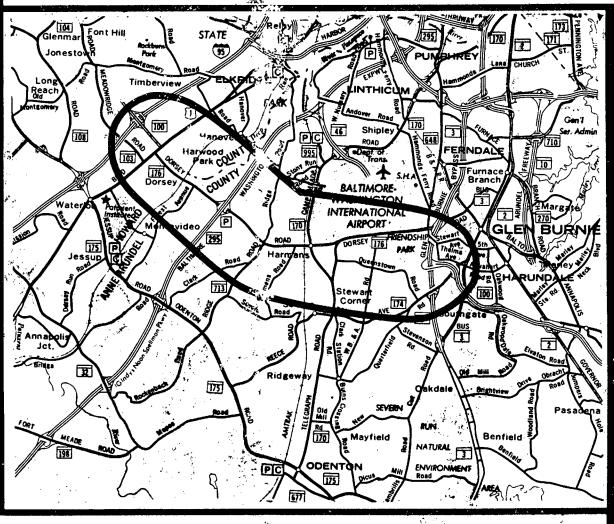
FINAL ENVIRONMENTAL IMPACT STATEMEN

SECTION (4) FE ALUATION

CONTRACT NO. AA 682-101-570

MARYLAND ROUTE 100

INTERSTATE ROUTE 95 (a MARYLAND ROUTE 3 (1-97)



prepared by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

is and seems

MARYLAND DEPARTMENT OF TRANSPORTATION STATE, HIGHWAY ADMINISTRATION

POSSIBLE ROADWAY CONNECTION

LEGEND



PROPOSED STRUCTURE

PROPOSED ROADWAY
PROPOSED RIGHT OF WAY (APPROX.)

EXISTING RIGHT OF WAY OR PROPERTY LINE

CUL-DE-SAC

170

STATE ROUTE

U. S. HIGHWAY

95

INTERSTATE HIGHWAY



INDICATES PROPERTY TO BE ACQUIRED

RESIDENCE

BUSINESS

CHURCH

Æ

OTHER

 \blacksquare

AIR RECEPTOR/NOISE SENSITIVE AREA

SPECIAL PROPERTIES



PARK BOUNDARY



DEPARTMENT OF NATURAL RESOURCES FORESTRY BOUNDARY



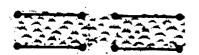
HISTORIC BOUNDARY

AIRPORT BOUNDARY

B.W.I. AIRPORT BOUNDARY



100-YEAR FLOOD
PLAIN*BOUNDARY***



WETLANDS BOUNDARY MARYLAND ROUTE 100

PLAN LEGEND

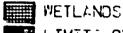
O STATE HIGHWAY ADMINISTRATION

DATE: MAY, 1906

FIGURE: II-L

LEGEND

-- DRAINAGE AREA DIVIDES



C LIMITS OF 100 YEAR-FLOODPLAINS

- # COUNTY WATER SUPPLY WELLS
- ATT DUALITY SAMPLING STATION

INDUSTRIAL PARKS

- InD. FRIENDSHIP AIRPARK
- 100. 2 BWI COMPERCE PARK
- IND. 3 BALTIMORE COMMONS BUSINESS PARK
- IND. 4 AIRPORT INDUSTRIAL PARK
- 140. 5 PARKWAY INDUSTRIAL CENTER I
- 18'D. G. PARKWAY INJUSTRIAL CENTER II
- IND. 7 TELEGRAPH INDUSTRIAL PARK
- ING. 8 ROUTE FOC INDUSTRIAL PARK
- IND. 9 FLKRIDGE INDUSTRIAL PARK
- IND. 10 HARWOOD INDUSTRIAL PARK
- IND. II EROOKDALE INDUSTRIAL PARK
- INU. 12 DORSEY BUSINESS CENTER

PARKS AND RECREATION CENTERS WM

- R-I FRIENDSHIP PARK
- R-2 OUEENSTOWN PARK
- 1-3 SEVERN DANZA FARK
- 3-4 HARMONS PARK
- R-5 JESSUP AND DORSEY PARK
- R-3 FATAPSCO VALLEY STATE PARK

CHURCHES =

- CH-I METROPOLITAN UNITED METHODIST
- CH-2 WESLEY GROVE UNITED METHODIST
- CH-3 ST. MARKS UNITED METHODIST
- CH-4 CALVARY CHAPEL
- CH-5 ASSEMBLY OF GOD
- CH-6 EMMANUEL UNITED METHODIST
- CH-7 HARWOOD PARK UNITED METHODIST
- CH-8 ROSE OF SHARUN BAPTIST
- CH-9 TRINITY EPISCOPAL
- CH-IO MT. PILGRIM BAPTIST
- CH-II FELLOWSHIP PENTECOSTAL

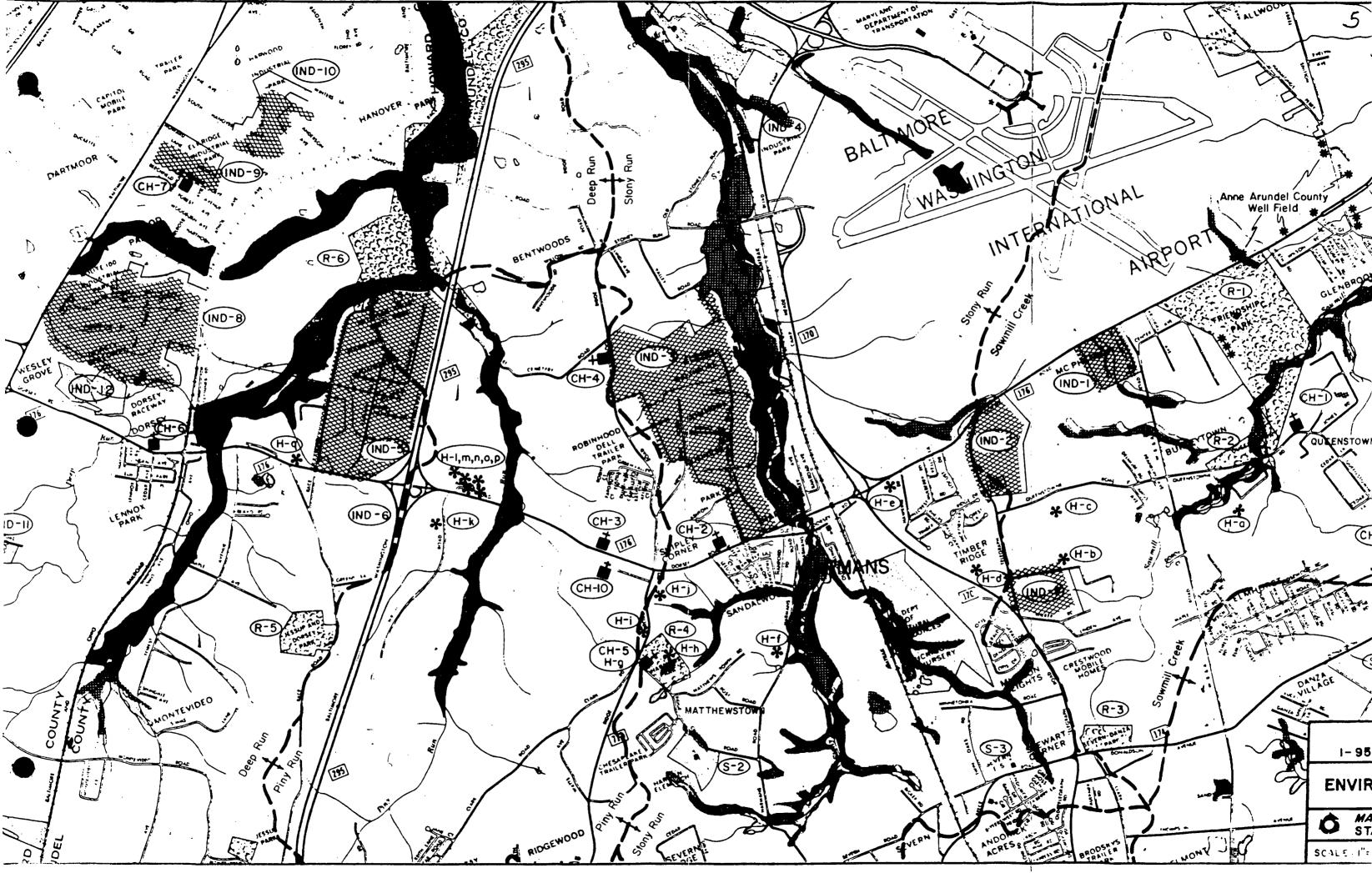
SCHOOLS

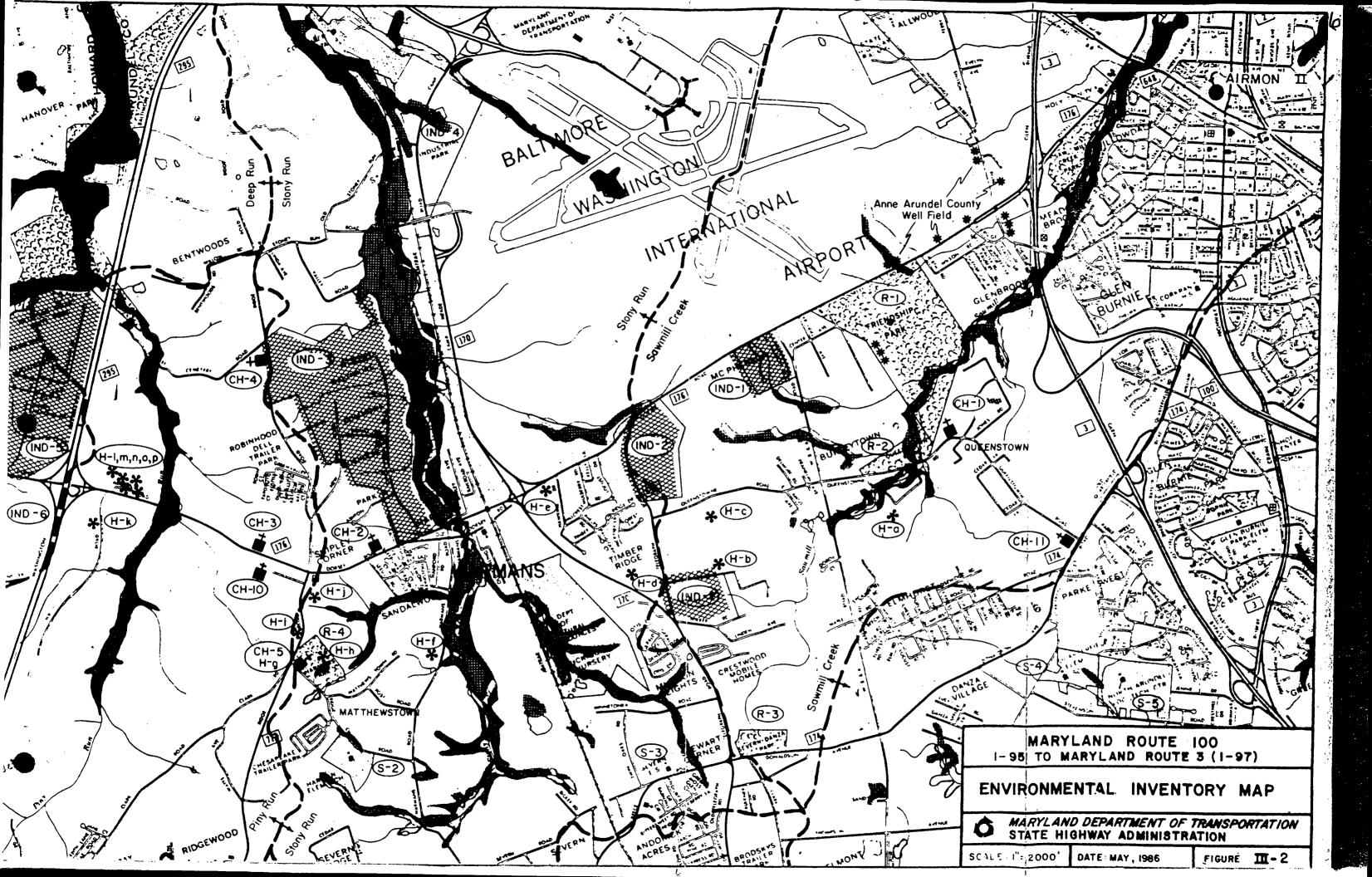
- S-I WATERLOO MIDDLE SCHOOL
- S-2 HARMONS ELEM. SCHOOL
- S-3 SEVERN ELEM. SCHOOL
- 3-4 QUARTERFIELD ELEMENTARY SCHOOL
- S-5 NORTH ARUNDEL VOC. TECH.

* HISTORIC SITES

(SUF TABLE 111 D









Maryland Department of Transportation State Highway Administration

Richard H. Trainor Secretary Hal Kassoff Administrator

January 18, 1988

MEMORANDUM

TO:

Mr. Louis H. Ege, Jr.

Deputy Director

Project Development Division

ATTN:

Mr. Lee Carrigan Project Manager

FROM:

Cynthia D. Simpson, Chief

Environmental Management

SUBJECT:

Environmental Considerations/Compliance Checklists

Contract No. AA 682-101-570

FAP No. AF 162-1 Maryland Route 100

Maryland Route 3 (Interstate Route 97)

to Interstate Route 95

PDMS No. 022007

Attached are the completed Environmental Considerations and Compliance Checklists for the subject project. Key environmental points found in the Final Environmental Impact Statement are summarized in these forms. Location Approval was received from the Federal Highway Administration on January 12, 1988.

To ensure follow-through on project commitments, both sets of checklists should be attached to the formal transmittal conveying the project from this Division to the Bureau of Highway Design.

The Compliance Checklist delineates those environmental commitments which are a condition of Location Approval. Should any changes be made, an environmental reevaluation <u>must be</u> requested. Proposed changes should be submitted to Environmental Management, Project Development Division, for review.

The Consideration Checklist identifies all environmental concerns relevant to the project and highlights those environmental factors which may require additional study. The rationale for a decision to reject a consideration should be submitted to the Chief, Environmental Management, Project Development Division.

My telephone number is (301) 333-1177

PAGE | OF 3

BUREAU OF PROJECT PLANNING ENVIRONMENTAL COMPLIANCE CHECKLIST

CONTRACT NO. AA 682-101-570

PROJECT: Maryland Route 100

TERMINI: 1-95 to MD 3 (1-97)

FEIS APPROVED: 10-27-87

FONSI APPROVED: ____

LOCATION APPROVAL: 1/88

			· 			
ENVIRON- MENTAL FACTOR	MITIGATION COMMITMENT	SOURCE OF COMMITM'T	WHEN SCHEDULED	BUREAU TO CONTACT/ PHONE#	DATE IMPLEM TED	COMMENTS**
RELOCATION	22 residences 10 of the re- sidential re- locations are minority relo- cations and (addl'n comment	iv, IV-2,3, 5-7,21-22 ³ ,	Phase IV	Bureau of Relocation Assistance 333-1670	n e	
HISTORIC SITES	No adverse effect for Shipley House conditional on landscaping plans (see addl'n comment	40,378,389 Draft Memo of Agreeme	Phase IV	Bureau of Landscape Architect 321-3521 Bureau of Hwy. Desig 333-1370	ire	Additional miti- gation may be re- quired pending approval of Smit Farm MOA
ARCHEOLOGIC SITES	Phase II ar- cheology at sites 18AN596 18AN580 and 18AN579	FEIS pg.vi III-58,IV- 92	Phase IV	Environme tal Manag ment 333-1184		Phase II complete Phase III required at 18AN579 and 18AN596. Publication of arch findings may be required per MOA agreement w/ACHP
PARKS	Landscape fil slopes through Friendship Par ROW required from Friendshi Park will (see addl'n comment	p	— Phase V 7	Bureau of Landscape Arch. 321-3521 Bureau of Acq. Acti- vities 333-1635		
PLANNING	If geodetic control survey monuments are disturbed, the National Ocean Service must be notified 90 dain advance to see addl'n con	e vs	Phase IV	Highway Design 333-1370		See additional comments
WILDLIFE						

COMPLIANCE WITH A COMMITMENT IS A CONDITION OF PROJECT APPROVAL. CHANGES ARE NOT IN ORDER EXCEPT UNDER EXTRAORDINARY, UNFORESEEN CIRCUMSTANCES. IF CHANGES ARE CONTEMPLATED FOR ANY REASON, THE CHIEF OF THE ENVIRONMENTAL EVALUATION SECTION SHOULD BE NOTIFIED IMMEDIATELY.

7

BUREAU OF	PROJECT	PLANNING
ENVIRONMENTAL	COMPLIAN	ICE CHECKLIST

ENVIRON- MENTAL FACTOR	MITIGATION COMMITMENT	SOURCE OF COMMITM'T		BUREAU TO CONTACT/ PHONE#	DATĘ IMPLEM TED	COMMENTS**
NOISE	10 sites ex- ceed Federal noise abatemen criteria or in crease by 10dB or more above ambient levels	A A	Phase IV	Bureau of Landscape Architectu 321-3521		A barrier is considered at only one site-NSA 28. The barrier would be constructed under the I-97 project.
SOILS	During project design, de- tailed SCS Soil Surveys will be utiliz	IV-42 VI-322	Phase IV	Hwy. Des: 333-1370	gn	

Relocations

Mitigation Commitment - 7 are owner-occupied & 3 are tenant-occupied. 7 Businesses would be relocated - 3 owner occupied and 4 tenant occupied. 1 Business is a farm operation. Relocation Assistance personnel will meet with each displaced persons to ascertain their replacement housing needs prior to displacement. Relocation Assistance Informational meetings will be held to mitigate community disruption and serve individual needs. Special efforts will be examined including the use of Last Resort Housing to maintain, where possible, community ties. All relocations will be in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act." A reasonable lead time of 24 months is necessary to accomplish the required relocations. Provisions will be made to reduce the hardship on any handicapped or elderly displaced persons.

Historic Sites

Mitigation Commitment - Mitigation of impacts to Smith Farm property will include landscaping of fill slopes and screening of historical structures from the roadway. The landscaping plans will be reviewed by the Maryland Historical Trust (MHT), ACHP and property owner. New access roads will be provided for the land parcels on the east side of the Selected Alternate within the Smith Farm boundaries Further coordination with affected property owners will continue in the design phase with final plans submitted to MHT, ACHP for review and comment. If Smith Farm historic boundaries are changed, further consult w/ACHP will be needed to revise mitigation measures.

|Park (con't)

Mitigation Commitment - replaced on a 1:1 basis. A separate culvert will be installed approximately 200' west of Sawmill Creek culvert to provide access for equestrian/pedestrian users. This culvert will allow access across MD 100 to either side of Friendship Park.

Coordination will be continued with the A. A. County Department of Recreation and Parks concerning the proposed park along Sawmill Creek by A. A. County.

See water/DNR Permit for Buckingham Forest Tree Nursey commitment discussion.

ADDITIONAL

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Environmental Compliance Checklist Additional Comments

Water

DNR Permit -

All streams are Class I streams and in-stream construction is prohibited from March 1 through June 15 inclusive. Stream areas must be stabilized and rip-rap placed at culvert inlets and outlets.

A Sediment and Erosion Control Plan and a stormwater Management Plan must be developed and submitted to the Department of Environment for approval. If Buckingham Forest Tree Nursery remains at its present location, then appropriate stormwater management and drainage techniques will be developed to ensure project will not result in exceedances of EPA's criteria for freshwater aquatic life and domestic water supply.

Structures -

A separate culvert will be installed approximately 200' west of Sawmill Creek culvert to provide access for equestrian/pedestrian user. This culvert will allow access across Maryland Route 100 to either side of Friendship Park.

Alternates -

See FEIS pgs II-12-14 - The Selected Alternate project design and location commitments are cited in the referenced pages.

pg. VI-368: Bridge over B&O RR tracks will be designed to accommodate the potential expansion of O'Conner Road.

Further coordination with Howard County Department of Public Works will be undertaken to minimize impacts and ensure that the entrance to the proposed Troy Hill Business Park is compatible with the relocated road.

12

Environmental Compliance Checklist Comments (continued)

<u>Vegetation</u> (con't)

<u>Mitigation Commitment</u> - will be preserved and protected whenever possible.

Planning

Mitigation Commitment - plan for monument relocation.

Water - Mitigation Commitment

Groundwater - studies will be conducted to determine project groundwater impacts. If changes to quantity or quality of well water occur replacement wells or compensation will be provided. A copy of the hydrogeologic study will be submitted to EPA for review.

Structure - During Final Design, a detailed hydrologic & hydraulic study will be prepared to determine appropriate structure sizes for each floodplain and stream crossing. Copies of the studies and construction plans will be provided to EPA, WRA for review.

Wetlands

Mitigation Commitment - enhanced, reconstructed or replaced.

Mitigation measures for wetland impacts will be coordinated with DNR, EPA, and USFWS.

Floodplain - existing down stream flow rates. Detailed hydrologic and hydraulic studies will be prepared.

Mr. Louis H. Ege, Jr. January 18, 1988
Page 2

Hydrogeologic studies will be conducted to determine project groundwater impacts. If changes to groundwater quantity or quality occur, replacement wells or compensation will be provided.

CDS:BG:cd

Attachments (2)

cc: Mr. Emil Elinsky (w/attach-Compliance Checklist only)

Mr. Paul Wettlaufer (w/attach)
Mr. Charles Adams (w/attach)
Mr. Wes Glass (w/attach)

PAGE 1 OF 3

BUREAU	OF	PRO	DJECT	PL	ANNING	
ENVIRONM	FNT	٦Δ١	CONS	IDE	RATIONS	;

CONTRACT NO. AA 682-101-570	DEIS/FEIS APPROVED: 5-5-86/10-27-87
PROJECT: Maryland Route 100	EA/FONSI APPROVED:
MANAGER: Mr. Lee Carrigan	D4(f)/F4(f) APPROVED:
ALTERNATE(S): 3 B Modified	LOCATION APPROVAL: 1/88
PROGRAM STATUS:	RE-EVALUATION DATE:

FACTOR	LOCATION	MITIGATIVE FEATURE/REFERENCE	COMMENTS/ COORDINATION**
RELOCATION 22 DWELLINGS 7 BUSINESSES 1 FARMS	IV-2,5-6,21	Every reasonable mea- sure to maintain neighborhood contin- uity will be consi- dered for minority displacements special efforts will be (see	See Compliance Check- list additional com- ments
HISTORIC SITES _2_NATIONAL REG- ISTER ELIGIBLE INVENTORY	FEIS pg IV-91	addi'n comments) Landscaping to be provided for Shipley House and Smith Farm	
ARCHEOLOGICAL SITES _2_IDENTIFIED POSSIBLE	FEIS pg. IV-92	Phase III required at sites 18AN579 and 18AN596	See Compliance Checklist
PARKS _1_PUBLICPRIVATE	FEIS pg IV-108,9		See Compliance Checklist
PLANNING	FEIS pg. IV-29-30	Efforts are to be made to replace the existing park & ride lot at Dorsey Rd/Wri Road intersection wi a 150 lot P & R and to replace the informal P & R lot at the termins of existing	Eh .
WILDLIFE	FEIS pg. IV-56	EB MD 100 west There are no known federally listed threatened or endangered species in stuarea.	ду

^{*} AN ENVIRONMENTAL CONSIDERATION MUST BE EXAMINED AND A DECISION MADE TO ACCEPT OR REJECT. RATIONALE FOR THE DECISION SHOULD BE PRESENTED TO THE CHIEF, ENVIRONMENTAL EVALUATION SECTION.

PAGE 2 OF 3

BUREAU OF PROJECT PLANNING ENVIRONMENTAL CONSIDERATIONS*

FACTOR	LOCATION	MITIGATIVE FEATURE/REFERENCE	COMMENTS/ COORDINATION**
VEGETATION	FEIS pg. IV-56,59	Consideration is being given to relocating the entire Buckingham Nursery Operators. Existing vegetation will be preserved and protected where possible.	See Compliance Checklist
WATER _I_CLASS _X_STRUCTURE _X_STREAM CROSSING _X_PERMIT (DNR, 404, COAST_GUARD)	FEIS pgs. vi, IV- 44-46,48,56,108 VI-296	Stormwater Manage- ment Plans and Sedi- ment and Erosion Cor trol Plan must be su mitted to the Depart ment of the Environ- ment. Seven (7) new stream crossing will be required and no stream relocation wi be required.	b -
FLOODPLAIN	FEIS pg IV-46-48	28.5 acres will be impacted	See Compliance Checklist
WETLANDS NT TYPE 56.9 ACREAGE	FEIS pg. IV-52,53	56.9 acres of non- tidal wetlands will be impacted.	See Compliance Checklist
COASTAL ZONE MANAGEMENT (CZM)			
AIR	FEIS pg. IV-65	No violations of State/National Ambient Air Quality Standards.	

BUREAU OF PROJECT PLANNING ENVIRONMENTAL CONSIDERATIONS*

PAGE	3	OF	3
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FACTOR	LOCATION	MITIGATIVE FEATURE/REFERENCE	COMMENTS/ COORDINATION **
NOISE	FEIS pg. IV-85,86	A barrier for NSA28 is being considered under of the constrution of I-97. (see addl'n comments)	See Compliance Checklist c-
SOILS	FEIS pg. iv,v,IV-42 VI-322	Sediment and Erosion Control will be in- corporated. No prime farmland is required Minor alignment shift will be considered during design to mine agricultural	Checklist ts
ADDITIONAL COMMENTS**		land impacts.	
	Planning Mitigative Feature potential replace Noise - Where barries feasible, pa	ed including the use of tain, where possible trees — of US 1. (See learners are not considered artial mitigation meas landscaping will be considered to the	FEIS reference for). d reasonable or sures such as dense
:			
	•		
	•		





Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

October 28, 1987

Contract No. AA 682-101-570

Maryland Route 100

from Interstate Route 95 to Interstate Route 97

PDMS No. 022007

FINAL ENVIRONMENTAL IMPACT STATEMENT/SECTION 4(f) STATEMENT

Enclosed for your information and files is the approved Final Environmental Impact Statement/Section 4(f) Statement and the appropriate supporting material for the referenced project. This document has been prepared in accordance with the CEQ Regulations, DOT Order 5610.1c, and the revised Federal-Aid Highway Program Manual, Volume 7, Chapter 7, Section 2.

Since the circulation of the Draft Environmental Impact Statement/Section 4(f) Statement, written comments have been received from citizens and various review agencies. These comments, along with appropriate responses, have been included in the Final Environmental Impact Statement/Section 4(f) Statement.

The selected alternate is Alternate 3-B (Modified). The selected alternate will improve traffic operations through and within the study area by providing a new east/west highway facility. It will provide adequate access for planned development and relieve existing congestion problems along major routes in the study area.

The selected alternate uses the same mainline alignment as Alternate 3-B, except in the vicinity of Race Road where the alignment has been shifted slightly south. The modifications include the selection of the option for relocating Dorsey Road at U.S. Route 1, a new configuration for the interchange at Race Road, the selection of the full cloverleaf interchange at Maryland Route 295, providing a bridge over Maryland Route 295 connecting Race Road and Wright Road, shifting the relocated Ridge Road to avoid Mount Pilgrim Baptist Church, selecting the optional interchange at Ridge Road which has a loop ramp in the southeast quadrant, bridging Harmons Road over Maryland Route 100, selecting the urban diamond interchange at Maryland Route 170, and bridging W.B.&A. Road over Maryland Route 100.

4

- Distribution of the Final Environmental Impact Statement is made on behalf of the Federal Highway Administration in accordance with 23 CFR 771.

Very truly yours,

neil & Hederson

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

NJP:tlh Enclosure

cc: Mr. Louis H. Ege, Jr.

Ms. Cynthia D. Simpson

Mr. Ronald E. Moon

DISTRIBUTION LIST

Contract No. AA 682-101-570
Maryland Route 100
from Interstate Route 95 to
Interstate Route 97

FINAL ENVIRONMENTAL IMPACT STATEMENT/SECTION 4(f) STATEMENT

FEDERAL AGENCIES

Department of Agriculture State Conservationist Soil Conservation Service 432 Hartwick Avenue, Room 522 College Park, Maryland 20740

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

U.S. Environmental Protection Agency Region III Mr. Jeffrey Alper, Chief NEPA Compliance Section 841 Chestnut Street Philadelphia, Pennsylvania 19107

Ms. Margaret A. Kengel
Regional Environmental Officer
Department of Housing and Urban Development
Philadelphia Regional Office, Region III
Liberty Square Building
105 South 7th Street
Philadelphia, Pennsylvania 19106-3392

Commander

U.S. Army Corps of Engineers Baltimore District P.O. Box 1715 Baltimore, Maryland 21201 ATTN: NABOP-F

Division of NEPA Affairs Department of Energy Room 4G 064 1000 Independence Avenue, S.W. Washington, D.C. 20230

FEDERAL AGENCIES (cont'd)

Mr. Paul Giordano Regional Director Federal Emergency Management Agency Liberty Square Building 105 South 7th Street Philadelphia, Pennsylvania 19106 ATTN: Mr. Walter Pierson

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Mrs. Florence B. Kurdle Planning and Zoning Officer Arundel Center Annapolis, Maryland 21401

Mr. Joseph J. McCann, Director Recreation and Parks Arundel Center Annapolis, Maryland 21401

Mr. George F. Neimeyer, Director Public Works 3430 Courthouse Drive Ellicott City, Maryland 21043

Mr. Thomas G. Harris, Jr., Director Office of Planning and Zoning 3430 Courthouse Drive Ellicott City, Maryland 21043

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Mr. Clyde E. Pyers, Director Division of Systems Planning and Development Maryland Department of Transportation B.W.I. Airport, Maryland 21240

Office of Legal Council
Office of the Maryland Secretary of
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B.W.I. Airport, Maryland 21240

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Mrs. Sylvia Garrison
Severn Improvement Association
416 Queenstown Road
Severn, Maryland 21144

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Maryland Route 100
from Interstate Route 95 to
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Philadelphia, Pennsylvania 19107

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416 Queenstown Road
Severn, Maryland 21144



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

October 28, 1987

Contract No. AA 682-101-570
Maryland Route 100
from Interstate Route 95 to Interstate Route 97
PDMS No. 022007

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Distribution of the Final Environmental Impact Statement is made on behalf of the Federal Highway Administration in accordance with 23 CFR 771.

Very truly yours,

neil & Hederson

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

NJP:t1h Enclosure

cc: Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson

Mr. Ronald E. Moon

STATE HIGHWAY ADMINISTRATION

*Deputy Chief Engineer - Highway Development Assistant Deputy Chief Engineer - Mighway Development 10007 District Engineer Copy Mochan ; I copy Chingon Bureau of Highway Design & Scoper Copie, Attn: Footer Bureau of Bridge Design & 30-por Bureau of Landscape Architecture Office of Planning and Preliminary Engineering $\sqrt{100p_{T}}$ Project Development Division Bureau of Planning and Program Development√\cof Office of Real Estate / 1009 Bureau of Relocation Assistance Vicopy Bureau of Requisition Activities & loopy Federal-Aid Section - Office of Real Estate District Chief - Office of Real Estate Icopy Dut 5 | Icopy Port 7 State Highway Administration Library / ١ ١ ١ ١ Equal Opportunity Section / 10094 Bureau of Highway Statistics / \copy

*Cover letter only

REPORT NUMBER: FHWA-WD-EIS-86-01-F

REGION III

MARYLAND ROUTE 100 EXTENDED From Interstate 95 In Howard County to Maryland Route 3/Interstate 97 In Anne Arundel County

FINAL ENVIRONMENTAL IMPACT STATEMENT SECTION 4(f) STATEMENT Submitted Pursuant to 42 U.S.C. 4332(2) (c) and 49 U.S.C. 303(c) CEQ Regulations (40 CFR 1500 et seq.)

