



Maryland Department of Transportation

State Highway Administration

Lowell K. Bridwell Secretary M. S. Caltrider

Administrator

December 18, 1981

Contract No. P 122-006-371

F.A.P. No. S 9393 (1)

Mary and Route 223

From Maryland Route 5 to Maryland Route 4

FINAL ENVIRONMENTAL IMPACT STATEMENT/

STATEMENT

Enclosed for your information and files is the approved Final Environmental Impact Statement/Section 4(f) for the referenced project. This document has been prepared in accordance with the Federal-Aid Highway Program Manual 107, Volume 7, Chapter 7, Section 2 dated December 30, 1974 concerning the implementation of Section 102 (a) (c) of the National Environmental Policy Act of 1969.

The proposed action consists of the improvement of approximately 4.5 miles of Woodyard Road (Maryland Route 223) between Branch Avenue (Maryland Route 5) and Pennsylvania Avenue (Maryland Route 4) and the construction of a diamond interchange at Branch Avenue.

The portion of the project from Maryland Route 5 to south of Maryland Route 4 is not included in the latest Consolidated Transportation Program (CTP). This means that this section is not funded for any additional activity. Construction of the Maryland Route 5 interchange is included in the Development and Evaluation portion of the CTP. This means the proposed interchange is funded through the design phase, however, it is not included in the construction portion of the CTP. The ability of Prince George's County to preserve right of way for the proposed improvement through local planning activities will determine to a large extent whether or not this project can ultimately be implemented.

Distribution of the Final Environmental Impact Statement/ Section 4(f) Statement is made on behalf of the Federal Highway Administration in accordance with 23 CFR 771.

HK:mcr Enclosure

cc: Mr. Lee

Mr. Schneider

Mr. Helm

Hai Kassoff, Director Office of Planning and

Preliminary Engineering

DEC 3 1 1981

REPORT NUMBER: FHWA-MD-EIS-79-05-F

Region III

Maryland Route 223
From Maryland Route 5
To Maryland Route 4
Prince George's County, Maryland

Administrative Action

Final Environmental Impact Statement Section 4(f) Statement

U.S. Department of Transportation Federal Highway Administration

and

State of Maryland Department of Transportation State Highway Administration

Submitted Pursuant to 42 U.S.C. 4332(2)(C), 23 U.S.C. 128(a) 49 U.S.C. 1653(f), 16 U.S.C. 470(f)

> M. S. Caltrider State Highway Administrator

6/15/81 Date

by:

Hal Kassoff, Director Office of Planning and Preliminary Engineering

12/2/81

Date

by

Federal Highway Administration Director, Office of Environmental Programs Region III

MARYLAND ROUTE 223

FINAL ENVIRONMENTAL IMPACT STATEMENT SECTION 4(f) STATEMENT

Preliminary November 6, 1980 Revision #1 February 26, 1981 Revision #2 May 26, 1981 4

SUMMARY

- 1. Federal Highway Administration, Region III
 Administrative Action
 Environmental Statement
 - () Draft
 - (X) Final
 - (X) Section 4(f) Statement Page 4-7
- 2. Individuals who can be contacted for additional information:

Mr. Wm. F. Schneider, Jr., Chief Bureau of Project Planning Maryland State Highway Administration 300 West Preston Street Baltimore, Maryland 21203 Telephone: (301) 383-4327 Office Hours: 8:15 AM to 4:15 PM

Mr. Roy Gingrich
Federal Highway Administration
The Rotunda - Suite 220
711 West 40th Street
Baltimore, Maryland 21211
Telephone: (301) 962-4011
Office Hours: 7:45 AM to 4:15 PM

3. Brief Description of the Proposed Action

The proposed action consists of the improvement of approximately 4.5 miles of Woodyard Road (Maryland Route 223) between Branch Avenue (Maryland Route 5) and Pennsylvania Avenue (Maryland Route 4), and the construction of a diamond interchange at Branch Avenue. Specific improvements include upgrading the present alignment to a four-lane highway and the elimination of dangerous and substandard curves and grades. Provision is made for bikeways.

Selection of this Alternate (Alternate H with a Diamond Interchange) was based on this study, comments received at a Public Hearing and comments received from cognizent government officials.

4. Summary of Impacts

The major impact of Alternate H and the Diamond

Interchange will be an improvement in traffic flow along Woodyard Road between Branch And Pennsylvania Avenues, and this, in turn, will permit developments contemplated in area Master Plans to proceed in accordance with time tables in these plans.

The selected alternate will require the taking of 54.3 acres of land, five residences and 19 commercial businesses. The No-Build Alternate requires neither additional land nor the taking of any structures.

There will be no violations of National Ambient Air Quality Standards resulting from the selected alternate.

There are no wetlands in the area that will be impacted by the selected alternate, nor will the 100 year flood plain be adversely affected.

Water quality will not be adversely impacted.

Noise will exceed Federal design noise levels in several locations, but this will occur whether or not the improvements are constructed.

Some vegetation may be lost, but permenant disruption to local wildlife is not expected to occur.

There are no endangered species of plant or animal life in the area.

Emergency services and school bus operations will be improved.

The selected alternate will require the taking of approximately one acre of land from His Lordship's Kindness, a site listed on the National Register of Historic Places, and, thus subject to the provisions of Section 4(f) of the Federal Aid Highway Act although the State Historic Preservation Officer has determined "No-Effect" for 106 consideration. Relocation of Alternate H would require the taking of one or more presently occupied homes and, therefore, is considered neither feasible nor prudent. Planning to minimize the impact includes landscaping and deeding to His Lordship's Kindness a compensatory amount of land. All concerned parties are agreeable to these mitigating actions.

5. Major Alternates Considered

Six Alternates, labeled A-F, were conceived during the initial stages of this project, and these, along withethe No-Build Alternate, were discussed at the Interim Alternates Location Meeting held on August 27, 1975. Alternates A and B represented variations of improvements to the existing road, Alternate C relocated the road, and Alternates D, E, and F were combinations of Alternates A,,B, and C. Alternate C was eliminated from further study because of adverse impacts to the Piscataway Creek floodplain and to the James Madison Junior High School. Alternate F, which shared the same alignment as the westerly portion of Alternate C, was eliminated because of impacts to the Creek. Alternates A, B, D, and E were modified to achieve the best horizontal and vertical alignment along the existing road. This became Alternate H. At the same time in response to public input, the State Highway Administrator directed that a new alternate, similar to Alternate C but modified to stay west of Woodyard Road up to Dower House Road, be studied in detail. This became Alternate G. Two interchange configurations also were developed and studied.

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As a result of these studies it has been determined that Alternate G would incur excessive right-of-way costs and that it and the cloverleaf interchange would result in severe adverse impacts to commercial developments at the Woodyard Road-Branch Avenue intersection. For these reasons Alternate H and the diamond interchange have been selected for implementation.

In addition, Alternate H has been recommended for location approval by the Prince George's County Council and by the County Executive (see letters included in Section 10 of this EIS).

6. Project Consistency with National Urban Policy

a. Urban Impacts

The implementation of the proposed improvement to Md. 223 (Woodyard Rd.) will have positive local impacts in that an inadequate section of highway will be improved.

Alternates under consideration for this project will not adversely impact the social or economic viability of the Washington, D.C. central business district. The proposed project will not incur costs to the central city for its construction, operation or maintenance.

The implementation of this project has been actively pursued by State and local agencies and officials. The project is consistent with State Highway Administration plans as well as local land use and transportation plans including the Master Plan of Highways for Prince George's County, the Mellwood Special Treatment Plan, the Master Plan for Subregion VI, the 1980 Needs Inventory, and the 1980 Maryland Transportation Plan.

Benefits accruing to the area by virtue of the implementation of this project include the increased accessibility it will provide existing and proposed local development as well as the relief it will provide to a roadway characterized by capacity and structural deficiencies. An improved roadway would also contribute to a lessening of the number of traffic accidents now being experienced along this route.

b. Energy Conservation

Inasmuch as land use projections for the corridor show a steady growth in future years, traffic demands on the existing roadway can only be expected to increase as well. As the existing roadway drops to lower levels of service, it can be expected that resultant low speeds, stop and start conditions, lack of maneuverability, and poor access will contribute to inefficient fuel use and unsafe conditions. The proposed widening will nullify these conditions.

Since traffic forecasts for the design year are independent of any alternate under consideration, energy consumption will depend, to a great deal, on capacity and geometric aspects of the roadway. The build alternates under consideration for this project propose a typical section width which would provide a comparatively greater level of service for design hour traffic volumes. The combination of decreased travel times and the improvements to flow conditions should result in a net decrease in energy consumption.

c. Transportation Systems Management

Under consideration for inclusion in this project are sidewalks, bikeways and a commuter parking facility in the vicinity of Md. 4 which is anticipated to accommodate approximately two hundred vehicles. Additionally, Prince George's County is investigating the possibility of implementing a five hundred space parking facility along Md. 5 approximately three quarters of a mile north of the intersection with Md. 223. The premised result from effective use of strategies such as these is the attainment of better levels of service on existing radial roadways as commuters forego individual use of their cars in favor of carpooling.

Another TSM strategy applicable to this segment of highway is the implementation of traffic engineering improvements. A traffic signal at the intersection of Md. 223 and Dangerfield Road is presently planned for the intersection. Additionally, the intersection of Rosaryville Rd. and Md. 223 has been recently signalized with some minor geometric modifications. Md. 223 could also be widened westerly from Rosaryville Rd. to provide a longer right turn lane for better intersection capacity and operation.

The combined efforts of these strategies on reducing capacity needs for Md. 223, however, is felt to be minimal. Due to the relatively long distances from the Woodyard area to employment centers, walking and bicycling become impractical for purposes of commuting. Ridesharing, while fuel efficient and cost efficient, is not expected to effect a large enough reduction in traffic on this segment of highway to overcome the need for additional lanes. Also, since Md. 223 functions more as a lateral route connecting the radial routes of Md. 4 and Md. 5, prime commuter routes to downtown Washington, its principal use in terms of ridesharing would be to provide access to the commuter parking facilities. The primary beneficiaries of these respective commuter parking facilities will be Md. Rtes 4 and 5.

Other than capacity related problems, additional issues compounding the inadequacy of Md. 223 are structural deficiencies and safety problems. TSM strategies will not redress these physical problems. Unless reconstruction of the roadway is undertaken, the poor horizontal and vertical alignments, the high accident locations, and the narrow lane deficiencies will remain.

d. Minority and Neighborhood Effects

Implementation of Alternate H and the diamond interchange (the selected alternates) will require the displacement of five residences and 19 commercial businesses. Relocations could affect up to 15 persons, four of whom are members of a minority group. Relocation assistance and compensation will be made available to those affected.

A benefit accruing to all users of the road is the increase in safety and efficiency of the roadway. There is no known disruption to neighborhood integrity anticipated as a result of the selection of these alternates. It should be noted that the MNCPPC alternate has been incorporated into the planning process of all recent or proposed developments.

e. Improvements to Existing Systems

Proposed improvements to Md. 223 give full consideration to use of existing facilities including the No-Build option as well as an alternate composed of appropriate TSM strategies. This practice is in conformance with Maryland Department of Transportation policy which states that, where practical, transportation needs should be met by improving existing facilities rather than constructing new ones.

Determination of the need to reconstruct this facility was based on analyses of present and future traffic volumes, future land use and population, and the existing structural deficiencies of the highway. With increased capacity available on the existing facility, the need for additional highway facilities on new locations in the corridor will be diminished for the foreseeable future.

During April and May of 1981 the old bridge that carried traffic over the Piscataway Creek was replaced with drainage structures that eliminated the weight restriction at the stream crossing but did not increase the traffic carrying capacity of the road.

7. Comments Requested From:

FEDERAL AGENCIES

- * Environmental Protection Agency Environmental Impact Statement Coordinator Curtis Building - 6th Floor Sixth and Walnut Streets Philadelphia, Pennsylvania 19106
- *Mr. Bruce Blanchard
 Director, Office of Environmental
 Project Review
 U.S. Department of the Interior
 18th and C. Streets, N. W.
 Washington, D. C. 20242

Regional Administrator
Department of Housing and Urban Development
Curtis Building
Sixth and Walnut Street
Philadelphia, Pennsylvania 19106
ATTENTION: Mr. Joseph Coffey
Director, Office of Regional
Community Planning Development

Regional Director National Marine Fisheries Service Federal Building 14 Elm Street Gloucester, Massachusetts 01930

Office of Economic Opportunity, Director 1200 - 19th Street, N. W. Washington, D. C. 20506

* State Conservationist Soils and Conservation Service Room 522 4321 Hartwick Avenue College Park, Maryland 20740

Deputy Assistant Secretary for Environmental, Affairs U.S. Department of Commerce 14th and Constitution Avenues Room 3876 Washington, D. C. 20235

^{*}Those agencies who submitted comments on the Draft Environmental Document.

FEDERAL AGENCIES

- * Commander
 Corps of Engineers
 Baltimore District
 Box 1715
 Baltimore, Maryland 21201
 Attn: NABOP F
- * Mr. Frantz K. Gimmler
 Region III, Director
 Urban Mass Transportation Administration
 Suite 1010
 434 Walnut Street
 Philadelphia, Pennsylvania 19106

Director,
Division of NEPA Affairs
U.S. Department of Energy,
Mail Station E-201, GTN
Washington, D. C. 20545

Commander U.S. Coast Guard, 5th District 431 Crawford Street Portsmouth, Virginia 23703

Associate Director for Planning Management and Demonstration Urban Mass Transit Administration 400 7th Street, S. W. Washington, D. C. 20590

* Office of the Secretary Department of Agriculture Washington, D. C. 20250

Department of Health, Education, and Welfare
Assistant Secretary for Health and
Science affairs
HEW - North Building
Washington, D. C. 20506

ELECTED FEDERAL AND LOCAL OFFICIALS

The Honorable Paul S. Sarbanes United States Senate Old Senate Building - Suite 362 Washington, D. C. 20510

The Honorable Charles McC. Mathias United States Senate Old Senate Office Building - Suite 406 Washington, D. C. 20510 C

The Honorable Gladys Noon Spellman United States Congress Cannon House Office Building - Room 308 Washington, D. C. 20515

The H onorable Arthur Dorman State Senator - Prince George's County 11107 Montgomery Rd. Beltsville, Maryland 20706

The Honorable Kay G. Bienen Delegate - Prince George's County 12411 Radnor Lane Laurel, Maryland 20811

The Honorable Timothy F. Malone Delegate - Prince George's County 4305 Josephine Ave. Beltsville, Maryland 20705

The Honorable Paulene H. Menes Delegate - Prince George's County 3517 Marlbrough Way College Park, Maryland 20740

The Honorable John J. Garrity State Senator - Pince George's County 6401 New Hampshire Avenue Hyattsville, Maryland 20783

The Honorable Anthony Cicoria
Delegate - Prince George's County
5618 Baltimore Ave.
Hyattsville, Maryland 20783

The Honorable Thomas J. Mooney
Delegate - Prince George's County
705 Elm Ave.
Takoma Park, Maryland

The Honorable Richard A. Palumbo Delegate - Prince George's County 3419 Stanford St. Hyattsville, Maryland 20783

The Honorable Thomas P. O'Reilly State Senator - Prince George's County 7107 Lois Lane Lanham, Maryland 20801

The Honorable David Bird
Delegate - Prince George's County
3402 Laurel Avenue
Cheverly, Maryland 20785

The Honorable Frank B. Pesci, Sr. Delegate - Prince George's County 8311 Fremont Place
New Carrollton, Maryland 20784

The Honorable Robert S. Redding Delegate - Prince George's County 14746 Main St. Upper Marlboro, Maryland 20870

The Honorable Edward T. Conroy State Senator - Prince George's County 12432 Shawmont Lane Bowie, Maryland 20715

The Honorable Gerad F. Devlin Delegate - Prince George's County 15518 Annapolis Rd. Bowie, Maryland 20715

The Honorable Joan Pitkin
Delegate - Prince George's County
12005 Longridge Lane
Boxie, Maryland 20715

The Honorable Charles J. Ryan Delegate - Prince George's County 3007 Bendix Lane Bowie, Maryland 20715

The Honorable Tommie Broadwater, Jr. State Senator - Prince George's County 5611 Landover Rd. Hyattsville, Maryland 20784

The Honorable Nataniel Exum
Delegate - Prince George's County
5611 Landover Rd.
Hyattsville, Maryland 20784

The Honorable Francis J. Santangelo Sr. Delegate - Prince George's County 5611 Landover Rd. Hyattsville, Maryland 20784

The Honorable Sylvania W. Woods, Jr. Delegate - Prince George's County 7816 Fiske Ave.
Lanham, Maryland 20801

The, Honorable B. W. Mike Donovan State Senator Prince George's County 6108 Old Silver Hill Rd. - Suite 216 District Heights, Maryland 20028 The Honorable Dennis C. Donaldson Delegate - Prince George's County 7405 Kipling Way District Heights, Maryland 20028

The Honorable Lorraine M. Sheehan Delegate - Prince George's County 6108 Old Silver Hill Rd. - Suite 216 District Heights, Maryland 20028

The Honorable Francis W. White Delegate - Prince George's County 33 Thurston Dr. Largo, Maryland 20870

The Honorable Peter A. Bozick State Senator - Prince George's County 5606 Lansing Dr. Camp Springs, Maryland 20031

The Honorable Charles S. Blumenthal Delegate - Prince George's County 6192 Oxon Hill Rd., Suite 362 Loyola Federal Building Oxon Hill, Maryland 20021

The Honorable Frederick C. Rummage Delegate - Prince George's County 6300 George Washington Dr. Camp Springs, Maryland 20031

The Honorable Frank J. Komenda Delegete - Prince George County 6192 Oxon Hill Rd., Suite 362 Oxon Hill, Maryland 20021

*The H onorable Lawrence J. Hogan Sr. County Executive County Administration Building 14741 Governor Oden, Bowie Upper Marlboro, Maryland 20870

The Honorable Samuel E. Wynkoop Member - Prince George's County Council County Administration Building Upper Marlboro, Maryland 20870

*The H onorable William B. Amonett Member - Prince George's County Council 9300 Pine View Lane Clinton, Maryland 20735

The Honorable David B. Hartlove Jr. Member - Prince George's County Council 9300 Pine View Lane Clinton, Maryland 20735

The H onorable Frank P. Casula Member - Prince George's County Council Philip Powers Drive Laurel, Maryland 20810

The H onorable Francis B. Francois Member - Prince George's County Council Seabury Lane Bowie, Maryland 20715

The Honorable Parris N. Glendening Member - Pringe Ceorge's County Council 6911 Oakridge Rd. University Park, Maryland 20782

The Honorable Sarah Ada Koonce Member - Prince George's County Council 5409 Chesterfield Drive Camp Springs, Maryland 20031

The Honorable Ann Landry Lombardi Member - Prince George's County Council 14501 Kent Drive Upper Marlboro, Maryland 20870

The Honorable Deborah R. Marshall Member - Prince George's County Council 2140 Brooks Drive #807 Suitland, Maryland 20028

The Honorable Gerard T. McDonough Member - Prince George's County Council 10113 Campus Way South Upper Marlboro, Maryland 20870

The Honorable Sue V. Mills Member - Prince George's County Council 5009 Woodland Boulevard Oxon Hill, Maryland 20021

The H onorable Floyd E. Wilson Jr.
Member - Prince George's County Council
Post Office Box 1285
Landover, Maryland 20785

The Honorable Thomas V. Mike Miller, Jr. State Senator - Prince George's and Charles Counties P.O. Box 218 Clinton, Maryland 20735

The Honorable William R. McCaffrey
Delegate - Prince George's and Charles Counties
12405 Lytton Avenue
Brandywine, Maryland 20613

The Honorable Joseph F. Vallario, Jr. Delegate - Prince George's and Charles Counties 6007 St. Barnabas Road Oxon Hill, Maryland 20021

The Honorable John W. Wolfgang
Delegate - Prince George's and Charles Counties
7906 Old Branch Avenue
Clinton, Maryland 20735

LOCAL GOVERNMENTAL AGENCIES

Mr. John B.Burcham
Maryland - National Capital Park and Planning Commission
County Administration Building
Upper Marlboro, Maryland 20870

* Mr. Vaughn E. Barkdoll, Acting Director Department of Public Works and Transportation County Office Building Upper Marlboro, Maryland 20870

MARYLAND DEPARTMENT OF TRANSPORTATION

Director Division of Public Affairs Maryland Department of Transportation

Mr. Clyde E. Pyers, Director Office of Transportation Planning Maryland Department of Transportation

STATE CLEARINGHOUSE

Local Governments

* Department of State Planning

* Department of Natural Resources
Department of Budget and Fiscal Planning
Department of General Services

Department of Economic and Community Development

* Department of Education

* Department of Health and Mental Hygiene Interagency Committee for School Construction Maryland Environmental Trust

* Maryland Historical Trust
Maryland Geological Survey
Department of Public Safety and Correctional
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The Draft Environmental Document was sent to the Environmental Protection Agency on December 14, 1979

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ENVIRONMENTAL IMPACT STATEMENT

WOODYARD ROAD FROM BRANCH AVENUE TO PENNSYLVANIA AVENUE

1. NEED FOR IMPROVEMENT

From its origin in southwestern Prince George's County, Maryland, Route 223 runs in a generally northeastward direction and terminates at Pennsylvania Avenue (Maryland Route 4) east of Andrews Air Force Base, Figure 1-1. Known as Piscataway Road west of Branch Avenue (Maryland Route 5) Route 223 becomes Woodyard Road east of that point. This Project consists of the upgrading of Woodyard Road between Routes 4 and 5 to the design standards of a Major Highway, Figure 1-2, in accordance with the MNCPPC Master Plan of Highways for Prince George's County (3)*, and in conformance with Master Plans for the area (1,2). The State classification is Minor Arterial.

1.1 PLANNING BASIS

The need to improve Woodyard Road to a four-lane highway was first documented in the Non-Critical Section of the 1968 Twenty-Year Highway Needs Study. Its status was changed to "critical" in the 1971 revision of the study, and it has remained in this category in subsequent revisions of the document. The Non-Critical Section of each Twenty-Year Needs Study since 1973 has indicated the desirability of increasing the width of Woodyard Road to six lanes some time beyond the twenty-year planning period.

The Master Plan for Subregion VI (2) (adopted and approved July, 1973) proposes the upgrading of Maryland Rte. 4

^{*} Numbers in parentheses () refer to documents listed in the Bibliography.



FIGURE I-I

PROJECT LOCATION

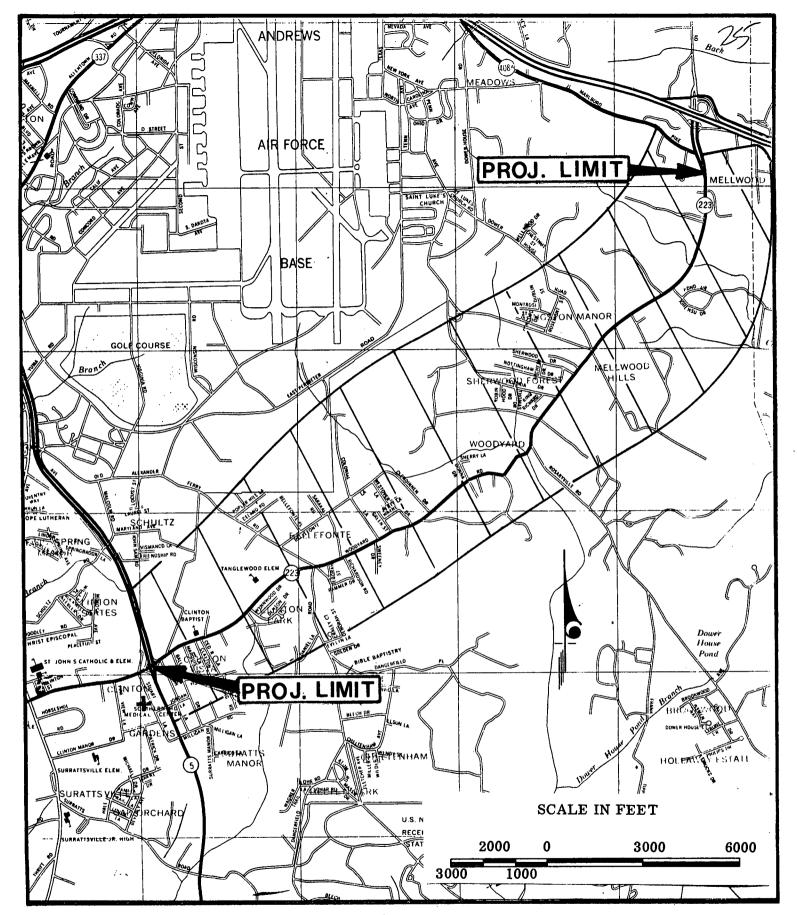


Figure 1-2
VICINITY MAP
MARYLAND ROUTE 223-WOODYARD ROAD
MD. ROUTE 4 TO MD. ROUTE 5

to freeway status, and indicates improvement and relocation of Dower House Road and Marlboro Pike. Similarly, the Master Plan for Subregion V (1), (adopted and approved February, 1974) suggests a concept under which the proposed Southeast Freeway and Branch Avenue would serve as parallel freeways. At the same time it recognized the inadequacy of the intersection between Brandh Avenue (Md. Rte. 5) and Woodyard Road. The project is included in the 1980 Needs Inventory as an "MTP Category 2" and also is in the Adopted and Approved (4/80) Melwood Special Treatment Area Plan.

Thus, in the long-range highway plan for Prince George's County, Woodyard Road might become a link in a north-south route that would extend from the southwestern part of the County, through Enterprise Road which is also scheduled for upgrading, and untimately would connect with Md. Rte. 193 in Montgomery County. This long range plan, however, is not implementable within the next 20 years. Moreover, by its nature, that type of improvement would require additional environmental studies covering the entire length of the project.

Of immediate concern is the need to improve transportation between Maryland Routes 4 and 5, and to rectify the deficiencies of the present road as described in the following paragraph. These improvements are planned in accordance with the Continuing and Comprehensive Coordination Process (the 3-C Process) between all jurisdictions and governmental agencies involved in the planning of a highway project. All concerned jurisdictions and governmental agencies have the opportunity to participate in and approve planned highway projects.

1.2 DEFICIENCIES OF THE PRESENT ROAD

Woodyard Road in its present condition cannot attain the objectives outlined for it in the preceding section because of the following deficiencies.

- 1. The present traffic volume on Woodyard Road operates at Level of Service D (as defined in Appendix A), and traffic forecasts indicate that Level of Service E can be expected by 1986. Traffic cannot move freely under this condition. (See Appendix F for traffic data)
- 2. Lane widths are less than the 12 feet required by current highway standards.
 - 3. Grades of up to 8% exist.
- 4. A narrow two θ lane bridge over the Piscataway Creek impedes traffic.
- 5. Woodyard Road takes an abrupt jog at the Rosaryville Road intersection.
 - 6. Drainage is poor.
- 7. There are no provisions for pedestrian or bicycle traffic.
- 8. At four locations vertical alignment is substandard, and at six locations horizontal alignment is substandard.
- 9. Overhanging vegetation reduces effective sight distance at several locations.

In January, 1980 the road surface was improved, narrow shoulders were provided along most of its length, and a traffic signal was added at the intersection of Woodyard and Rosaryville Roads. A new structure over the Piscataway Creek has removed weight restrictions at this stream crossing. These changes have improved the quality of the existing road, but they have done little to increase its capacity. Capacity required to accomodate projected traffic volumes can be obtained only by increasing the number of lanes.

