep you appraised as our investigations proceed.


GJT: bw


TAWES S:AT: rFitce UU E:C\%

(301)23\%-31\%

February 22, 1980

Mr. Nilliam L. Branch
State Highway Administration
Eureau of Landscape Architecture Joppa and Falis Roads
Brooklandville, Marjland 21022
Dear bill:
Here's the latest update on survey rosiats fron cur Maryland Cave Dweling Eats Investigation, specifically for those caves locited adjacent wo the proposed AGBF2 alignment for the National Freway. This iufomatian was collected subsequent to that concained in riy lettor to you dated Januazy 21, 2 ? 0 . Included here is infomation only on those caves which were investigated since my previous letter to you.

1. Murley Sranch Spring Cave: owner indicated cave is unaccossible to investigators since it is át spring source, Bat use here is guestionabie, but perhaps the entrance could be sumpled by mist netting during the summer.
2. Tcwell Caves: cave entrances exceedingly sinali (inacoessible to investigators). Mist netting would be the only means of sampling for bat use.
3. Horse Cave: moderate use by Eastern pipistrelles documenced in carly February.

I'11 continue to keep you appraised of our survey resuits.
Slacezely,

Gary j. Taylor
Nonganie \& Endnazered
Species Progran Menayer
CuT: bw

## Maryland Department of Transportation

# FE\& 261980 

MEMORANDUM

TO: Mr. Gordon E. Daily
Mr. Philip Sonner
Mr . Allan Eddy
Mr. William B. Greene
Mr. Richard Krolak v
Mr. John Knepp
FROM: N. S. Caltrider
State Highway Administrator


SUBJECT: U. S. 48 - Sections I and II

Since the design on Section II of the National Freeway is now under way and Section $I$ is scheduled to start this fall, the a dove are assigned as the SHA's Vail Pass Concept Team for these projects. This team will stay in force throughout the Design and Construction of these projects. Mr. Gordon Daily will be the Team Chairman through the Design phases and Mr. John Knepp will be the Chairman throughout the Construction phases.

The purpose of this Team is to incorporate into the design and construction as much of the Vail Pass concepts as is practicable especially through the Green Ridge State Forest.

Mr. Daily and Mr. Knepp are to keep the Maryland Department of Natural Resources involved in both Design and Construction of these projects. Based on the agreement between the State Highway Administration and the Department of Natural Resources for Green Ridge Forest, they are to become a continuous member of the Team for that area.

The Team Chairman will report to the Chief Engineer in his normal Design Review Meetings and under Construction, once a month by a written report. If in between time there is any problem, the Chief Engineer is to be notified immediately.

## Page 2

## F23 261980

 Administration. I am alerting them to the Esiabiisnment of this Team along with an invitation $t=$ Essizn someone
 if they so desire.

MSC: eer
cc: Mr. Emil Elinsky
Mr. Frederick Gottemoeller
Mr. William K. Lee, III
Mr. Hal Kassoff
Mr. Nilliam F. Lins, Jr.
Mr. T. W. Beaulieu
Mr. Paul A. Milash
Mr. Charles R. Anderson
X.F-2

ADVISORY COUNCIL ON HISTORIC PRESERVATION
PUBLIC INFORMATION MEETING

Notice is hereby given in accordance with Section $800.5(c)$ of the Council's "Procedures for the Protection of Historic and Cultural Properties" ( 36 CFR Part 800) that on August 22, 1978, at 7:30 p.m., a public information meeting will be held at the Alleghany County Community College Theatre, Cumberland, Maryland. The purpose of this meeting is to provide an opportunity for representatives of national, State, and local units of government, representatives of public and private organizations, and interested citizens to receive information and express their views on the proposed construction of Section I of the National Freeway, an undertaking assisted by the Federal Highway Administration, that will adversely affect the Breakneck Road Historic District, Alleghany County, a property determined by the Secretary of the Interior to be eligible for inclusion in the National Register of Historic Places.

The following is a summary of the agenda of the public information meeting:
I. An explanation of the procedures and purpose of the meeting by a representative of the Executive Director of the Council.
II. A description of the undertaking and an evaluation of its effects on the property by the Federal Highway Administration.
III. A statement by the Maryland State Historic Preservation Officer.
IV. Statements from local officials, private organizations, and the public on the effects of the undertaking on the property.
V. A general question period.