> U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION AND

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION COOPERATING AGENCY U.S. ARMY CORPS OF ENGINEERS

The following persons may be contacted for additional information concerning the document:

Engineering

Room 310

Mr. Edward Terry District Engineer Federal Highway Administration The Rotunda - Suite 220 711 West 40th Street Baltimore, Maryland 21211

PHONE: (301) 962-4010

HOURS: 7:45 a.m. - 4:15 p.m.

Baltimore, Maryland 21202 PHONE: (301) 333-1130

HOURS: 8:15 a.m. - 4:15 p.m.

State Highway Administration

707 North Calvert Street

Tederen

Director, Office of Planning and

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FEDERAL HIGHWAY ADMINISTRATION

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FHWA Region 3

The purpose of the project is to provide an extension of Maryland Route 100 from Interstate 95 In Howard County to Maryland Route 3/Interstate 97 In Anne Arundel County. The project is compatible with local and State plans.

Environmental Impacts associated with the project Include right-of-way acquisition and the displacement of residents and businesses. There are floodplain and wetland involvements.

SUMMARY

SUMMARY

1. Administrative Action

Environmental Statement

() Draft (X) Final

(X) Section 4(f) Statement

The following persons may be contacted for additional Information concerning this document:

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Hours: 8:15 a.m. - 4:15 p.m.

3. Description of Selected Action

The selected alternate, Alternate 3B (Modified), involves the extension of Maryland Route 100 from Interstate 95 in Howard County to Maryland Route 3/Interstate 97 in Anne Arundel County, a distance of approximately 7.5 miles.

The selected Alternate would improve traffic operations through and within the study area by providing a new east/west highway facility in the The primary purpose of this project is to provide adequate access to an area that Anne Arundel and Howard Countles have designated for planned growth and to relieve existing congestion problems along major routes in the study area. The selected alternate is consistent with the General Development Plans and compatible with existing and planned development of Anne Arundel and Howard Countles.

4. Alternates Considered

The State Highway Administration has considered numerous preliminary alternates, including the No-Build, for the extension of Maryland Route 100 from 1-95 to Maryland Route 3/1-97. The No-Bulld Alternate, Alternate 2-Option A, Alternate 2-Option B and Alternate 3-Option A were presented at the Alternates Public Meeting held April 11, 1985. As a result of comments received at the Alternates Public Meeting, meetings with local community organizations and coordination with local elected officials and various state and federal agencies, Alternate 4, Crossover Option and Alternate 3-Option B were developed. All of these Alternates were studied in detail and presented



at the Combined Location/Design Public Hearing on June 12, 1986. As a result of comments received at the Public Hearing, Alternate 3B (Modified), the selected alternate, and Alternate 4/3B were studied.

No-Build Alternate

The No-Build Alternate would provide no major improvements or increase in capacity to Maryland Route 176 (Dorsey Road), the existing two lane east-west facility in the project area, other than the recent widening of the existing roadway to four lanes between Maryland Routes 295 and 652 and the planned widening to four lanes between Maryland Routes 652 and Hammonds Ferry Road. These improvements are to be considered only as an interim measure for the short-term relief of traffic congestion, and even with these improvements, the road will not adequately accommodate the future traffic needs of this corridor.

Alternate 2 - Urban Arterial

Alternate 2 (Figure II-K1) proposes the construction of a curbed section urban arterial highway on or close to the alignment of existing Maryland Route 176 (Dorsey Road). From 1-95, this alternate proceeds southeasterly, interchanges with U.S. Route 1, intersects with Race Road, and continues on to an Interchange with Maryland Route 295 (Figures II-1 to II-4). East of Route 295, this alternate follows existing Route 176, intersects with Maryland Route 713 (Ridge Road) and interchanges with Maryland Route 170 (Figures II-4 to II-6). East of Route 170, this alternate shifts north of Dorsey Road to east of Maryland Route 652 where there are two options proposed. Option A curves southeasterly, intersects with W.B.&A. Road and then continues to the existing Maryland Route 100/Maryland Route 3 (1-97) Interchange (Figures II-7 and II-8). Option B continues easterly from Route 652, remains north of Route 176 until just east of McPherson where it curves southerly through the western portion of Friendship Park and then onto the Route 100/1-97 Interchange (Figures | |-9 to | |-11).

Alternate 3 - Freeway

Alternate 3 (Figure II-K1) proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access from 1-95 to 1-97. From 1-95 to Maryland Route 295, Alternate 3 follows the same alignment as Alternate 2 and has Interchanges with U.S. Route 1, Race Road and Route 295 (Figures II-12 to II-14). East of Route 295, this alternate curves southeasterly away from Dorsey Road, Interchanges with Maryland Route 713 and then Interchanges with Maryland Route 170 Just north of Munson Heights (Figures II-14 to II-17). East of Route 170, there are two options proposed. continues easterly, crosses under Queenstown Road south of Jones Road and then Interchanges with I-97 (Figures II-17 to II-19). Option B curves northeasterly from the Route 170 Interchange, crosses under Queenstown Road, curves north of Burleytown and Alberta Heights, continues east across Friendship Park and then curves southeasterly around Queenstown to the Route 100/1-97 Interchange (Figures II-20 to II-22). Options are proposed for the interchanges at Route 295, Route 713 and Route 170 and are shown on Figures II-23 to II-25, respectively.



Alternate 3B (Modified) (Selected Alternate)

This alternate uses the same mainline alignment as Alternate 3-Option B, except in the vicinity of Race Road where the alignment has been shifted slightly south. The modifications include the selection of the "Option" for relocating Dorsey Road at U.S. Route 1 (Figure II-28), the selection of the full cloverleaf interchange at Maryland Route 295 (Figure II-29), providing a bridge over Maryland Route 295 connecting Race Road and Wright Road (Figure II-30), shifting the relocated Ridge Road to avoid Mt. Pligrim Baptist Church (Figure II-31), selecting the "first option" interchange at Ridge Road which has a loop ramp in the southeast quadrant (Figure II-31), bridging Harmans Road over Maryland Route 100 (Figure II-32), selecting the urban diamond interchange at Maryland Route 170 (Figure II-33) and bridging W.B.&A. Road over Maryland Route 100 (Figure II-34).

Alternate 4 - Freeway

This alternate proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access from I-95 to I-97. This alternate has the same alignment as Alternates 2 and 3 from I-95 through the U.S. Route 1 Interchange (Figure II-36). Before the alignment crosses the B&O Raliroad, It curves northeasterly around the Parkway Industrial Center I, then curves southeasterly (Figure II-45) through the Patapsco Valley State Park and Interchanges with Maryland Route 295 (Figures II-37 and II-38). Alternate 4 then continues southeasterly, interchanges with an extension of New Ridge Road north of the Baltimore Commons Business Park, bridges over AMTRAK and Maryland Route 170 and then crosses through the southwest corner of BWI airport (Figures II-39 and II-40). After interchanging with Dorsey Road, Alternate 4 follows the same alignment as Alternate 2, Option A, to the Route 100/I-97 Interchange (Figures II-41 and II-42).

Alternate 4/3B

This alternate is identical to Alternate 4 from I-95 to the Dorsey Road Interchange (Figure II-36 through II-41). South of Dorsey Road, this alternate would curve southeasterly (Figure II-45) to Join the alignment of Alternate 3-Option B at W.B.&A. Road (Figure II-21 and II-22).

Crossover Option (Alternate 3 to Alternate 4)

The Crossover Option utilizes Alternate 3 from I-95 to Maryland Route 295 (Figures II-12 to II-14), then crosses northeasterly to the Alternate 4 Interchange with the New Ridge Road extension (Figures II-43 and II-44), and then utilizes Alternate 4 to the Route 100/I-97 interchange (Figures II-39 to II-42). The Crossover Option proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access as proposed for Alternates 3 and 4.



5. Environmental Consequences

The selected alternate, Alternate 3B (Modified), requires 22 residential relocations. Ten of the relocations are minority residential relocations. Of the minority residential relocations, 7 are owner-occupied residences and 3 are tenant-occupied residences. There are 7 business relocations required.

The selected alternate, Alternate 3B (Modified), would improve accessibility to community facilities, parks and public recreation areas in the project area by separating local and through traffic and keeping the existing road network intact through the use of bridges. Several roads would be rerouted or cul-de-saced in the Race Road and Wright Road areas, causing more circuitous travel to reach MD Route 176. However, by eliminating through traffic on MD Route 176, travel along this road improves due to less traffic backups and a greater level-of-service. For a more detailed discussion of travel time and distance, see Section IV.

The selected alternate, Alternate 38 (Modified), would permit the planned expansion of the industrial and business section within the study area as called for in the General Development Plans of Howard County and Anne Arundel County by providing greater traffic capacity and improving access to and from the study area.

Local businesses that depend on drive-by traffic (i.e., restaurants, motels, etc.) might experience some loss of activity under the selected alternate since a large portion of the through traffic would be moved away from the Maryland Route 176 corridor. However, the new alignment would reduce congestion along Route 176 and facilitate access to these establishments, especially during the peak traffic hours, through the use of interchanges and service roads. The selected alternate, Alternate 3B (Modified), includes several provisions for maintaining the existing road network so that local residences can access the businesses.

The selected alternate, Alternate 3B (Modified), would have a positive effect on the tax bases of Howard and Anne Arundel Counties since it would accommodate the efficient expansion of proposed development in the study corridor.

The transportation requirements of the study area (as shown in Figures IV-1 through IV-10) reveal that the selected alternate would provide both greater capacity through the area and higher levels of service on the existing road network than the No-Build Alternate. The accident rate within the study area would decrease under the selected alternate even though higher capacities would be attained.

Generally, geologic and soil features of the study area pose no significant difficulty to roadway construction if careful and detailed analysis and design are undertaken.

The impact to surface water from highway improvements and the accompanying development would be minimized by designing the project in accordance with the Maryland Stormwater Management Act, following the sediment and erosion

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control program of the State Highway Administration and incorporating other stormwater management practices.

Since the selected alternate, Alternate 38 (Modified), would cross one or more streams and their 100 year flood plains, detailed hydrologic and hydraulic studies will be conducted to minimize impacts due to any floodplain encroachment. Preliminary analysis, in accordance with Executive Order 11988, indicates that no significant floodplain impacts are expected to occur as a result of the selected alternate.

The selected alternate, Alternate 3B (Modified), would adversely impact some wetlands. The use of stringent sediment control measures would minimize these impacts. Wetland mitigations, such as enhancement, reconstruction or replacement will be coordinated with the U.S. Army Corps of Engineers, MD Department of Natural Resources and other agencies.

Correspondence with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources - Wildlife Administration Indicates that there are no known populations of federally listed threatened or endangered species along the study corridor to be impacted by the selected alternate.

An air quality analysis of 30 receptor sites (see Figure IV-11) within the study area reveals no violations of State and National Ambient Air Quality Standards (S/NAAQS) for either the maximum one-hour period or maximum consecutive eight-hour period in the design year (2010) and the estimated year of completion (1990) for the selected alternate, Alternate 3B (Modified).

A noise impact analysis was conducted using 29 receptor sites (see Figure IV-11) within the study area. Noise measurements at each noise sensitive area (NSA) were made and design year (2010) noise levels at each site were predicted using methodology developed by the Federal Highway Administration (see Table IV-4 and IV-5). Traffic noise impacts would occur when the predicted traffic noise levels would exceed the FHWA noise abatement criteria of 67 dBA Leq or increase by 10 dBA or more above the current ambient noise levels excluding aircraft.

The selected alternate, Alternate 3B (Modified) would cause noise impacts to 10 NSA's and at one of these sites, (NSA 28), noise abatement measures were considered reasonable and feasible (see Table IV-9). Noise abatement measures at the impacted site, NSA 28, are being considered under the upgrading of Maryland Route 3.

Seventeen (17) historical sites are located within the study area; two are sites for National Register eligibility (Shipley House and Smith Farm) and the remaining 15 sites are not eligible, but are of Maryland inventory Quality. The State Historic Preservation Officer has determined that the selected alternate, Alternate 3B (Modified), will not have an adverse effect on the Shipley House or the Smith Farm conditional on landscaping plans which are reviewed by the Maryland Historical Trust. No property is required from the Shipley House. The selected alternate does require acquisition of some of the Smith Farm property, but would not directly impact any buildings or the cemetery on the property. Mitigation measures will be coodinated with the SHPO.

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Four sites identified by the Maryland Geological Survey as potentially eligible for the National Register of Historic Places would be impacted by the selected alternate, Alternate 38 (Modified). Phase II archeological studies will be undertaken on three of these sites and this work will be coordinated with the State Historic Preservation Officer.

6. Areas of Controversy/Unresolved Issues

Community groups in the area are opposed to Alternates 2A, 2B, 3A, 3B and 4 based on disruption to their communities and the traffic impacts associated with Maryland Route 100 traffic travelling through the communities.

The Maryland State Aviation Administration and the Federal Aviation Administration were opposed to Alternates 2A, 2B, 4/3B and 4 due to conflicts with the planned expansion of Baltimore/Washington International Airport. The MD SAA and the FAA are not opposed to the selected alternate, Alternate 3B (Modified).

The Maryland Department of Natural Resources is opposed to Alternate 4 since it would impact the Patapsco Valley State Park. This agency is also opposed to Alternate 3, Options A & B since both of these alternates impact the Buckingham Forest Tree Nursery. Coordination with the MD. D.N.R. has been on-going throughout the preliminary planning stage to minimize the impacts to the nursery.

Opposed to Alternate 3B is the State Chapter of the National Association for the Advancement of Colored People (NAACP).

The Maryland State Highway Administration finds that Alternate 3B (Modified) provides the needed service for transportation with minimal impacts to adjacent communities.

7. Permits Required

Construction of this project would require review and approval for the following permits:

- U.S. Army Corps of Engineers -- Section 404 Permit
- Maryland Department of Natural Resources -- Approved Sediment Control Plan
- Maryland Department of Natural Resources -- Approved Stormwater Management Plan
- Maryland Department of Natural Resources -- Waterway Construction Permit
- Maryland Department of Health and Mental Hyglene Water Quality Certificate

8. Summary of Impacts

Table S-1 compares the significant impacts associated with each alternate.

SUMMARY OF IMPACTS

TABLE S-1

					ALT	RNATES			
	NO- Build	2A	28	ЗА	3B	38 (MOD.) SELECTED ALTERNATE	1 4	3 CROSS- OVER 4	4/3
SOCIO - ECONOMIC IN	1 PAC	TS				٠.			
RESIDENTIAL DISPLACEMENTS	0	38	39	43 A	33 A	22	33	40	25
MINORITY RESIDENTIAL DISPLACEMENTS	0	23	24	28	14	10	12	26	3
BUSINESS DISPLACEMENTS	0	12	12	8	7	7	7	7	6
ACCESS TO COMMUNITY FACILITIES MODIFIED	NO	YES	YES	YES	YES	YES	YES	YES	YES
PARKLAND AFFECTED - ACRES	0	4.1	32.7	0	14.2	14.2	20.1	4.0	30.
HISTORIC SITES AFFECTED	0	0	0	1	2	2	0	0	0
ARCHEOLOGICAL SITES AFFECTED	0	3	3	5	4	4	1	3	ı
CONSISTENT WITH DEVELOPMENT PLANS	NO	NO	NO	YES	YES	YES	NO	NO	NO
PRIME FARMLAND SOILS - ACRES	0	0	0	0	0	0	0	0	0
PRIME FARMLAND SOILS - ACRES ACTIVE AGRICULTURAL LAND-ACRES	0	0	0	0 54.4	0 43.5	0	0	0	0
			<u> </u>			0 43.5 0	0 16.8	0 16.8 0	
ACTIVE AGRICULTURAL LAND-ACRES	0	16.8	12.3	54.4	43.5	43.5	16.8	16.8	0
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT.	0	16.8	12.3	54.4 0	43.5 0	43.5 0	16.8	16.8	0 0 3
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES	0 0 0	16.8 0 4	12.3 0 4 41.6	54.4 0 6 53.5	43.5 0 7	43.5 0 7	16.8 0 3	16.8 0 5	0 0 3 77.3
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES	0 0 0	16.8 0 4 48.8	12.3 0 4 41.6	54.4 0 6 53.5	43.5 0 7 54.3	43.5 0 7 56.9	16.8 0 3 79.1	16.8 0 5 76.5	0 0 3 77.3 7.3
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES	0 0 0 0	16.8 0 4 48.8 17.2	12.3 0 4 41.6 17.2	54.4 0 6 53.5 33.3	43.5 0 7 54.3 34.2	43.5 0 7 56.9 28.5 56.0	16.8 0 3 79.1 8.8	16.8 0 5 76.5 25.7	0 0 3 77.3 7.3 37.6
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES	0 0 0 0 0	16.8 0 4 48.8 17.2 47.6	12.3 0 4 41.6 17.2 39.7	54.4 0 6 53.5 33.3 59.5	43.5 0 7 54.3 34.2 61.4	43.5 0 7 56.9 28.5 56.0	16.8 0 3 79.1 8.8 41.7	16.8 0 5 76.5 25.7 54.3	0 0 3 77.3 7.3 37.6
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS +	0 0 0 0 0	16.8 0 4 48.8 17.2 47.6 59.0 0	12.3 0 4 41.6 17.2 39.7 46.8 0	54.4 0 6 53.5 33.3 59.5 80.7	43.5 0 7 54.3 34.2 61.4 76.4	43.5 0 7 56.9 28.5 56.0 69.7	16.8 0 3 79.1 8.8 41.7 68.1	16.8 0 5 76.5 25.7 54.3 96.9	0 0 3 77.3 7.3 37.6 54.9
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS +	0 0 0 0 0 0	16.8 0 4 48.8 17.2 47.6 59.0 0	12.3 0 4 41.6 17.2 39.7 46.8	54.4 0 6 53.5 33.3 59.5 80.7	43.5 0 7 54.3 34.2 61.4 76.4	43.5 0 7 56.9 28.5 56.0 69.7	16.8 0 3 79.1 8.8 41.7 68.1	16.8 0 5 76.5 25.7 54.3 96.9	0 0 3 77.3 7.3 37.6 54.9
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS +	0 0 0 0 0 0 0 0	16.8 0 4 48.8 17.2 47.6 59.0 0	12.3 0 4 41.6 17.2 39.7 46.8 0	54.4 0 6 53.5 33.3 59.5 80.7 0	43.5 0 7 54.3 34.2 61.4 76.4 0	43.5 0 7 56.9 28.5 56.0 69.7 0	16.8 0 3 79.1 8.8 41.7 68.1 0	16.8 0 5 76.5 25.7 54.3 96.9 0	0 0 3 77.3 7.3 37.6 54.9
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS + NOISE LEVEL IMPACTS ++ COST (x \$ 1,000,00	0 0 0 0 0 0 0 0	16.8 0 4 48.8 17.2 47.6 59.0 0 5	12.3 0 4 41.6 17.2 39.7 46.8 0	54.4 0 6 53.5 33.3 59.5 80.7 0	43.5 0 7 54.3 34.2 61.4 76.4 0	43.5 0 7 56.9 28.5 56.0 69.7 0	16.8 0 3 79.1 8.8 41.7 68.1 0	16.8 0 5 76.5 25.7 54.3 96.9 0	0 0 3 77.3 7.3 37.6 54.9
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS + NOISE LEVEL IMPACTS ++ COST (x \$ 1,000,00	0 0 0 0 0 0 0 0 5	16.8 0 4 48.8 17.2 47.6 59.0 0 5	12.3 0 4 41.6 17.2 39.7 46.8 0 0 5	54.4 0 6 53.5 33.3 59.5 80.7 0	43.5 0 7 54.3 34.2 61.4 76.4 0 0	43.5 0 7 56.9 28.5 56.0 69.7 0	16.8 0 3 79.1 8.8 41.7 68.1 0 0 8	16.8 0 5 76.5 25.7 54.3 96.9 0 0	0 0 3 77.3 7.3 37.6 54.9 0
ACTIVE AGRICULTURAL LAND-ACRES STREAM REALIGNMENT - LINEAR FT. NEW STREAM CROSSINGS WETLANDS - ACRES FLOODPLAIN - ACRES WOODLAND - ACRES OLD FIELD - ACRES THREATENED OR ENDANGERED SPECIES AIR QUALITY IMPACTS + NOISE LEVEL IMPACTS ++ COST (x \$ 1,000,00	0 0 0 0 0 0 0 0 5	16.8 0 4 48.8 17.2 47.6 59.0 0 5	12.3 0 4 41.6 17.2 39.7 46.8 0 0 5	54.4 0 6 53.5 33.3 59.5 80.7 0 0 11	43.5 0 7 54.3 34.2 61.4 76.4 0 0 10	43.5 0 7 56.9 28.5 56.0 69.7 0	16.8 0 3 79.1 8.8 41.7 68.1 0 0 8	16.8 0 5 76.5 25.7 54.3 96.9 0 0	0 0 3 77.3 7.3 37.6 54.9 0 0

- REPRESENTS WORSE CASE COMBINATION OF INTERCHANGE OPTIONS
- SITES EXCEEDING S/NAAQS
- + + N S A'S EXCEEDING FEDERAL NOISE ABATEMENT CRITERIA OR IOBBA INCREASE
 * WILL INCREASE BY \$45 TO \$65 MILLION FOR AIRPORT TUNNEL

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The following Environmental Assessment Form is a requirement of the Maryland Environmental Policy Act and Maryland Department of Transportation Order 11.01.06.02. Its use is in keeping with the provisions of 1500.4 (k) and 1506.2 and .6 of the Council of Environmental Quality Regulations, effective July 31, 1979, which recommend that duplication of Federal, State, and Local procedures be integrated into a single process.

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

ENVIRONMENTAL ASSESSMENT FORM

			YES	<u>0</u> 0	COMMENTS
A.	Land	Use Considerations			
	1.	Will the action be within the 100 year flood plain?	<u> </u>		IV.C.5
	2.	Will the action require a permit for construction or alteration within the 50 year flood plain		<u>x</u>	
	3.	Will the action require a permit for dredging, filling, draining or alteration of a wetland?	x_		IV.C.4
	4.	Will the action require a permit for the construction or operation of facilities for solid waste disposal including dredge and excavation spoil?		<u>x</u>	
	5.	Will the action occur on slopes exceeding 15%?	<u>x</u>		IV.C.1
	6.	Will the action require a grading plan or a sediment control permit?	<u> x</u>		IV.C.8
	7.	Will the action require a mining permit for deep or surface mining?	<u>.</u>	<u>_x</u>	
	8.	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 the Potomac River by conduits, cables or other like devices?		<u> x</u>	

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ENVIRONMENTAL ASSESSMENT FORM (Cont'd)

			YES	<u>NO</u>	COMMENTS
	11.	Will the action affect the use of a public recreation area, park, forest, wildlife management area, scenic river or wild land?	<u>x</u>		IV.A.1.f
	12.	Will the action affect the use of any natural or manmade features that are unique to the county, state or nation?	_	x_	·
	13.	Will the action affect the use of an archeological or histori- cal site or structures?	<u> x</u>		<u>IV. I</u>
В.	Wate	er 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>	_	IV.C.3
	15.	Will the action require the construction, alteration or removal of a dam, reservoir, or waterway obstruction?	_	<u> </u>	CANADO La companya de la companya del companya de la companya del companya de la companya de l
	16.	Will the action change the overland flow of stormwater or reduce the absorption capacity of the ground?	· <u> </u>		IV.C.2
	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 operation of facilities for treatment or distribution of water?		<u>x</u>	



ENVIRONMENTAL ASSESSMENT FORM (Cont'd)

		YES	<u>NO</u>	<u>COMMENTS</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?		x	
21.	Will the action result in			•
	any discharge into surface or sub-surface water?	<u>x</u>		IV.C.2
22.	affect amblent water quality parameters and/or require a			
	discharge permit?		<u> x</u>	
23.	Will the action result in any discharge into the air?	<u> x</u>		_IV.D
24.	If so, will the discharge affect ambient air quality parameters or produce a disagreeable odor?	_ X _		IV.D
25.	Will the action generate additional noise which differs in character or level from present conditions?	×		IV.E
26.	Will the action preclude			
	future use of related air space?		<u>_x</u>	
27.	Will the action generate any radiological, electrical, magnetic, or light influences?		v	
Diam			<u> </u>	
	nts and Animais			•
28.	Will the action cause the disturbance, 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?		x	·

D.

N

ENVIRONMENTAL ASSESSMENT FORM (Cont'd)

	30.	Will the action require a permit for the use of pesticides, herbicides or other blological, chemical or radiological control agents?	<u>YES</u>	<u>NO</u> X	<u>COMMENTS</u>
E.	Soci	o-Economic		^_	
	31.	Will the action result in a pre-emption or division of properties or impair their economic use?	x_		IV.A
•	32.	Will the action cause relocation of activities, structures, or result in a change in the population density or			
		distribution?	<u> </u>		IV.A
	33.	Will the action alter land values?	x		IV.A
	34.	Will the action affect traffic flow and volume?	<u>x</u>		IV.B

ENVIRONMENTAL ASSESSMENT FORM (Cont'd)

			YES	<u>NO</u>	COMMENTS
	35.	Will the action affect the production, extraction, harvest or potential use of a scarce or economically important resource?		<u> x</u>	IV.H
	36.	Will the action require a license to construct a sawmill or other plant for the manufacture of forest products?		_ <u>x</u> _	
	37.	Is the action in accord with federal, state, regional and local comprehensive or functional plans - including zoning?			
		ZOTTING?	<u> </u>		I.B
	38.	Will the action affect the employment opportunities for persons in the area?	<u>x</u>		IV.A.2
	39.	Will the action affect the ability of the area to attract new sources of tax revenue?	<u> x</u>		
	40.	Will the action discourage present sources of tax revenue from remaining in the area, or affirmatively encourage them to relocate elsewhere?		_ <u>x</u> _	
	41.	Will the action affect the ability of the area to attract tourism?		<u>x_</u>	
₹.	Othe	r Considerations			
	42.	Could the action endanger the public health, safety or welfare?		<u>x_</u>	
	43.	Could the action be eliminated without deleterious affects to the public health, safety, welfare or the natural environment?		<u>x</u>	
		•			

3

ENVIRONMENTAL ASSESSMENT FORM (Cont'd)

		YES	<u> </u>	COMMENTS
44.	Will the action be of statewide significance?		<u> </u>	
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			
	envirorment?		<u> </u>	
46.	Will the action require additional power generation or transmission capacity?		<u>x</u>	
47.	This agency will develop a complete environmental effects report on the proposed action.		¥	

A Draft and Final Environmental impact Statement have been prepared in accordance with the National Environmental Policy Act. These documents satisfy all the requirements of the Maryland Environmental Policy Act.

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PURPOSE AND NEED

I. PURPOSE AND NEED

A. <u>Project Location and Description</u>

The Maryland Route 100 location study is located in the northern part of Anne Arundel County, south of Baltimore/Washington International Airport, and the eastern part of Howard County (see Figure I-1). The project limits are from interstate I-95 to Maryland Route 3/Interstate 97 (see Figure I-2).

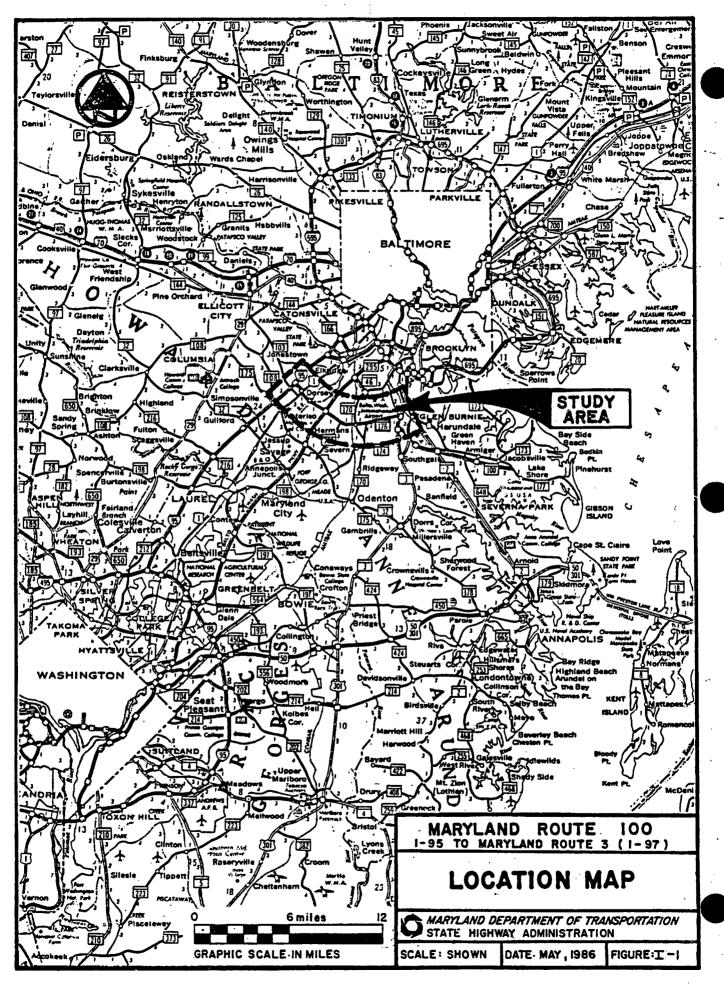
B. Need for the Project

1. Regional Growth and Development

Anne Arundel County and Howard County have established general development plans which include proposed land usage for continued growth and development in the region. The General Development Plan for Anne Arundel County was adopted in 1978, while the General Development Plan for Howard County was adopted in 1982. The expressed purpose of these Plans is to establish policies to provide for orderly growth and development in the region. The project is shown on the Regional Planning Council General Development Plan adopted in 1986.

This region of Anne Arundel County has experienced an above average growth rate based on the 1970 census tracts. By the year 2005, the population is expected to increase an additional 35 percent to an estimated 42,460 people. For the study area within Howard County, the rate of growth has been 28.3 percent since 1980 and is more than that for the County as a whole, with the area around Columbia having the largest population growth. In the combined areas of Anne Arundel and Howard Countles, the population is expected to increase by approximately 45% to 55,400 in the next 20 years (2005).

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This large growth in the population creates a need for improved transportation facilities in the region. Maryland Route 100 will provide a major east-west link in the highway network and relieve an already congested Maryland Route 176 (Dorsey Road).

Traffic and Operating Conditions

a. Existing Facilities (Figure 1-2)

The study area is serviced by Maryland Route 176 in an east/west direction. This road links interstate 97 on the east with interstate 95 on the west (via small lengths of U.S. Route 1 and Maryland Route 100). These interstate highways are the two major north/south routes serving the region. In addition to the interstate routes, there are two major state routes and one U.S. Route serving the north/south movement, Maryland Route 295 (Gladys Noon Speliman Parkway), Maryland Route 170 and U.S. Route 1.