A summary of accident rates and costs compiled by the Maryland Department of Transportation, bureau of Traffic Statistics, is included in Appendix B. Traffic data are in Appendix F.

1.3 HISTORICAL BACKGROUND

The strategic location of the Woodyard Road area between the Patuxent River to the east and the Potomac River to the west has placed it squarely in the middle of the historical development of Prince George's County. Many facets of the present state of development of the area can be traced to these historical roots although only more recent history will have an impact on future developments.

Of special significance to the current environment of the Woodyard Road area was the establishment of a military airport in 1942 on land acquired from residents of Prince George's County. Originally named Camp Springs Army Airfield, it became Andrews Field in February, 1945 in honor of the late Lieutenant General Frank M. Andrews, and in 1947, with the establishment of the Air Force as a seperate unit, the name was changed to Andrews Air Force Base. Since World War II Andrews has served as the headquarters base for the Continental Air Command, and Military Air Transport Service (now the Military Airlift Command). 1960 Andrews has been assigned several important missions ranging from Presidential support, proficiency flying and training, to aeromedical evacuation and medical services. As the "Aerial Gateway to the Nation's Capital" Andrews has become firmly established as the main port of entry for foreign military and government officials enroute to Washington, D.C. and the nation. It has had a profound influence on the economic and social development or the surrounding areas. This is discussed in further detail in Section 2.2.2.6.

1.4 CURRENT STATUS AND FUNDING

The improvement of Woodyard Road appeared in the 1980-1985 Consolidated Transportation Plan but was omitted from the 1981-1986 edition. Since no funds are available

for project engineering (design), right-of-way acquisition, or construction, implementation of Alternate H is expected to be many years away. The only impact for the foreseeable future, therefore, will be the establishment of setbacks from the proposed right-of-way limits in order to accomodate future highway improvements.

The interchange with Maryland Route 5 remains in the CTP as a candidate for construction.

The Project is consistent with the following:

- (a) Master Plan for Subregion V
- (b) Master Plan for Subregion VI
- (c) COG Transportation Improvement Plan
- (d) Three-C Process

2. DESCRIPTION OF THE PROPOSED ACTION

The action proposed to attain the objectives outlined in Section 1 and to rectify the deficiencies of the present road consists of improvements to Woodyard Road (Maryland Route 223) between Branch Avenue (Maryland Route 5) and Pennsylvania Avenue (Maryland Route 4).

Specifically, the following improvements were considered under this project.

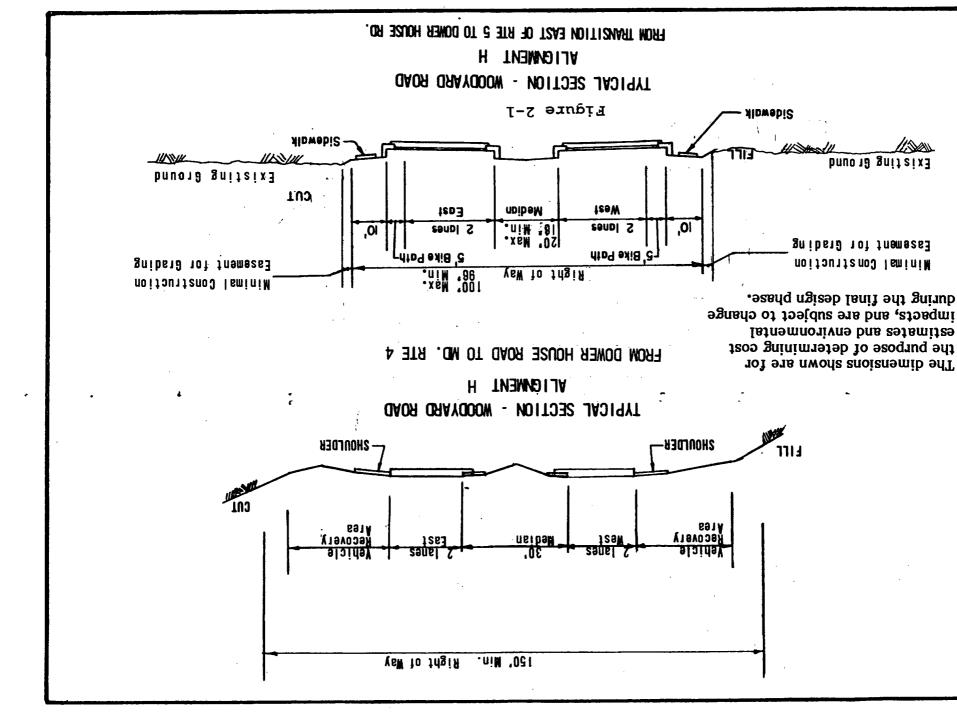
- 1. Upgrading Woodyard Road to a four-lane high-way with typical cross sections as shown in Figure 2-1.
- 2. Realignment to eliminate dangerous and substandard curves and grades.
- 3. An interchange at Branch Avenue.

The total length of the Project is approximately 4.5 miles.

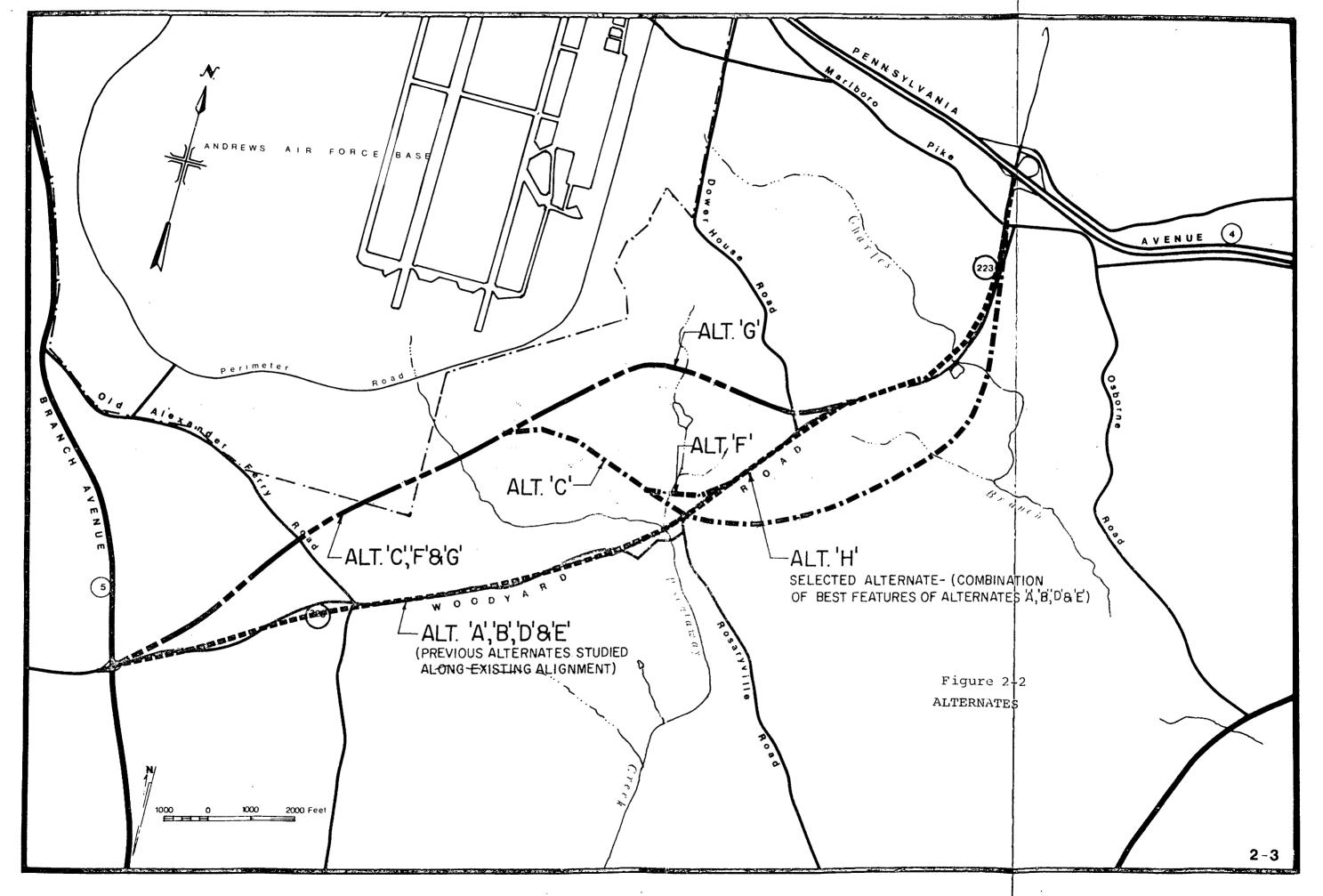
2.1 ALTERNATES CONSIDERED

During the initial stages of this study six alternates were conceived. They were labeled A - F and are depicted in Figure 2-2.

Alternate A, developed by the Maryland-National Capital Park and Planning Commission, generally followed the existing alignment, deviating from it where necessary to eliminate dangerous or substandard curves and grades. Alternates B, D, and E represented variants of Alternate A designed to provide different environmental advantages or more efficient highway design. Alternate C represented an attempt to remove traffic from the vicinity of Woodyard Road homes, thereby mitigating some of the impacts of the other



2-2



alignments. Since it was a major deviation from the MNCPPC alignment it did not conform to area Master Plans.

Alternate F connected Alternate C to Alternates along the existing alignment at Rosaryville Road.

These Alternates were studied in sufficient detail and were presented at the Interim Alternates Location Meeting held on August 27, 1975. As a result of comments received at that meeting, suggestions and comments from cognizent governmental and private agencies and detailed evaluation by the State Highway Administration, two new Alternates were developed. Alternate G combined the best features of Alternates C and F, and Alternate H combined the best features of Alternates A, B, D, and E.

Concurrently, two interchanges were developed for the Woodyard Road-Branch Avenue intersection. A full diamond and a partial cloverleaf were designed so that either interchange could be used with either Alternate.

The two alternate alignments and the two alternate interchanges received intensive study and were discussed at a Public Hearing held in the James Madison Junior High School on February 7, 1980. A summary of comments heard at that meeting are included in Section 6 of this report.

During the months of April and May, 1981 it was discovered that the old, underdesigned bridge carrying Wood-yard Road over Piscataway Creek was overstressed and for safety reasons had to be removed. The old bridge was replaced with culverts which carry two 11' lanes with concrete barriers across the Piscataway Creek. This temporary measure eliminates the need for weight restrictions at the stream crossing, but the new bridge still has a limited capacity due to narrow lane widths and lack of adequate lateral clearances.

Based on the results of the project study and after due consideration of comments from citizens, public officials and governmental and private agencies, the Project Planning Team recommended that location approval be given to Alternate H and the diamond interchange. A statement of this decision and the reasons therefore is contained in a Project Status Report dated July 17, 1980 and included in Section 7 of this report.

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NOTES: (1) Traffic for the selected Alternate has been re-evaluated to consider only the facility between MD Rte. 5 and MD Rte. 4.
(2) Cost estimates for Alternate 'H' and the Diamond Interchange have been updated to 1981 costs.
(3) Interchange costs as shown are in addition to mainline costs.



2.2 DESCRIPTION OF THE ENVIRONMENT

The environment of the Woodyard Road area is a changing interrelationship of land use patterns and the socioeconomic conditions that have created them. These are described in the following sections along with brief surveys of the biota found in the area, historic and archeologic sites, parklands, hydrology and water quality, ambient air quality and noise. The impact of each alternative highway alignment, described in detail in Section 5, upon each of the above significant environmental functions is described in Section 4.

2.2.1 Socio-Economic Profile

The section of Woodyard Road proposed for improvement in this Project is included in two different Planning Areas of Prince George's County. These are identified as Subregion V and Subregion VI in Figure 2-3, and Master Plans have been adopted and approved for each - Subregion V in February, 1974 (1), and Subregion VI in July, 1973 (2). The two Master Plans, with statistics updated where possible, form the basis for the Socio-Economic Profile of the area and for the impact assessment that follows.

The two Planning Areas, in turn, are subdivided into neighborhood communities, and Woodyard Road traverses the communities of Tanglewood and Mellwood as shown in Figure 2-4. Tanglewood lies in Subregion V, and Mellwood lies in Subregion VI.

Thus the immediate environment of Woodyard Road can be identified with the two neighborhood communities,

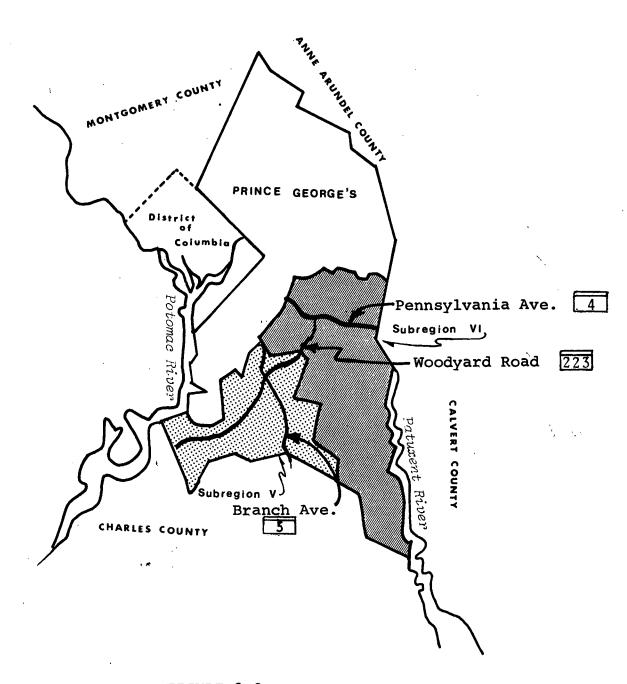
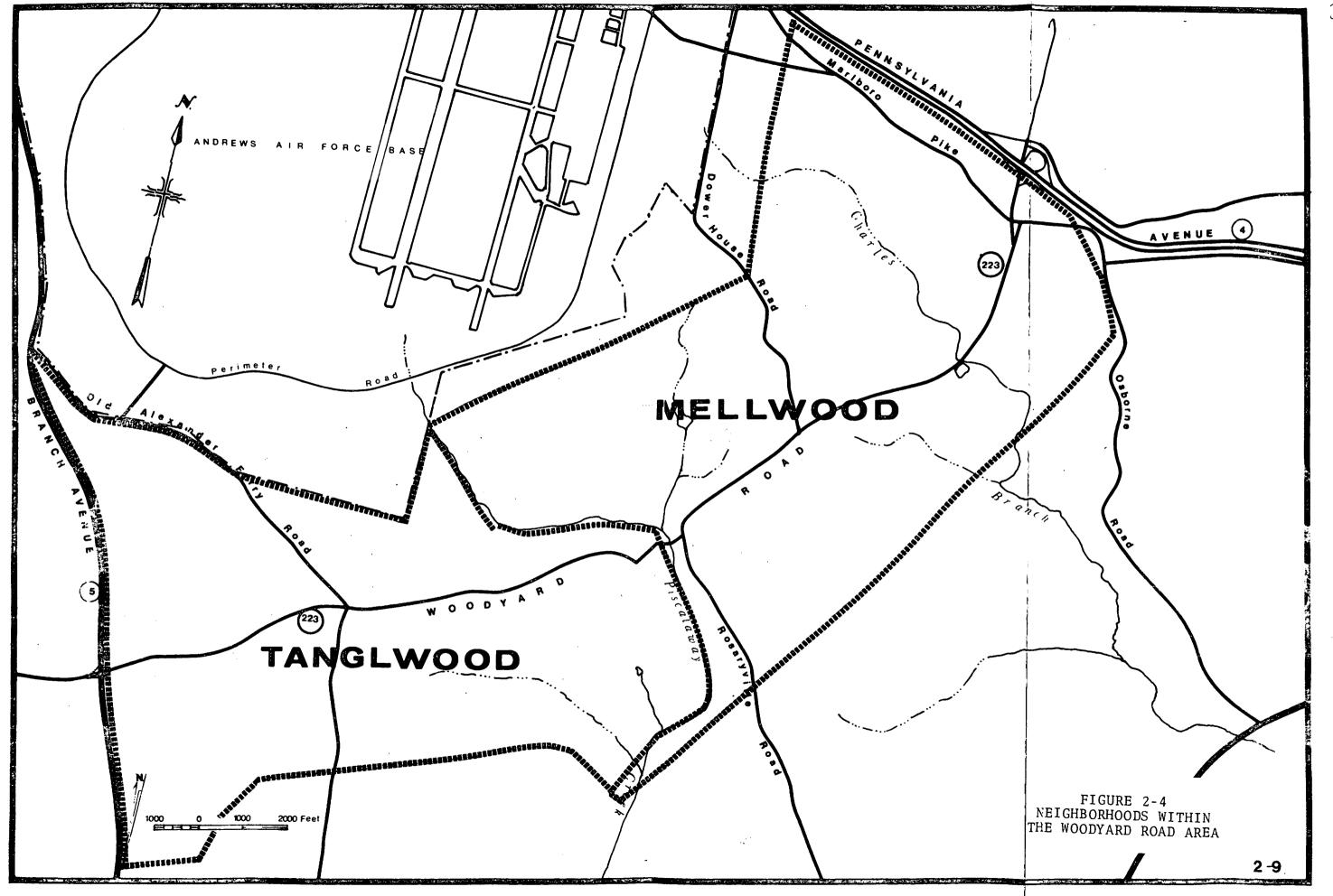


FIGURE 2-3
PLANNING AREAS



but the road, because of its position in the two Planning Areas and its importance to the County highway network, is likely to have effects that can reach beyond the immediate environment.

2.2.1.1 Population

In 1972 Tanglewood and Mellwood together included less than one percent of the population of Prince George's County, Table 2-2. The project area population is expected to increase by 120% and equal 1.5% of the total County population by the year 2000. The increase is attributable, in part, to a planned major community activity center in the Tanglewood neighborhood.

No minority communities exist in the area.

The population is characterized by a median age that is similar to other County residents, Table 2-3, but which includes a significantly greater percentage of residents under the age of 14.

These data define a population that is young, that includes a large percentage of school-age children, and that is expected to increase at a rate faster than the County population. The conclusions from the data, in turn, illustrate the need for continual improvements in the transportation network. The need for improved transportation is discussed in Section 1.

2.2.1.2 Income

The median family income in the Woodyard Road corridor in 1969, the last year for which data are available, was \$13,405 (1970 Census). The median income for a family in the Washington Metropolitan area was \$12,933, and the corresponding figure for Prince George's County was \$12,450, thus indicating the comparison between living standards in the project area and the County as a whole.

TABLE 2-2
POPULATION - PRESENT AND FORECAST

		197	2	2000		
Area	i	Number	% of County	Number	% of County	
Tanglewood *		3,500 ¹	0.51	12,900 ¹	1.08	
Mellwood *	,	2,900 ¹	0.42	5,200 ¹	0.44	
Subregion V	•	26,700 ¹	3.87	277,800 ¹	23.31	
Subregion VI		21,700 ¹	3.14	88,300 ¹	7.41	
Prince George's County		690,700 ²		$1,192,000^3$		

Notes:

- 1. Maryland-National Capital Park and Planning Commission 1972
- 2. MNCPPC estimate based on 1970 Census
- 3. Derived from MNCPPC "Wedges and Corridors"

TABLE 2-3
AGE DISTRIBUTION - 1970

Age	Subregion V (%)	Subregion VI (%)	County (%)
0-5	12.3	13.0	12.7
6-14	24.7	24.4	19.4
15-24	14.3	15.3	19.5
25-34	14.6	14.4	16.8
35-44	14.1	13.2	12.0
45-54	r o.3	9.3	10.0
55-64	₄ 5.4	5.7	5.6
65+	4.3	4.7	4.0
Median Age	23.2 years	22.4 years	23.3 years

^{*} MNCPPC population figures for 1970 and 1978 are 7976 and 9270 (estimated) respectively for the Tanglewood-Mellwood Community. Individual neighborhood and Subregion figures are not available.

2.2.1.3 Housing

Most people in the area live in single-family owner-occupied homes. This is illustrated in Table 2-4 which also shows comparative data for the entire County and for the surrounding metropolitan area.

TABLE 2-4
SINGLE-FAMILY AND OWNER-OCCUPIED HOUSING

	Single-Family (Percent of all housing)	Owner-Occupied (Percent of all housing)
Woodyard Road Corridor '	97%	74%
Prince George's County	56%	48%
Washington Standard Metropolitan Statistical Area	55%	44%

Source: 1970 Census of Population and Housing

The Woodyard Road corridor, therefore, is characterized by single-family and owner-occupancy rates that are significantly above the County and regional levels.

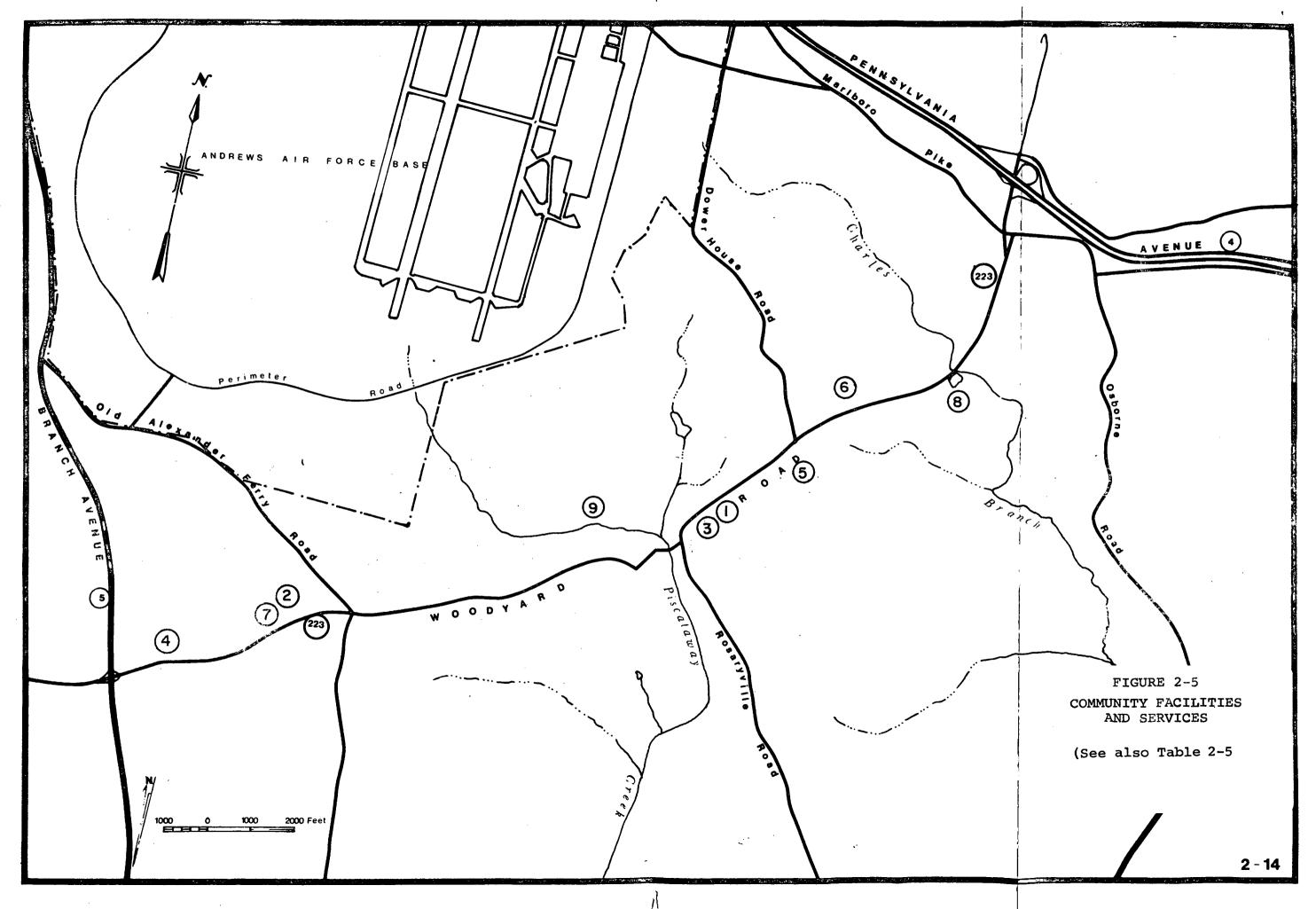
If the median values for housing are adjusted upward in accordance with the increase in the consumer price indes since 1970, the 1978 figure for single-family, owner-occupied residences in the Woodyard Road corridor and in the County would be over \$50,000. Inflation and increased demand will continue to force upward the value of houses. The population increase forecast in Section 2.2.1.1, Therefore, is likely to come from middle to high income level persons.

2.2.1.4 Community Facilities and Services

Major facilities serving Mellwood and Tanglewood are listed in Table 2-5 and their locations are shown in Figure 2-5. The fire station nearest to the area is located

TABLE 2-5 COMMUNITY FACILITIES AND SERVICES

Description .	Map Location Number (Figure 2-5)
Mellwood Elementary School	1
Tanglewood Elementary School	2
James Madison Jr. High School	3
Clinton Baptist Church	4
Mellwood Church of the Nazarene	5
Bible Baptist Church	6
Tanglewood Park	7
Mellwood Pond	8
Stewart Manor Recreation Center	9



on Piscataway Road at Old Branch Avenue. Also on Piscataway Road just west of present Branch Avenue is the Clinton Community Hospital. A County police station is located on Md. Rte. 223 just east of Md. Rte. 5.

2.2.2 Land Use Planning

2.2.2.1 Residential Land Uses

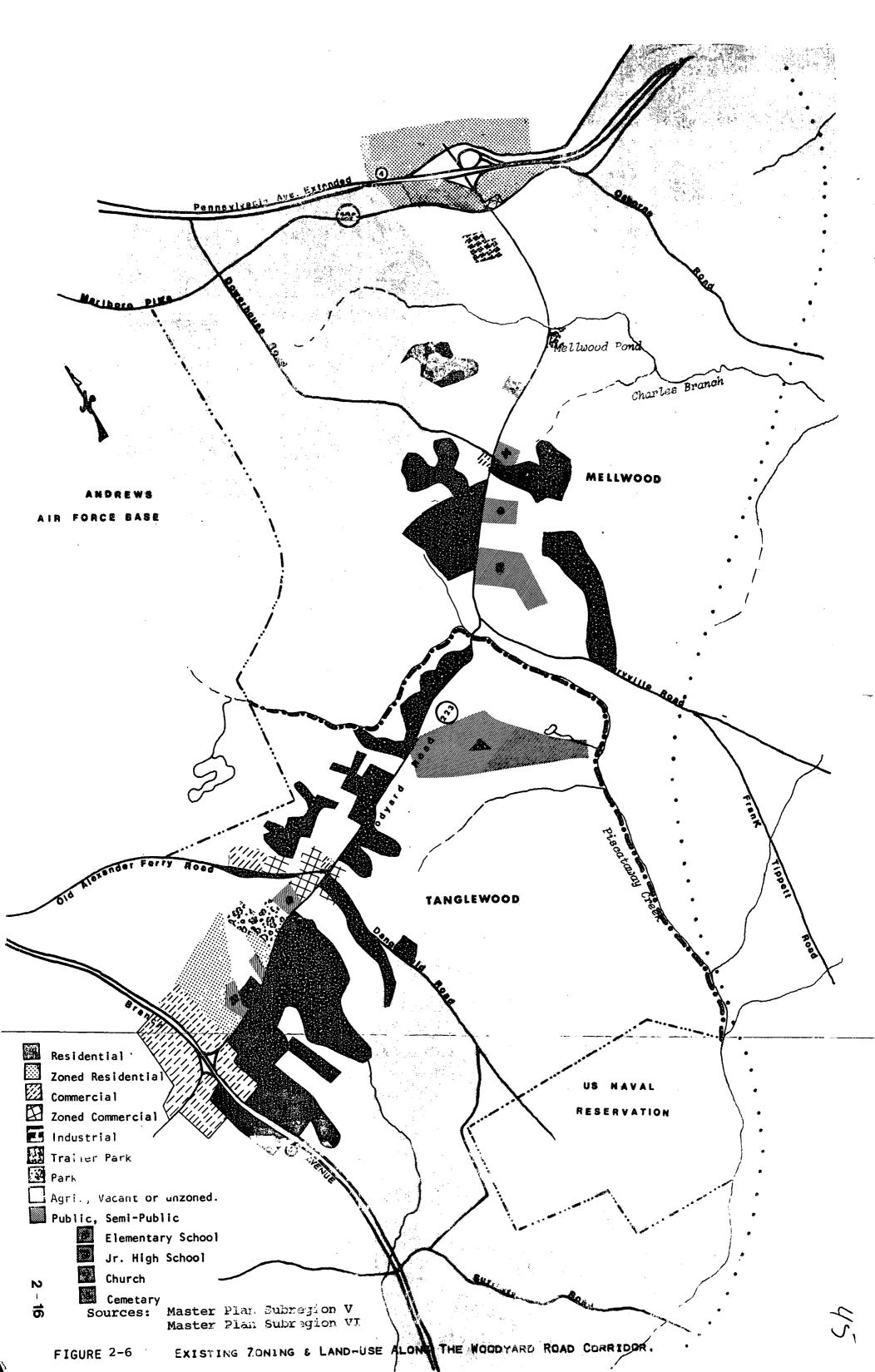
The Woodyard Road area is predominantely residential in character as shown in Figure 2-6. There are eleven subdivisions named Ballard, Clinton Vista, Bunbury Hills, Clinton Park, Bellefonte, Keyser Estates, Estonian Estates, Sherwood Forest, Mellwood Hills, Kingston Manor, and Queen's Wood. The first six subdivisions are from ten to fifteen years older than the last five.