Speakers should limit their statements to 10 minutes. Written statements in furtherance of oral remarks will be accepted by the Council at the time of the meeting. Additional information regarding the meeting is available from the Executive Director, Advisory Council on Historic Preservation, 1522 K Street, N.W., Washington, D. C. 20005, 202-254-3974.
X.G-1

Allegary Count:
Contract No. A 519-033-6.19
F.A.P. No. APD 155-1(42)

National Freeway - Section I
Wolfe Mill to M.V. Smith Road

Summary of the August 22, 1978 meeting conducted by the Advisory Council on Historic Preservation.

The meeting was conducted in the theatre of the Allegany Community College located on Willow Brook Road, Cumberland. The meeting concerned only Section I of the National Freeway from Wolfe Mill to M.V. Smith Road, specifically, the AGEENA alignment and the Historic Properties.

Approximately 225 people attended this meeting. There
 their position. Ms. Myra Harrison introduced herself as the Assistant Director of the Office of Review and Compliance of the Advisory Council on Historic Preservation. She introduced several of the members on the Council.

Ms. Harrison was the conductor of the meeting. She reviewed the function of the Advisory Council and the reasons for their existance. Fifty percent were in favor of a freeway concept on new location.

Mr. Elinsky, Mr. Krolak, and Mr. Pearce spoke in turn concering the project and problems involving the AGEENA alignment and its Historic implications.

The following speakers represented groups and political statements concerning constituency opinions.

Senator Mathis' statement was read into the record and is available upon request.

Richard Mappin representing the Allegany Economic Developmint Company of Cumberland recommends the AGEENA alignment.

AFL-CIO representative Dominic Anfreno favors the AGEENA alignment.

Wm. Tate, head of Maryland Economic and Community Levelopment favors the AGEENA alignment, along with the Approval Regulation Commission board members. He said Maryland receives 10 million dollars A.R.C. money each. year. John Coyle, President Allegany County Board of Commissioners is in favor of the AGEENA line.

Joe Freno, President Teamsters Union in the area, favors the AGEENA line.

David Wagner, Transportation Advisor to Mayor Wm. D. Shaffer, Baltimore City, also favors completed National Freeway.

David Seldon, Congressman Goodloe Byron's Legislative Assistant in Washington County, supports the Administration's choice of alignment.

Senator Cushwa, Representating parts of Allegany County and Washington Councy cited the benefits of the National Freeway and interstate highways in his district. The Senator asked that all interested parties give maximum effort toward a fearsidle settlement of the issues. .

Ms. Helen Hinkle; historian, said that AGEENA land cannot be used legally for a highway because it is $4 f$ land.

Mr. David Morris, Professional Planner, said AGEENA is the worst planning concept he has ever seen. He said that the cross-town bridge problems have not been resolved by Highway officials. He said the Cumberland viaduct is inferior. He said a study was recommended by State officials in 1973; and to date, nothing has been studied, much less resolved. He said the E.I.S. in 1973 is outdated and, therefore should be rewritten to meet 1978 conditions and standards. He said that in 1973 the majority of people wanted the $\mathrm{BF}_{2}$ alignment.

State Senator Edward Mason, representing District 1 , said he now takes no position because of the problem of getting off of dead center. The Senator made the point that a highway be built now to interstate standards. He cited reasons as loss of funds, loss of life, time, etc. He said that the Feds. may initiate an agricultural preservation policy that could further delay this project. He said that we weaved around the city with the cross-town bridge because of a hotel declared historical and then razed that hotel later. The Senator said that if we continue to delay this project, the plans themsleves could be historical.

Mr. Dave Austin, Assistant General, Traffic Manager, Springfield Tire Company, wants the Freeway completed to economically compete with other industry in the East. He advocated the AGEENA Route.

Delegate Tom Cuminski, General Assembly, wants the project to get underway as quickly as possible. He said all must compromise the issues to meet these obligations.

Gary Teeter, Flintstones, representing the Allegany Soil Conservation district Supervisors, said that in 1973 they recombmended in a letter to Mr. Thompson that the Route 40 upgrading alignment be built and have not changed their opinion at this time.