The transportation needs within the study area are twofold. Maryland Route 176 is the only east/west movement in the study area and suffers from the problem of high traffic volumes compounded by a mix of local and through traffic, strip development, business and large industrial parks and side road friction created by numerous driveways. Also essential to the future development in the region is the timely provision of a major new highway facility to provide for increased system capacity and levels of service. This project is intended to provide the capacity for an improved east/west movement of traffic linking the major north/south interstate routes. The proposed extension of MD. Route 100 west of 1-95 to MD. Route 29 as an arterial highway has independent utility and is not essential to the operation of this facility, being beyond the major traffic generating interstate corridors.

b. Operating Conditions

Existing roads in the vicinity of the study area are congested, particularly during peak hours. Maryland Route 176 currently carries traffic volumes of 17,800 vehicles per day at U.S. Route 1 (the west end of the study area), 19,000 vehicles per day at Maryland Route 170 and 17,100 vehicles per day at Maryland Route 3/Interstate 97 (see Figure 1-3). Motorists along the existing Maryland Route 176 experience considerable congestion and delay, especially at the following intersections: U.S. Route 1, Parkway Drive, Maryland Route 713, Candlewood Road, Harmans Road and Maryland Route 170. These intersections will be at capacity in the design year 2010 even with the 4-lane Interim improvement of Maryland Route 176 from Maryland Route 295 to Hammonds Ferry Road, and will operate at a level-of-service F in either the a.m. or p.m. peak or both (for definition of Level of Service, see Appendix Maryland Route 176 would be at a level-of-service F and Hammonds Ferry A). Road would be at a level-of-service E in the a.m. peak for the design year 2010.

An accident analysis was performed for the study area for the years 1979 through 1983. Maryland Route 176, from U.S. Route 1 in Howard County to Maryland Route 3 in Anne Arundel County, experienced 627 reported accidents during the five-year period, 1979 through 1983, resulting in an average accident rate of 256 accidents per one hundred million vehicle miles of travel (100MM). This rate is lower than the weighted statewide average rate of 333 ACC/100MM for all similar design highways.

An estimated monetary loss of \$1.4 million for every hundred million vehicle miles of travel occurred to the general and motoring public as a result of these 627 accidents. The accidents are listed below by severity indicating persons killed and injured.



Severity	1979	1980	1981	1982	1983	Total
Fatal Accidents	2	1	1	1	0	5
Persons Killed	3	2	1	1	O	7
Injury Accidents	60	47	75	76	64	322
Persons Injured	110	76	134	121	123	564
Property Damage Only	97	61	47	37	58	300
Total Accidents	159	109	123	114	122	627

A total of 59 accidents involving trucks occurred during the study period. Nearly 51 percent of the total accidents occurred during hours of darkness, which is above the statewide average for nighttime accidents. Also, 25 percent of the reported accidents were experienced between the hours of 4:00 to 7:00 p.m. The accidents were evenly distributed throughout the months of the year.

There were 3 locations within the study area that met the criteria for a High Accident Location (HAL). These locations: Maryland Route 176 from Hammonds Ferry Road to .22 mile east of Maryland Route 3, Maryland Route 176 at Ridge Road and Maryland Route 176 at Hammonds Ferry Road, were HAL's for 1981 only.

The collision types experienced on Maryland Route 176 in comparison to statewide averages for this type design highway are as follows:

Collision Type	Study Section Rate/100 MVM	Statewide Rate/100MMM
Rear End	90.56	75.83
Fixed Object	33.45	50.16
Opposite Direction	19.17	22.15
Sideswipe	14.28	24.38

The rate of rear end type collisions significantly exceeds the statewide average rate. These collisions are mainly associated with congestion generally present with backup and delay situations.



The Increasing traffic volumes, deteriorating conditions and low levels of service that the existing road network would experience through the design year 2010 would increase the rate and severity of all types of accidents.

Traffic volumes on Maryland Route 176 will increase substantially (e.g. from the current 17,800 vehicles per day to 24,100 vehicles per day at U.S. Route 1 in the year 2010) if a new facility is not constructed. In the year 2010 traffic operations would continue to deteriorate for the No-Build option with higher volumes causing forced flow and operational breakdowns.

Traffic volumes on Maryland Route 176 will decrease substantially with the freeway build options. At Maryland Route 170, with the No-Build option, it is estimated that there will be 26,700 vehicles per day in the year 2010. However, with any of the freeway build options, this volume is estimated to decreased to 16,300 vehicles per day in the year 2010 with 45,600 vehicles per day utilizing the new facility.

C. Planning Background

In the early 1960's, Maryland Route 100 was envisioned as part of the "Outer Baltimore Beltway". A planning study was initiated for this same section of Maryland Route 100 from Maryland Route 3 to Maryland Route 170 and a combined Corridor/Design Public Hearing was held on August 6, 1973. A Draft Environmental impact Statement was prepared by the State Highway Administration. However, the project was then delayed pending the completion of a Maryland Route 100 Corridor Systems Study.

The Corridor Systems Study was undertaken in 1977 by the Maryland Department of Transportation in cooperation with Anne Arundel and Howard Countles, the Department of State Pianning, and the Regional Pianning Council. The purpose of the study was to determine additional east/west highway needs through northern Anne Arundel and eastern Howard Countles. The Final Report for the Corridor System's Study was published in July, 1979. The study concluded that both the new Maryland Route 100 freeway and the reconstruction/relocation of Maryland Route 176 be studied as equal alternates before a decision is made.

The Maryland Department of Transportation's <u>Highway Needs</u> inventory (revised 1984) Identifies and acknowledges the need to improve service by extending Maryland Route 100 from Maryland Route 3 (Interstate 97) west to Interstate 95. The <u>General Development Plan for Anne Arundel County</u> (1978), the <u>General Development Plan for Howard County</u> (1982) and the <u>Regional Planning Council General Development Plan (1986)</u> Identify the corridor of Alternate 3-Option A for this project and is the basis upon which transportation, development and zoning plans have been made and implemented. This alignment has also been shown in the <u>General Development Plan for Anne Arundel County</u> of 1968.

The project is included in the Maryland Department of Transportation's Consolidated Transportation Program for Fiscal Years 1986-1991 in the Primary Development and Evaluation Section.

Coordination of this project with Anne Arundei and Howard County officials, elected officials, and the public has been on-going throughout the project planning phase.

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In early 1984 through early 1985, meetings were held with Elected Officials of Anne Arundel and Howard Counties, the County staffs (e.g., Department of Planning and Zoning, Department of Traffic Engineering, Department of Public Works) and community groups to brief and update them on the studies developed to date, obtain their input regarding the preliminary alternates and to address their concerns. Comments from these meetings have been given consideration and incorporated into the development of the preliminary alternates.

On April 11, 1985 the Alternates Public Meeting was held to present the preliminary alternates developed as a result of the feasibility studies, environmental assessments and coordination to date and to encourage public discussion of these alternates. The Maryland State Highway *Administration reviewed the comments received from the Alternates Public Meeting and selected those alternates that would be retained for further study. The incorporation of Alternate 4, Alternate 3 - Option B and the Crossover Option into the study was a direct result of the input from these meetings.

The alternates retained for further study and their associated impacts were discussed in the Draft Environmental impact Statement/4(f) Evaluation which was approved for distribution on May 5, 1986.

Subsequent to the distribution of the Draft Environmental Impact Statement, a Location/Design Public Hearing was held on June 12, 1986 at Andover Senior High School. All comments received on the Draft Environmental Impact Statement were considered prior to the selection of Alternate 3B



(Modified) for Maryland Route 100. The study of Alternate 4/3B was a direct result of the review of these comments.

After location and design approvals are granted for Maryland Route
100, the project will proceed to detailed design.

II ALTERNATES

II. ALTERNATES, INCLUDING THE SELECTED ACTION

A. <u>Preliminary Alternates</u>

Prior to the Alternates Public Meeting, Transportation System Management (TSM) procedures were considered as a solution to the traffic problems of the corridor. They were found not to be feasible since they would utilize existing Dorsey Road which, as discussed in Section IV.B, will experience a level-of-service F in the design year (2010) from U.S. Route 1 to Maryland Route 3. TSM procedures would leave Dorsey Road as the only major east-west road through the study corridor and therefore could not furnish the capacity needed for the planned growth in the area.

Two build alternates and the No-Build Alternate were presented at the Alternates Public Meeting on April 11, 1985. Alternate 2 (Options A & B) and Alternate 3 (Option A), as described in Section B of this chapter, were presented to the public.

In response to public request at the alternates meeting, Alternate 4 was studied. This alternate is described in detail in Section B of this chapter.

After Introducing Alternate 4, public input resulted in the study of a Crossover Option combining the western section of Alternate 3 with the eastern section of Alternate 4. Public input also resulted in the study of Option B for Alternate 3.

At the Combined Location/Design Public Hearing held on June 12, 1986, the following alternates were presented: the No-Build Alternate, Alternate 2 (Options A & B), Alternate 3 (Options A & B), Alternate 4 and the Crossover Option. In response to public input, Alternate 4 with a connection to Alternate 3-Option B near W.B.&A. Road (Alternate 4/3B) and Alternate 3 B



(Modified), the selected alternate, were studied.

All of these alternates are described in detail in Section B of this chapter. Figures II-1 through II-45 show the detailed plans for each alignment. Figure II-K1 shows the alternates which were studied in detail and Figure II-K2 shows the locations of the plan sheets for the selected alternate, Alternate 3B (Modified).

Figure II-46 shows the typical section for the urban arterial section (Alternate 2) and the freeway section (Alternates 3, 4, 4/3B and the Crossover Option). Figures II-47 and II-48 show typical sections for various roads and Figures II-49 and II-50 show typical bridge sections.

B. <u>Alternates for Detailed Studies</u>

As a result of public involvement in the initial project planning phase, the following alternates were advanced to detailed engineering studies and environmental analysis in the final project planning phase of this project.

1. No-Build Alternate

The No-Build Alternate would provide no major improvements or increase in capacity to Maryland Route 176 (Dorsey Road) other than the recent widening of the existing roadway to four lanes between Maryland Routes 295 and 652. A fifth lane, for left turning vehicles, will be provided in several locations.

The Widening of existing Maryland Route 176 from two lanes to four lanes between Maryland Route 652 and Hammonds Ferry Road is scheduled to begin in fiscal year 1987.

in addition to these special projects, minor safety improvements and normal maintenance will continue with the No-Build Alternate. There are no plans for widening the section of Maryland Route 176 between U.S. Route 1 and Maryland Route 295.

The improvements described above are to be considered only as an interim measure for the short-term relief of traffic congestion and even with these improvements, the road will not adequately accommodate the future traffic needs of this corridor. Therefore, the No-Build Alternate was not selected.

2. Alternate 2 - Urban Artériai (Figure II-1 through II-11)

Alternate 2 proposes the reconstruction of a portion of existing Maryland Route 176 to a 6 lane curbed section urban arterial highway with a design speed of 60 miles per hour (see Typical Sections). This alternate does not provide for access control along its alignment. As a result, residential drives and commercial entrances, with their associated in and out turning movements, will present a safety hazard and otherwise impede the continuous flow of traffic through the study area. It also proposes to construct segments on new location using the same curbed section. With Alternate 2, some intersecting roads will remain at grade, some will be closed and some will have grade separated interchanges.

Beginning at 1-95, Alternate 2 would follow the alignment of the existing Maryland Route 100 (Figure II-1). It would cross beneath U.S. Route 1 approximately 950 feet north of the existing Maryland Route 176 Intersection. Alternate 2 proposes the construction of a partial cloverleaf interchange with the two loops on the east side of U.S. Route 1.



Existing Maryland Route 176 (Dorsey Road) would be terminated with a cul-de-sac just east of U.S. Route 1. It would be relocated beginning opposite the intersection of Maryland Route 103 (Meadowridge Road) and U.S. Route 1 (Figure II-2). This relocated two lane road would follow a southeastward direction for 700 feet. At this point, there are two possible options. One option would have the relocated road turning northeast and then paralleling U.S. Route 1 approximately 1,000 feet to the east until it would tie back into existing Maryland Route 176. In the other option, the relocated road would continue southeasterly for 500 feet and then would curve easterly until it would tie into existing Maryland Route 176 near Magnolia Avenue. Either one of the options would incorporate a road proposed by Howard County that runs from U.S. Route 1 easterly to south of Lennox Park and then southerly to Montevideo Road.

The entrance to the Route 100 industrial Park would be relocated approximately 1,100 feet north of its current location at U.S. Route 1 and Amberton Drive (see Figure 11-1). This entrance would curve into the Hunting Mills Drive right-of-way. Amberton Drive would then be closed with a cul-de-sac at U.S. Route 1. A service road would be constructed on the west side of U.S. Route 1 directly opposite this new entrance to provide access for the properties on the west side of U.S. Route 1.

U.S. Route 1 would be reconstructed as a four lane roadway with a 30 foot wide median through the interchange and the service road intersections.

The alignment for Alternate 2 would continue southeastwardly abutting the Route 100 Business Park on the north and Dorsey Business Center on the south. Alternate 2 would bridge over the Chessie

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System (Baitimore and Ohio) Railroad and O'Conner Road approximately 1,600 feet north of Maryland Route 176 (See Figure 11-3). East of the railroad, existing Maryland Route 176 would again be relocated beginning 500 feet east of Forest Avenue, curving to the east to an at-grade intersection with Alternate 2 and tying into existing Race Road. Service roads would connect Parkway Drive South with the relocated Route 176. Another service road would connect Parkway Drive on the north side of Alternate 2 with the relocated road which runs between Race and Dorsey Roads.

Alternate 2 then continues in an eastward direction passing under, and interchanging with, Maryland Route 295 (Baltimore-Washington Parkway) just south of the existing interchange (See Figure 11-4).

Beyond the Route 295 interchange, Alternate 2 continues parallel to and Just south of Maryland Route 176. Access from Wright Road would be relocated approximately 1,200 feet to the east of its present intersection via an at-grade intersection. The existing Dorsey Road east of Maryland Route 295 would become a service road which would be accessed to Route 100 at the intersection with the relocated Wright Road.

Alternate 2 would then shift onto the existing Dorsey Road right—of—way at Maryland Route 713 (Ridge Road) and there would be an at—grade intersection with Maryland Route 713 (See Figure II—5). From this intersection to Harmans Road, the median width would decrease to 20 feet from the previous 30 feet to avoid encroachment to the Sandalwood and Ridge View sub—divisions. As Alternate 2 approaches Maryland Route 170, the proposed alignment would begin a slight shift to the north of existing Route 176 (Figure II—6). The alignment would bridge over the Amtrak railroad line utilizing the existing bridge (widening of the bridge is programmed to begin in fiscal year



1986). Alternate 2 would then bridge over and interchange with Maryland Route 170. This interchange would have a loop in the northeast quadrant and diamond interchange ramps on the west side of Route 170, thus creating two at-grade intersections requiring provisions for left turn movements. There would be no ramps in the southeast quadrant in an effort to minimize impact to the Timber Ridge subdivision. Maryland Route 170 would be dualized through this interchange.

East of Maryland Route 170, the Alternate 2 alignment would be located north of the existing Maryland Route 176 on property owned by Baltimore-Washington International Airport.

Maryland Route 652 (Telegraph Road) would be relocated with an at-grade intersection with Alternate 2 situated approximately 700 feet west of its current intersection with Route 176.

Beyond Maryland Route 652, Alternate 2 proposes two options. Option A (Figure II-7) would curve southeasterly, leaving the Dorsey Road corridor approximately 1,000 feet east of the existing Maryland Route 652 intersection. Existing Dorsey Road on the east side of the Alternate 2 alignment would be relocated to tie into the Option A alignment at an at-grade intersection.

Option A proposes an at-grade Intersection with W.B.&A. Road approximately 1,200 feet north of Queenstown Road. The alignment would cross through the proposed Landco Business Park just north of Queenstown Park. This alignment would then pass through the southern corner of Friendship Park (Figure II-8). At this point the eastbound and westbound roadways would begin to diverge as Option A approaches the I-97/Maryland Route 100 Interchange. The eastbound roadway would cross Jones Road 500 feet east of Queenstown Road.



Option A would bridge over a relocated and realigned Jones Road which would be constructed to maintain access to the section of Queenstown north of the alignment. Alternate 2, Option A would tie into existing Maryland Route 100 at 1-97 where a full interchange is being designed which provides all movements.

From the vicinity of the relocated Maryland Route 652 intersection, Alternate 2, Option B (Figure II-9) would continue easterly on the north side of existing Maryland Route 176. Just beyond McPherson, the Option B alignment would curve to the south and enter Friendship Park (Figure II-10). The Option B alignment would run parallel to and approximately two hundred feet inside the western boundary of the park. Near the southern end of Friendship Park, this alignment would curve easterly and bridge over a reconstructed Jones Road (Figure II-11). The option would then tie into existing Maryland Route 100 and the full interchange with I-97 would be identical to the Option A alignment.

Alternate 2 was not selected for several reasons. As discussed in Section IV.B, Alternate 2 would carry 17% less traffic through the study area than the freeway alternates, the accident rate for the urban arterial roadway is projected to be high (358 accidents per 100 MMM) and the introduction of an urban arterial facility linking two major freeways (1-95 and 1-97) would create a bottleneck effect, produce confusion and conflicts between through and local traffic and otherwise impede the continuous flow of traffic through the study area. The State Aviation Administration is opposed to Alternate 2, Options A and B, due to conflicts with the planned expansion of the BWI Airport (see letter dated December 26, 1985 in Section VI).



3. Alternate 3 - Freeway (Figure II-12 through II-25)

Alternate 3 proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access from 1-95 to 1-97. This freeway would have four lanes from 1-95 to Maryland Route 170 and six lanes from Maryland Route 170 to 1-97. The design speed for the mainline is 70 miles per hour except in the vicinity of the 1-97 interchange where the design speed is 60 miles per hour. Interchanges for this alternate would be located at U.S. Route 1, Race Road, Maryland Route 295, Maryland Route 713, Maryland Route 170 and Maryland Route 3/1-97.

Beginning at I-95, the alignment of Alternate 3 would be identical to Alternate 2 through the proposed Maryland Route 295 Interchange (Figures II-12 to II-14). The Interchange, service roads and relocated Maryland Route 176 (Dorsey Road) options at U.S. Route 1 are the same as described for Alternate 2.

The alignment for Alternate 3 would continue in a southeast-erly direction after interchanging with U.S. Route 1. Shortly after bridging over the Chessie System (Baltimore and Ohio) Railroad and O'Conner Road (Figure II-13), an exit ramp is provided for the exit of eastbound traffic onto existing Maryland Route 176 at Forest Avenue. At this intersection, an entrance ramp for traffic onto eastbound Maryland Route 100 would begin and curve towards the freeway alignment.

As described for Alternate 2, Maryland Route 176 would be relocated to tie into Race Road. However, with Alternate 3, this relocated road would bridge over Route 100 and therefore an interchange would be required. This interchange (Figure II-14) would have both a loop for exiting from westbound Maryland Route 100 and a ramp for entering onto westbound Route 100

In the northeast quadrant.

The Alternate 3 alignment would pass under and Interchange with Maryland Route 295 (Baltimore-Washington Parkway) just south of the existing Maryland Route 176 underpass. There are two options for the Maryland Route 100 Interchange with Maryland Route 295. A full cloverleaf Interchange is the first option. The second option (Figure II-23) uses three loops and a directional ramp for the southbound Parkway traffic desiring to go eastbound on Maryland Route 100.

The Alternate 3 alignment separates from the Alternate 2 alignment just east of the Route 295 Interchange. Alternate 3 proceeds in a southeastward direction and would parallel Maryland Route 176 with approximately 500 to 1,000 feet separating the two roads.

Wright Road would be relocated to the east (Figure II-14) of its present location. It would bridge over Alternate 3 and tie into existing Maryland Route 176 approximately 600 feet to the east of its existing intersection.

Alternate 3 would interchange with a relocated New Ridge Road/Maryland Route 713 (Figure II-15). This relocated road would leave the alignment of the New Ridge Road approximately 750 feet north of its intersection with Ridge Road. It would proceed southwesterly and intersect Maryland Route 176 approximately 1,100 feet to the west of the existing Maryland Route 176 intersection with Maryland Route 713.

The relocated Maryland Route 713 would parallel the existing road for approximately 1,200 feet and then curve southward to rejoin the existing road approximately 1,100 feet south of Ridge Chapel Road. This relocated road would be dualized from Dorsey Road south to where it rejoins



the existing Maryland Route 713. Watts Avenue would be relocated and would tie into Ridge Chapel Road which would result in an at-grade intersection on relocated Maryland Route 713.

There are two options for the Alternate 3 Interchange with the relocated Maryland Route 713. The first option (Figure II-15) proposes a conventional diamond in three quadrants and a loop in the southeast quadrant. This loop eliminates the left turn maneuver for the eastbound Maryland Route 100 traffic desiring to go northbound on Maryland Route 713. The second option (Figure II-24) eliminates the loop resulting in a full conventional diamond interchange.

Alternate 3, after bridging over the relocated Maryland Route 713 (the existing Maryland Route 713 would terminate with cul-de-sacs at the freeway), would continue southeasterly and would cross Harmans Road (Figure II-16) approximately 3,700 feet south of the Maryland Route 176/Harmans Road Intersection. Harmans Road would be closed and Matthews Town Road would terminate just south of the freeway.

Alternate 3 would then curve to the east and bridge over the AMTRAK line approximately 4,100 feet south of Maryland Route 176. The alignment would continue east through the Buckingham Forest Tree Nursery.

The alignment would bridge over and interchange with Maryland Route 170 (Figure II-17) approximately 4,100 feet south of Maryland Route 176. Maryland Route 170 would be dualized in the vicinity of this interchange. Maryland Route 652 (Telegraph Road) would be closed with a culde-sac just north of the interchange.

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Two options for the Maryland Route 170 Interchange have been considered. The first option (Figure II-17) is an urban diamond interchange. The second option (Figure II-25) utilizes a diagonal ramp in the southeast quadrant, loop ramps in the northeast and northwest quadrants and a directional ramp for the movement from southbound Maryland Route 170 to eastbound Maryland Route 100.

Beyond Maryland Route 170, Alternate 3 proposes two options. Option A (Figure II-17) would continue easterly approximately paralleling Queenstown Road. The alignment would cross W.B.& A. Road (Figure II-18) approximately 1300 feet south of Queenstown Road. W.B.& A. Road would be terminated with cui-de-sacs on each side of the freeway.

Option A would continue eastward and cross under Queenstown Road approximately 500 feet south of Jones Road (Figure II-19). Queenstown Road would remain at or close to its current grade. Option A would then the into existing Maryland Route 100 at I-97 where a full interchange is being designed which provides all movements.

Alternate 3 — Option A was not chosen due to its impacts on Queenstown, a unique and distinct minority community. The Option A alignment would require 12 minority owner—occupied residences and one minority owned business to be relocated from Queenstown. In addition, the Option A alignment would serve as a physical and psychological barrier to the social interactions within the community.

From the vicinity of the Maryland Route 170 interchange, Alternate 3, Option B, would curve northeasterly and cross under Queenstown Road approximately 2,000 feet east of Maryland Route 652 (Figure II-20). Queenstown Road would remain at or close to its current grade. Option B would



then curve easterly and cross W.B.&A. Road approximately 1,200 feet north of Queenstown Road (Figure II-21). W.B.&A. Road would terminate with cul-de-sacs on each side of the freeway. The alignment would continue easterly north of Alberta Heights and then across Landco Business Park and Friendship Park. Near the eastern border of Friendship Park, Option B curves southeasterly around the northern section of the Queenstown community and then ties into existing Maryland Route 100 at I-97 where a full interchange is being designed which provides all movements (Figure II-22).

4. <u>Alternate 3 B (Modified) - Selected Alternate - (Figure II-26 through II-35)</u>

In response to public comments received at the Combined Location/Design Public Hearing, modifications that reduced the number of relocations required and improved local traffic circulation were made to Alternate 3-Option B. The resultant Alternate 3B (Modified) is the selected alternate for the extension of Maryland Route 100 from 1-95 to Maryland Route 3/1-97.

Alternate 3B (Modified) proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access from I-95 to I-97. It would have the same geometric characteristics and interchange locations as described for Alternate 3-Option B.

The mainline alignment for Alternate 3B (Modified) would be the same as that for Alternate 3-Option B except in the vicinity of Race Road where the alignment has been shifted slightly south (see Figures II-28 and II-29). Other modifications to Alternate 3-Option B include:

a. The service road West of U.S. Route 1 was relocated to reduce the impacts to wetland W-10 (See Figure II-26).

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- b. Using the "Option" for relocating Dorsey Road at U.S. Route 1 to reduce the number of residential relocations (see Figure 11-27).
- c. Using a standard diamond configuration for the interchange at Race Road to reduce the number of residential relocations and wetland and floodplain impacts (see Figure II-28).
- d. Using a full cloverleaf Interchange at Maryland Route 295 with a lower design speed outer ramp in the southwest quadrant to further reduce the number of residential relocations (see Figure 11-29).
- e. Providing a bridge over Maryland Route 295 to connect Race Road and Wright Road (see Figure II-30).
- f. Shifting the relocated Ridge Road to avoid the Mt. Pligrim Baptist Church and cemetery (see Figure II-31).
- g. Using the "first option" interchange at relocated Maryland Route 713 which consists of conventional diamond ramps in three quadrants and a loop ramp in the southeast quadrant (see Figure II-31).
- h. Bridging Harmans Road over Maryland Route 100 (see Figure II-32).
- 1. Using the urban diamond interchange at Maryland Route 170 to reduce impacts to Buckingham Forest Tree Nursery (see Figure 11-33).
- J. Bridging W.B.&A. Road over Maryland Route 100 (see Figure II-34).
- k. An access road to Smith Farm from Queenstown Road will be provided on the east side of Maryland Route 100 (See Figure II-33).
- I. The service road serving the farms south of Smith Farm will remain as shown for Alternate 3B. However, details of these service roads will be coordinated with the affected owners.

1/2

The changes to Alternate 3B from how it was presented in the DEIS are not significant and the resulting changes in the anticipated impacts are not significant as shown in the Summary of impacts Table (Table S-1).

5. Alternate 4 - Freeway (Figure II-36 through II-42)

Alternate 4, like Alternate 3, proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access from I-95 to Maryland Route 3/I-97. This alternate takes a northerly route around Dorsey and the industrial parks fronting on Maryland Route 176. Interchanges for this alternate would be located at U.S. Route 1, Maryland Route 295, New Ridge Road (extended), Maryland Route 176 near Maryland Route 170 and Maryland Route 3/I-97. This freeway would have four lanes from I-95 to the Maryland Route 176 interchange and six lanes from Route 176 to I-97. The design speed for the mainline is 70 miles per hour except in the vicinity of the I-97 interchange where the design speed is 60 miles per hour. The interchange, service roads and relocated Maryland Route 176 (Dorsey Road) options at U.S. Route 1 are the same as described for Alternate 2.

Beginning at 1-95 (Figure II-36), Alternate 4 would follow the same alignment as Alternates 2 and 3 to a point approximately 1,300 feet west of the crossing for the Chessie System Raliroad (Figure II-37). Here the alignment would begin curving to the northeast, crossing the raliroad approximately 1,900 feet north of existing Maryland Route 176, and 300 feet north of where Alternates 2 and 3 cross the raliroad.

After Alternate 4 bridges over the railroad and O'Conner Road, it would continue curving in a northeasterly direction and would bridge over the railroad spur which services the Parkway Industrial Center. The

alignment would then curve to the southeast and cross through the southern section of the Patapsco Valley State Park (Figure 11-38) approximately 900 feet north of Deep Run and Race Road. Alternate 4 would bridge over Race Road approximately 700 feet north of the location where Race Road takes a sharp curve to the north.

Alternate 4 would then bridge over and interchange with Maryland Route 295 approximately 1 mile north of the existing interchange of Maryland Routes 295 and 176 and approximately 2,000 feet south of Hanover Road. The proposed Maryland Route 295 interchange configuration would include three loop ramps, one in each of the quadrants except for the southwest quadrant; a directional ramp for the traffic from southbound Maryland Route 295 desiring to go eastbound on Alternate 4 and four outer ramps for right turning movements. The ramps on the west side of Maryland Route 295 would be mostly on bridge structures because these ramps would cross the Deep Run flood plain.

Alternate 4 would continue southeasterly just south of Weeping Willow Road. The alignment would cross the southernmost 200 feet of Bentwoods Road. The freeway would then pass under Ridge Road (Figure 11-39) approximately 500 feet north of Cemetery Road.

The alignment would proceed easterly and Interchange with the New Ridge Road extension. The alignment would bridge over this road extension approximately 1,300 feet north of the existing Charwood Road/New Ridge Road intersection and approximately 2,000 feet south of the relocated Stoney Run Road. The interchange would be essentially a conventional diamond with one loop in the northeast quadrant. Valley Road would be terminated just north of the location where it curves eastward.

Alternate 4 would then curve to the southeast bridging over both AMTRAK and Maryland Route 170. The freeway would cross Maryland Route 170 approximately 2,200 feet south of the relocated Stony Run Road bridge over Maryland Route 170.

The freeway would proceed in a southeasterly direction across the southwest corner of the Baltimore-Washington International Airport property. The freeway would cross and close the section of Old Telegraph Road that is on airport property (Figure 11-40).

Alternate 4 would bridge over and Interchange with Maryland Route 176 approximately 1,500 feet east of the intersection of Maryland Routes 652 and 176 (Figure II-41). The interchange would be essentially a conventional diamond with one loop provided in the northeast quadrant and no ramps in the southeast quadrant.

South of Maryland Route 176, the Alternate 4 alignment is identical to Alternate 2, Option A except that W.B.& A. Road would be closed by this alternate. Alternate 4 would continue to the southeast until it interchanges with the interstate 97/Maryland Route 100 interchange (Figure II-42). This proposed interchange would be the same as described previously.

Alternate 4 was not selected for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park, a 4(f) resource, which is prohibited under Federal Law if a "feasible and prudent" alternative exists. Also, Alternate 4 does not provide the required service to areas of Howard and Anne Arundel Counties which are planned for development. Alternate 4 also traverses the soutwestern corner of the Baltimore-Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a



tunnel through this area which would cause the total cost of Alternate 4 to be up to \$65 million greater. The Federal Aviation Administration is opposed to Alternate 4 (see letter dated October 26, 1986 in Section VI).

Alternate 4 would also require the relocation of residences from Queenstown, a unique and distinct minority community and would be a physical and psychological barrier that would separate this community into north and south sections.

6. <u>Crossover Option (Alternate 3 to Alternate 4)</u> (Figures II-43 and II-44)

This Crossover Option proposes utilizing Alternate 3 west of Maryland Route 295 and Alternate 4 east of New Ridge Road. The Crossover Option proposes the construction of Maryland Route 100 as a multi-lane freeway with full control of access and the same number of lanes and design speed as proposed for the respective segments of Alternates 3 and 4. The crossover segment from Maryland Route 295 to New Ridge Road would have four lanes and a mainline design speed of 70 miles per hour.

The Crossover Option would utilize the same full cloverleaf interchange with Maryland Route 295 (Figure II-43) as described for Alternate 3. However, beyond this interchange, the Crossover alignment would curve in a northeasterly direction and cross beneath the existing Ridge Road (Figure II-44) approximately 600 feet south of Cemetery Road. The alignment of the Crossover Option would then curve to the southeast and bridge over and interchange with the New Ridge Road extension. This interchange would be the same as described for Alternate 4. Beyond the interchange, the Crossover alignment would tie into the Alternate 4 alignment.



For this option, Wright Road would be relocated. This relocated road would curve towards the northeast, go through the existing park and ride lot and then tie into existing Maryland Route 176.

The Crossover Option was not selected because it has the same impacts on the BWI Airport and Queenstown as described for Alternate 4 and because it does not provide the required service to an area of Anne Arundei County that is planned for development.

7. Alternate 4/3B

In response to comments received at the Combined Location/Design Public Hearing, an alternate that combined Alternate 4 with Alternate 3-Option B was studied. This alternate, designated Alternate 4/3B, would follow the same alignment as Alternate 4 from 1-95 to the Dorsey Road Interchange (see Figure 11-36 through 11-41). South of Dorsey Road, the alignment would curve easterly (see Figure 11-45) and follow the Alternate 3-Option B alignment from W.B.&A. Road to 1-97 (see Figures 11-21 and 11-22).