Residential development began in the 1950's at Branch Avenue and moved northward. The earlier subdivisions consist of modest dwellings of brick and frame construction situated on quarter acre lots. The more recent subdivisions include larger and more expensive multi-story colonial style houses on relatively large lots. In-filling between the older subdivisions has also included even larger and more expensive homes.

Beyond the Queen's Wood and Mellwood Hills subdivisions, near the Old Marlboro Pike, a more rural area remains. Scattered wood frame houses and farm buildings are indicative of the original character of this area prior to post-war residential development. A mobile home development, located in the area between Dower House Road and Old Marlboro Pike, provides housing for lower income families.

2.2.2. Commercial Land Uses

Commercial uses are confined to four areas. A small neighborhood shopping center is situated in the south-



east quadrant of the intersection of Branch Avenue and Wood-yard Road. This retail center is approximately ten years old, and consists primarily of convenience stores. Mixed commercial uses are scattered along Old Alexander Ferry Road, interspersed with low density detached single-family dwellings. Commercial uses include office, retail, and warehousing. Several gas stations and two neighborhood convenience stores are located around the intersection of Old Alexander Ferry, Woodyard and Dangerfield Roads. Another neighborhood convenience store is located at the intersection of Dower House and Woodyard Roads.

2.2.2.3 Public Lands

Public lands and quasi-public lands include a large park in the Tanglewood area, an undeveloped park near Andrews Air Force Base, and Mellwood Pond. The Tanglewood Park is the largest of the three. The project will have no 4(f) involvement with any of these sites.

2.2.2.4 Land Use Plans

The Master Plans for Subregions V and VI designate residential areas with major community centers to be located near Branch Avenue and near Pennsylvania Avenue. The Branch Avenue center is partially developed, and includes some commercial establishments. Some commercially zoned land is to be reconsidered for residential development.

A village activity center, to be known as the Mellwood Activity Center, is currently proposed in the Subregion VI Master Plan to be located in the northeast quadrant of Rosaryville Road and Woodyard Road. It is expected to include a supermarket or variety store and retail service outlets. Recreational facilities and medical and dental offices are suggested additional uses.

An existing commercial center at Woodyard Road

and Dangerfield Road is planned to be retained as a neighborhood convenience and is not to be expanded beyond what is permitted by existing zoning.

The remainder of the area is planned for low and medium density residential development in Tanglewood, and for low density residential development in Mellwood. The northern section of Mellwood is intended to remain in open space in the immediate future, with the level and timing of future residential development dependent upon the rate of population growth experienced in the southern section of the community. Thus, future land use will not deviate significantly from present land use as shown in Figure 2-6.

2.2.2.5 Growth Management Controls

Current land management controls operational within the area are confined principally to zoning and subdivision regulations. The intent of this control through zoning is illustrated in Figure 2-6.

2.2.2.6 Potential Conflicts

Land use planning is influenced greatly by the Andrews Air Force Air Installation Compatible Use Zone (AICUZ). This document, prepared by the Air Force in December, 1974, is designed to promote land use development near the airfield in a manner which not only will protect the adjacent community from the noise and safety hazards associated with aircraft operations, but also will preserve the operational integrity of the airfield. Thus, the AICUZ was published several months after the Master Plans for Subregions V and VI, and inevitably, several conflicts were uncovered. Specifically, the AICUZ notes (page IV-2) that in Subregion V low-density residential development has already occurred in

districts which are incompatible with residential development. Most of the area has been planned for future industrial and medium-density residential development, and these uses are compatible with the AICUZ. In Subregion VI the proposed Mellwood Local Activity Center falls within a zone requiring noise level reduction measures to achieve compatible residential uses. All areas west of the Mellwood Local Activity Center are incompatible with any residential development. The proposed improvements to Woodyard Road are not, in themselves, incompatible with the AICUZ.

It would seem prudent to incorporate or at least to be cognizant of these factors in the implementation of all area land use plans.

Alternate H, by virtue of its location along the MNCPPC alignment (see Section 4.1.2), is in conformance with Master Plans for both Subregions V and VI. Alternate G deviates from these plans and would have required an amendment or some other action prior to the construction of it.

In all other respects the project is consistent with area Master Plans.

The entire project was included in the 1981-1985 Transportation Improvement Program, but only the interchange with Md. Rte. 5 is included in the draft 1982-1986 document.

2.2.3 Geology and Soils

Prince George's County is located almost entirely within the Atlantic Coastal Plain Physiographic Province. The Fall Zone, which represents the boundary between the Coastal Plain and the Piedmont Plateau, cuts through a small section in the northwestern portion of the County bordering Montgomery County. The Coastal Plain dominates the geology of the Woodyard Road area. It is underlain by a series of southeasterly dipping layers of unconsolidated sediments of gravel, sand, silt and clay. These sediments range in age from the Cretaceous Period in the northern part of the County to the Recent Period in the flood plains.

Brandywine gravel is the geologic unit exposed along much of the Woodyard Road corridor. This unit is approximately 20-40 feet thick and consists of materials deposited as ancient alluvial fans in the Pliocene Age. The Brandywine formation has been extensively mined for gravel in Prince George's County, There are numerous active and inactive gravel pits in the area.

Charles Branch and Piscataway Creek have eroded the Brandywine gravel exposing the older (Miocene) Chesapeake Group. The Chesapeake Group is approximately 80 feet thick and consists of light gray diatomaceous earth and fine yellow sand with a thin pebble bed of reworked glauconitic sand at the bottom.

The soils within the Woodyard Road area, Figure 2-7, generally belong to one of four associations and have the following characteristics:

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Westphalia-Evesboro-Sassafras Association - deep, well-drained to excessively drained soils of uplands that are mostly moderately sloping to steep.

<u>Bibb-Tidal Marsh Association</u> - poorly drained soils of the flood plains and soils in marshes that are subject to tidal flooding.

<u>Sassafras-Croom Association</u> - gently sloping to steep, well-drained, dominantly gravelly soils, some of them with a compact subsoil and substratum.

<u>Beltsville-Leonardtown-Chillum</u> <u>Association</u> - moderately deep, well-drained to poorly drained, cominantly gently sloping soils that have a compact subsoil or substratum.

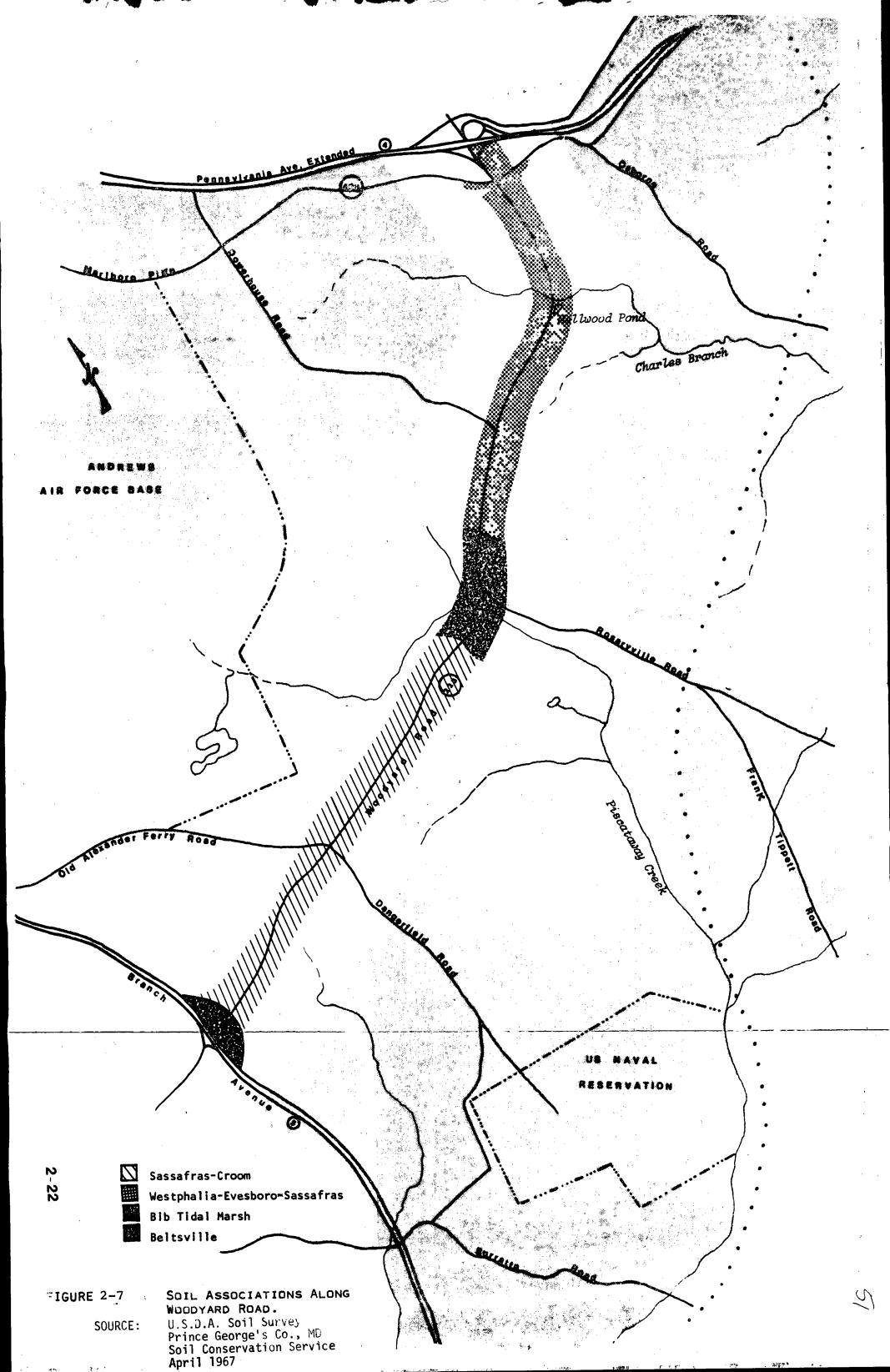
These soil associations are located along Woodyard Road as shown in Figure 2-7. Westphalia, Sassafras and Chillum soils are prime agricultural soils, but the selected Alternate (Alternate H) will have little impact on them since it follows the present alignment of Woodyard Road.

2.2.4 Biology of Woodyard Road

2.2.4.1 Terrestial Biology

The vegetation along Woodyard Road may be divided into three distinct categories: forested urban areas, farmland and hedgerows, and landscape vegetation.

The forested urban areas are bounded by Maryland Route 5 and Rosaryville Road, and contain two extensive woodlands. The one to the north of Woodyard Road extends from the Chesapeake and Potomac Telephone Company building near Tanglewood Park to the southern boundary of Andrews Air Force Base and then eastward to Piscataway Creek at Rosaryville Road. Parts of this woodland may be seen from Woodyard Road at Tanglewood Park and also between Alexander



Ferry Road and Colonial Lane. The woodland south of Woodyard Road extends from Cedar Lane south to the U.S. Naval Reservation and then east to Piscataway Creek. It borders Woodyard Road from Sweeny Drive to the intersection of Woodyard and Don Drive. The two woodlands meet at the intersection of Rosaryville Road and Woodyard Road along Piscataway Creek.

These are mature woodlands dominated by various species of oak. Virginia pine occurs in disturbed areas or where abundant light is available, such as those areas that border the road. In the stream valley of the Piscataway, river birch and sycamore are important species.

The farmland and the areas containing hedgerows are bounded by Rosaryville Road and Maryland Route 4. The vegetation, which is confined to the small area between the road and farms in the area that cannot be cultivated, consists of scrub trees and weeds, except near stream bottoms. Here the vegetation is thin, but species appear that are also found in the stream valley of Piscataway Creek. This type of Vegetation is present at Charles Branch near Mell-wood Pond.

Ornamentals are largely confined to the area of Woodyard Road between Route 5 and Rosaryville Road. For the most part, singly planted trees dominate lawns throughout the area. North of the sharp curve at Rosaryville Road, however, there are many trees growing in front of the dwellings. These are actually a continuation of the forest north of Woodyard Road, but because of the proximity of the dwellings they have been classified as landscaped vegetation.

Throughout the Woodyard Road area, wildlife habitat is plentiful. Fringe areas between forest and field provide food and protection for such animals as rabbits, deer and many birds. Mast produced by oak trees serves as food for raccoon, opossum and many other water animals. No threatened or endangered plant or animal species are known to be in the area.

(See letter from U.S. Fish and Wildlife Service, Section 7

Of special concern is the large willow oak at the corner of Woodyard and Dower House Roads. The tree is over 200 years old and stands about 105 feet tall. It withstood the effects of soil compaction when Woodyard Road was first constructed, it has endured the effects of air pollution, and currently it is plagued with a growth of ivy that provides a path for diseases and fungi that may enter the tree where roots from the vine penetrate the bark. All of these effects are exacting their toll and the tree is exhibiting signs of dying. Further root compaction brought about by construction of the selected alternate will hasten this process.

The tree is a local landmark, but it is not recognized as a historic site by the Maryland Historical Trust, nor is it among the Champion Trees of Maryland listed by the Maryland Department of Natural Resources.

2.2.4.2 Aquatic Biology

Two streams and two ponds within the study area support fish and other aquatic organisms. Biological data for these bodies of water are discussed below. No rare or endangered species are known to exist in the area.

Piscataway Creek flows south-eastwardly from its origin on the Andrews Air Force Base. It is shallow through much of its length, but it has several deep pools. Although the Maryland Department of Natural Resources has no fish sampling data from the immediate area it is known that anadromous fish spawn downstream in Piscataway Creek and may migrate into the study area. Fish that may be found in the stream include bullheads, shiners and minnows.

Charles Branch flows through the study area near the Marlboro Pike. No fish sampling data are available, but the stream is so small (three to four feet in width) and shallow that it is not likely to offer habitat for fish other than minnows.

Mellwood Pond, a recreational facility owned by the Maryland National Capital Park and Planning Commission, is on a 3.35 acre site which is stocked with trout each year by the Maryland Department of Natural Resources. The pond is man-made and is filled by springs and surface drainage.

An unnamed pond by Colonial Lane is fed by a tributary of the Piscataway Creek. This man-made impoundment is approximately one-half acre in size and has a resident fish population. The habitat includes aquatic macroscopic plants and invertebrate animals.

2.2.5 Hydrology and Water Quality

2.2.5.1 Piscataway Creek

Woodyard Road crosses Piscataway Creek close to its upstream limit where periods of no flow can be expected. Based on the assumption that runoff is evenly distributed in time and area throughout the Piscataway Creek drainage basin, flow data from a downstream gaging station at Piscataway, Maryland indicate that the average flow of the Piscataway at Woodyard Road is approximately 9 cubic feet per second (cfs). Thus, it is normally a placid, slow flowing stream, but thunderstorms during the summer months often bring heavy rains that cause local flooding. Data from a flood information study for an area approximately two miles downstream were used to calculate the flow expected during a 100 year storm such as Hurricane Agnes in 1972. these conditions streamflow at this downstream location could be expected to increase to approximately 6,600 cfs, and the stream might be as much as 8 feet overbank (24). no discharge data for the area where Woodyard Road crosses Piscataway Creek. The structure for crossing the Piscataway will be designed to accomodate the 100 year flood. The interim improvement just recently completed accomplishes this.

Water quality data obtained by the Prince George's County Department of Environmental Health from a sampling point approximately five miles downstream from the highway corridor indicate that water quality standards established by the State of Maryland were not exceeded on Piscataway Creek in this location. Knowing that runoff from Andrews Air Force Base is a significant source of stream flow, however, various contaminants such as petrochemicals, heavy metals, and materials derived from the decomposition of paved surfaces are expected to be present in the stream.

2.2.5.2 Charles Branch

Charles Branch is a small, intermittent stream originating just west and north of Woodyard Road. Water quality data obtained from the Prince George's County Department of Environmental Health approximately five miles downstream from its intersection with Woodyard Road indicate that the Maryland standard for fecal contamination has been exceeded at this sampling point. Seepage from on-site sewage systems may be the cause of these high fecal coliform counts.

2.2.5.3 Mellwood Pond

Mellwood Pond is fed by a very small spring and by runoff from surrounding hillsides. The pond is stocked for "put and take" fishing, and the MNCPPC has indicated the low dissolved oxygen in the pond has resulted in several fishkills. No other hydrologic or water quality data are available for Mellwood Pond.

2.2.5.4 Groundwater

Two aquifers, the Brandywine and Bryn Mawr gravels, are traversed by the highway. These are relatively minor aquifers and improving the highway will have little impact on their hydrologic characteristics.

2.2.5.5 Flood Plains

The only flood data available for the Project area are in a flood prone area map prepared by the U.S. Geological Survey based on reconnaissance and on information obtained from the Corp of Engineers Department of the Army. (See the Correspondence Section for a copy of the map and correspondence from the Department of the Army.) The floodplain elevations have been transposed to the figure on page 4-3.

Based on the preceeding information it has been determined that there are no homes or improvements within the designated flood prone area. Prince George's County is developing a plan that would prohibit any future development within the designated floodplain areas.

The proposed new structure will be designed to provide for the same volume and rate of flow that will result from the 100 year flood. Data on the volume and rate of flow of the Piscataway at this point are lacking, but will be developed prior to final design of the structure. The structure will be designed to withstand maximum flood flow with minimum damage. The proposed structure will have no effect on the highway or on the characteristics of the existing flood plain.

The flood plain encroachment is estimated to be approximately 2 acres. The selected alternate will have no longitudinal encroachment on the floodplain. There will be no adverse impact to beneficial floodplain values, and there will be no direct or indirect support to further development within the floodplain. This encroachment is not significant, per the requirements of FHPM 6-7-3-2; therefore, a floodplain finding is not necessary.

Since the project traverses the Piscataway Creek a 404 permit from the Corps of Engineers and approval of the Fish and Wildlife Service will be required. Coordination with the COE will continue.

2.2.5.6 Wetlands

There are no wetlands in the area that will be impacted by the selected Alternate.

2.2.6 Ambient Air Quality

Prince George's County is included within the National Capital Air Quality Control Region (AQCR) which also includes Montgomery County, the District of Columbia, and the Northern Virginia area. The region has been designated an Air Quality Maintenance Area (AQMA) for suspended particulate matter and photochemical oxidants. AQM areas are so designated when the possibility exists that primary air quality standards might be exceeded sometime during the next ten years. Each jurisdiction within the AQMA has developed plans for controlling these pollutants, and each has proposed methods for implementing the plans. All are awaiting EPA approval and all are undergoing revision. In the meantime, to the greatest extent possible, Prince George's County is complying with the Control Plan and the implementation of it.

There are two monitoring stations that are near enough to Woodyard Road to give indications of air quality in the area. These are located on Suitland Parkway, about five miles north of the area; and at Andrews Air Force Base.

Data for the last five years from these two stations have been tabulated in Table 2-6 and they indicate that carbon monoxide (8-hour), photochemical oxidants, and hydrocarbons have exceeded standards during this period. All are related to automotive emissions. Photochemical oxidants (PCO), the most common of which is ozone, are formed when hydrocarbons react with nitrogen oxides in the presence of sunlight, and the resulting PCO's are components of smog. The conditions depicted by Table 2-6, high concentrations of HC plus

TABLE 2-6 CURRENT AMBIENT AIR QUALITY

		;	Suitla	nd	•		An	drews	AFB		
Pollutant	'72	'73	' 74	' 75	'76	'72	'73	'74	' 75	' 76	Standard*
SO ₂ (ugm/m ³) mean 24 hr. max 3 hr. max 1 hr. max	1 26 157 262	6 39 130 314	7 82 235 288	4 41 78 104	4 31 60 157	18 92	18 172	12 41	8 51	9 58	60 ¹ 262 1300 ² 920
NO (ugm/m ³) mean			19	28	23				•	•	No std.
NO ² (ugm/m ³) mean	84	89	87	79	71	62	40	31	31	37	100
CO (mg/m ³) 8 hr. av. 1 hr. max	10 15	7 27	13 24	9 21	12 ³ 25						10 40
PCO (ugm/m ³) 1 hr. max	314	451	353	510	353						160
Tot. HC (ugm/m 3 hr.	³) 3989	6278	1459	6146							235 ²
Sus. Part.(ugm mean 24 hr. max	/m ³)					48 112	43 121	48 97	40 91	41 109	65 ¹ 140 ¹

Notes:

- * State of Maryland Serious Standard unless otherwise noted 1 State of Maryland More Adverse Standard 2 National Secondary Standard 3 1977 8-hr CO = 9mg/m³; 1978 8-hr CO = 8mg/m³

moderately high concentrations of ${\rm NO}_{\rm X}$ (both automotive pollutants), would present prime conditions for the formation of PCO, and it would seem that automotive traffic is the offender. But this conclusion must be viewed with caution for two reasons.

First, unusually high and unexplained concentrations of PCO have been discovered in rural areas far from large urban centers. It is presumed that these concentrations, at least in part, are the result of long range transport from urban centers. If this turns out to be true, then the PCO over the Washington area may have been generated some distance away and may not be attributable to Washington traffic at all. It would follow, then, that controlling automobile traffic in the Washington area might not decrease the concentration of PCO in the area.

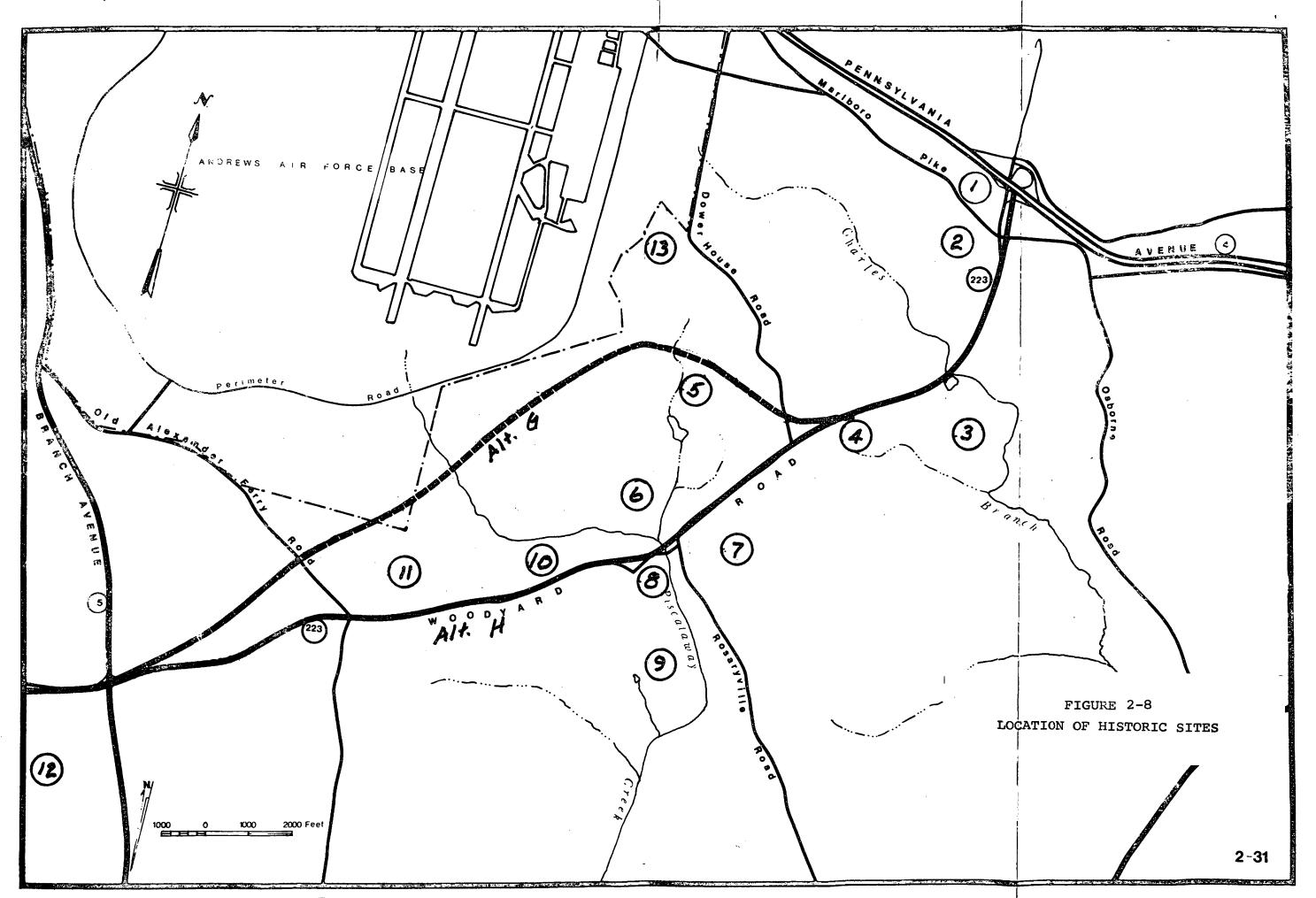
Secondly, hydrocarbons emitted from automobiles usually are emitted under the same conditions as carbon monoxide (CO). Thus, high concentrations of HC usually are accompanied by high concentrations of CO. But at Suitland unusually high concentrations of HC are accompanied by CO concentrations that are not correspondingly as high.* This suggests that the HC measured at Suitland may have been emitted by sources other than automobiles.

Increased vehicular traffic, nevertheless, will have an impact on air quality in the Woodyard Road area. The extent of the impact is discussed in Section 4-2.

2.2.7 Historic and Archeologic Sites

Within the Woodyard Road area are two sites listed on the National Register of Historic Places, and ten others listed on the inventory maintained by the Maryland Historic Trust. All are identified in Figure 2-9, and sites for which information is available are described below. This information was obtained from the State Historic Preservation Office.