Mr. James Robinson, Allegany County Farm Bureau, speaking for Russell Myers, President, cites opposition to AGEENA Route :nd is opting for the AGEA Route.
X.G-3

Mr. Tim Dugan, County Planning Director for Garrett County panel, voted to build the AGEENA Line as quickly as possible.

Mr. Harris LaPue representing the West Vaco Corporation urged the Council to make a decision quickly for the safety and economic factors involved for everyone, favors the AGEENA alignment.

Mr. McVey, County Agriculture Agent, and with the Maryland Cooperative Service; favors the upgrading of U.S. Route 40 .

Wallace Ullery, Councilman, speaking for the City Council of Cumberland, favors the AGEENA alignment.

Ms. Harrison explained the procedures by which the Council will act upon after the meeting and assured the people that a decision regarding the issues will be forthcoming by the second week in September, 1978.

Ms. Harrison closed the meeting at approximately 12:15 a.m.

Advisory Council on Historic Preservation 1522 K Street N.W. Washington. D.C. 20005



September 22, 1978

Mr. Emil E.linsky
Division Administrator
Federal Highway Administration
US. Department of Transportation
The Rotunda Suite 220
711 West 40th Street
Baltimore, Maryland 21211
Dear Mr. Elinsky:


We are writing to confirm the position of the Advisory Council on the prorseed completion of Section I of the National Freeway, and to rut.lire what appear to us to be necessary steps to complete the consultation $\mathrm{p}:$ ores for this project as required by 36 CFR Part 800.

On September 14, 1978, you and other representatives of the U.S. Deparinent of Transportation met in our Washington office with me, General Owen Talbot, Director, Maryland Historical Trust, and Is. Nancy Miller, Acting State Historic Preservation Officer for Maryland. At that time, the position of the Executive Director of the Council was stated: that the Council staff concurred in your analysis, as found in your letter of Septerb $=\mathrm{r} 6$ i 978 , to Mr. M.S. Caltrider, that the proposed ACEENA alignment: would cause the Ereakneck Road Historic District "adverse impacts vilich will be extremely difficult, if not impossible, to mitigate". Furthermore, in our judgment it would be possible to execute a Nemorand wo forcement on either of the other two alignments that have been considered: the AGE $\Lambda$ align meat of upgrading the existing U.S. 40 to freeway standards, or the southern, BF-2 alignment. Other alternatives not yet presented, including but not limited to the modification of the EF-2 aligninent currently under consideration by the Maryland State Highway Administration, might also be acceptable as the basis for an agreement. General Talbot and ids. Miller said that of tire alternatives presented they preferred the $\mathrm{EF}-2$ alignment, or a modification thereof, as it would cause the fewest adverse effects on properties included in or that ray be eligible for inclusion in the Rational Register of Historic Places. Therefore, it was concluded that the BF-2 alignment or its variation would be the basis for a Memorandum of Agreement.

If proceeding with a Memorandum of Agreement on the BF-2 or modified BF-2 alignment is acceptable to you, additional information will be required. First, we understand that a survey has been performed throughout the highway corridor to identify historic properties that would be affected by either of these two alternatives. These properties have not yet been

## Page 2

Mr. Emil Elinsky
National Freeway
determined eligible for inclusion in the National Register of Historic Places. As properties must be determined eligible before they can be the subject of a Memorandum of Agreement, the Federal Highway Administration should seek eligibility determinations for all properties that appear to possess significance and that will be affected by the BF-2 alignments. Second, the staff of the Council and that of the Maryland SHPO will consult and provide you with information, either before or at the time of our next consultation meeting, as to the kinds of mitigation that might be appropriate for those properties that have been identified through the survey as potentially eligible for the Register and likely to pe affected by either BF-2 or modified $\mathrm{BF}-2$. However, as you know, the responsibility for designing such mitigation lies with the project agency; it is our hope that the Council staff and the Maryland SHPO can provide you with guidance in accomplishing this task. At the time of the next meeting, then, we would hope to be able to begin discussions of the specific terms for a Memorandum of Agreement on this project.

The next meeting is currently scheduled for October 5, 1978, in your offices in Baltimore. We look forward to working with you to reach a satisfactory resolution of the issues presented by this Section 106 case.