Alternate 4/3B was not selected because it would have the same impacts on the Patapsco Valley State Park and the BWI Airport as described for Alternate 4 and because it does not provide the required service to areas of Howard and Anne Arundei Counties that are planned for development.

8. Project Costs

Total construction and right-of-way costs for each of the alternates are summarized in Table No. ii-1. The right-of-way costs include costs of land, improvements, relocation assistance costs, contingencies.



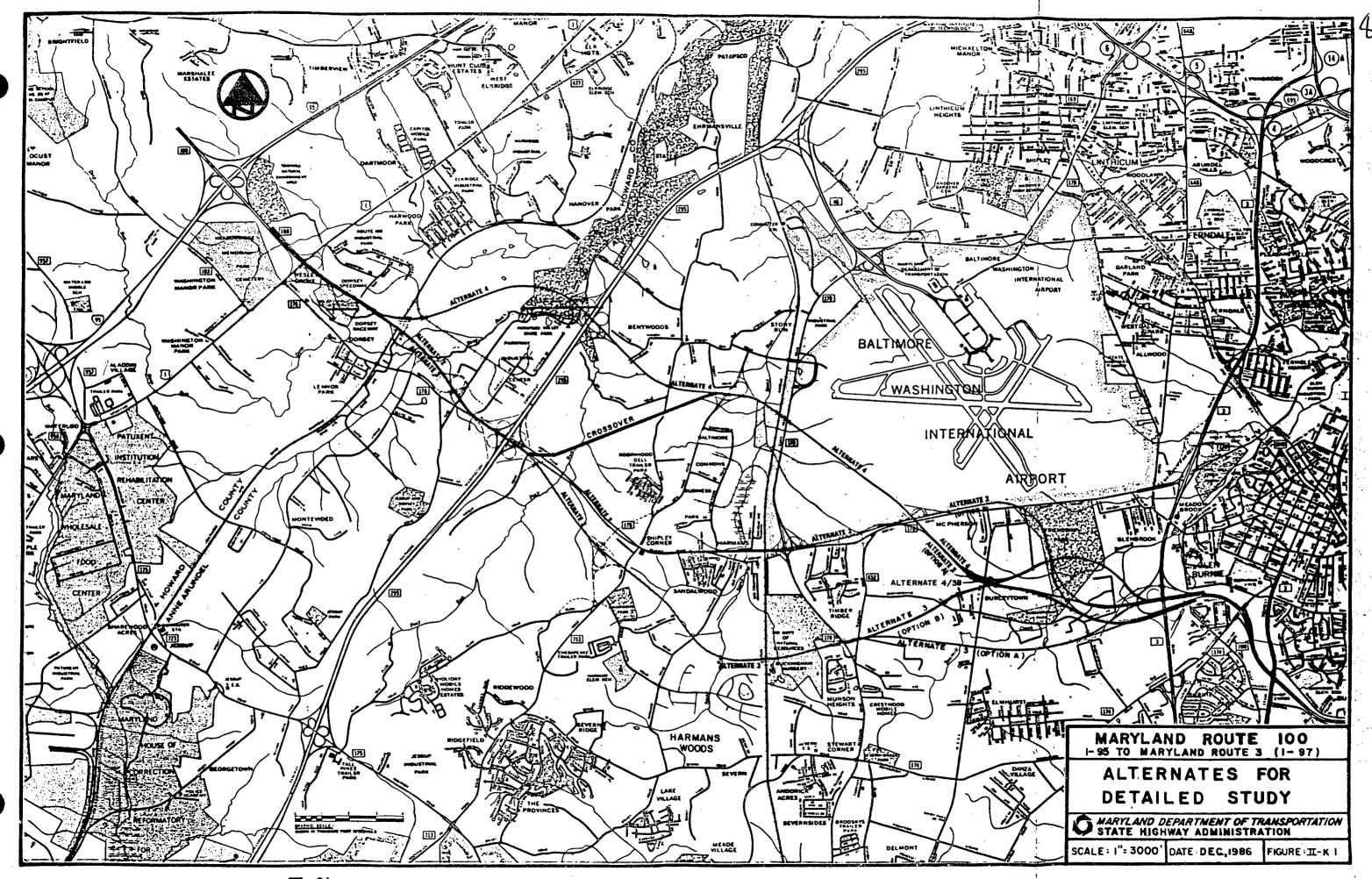
administrative and overhead expenses. The construction costs include clearing the right-of-way, earthwork and grading, drainage and related structures, roadway base and surface, roadside development, major and miscellaneous structures, contingencies, construction engineering and administrative and overhead expenses.

TABLE NO. II-1 PROJECT COST ESTIMATES (millions of dollars)

	Right-of Way and Relocation	Construction
No-Build Alternate Alternate No. 2 - Option A Alternate No. 2 - Option B Alternate No. 3 Maryland Route 295 interchange Option Maryland Route 713 Interchange Option Maryland Route 170 Interchange Option Alternate 3 - Option B Alternate 3 B (Modified)	on +0.2*	0 101.6 103.8 119.1 +0.6* -0.7* +2.7* 130.1
Selected Alternate Alternate No. 4 Alternate No. 3 - Crossover - Alternate No. 4 Alternate 4/3B	23.8 19.0 19.0 19.0	133.2 105.8** 119.1 109.0**

^{*} Note that these costs represent the difference between the interchange shown and its option. A positive cost indicates that the interchange option is more expensive than the one shown.

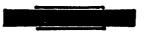
^{**} Note that these costs will increase by \$45 to \$65 million depending upon the requirements of building tunnels through the Baltimore—Washington International Airport.



II -21

POSSIBLE ROADWAY CONNECTION

LEGEND



PROPOSED STRUCTURE

PROPOSED ROADWAY

PROPOSED RIGHT OF WAY (APPROX.)

EXISTING RIGHT OF WAY OR PROPERTY LINE

CUL-DE-SAC

170

STATE ROUTE



U. S. HIGHWAY



INTERSTATE HIGHWAY



INDICATES PROPERTY TO BE ACQUIRED



RESIDENCE



BUSINESS



CHURCH



OTHER

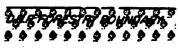


AIR RECEPTOR/NOISE SENSITIVE AREA

SPECIAL PROPERTIES



PARK BOUNDARY



DEPARTMENT OF NATURAL RESOURCES FORESTRY BOUNDARY



HISTORIC BOUNDARY

AIRPORT BOUNDARY

B.W.I. AIRPORT BOUNDARY



100-YEAR FLOOD PLAIN BOUNDARY



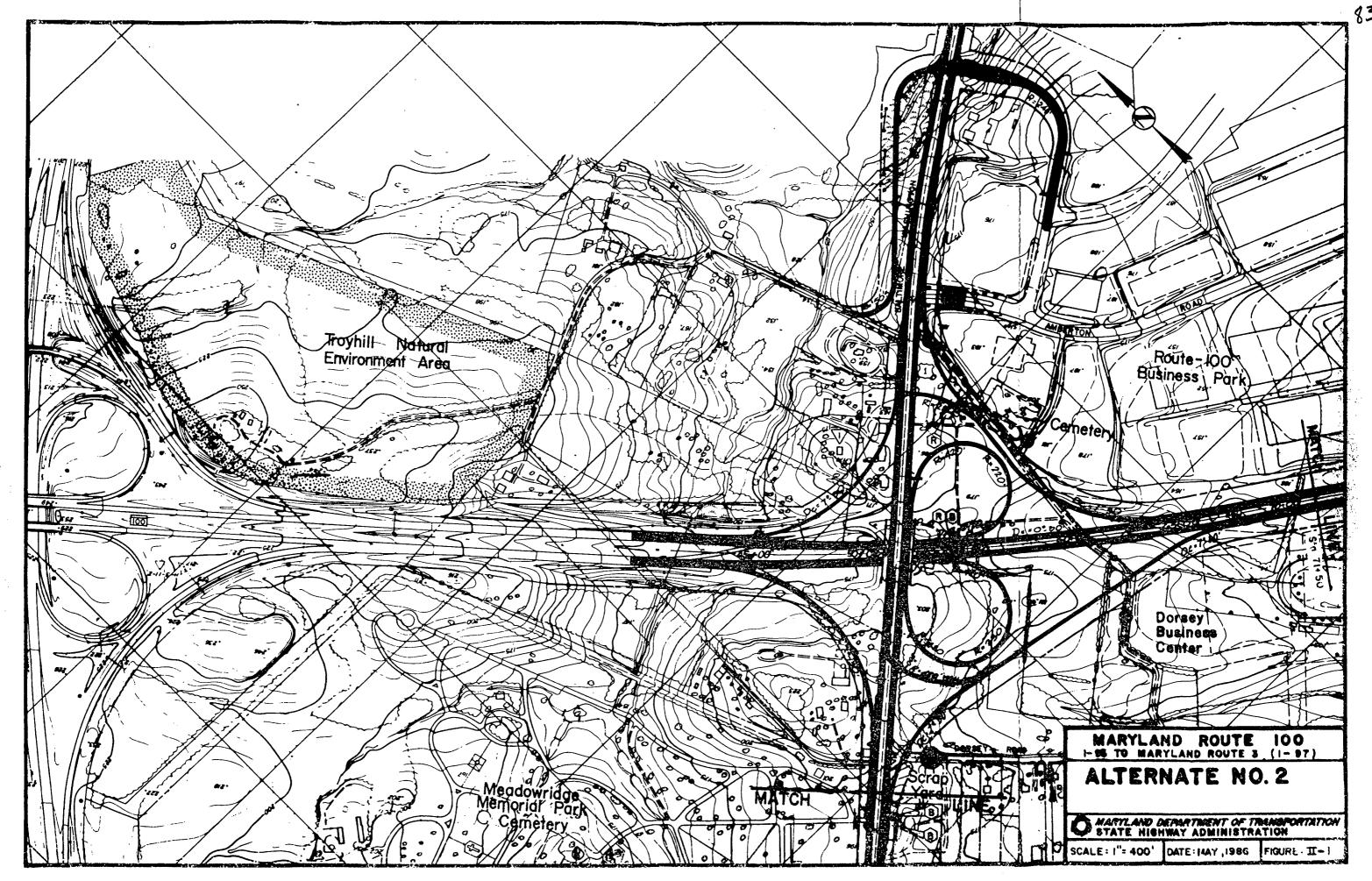
WETLANDS BOUNDARY MARYLAND ROUTE 100

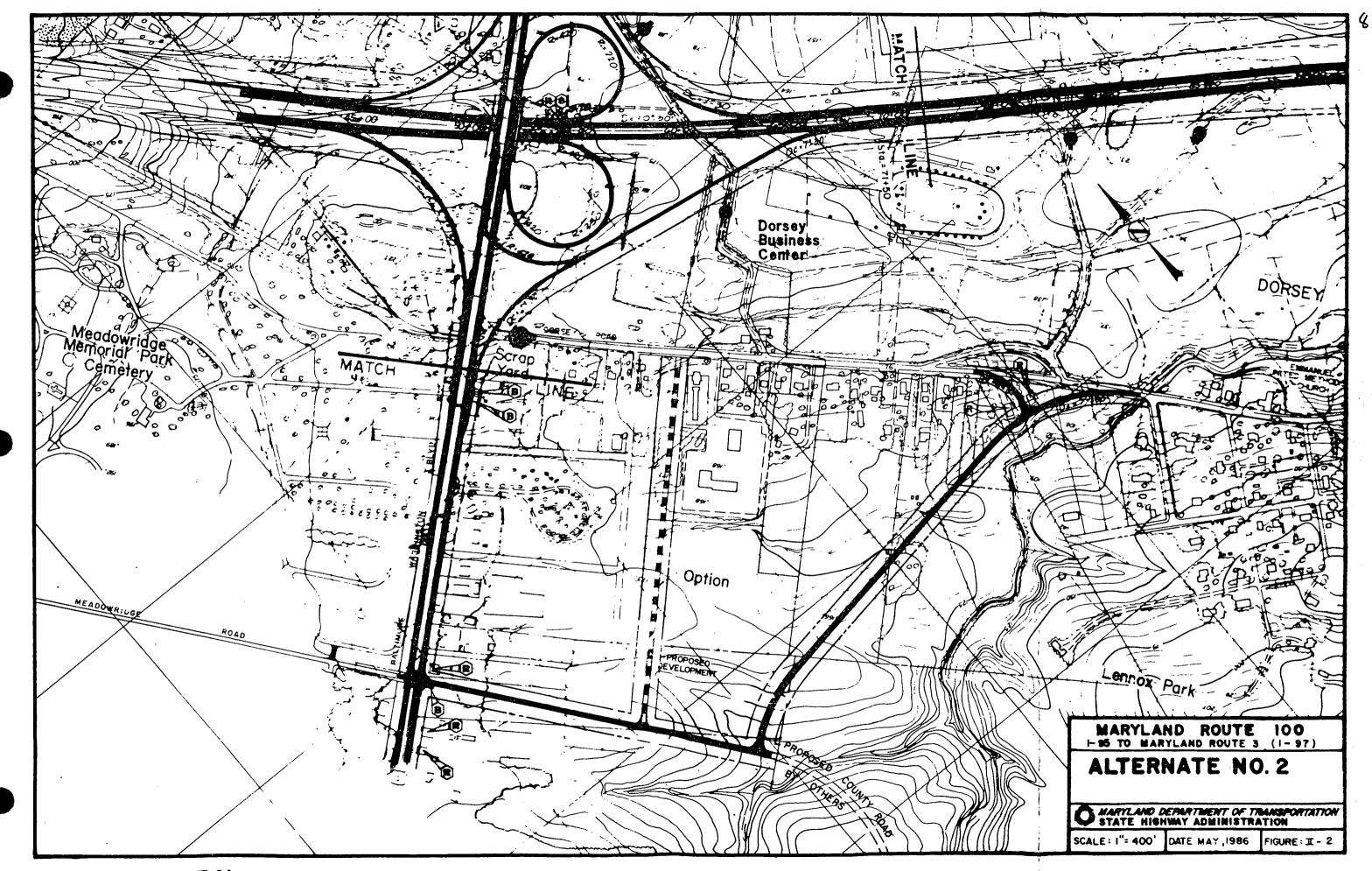
PLAN LEGEND

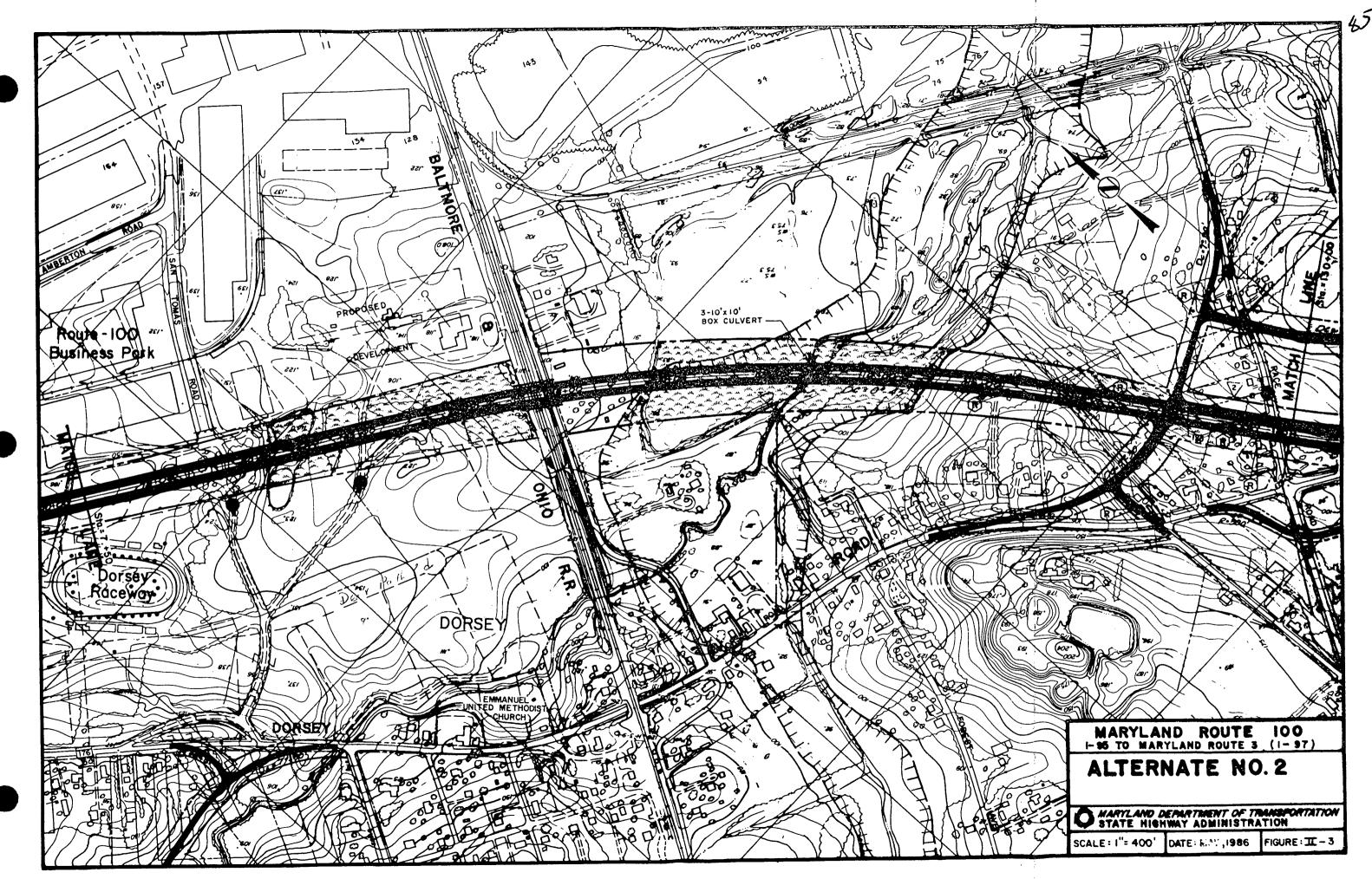
MATYLAND DEPARTMENT OF TRANSFORTATION STATE HIGHWAY ADMINISTRATION

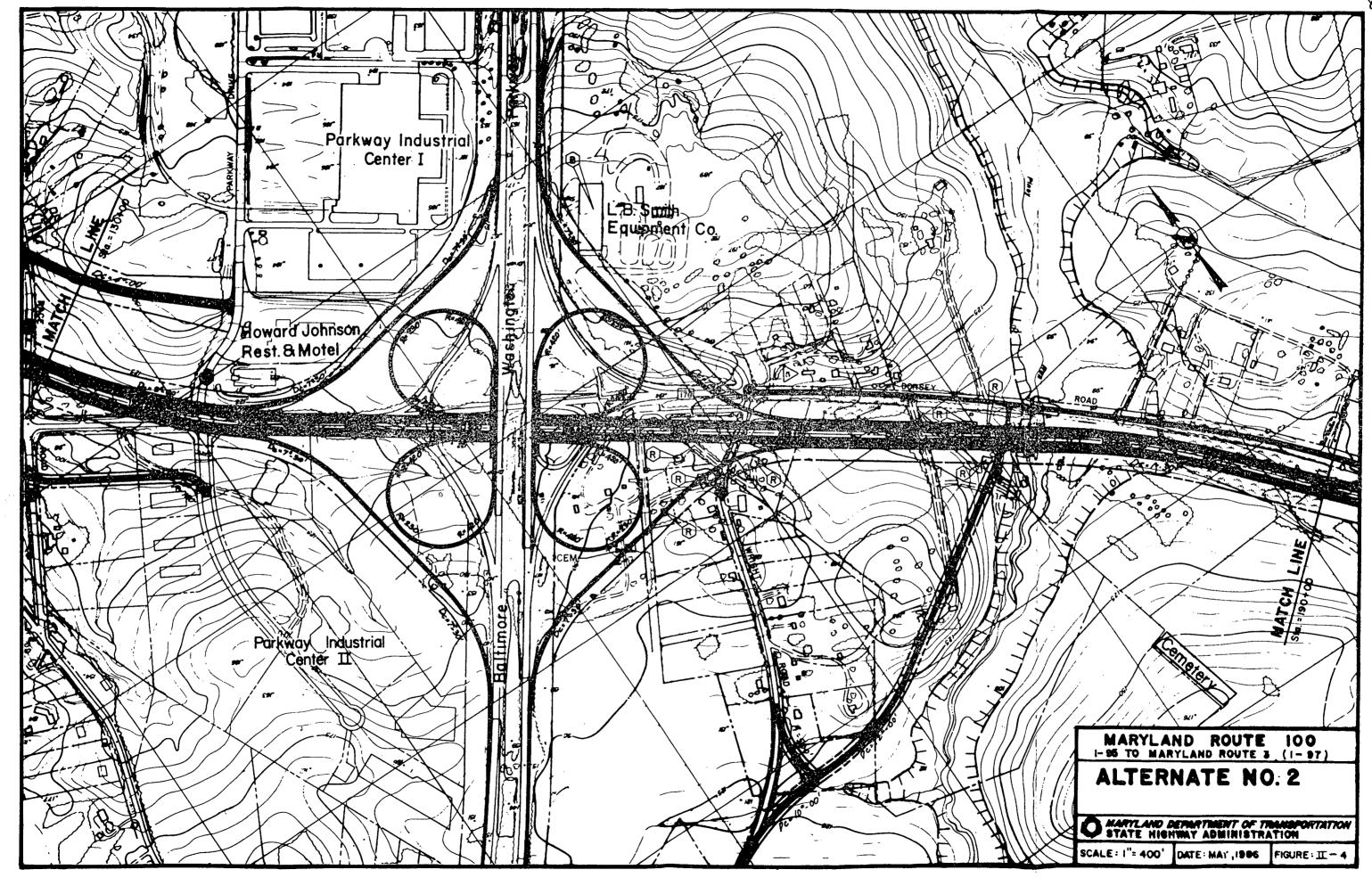
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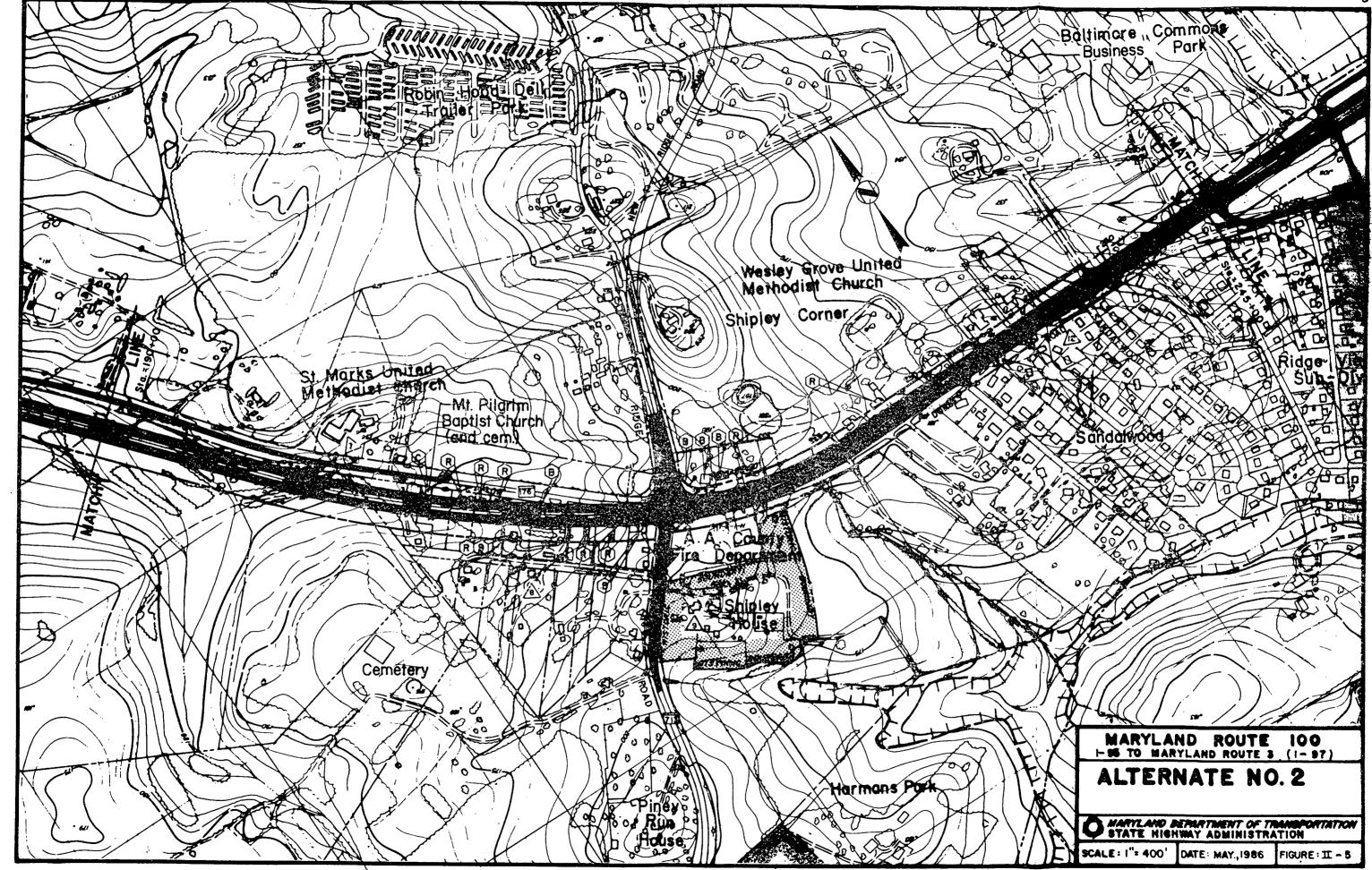
FIGURE: II-L