^{*1977} Eight (8) Hour CO 9 mg/m $_3$ 1978 Eight (8) Hour CO 8 mg/m $_3$



2.2.7.1 National Register Sites

His Lordships Kindness (No. 9)*

Brick, two stories, rectangular with two side wings and connecting hyphens, hipped roof with two gabled and dormered sections perpendicular to rear, two interior chimneys, center projecting pedimented section with door and two flanking windows, second story Palladian window; center hall plan, outstanding interior staircase. Georgian. Built by the Earl of Shrewsbury as a wedding present for his niece. Built circa 1735.

The Woodyard (No. 7)

17th-19th century. Site of Woodyard Plantation where Stephen West established a firearms factory and spinning mill to supply the Continental forces during the Revolutionary War; site now includes L-shaped brick house (circa 1870).

2.2.7.2 Maryland Inventory Sites

Mellwood Farm (No.1) Built circa 1830

Norbourne Farm (No. 2) Post-Civil War farm, built by Bowie family

Mt.Clair/Mullikan House (No. 3) May be eligible for National Register

Small Farm (No. 4) Built circa 1900

Mill Site (No. 8) Located within the boundary of His Lordship's Kindness

Nurse House (No. 5) Original House built during first quarter of 19th century

Bradstreet Farm (No. 6) In ruins

Marshall.Walters Miller's House (No. 10)

Cole House (No. 11)

St. Lukes Church (No. 12)

^{*} Numbers are keyed to Map - Figure 2-8

2.2.7.3 Archaeological Sites

Lowlands along both Piscataway Creek and Charles Branch are possible sites of ancient Inidan encampments, and high grounds near streams, such as those found in the vicinity of the intersection of Woodyard Road and Rosary-ville Road, are potential prehistoric archaeological sites. Griffith's Map of Maryland, printed in 1794, shows that a mill was once located in the vicinity of Woodyard Road and Piscataway Creek. It is thought that the remains of that mill are buried.

The historic nature of the area, coupled with the presence of several small streams, indicates that the archaeological potential of the corridor is high. A preliminary archaeological reconnaissance survey was conducted by the Maryland Geological Survey in September, 1978. Despite the high potential, only two isolated artifact finds were reported in the corridors of the two alternates. Two other sites, the Woodyard and a possible mill site, were reported. The Woodyard is located approximately 1000 feet from the proposed right-of-way lines of Alternate H, and the mill site is approximately 250 feet from the proposed right-of-way lines of Alternate G. Based on these findings the State Historic Preservation Officer, J. Rodney Little, has determined that neither Alternate will affect archaeological sites in the area.

All known archaeological sites will be avoided during construction.

2.2.8 Ambient Noise Levels*

Ambient noise in the Woodyard Road area is gen-

^{*}This Section and Section 3.5 are summaries of a Noise Analysis prepared by the Maryland Department of Transportation, 8-7-'80.

erated mostly by highway traffic and aircraft from Andrews Air Force Base. A sand and gravel quarry adds to these two sources at one location.

Ambient noise levels were measured at each of 43 noise sensitive areas during the late summer and fall of 1978. The purpose of the measurements was to establish the basis for impact analysis. Noise levels may be expected to rise and fall with variations in local traffic flow, but these fluctuations are not sufficient to significantly affect their use in impact assessment.

The measured levels ranged from a low of 48 dBA in a presently undeveloped area within a subdivision of Sherwood Forest to a high of 70 dBA in the vicinity of several residences located on both sides of Woodyard Road between Clendenin Drive and Rosaryville Road. The noise levels are expressed in terms of L_{10} which is the level that is exceeded 10% of the time.

3. PROBABLE IMPACTS OF THE SELECTED ALTERNATE

3.1 SOCIO-ECONOMIC EFFECTS

Socio-economic effects that generally result from highway improvements are of four kinds: (1) the acquisition of property and displacement of residences and businesses, (2) the effect on property values, (3) the impact on community services, and (4) the impact upon minority groups (Ref. 12). No community disruptions or isolations and no adverse impacts to elderly or handicapped individuals will result.

3.1.1mmThe Acquisition of Property

From the limits of the Woodyard Road-Branch Avenue interchange (Figure 4-1) Alternate H follows the existing right-of-way for its entire length and will require the acquisition of 33.3 acres of mostly residential land in order todesctify substandard curves, especially those at Rosaryville Road. This alignment will result in the displacement of two residential families, one of which is believed to be a minority group member and a tenant, and six businesses. Projected relocation assistance costs are estimated to be \$78,000. The tenant displacee may require housing as a last resort if he is paying below market rent. Six persons, four of them in a minority group, will be affected. The residences, including that occupied by the tenant family are estimated to be in the \$50,000-\$60,000 range. Six months to a year might be required to relocate the tenant family.

The diamond interchange (Figure 4-1) will require the acquisition of 18.1 acres of commercial property and 2.9 acres of residential land. It will displace 13 businesses and three residences. Relocation assistance costs are estimated to be \$139,000, and may require housing as last

65

resort payment.

Adequate housing is for sale in the area, but only a limited number of rentals are available. Unimproved commercial acreage is available, but only a few improved sites exist.

A summary of the MSHA Relocation Assistance Program is included in Appendix E.

3.1.2 The Effect on Property Values

Studies have shown (Ref. 13) that the improved accessibility afforded by highway improvements tends to benefit both residential and commercial property.

Alternate H will provide improved accessibility. Commercial areas at Branch Avenue will be more easily accessible as will the areas areound Pannsylvania Avenue. The local activity center phanned for the area around Rosary-ville Road also will become more accessible. Traffic flow between Branch and Pennsylvania Avenues will be facilitated.

3.1.3 The Impact on Community Services

Alternate H will facilitate the movement of police, fire and ambulance vehicles, and, in addition, will permit these vehicles to move directly into areas where they mayabe needed. The movement of school buses also would be facilitated by Alternate H.

3.1.4 The Impact on Minority Groups

Alternate H will require the dispacement of one minority tenant family affecting approximately four people.

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, sex, age, 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 acquisition of right-of-way or the provision of relocation advisory assistance. This policy has been incorporated into all levels of the highway planning process in order that proper consideration be given to the social, economic, and environmental effects of all highway projects. Alleged discrimination actions should be addressed to the State Highway Administration for investigation.

3.2 AIR QUALITY IMPACTS

Air quality impacts are analyzed by methods developed by the Environmental Protection Agency, the Maryland State Highway Administration, and the Maryland Bureau of Air Quality and Noise Control. The methodology consists of four steps:

- 1.. Identification of sensitive receptors
- 2. Calculation of carbon monoxide concentrations
- 3. Analysis of impacts.

3.2.1 Sensitive Receptors

Map study and visits have led to the identification of sites that appear to be sensitive to the effects of air pollution. These are listed in Table 3-1 and shown in Figure 3-1.

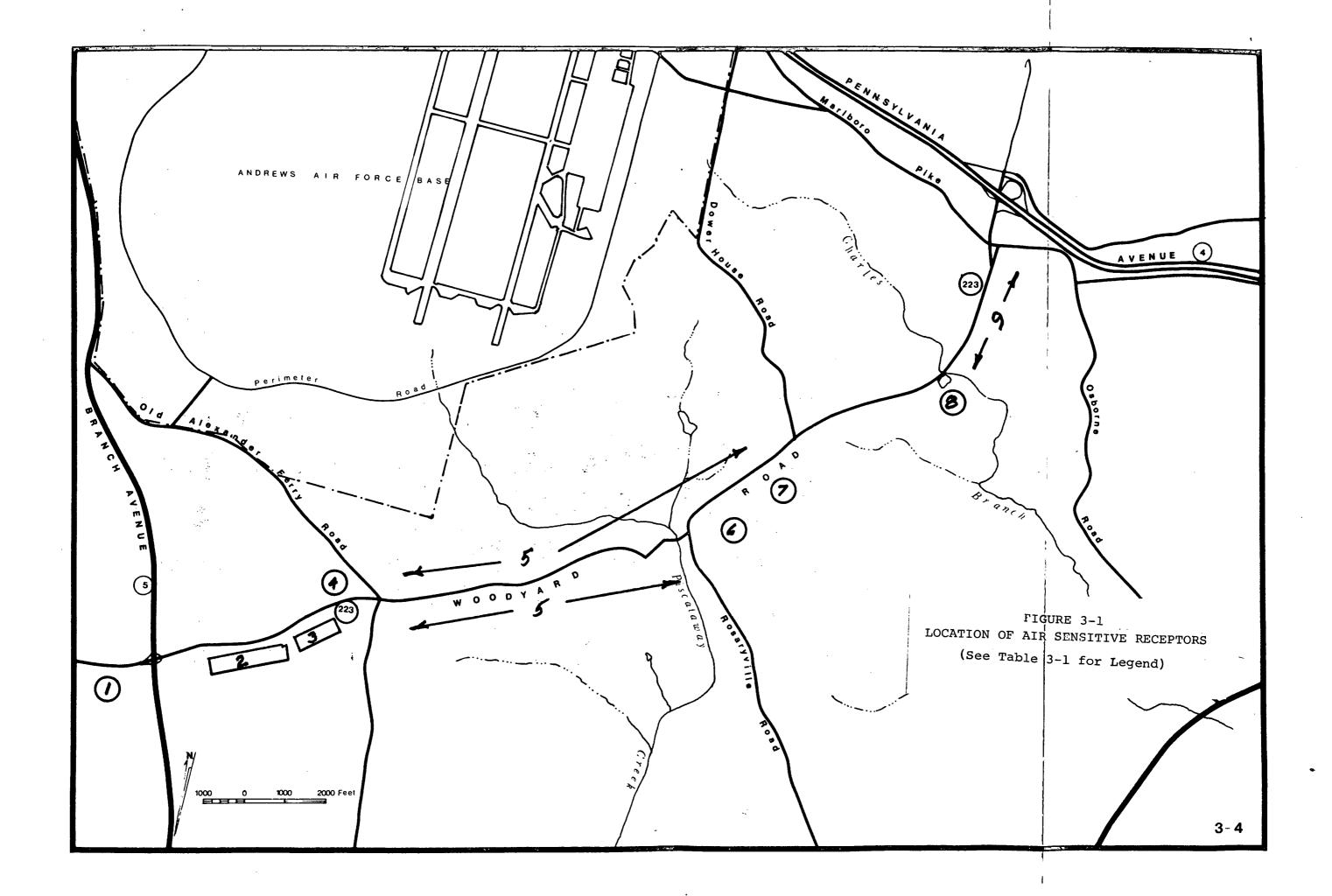


TABLE 3-1

SENSITIVE RECEPTORS

- 1. Clinton Community Hospital
- 2. Homes near intersection of Woodyard and Rte. 5
- 3. Homes across from Tanglewood Park
- 4. Tanglewood Elementary School
- 5. Homes along Woodyard between Alexander Ferry and Dower House Roads
- 6. James Madison Junior High School
- 7. Mellwood Elementary School
- 8. Mellwood Pond
- 9 Bicycle path

3.2.2 Carbon Monoxide Concentrations

Analytical procedures recommended by EPA are used to calculate both 1-hour and 8-hour concentrations of carbon monoxide (CO) as a function of distance from the road for the years 1985 and 2005. The traffic and meteorological parameters assumed are tabulated in Table 3-3. The general CO background concentrations in the Woodyard Road area, as estimated by COG using the Hanna-Gifford model are given in Table 3-2.

TABLE 3-2
CO BACKGROUND CONCENTRATIONS*

Year	CO Backgrou	and (mg/m^3)
	1-hour	8-hour
1985	4.1	1.35
2005	4.0	1.34

* Based on a Hanna-Gifford calculation

TABLE 3-3

FACTORS AND PARAMETERS USED IN CALCULATIONS

	USED :	IN CALC	ULATIONS				
,	High and Book and			(Selec		,	
⊥.	Highway Factors	Alt	ernate G	Altern	nate H	No-Bui	1d
	Total length (mi.) Number of lanes Lane width (ft.) Median Width		5.11 4 12 16	4. 4 12	94	4.94 2 12 	
2.	Traffic(1)	1985	2005	1985	2005	1985	2005
	ADT (total vehicles) Peak Hour LDV* (veh./lane/hour) HDG* HDD*	334 1.05	620 1.95	517 1.62	862 2.7	635 1.27	1060 2.12
	Av. Speed (mph) (2)	1.08 35	2.01 30	1.68 35	30	1 .27 15	2.12 20
	*LDV = Light Duty Ver HDG = Heavy Duty Gas HDD = Heavy Duty Die	s Vehic					
	(1) Source: State H: Bureau (2) Conservative est:	of High	way Stat:	istics	eds		
3.	Background 1-hour 8-hour (Source: Council	1.35		s)			
4.	Vehicle Miles Traveled		1985		2005	5	
	LDV HDG HDD	1	.78x10 ⁷ .19x10 ⁶ .23x10 ⁶		6.29x1 1.98x1 2.04x1	LO ^O	
5.	Meteorological Conditions						
	Wind direction with	respect	to Wood	vard Roa	ad	- 10 ⁰	

Wind direction with respect to Woodyard Road - - - 100

Wind Speed - - - 2 m/sec before 1700

1 m/sec after 1700

Stability Class - - - D before 1700 F after 1700

Temperature - - - 35°F

^{*} LDV = Light Duty Vehicle; HDG = Heavy Duty Gas HDD = Heavy Duty Diesel

Emission factors for this analysis were calculated with a computerized model, Called MOBILE I, of the procedure outlined in EPA Document AP-42, Supplement 8. Dispersion of CO from vehicular traffic was calculated with a computerized model called HIWAY.

The most heavily traveled section of Woodyard Road lies between Alexander Ferry And Rosaryville Roads. Traffic volumes expected along this section for both Alternates and the No-Build Alternate are shown in Table 3-3 along with other factors and parameters used in the calculations. Under the conditions shown carbon monoxide concentrations at several distances from the edge of the road are given in Table 3-4. Both 1-hour and 8-hour concentrations are well within Federal and State Standards.

Both a diamond and a partial cloverleaf were considered as alternatives for the Woodyard Road-Branch Avenue interchange. In either case traffic signals will cause queues to form on Woodyard Road as shown in Figures 3-2 and 3-3. The grid in the lower right corner of each figure indicates the relative locations at which CO concentrations were calculated. The results are tabulated in Table 3-5. No violations of either Federal or State standards are anticipated.

3.2.3 Analysis of Impacts

Carbon monoxide concentrations at each sensitive receptor identified in Section 3.2.1 are tabulated in Table 3-6. Values were obtained by noting the distance of each receptor either from the edge of the road or the intersection and then interpolating values from Tables 3-4 and 3-5. The two values shown for the first two receptors are for the diamond and cloverleaf intersections, respectively.

The Table shows that all along Woodyard Road, even

TABLE 3-4

WOODYARD ROAD AIR QUALITY
BETWEEN ALEXANDER FERRY AND ROSARYVILLE ROADS

Distance from	co c	oncentration	(mg/m^3) *		
Edge of Road	198	5	200)5	
(ft.)		No-Build		_	
1. 1-Hour Maximum					
1 15 30 60 120		16.3 15.0 13.4 11.4 9.3	10.0 9.4 8.6 7.6 6.6	16.8 15.5 13.7 11.7 9.5	
2. <u>8-Hour Average</u>					
1 15 30 60 120	5.0 4.6 4.1 3.5 2.8	9.0 8.2 7.1 5.8 4.5	5.1 4.7 4.2 3.5 2.9	9.4 8.5 7.4 6.0 4.6	
Standards (mg/m ³)	Federal	State			
1-Hour Maximum 8- Hour Average	40 10	40 10			
* Includes Background	s:				
	1985	2005			
1. Hour Maximum 8- Hour Average	4.1 1.35	4.0 1.34			

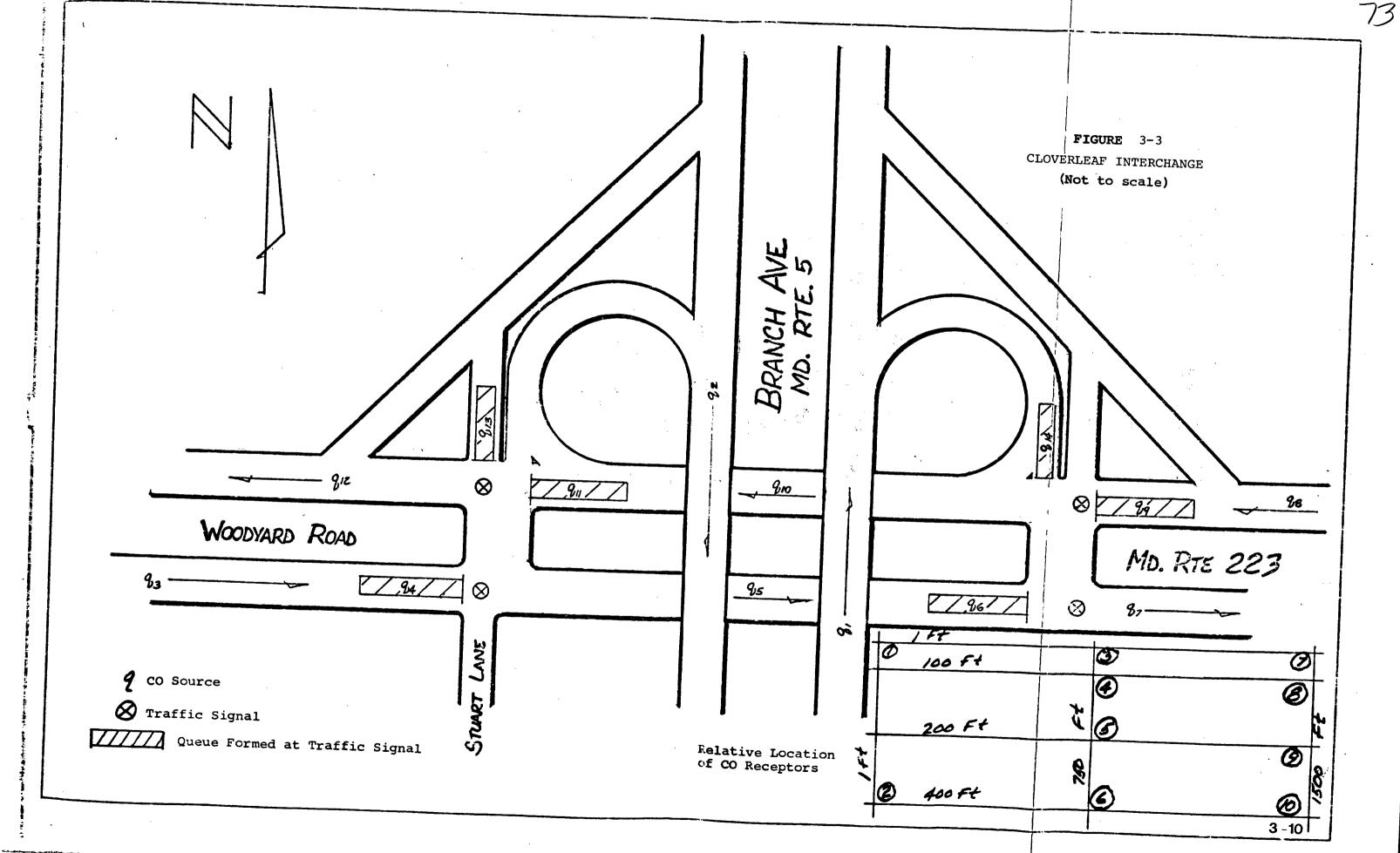


TABLE 3-5

AIR QUALITY
WOODYARD ROAD-BRANCH AVENUE INTERSECTION

1.	<u>Diamond</u> Intersection	(Selected	Alternate)			
	Location #	CO Concentration*				
	(Figure 3-1)		Hr. Max.	8-Hr.	Av. 2005	
	4	1985	2005	1985		
	1	5.4	5.2	2.1	2.0	
	2	6.6	6.5	2.9	2.8	
	3	15.4	14.6	8.1	7.7	
	4	13.5	13.1	7.1	6.8	
	5	14.3	13.3	7.5	6.9	
	6	12.0	11.2	6.1	5.6	
	7	5.7	5.4	2.3	2.2	
	8.	10.2	12.8	5.0	6.6	
	9	10.9	11.9	5.4	6.1	
	10	11.4	10.4	5.7	5.2	
	Standard	40.0	40.0	10.0	10.0	

2. Cloverleaf Intersection

Location # (Figure 3-2)	CO Concentration*				
	1-Hr.	Max	8-Hr.	Av.	
	1985	2005	1985	2005	
1	16.4	17.0	8.7	9.1	
2	5 .5	5.2	2.2	2.0	
2 3	15.3	13.2	8.1	6.8	
	11.9	10.5	6.0	5.2	
4 5	9.2	9.0	4.4	4.3	
6	5.8	5.5	2.4	2.2	
7	9,8	12.8	4.8	6.6	
8	10.6	13.7	5.3	7.1	
9	9.3	8.4	4.5	3.6	
10	6.9	6.5	3.0	2.8	
Standard	40.0	40.0	10.0	10.0	

^{*} Includes Backgrounds

TABLE 3-6

CARBON MONOXIDE

AT SENSITIVE RECEPTORS
(1-Hour Max.)

Sensitive Receptor	CO Concentration (mg/m ³)			
	19		2005	
	Build	No-Build	Build	No-Build
Clinton Community Hospital	11-12	11	12-13	11
Homes near Intersection	12-14	11	11-13	11
Homes Across from Tanglewood Park	7.0	7.4	6.2	7.7
Tanglewood School	5.9	6.2	5.3	6.4
Homes Between Alexander Ferry and Dower House	7.0	7.4	6.2	7.7
James Madison Jr. High School	5.9	6.2	5.3	6.4
Mellwood Park	7.0	7.4	6.2	7.7
Bike Path	10.0	10.3	9.5	10.7

at the heavily traveled intersection with Route 5, CO concentrations will remain well below Federal and State standards. This result, however, is predicated upon continued implementation of exhaust emission controls now mandated for all vehicles, and upon continued enforcement of exhaust emission standards.

3.2.4 Consistency Statements

The consistency of the project in relation to construction activities was addressed through consultation with the Maryland Bureau or Air Quality and Noise Control. The State Highway Administration has established specifications for Materials, Highways, Bridges, and Incidential 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.

The project is consistent on a microscale level with the SIP.

The air quality consistency of this project on a regional level is assured in the following ways:

A. The National Memorandum of Understanding between U.S. Department of Transportation and Environmental Protection Agency dated June 14, 1978 formally integrates the transportation and air quality planning processes for transportation projects receiving federal aid highway funds. This Agreement recognizes that the "reduction of air pollution is an important national goal, and must be among the highest priorities of the transportation planning process in areas not meeting primary Air Quality Standards." This process provides for extensive input from the public, local and State

transportation and air quality agencies. In addition, the procedures call for the joint administration of the air quality aspects of the urban transportation planning process between U.S. Department of Transportation and Environmental Protection Agency. This includes joint review of the following documents and activities to ensure that air quality considerations are adequately addressed:

- 1.) The Transportation Plan for the urban area,
- 2.) The Transportation Improvement Program which identifies projects for implementation,
- 3.) The State Implementation Plan. Transportation Control Plan for addressing attainment with Air Quality Standards,
- 4.) The review process which "certifies" that adequate transportation and air quality planning is being conducted in the urbanized areas.
- B. Through the urban transportation planning requirement of Title 23, United States Code, Section 134, as implemented by the TBP/COG forum, the same state and local agencies responsible for planning transportation projects in the urbanized area are also responsible—from a transportation control plan perspective—for assurring attainment of Air Quality Standards.
- C. Therefore, Woodyard Road (Maryland Route 223) is included in the regional transportation plan and Transportation Improvement Program for the urbanized area and is programmed for federal-aid highway funding. Thus it is subjected to this federal review and project development process. Therefore, the regional consistency of this project is addressed prior to undertaking the final project planning studies presented in this environmental document.

Since regional pollutants such as hydrocarbons and oxides of nitrogen, precursers of photochemical oxidants (smog) are addressed through this regional planning process

only carbon monoxide emissions, a more localized pollutant, are being addressed quantatively in this analysis (environmental document).

3.3 WATER QUALITY IMPACTS

The reconstruction of Woodyard Road will increase siltation in Piscataway Creek, the Charles Branch, Melwood Pond and the small unnamed stream mentioned in Section 2.4.2. During construction, excavation and grading will expose soils to the erosive forces of wind, rain, and surface runoff. Proper use of erosion control techniques, now mandatory and enforceable under Federal, State and local laws, will minimize the impact of highway construction. All control techniques will be approved by the Soil Conservation Service and the Department of Natural Resources before permits are issued. As a result, there will be no permanent or significant impact to water quality from highway construction activities.

Impacts to ground water will be minimal because no important aquifer recharge areas are located within the highway corridor

The no-Build Alternate has no adverse impact upon hydrology or water quality.

3.4 IMPACTS TO BIOTA

Farmlands and forests along Woodyard Road will sustain only slight damage attributable to Alternate H. Removal of roadside border vegetation will result in increased erosion, but only until the vegetation becomes reestablished. The forests generally are about 75 feet away from the edge of the road so only a few trees will be removed. Exceptions will occur at Tanglewood Park where a row of trees along the edge of the road may be lost, and at Dower House Road where a large willow oak adjacent to the road also will be removed as a result of construction. The most noticeable impact will be the loss of ornamental trees and shrubbery along the present road.

Alternate G, by virtue of its location in presently undeveloped land, would have avoided these impacts, but would have required the taking of more forest land. Alternate H will not require the taking of prime agricultural land. There is no unique farmland in the area.

Similarly, impacts to wildlife in the corridor will be slight. Some fringe vegetation and nesting sites may be destroyed during construction, but this will be only temporary. Stream crossings will cause permanent disruption of habitat because of bridge structures, and the animals occupying these areas will be forced to move elsewhere for food and nesting. This may cause competition for preferred sites between those animals that are displaced and those that live in the contested sites.

3.5 NOISE IMPACTS

This section is a summary of a report entitled

Noise Analysis - Maryland Route 223 From Maryland Route 5

to Maryland Route 4 prepared by the Maryland State Highway

Administration. The report is available for inspection and
copying at the State Highway Administration office.

The noise descriptor is ${\tt L}_{10}$ which is the noise level that is exceeded 10% of the time.

A relationship between design noise levels and land use activities is shown in Table 3-7. The number of noise levels that will exceed these design levels after the improvements are constructed are tabulated in Table 3-8 along with the number of locations at which traffic increases will raise the current levels by 10 dBA or more. Table 3-9 10c-ates areas where design noise levels will be exceeded.

TABLE 3-7
DESIGN NOISE LEVEL/ACTIVITY RELATIONSHIPS

	Design Noise Levels - dBA <u>1</u> /				
Activity <u>Category</u>	Leq	<u>L</u> 10	Description of Activity Category		
A <u>2</u> /	57 (Exterior)	60 (Exterior)	Tracts of land which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.		
B <u>2</u> /	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgounds, active sports areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.		
С	72 (Exterior)	75 (Exterior)	Developed lands, properties or activites not included in Categories A or B above.		
D			For requirements on undeveloped lands see paragraphs lla and c (of this Manual).		
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.		

- 1/ Either L_{10} or Leq (but not both) design noise levels may be used on a project.
- Parks in Categories A and B include all such lands (public or private) which are actually used as parks as well as those public lands officially set aside or designated by a governmental agency as parks on the date of public knowledge of the proposed highway project.