## U. S. DEPARTMENT OF TRANSPORTATION <br> FEDERAL HIGHWAY ADMINISTRATION

REGION THREE

The Rotunda - Suite 220<br>711 West 40th Street<br>Baltimore, Maryland 21211

November 3, 1977

| Mr. Terry Cederstrom | INREPLY REFER-TO: |
| :--- | :--- |
| Mid-Atlantic Region | Project APD-155-1(42) |
| National Park Service | Natdonal Freeway |
| 143 South 3rd Street |  |
| Philadelphia, Pennsylvania 19106 | Section I |
| Section 4(f) Consultation |  |

Dear Mr. Cederstrom:
This letter will confirm the recent telephone conservations between our offices concerning the meeting which we have scheduled for 10:30 AM on November 18, 1977, to discuss the Section 4 (f) involvement with the studies for Section I of the National Freeway in Allegany County, Maryland. As we indicated during our discussions, we believe that this meeting will provide the best opportunity to respond to the comments in your December 10, 1976 letter concerning the Section 4(f) Supplement, and we hope that this meeting can also resolve the complex issues relevant to Section $4(f)$ for this Section of the National Freeway.

While the majority of the Section $4(f)$ issues will be concerned with historic sites and districts potentially affected by the alternatives, there could also be potential involvement with both the Green Ridge State Forest and Rocky Gap State Park. These Section 4 (f) concerns were presented in the original Draft Environmental Impact Statement circulated in September 1973. It would, therefore, be appropriate for the Bureau of Outdoor Recreation to also participate in the discussions. We appreciate the arrangements you have made with Mr. Michael Gordon for his attendance at this meeting.

As you suggested, we will also be in contact with Mr. Robert Zepp of the U.S. Fish and Wildife Service in Annapolis to invite his participation in the meeting.

We also expect representation from the office of the State Historic Preservation Officer, Mr. John Pearce, whose office has assisted with much of the historic inventory work and already been involved with coordination both within the State and with the Advisory Council of Historic Preservation.

As we indicated in our conversations, we will make the necessary arrangements for your transportation from the railroad station to our Division Office where the meeting will be held. We look forward to a cooperative and productive discussion which will lead to resolution of Section $4(f)$ issues. If there are any questions concerning these arrangements, please contact our office.

## Sincerely yours,

## E. ELINSKY

Emil Elinsky
Division Administrator

Summary of Meeting of November 18, 1977
State Highway Administration-Federal Highway Administration United States Department of the Interior

The meeting was held in the F.H.W.A. Conference Room, Suite 220; The Rotunda, 711 West 40 th Street, Baltimore, Maryland beginning at 10 o'clock a.m. A list of attendees is attached.

The purpose of this meeting was to discuss the comments in the letter of December 10, 1976 from the United States Department of the Interior, regarding the "Supplemental to the D.E.I.S. Section 4(f) - Involvement for Historical Sites - Section I National Freeway - East of Cumberland to M. V. Smith Road.

The meeting was opened by Mr. Louis M. Paper, Assistant Administrator, F.H.W.A. who welcomed all participants and stressed the need to continue to advance this project toward Location Approval. Mr. Camponeschi, Chief Bureau of Project Planning then presented a history of the project which started in 1972. Highlights of this history included the relationship of the study procedures to the Maryland Action Plan, the various agencies which made up the National Freeway Advisory Committee and the number of alignments studied. The statement was also made that during the study we became aware of the development of two major factions. One of these factions favored protection of the total natural environment, and the other favored protection of the existing economic concerns and development of new areas for economic expansion. A copy of the Rationale for selecting alignment AGEENP. was then distributed.

Mr. Richard S. Krolak, Chief of the Environmental Evaluation Section, Bureau of Project Planning, then distributed a Milestone Report showing a chronology of the "Delays" on Section One. He then explained these "Delays" were due to requests for additional information from various agencies. The major delay began in June 1975 when it was determined that there was a number of potentially significant historical sites within the study area. Due to lack of personnel within the Bureau of Project Planning or the Maryland Historical Trust it became necessary to contract with the Maryland Historical Trust. This contract provided for qualified historical personnel to conduct surveys on full time basis, inventtory and determine the eligibility of the sites, and determine the boundaries of the potential Breakneck Road Historic District. Mr. John Pearce, State Historic Preservation Officer, explained the terms of this contract, and also our relationship with the state Archeologist in doing preliminary archeological reconnaissance. This completed the briefing of the representatives of the Department of the Interior.
X.G-9

Pri, r to our discussion on the comments received on the letter of December 10, 1976, the representative of the National Park Service made a statement clarifying their position. He said there would be no verbal decision or formal evaluation made during an informal meeting. The National Park Service, as lead bureau for the Department of the Interior, would provide "Technical Assistance as required by law", on written documentation only.