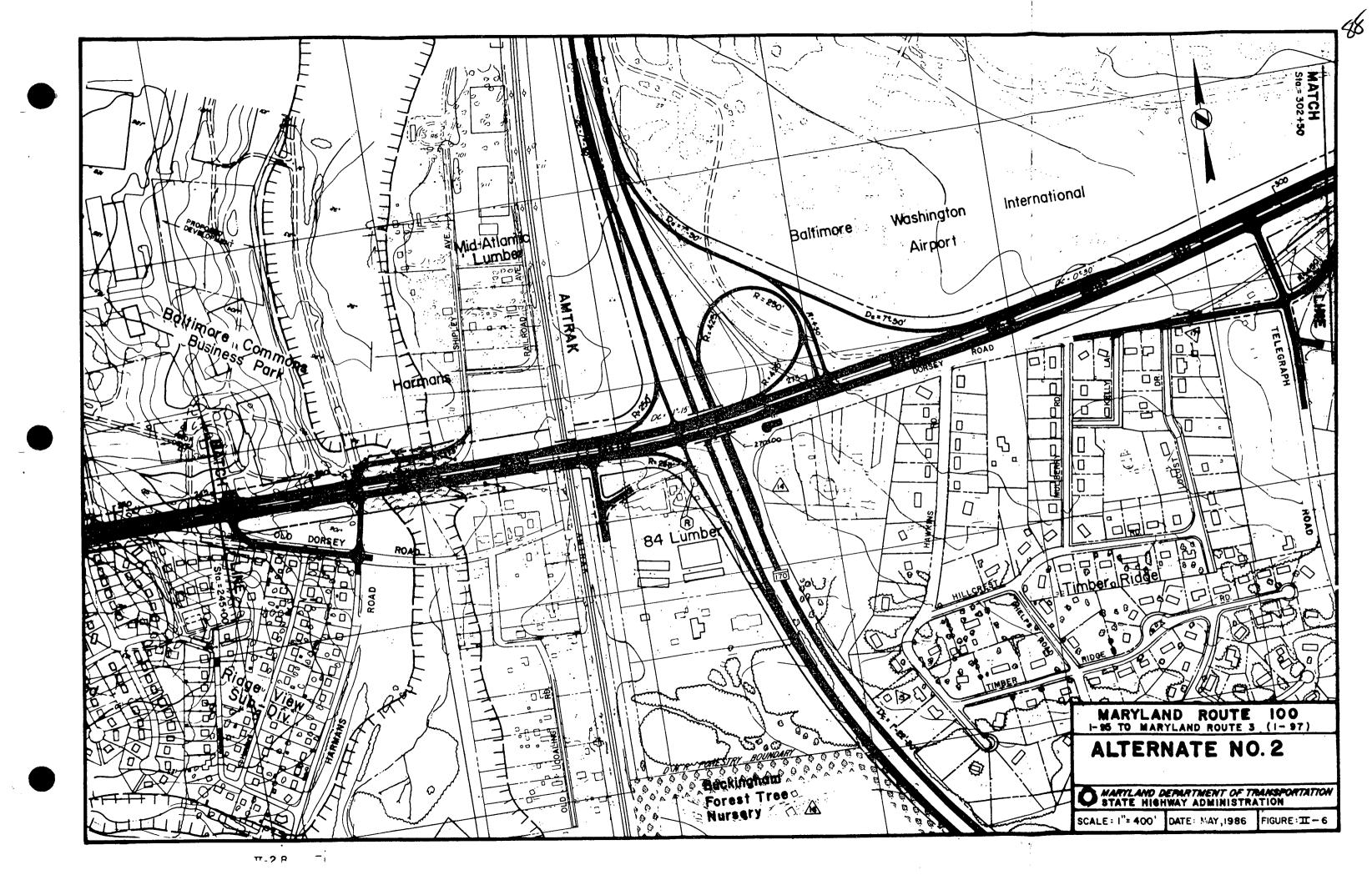


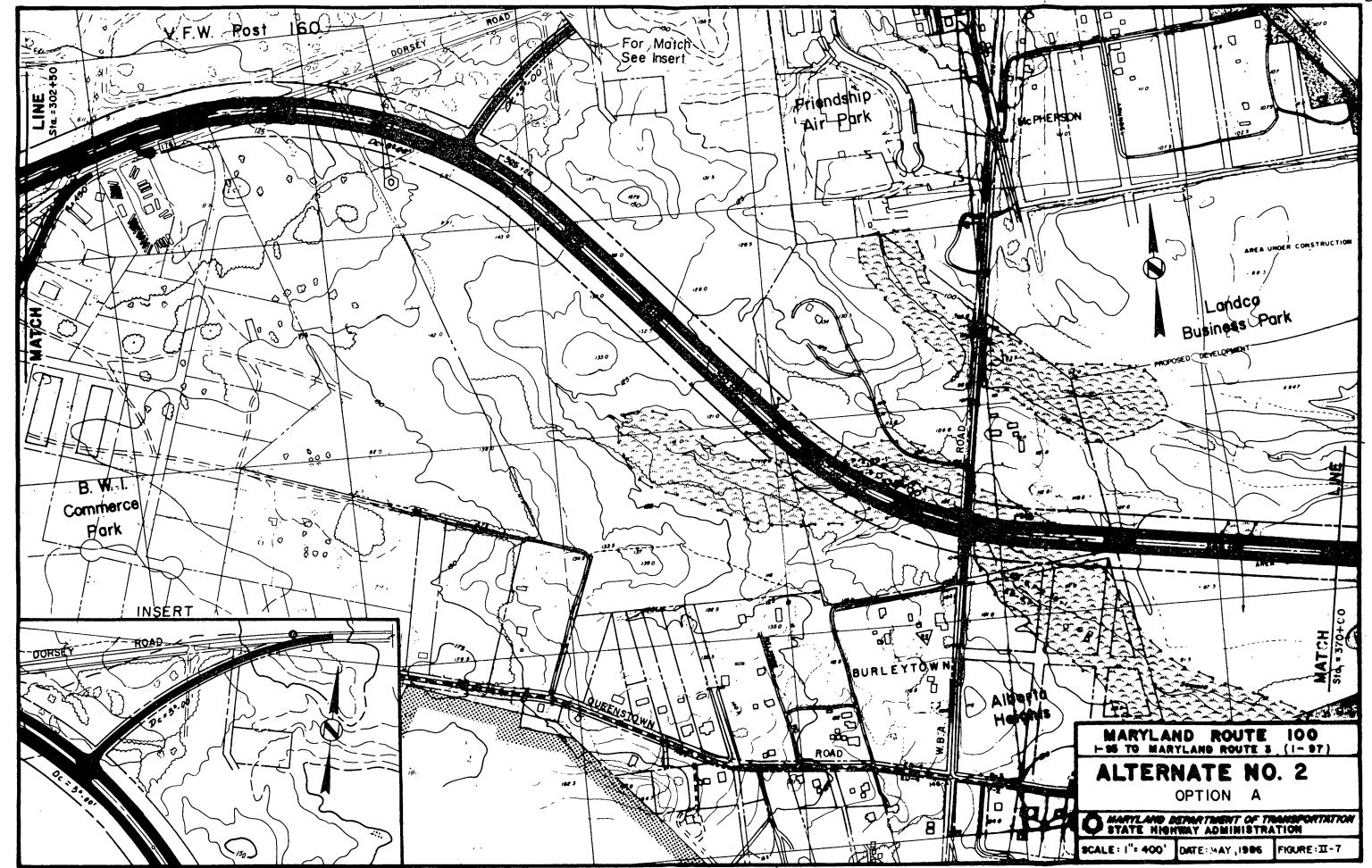


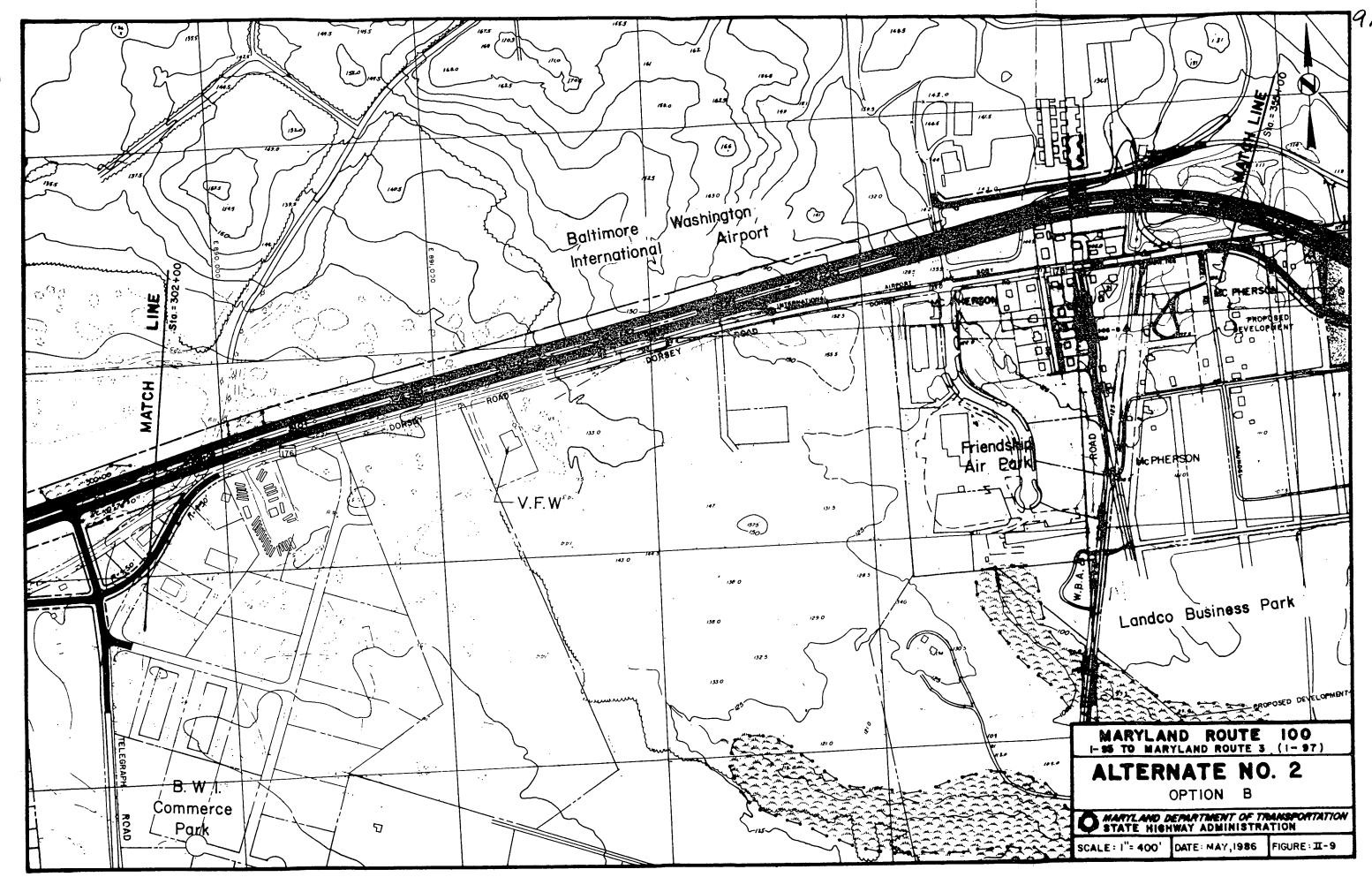


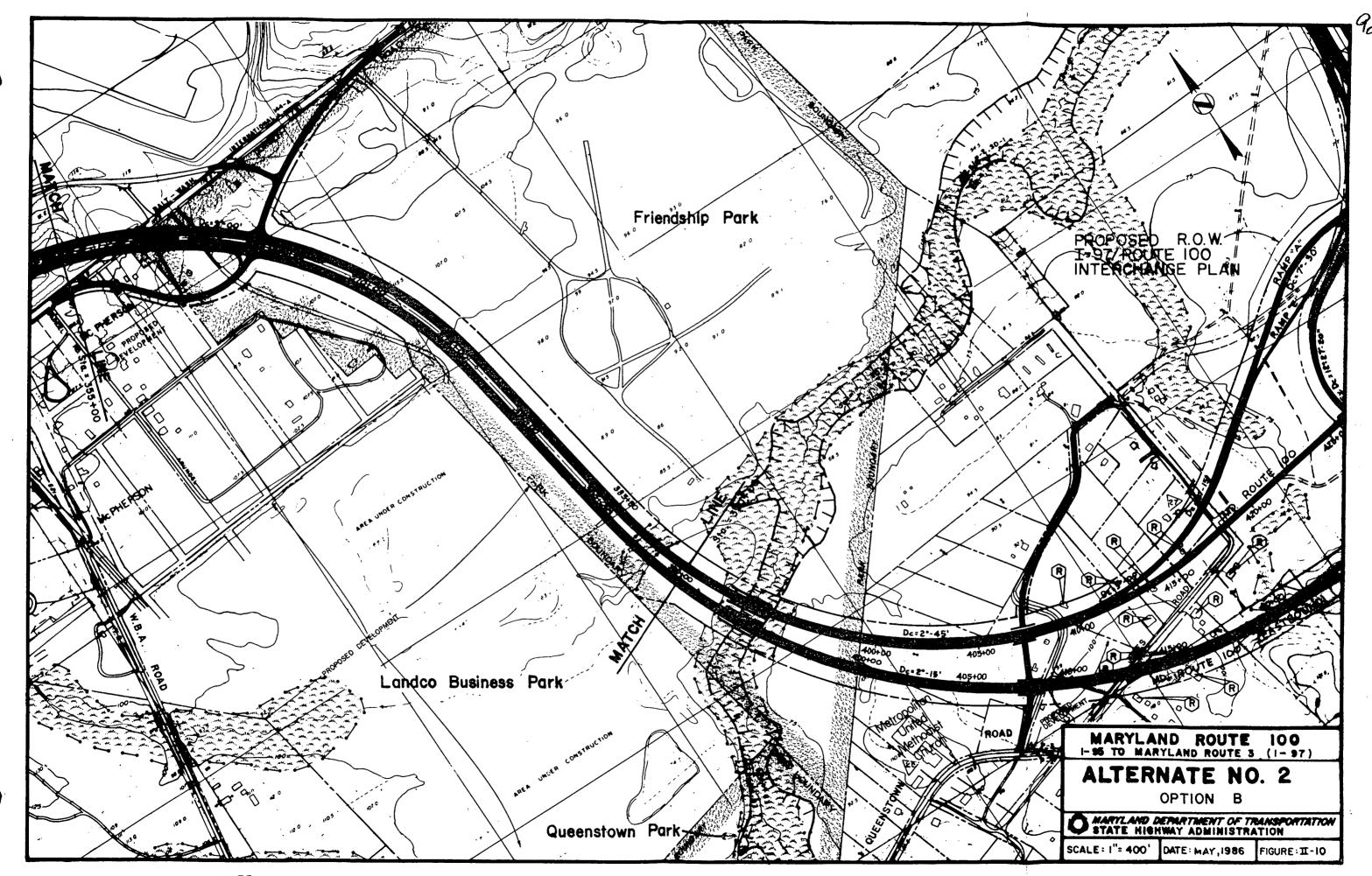




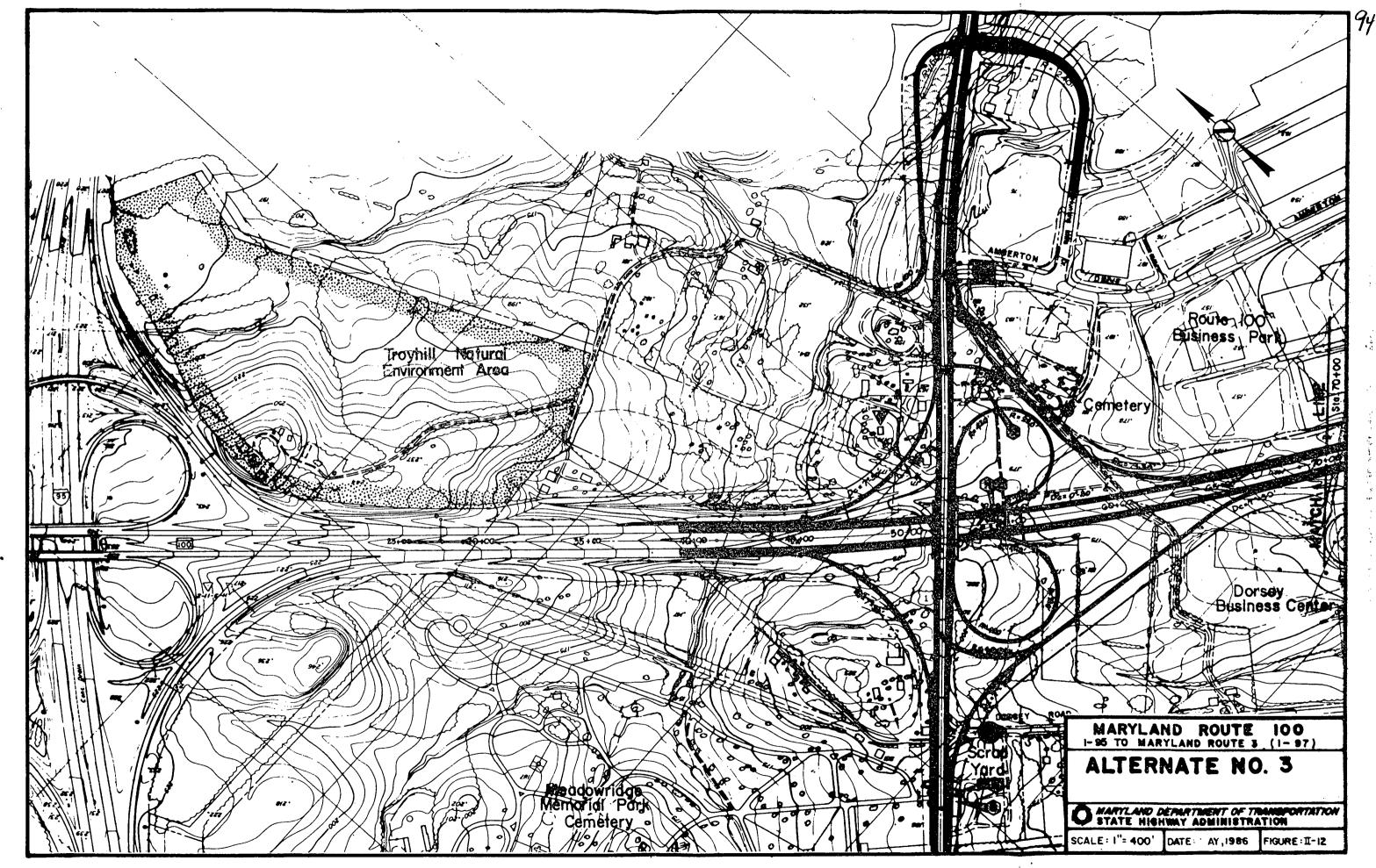


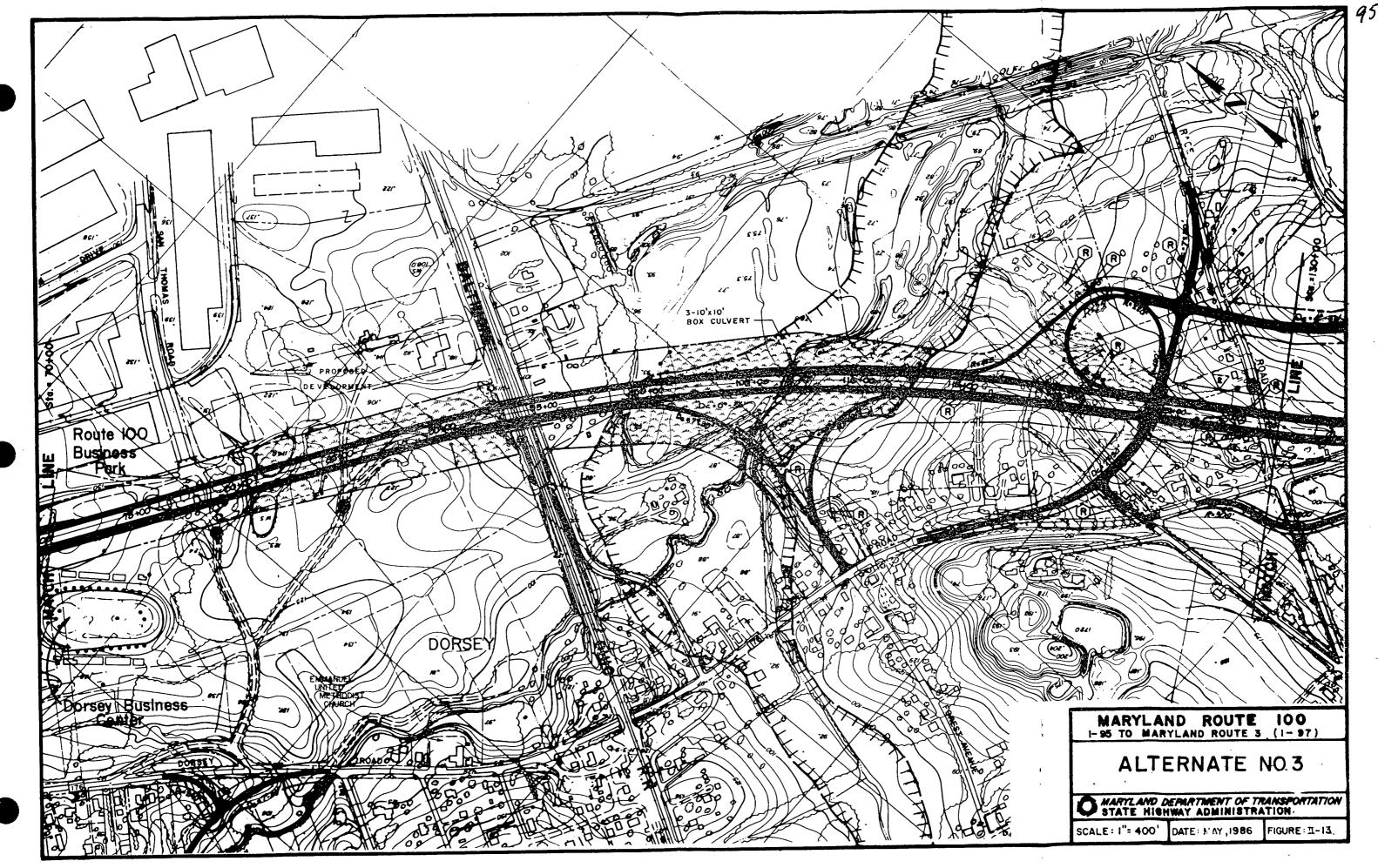


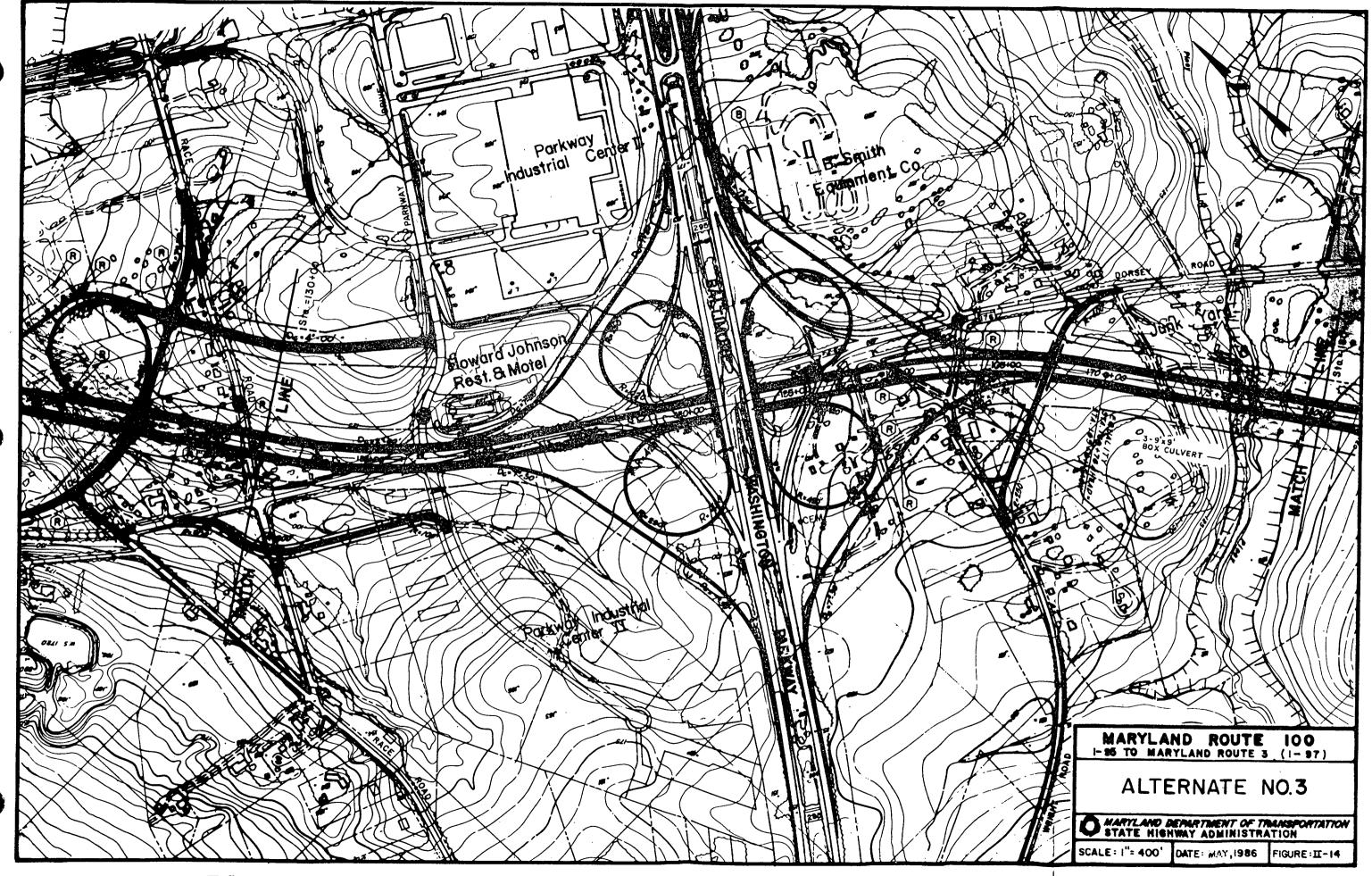


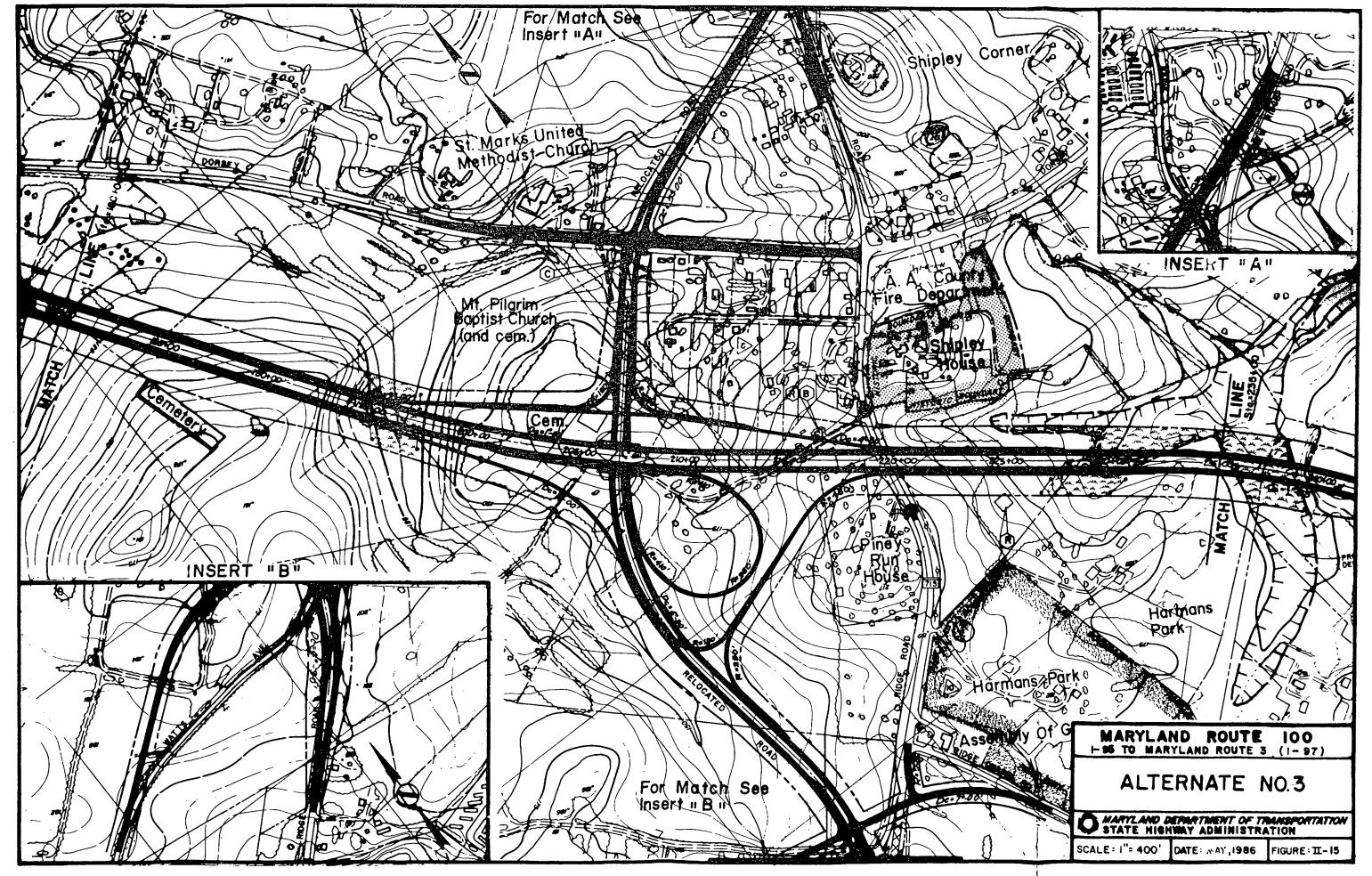


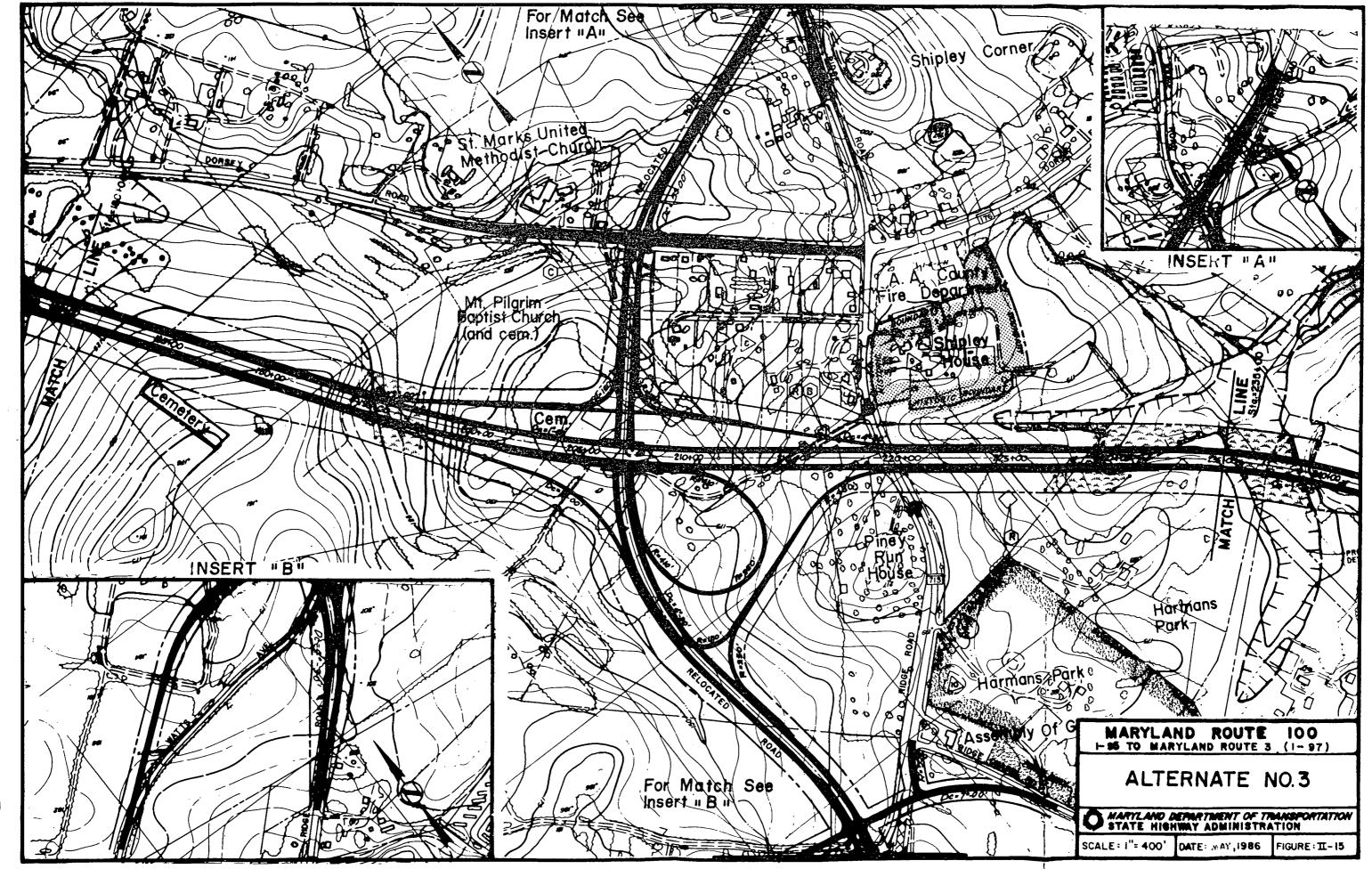