Source: Federal Aid Highway Program Manual Volume 7, Chapter 7, Section 3

TABLE 3-8 SUMMARY OF NOISE IMPACTS

Maryland Route 223 Maryland Route 5 to Maryland Route 4

(Selected Alternate)

ALTERNATE		No-Build	Alternate 'G'	Alternate 'H'
No. of Noise Sensitive Areas Residences		108	44	108
	Schools	5	0	5
	Churches	3	0	3
*	Parks	2	1	2
777111	Hospitals	1	1	1
No. of Historic Sit	No. of Historic Sites		1	1
No. of Areas Where Design Noise Level is Exceeded		1	4	19
No. of Significant Noise Level Increases (11-15dBA) No. of Severe Noise Level Increases (15dBA)		ò	1	3*
		0	3	0
Type of Alternate Access Control		Uncontrolled	Uncontrolled	Uncontrolled

^{*}South Side Maryland 223, Sta. 29 to 35: North Side Maryland 223, Sta. 46: South Side Maryland 223, Sta. 196

TABLE 3-9
AREAS EXCEEDING DESIGN NOISE LEVELS

	Area	Noise	Level	(L ₁₀ , dBA)
	·	No Bld	Alt G	Alt H (Sel. Alt.)
1.	Single family home, Pine View Lane	-	71	71
2.	Clinton Community Hospital	_	71	71
3.	Single family homes, Cedar Lane	-	-	73
4.	Clinton Baptist Church	-	-	72
5.	Single family homes, Autumn Way	. –	-	73
6.	Single family homes, Canberra Drive	-	-	71
7.	Single family homes, Denton Drive	-	-	73
8.	Tanglewood Elementary School	-	-	73
9.	Single family homes between Deborah St. and Sweeny Drive	-	-	73
10.	Single family homes between Sweeny Dr. and Lantern Lane (includes day nursery)	-	-	74
.11.	Single family homes near Rosaryville Rd. north side of 223	-	-	75
12.	Single family homes near Rosaryville Rd. south side of 223	-	-	75
13.	Single family homes near Rosaryville Rd. north side of 223	-	-	71
14.	Sherwood Forest	-	72	_
15.	Texaco Gas Station and one residence	-	_	75
16.	Gatehouse - His Lordship's Kindness	72	-	-
17.	Single family homes, Victoria Dr.	-	-	76
18.	Single family homes, Sherwood Dr.	-	-	72
19.	Single family homes, Dower House Rd.	-	-	72
20.	Single family homes near Charles Br.	-	71	71
21.	Texaco Gas Station and market	-	-	77
	For location see Figure 4-1			

3.5.1 No-Build Alternate

Only at the gatehouse to His Lordship's Kindness will design noise levels be exceeded. In the same location is a horse stable and a one-family mobile home. No noise abatement measures would be provided with the No-Build Alternate.

3.5.2 Alternate G

Three of the four areas that would have been impacted by noise from traffic on Alternate G are located near the extremities of the project area and also will be impacted by Alternate H. The other area that would have been impacted by Alternate G is a presently undeveloped subdivision of Sherwood Forest. Noise abatement measures are not feasible where access is uncontrolled due to entrances.

3.5.3 Alternate H (Selected Alternate)

Alternate H will result in 19 areas where Federal design noise levels would be exceeded. These include almost all of the homes located along Woodyard Road plus three of the areas impacted by Alternate G. Noise abatement measures are not feasible where access is not controlled.

3.5.4 Coordination with Local Officials

Effective and compatible land use planning and development should consider potential adverse impacts from highway generated noise. To aid in this process, a copy of the report Noise Analysis - Maryland Route 223 From Maryland Route 5 to Maryland Route 4 has been sent to the following agency:

Housing Authority of Prince George's County County Courthouse Upper Marlboro, Maryland 20870

3.5.5 Aircraft Noise

The proximity of Woodyard Road to Andrews Air Force Base means that the area is impacted by aircraft noise. Peak levels as high as 98 dBA were recorded during a noise survey made during the late summer and fall of 1978.

3.5.6 Exceptions to the Design Noise Levels

The proposed improvement project of Maryland Route 223 from Maryland Route 5 to Maryland Route 4 would have no control of access to the highway under any of the alternates. FHPM 7.7.3 does not require processing of exceptions for uncontrolled access highways. However, where design noise levels are exceeded, partial abatement measures will be investigated during final design and after consultation with property owners involved.

3.5.7 Abatement Measures

Nineteen noise sensitive areas are expected to experience L_{10} noise levels in the design year exceeding Federal design criteria. Alternate H would have uncontrolled access. Effective noise abatement measures cannot be implemented where access is uncontrolled.

Because of the frequent points or access to Md. 223, effective noise barriers would be difficult to implement. In order to be effective, barriers would have to be visually intrusive and pose safety problems for motorists using or attempting to enter Route 223. In addition, in most instances, such barriers would only provide effective protection for the first row of houses. The only feasible partial abatement measure would be landscaping and its use will be investigated during final design.

3.6 IMPACTS TO HISTORIC AND ARCHEOLOGICAL SITES

The relationship between the historic sites described in Section 2.2.7 and the location of each proposed Alternate has been discussed with the Maryland Historical Trust. In addition an archeological reconnaissance of the area was conducted by the Maryland Geological Survey in 1978. In the opinion of J. Rodney Little, State Historic Preservation Officer "No known historic or archeological sites will be affected by either Alternate G or H providing that the recommendations of the Archeological Reconnaissance submitted by Dennis C. Curry are followed."*

The recommendations referred to are two in number.

- "(1) Woodyard (18 PR 136), a property listed on the National Register of Historic Places, should be considered a sensitive area and avoided during the selection of areas to be used for borrow pits and access roads. Precautions should also be taken to avoid other forms of indirect impact on Woodyard during construction.
- (2) The general location of the mill mentioned above should be considered a sensitive area and avoided during the selection of areas to be used for borrow pits and access roads."

These areas will be avoided during construction.

*See letter from the State Historic Preservation Officer in Section 7.

4. ALTERNATES

The two alternate alignments that have received detailed study were developed by combining the best features from several alternates that were conceived during the early stages of this project. Each alternate described in the following paragraphs attains most of the broad goals and objectives set forth in Section 1, and each has its own unique advantages and disadvantages. In addition, there are several advantages and one disadvantage that are common to either alternate. The common advantages are:

- 1. Increased safety.
- 2. Improved driving patterns.
- 3. Elimination of the narrow bridge over Piscataway Creek.
- 4. Improvement of the intersection at Rosary-ville Road.

The common disadvantage is the annoyance that residents will experience during the construction period.

In addition to the two alternate alignments, a full diamond and a partial cloverleaf have been studied as alternate interchanges for the Branch Avenue-Woodyard Road intersection. These are described in Section 4.2.

The highway will be designed in accordance with AASHTO standards for a 50 mph design speed.

4.1 ALTERNATE ALIGNMENTS

4.1.1 Alternate G

Alternate G started just west of the present Woodyard Road-Branch Avenue intersection and swung eastward behind the Clinton Baptist Church. Following a generally northeastward course from that point, Alternate G intersected Alexander Ferry Road north of Bellefonte Lane in the vicinity of some residences. From there it traversed generally

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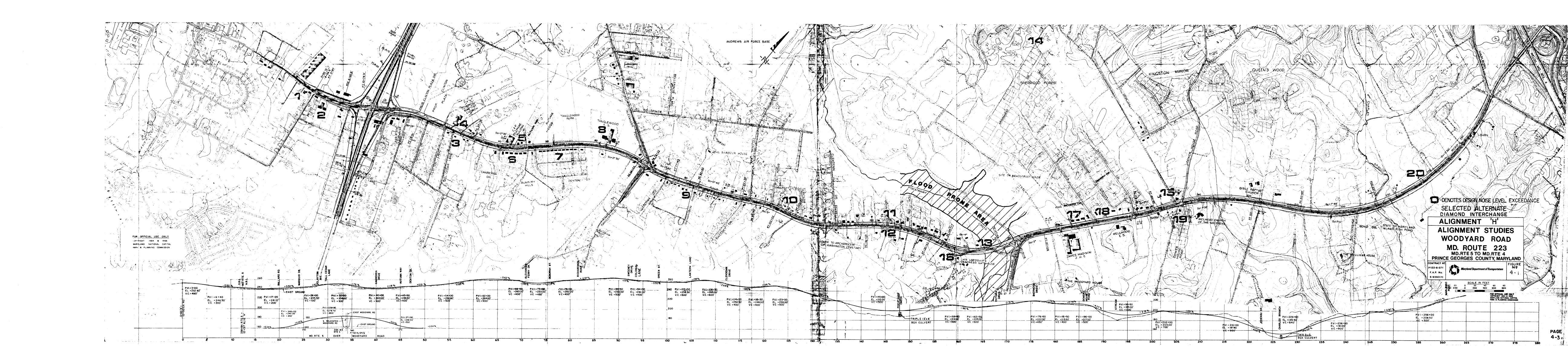
undeveloped land, crossed Piscataway Creek and continued to a point on the proposed extension of Victoria Drive. Curving eastward, it paralleled Concord Drive and then turned northeastward again to rejoin Woodyard Road crossing Dower House Road near the Bible Bapist Church, the access to which was not affected. It then followed existing Woodyard Road to an intersection with Pennsylvania Avenue (Md. Rte. 4). Included with the development of this alternate was the improvement of a portion of existing Woodyard Road and Rosary-ville intersection.

4.1.2 Alternate H (Figure 4-1) (Selected Alternate)

Alternate H starts just west of the present Branch Avenue-Woodyard Road intersection and follows the existing right-of-way for its entire length. One major and several minor deviations have been incorporated to correct substandard horizontal and vertical alignments. Alternate H follows a smooth, continuous route through the Rosaryville Road intersection which will be controlled by a traffic signal. Other minor deviations from the present alignment are incorporated to bring Alternate H into conformance with AASHTO standards.

Major advantages of Alternate H are:

- 1. Present traffic patterns would be maintained.
- 2. Improvement of the intersection at Rosary-ville Road.
- 3. Much of the required right-of-way has already been acquired.
- 4. It is less costly than Alternate G.
- 5. Bike paths would be provided.
- 6. It is consistent with area Master Plans.
- Air quality will be improved with respect to the Mo-Build Alternate.
- 8. It will improve the storm drainage system.
- 9. Traffic flow will be improved.



Major disadvantages of Alternate H are:

- 1. Existing residences along Woodyard Road will experience increased noise levels.
- 2. The large willow oak at Dower House Road will be removed during construction.
- 3. Maintenance of traffic during construction will be difficult.
- 4. Two residences will be taken, and the road will encroach upon six commercial businesses.

4.2 ALTERNATE INTERCHANGES

Two alternate interchanges have been studied for the intersection of Branch Avenue and Woodyard Road. These are a Full Diamond Interchange and a Partial Cloverleaf.

4.2.1 Full Diamond Interchange (Selected Alternate)

As shown in Figure 4-1 the selected interchange
is a full four-leg diamond with Branch Avenue crossing over
Woodyard Road, and one ramp located in each quadrant.

The major advantages of the Diamond Interchange over the Partial Cloverleaf are:

- 1. It reduces the size of the structures required on Branch Avenue because they need be only wide enough to accommodate the through lanes.
- 2. It allows easier maintenance of traffic during construction.
- 3. It provides for safer and more efficient operations on Woodyard Road through the interchange area. The possibility of entering the wrong ramp is minimized, the traffic patterns are simpler (no weaving lane on Woodyard Road), and points of traffic conflict are fewer. This will reduce congestion and allow a higher level of service.
- 4. It reduces the area of encroachment into the shopping center located in the northwest quadrant.
- 5. Construction costs are lower.

Major disadvantages of the Diamond Intenchange are:

- 1. It requires right-of-way on both sides of Woodyard Road.
- 2. It requires service roads on the south side of Woodyard Road.
- 3. It requires a third eastbound lame on Wood- , ward Road.
- 4. It requires acquisition of three residences and 13 commercial businesses.

4.3 NO-BUILD ALTERNATE

If the proposed improvements to Woodyatd Road are not constructed the substandard conditions and deficiencies discussed in Section 1.2 will remain, and their impact will become magnified as traffic through the area continues to increase. Routine maintenance will be continued.

Major advantages of the No-Build Alternate are:

- 1. It is less costly than either of the other two alternates.
- No additional property is required.
- 3. No residences are taken.

Major disadvantages of the No-Build Alternate are:

- 1. There are six substandard horizontal alignments and four substandard vertical alignments, several in combination with each other, and all will remain.
- 2. There are no continuous shoulders or bike paths.
- 3. Drainage is poor.
- 4. A large volume of slow moving traffic will result in more air pollution and higher noise levels than from either of the other two alternates.
- 5. It is not consistent with area Master Plans.
- 6. It fails to solve capacity and safety problems.

4.4 SECTION 4(f) STATEMENT

Section 4(f) of the Federal Aid Highway act of 1966, as amended, specifies that publicly owned land from public park, recreation area, or wildlife and waterfowl refuge of national, state or local significance; or any land from a historic site of national, state or local significance may be used for Federal Aid projects only if:

- (1) There is no feasible and prudent alternative to the use of the land, and
- (2) Such highway program or project includes all possible planning to minimize harm to 4(f) land resulting from such use.

The selected Alternate (Alternate H) encroaches upon land that is part of His Lordship's Kindness, a site listed on the National Register of Historic Places. The project, therefore, falls within the purview of Section 4(f).

4.4.1 Summary

The project consists of improving Woodyard Road (MD. Rte. 223) between Branch Avenue (Md. Rte. 5) and Pennsylvania Avenue (Md. Rte. 4) by upgrading the present two-lane road to a four-lane urban highway. This is necessary in order to accommodate presently projected traffic increases. A detailed description of the project and the need for it may be found in Sections 1 and 2 of this document.

4.4.1 Summary (continued)

All alternates considered during the development of the project, as described in Section 4, require land from the site. However, two alternate alignments have been considered for the improvement of Woodyard Road in the vicinity of His Lordship's Kindness. The first, Alternate H, Figure 4-2, requires the taking of 0.8 acres of His Lordship's Kindness property plus about 0.52 acres for a revertible slope easement. The taking of any property from this site is avoided by Alternate H-1, Figure 4-3, which is located north of Alternate H and requires the taking of one owner occupied house, and crossing Piscataway Creek at a skewed angle, which would require a longer structure and potential channel changes.

4.4.2 Impact Assessment of Each Alternate

A major deficiency of the present road is the existence of substandard horizontal alignments at six locations, Section 1.2, one of which is in the vicinity of His Lordship's Kindness. Elimination of this substandard curve is accomplished by Alternate H by the taking of about 0.8 acres of site property plus about 0.52 acres that are required for slope easement during construction which will return to the property at the completion of the project. Because Alternate H will relocate Woodyard Road away from the gatehouse and surrounding improvements, projected noise levels will decrease from 72 dba to 69 dba in the design year (see section 3.5). It will also provide much safer access to the

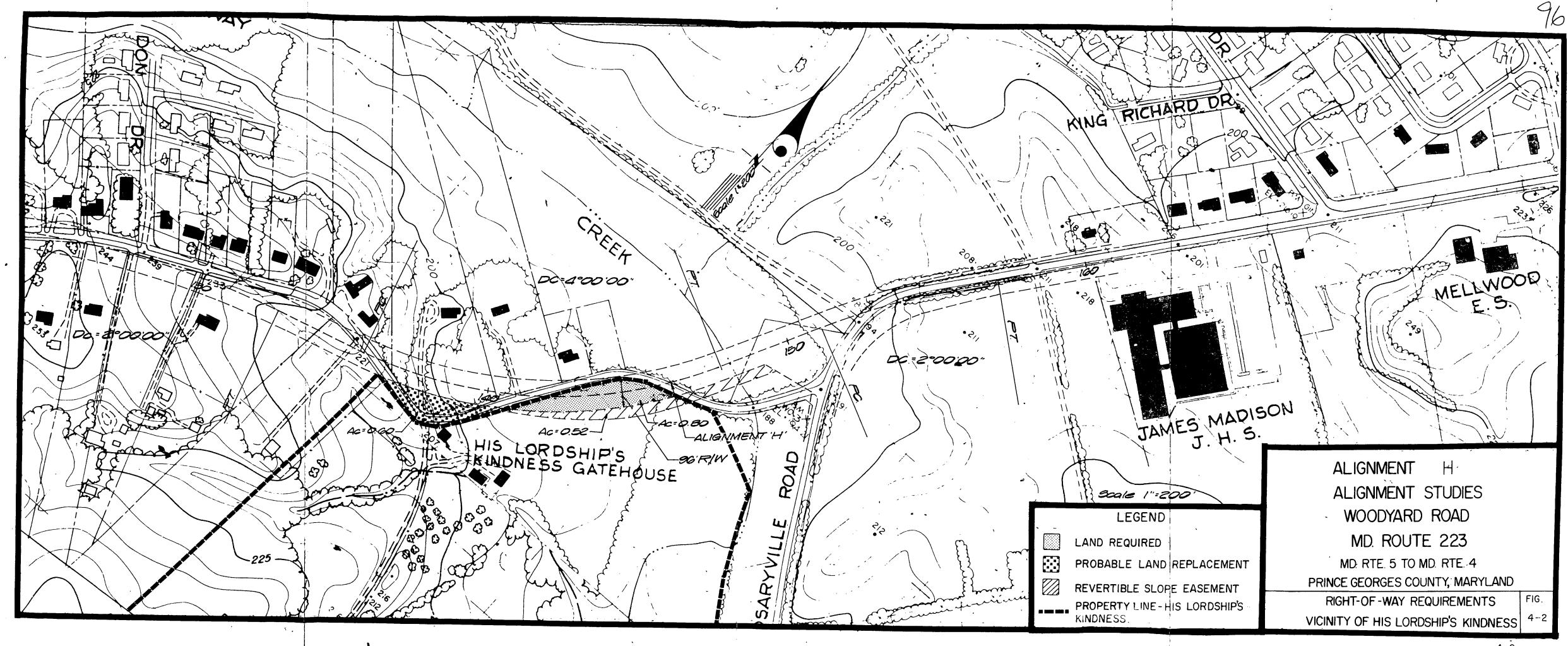
4.4.2 Impact Assessment of Each Alternate (continued)

A description of the Alternates considered in this study is included in Section 4. The Interdisciplinary
Planning Team has recommended that location approval be given to Alternate H, which generally follows the existing alignment of Woodyard Road except for minor deviations necessary to correct substandard and unsafe horizontal and vertical alignments. One deviation is in the vicinity of His Lordship's Kindness, a site listed on the National Register of Historic Places.

His Lordship's Kindness is a brick, two-story rectangular Georgian mansion with two side wings and connecting hypens. It has a hipped roof with two gabled and dormered sections perpendicular to the rear, two interior chimneys, a second story Palladian window and an outstanding interior staircase. It was built about 1735 by the Earl of Shrewsbury as a wedding present for his niece.

The mansion, presently in private ownership, is located on about 270 acres of land a little over a quarter of a mile south of Woodyard Road. Its approximate location may be seen in Figure 2-8. The main house is far removed from Woodyard Road and is screened by vegetation and landscaping.

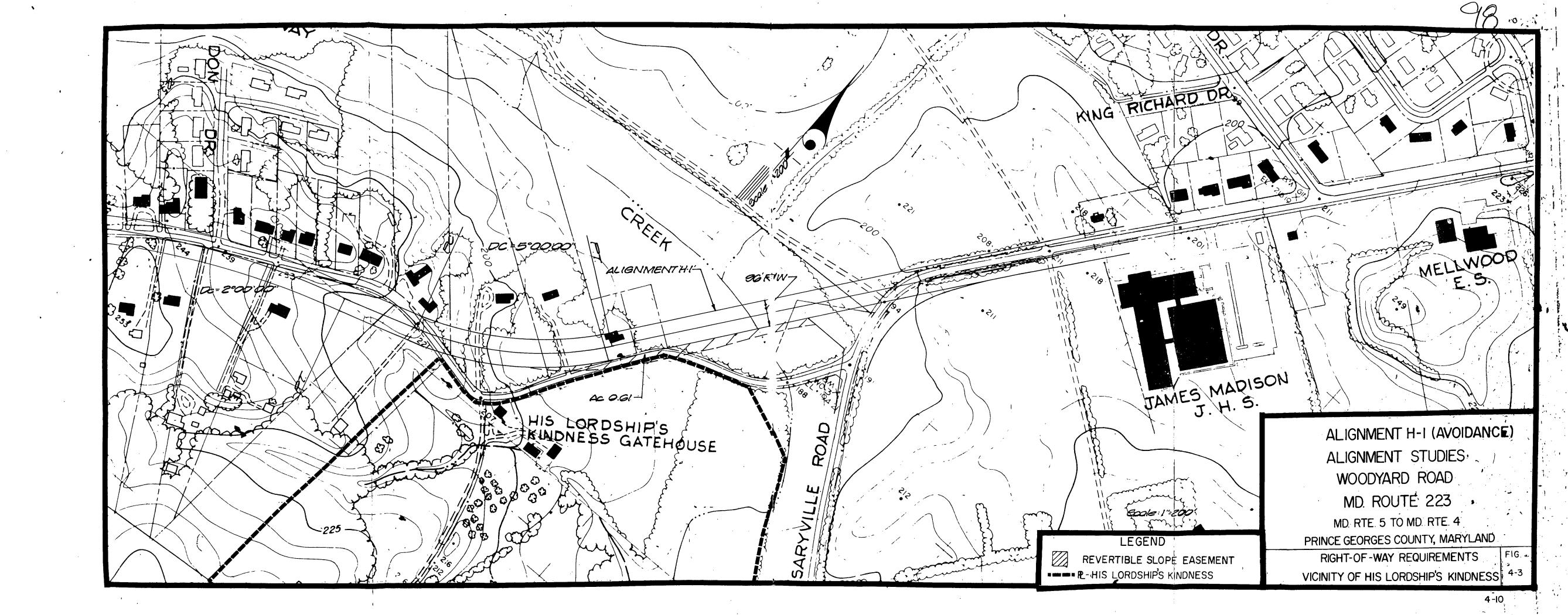
The property faces on Woodyard Road, as shown in Figures 4-2 and 4-3, fronted by a modern gatehouse, recently reconstructed and located where the driveway joins the road.



4.4.2 Impact Assessment of Each Alternate (continued)

historic property by eliminating the substandard curve that intersects with the property's entrance road. No air quality violations will result from this or any of the alternatives (see section 3.2). Moreover, the State Historic Preservation Officer has determined that the project will have no effect on the historic property. (see section 7). The land taken has no intrinsic historical significance.

Alternate H-1 also eliminates the substandard curve, and it avoids the use of any land from the historic site. However, in so doing it would be necessary to take one house that is presently occupied by the owner. Taking the house would work a hardship on the owner who would be forced to relocate, possibly out of the neighborhood, and would require additional expenditures to compensate the owner for the loss of his house, presently in the \$50,000-\$60,000 class, and for relocation expenses. This relocation would involve approximately 6 people. Proximity damages will result on a second house which is less than 20 ft. away from the roadway. This house is occupied by a minority family. Additional right of way would also be required from two other improved residential Each would lose an additional 40 to 50 ft. strip of land. Relocating Woodyard Road closer to these homes would result in additional noise impacts. While noise levels at these houses would fall below federal design noise levels with alternate H, they would become marginal as the noise levels increased 3 to 5 dba with alternate H-1. These houses would



4.4.2 Impact Assessment of Each Alternate (continued)

also suffer some adverse scenic impacts with the removal of vegetation, including many mature trees, in the additional strip of right of way acquired. In addition H-l would require the crossing of Piscataway Creek at a skewed angle which would require a longer structure to accommodate flood flows and could lead to potential channel changes or bank erosion.

As shown in the following section, the impact of taking land from His Lordship's Kindness has been found to have "no effect" on the significance of the site and any possible aesthetic impacts, associates with alternate H, easily can be mitigated. Thus, taking a residence, causing proximity impacts to three residential properties, and adding structure length, channel work and cost, as required by Alternate H-1, is neither prudent nor feasible.

A plan for reducing the revertible slope easement by increasing the slope through this area was studied, Figure 4-4 and 4-5. There appears to be an opportunity for further studies, which will be conducted during the design phase. The SHA will use the flatter slope at this time, as it permits more flexibility in landscaping, to screen the site to retain the aesthetic values of the views to and from the site and is safer and easier to maintain.

An additional study was conducted to assess the impact of lowering the entire roadway profile through this area. This would reduce the amount of slope easement required, but also would extend the flood plain area (see Figure 4-1) into this

4.4.2 Impact Assessment of Each Alternate (continued)
location. Although homes could be protected, floods would
interfere with the operation of emergency vehicles. Lowering
the roadway profile, therefore, is not a prudent measure.

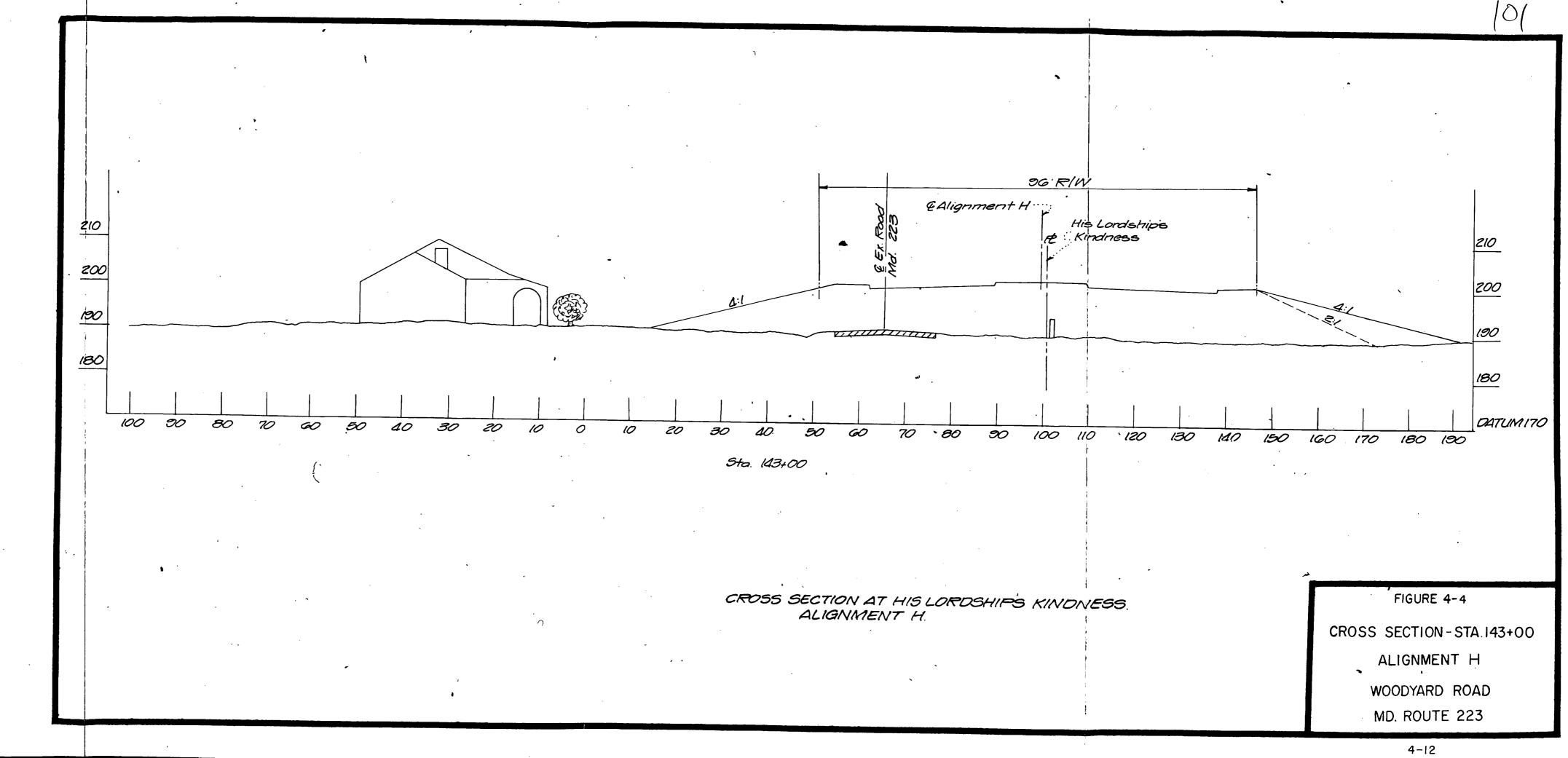
4.4.3 Mitigating Measures

Since there are no feasible nor prudent alternatives to the taking of land from His Lordship's Kindness the following measures will be used to minimize the requirement for land.