## Discussion of Comments

1. Archeology

Mr. Krolak said that no significant sites had been ciscovered. After Location Approval, proper mitigation would occur in the Design Phase. National Park Service said they would need complete details involving who did the surveys, exact site locations and site significance for proper evaluaujon by their personnel. Mr. Krolak stated that ile Stace frcheologist, who performed the surveys was qualifjed to Evaluate the sites and effects and had requested timet deinji. $=d$ $\therefore$ niormation not be placed in the F.E.I.S. Mr. Cederirom greed that full technical details are not needed in F.f. it in wit shouid be available for N.P.S. evaluation. Mr, Kiolak striced that the technical report were always availab? :gualified reviewers.

Mr. Papet, F.H.W.A., asked if a draft of the final. statement could be submitted to D.O.I. for review, prin: to the normal submission to all agencies. All repıesentatives of D.O.I. agreed.
2. Historic Sites - Insufficient Detail

Mr. Krolak stated that because of the history of tine project the supplemental document was not intended to give detailed effects of each alternate on individual histor sites. The intent of this document was to serve notice that we have identified the sites. The F.E.I.S. and final 4(f) statement will address detailed effects, in regard to the recommended alignment.
3. Historical Sketch of Area, Photos, Better Description of Affected Structures

John Pearce stated a short description of the relationship of the district to Allegany County could be put in the F.E.I.S. Better descriptions of properties, including structures, and photographs are now available.

## 4. Warriors Path

Mr. Pearce explained that Warrior's Path has not been located, but that it is known the Indians utilized a path the length of Warrior's Mcuatain. The trail merits the attention of the National Reqister and he feels that all
alignments would involve a similar mitigable impact to the path.
5. Agea and Flinstone

The $4(f)$ document contained a typographical error on Page 9. It was pointed out to D.O.T. that shifting the AGEA alignment in the vicinity of Flintstones would be n Highly infeasible".
6. Discussion of Site \#32-B. M. Hinkle House

We asked N.P.S. from which perspecitve we should evaluate effects: From the new highway to a site or from a site to the new highway.

After discussion it was agreed to by all parties, that would describe the view from the historic site to the Ghway in the $4(f)$ statement.

Road Historic District
Mr. Krolak explained that the Williams Road issus $\because$ pict has been absorbed into the Breakneck Valley Iirancir $\cdots: \quad$ and will be addressed accordingly. Oi 16 Proof of Feasible and Prudent Alternates
$\therefore$ draft $4(f)$ document provides discussion of several alternatives, not of a single proposed alignment. There.rise, prudent and feasible alternatives cannot be addressed unit: ; the $4(f)$ statement. D.O.I. representatives acknow! edged t. iss rationale.

## Statement Does Not Demonstrate Energetic Investigation of

 all Possible Planning to Minimize Harm"Same category as \#8. A discussion of the difference in ensued. N.P.S. says we must prove we investigated all methods to minimize harm in the D.E.I.S; F.E.I.S. is to late. Mr. Krolak pointed out that general concepts for all alternates are addressed in the draft, while more specific measures would be discussed in the final statement for the proposed alternate. Mr. Paper reminded D.O.I. representatives that they provide consultation, not approval. Mr. Krolak asked if the "Intrusion" of an alignment should be addressed on an individual site or on a district basis. Mr. Cederstrom suggested both impacts be addressed; however, Ms. Wolfe expressed uncertainty about the proper application. Ms. Miller suggested we check the Environmental Documents on I-85 in Fells Point, as to technigues of description.
X.G-11
10.
D.O.I. is not satisfied and would like to review further documentation. We will submit a Draft F.E.I.S. 4(f) to N.P.S. for review and technical assistance prior to distribution of F.E.D. N.P.S. will coordinate all comments (N.P.S., B.O.R., Fish and Wildlife). This request should be submitted to the Regional Director, National Park Service. This action will satisfy NPS as their consultative role.
fried votes bewaidiont of tie mterioi

In Reply Refer To: L.7619-460
( $\mathrm{ER}-76 / 997$ )

## Dear Mi: Elinsky:

This i:: in response to the Maryland Department of Transnortation's request for orr review of and comments on the draft Section 4(f) statement (Historic Sites) for the National Freeway, Allegheny County, Maryland.