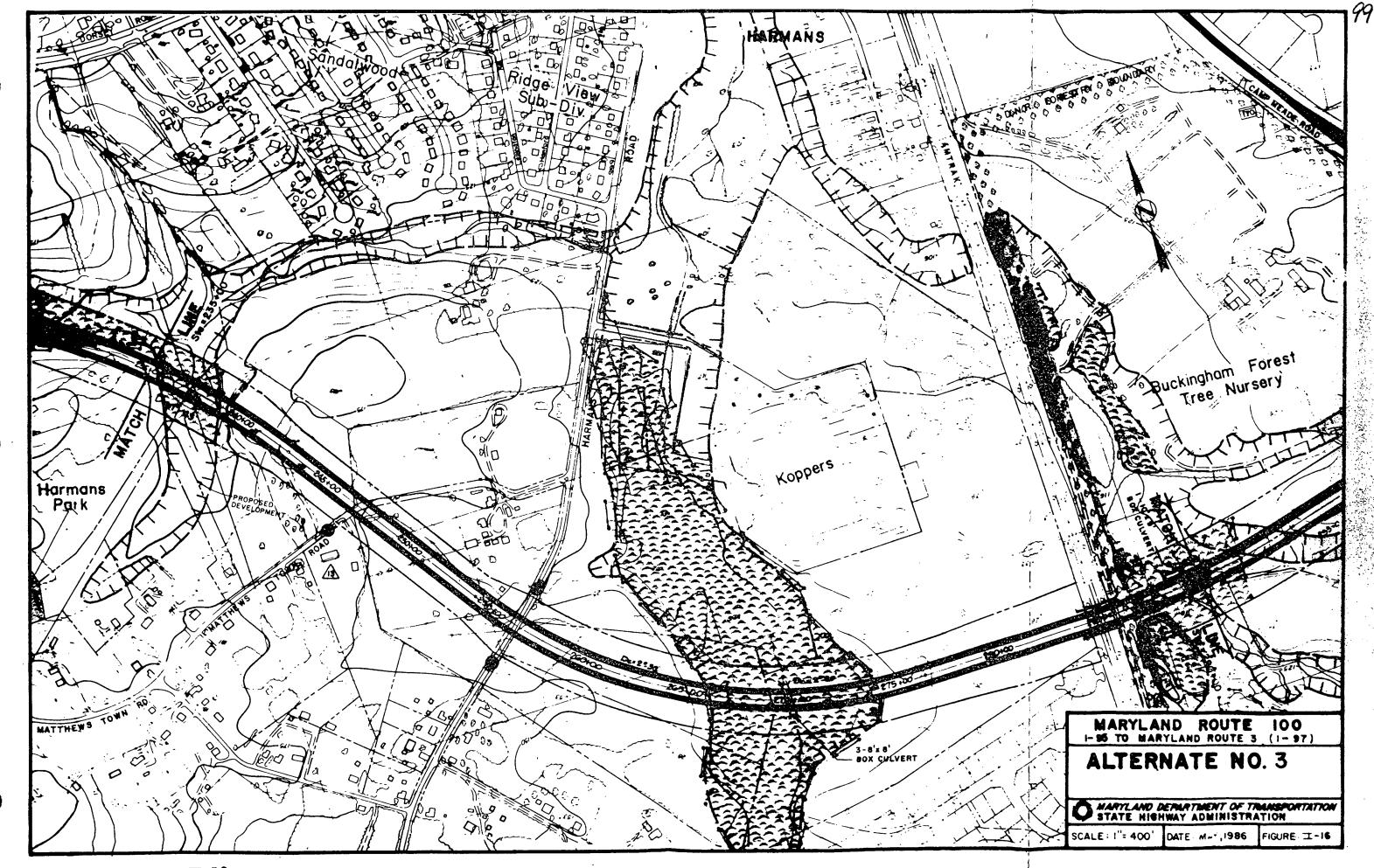


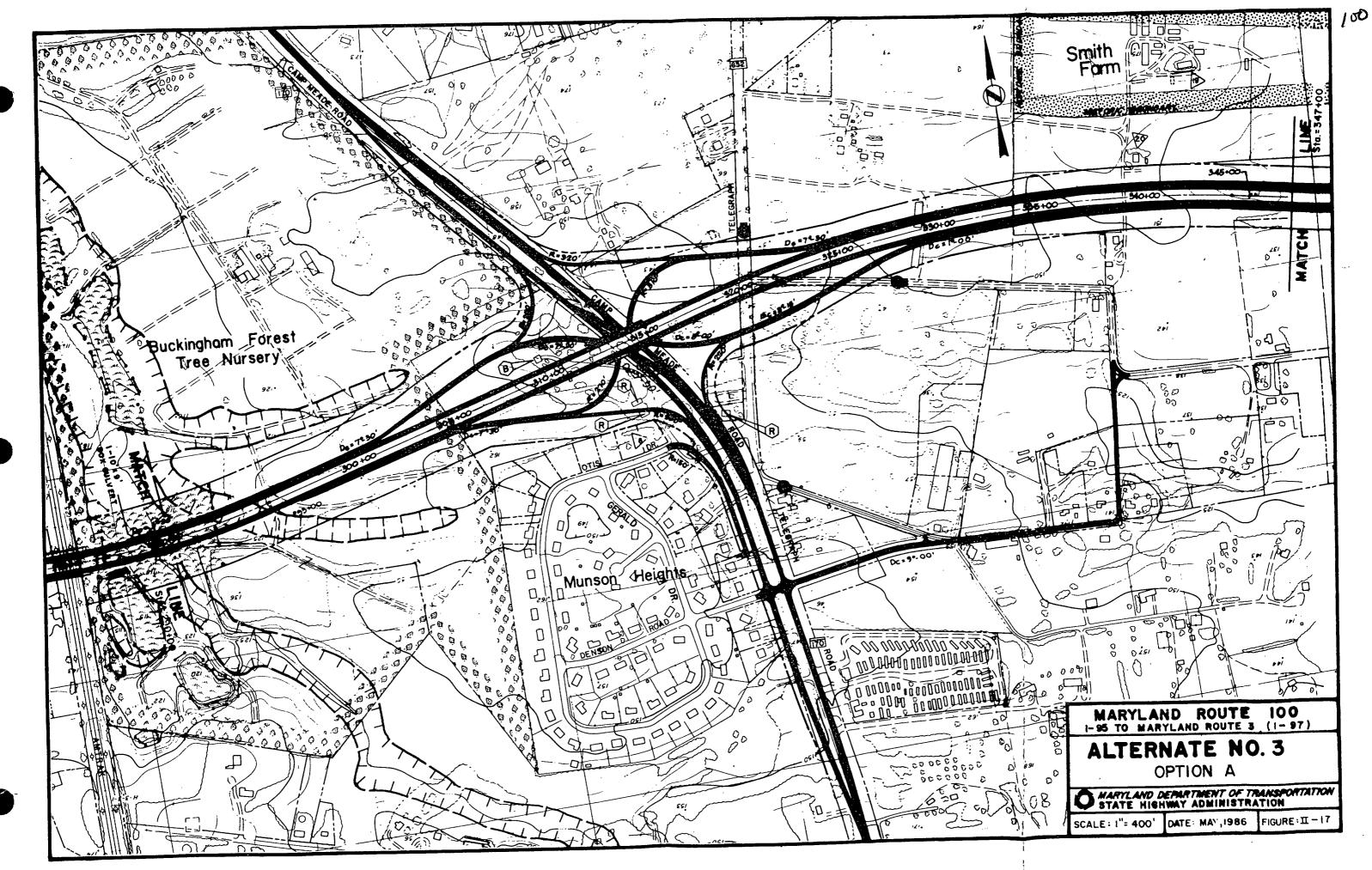


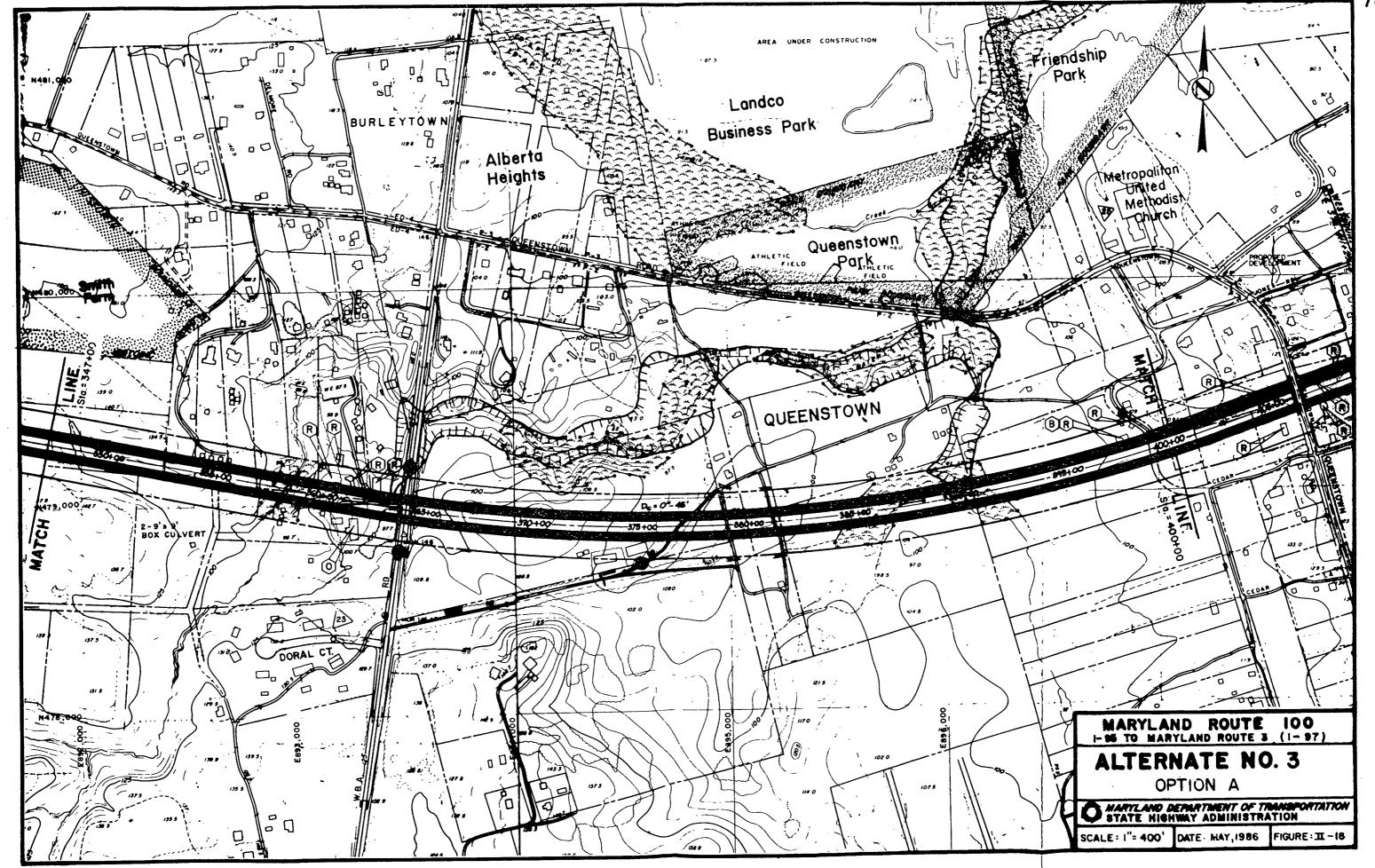


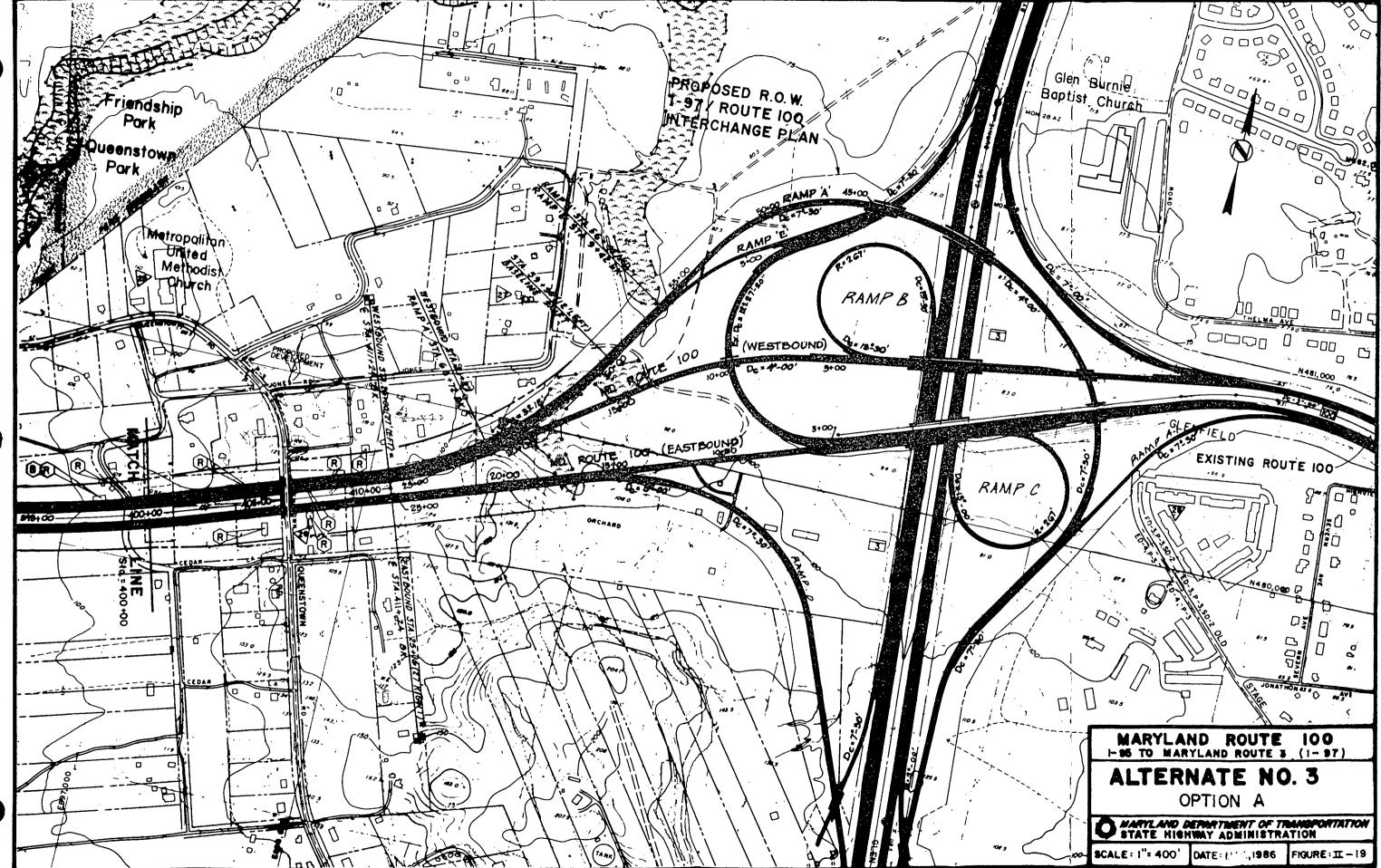


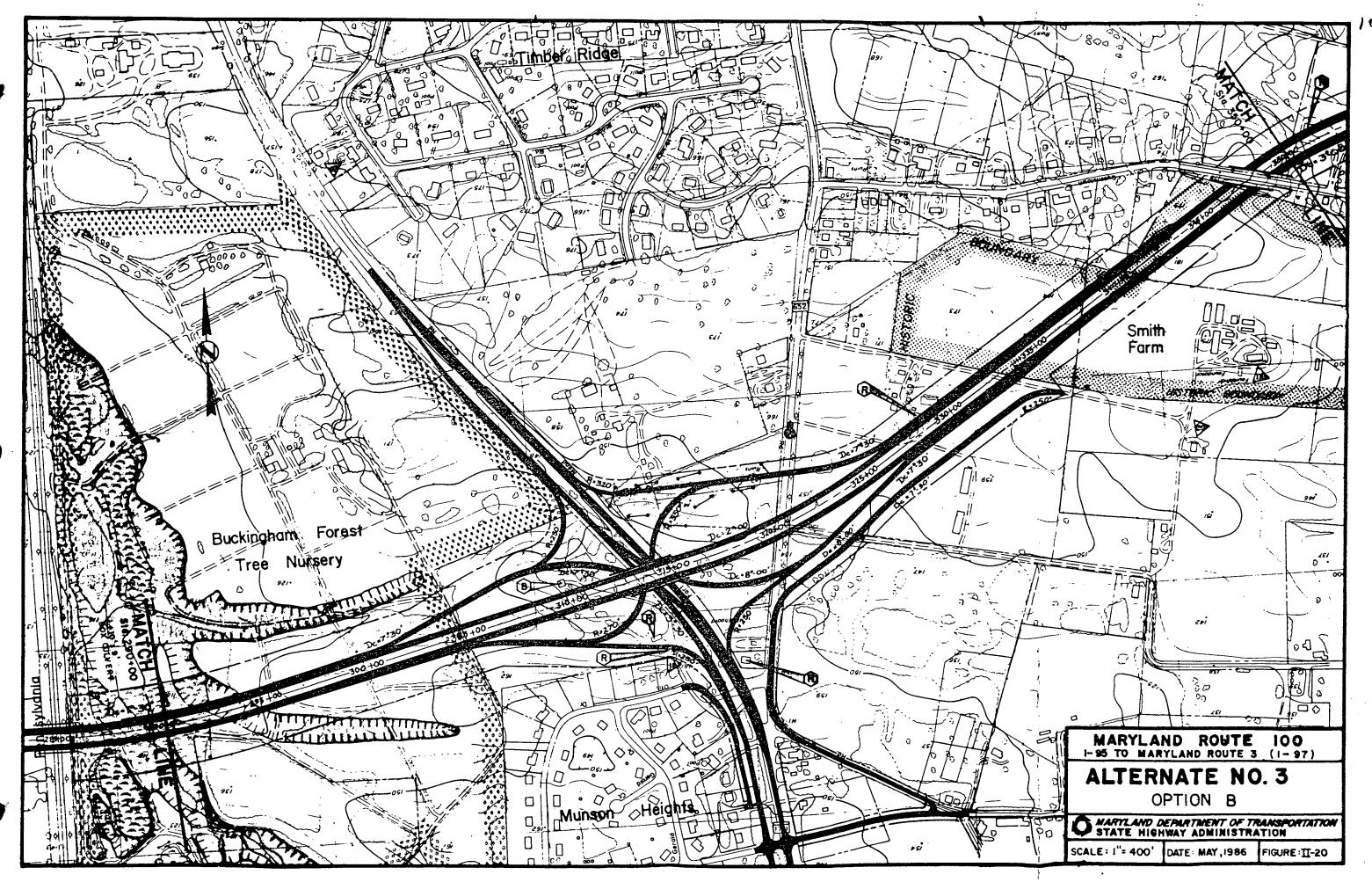


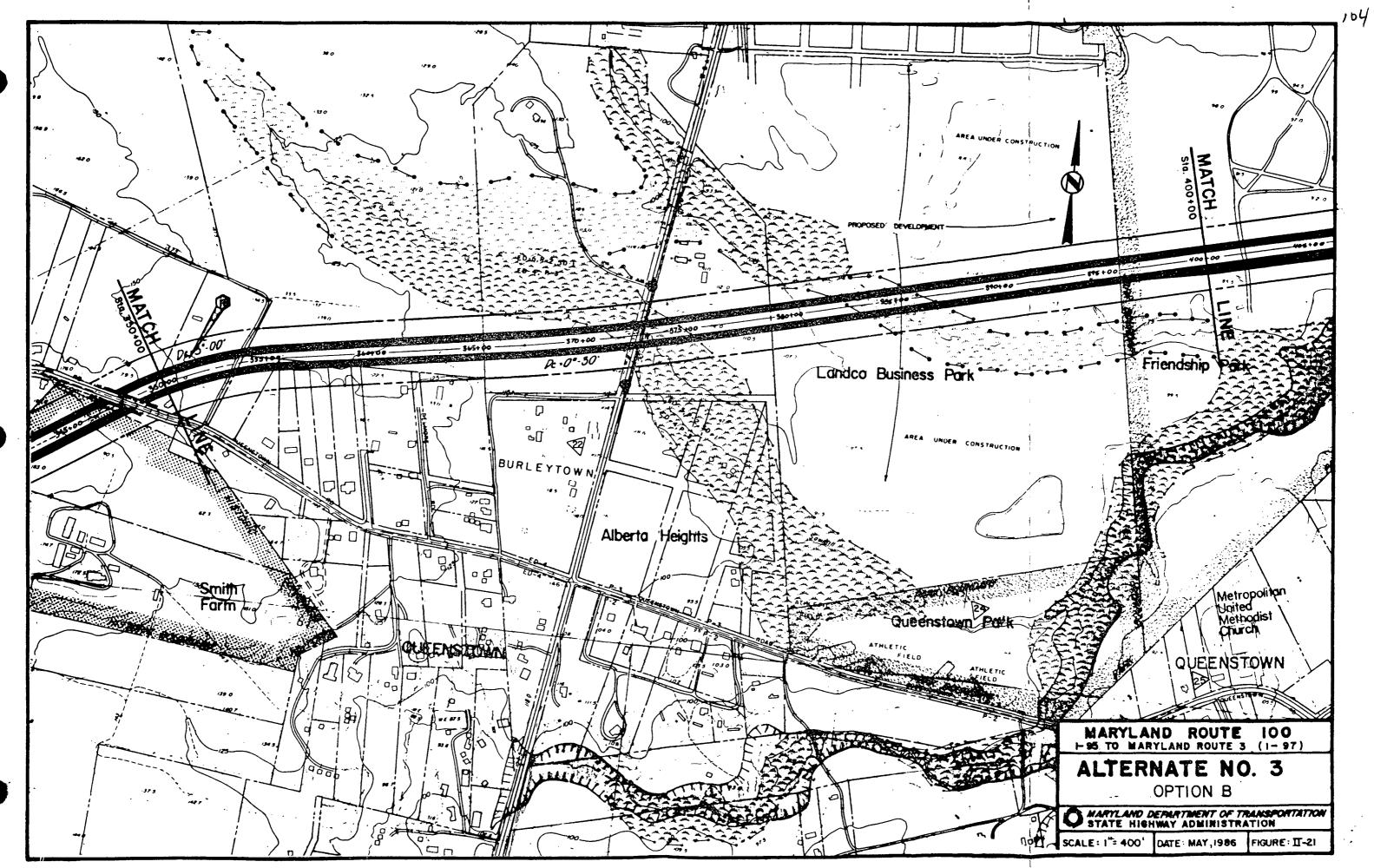


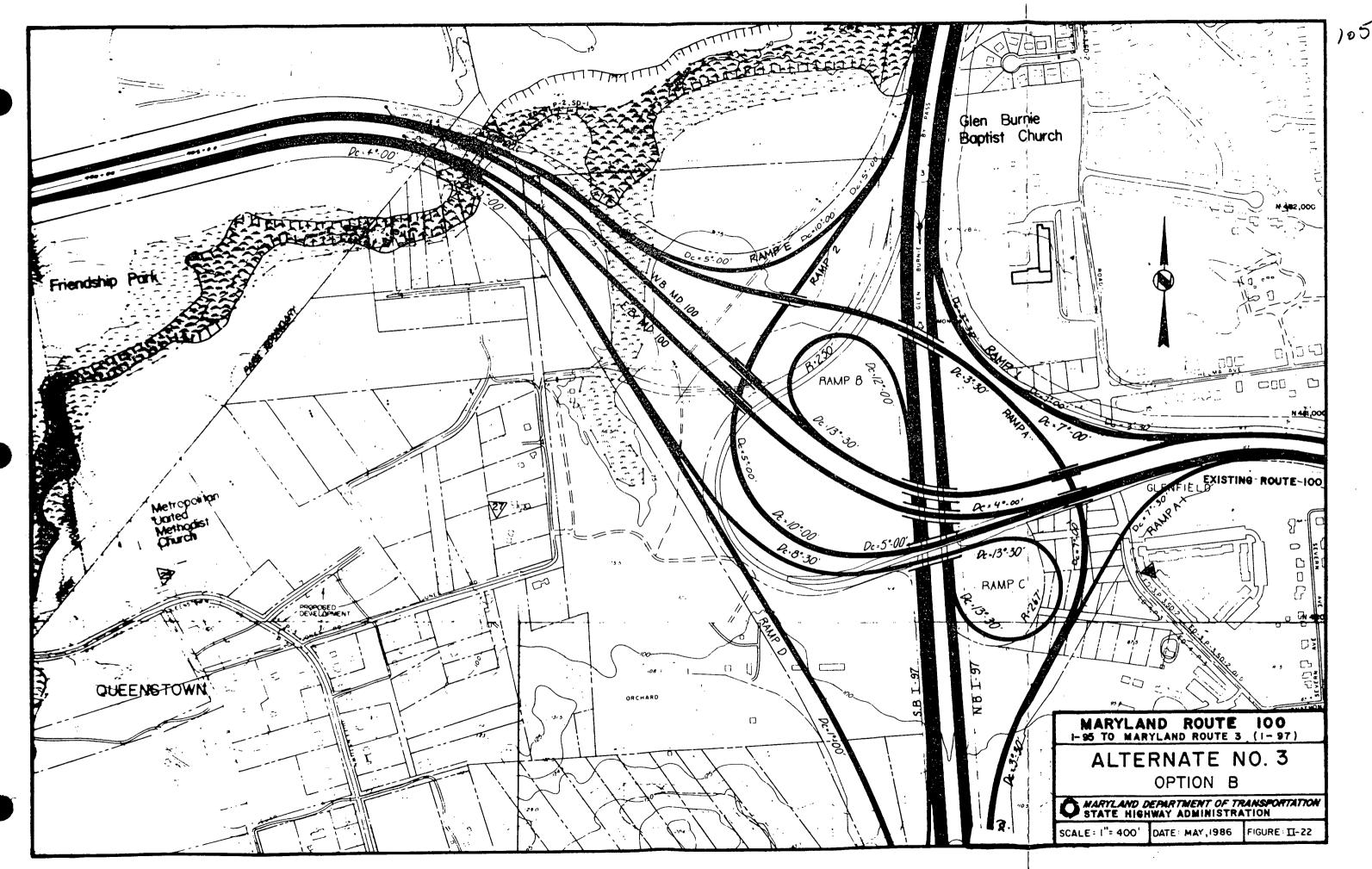


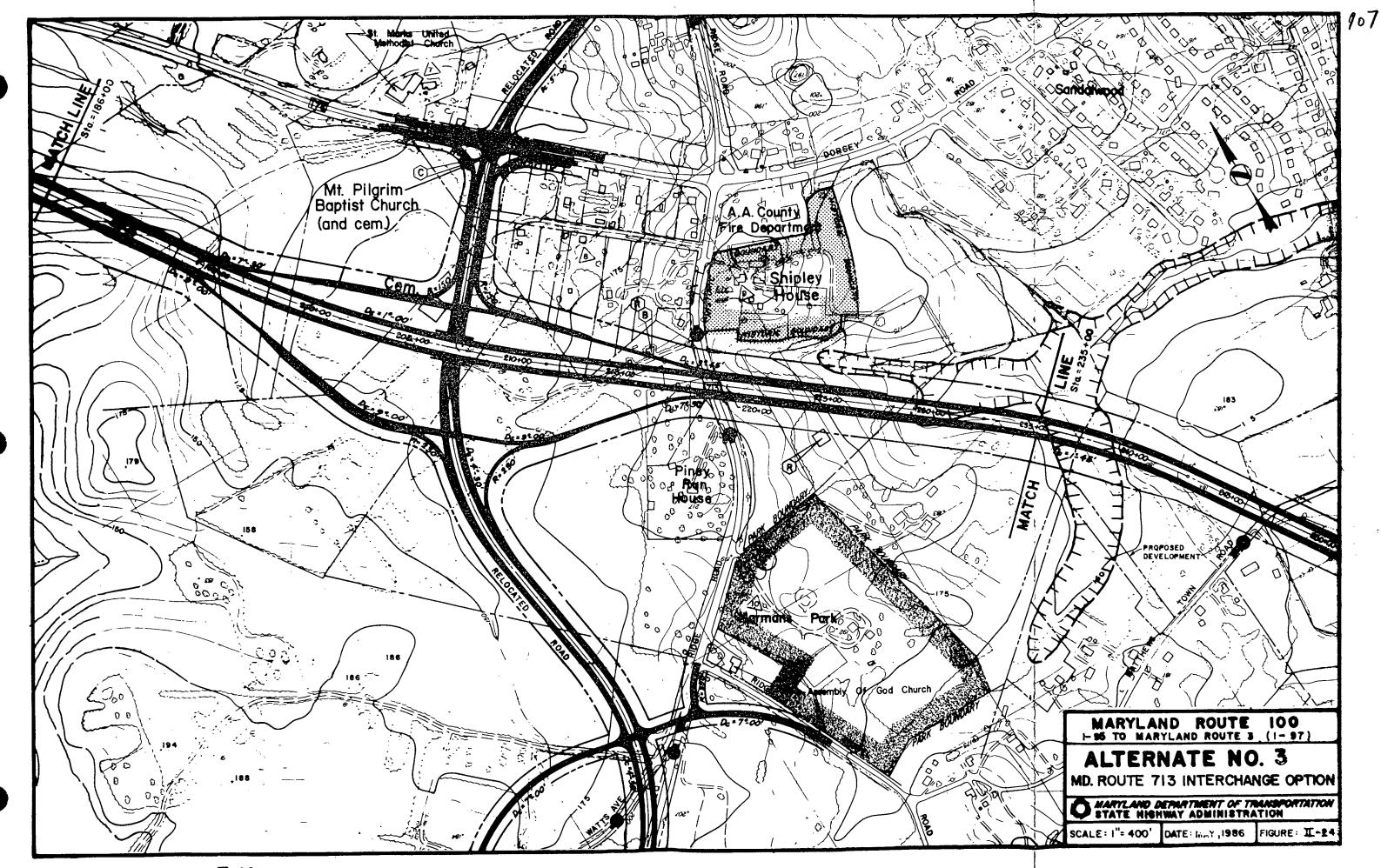


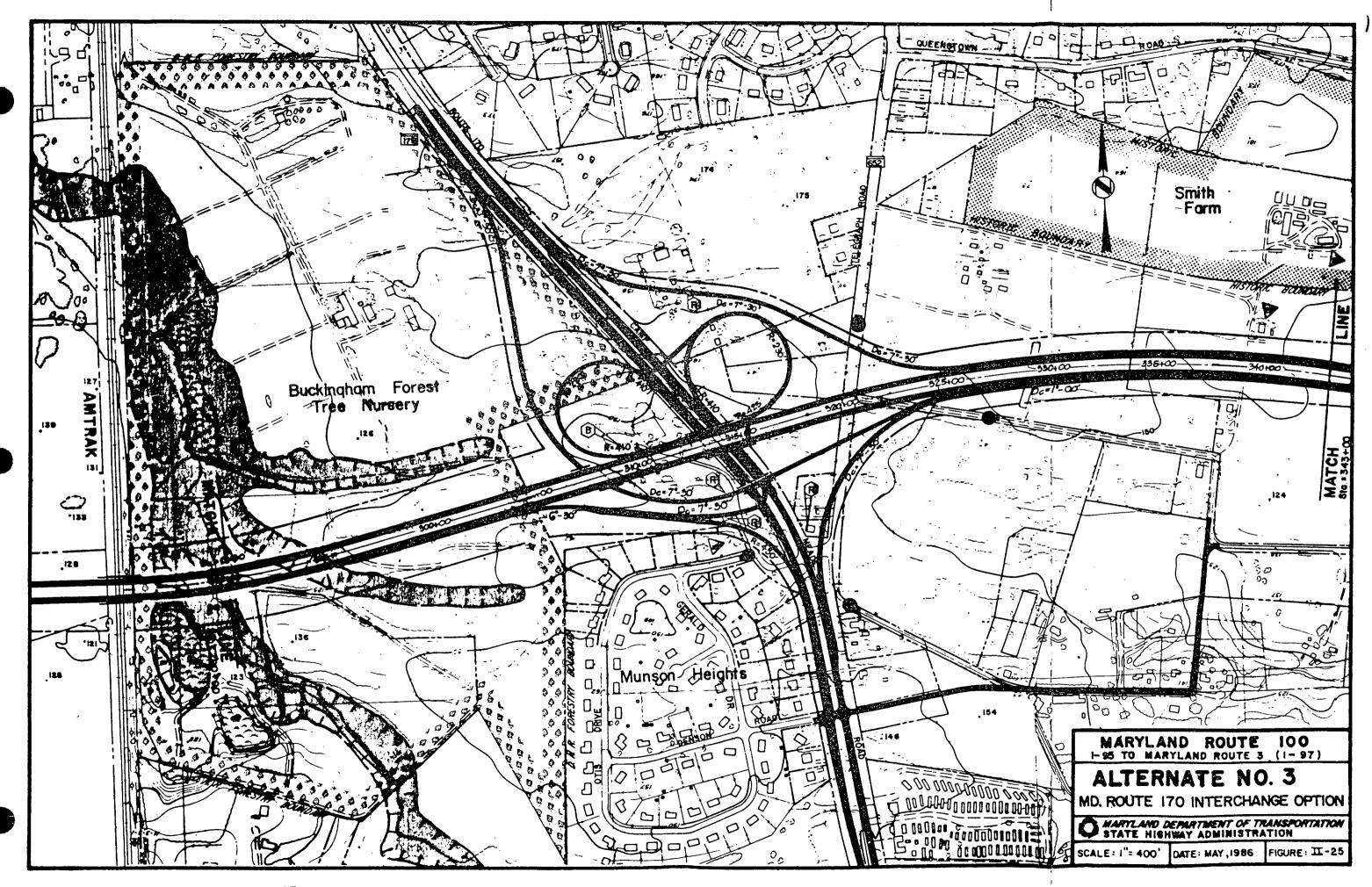


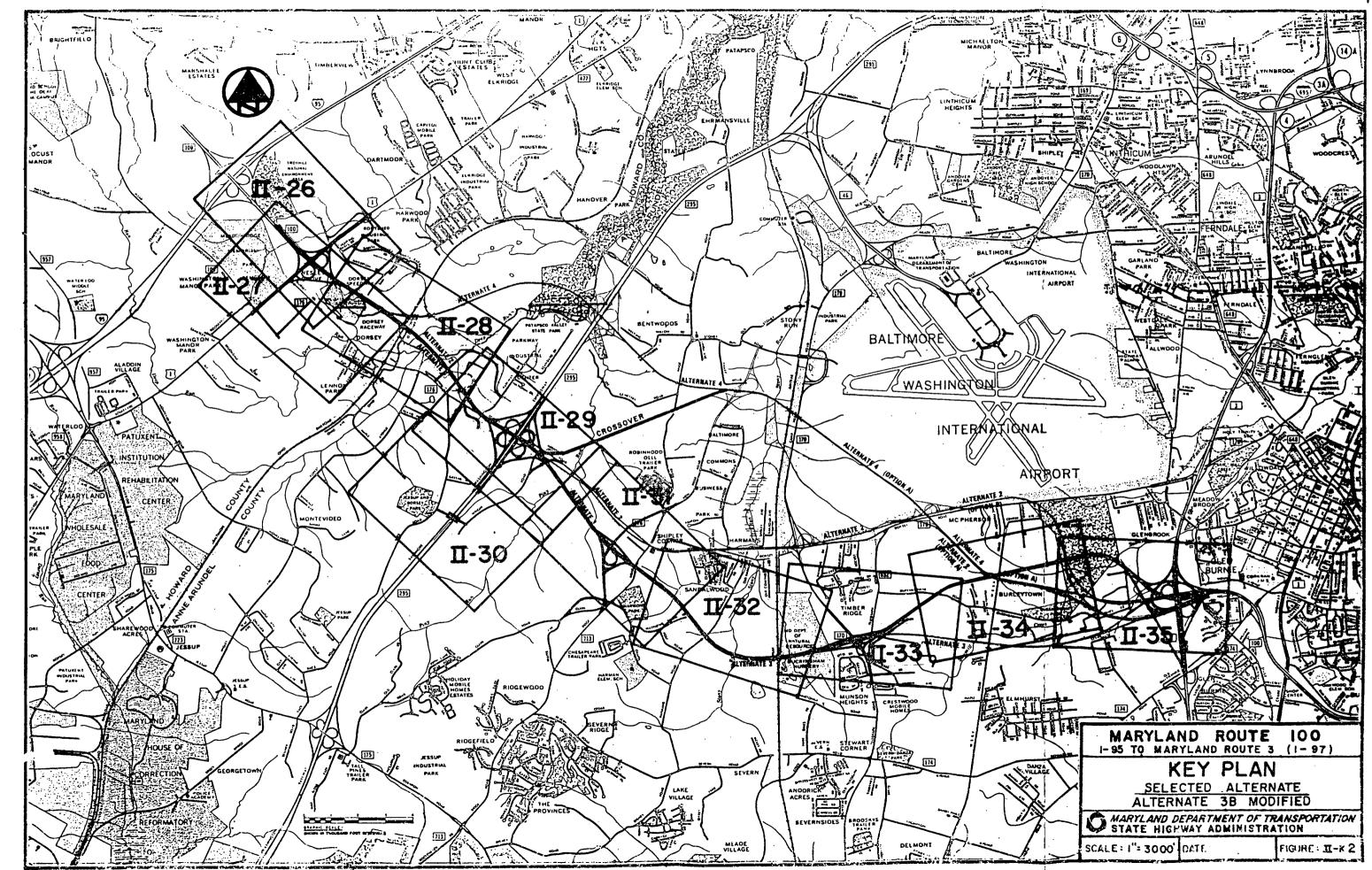