- (a) A compensatory amount of land will deeded to His Lordship's Kindness.
- (b) Landscaping will be provided along the affected right-of-way and coordinated with the property owner.

As shown in Figure 4-2, approximately 0.8 acres of land will be taken from 'His Lordship's Kindness by Alternate H, plus about 0.52 acres of revertible slope easement. This will be compensated by deeding to the owners of the site approximately 0.6 acres that will become available as a result of eliminating a substandard curve. On September 3, 1980 representatives of the District 3, Right-of-Way Office, the Bureau of Project Planning, and the State Historic Preservation Officer met with the owner of His Lordship's Kindness and agreed to this excannge of property.

At this meeting it was also decided that suitable landscaping plan would be developed by the State Highway Administration during the design phase of the project and presented to the property owner.



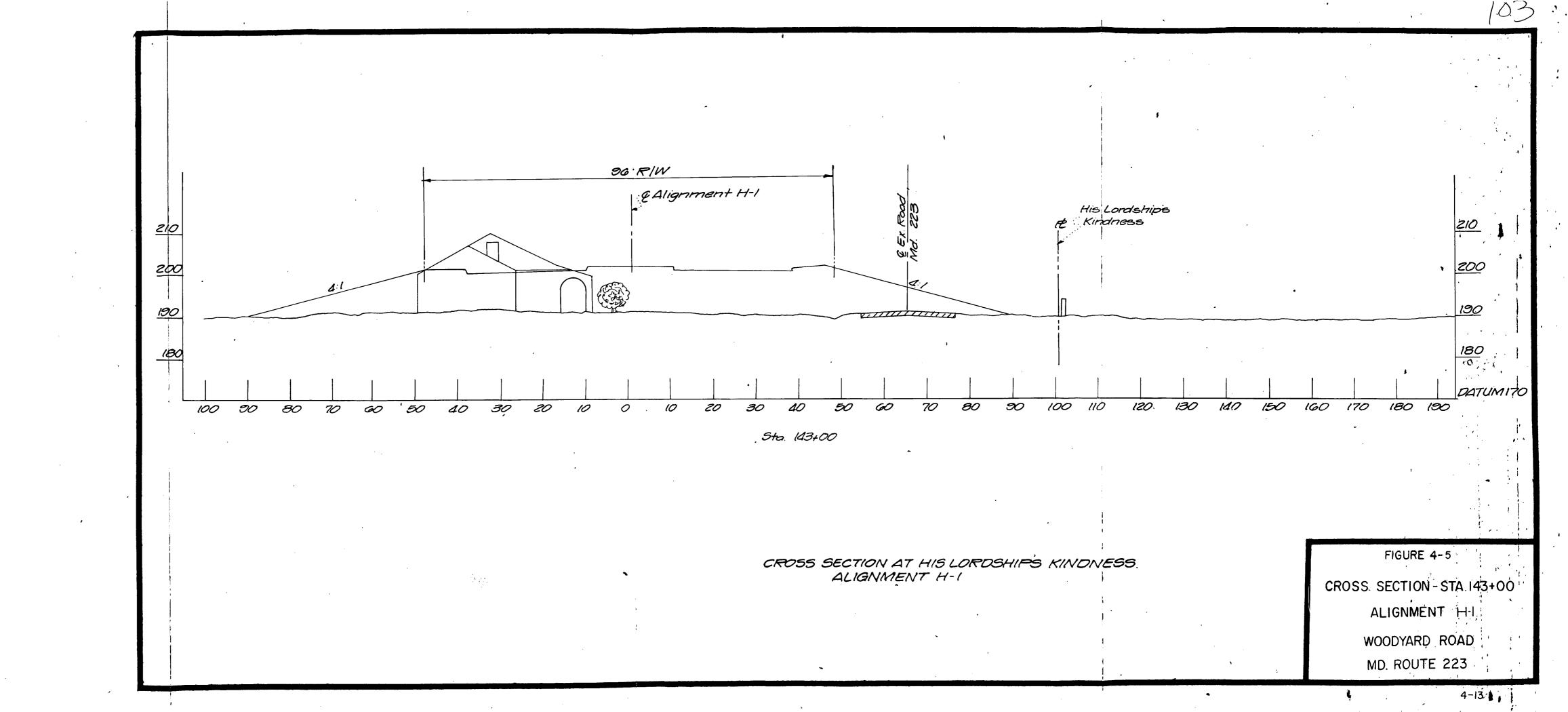
4.4.4 Summary of Coordination

In arriving at the above conclusions these studies have been coordinated with the following agencies. All letters are included in Section 7.

- (a) U.S. Department of Agriculture General R. Calhoun, State Conservationist January 7, 1980, No Objection.
- (b) U.S. Department of the Interior James H. Rathlesberger, Special Assistant to the Secretary February 8, 1980, No Objection.
- (c) State Historic Preservation Office
 J. Rodney Little, State Historic Preservation
 Officer, No Effect.
- (d) No response was received from the U.S. Department of Housing and Urban Development.

4.4.5 Summary of Conclusions

- 1. There are no feasible and prudent alternates to the taking of land from His Lordship's Kindness.
- 2. Planning and coordination among representative parties has resulted in agreements to compensate the owner of His Lordship's Kindness with 0.6 acres of land and to provide suitable landscaping.
- 3. The actions were taken even though the State Historic Preservation Officer indicated that there would be "no effect" to the historic resource and the land taken has no intrinsic historical significance.
- 4. Therefore, it is concluded that all possible planning, and coordination to minimize harm have been accomplished and the project can proceed.



5. PROBABLE ADVERSE EFFECTS THAT CANNOT BE AVOIDED

Alternate H will require the removal of the large willow oak at Dower House Road. Over 200 years old, the tree is 105 feet tall and is a landmark in the area.

PLEASE NOTE:

During the printing of this document, the tree was removed after suffering substantial damage during a storm.

6. SUMMARY OF LOCATION PUBLIC HEARING

On Thursday February 7, 1980 a Location Public Hearing was held at the James Madison Junior High School, Upper Marlboro, Maryland for the purpose of presenting alternate proposals for the improvement of Maryland Rte. 223 between Maryland Rte. 4 and Maryland Rte. 5. After preliminary remarks by Mr. Willlam Shook, District Engineer for Region 3, Mr. Walter Hanrahan, Project Manager discussed the need for improvements to Woodyard Road and described two alternate alignments and two alternate interchanges for the Branch Avenue-Woodyard Road intersection. Mr. Richard Krolak, Chief, Environmental Management, reviewed the environmental impacts of all alternates and the no-build alternate, after which Mr. Shook opened the meeting for statements from the floor.

Following are summaries of the official transcript of these statements.

Dr. R.R. Hessberg
 9524 Victoria Drive
 Upper Marlboro

Speaking for the Sherwood Forest Citizen's Association, Dr. Hessberg stated that the community which he represented has maintained a steadfast desire to retain a residential and rural atmosphere. He favored Alternate G for the following reasons:

- (a) It removes high-speed traffic from the vicinity of the schools.
 - (b) It bypasses homes along Woodyard Road.
- (c) It accomodates through, rather than local traffic.

- (d) It discourages commercialization.
- (e) It retains the residential character of the neighborhood.
- (f) It removes truck, constuction and other noise and dust sources from the vicinity of Woodyard Road homes.

He noted that an objection to Alternate G was lack of conformance with the MNCPPC Master Plan for the area, and requested that steps be taken to change the Master Plan.

Reply

The Project Planning Team has recommended that location approval be given to Alternate H and the diamond interchange. This decision is based on the advantages of each as described in Sections 4.1.2 and 4.2.1 and the environmental impacts discussed in Section 3. A statement of the decision and the reasons therefore are contained in a Project Status Report dated July 17, 1980 and included in Section 7.

2. Mr. Robert St. Pierre 6506 Peppin Drive Upper Marlboro

Speaking for the Melwood Citizens Association, Mr. St. Pierre expressed the following concerns about the project:

- (a) Since Woodyard Road eventually will serve as a link between southern Prince George's County and Route 193 in Montgomery County it will have the status of a major highway. This will increase VMT and air pollution. Since the control strategies in the State Implementation Plan do not allow for VMT increases over and above normal growth the Project does not conform to the SIP.
- (b) It appears that the Maryland DOT is segmenting the environmental process for a major highway.
- (c) Alternate H will bring traffic closer to homes along Woodyard Road, and improvement of the structure over the Piscataway Creek will allow trucks to use Woodyard Road.

The net effect will be an immediate increase in the noise level.

(d) The Draft EIS does not reflect recent improvements in the existing road, and it does not reflect current zoning.

In view of these comments the Melwood Citizens Association states that the only viable alternative is one that would provide minor safety improvements and upgrade the bridge at Rosaryville Road.

Reply

- (a) Although the Master Plan for Subregion V mentions the possibility that Woodyard Road might become a link in a major north-south highway, the State Highway Administration has determined that this plan is not implementable within the next twenty years. The proposed improvements have been reviewed by the MBAQ and are consistent with the SIP.
- (b) Since Woodyard Road will not become a link in a north-south highway system within the next twenty years Maryland Routes 4 and 5 represent logical termini for this project.
- (c) The effects of bringing traffic closer to homes along Woodyard Road will be mitigated to the greatest extent possible by reducing the width of the median in those areas where the effect would be most pronounced.
- (d) The Final EIS will include recent improvements and current zoning.
 - 3. Mr. Howard Harris (No address)

As a representative of the Oxon Hill Bicycle and Trail Club, Mr. Harris endorsed the inclusion of bicycle lanes with the proposed improvements and suggested that a

cross section of the willow oak at Dower House Road be preserved for the educational enrichment of the people.

Reply

A bicycle lane will be included with either of the "build" alternates, but not with the "no-build" alternate.

4. Mr. John Gruber, President
Tanglewood Citizens Association
7908 Colonial Lane
Clinton

Mr. Gruber questioned the traffic projections cited in the EIS by observing that current gasoline prices will reduce driving. He favored Alternate G because 60% of the traffic on Woodyard Road is through traffic. He proposed a meeting with all of the local civic associations and elected officials to discuss the plan.

Reply

Traffic projections are based on the best informatiom regarding economic growth, the construction of other highways in the network and all other factors that might influence traffic volume. The price of gasoline is one such factor, but since most of the traffic on Woodyard Road is essential commuter traffic that will utilize the road regardless of the price of gasoline it is believed that this will have only a minor effect.

5. Mr. David Nicholson 9514 Nottingham Drive Upper Marlboro

Mr. Nicholson requested information regarding the widening of Branch Avenue between Woodyard Road and the Belt-

way. He also requested information on public response to the Alternates described at the previous public meetings.

Reply

Information on widening Branch Avenue may be obtained directly From the State Highway Administration. Responses to this project from citizens, from government and private agencies and from public officials are included in this document.

6. Mr. Richard Weir Nottingham Drive Sherwood Forest

Mr. Weir favored Alternate G.

7. Ms. Katherine Coolridge
Past President, Broadway Citizens Association
1111 Parkmont Drive
Upper Marlboro

Ms. Coolridge reiterated the previous stand of the Broadway Citizens Association in favor of Alternate G.

Reply

The reasons for the selection of Alternate H are summarized in a Project Status Report dated July 17, 1980 and included in Section 7.

8. Mrs. Dorothy Troutman (No address)

As a member of Citizens for Upper Marlboro, Mrs. Troutman was concerned about the relationship between this project and the Melbourne (sic) Special Treatment Area Study. In the Melwood Plan industrial traffic would follow a new route between Dower House Road and Route 4, and Woodyard Road would remain as it is. If Alternate G cannot be built she prefers the No-Build Alternate.

Reply

The relationship between the Melwood Special Treatment Area Study and this project was considered during the course of this study.

7. COMMENTS AND COORDINATION

Included in this section are responses to requests for comments on the Draft Environmental Impact Statement. These comments have been taken into consideration in the selection of the alternate to be implemented, and, where appropriate, the comments have been incorporated into the text. Following the letters are replies to suggestions and comments and indication as to where suggested changes can be found in the text.

DEPARTMENT OF HEALTH AND MENTAL HYGIENE ENVIRONMENTAL HEALTH ADMINISTRATION

P.O. BOX 13387

201 WEST PRESTON STREET
BALTIMORE, MARYLAND 21203
PHONE • 301-383- 3245

OONALD H. NOPEN

March 17, 1978

Mr. Andrew Brooks
State Highway Administration
Bureau of Landscape Architecture
Joppa and Falls Roads
Brooklandville, Maryland 21022

Dear Mr. Brooks:

NEIL SOLOMON, M.D., PH.D.

SECRETARY

The Air Quality Analysis for the improvement of Woodyard Road has been reviewed. All alternatives were found to be consistent with this agency's plans.

Sincerely,

1.11:1. 1. 1. 1. 1.

William K. Bonta, Chief Division of Program Planning and Analysis

WKB:JH:sez



Maryland Historical Trust

December 1, 1978

1070 DEC 17 AM 9 27

Mr. Eugene T. Camponeschi Bureau of Project Planning State Highway Administration 300 West Preston Street Baltimore, Md.

AUM ATION PROJECT PLANNING

RE: Md. Rt. 223 from Md. 4 to Md. 5 P 122-006-371

Dear Mr. Camponeschi:

Thank you for your letter of November 6, 1978, and the archaeological report regarding the project listed above. No known historic or archaeological sites will be affected by either alternate G of H providing the recommendations of the Archaeological Reconnaissance submitted by Dennis C. Curry are followed. However, I prefer Alternate G since Alternate H does require the acquisition of some land belonging to His Lordship's Kindness, now on the National Register.

Sincerely,

J. Rodney Little State Historic

Preservation Officer

JRL:GJA:mms

cc: Dennis Curry: George Andreve Margaret Yewell; Theodore Machen

Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301) 269-2212, 269-2438 Department of Economic and Community Development

Reply:

Based on the results of this project study the Project Planning Team recommended Alternate H and the diamond interchange for implementation, and the State Highway Administrator, M. S. Caltrider concurred with the recommendation. The advantages and disadvantages of the proposed alternate and interchange are discussed in Sections 4.1.2 and 4.2.1. Probable environmental impacts are discussed in Section 3, and mitigation of impacts to His Lordships Kindness are outlined in Section 4.4. The recommendation is consistent with adopted Master Plans for the area and reflects the position of county officials. It also reflects the fact that current development in the area has, as a practical matter ruled out Alternate G.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

6TH AND WALNUT STREETS
PHILADELPHIA PENNSYLVANIA 19106

MAR 5 1079

Mr. Charles R. Anderson Chief Bureau of Landscape Architecture Maryland State Highway Administration 2323 West Joppa Road Brooklandville, Maryland 21022

Re: Air Analysis; Maryland Route 223, Prince Georges County, Maryland

Dear Mr. Anderson:

We have reviewed the above referenced air quality analysis. Based upon this review, we have no objection to further development of the project from an air quality standpoint. If you have any questions, or if we can be of further assistance, please contact us.

Sincerely yours,

John R. Pomponio, Chief

EIS & Wetlands Review Section

PRINCE GEORGE'S COUNTY



County Administration Building Upper Marlboro, Maryland 20870 (301) 952-3820

County Council
WILLIAM B. AMONETT
Charman

OCT 1 1 1979

Mr. M. S. Caltrider State Highway Administrator 300 West Preston Street Baltimore, Maryland 21203

> RE: Woodyard Road, Md. 223 from Md. 5 to Md. 4 Contract No. P 122-6-371

Dear Mr. Caltrider:

In response to the questions raised in your June 13 letter to the Prince George's County Planning Board, at its meeting of October 9 the Prince George's County Council endorsed Alternate H, the reconstruction of Woodyard Road along its existing alignment as recommended in the Planning Board staff report. The Council recognized that the widening of this road may be a number of years in the future, but urged that the critical section between Donna Drive and Rosaryville Road, and the interchange at Md. 5, be improved at an early date.

In considering the advantages and disadvantages of the various alternates, including the no-build option, the Council found that the County's long-term interests could best be served by construction of Alternate H. This highway is a vital link in a future local circumferential facility to serve central Prince George's County. While a proposed relocation would avoid some of the homes now fronting on Woodyard Road, impacts on new development under construction and on recently acquired parkland would be consider-Further, more than 30% of the right-of-way necessary for widening the existing roadway has been acquired through dedication over the years. Although the SHA's alternative alignments were devised in response to Federal requirements, we believe that they may have misled the public into thinking that the alternatives were viable when in fact they posed implementation problems. Even though an alternative alignment may reduce the impacts on properties which now front on Woodyard Road, it may cause more costly problems elsewhere.

Therefore, the Council recommends that the State pursue location approval for Alternate H. Further, the Council recommends that:

- 1. The improvement consist of a four lane divided roadway for its entire length and, if possible, be designed to have "parkway character." Parkway character as used here suggests that (1) special attention be given to preservation of mature trees within the right-of-way, (2) the right-of-way be allowed to vary in width in order to preserve specimen trees, and (3) landscaping materials be used extensively within the right-of-way. We have on several occasions expressed our desire to the State Highway Administrator to create a parkway character for this central arterial extending from Lanham-Severn Road (Md. 564) southward to Rosaryville Road and including Glenn Dale Road, Enterprise Road, and a portion of Woodyard Road. This approach also appears to be possible for Piscataway Road south of Steed Road. To date we have received no response to this proposal. We would welcome your thoughts on this proposal and would be pleased to work with the SHA to implement the concept where feasible.
- 2. The number of access points be minimized by designing a single entrance drive to serve adjacent (or nearby) public facilities, such as Tanglewood School and Park.
- 3. The historic Willow Oak tree located near Dower House Road be preserved.
- 4. Wherever possible, additional buffer be provided for homes fronting on the highway by shifting the alignment onto undeveloped land.

We appreciate the opportunity to comment on this important project.

· Very truly

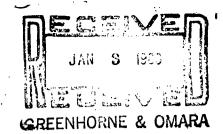
lliam BZ Amonett, Chairman

County Council

County Executive Hogan cc: Mr. John Burcham

Reply:

- 1. Preservation of mature trees and specimen trees (except the willow oak at Dower House Road), the use of landscape materials and the creation of a parkway character will be considered during the final design of this project.
- 2. Minimization of access points will be considered in the final design stage.
- 3. It will be impossible to preserve the willow oak at Dower House Road. See Section 5.
- 4. The provision of buffer zones by modification of grades and shifts in alignment will be studied prior to completion of the final design.



DEU 5 1 1979

RE: Contract No. Pl22-6-371
Maryland Route 223
From Maryland Route 5 To
Maryland Route 4

Woodyard Road

The Honorable Lawrence J. Hogan County Executive Prince George's County County Administration Building Upper Marlboro, Maryland 20870

Dear Mr. Hogan:

I have received your letter of December 12, 1979 in which you have expressed your support for Alternate H, the reconstruction of Woodyard Road along its existing alignment.

The Public Hearing for this project is tentatively scheduled for February 7, 1979. Following the Hearing, a decision will be made to recommend an alternate for Location Approval.

I agree that the Branch Avenue/Woodyard Road interchange along with the realignment of the section near Rosaryville Road is of prime importance to improving the flow of traffic through the area and that these two elements may warrant being accomplished on a priority basis, funds permitting.

I want to thank you for expressing your recommendation concerning this project, and assure you that it will be taken into full consideration in arriving at a final decision.

Very truly yours,

the Son Control of

M.S. Caltrider State Highway Administrator

MSC: dd

bcc: Mr. Hal Kassoff

Mr. William Shook W/attach.

Mr. Larry Saben

Mr. William Delane@y

Mr. Eugene T. Camponeschi

w/attach.

Mr. Walter L. Hanrahan





THE PRINCE GEORGE'S COUNTY GOVERNMENT

In Deferrant

December 12, 1979

RECEIVED

DEC 14 1979

Mr. M. S. Caltrider State Highway Administrator 300 West Preston Street Baltimore, Maryland 21203

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

Dear Mr. Caltrider:

This letter is to express my support, in accordance with County Council Chairman Amonett's letter to you dated October 11, 1979, regarding the Woodyard Road Improvement Project.

The Alternate H, as recommended in the Planning Board Staff Report, provides for the reconstruction of Woodyard Road along its existing alignment. I realize that the widening of this road is a number of years in the future, however, it is my recommendation that the State Highway Administration complete the location approval for this proposed improvement. This location approval is of particular concern in regard to the Branch Avenue/Woodyard Road interchange.

I continue to have reservations about this project and its relationship to the land use policies of the Melwood Special Treatment Area, but believe that improvements, such as the resurfacing and rehabilitation project, should proceed as expeditiously as possible.

Sincerely.

Hogan

County Executive

MICH YWH STATE

B DEC 17 11: 17



Soil Conservation Service

4321 Hartwick Road College Park, Maryland 20740

January 7, 1980

Mr. Eugene T. Camponeschi, Chief Bureau of Project Planning State Highway Administration 300 West Preston Street Baltimore, Maryland 21201

Dear Sir:

Thank you for the opportunity to review the draft EIS for Maryland Route 223 upgrading proposal from Maryland Rt. 5 to Maryland Rt. 4.

We were unable to find that prime agricultural soils were identified in the project area or that the impact of this project on them was evaluated.

Attached please find a list of the prime agricultural soils for Brimee Georges County which you can use in conjunction with the soil survey for Prince Georges County.

If we can be of further assistance feel free to contact us.

Sincerely,

Gerald R. Calhoun State Conservationist

Attachment

cc: Clarence S. Britt, Chairman, Prince Georges County SCD, 9010
Breezewood Terrace, Greenbelt, Maryland 20770
Norman A. Berg, Administrator, SCS, Washington, D.C.
Director of the Environmental Services Division, SCS, Washington, D.C.

cc/attack to
Green horne + 0 Mara 1/2 9/80
RES



Reply

The list of prime agricultural lands supplied by the Soil Conservation Service was used to identify these lands in the Woodyard Road area, and the text of Section 2.2.3 was modified accordingly.

6512 Rosemont St.
Upper Marlboro, Md. 20870
January 19, 1980

1980 JAN 22 PM 4 09

Mr. Eugene T. Camponeski Maryland State Highway Administration 300 West Preston St. Baltimore, Maryland 21203

ADMINITED ATION PROJECT PLANNING

Dear Sir:

Members of our Association have reviewed the Draft Environmental Impact statement for Maryland Route 223 (Woodyard Rd.) from Md. Route 5 to Md. Route 4 and offer the following comments. We have also sent copies of this letter to the Environmental Protection Agency and the U.S. Department of Transportation. We are sure that these two agencies will be interested in our comments.

We note on page 1-4 that "Woodyard Road will become a key link in a north-south route that will extend from the south western part of the County, through Enterprise Road..., and ultimately will connect with Rte 193 in Montgomery County. A four-lane facility will be required to accomodate the anticipated traffic increases.... This statement agrees with statements made by the County planning staff and some Maryland DOT employees that since the once proposed "outer-belt" is effectively dead, the Rt 223 corridor will be a surrogate for the outer-belt. It is common knowledge that this is the State's intention even though Rt 223 will not have full access control. The statement made on page 1-4 seems to conflict with the statement made on page 3-14: "The control strategies in the SIP compensate for normal growth of They do not however, allow for the VMT increases which would accompany an additional major highway corridor. As the subject project may be regarded as minor in relationship to the regional network, it is consistent with the SIP." We believe the Maryland DOT is not accurately portraying their full intentions concerning this route.

First, any four lane (and eventually six lane) highway from southern

(a)

(c)

(d)

(.;

Prince George's County to Montgomery County is a major regional highway as indicated on page 1-4. Since a major new highway (which Rt 223 will be once connected to Enterprise Rd.) will increase VMT and induce new commercial, industrial and residential growth in a largely undeveloped area thereby further increasin; VMT and air pollution the new highway can not be considered consistent or in conformance with the State Implementation Plan.

In addition, Section 176(c) of the Clean Air Act Amendments of 1977 (b) provides that "No department, agency, or instrumentality of the Federal Government shall (1) engage in, (2) support in any way or provide financial assistance for, (3) license or permit, or (4) approve any activity which does not conform to a plan after it has been approved or promulgated under Section 110." Since the control strategies in the SIP do not allow VMT increases over and above normal growth, any federal agency such as the U.S. DOT and the U.S. EPA would have to find that the proposed project does not conform to the plan.

Second, the traffic projections do not appear realistic nor consistent. The projected ADT for the year 2005 for alternate H is 36,700. The no build alternate also shows an ADT of 36,700 for 2005. This does not appear consistent with reality since the no build alternate would be only two lanes and would not likely be able to accommodate this high traffic volume. It is doubtful that the no build alternate will deteriorate to level of service E since commuters would not use it as a short cut route between Rt 5 and Rt 4 if it ever got that bad.

Third, it appears that the Maryland DOT is segmenting the environmental process for a major highway. Since MDOT has intentions of constructing a major new highway, an environmental impact statement should be drafted and submitted for comment on the entire alignment from southern Prince George's County to Montgomery County. This would allow the social, environmental and economic impacts of a major new north-south highway to be assessed. The energy usage implications should also be addressed since this new highway would foster added emphasis on auto transportation and usage.

(e)

Fourth, page 5-1 indicated: "Alternate H will require full utilization of existing R/W along Woodyard Road. This means that traffic will be brought closer to residents living along the road with consequent possible increases in noise and air pollution in addition to loss of the use of land. None of these impacts can be avoided if Alternate H is constructed. The increased noise level, however, will occur over a period of more than 20 years as traffic increases from its present volume to its predicted volume. Thus, the yearly increase in noise level will be small and may very well be marked by noise levels attributable to Andrews Air Force Base." This statement is only partially true. The noise will be brought closer to residents since vehicles will practically be at some people's front doors. It is not correct to say this will occur over 20 years. Once the current structure over Piscataway Creek is replaced, the truck traffic which is currently diverted down Rosaryville Rd. will use the section of Rt 223 through Tanglewood. The weight limit on the current structure prevents truck traffic now. Most of the trucks in our area are dump trucks which operate at the 85+ dB level. This will make the noise and vibration unbearable for those people living in the Tanglewood area.

Fifth, the Draft EIS does not reflect the work recently finished on Wood- (f) yard Rd. The lane width was increased and shoulders were added in many areas.

Sixth, figure 2-6 on page 2-15 does not reflect the current zoning. For instance, the southwest quadrant of the Rt 4 & Rt 223 interchange is shown as industrial. It is not industrially zoned.

Seventh, all of these comments have been germane to Alternate H. This is because the EDOT has no intention of going through with Alternate G. There is even a comment to this effect in the DEIS from a County official. Alternate G was evidently only included to satisfy federal requirements that more than one alternate be considered. However, this comment pertains to Alternate G. Alternate G should also have a bicycle path.

We hope these comments will be of assistance and improve the environmental process.