Since no mention is made in the statement concerning project impacts in the Sideling Hill and Belle Grove Wildlife Management Areas, we reiterate our comment as stated in the Departmental letter, dated ?t wiry 4, 1974, that these effects should be coordificed with the リ. S. Fish and Wildlife Service as well as the Marylard Department of i-: 1 R Resources. Results of this coordination should be in lucid in -.. find environmental statement.

## COMP COMMENTS

if : aments below pertain to the adequacy of this document fac: $\therefore$ sinned purpose only, namely, impact of the National freeway upon Rubrical sites. This $4(f)$ Statement makes no me tron if cis impact 3 The national Freeway upon known or potential arche,...ical sites. - is madly, archeology is treated in another document. However, the 4 (f) Statement does not reference this matter. If the project were to ?: land from a significant archeological resource additional! Section 4 (f) documentation would be required.
f... resent Section $4(f)$ Statement for the National Treeing gev: rally dc. s : to :llow one to judge whether the National Freeway aifgnment; would aery or impair valuable properties. For example, the 014 volford hove (site \#1\%) is described as "a small two -story, white fran house inca M1d-1800's) with a covered front porch" (p. I). With such e: gt, information on historic resources, it is difficult fox us :o fulfill our review responsibilities.

The statement should be revised to contain a brief but informed historical sketch of the project area and adequate citsci'iptions of affected structures in terms of historic or architectural importance. (3) it would be very valuable to have at least one good photograph of 2 , th es of these structures.


Raced on the information contained in this Section $4(f)$ Statement, and judging from the viewpoint of conservation of historic resources, we rate the three proposed alignments for the National Freeway in the following order:

| Alignment | Rating |
| :--- | :--- | :--- |
| AGBF | Preferable |
| AGEEKA |  |
| AGES |  |$\quad$| Less Preferable |
| :--- |
| Least Preferable |

- There is no indication whether Site \#57, Warriors' Path (which is - 11:ted on the National Register), has current recreational use (3. 1). If it does, a definite commitment to providing a pedestrian route over or under the National Freeway would appear to be appropriate. Moicover, archeological supervision ought to be provided during excavation of the road in the vicinity of the Warriors: Path.
$\therefore$ it: $1: 9$ should be marked on the two-page general area map. we helucation does not impair or destroy other valuable historical "equates.
(1) Ln's Jiszussion of Site \#32, the B. M. Winkle House, should include: in:
an estimate of visual and aural effects of alignment AGEENA on that
pic. ?est. (p. 11). The itiscussion of the proposed Williams Road historic district should in ! tit an estimate of the aural effect of alignment $\mathrm{AGBF}_{2}$ on that $\therefore$ :t :ster (p. 17).

When discussing specific historic structures, the statement generally oh cos hat Ell feasible and prudent alternatives to a taking have bee'! thoroughly explored. However, detailed proof is lacking In the id: :Hesione of sites $18,15,16,17,22,29$, and 59 and the Historic Districts of Flintstone, Breakneck Road, and Williams Road.

In no case does the Statement demonstrate energetic investigation of "ali possible planning to minimize harm." In the discussion of each historic structure, such planning is offered only tentatively as a possibility. A firm commitment to specific mitigating devices and strategies should tu presented.
X.G-14

SUMMARY COMMENTS
The statement does rot contain sufficient information to enable fulfillment of our consultative role under Section $4(f)$. We cannot concur at this rime that all feasible and prudent alternatives to avoid significant historic sites have been considered or that all possible planning to minimize hard has teen widertaken. We request the operon tunity to review further documentation 2 s indicated above concerning description of cultural resources, exhaustion of prudent ami feasible alternatives to avoid $4(f)$ land and mitigating measures sc that we can complete our consultative requirements. Please contact the Regional Director, National Park Service, 143 South Third Street: Philadelphia, Pennsyivania 19106, telephone 215-597-7013, who can provide technical assistance in this matter.