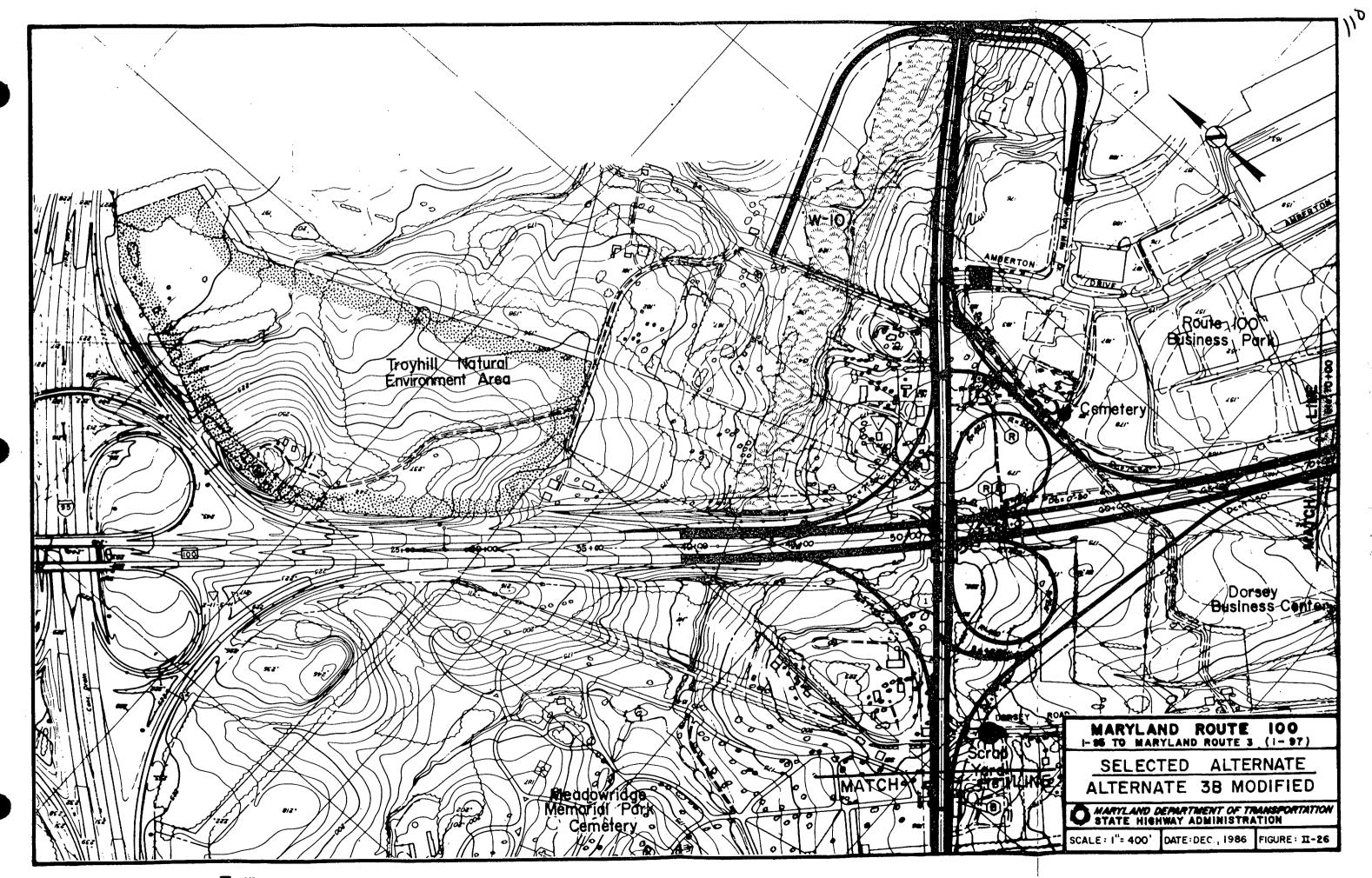




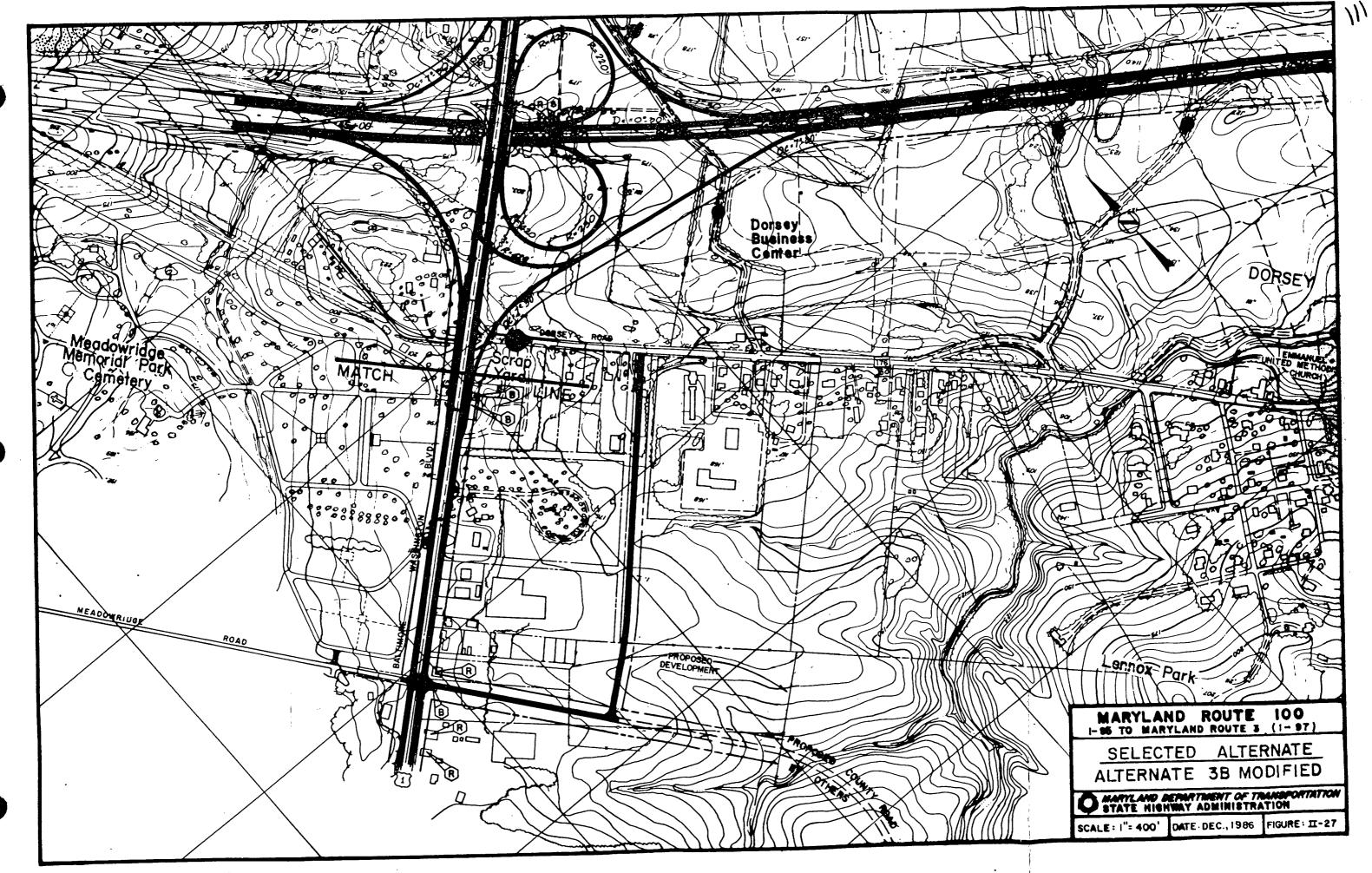


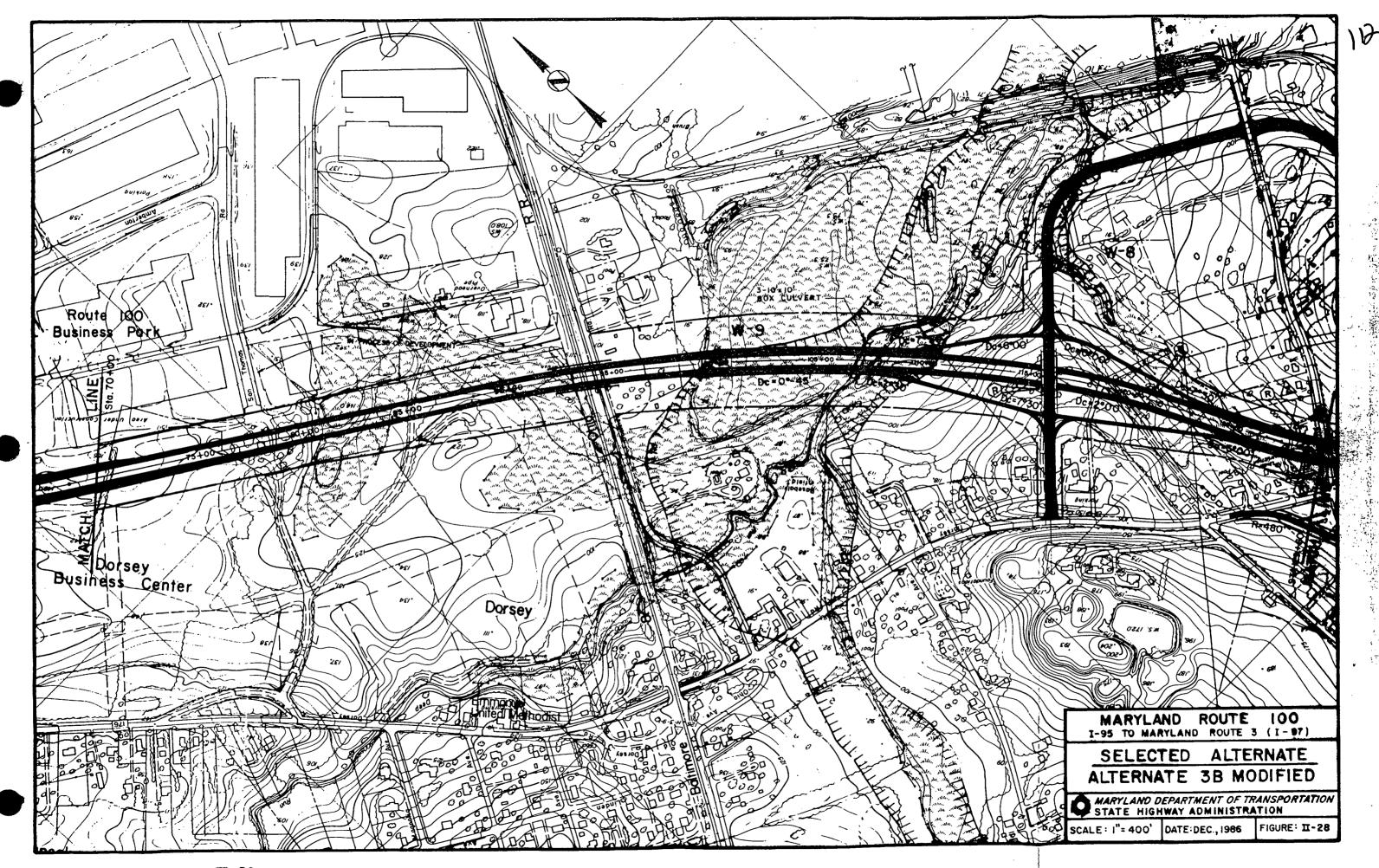


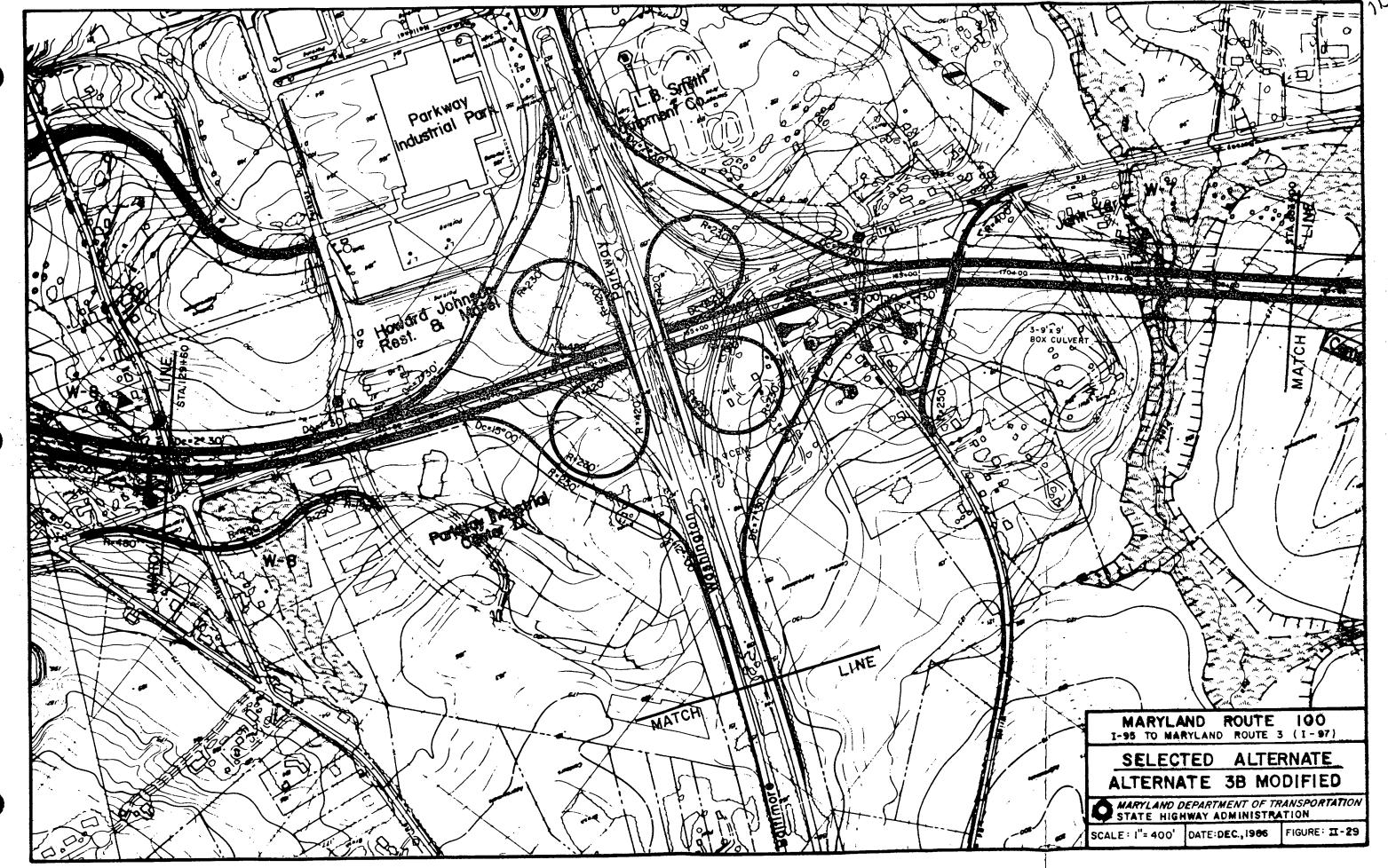
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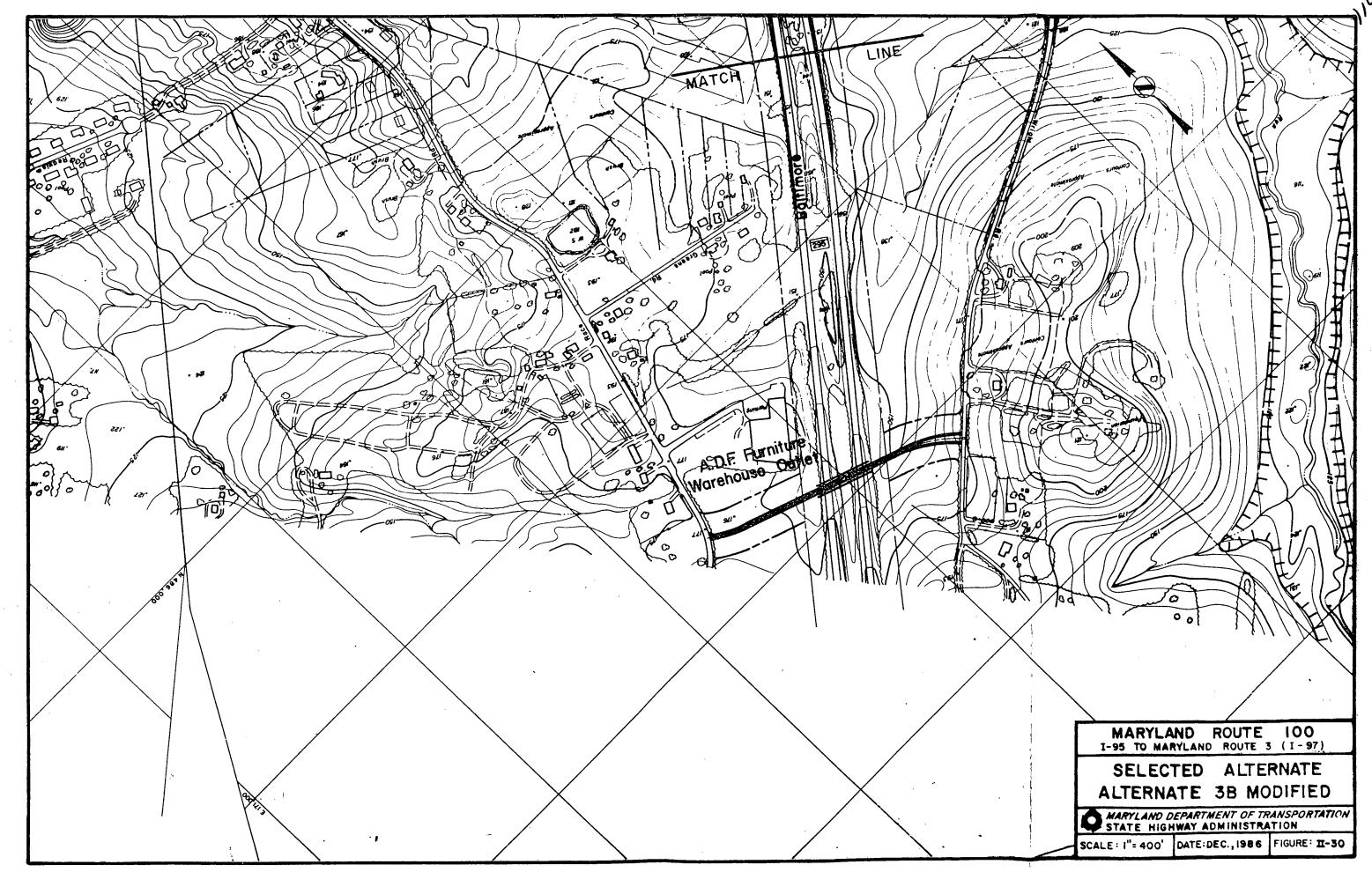


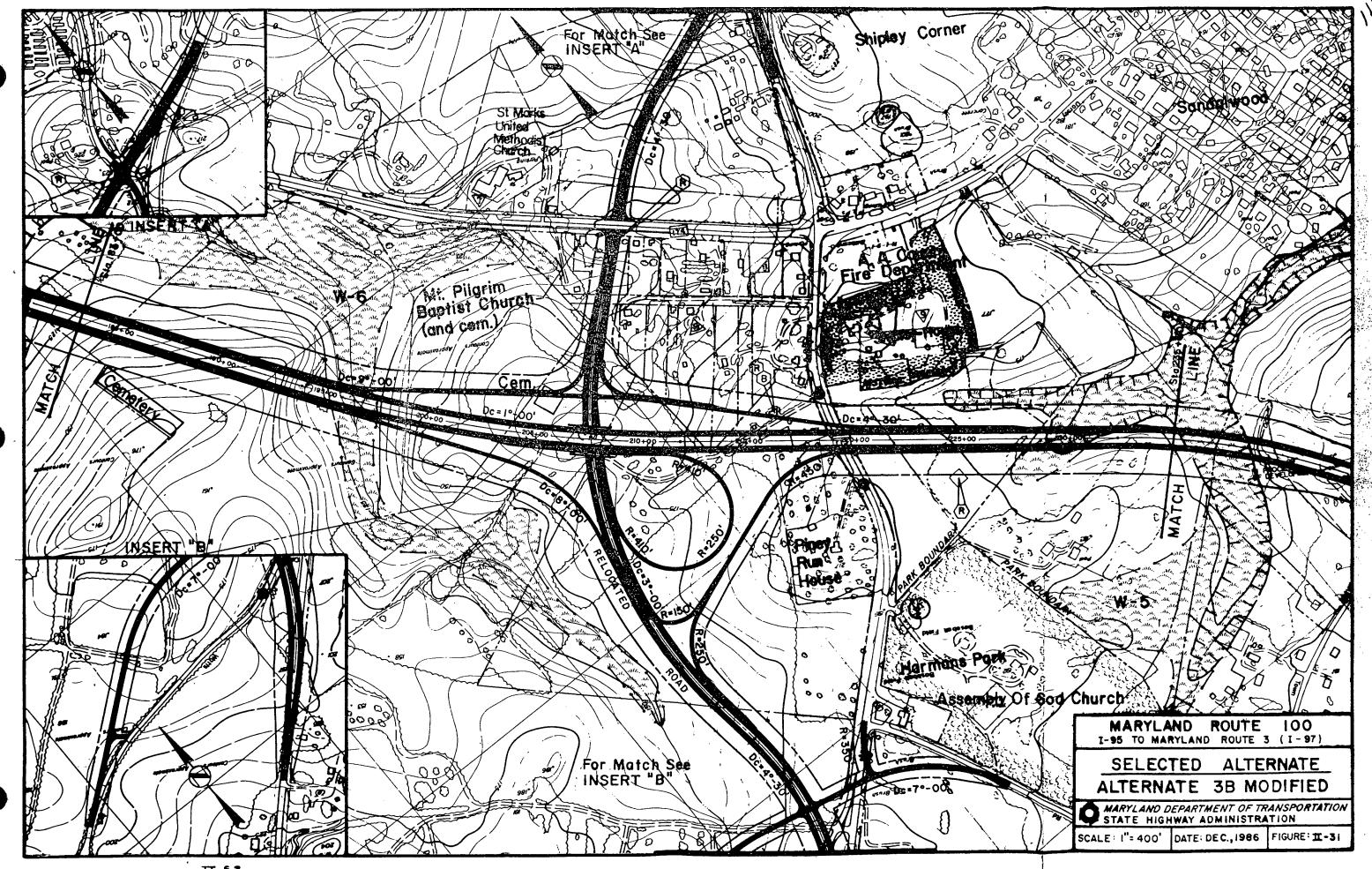
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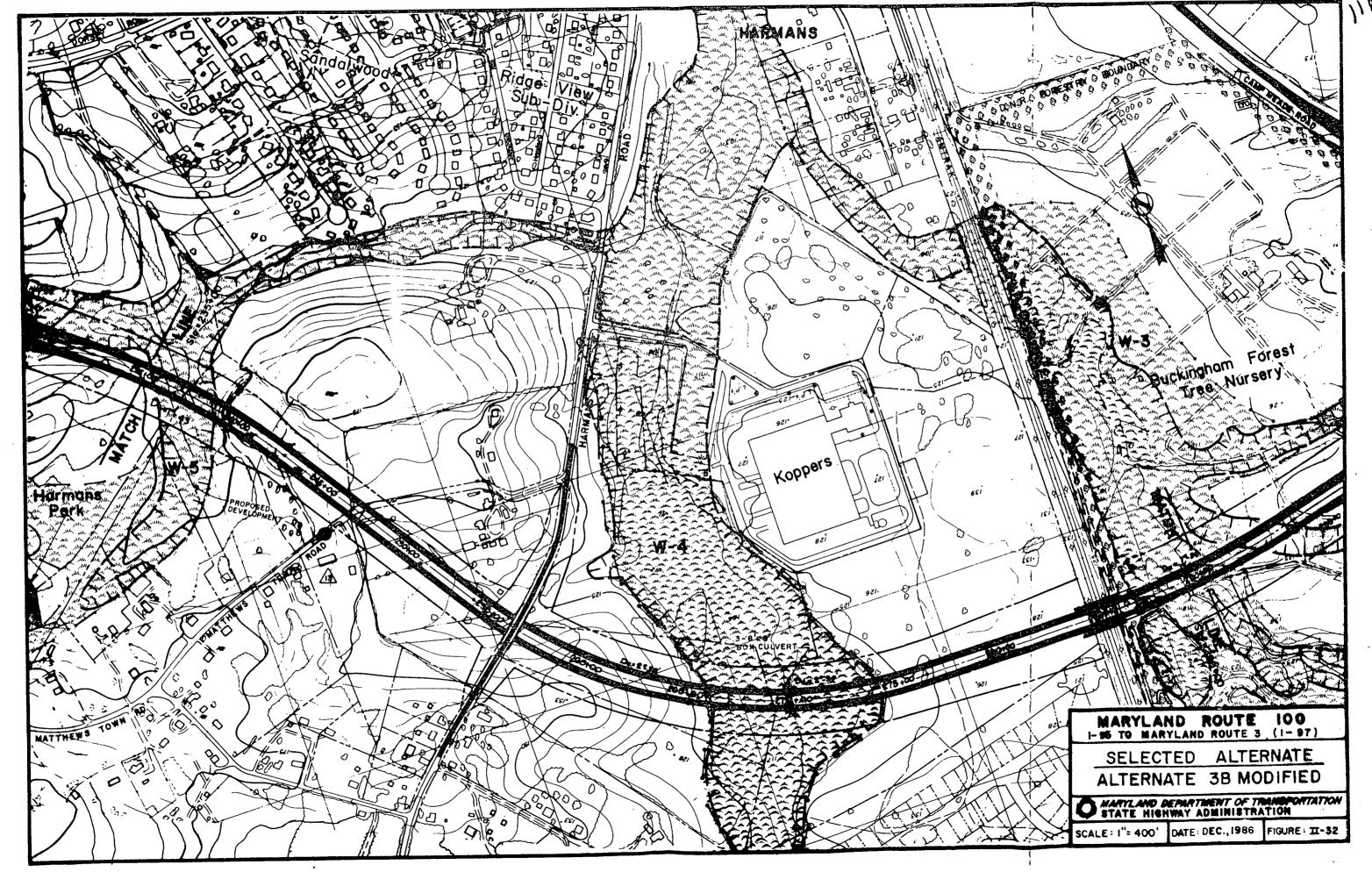