Sincerely,

Greg Hoge, Vice President

Melwood Citizens Association

CC - Green horro + O'Nora

Reply

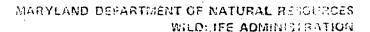
(a) The State Highway Administration has determined that the plan to link Woodyard Road with Enterprise Road is not implementable within the mext twenty years. The designation of Woodyard Road as a minor arterial, therefore, is correct, and the proposed improvements are consistent with the State Implementation Plan.

(b and c) Trafffic projections are based on projected population changes, the construction of nearby roads and general economic conditions. They are a realistic estimate of anticipated normal growth, therefore, and are consistent with the SIP. Since highways generally do not generate traffic the projected traffic volumes will occur whether or not Woodyard Road is improved, but it will operate at Level of Service E if it is not widened.

- (d) Since Woodyard Road is not expected to be extended during the next twenty years the termini chosen for this project are logical and consistent with area Master Plans.
- (e) Noise levels on Woodyard Road are expected to increase whether or not Alternate H is constructed. Alternate H, however, includes measures for mitigating these noise levels to the greatest extent possible. They are described in Section 3.5.7.

The noise analysis for the No-Build Alternate includes heavy truck traffic that is now permitted across the new drainage structure.

- (f) The text in Section 1.2 has been modified to reflect recent improvements in Woodyard Road.
- (g) Figure 2≟6 has been changed to reflect current zoning.
- (h) Alternates H and G as well as the two alternate interchanges have received equal consideration during the study. See the Summary for the reasons for selecting Alt.H.





SERNARD F. HALLA DIRECTOR EARL H. HODIL DEBUTY DIRECTOR TAWES STATE OFFICE BUILDING ANNAPOLIS 21401 AREA 301 269-3195

TO: Lester A. Levine

DATE: January 16, 1980

FROM: Carlo R. Brunori CVB

SUBJ: 80-12-668 - Draft EIS-MD Rt. 223, P.G. County

We have reviewed the above mentioned DEIS and have the following comments.

Alternate H would be environmentally acceptable since it will result in minimal loss of wildlife habitat within the corridor. Alternate G, on the other hand, would result in a substantial loss of quality wildlife habitat. The removal of this habitat does not seem justified since better utilization of the existing alignment could achieve the stated goals, i.e. upgrading Woodyard Road, elimination of dangerous and substandard curves and grades, and putting an interchange at Branch Avenue, thus eliminating the need for extensively disrupting this habitat.

Should alternate G be selected, further coordination would be necessary to assess the loss of habitat and potential for mitigation.

The Inland Fisheries Division requests a work restriction similar to that required for anadromous fish. As a minimum, no work over the Piscataway stream crossing should be performed between April and June.

CRB: SEM: wfs cc: D. Wharton

Reply

The State Highway Administration will include in construction contracts specifications that there will be no construction activities over the Piscataway Creek during April through June.

THOMAS C. ANDREWS



STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES WATER RESOURCES ADMINISTRATION

TAWES STATE OFFICE BUILDING ANNAPOLIS, MARYLAND 21401 (301) 269-2265

January 22, 1980

<u>MEMORANDUM</u>

TO: Lester A. Levine

FROM: Michael A. Ports

SUBJ: MD 223 Draft EIS Review

WRA No. 75-PP-0049 Clearinghouse 80-12-668

A review of the Draft document for the above referenced project has been completed. As a result of this review the following comments are offered:

- 1. Alternate H follows the existing roadway alignment while Alt. G is is a relocation that would require the acquisition of approximately 2.36 times as much land.
- 2. Alternate H would have less of an impact on the water resources of the area by minimizing the disturbance of soil.
- 3. Alternate H would require 1 crossing of Piscataway Creek and 1 crossing of Charles Branch. Alternate G would require 2 crossings of Piscataway Creek and 1 crossing of Charles Branch. Waterway Construction Permits for these crossings would be required.
- 4. The report is being retained in our files.
- 5. The report states that no state wetlands are involved with this project; therefore, the report was not sent to Wetlands for their comments.

Based upon these comments, Alternate H seems to be the most preferable from the viewpoint of this agency.

MAP/CKC/bal

Draft Environmental Impact Statement/
Section 4(f) Determination, Route 223,
Prince George's County, Maryland,
FHWA-MD-EIS-79-5-D

memorandum

______ Date: January 24, 1980

From: Director, Office of Environment and Safety

Reply to Attn. of:

To: Chief, Environmental Programs Division, FHWA/HEV-10

We have reviewed the subject draft environmental impact statement/ section 4(f) determination and offer the following comments.

The draft indicates that several alternatives were considered early in the planning process and all were eliminated except two. Both of these alternatives impact a National Register historic property. In order to comply with section 4(f) of the Department of Transportation Act, other alternatives that do not impact the historic property should be discussed in the final EIS, along with a detailed explanation of why they may not be feasible and prudent.

The final EIS must also indicate whether the project is consistent with the State Implementation Plan for air quality. In addition, the final EIS should not be approved until a Memorandum of Agreement has been signed by the Advisory Council on Historic Preservation.

We appreciate the opportunity to review and comment on the draft EIS.

SPEED LIMIT 55 (2)

(1)

(3)

Martin Convisser

Rep1y

- (1) An avoidance alternative is discussed in the 4(f) Statement in Section 4.4. It would require the acquisition of a house and the consequential relocation of its owner-occupant (See figure 4-3). Since the acquisition of a small portion of His Lordship's Kindness will have no effect on the historic property and suitable measures have been taken to assure this, the avoidance alternative is not considered prudent and feasible. Refer to Section 4.4.2., for a more detailed discussion.
- (2) The project is consistent with the S.I.P. for air quality. See Section 3.2.4., for the consistency discussion.
- (3) A Memorandum of Agreement will not be necessary since there will be "no effect" on historic or archeological sites. See Section 7 for the determination made by the State Historic Preservation Officer on December 1, 1978.



DEPARTMENT OF TRANSPORTATION URBAN MASS TRANSPORTATION ADMINISTRATION 434 WALNUT STREET

PHILADELPHIA, PENNSYLVANIA 19106

REGION III

January 25, 1980

RECEIVED

JAN 90 1980

Mr. Hal Kassoff, Director Office of Planning and Preliminary Engineering Maryland Department of Transportation P.O. Box 717 300 West Preston Street Baltimore, MD 21203

DIRECTOR, CTRICE OF PLANNING & PRELIMITARY ENGINEERING

RE: Maryland Route 223

From MD #5 to MD #4

Dear Mr. Kassoff:

UMTA has reviewed the draft Environmental Statement for the abovereferenced facility and has no comment.

Sincerel

Franz K. Gimmler Regional Director



Prince George's County Public Schools

UPPER MARLBORO, MARYLAND 20870

TT 10 PN 9 54

February 5, 1980

RECEIVED

Mr. Hal Kassoff, Director
Office of Planning & Preliminary Engineering
State Highway Administration
300 West Preston Street
Baltimore, Maryland 21201

FFR S 1930

DIRECTOR, OFFICE OF PLANNING & PRELIMI MAY ENGINEERING

Dear Mr. Kassoff:

Re: Your Project P-122-6-371
Md. Rt. 223 (Woodyard Road)
From Md. Rt. 5 to Md. Rt. 4
Our Melwood Elem. School #15-1-04
Tanglewood Elem. School #09-1-07
James Madison Jr. High School #15-2-10

Reference is made to our letter of January 8, 1980 which requested information on which of the alternates were currently under consideration.

Your brochure, which was received on February 1, 1980, noted that the following alternates are under consideration:

- No build.
- Alternate G.
- Alternate H.

Please note for the record that our preference is Alternate G since it will not have any physical or environmental impact on the three existing public schools located on Woodyard Road, e.g. Tanglewood Elementary, Melwood Elementary and James Madison Junior High.

Your cooperation in this matter is appreciated.

and account account of the second of

Very truly yours,

Parker

Director of Plant Planning, Construction and Real Estate

RIP: AEF: ple

cc: Mr. William Shook

Reply

Based on the results of this project study the Project Planning Team recommended Alternate H and the diamond interchange for implementation, and the State Highway Administrator, M. S. Caltrider, concurred with the recommendation. The advantages and disadvantages of the proposed alternate and interchange are discussed in Sections 4.1.2 and 4.2.1. Probable environmental impacts are discussed in Section 3. The recommendation is consistent with adopted Master Plans for the area and reflects the position of county officials. It also reflects the fact that current development in the area has, as a practical matter, ruled out Alternate G.



· MARYLAND

DEPARTMENT OF STATE PLANNING

301 W. PRESTON STREET **BALTIMORE, MARYLAND 21201**

HARRY HUGHES GOVERNOR

February 6, 1980 CONSTANCE LIEDER SECRETARY

. This is a sugarme

Mr. Eugene Camponeschi, Chief Bureau of Project Planning State Highway Administration 300 W. Preston Street Baltimore, Md., 21201

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT (EIS) REVIEW

Applicant: State Highway Administration

Project: Draft EIS - Md. 223 from Md. Route 5 to Md.

Rte. 4 (Prince George's Co.) Contract #P122-006-371

and FAP # S9393 (1)

State Clearinghouse Control Number: 80-12-668

State Clearinghouse Contact: James W. McConnaughhay (383-2467)

Dear Mr. Camponeschi:

The State Clearinghouse has reviewed the above Statement. In accordance with the procedures established by the Office of Management and Budget Circular A-95, the State Clearinghouse received comments from the following:

Dept. of Public Safety & Correctional Services, Dept. of Economic & Community Development, including their Historical Trust section, Dept. of Education, Dept. of Budget & Fiscal Planning, Dept. of General Services, Environmental Health Administration, Interagency Committee for Public School Construction and our staff noted that the Statement appears to adequately cover those areas of interest to their agencies.

Metropolitan Washington Council of Governments conducted the regional and local A-95 review of the Statement and determined that the Statement is in general accord with the regional and local planning process and adopted policies.

Md. Dept. of Natural Resources indicated (copy attached) a strong preference for Alternate H which basically follows the existing roadway. Alternate H would have less impact on the water, land and wildlife resources in the area and appears to be the only alternative that is environmentally acceptable.

Dept. of Health & Mental Hygiene and the National Capital Planning Commission were provided the opportunity to review and comment on the project within this review period but have not responded as of this date. If any substantive comments are received subsequent to this letter, the comments will be appropriately forwarded.

We hope these comments are useful in your agency's continuing evaluation of this project and appreciate your attention to the A-95 review process.

TELEPHONE: 301-383- 2467 OFFICE OF STATE CLEARINGHOUSE Mr. Eugene Camponeschi February 6, 1980 Page Two

Sincerely,

Sames W. McConnaughhay

Director, State Clearinghouse

JWM:BG:mmk

cc: E. Chen/G. Kamka/L. Frederick/J. Bresee/D. Ricker/W. Foy/M. Eisenberg W. Scheiber/E. Pigo/R. Griffith/E. Seboda/Henry Silbermann



DEPARTMENT OF THE ARMY

BALTIMORE DISTRICT, CORPS OF ENGINEERS P.O. BOX 1715 BALTIMORE, MARYLAND 21203

REPLY TO ATTENTION OF:

NABPL-E

6 February 1980

Mr. Eugene T. Camponeschi Bureau of Project Planning State Highway Administration 300 West Preston Street Baltimore, Maryland 21201

Dear Mr. Camponeschi:

The Baltimore District, Corps of Engineers, has reviewed the Draft Environmental Impact Statement (DEIS) for Maryland Route 223 from Maryland Route 5 to Maryland Route 4 and offers the following comments for your consideration.

- 1. The project as presented would not affect any existing or proposed Corps' projects.
- 2. On page 2-26, 2nd to last paragraph in Section 2.2.5.5., the flood associated with the volume and rate of flow should be specified.
- There should be a statement on the effect of the flood potential on the highway. Will the highway structure, embankment or bridge be capable of withstanding the flood flow with minimum damage?
- 4. Under the regulatory jurisdiction of the Corps of Engineers, a Department of the Army permit would be required for work involving the deposition of dredged or fill material into navigable waters of the United States or the diversion of streams through culverts pursuant to Section 404 of the Federal Water Pollution Control Act as amended. Mr. Frank Bonomo of Operations Division, Baltimore District, 962-3477, should be contacted for further information regarding permits.

We appreciate the opportunity to comment on the DEIS and if we can be of further assistance, please contact us.

Sincerely yours,

copy to F. Provini, 600.
2/4/80
RES

WILLIAM E. TRIESCHMAN, Jr.

Chief, Planning Division

Reply

- (2) Floodplain elevations were obtained from a map supplied by the COE and transposed to Figure 4-1. The COE also supplied the only available volume and flow informationin a letter dated November 27, 1974 and verified in a letter dated September 26, 1978. Both letters and the map are included in Appendix C.
- (3) Highway structures will be capable of withstanding maximum flood flows see Section 2.2.5.5.

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE

NORTHEASTERN AREA STATE AND PRIVATE FORESTRY 37D REED ROAD - BROOMALL, PA. 19008 (215) 596-1672

> 1950 February 7, 1980

Mr. Eugene T. Camponeschi, Chief PROJE TO LEARNING Bureau of Project Planning State Highway Administration 300 West Preston Street Baltimore, MD 21201

1 10 min 50

Refer to: Draft Environmental Statement, MD Route 223, from MD Route 5 to Route 4, Prince George's County

Dear Mr. Camponeschi:

From our standpoint, Alternate H, which uses an existing right of way, is the preferred route of the 2 planned for construction. Alternate G would, as stated, remove fewer dwellings than H, but would close out options for residential construction, as well as recreation areas, along its path.

Thank you for the opportunity to review this Statement.

Sincerely,

DALE O. VANDENBURG

Staff Director

Environmental Quality Evaluation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106
FEB 7 1980

TO 10 PM 0 59

Mr. Eugene T. Camponeschi, Chief Bureau of Project Planning State Highway Administration 300 West Preston Street Baltimore, Maryland 21201

PROJECTAL NEW NO

Re: Maryland Route 223, from Maryland Route 5 to Maryland Route 4

Dear Mr. Camponeschi:

We have reviewed the Draft Environmental Impact Statement for the proposed project referenced above, and have classified it in EPA's Reference Category ER-2. We have enclosed a copy of the Definition of Codes for the General Nature of EPA Comments to provide a more detailed description of this rating. In accordance with our responsibilities under Section 309 of the Clean Air Act to inform the public of EPA's views on the potential environmental effects of Federally assisted actions, this rating will be published in the Federal Register.

We are concerned with the narrow scope of alternatives presented in the DEIS, the noise impacts of the proposed project, and the nature of the air quality analysis. This proposed project represents an important connecting link between two State highways, Maryland Routes 4 and 5, yet only the "no-build" and two "build" alternatives are presented in the DEIS. In order to conform with NEPA regulations, we believe that an EIS for a project of this importance should include a wider range of alternatives. For instance, since 60% of the traffic on Woodyard Road is through traffic (page 4-4), we believe that the EIS should discuss the origins and destinations of this traffic. Such an analysis could reveal other alternative routes or modes of transportation for the travel needs of the area. These issues are particularly important because the current project could be the first step in expanding Woodyard Road to a six lane highway (page 1-1). Due to the important role this proposed project could play in the area's highway network, and the regulations implementing NEPA, an expanded alternatives analysis appears to be warranted.

We are also concerned with the noise impacts of the two build alternatives. Alternate H exceeds Federal design noise standards at 18 locations, including numerous single family houses (the DEIS does not specify the exact number), a hospital, church, and elementary shool.

(a)

(b)

(c)

Alternate G exceeds standards at the hospital and several homes. Since noise mitigation measures are not feasible on this kind of roadway, these noise levels may have an adverse effect on the residents and users of the homes and facilities adjacent to the proposed project.

The discussion of air quality will require several revisions for the Final EIS. On page 2-27 it is stated that only two of the monitored pollutants, photochemical oxidants (PCO) and hydrocarbons, had exceeded national standards between 1972 and 1976. As Table 2-6 indicates, however, the 8-hour CO standard was also equalled or exceeded for three of the five years. This data does not support the statement that local CO concentrations are "low or moderate" (page 2-29). The EIS should note the importance of CO pollution in the study area, and should revise the discussion of PCO formation in light of this information.

The issue of CO levels also arises in Section 3.2.2 when background levels are included in the estimates of future air quality impacts. The 8-hour background levels used in this section are much lower than the monitored values in Table 2-6, and this difference should be explained. If the Hanna-Gifford Model has been used, the final EIS should explain why this method was chosen rather than utilizing actual monitoring data.

Furthermore, since Alternate H will apparently reduce the setback (e) distance between the roadway and the sensitive receptors, we believe that the 8-hour CO analysis should receive further attention. The discussion of air quality should also indicate what method was used to determine the air quality impacts.

Our review of this DEIS has raised both procedural and environmental questions. The selection of alternatives, the noise impacts, and the air quality analysis are all of concern to us, and we beieve that these issues should receive additional attention in the Final EIS. If you have any questions concerning our comments, please contact Mr. Eric Johnson of my staff at (215) 597-4388.

Sincerely yours,

on in a

EIS & Wetlands Review Section

Enclosure

Reply

- (a) The scope of this project is more clearly defined on page 1-4, and the statement on page 4-4 has been changed to reflect this scope. In view of the limited scope now envisioned for this project the number of alternatives that have been studied appears justified.
- (b) Noise abatement measures are not feasible for this project, but landscaping is suggested as a partial noise reduction measure in Section 3.5.7.
- (c) The ambient air quality charts have been updated where possible, and the text on pages 2-27 and 2-29 has been changed to include the EPA suggestions.
- (d) Background CO levels are calculated by the COG using the Hanna-Gifford model because this is the accepted model for forecasting background CO levels. Background levels so calculated are lower than the monitored values in Table 2-6 because the values in Table 2-6 are maximum 8-hour CO concentrations.
- (e) The methods used to determine air quality impacts are summarized on page 3-16, and the parameters used in the calculations are tabulated in Table 3-3.



United States Department of the Interior

OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

ER 79/1207

FEB0 18 1980

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda, Suite 220
Baltimore, MD 21211

Dear Mr. Elinsky:

This responds to the request for the Department of the Interior's comments on the draft environmental/Section 4(f) statement for SR-223 (from SR-5 to SR-4), Prince Georges County, Maryland.

SECTION 4(f) COMMENTS

(a)

We would have no objection to a finding of no feasible and prudent alternative to the taking of a portion of His Lordship's Kindness Historic Site. However, the statement includes virtually no discussion of the second proviso of Section 4(f): namely, all possible planning to minimize harm to the site. In this regard, we suggest that the Maryland State Highway Administration work with the State Historic Preservation Officer to develop measures that will minimize visual and other intrusions on the site, i.e., landscaping. Evidence of coordination with the State Historic Preservation Officer reflecting those measures which will be undertaken should be included in the final statement.

ENVIRONMENTAL STATEMENT COMMENTS

Water Resources

(b)

On page 2-24, the narrative states that 2 miles downstream from Woodyard Road (Route 223) the 100-year floodflow of Piscataway Creek might be expected to be approximately 4,300 cfs and the stream level might be 8 feet overbank. These numbers apparently are from a 1967 report of the U.S. Corps of Engineers titled "Flood Plain Information Piscataway Creek, Prince Georges County, Maryland." We suggest that this important report be referenced in the statement.

The section on ground water is inadequately covered in the narrative. We believe the sentence concerning aquifer recharge areas located in the highway corridor should be amplified to include the names of the aquifers traversed by the highway which are the Brandywine and Bryn Mawr gravels. They are relatively minor aquifers in the area and probably improving the highway will have little effect on their hydrologic characteristics, but they should be identified and discussed briefly.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

Appendix A, Item II-B-14, shows that the project action will require a permit for changes of a stream or other water body. We interpret this to mean a "404" permit from the Corps of Engineers since the project traverses Piscataway Creek.

Discussion in the statement of this interrelated Federal action and expected impacts is lacking. Site specific design information with details of mitigation measures to be taken is needed. Accordingly, the comments on this statement do not preclude separate evaluation and comments by the Fish and Wildlife Service when it reviews the permit application.

In review of the permit application to the Corps, FWS may concur, with or without stipulations, or object to the proposed work depending on the detailed information then available. Based on its current knowledge of the project area, FWS advises that its tentative position will be to concur, perhaps with stipulations aimed at stream bank stabilization and erosion and sedimentation controls. In addition, FWS considers Alternative H preferable due to lesser impacts on fish and wildlife resources and the smaller acreage of wildlife habitat destroyed in right-of-way clearing.

Should appropriate site-specific information be available, FWS would be pleased to cooperate and coordinate with you, the Corps of Engineers, Maryland Department of Transportation and Maryland Department of Natural Resources in tentative resolution now of all factors, including stipulations, relating to the needed permit so that this information may appear in the final environmental statement.

SUMMARY COMMENTS

We concur that there is no feasible and prudent alternative to the use of some land from the historic site. In addition, for this case, we are willing to defer to the mitigation measures resolved among the State Historic Preservation Officer, the landowner, and highway officials. Contingent on the final statement describing the mitigation measures to be taken, the Department of the Interior offers no objection to Section 4(f) approval of this project.

We would be pleased to cooperate with you on a technical assistance basis in further project planning and evaluation. The field office with historic resource responsibility is the Regional Director, Heritage Conservation and Recreation Service, U.S. Department of the Interior, Federal Building, 600 Arch Street, Room 9310, Philadelphia, PA 19106 (phone: FTS 597-7995). For facets relating to fish and wildlife and 404 permit matters, responsibility will rest with the Area Manager, Fish and Wildlife Service, U.S. Department of the Interior, 1828 Virginia Street, Annapolis, MD 21401 (phone: FTS 922-2007; comm. 301/269-6324).

We appreciate the opportunity to offer these comments.

1

James H. Rathlesberger Special Assistant to

cc: Mr. Eugene T. Camponeschi Chief, Bureau of Project Planning MD Department of Transportation State Highway Administration P.O. Box 717 300 West Preston Street

Baltimore, MD 21211

State Historic Preservation Officer Advisory Council on Historic Preservation

Reply

- (a) Section 4.4 in the Draft EIS simply noted that the project was involved with a 4(f) determination. The Final EIS contains a 4(f) Statement, Section 4.4, that complies with the DOI suggestions.
- (b) \S (c) Section 2.2.5.4 has been revised in accordance with the DOI suggestion.

1325 G STREET NW. WASHINGTON, D.C. 20576

In Reply Refer To: NCPC File No. 1972

Complement of the fire FLAMING & PARLICULARY ENGINEERING

February 12, 1980

Mr. M. S. Caltrider State Highway Administrator State Highway Administration Maryland Department of Transportation Tocation Pulsber Hear 300 West Preston Street Baltimore, Maryland 21201

Dear Mr. Caltrider:

In response to your request, the National Capital Planning Commission, at its meeting on February 7, 1980, commented to the Maryland Department of Transportation on the proposed improvement of Maryland Route 223 (Woodyard Road) between Maryland Route 4 and Maryland Route 5 and the accompanying Draft Environmental Impact Statement thereon as follows:

- The Commission endorses Alternate H, which generally follows the existing road and most closely follows the location recommended by the Commission in its review of the Melwood Special Treatment Area Plan prepared by the Prince George's County Planning Board;
- The United States Air Force opposes Alternate G since it would pass through portions of Andrews Air Force Base which were acquired as a Clear Zone to prevent future development. Also, Alternate G would pass through areas adjacent to the airfield classified Accident Potential Zone 1 under the Air Force AICUZ program. Therefore, any development which might occur along an alignment such as Alternate G would be incompatible with area master plans which follow AICUZ and could impose noise and safety hazards and impair the operational integrity of the airfield. These factors should be addressed in the Final Environmental Impact Statement; and
- Improvement of Woodyard Road along its existing alignment, as depicted in Alternate H, will not have a negative impact on the functions of the Federal Establishment or other Federal interests in the National Capital Region.

MA YWH STATE

11: 50 20 FEB

Relocation of Woodyard Road to cross a portion of Andrews Air Force Base, as depicted in Alternative G, could have a negative impact on the functions of the Federal Establishment or other Federal interests in the National Capital Region.

A copy of the Executive Director's Recommendation, as approved by the Commission, is enclosed for your information.

Sincerely,

Reginald W. Liffith

Reginald W. Griffith Executive Director

Enclosure

NATIONAL CAPITAL PLANNING COMMISSION 1325 G STREET NW. WASHINGTON, D.C. 20576

NCPC File No. 1972

MARYLAND ROUTE 223 (WOODYARD ROAD)
FROM MARYLAND ROUTE 5 TO 0.3 MILES SOUTH
OF MARYLAND ROUTE 4, PRINCE GEROGE'S
COUNTY, MARYLAND

Executive Director's Recommendation

February 1, 1980

The Executive Director recommends that the Commission comment to the Maryland Department of Transportation on the proposed improvement of Maryland Route 223 (Woodyard Road) between Maryland Route 4 and Maryland Route 5 and the accompanying Draft Environmental Impact Statement thereon as follows:

- 1. The Commission endorses Alternate H, which generally follows the existing road and most closely follows the location recommended by the Commission in its review of the Melwood Special Treatment Area Plan prepared by the Prince George's County Planning Board;
- 2. The United States Air Force opposes Alternate G since it would pass through portions of Andrews Air Force Base which were acquired as a Clear Zone to prevent future development. Also, Alternate G would pass through areas adjacent to the airfield classified Accident Potential Zone 1 under the Air Force AICUZ program. Therefore, any development which might occur along an alignment such as Alternate G would be incompatible with area master plans which follow AICUZ and could impose noise and safety hazards and impair the operational integrity of the airfield. These factors should be addressed in the Final Environmental Impact Statement; and
- 3. Improvement of Woodyard Road along its existing alignment, as depicted in Alternate H, will not have a negative impact on the functions of the Federal Establishment or other Federal interests in the National Capital Region.

152

Relocation of Woodyard Road to cross a portion of Andrews Air Force Base, as depicted in Alternative G, could have a negative impact on the functions of the Federal Establishment or other Federal interests in the National Capital Region.

Description of the Project

The State Highway Administration of the Maryland Department of Transportation has scheduled a location hearing on the improvement of Route 223, Woodyard Road between Maryland Routes 4 and 5 in Prince George's County. Proposed is a four-lane divided roadway. Two locations have been studied, one, Alternate H, following the existing roadway with minor easing of some curves, the second, Alternate G, located approximately one-half mile north of the existing road for most of the section between Dower House Road and Branch Avenue (Route 5). Alternate G would pass through a corner of Andrews Air Force Base south of the runways. An interchange is proposed at Branch Avenue; two alternative designs are presented, a diamond and a partial cloverleaf.

Alternate H would require the acquisiton of two residences and four businesses. Alternate G would require three residences. The half cloverleaf interchange would displace one business, the diamond ten.

Neither alignment would require any park or recreational land. Alternate G would require 0.6 acres of land of historic interest. Alternate H would require one acre of the same land. No historic structures would be affected.

Twenty-five year projections of traffic forecast 36,700 vehicles per day for Alternate H and 25,500 for Alternate G. Alternate G is lower because under this alternative the existing road would continue to operate and handle some local traffic.

Previous Commission Action

On April 5, 1979, the Commission reviewed the Melwood Special Treatment Area Plan and reported to the Prince George's County Planning Board that the plan would not have a negative impact on the function of the Federal establishment or other Federal interests in the National Capital Region. In that plan Woodyard Road is shown in its existing location.

Federal Interest Evaluation of the Plan

The alternatives for the improvement of Woodyard Road (Maryland Route 223) have been reviewed for their impact on the function of the Federal Establishment in the National Capital Region. The role of Woodyard Road in its present location was addressed in the review of the Melwood Special Treatment Area Plan.