Sincerely yours,
(Sgd) Stanley D. Doremara
Deputy Assistant Secretary of the Interior
Mr. Entoil Elf 1 sky
ul: 'so: Administrator
Federal [itahwaj Administration
The Kotiada, Suite 220
71: Test 40 th Street
Ba? inure, Maryland 21211
$V^{\prime}$ Ec: $\begin{aligned} & \text { Mir. Marcy R, Hughes } \\ & \text { lu九irgland DOT }\end{aligned}$

RESPONSES:

1. No significant archeological sites have been discovered. The technical report is available at the State Highway Administration, to qualified reviewers. Copies were sent to NPS on 5/16/77.
2. Sites are indicated in the Historic Resources and 4(f) section of this document.
3. See the $4(f)$ Section of the document.
4. Section 4(f) contains a discussion of Warriors Path.
5. Alternate AGEA would have required 12 acres from the Flintstone Historic District. This alternate was dropped because of natural environmental and socio-economic concerns. See the "Other Alternates" section and the $4(f)$ section of this document.
6. See the Historic Impact and 4(f) Sections for a discussion of the B.M. Hinkle site.
7. Williams Road historic district is discussed in Section 4(f) as part of the Breakneck Valley Historic District.
8. See the Section 4(f) Statement
9. See above comment.
10. See comment number 8 above. In addition a preliminary FEIS/4(f) statement was provided to HCRS on March 26, 1980 and meetings held on April 24, 1980, to discuss issues. The results of the consultation are included in the FEIS prepred for the action.

| SUBJECT | PAGE |
| :---: | :---: |
| Acreage | VI. 9 |
| Air Quality | V.19-V. 25 |
| Air Quality Consistency | V. 25 |
| AGBF 2 Variations | III. 10 |
| Alternates |  |
| Selected | III.1 |
| Other | III. 6 |
| Appalachian Regional Development Program | II. 1 |
| Archeology | IV.31, VI. 31 |
| Borrow Site | V.l |
| Climate | IV. 19 |
| Coastal Zone Management | IV. 13 |
| Comparative Considerations | III. 12 |
| Economics | IV.l |
| Edge Effect | V. 3 |
| Enadangered Species | IV.28,V.6 |
| Energy Requirements | V.ll |
| Erosion | V. 2 |
| Existing Road, Description of | II. 3 |
| Featured Species Concept | IV. 23 |
| Floodplains | IV.13, V. 6 |
| Geomorphology | IV. 6 |
| Geology | IV. 6 |
| Green Ridge State Forest | V.8, VI. 8 |
| Historic Resources | IV.32-IV. 36 |
| Land Use Planning |  |
| Existing | IV. 3 |
| Future | IV. 3 |
| Minorities | V. 17 |
| Monitoring Program | V. 50 |
| Noise Impacts | V. 25 |
| Permits | i |
| Polish Mountain Wildand | IV.25,V.10,VI. ${ }^{\text {c }}$ |
| Population Characteristics | IV. 1 |
| Prime Farmland | IV.13 |
| Public Hearing Dates | VIII.1 |
| Relocation Impacts | V. 16 |
| Replacement Lands | V. 9 |
| Safety |  |
| Existing Road | II. 6 |
| $\mathrm{AGBF}_{2}$ | III. 4 |
| Section ${ }^{2}$ (f) | VI.l |
| Siltation | V. 2 |
| Soils | IV. 10 |
| Stream Relocations | V. 6 |
| Title VI Statement | V.l8 |
| Tri-County Council | IV. 1 |
| Topography | IV. 6 |
| Upgrading U.S. Route 40 | III. 8 |
| Vegetation | IV.19,V. 3 |
| Visual Quality | V.l0,V.ll |

PAGE
Warrior Mountain Wildlife Area ..... IV. 23
Water
Ground ..... IV. 18
Sole Source Aquifers ..... IV. 19
SurfaceIV. 13
Quality ..... IV. 13WetlandsIV. 28
WildlifeAquaticTerrestrial
Wild TurkeyIV.28,V. 5IV.28, V. 4IV.25,V. 4IV.23,IV. 25


[^0]:    *Upgrading Existing U.S. Route 40 to a fully Controlled Access Highway

[^1]:    X.B-7