The Air Force has reviewed the Draft Environmental Impact Statement since one of the alternatives would affect Andrews Air Force Base. The Air Force has concerns with Alternate G as follows:

- a) the potential taking of portions of Andrews AFB property; and
- b) the effect on land-use planning related to the Andrews AICUZ program.

On the first concern, Alternate G traverses a corner of Andrews AFB at a location due south of the center of the runways. It also apparently would cross a corner of the land purchased by the Air Force in 1976 for Clear Zone land acquisition.

The intent of this purchase was to expand the previously designated clear zone area to encompass additional property where accident potential is so high that necessary land-use restrictions prohibit economic use of the land. Obviously, the taking, or granting, of easements for right of way of any of the Andrews AFB property would require resolution and decisions at the Department of Defense level.

Through its AICUZ program, the Air Force strives to achieve compatibility between air installations and neighboring civil communities by means of compatible landuse planning and control processes conducted by the local community. Such efforts in the Andrews AFB environs have achieved measured success; notably, through the inclusion of the AICUZ concepts in the Master Plans for Subregions V and VI. Alternate H would not adversely effect AICUZ efforts. Alternate G could result in conflicts associated with potential future development along the proposed alignment. While the highway and right of way development would be compatible with the AICUZ program, the Air Force would be vitally interested in all other proposed development along the Alternate G route, particularly since it would traverse Accident Potential Zone 1, and, possibly, the Expanded Clear Zone. In these zones, concerns over compatible development are considerably increased both in terms of protecting the community from the noise and safety hazards, and in preserving the operational integrity of the airfield. Additionally, given the proximity of these zones to the ends of the runways, FAA regulations, height and obstruction criteria and other considerations also have a bearing on proposed development. For these reasons, the Air Force recommends selection of Alternate H for which the Executive Director recommends the Commission endorse.



THE PRINCE GEORGE'S COUNTY GOVERNMENT

Department of Public Works and Transportation Room 3090 4 4000 54

952-4150

And Fried Control of the Project of Language Pebruary 28, 1980

Mr. Hal Kassoff, Director Office of Planning and Preliminary Engineering State Highway Administration 300 West Preston Street Baltimore, Maryland 21203

Re: Woodyard Road (Route 223)

Dear Mr. Kassoff:

We have reviewed the draft environmental statement for the improvement of Woodyard Road between Maryland Route 5 and Maryland Route 4. Based on this information, we recommend the construction of Alternate H which closely follows the existing alignment.

We also recommend the construction of a diamond interchange at the Branch Avenue (Route 5) intersection rather than the partial cloverleaf interchange.

If at all possible, the interchange at Branch Avenue should be built first. If the project is broken down into other phases, it would be desirable to reconstruct that part of the roadway in the vicinity of Rosaryville Road immediately after the interchange is built. This part of Woodyard Road is very hazardous at the present time because of the many sharp curves and the narrow bridge over Piscataway Creek.

Thank you for the opportunity to/comment on this project.

Sincerely,

Vaughn∫E. Barkdol

Director

cc: Mr. A. A. Fleury

MAR 1 1980

PLANCING & PRELIMITARY ENGLISERING

Maryland Department of Transportation

State Highway Administration

James J. O'Donnell Secretary M. S. Caltrider Administrator

July 17, 1980

Contract No. P 122-6-371 Marvland Route 223 From Maryland Route 5 To Maryland Route 4

PROJECT STATUS REPORT

This report is being circulated to advise you of the status of the Maryland Route 223 project.

Based on the results of the project study, the Project Planning Team has recommended that Location Approval be requested for Alternate H, which involves upgrading the existing roadway. State Highway Administrator M. S. Caltrider has concurred with this recommendation. The recommendation is consistent with the Adopted Master Plan for the area and reflects the position of County officials. It also reflects the fact that current development in the area has all but ruled out Alternate G (the relocation alternate) as a practical matter (see enclosed map).

Because no funds for project engineering (design), right of way acquisition, or construction are included in the 1980-1985 Consolidated Transportation Fund, implementation of the project is expected to be many years away. Therefore, the only impact of the project for the foreseeable future will be to guide development as to setbacks from the proposed right of way limits in order to accommodate a future highway improvement.

The Administrator has directed that the right of way for the proposed improvement be held to an absolute minimum in order to reduce impacts to adjacent properties. Accordingly, if and when final design is initiated on the project, the design team will strive for a minimum cross-section, with a 20 foot desirable minimum median, possibly reduced to 16 feet in the most constrained locations. From Dowerhouse Road to Maryland Route 4, it appears that a 30 foot median could be accommodated without severe adverse effects.

It has been further determined that the construction of a diamond interchange at Maryland Route 5 and Maryland Route 223 and a two lane roadway improvement to eliminate the severe curve in the vicinity of the Rosaryville Road intersection would have first priority for construction funding although here again, such funding is not anticipated in the very near future.

The State Highway Administration will also pursue the possibility of a park and ride facility for approximately 100 to 200 cars in the vicinity of Maryland Route 4 and Maryland Route 223. Preliminary investigations indicate a possible site in the southwest quadrant of this intersection, between Old Marlboro Pike and the ramp from Maryland Route 4 to Maryland Route 223. Access would be via the Old Marlboro Pike.

The Final Environmental Document for this project is now being prepared and will be submitted to the Federal Highway Administration. This document will be available for public review, along with the transcript of the public hearing. Receipt of Location Approval is projected for early 1981.

Requests to be enrolled on the project mailing list for future status reports should be addressed to this office at 300 West Preston Street, Baltimore, Maryland 21201. Specific inquiries on this project should be referred to me or to Mr. Walter Hanrahan, Project Manager, at the Preston Street address or by phone at (301) 383-4317.

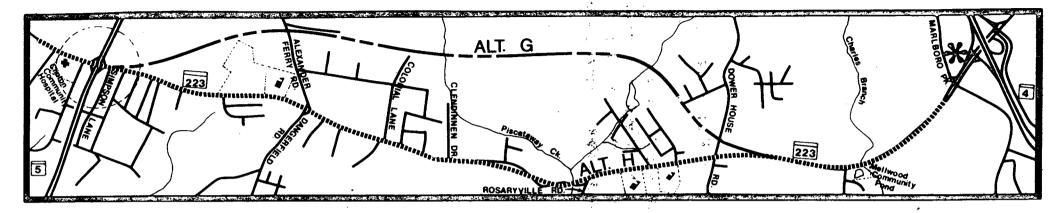
I would like to express my appreciation to those of you who participated in this study process. We recognize that there will be some disagreement with this action, and would be pleased to respond to further questions about the selection of Alternate H. If and when final design is undertaken for the Maryland Route 223 improvement, you will again be given the opportunity to participate actively in the development of final engineering plans. Many of the concerns that have been raised to date can be addressed in detail during the design phase, and hopefully, in most cases, resolved to the satisfaction of those who are affected.

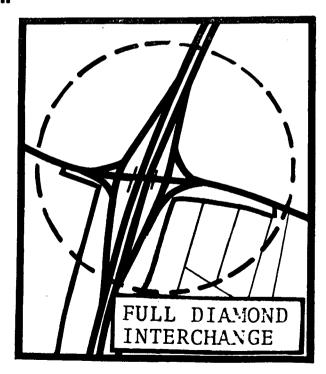
Very truly yours,

Hal Kassoff, Director Office of Planning and Preliminary Engineering

HK:bh

MARYLAND ROUTE 223 FROM MARYLAND ROUTE 5 TO MARYLAND ROUTE 4







UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

DELMARVA AREA OFFICE 1825 VIRGINIA STREET ANNAPOLIS, MD 21401

OCT 21 1980

GREENHORNE & OMARA

Mr. F. C. Provini Greenhorne and O'Mara, Inc. 6715 Kenilworth Ave. Riverdale, MD 20840

Re: Maryland Route 223
MD Route 5 to MD Route 4
Contract No. P 122-006-371

Dear Mr. Provini:

This responds to your October 6, 1980, request for information on the presence of Federally listed or proposed endangered or threatened species within the impact area of the proposed widening of Woodyard Road (MD Route 223) in Prince George's County, Maryland.

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

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

Lists of Federally listed and proposed endangered and threatened species in are enclosed for your information. Please contact Andy Moser (301-269-6324), our Endangered Species Specialist, if you need further assistance.

Sincerely yours,

John D. Green Area Manager

Enclosure



UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE 1825B Virginia Street Annapolis, MD 21401

November 13, 1980

Mr. F.C. Provinia
Department Head, Transportation
Greenhouse and O'Mara, Inc.
6715 Kenilworth Avenue
Riverdale, MD 20840

Dear Mr. Provina:

This responds to your October 6, 1980, letter and subsequent phone conversation of November 7, 1980 with Bob Zepp of this office. We apologize for the delay in our response. Our review of the material provided with your letter indicates your awareness of our concerns regarding the Piscataway Creek crossing. We do not foresee any insurmountable problems that could surface during our review of a Corps of Engineers permit. Therefore, we have no objection to the concept of this project as presently proposed.

Thank you for the time you have spent resolving our concerns.

Sincerely yours,

Horge Ruddy

for Glenn Kinser

Supervisor

Annapolis Field Office



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- 24. Flood Plain Information, Piscataway Creek, Prince George's County, Maryland U.S. Corps of Engineers, 1967

Appendix A Levels of Service

Level of service A describes a condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles, and drivers can maintain their desired speeds with little or no delay.

Level of service B is in the zone of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted. The lower limit (lowest speed, highest volume) of this level of service has been associated with service volumes used in the design of rural highways.

Level of service C is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, with service volumes perhaps suitable for urban design practice.

Level of service D approaches unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time.

Level of service E cannot be described by speed alone, but represents operations at even lower operating speeds than in level D, with volumes at or near the capacity of the highway. At capacity, speeds are typical, but not always, in the neighborhood of 30 mph. Flow is unstable, and there may be stoppages of momentary duration.

Level of service F describes forced flow operation at low speeds, where volumes are below capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. The section under study will be serving as a storage area during parts of all of the peak hour. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of the downstream congestion. In the extreme, both speed and volume can drop to zero.

Source: Highway Capacity Manual 1965 Highway Research Board Special Report 87 Page 80-81



James J. O'Donnell Secretary M. S. Caltrider Administrator

August 27, 1980

MEMORANDUM

TO:

Mr. William F. Schneider, Jr., Chief

Bureau of Project Planning

ATTENTION: Mr. Walter L. Hanrahan

Project Manager

FROM:

Paul S. Jaworski, Chief

Bureau of Accident Studies

SUBJECT:

Contract No. P 122-006-371

MD 223, from MD 5 to MD 4

Accident Analysis and Economic Assessment

In response to your memorandum of July 24, 1980, we are attaching the updated and revised Accident Analysis and Economic Assessment report for the subject project.

This report supersedes the report submitted on February 16, 1979.

Please advise if any further information is needed in this regard.

PSJ/RBC/dma

Attachment - In ENV' Falder

c.c. Mr. E. T. Camponeschi

Mr. S. M. Plemens

6+0/ATToch 7/2/80 AES

Accident Analysis and Economic Evaluation MD 223, from MD 5 to MD 4 Contract No. P 122-6-371 Prince Georges County

MD 223, from MD 5 to MD 4, experienced an average accident rate of 502 accidents for every 100 million vehicle miles of travel (100MVM) for the four-year period, 1975 through 1978. This accident rate is slightly higher than our weighted statewide average accident rate/100MVM of 482 accidents for all similar design highways now under state maintenance.

A total of 386 accidents was reported on this highway during the four-year period (1975 through 1978), of which two were fatal accidents taking the lives of two persons. The monetary loss to the motoring and general public resulting from these 386 accidents is estimated at approximately \$1.8 million for every 100MVM. These accidents are listed below by severity, indicating persons killed and injured.

Severity	1975	1976	1977	<u> 1978</u>	<u>Total</u>
Fatal Accidents	1	_	1	-	2
Persons Killed	1	_	1	=	2
Injury Accidents	25	25	43	44	137
Persons Injured	43	41	65	75	224
Property Damage Accidents	, 56	66	59	66	247
Total Accidents	82	91	103	110	386

Within the study limits there are two locations meeting our criteria as high accident intersections (HAI). These locations are listed below indicating the total number of accidents and the year in which they qualified.

Location No. 1	MD	223	@	MD	5	_	24	accidents - 1975
	MD	223	@	M.	5	_	32	accidents - 1976
	MD	223	@	M	5	-	22	accidents - 1977
	MD	223	@	MD-	5	_	26	accidents - 1978

Location No. 2 MD 223 @ Old Alexander Ferry Road - 18 accidents - 1978

Additionally, within the study limits of MD 223 there was one location that qualified as a high accident location (HAL) during 1976 and this is the bridge and approaches over the Piscataway Creek. This location has had a continuing frequency of accidents involving fixed objects by northbound vehicles which can be directly related to the sharp curves on MD 223 at this location.

Because MD 223 lies within the Federal Aid Urban Boundaries, it is designated as an urban route; however, it has operational characteristics that may be considered somewhat rural. A comparison of the existing collision types with a <u>weighted average</u> composed of combined urban and rural statewide averages is listed below:

Collision Type	% Study Section	Weighted % U&R Statewide
Angle	25.12	15.55
Rear End	18.13	22.79
Fixed Object	26. 68	24.13
Opposite Direction	8.29	6.80
Sideswipe (SD)	4.66	8.26
Left Turn	6.73	4.56
Pedestrian	0.77	2.19
Other	9.58	14.33

Of the total accidents reported on MD 223 for the four-year period, angle accidents occurred at a significantly higher rate than normally expected for this type highway. Fixed objects, opposite direction, and left turn collision types also experienced higher rates than normally expected, but were in line with statewide expectations for this design highway.

Also accidents reported as occurring on wet surface were found to be significantly higher than statewide expectations, while nighttime accidents were found to be slightly lower than our statewide parameters. This data is listed below:

	Four-year Total	% of Total	% Statewide
Wet Surface Accidents	102	26.42	20.48
Nighttime Accidents	146	37.82	40.52

The peak period accident rate is presently significantly higher than the overall statewide accident rate for this design highway, as well as the existing ND 223 accident rate. The respective rates are listed below:

Evening peak period accident rate/100MVM	590
Statewide average accident rate/100MVM	482
Existing MD 223 accident rate/100MVM	502

Traffic forecasts for MD 223 are projecting a 43% increase in vehicular volume by the year 2005. Under a no-build alternate and considering the anticipated traffic increase, the type collisions that are now occurring during the peak period will begin to occur more frequently during off-peak hours. The accident patterns should change slightly; as congestion increases so should the frequency of rear end accidents. Under normal conditions, increased congestion would tend to reduce speeds, and therefore reduce the frequency of fixed object accidents; although in the case of MD 223, with its curves, and the fact that fixed object accidents are more prevalent in off-peak hours, this type collision may still remain above statewide expectations. The frequency of angle accidents should remain high, especially at the at-grade intersections. Rear end and left turn intersection accidents should also increase and eventually it is possible that the intersection of MD 223 with Rosaryville Road could meet the criterion of a high accident location.

August 27, 1980 Page 3

The proposed four-lane divided highway with no control of access would institute a safer type highway by providing more lanes, thus reducing congestion. Also, by providing a median, the generally severe opposite direction accidents should virtually be eliminated. Fixed object accidents should also be reduced as a result of the increased roadway width and the corrective alignment improvements being proposed in this alternate. Our studies indicate that the proposed four-lane divided highway should experience an accident rate of approximately 391 accidents/100MVM of travel. The corresponding accident cost is estimated at approximately \$1.4 million/100MVM, and would result in an estimated societal savings of approximately \$400,000/100MVM over the existing roadway.

The accident costs as indicated, includes present worth of future earnings of those persons killed and permanently disabled, as well as monetary losses resulting from injury and property damage accidents. The unit cost utilized in the above computations were based on actual cost values obtained from three independent accident cost studies conducted in Washington, D.C., Illinois, and the California Division of Highways and were updated to 1978 prices.

REPLY TO ATTENTION OF:

APPENDIX C

DEPARTMENT OF THE ARMY

BALTIMORE DISTRICT, CORPS OF ENGINEERS P.O. BOX 1715 BALTIMORE, MARYLAND 21203

GREENHORNE & O'MARA

26 September 1978

NABPL-S

Mr. Eugene T. Camponeschi Maryland Department of Transportation State Highway Administration P.O. Box 717 300 West Preston Street Baltimore, Maryland 21203

Dear Mr. Camponeschi:

Reference is made to your letter of 22 August 1978, requesting verification of the 50-year and 100-year water surface depths on the Piscataway Creek at Route 223 crossing as stated on attached letter dated 27 November 1974.

The data for the 100-year and 50-year flood stages stated in the letter of November 1974 are considered still valid. However, we have not conducted new studies at the above location since providing you this information.

If you have any further questions, please call Mr. Jim Guerrini, Flood Plain Management Services Branch, at (301) 962-2650.

Sincerely yours,

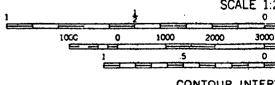
Chief, Planning Division



nundaries of flood-grone areas are shown on this map. There is, on the tance in 100 that time designated areas will be inundated in any year. Important to public agencies and private citizens concerned with future

: areas have been existincated through use of readily available informarather than from detailed field surveys and inspections. In general, are for natural conditions and do not take into consideration the positing or proposed fixed control structures except where those effects

Flood areas have theen identified for: (1) urban areas where the upin exceeds 25 square miles, (2) rural areas in humid regions where the asin exceeds 100 square miles, (3) rural areas in semiarid regions where age basin exceeds 250 square miles, and (4) smaller drainage basins,



CONTOUR INTER
DATUM IS MEAN

197.

C-2

Prepared by the U.S. Departme



DEPARTMENT OF THE ARMY BALTIMORE DISTRICT, CORPS OF ENGINEERS P.O. BOX 1715

BALTIMORE, MARYLAND 21203

27 November 1974

Mr. Edward F. Wandelt EcolSciences, Inc. 133 Park Street, N.E. Vienna, Virginia 22180

(30) 962-441C

Dear Mr. Wandelt:

Reference is made to your letter of 20 November 1974 requesting flood hazard information at the Route 223 - Woodyard Road crossing over Piscataway Creek, Prince Georges County, Maryland.

The only data available at this location is a flood prone area map prepared by the U.S. Geological Survey based on reconnaissance. A print of the U.S.G.S. map covering the area of interest to you is inclosed.

This office made a flood plain information study of Piscataway Creek in 1967, but unfortunately, the study terminated about 2 miles below the Route 223 crossing. It may interest you to know that at this downstream location, the flow expected on the average of once in a 100-year period would have a discharge of about 6,600 cfs and would be 2 to 8 feet overbank. A 50-year flood would be less than 1 foot below the 100-year flood.

as we would prove Dame.

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Sincerely yours,

l Incl As stated

in the

WILLIAM E. TRIESCHMAN, Jr.

Chief, Planning Division

ASSESSMENT OF SIGNIFICANT ENVIRONMENTAL EFFECTS

The following questions should be answered by placing a check in the appropriate column(s). If desirable, the "comments attached" column can be checked by itself or in combination with an answer of "yes" or "no" to provide additional information or to overcome an affirmative presumption.

In answering the questions, the significant beneficial and adverse, short and long term effects of the proposed action, on-site and off-site during construction and operation should be considered.

All questions should be answered as if the agency is subject to the same requirements as a private person requesting a license or permit from the State or Federal Government.

			Yes	No	Comments Attached
Α.	Lan	d Use Considerations			
	1.	Will the action be within the 100 year flood plain?	<u>x</u>		2.2.5.5
	2.	Will the action require a permit for construction or alteration within the 50 year flood plain?	X	-	2.2.5.5
	3.	Will the action require a permit for dredging, filling, draining or alteration of a wetland?		X	·
	4.	for the construction or operation of facilities for solid waste			
		disposal including dredge and excavation spoil?		<u> </u>	
	5.	Will the action occur on slopes exceeding 15%?		<u> </u>	
	6.	Will the action require a grading plan or a sediment control permit?	X		3.3
	7.	Will the action require a mining permit for deep or surface mining?	-	<u> </u>	
	.s	Will the action require a permit for drilling a gas or oil well?	*****	<u>x</u>	·
	9.	Will the action require a permit for airport construction?		<u> X</u>	
	10.	Will the action require a permit for the crossing of a major stream or river, by highways, bridges, tunnels, conduits, cables or other like devices?	X		2.2 <u>.5.</u> 5

Appendix	D (continued)			171
		<u>Yes</u>	No	Comments)70 Attached
11.	Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wildland?		<u>x</u>	
12.	Will the action affect the use of any natural or man-made features that are unique to the county, state or nation?		_X	
13.	Will the action affect the use of an archaeological or historical site or structure?	<u>x</u>		2.2.7
B. Water	Use Considerations			
14.	Will the action require a permit for the change of the course, current, or cross-section of a stream or other body of water?	<u> </u>		2.2.5
15.	Will the action require the construction, alteration or removal of a dam, reservoir or waterway obstruction?		<u> x</u>	·
16.	Will the action change the over- land flow of storm water or reduce the absorption capacity of the ground?	<u>x</u>	· —	2.2.5
17.	Will the action require a permit for the drilling of a water well?		<u>x</u>	
18.	Will the action require a permit for water appropriation?		<u>x</u>	
19.	Will the action require a permit for the construction and opera- tion of facilities for treatment or distribution of water?	-	<u>x</u>	
20.	Will the project require a permit for the construction and operation of facilities for sewage treatment and/or land disposal of liquid waste derivatives?		х	
21.	Will the action result in any discharge into surface or sub- surface water?		<u>x</u>	

Appendix D (continued)

API	PENDI.	X D (Continued)		•	Comment
			<u>Yes</u>	No	Attache
	22.	If so, will the discharge affect ambient water quality parameters and/or require a discharge permit?	·	<u>x</u>	
c.	Air	Use Considerations			
	23.	Will the action result in any discharge into the air?	X		3.2
	24.	If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	X		<u>3.2</u>
	25.	Will the action generate addi- tional noise which differs in character or level from present conditions?	x		3.5
	26.			х	-
	27.	Will the action generate any radiological, electrical, magnetic, or light influences?		<u>_X_</u>	
D.	Plan	its and Animals			·
	28.	Will the action cause the dis- turbance, reduction or loss of any rare, unique or valuable plant or animal?		<u>X</u>	
	29.	Will the action result in the significant reduction or loss of any fish or wildlife habitats?	وفسانستان	X_	********
	30.	for the use of pesticides, herbi- cides or other biological, chemi-			
		cal or radiological control agents?	-	<u> </u>	
E.	Soci	o-Economic			
	31.	Will the action result in a pre- emption or division of properties		v	

وعدران ورادا	- / Concindenty			
		<u>Yes</u>	No	Comments Attached
32.	Will the action cause relocation of activities, structures or result in a change in the population density or distribution?	<u>x</u>		3.1
33.	Will the action alter land values?	<u>x</u>		3.1
34.	Will the action affect traffic flow and volume?	<u>x</u>		1.2
35.	Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?		<u> x</u>	-
36.	Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?		X	
37.	Is the action in accord with federal, state, regional and local comprehensive or functional plans-including zoning?	<u> </u>		2.2.2
38.	Will the action affect the employ- ment opportunities for persons in the area?	<u>x</u>		<u>2.2</u> .1
39.	Will the action affect the ability of the area to attract new sources of tax revenue?	<u>x</u>		2.2.1
40.	Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?		x_	
41.	Will the action affect the ability of the area to attract tourism?		_ <u>x</u>	
Other	Considerations			
42.	Could the action endanger the pub- lic health, safety or welfare?		<u> </u>	-
	Could the action be eliminated without deleterious effects to the public health, safety, welfare or the natural environment?		Х	

F.

Ybbendt x	D (Continued)	-		Comments	/
		Yes	No	Attached	′
44.	will the action be of statewide significance?		X	•	
45.	Are there any other plans or actions (federal, state, county or private) that, in conjunction with the subject action could result in a cumulative or synergistic impact on the public health safety, welfare or environment?	,	<u>x</u>		
46.	Will the action require additional power generation or transmission capacity?		X		
G. Con	clusion	•			
47.	This agency will develop a com- plete environmental effects report on the proposed action.	حنينه	<u> </u>		

The Federal law and the State law overlap in many respects relative to environmental requirements. The Maryland Department of Transportation feels it would be inefficient to duplicate the effort involved in preparing a separate State Environmental Effects Report on any project for which a Federal Environmental Impact Statement is required. Therefore, an Environmental Impact Statement will be prepared for the project which will satisfy the both the National Environmental Policy Act and the Maryland Environmental Act in accordance with the Council on Environmental Quality guidelines.

APPENDIX E

"SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE

STATE HIGHWAY ADMINISTRATION OF MARYLAND"

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

The provisions of the Federal and State Law require the State Highway Administration to provide payments and services to persons displaced by a public project. The payments that are provided include replacement housing payments and/or moving costs. The maximum limits of the replacement housing payments are \$15,000 for owner-occupants and \$4,000 for 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 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 amount 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 These payments may only be made after an effort to move. by the owner to sell the personal property involved. 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 expenses 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.

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 be relocated without a substantial loss of its existing patronage, the business is not part of a commercial enterprise having at least one other establishment in the same or similar business that is not being acquired, and the business contributes materially to the income of a displaced owner.

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

In order to determine the amount of the "in lieu of" moving expenses payment, the average annual net earnings of the business is considered to be one-half of the net earnings before taxes, during the two taxable years immediately preceding the taxable year in which the business is reloca-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 compensation paid by the business to the owner, his spouse, or his dependents during the period. Should a business be in operation less than two years, 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 payments 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.

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. Dwelling 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.

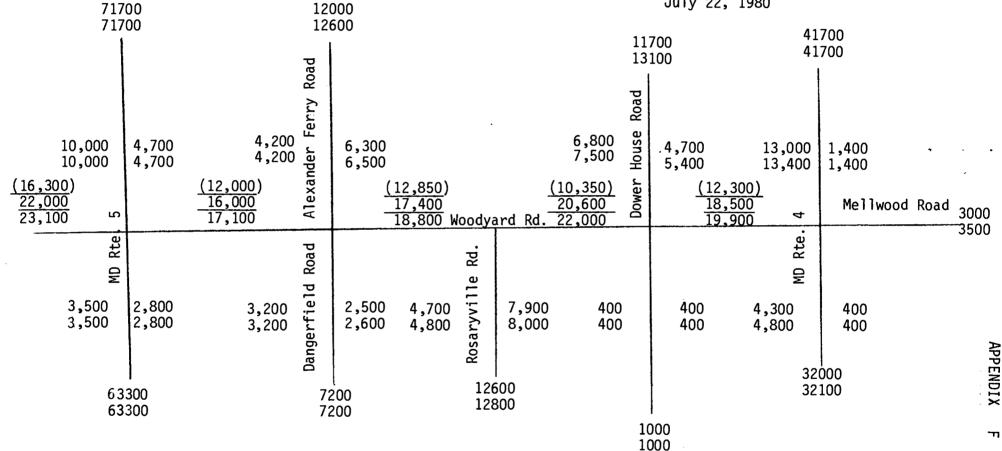
The "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any person, or proceed with any construction project until it has furnished satisfactory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

No extension of MD 556 to MD 223 Year 1978 ADT (xxxx) Year 2005 ADT No Widen MD 223 Widen MD 223

Maryland Highway Administration

Bureau of Statistics





Design Hour Volume (D.H.V.) 10% Directional Distribution of D.H.V. 53% Percent of Trucks Average Daily Traffic 6% Design Hour Volume 1%

NOTE: Design Data From May 4, 1976

MSHA Traffic Data