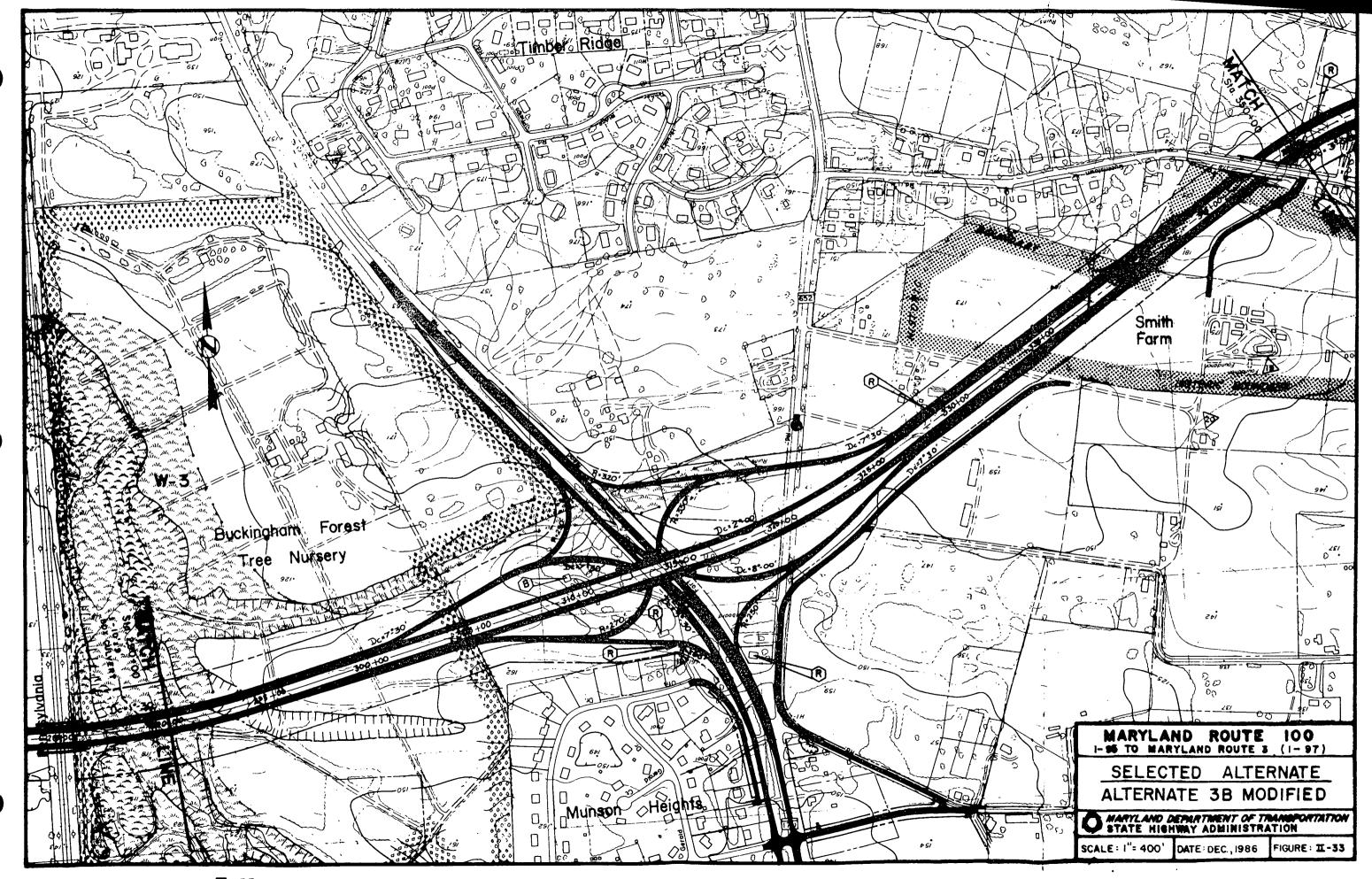


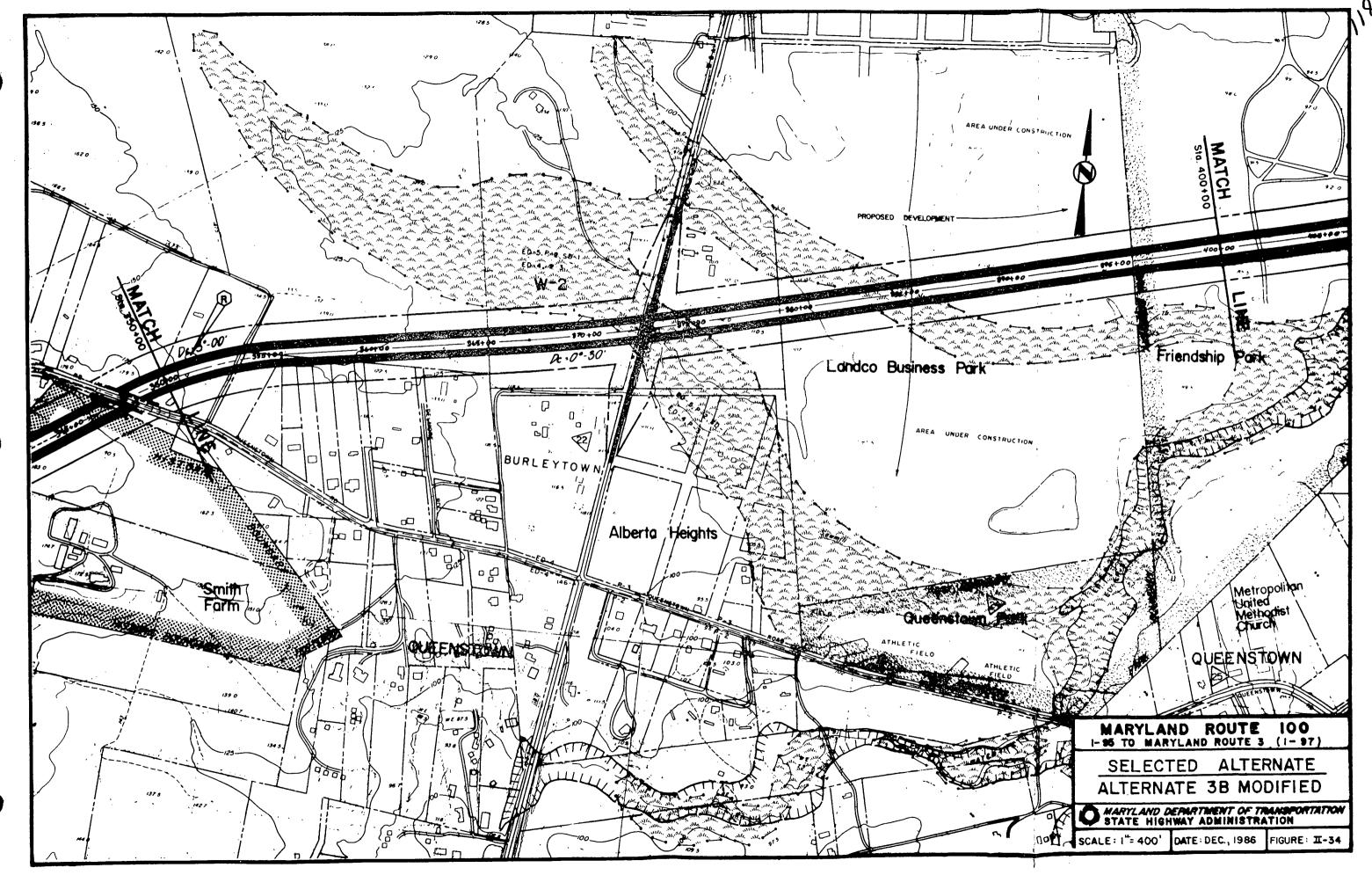


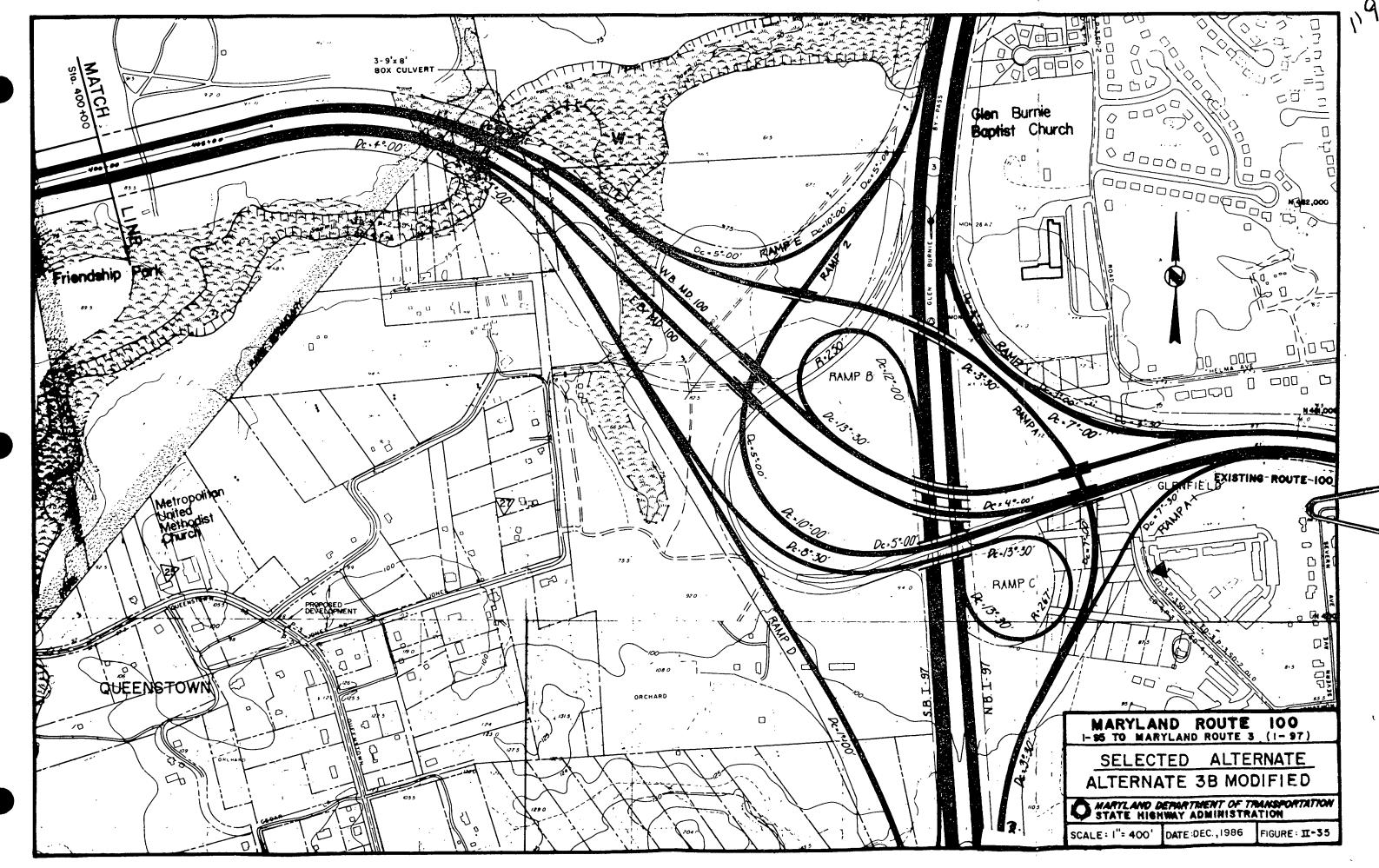


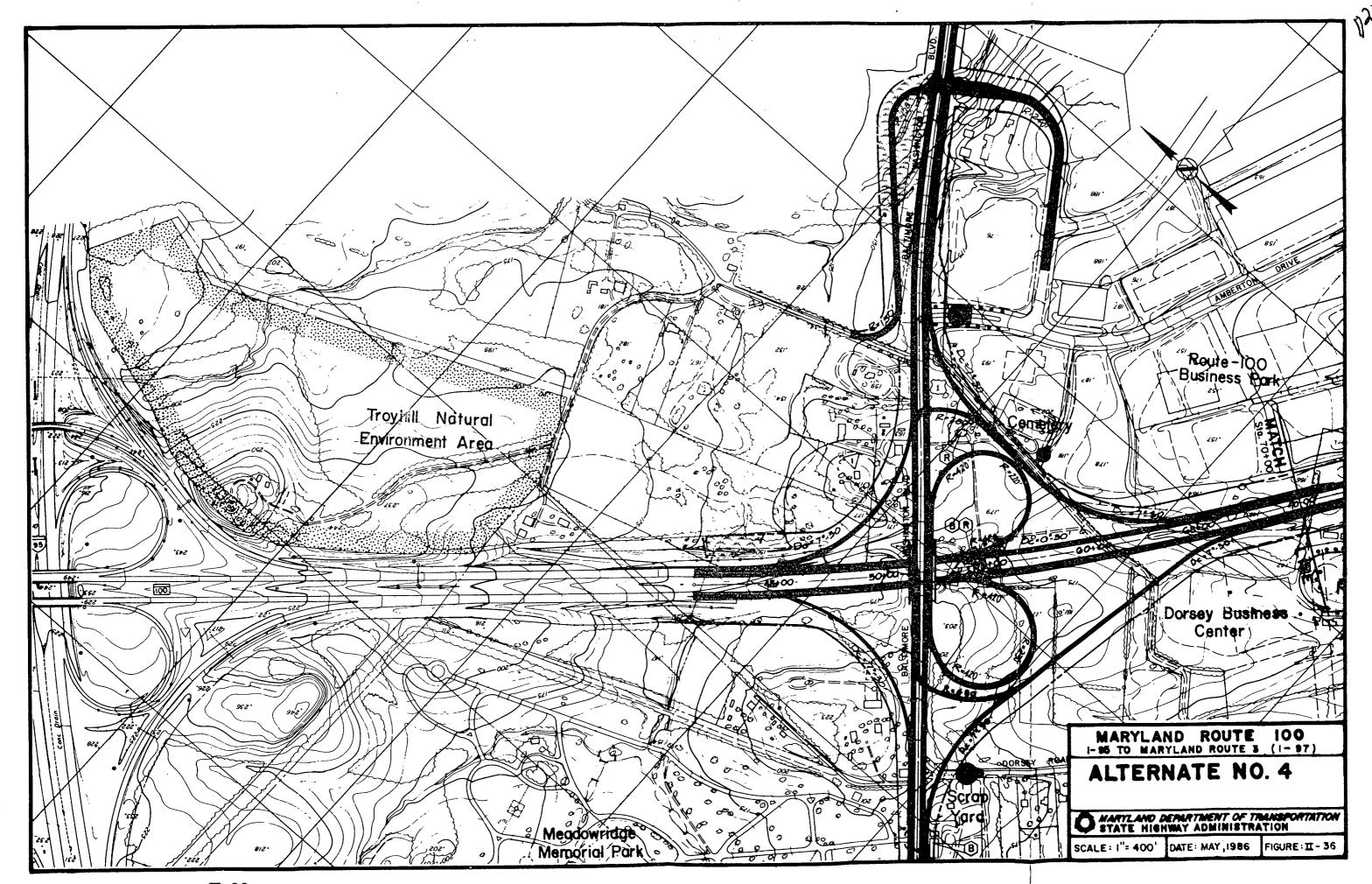


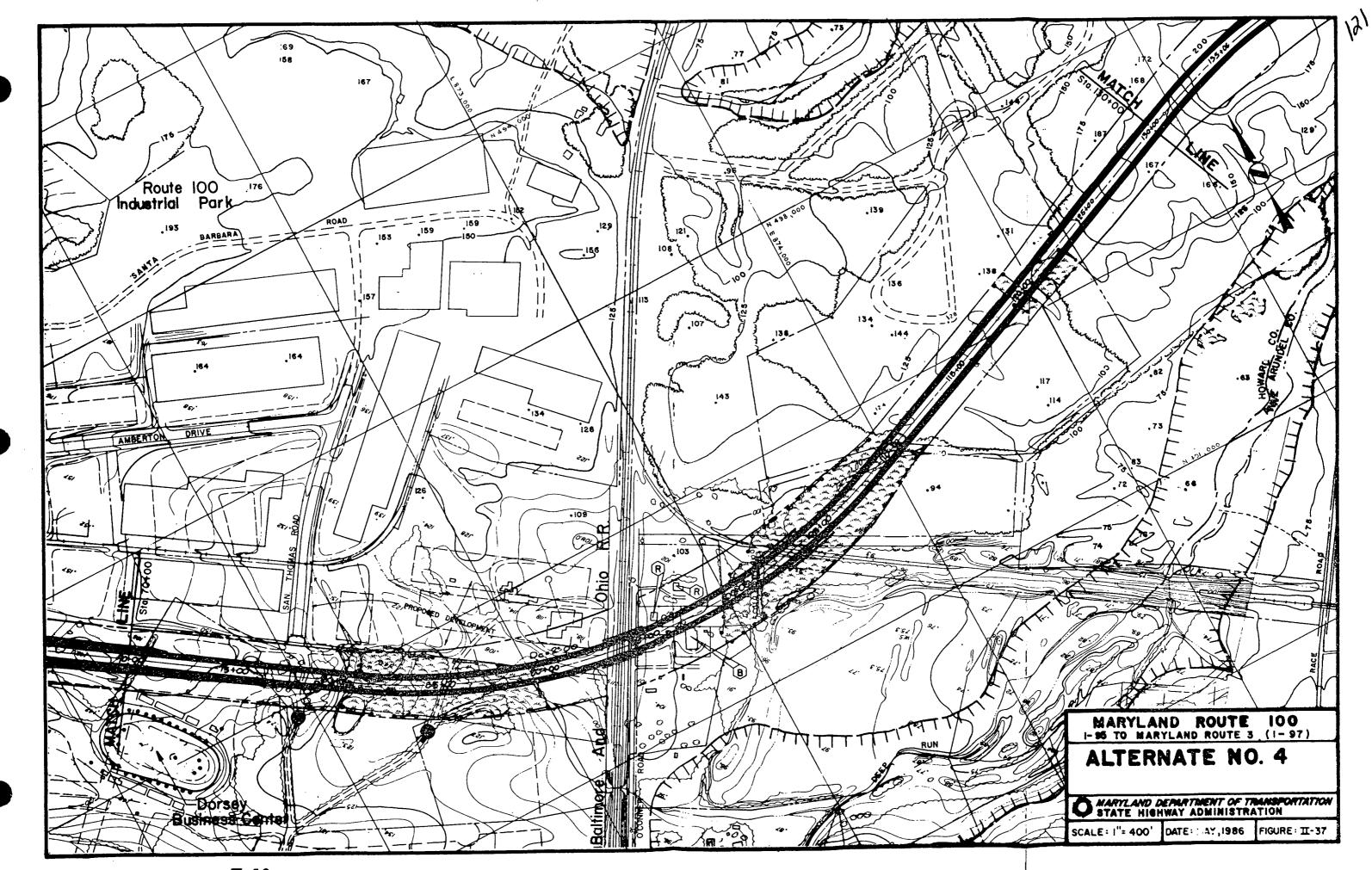
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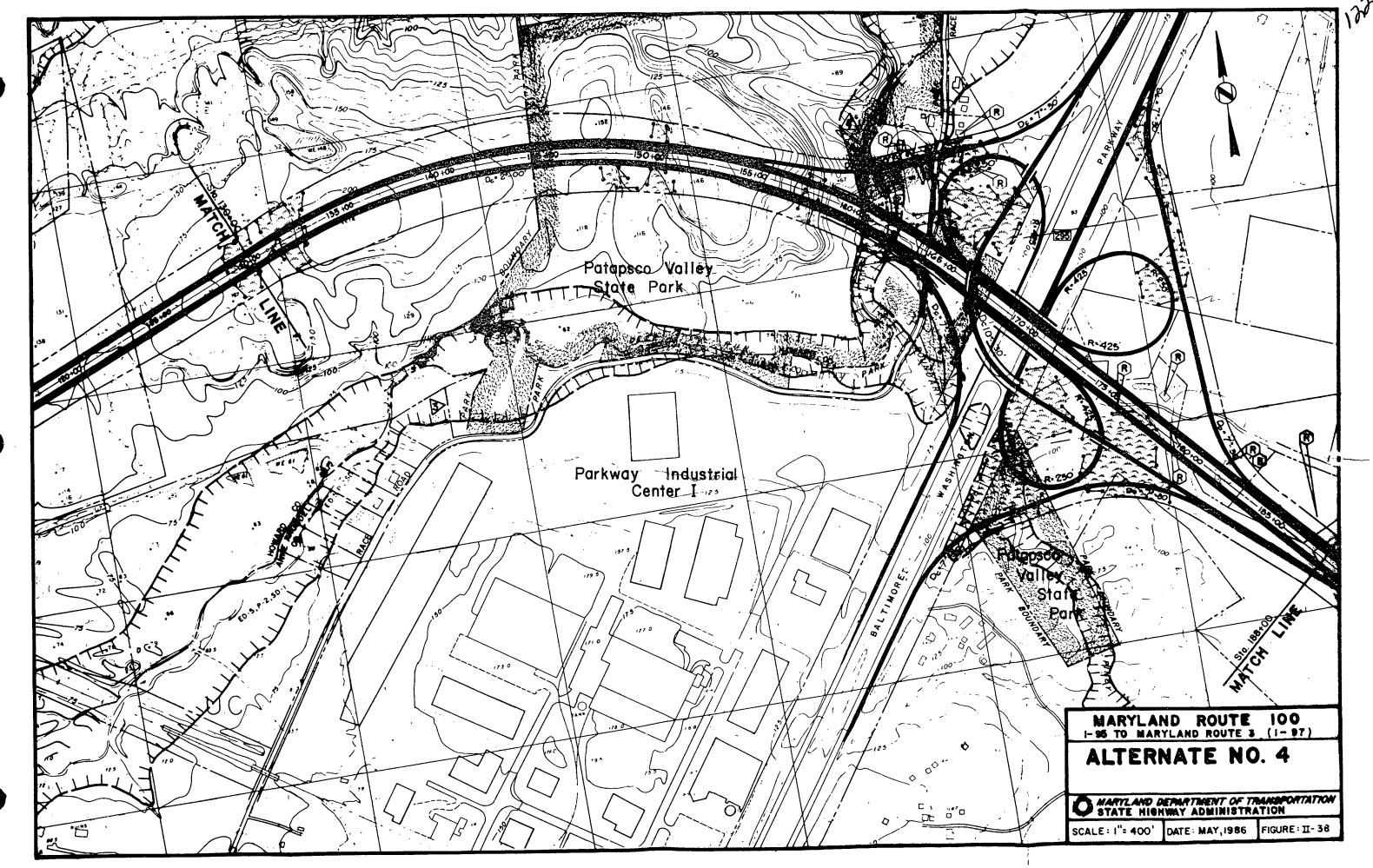


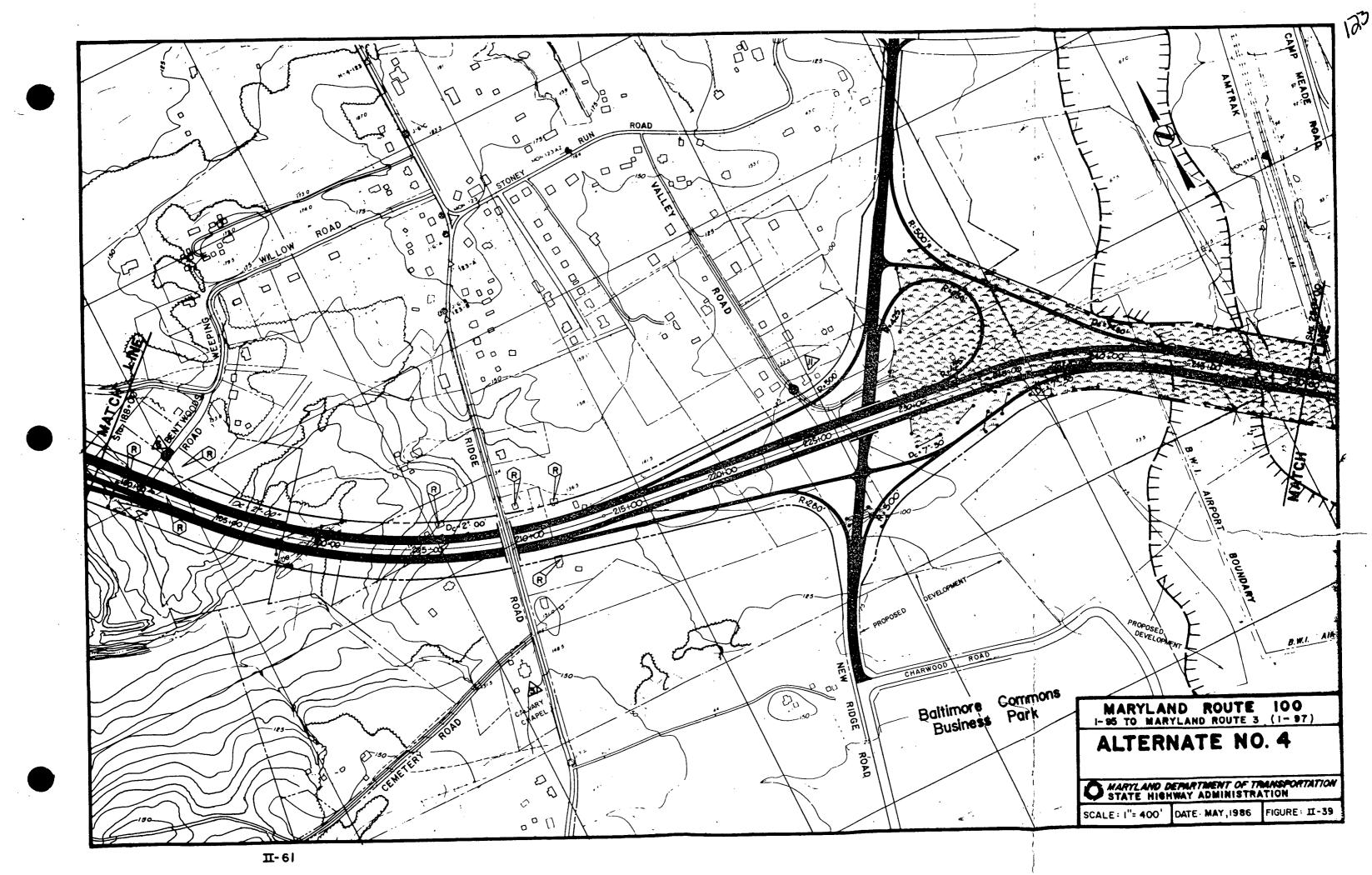


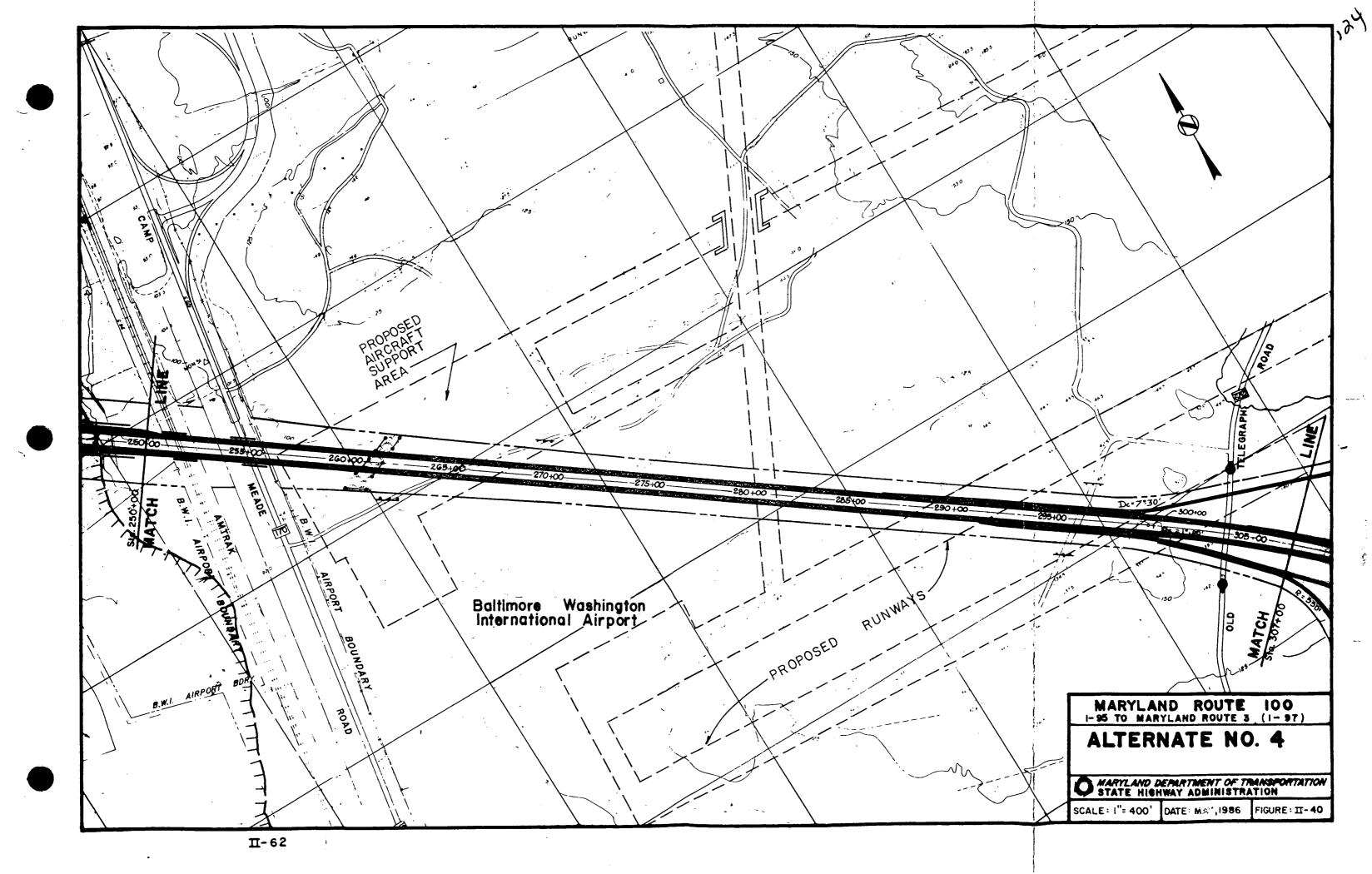


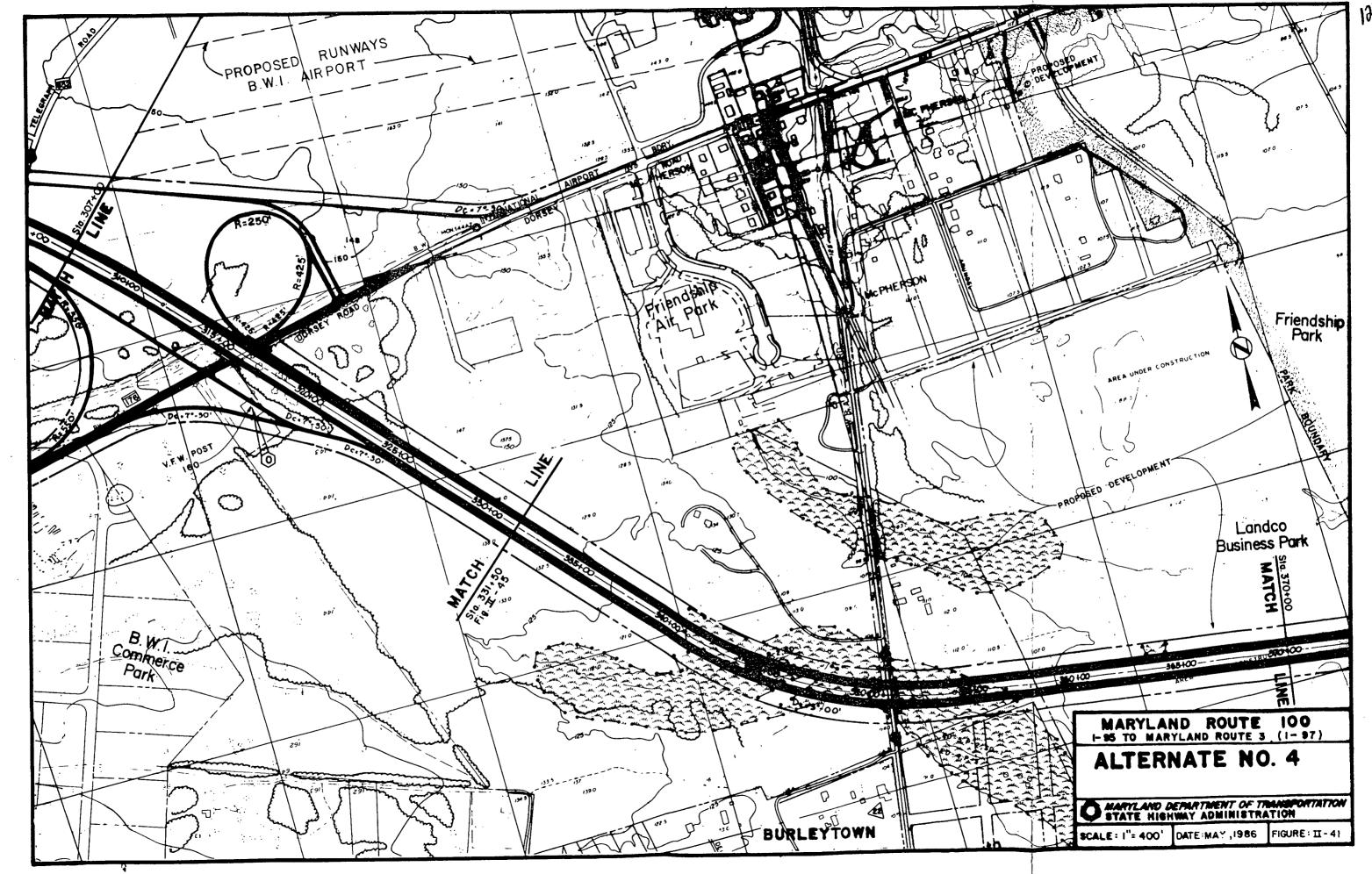


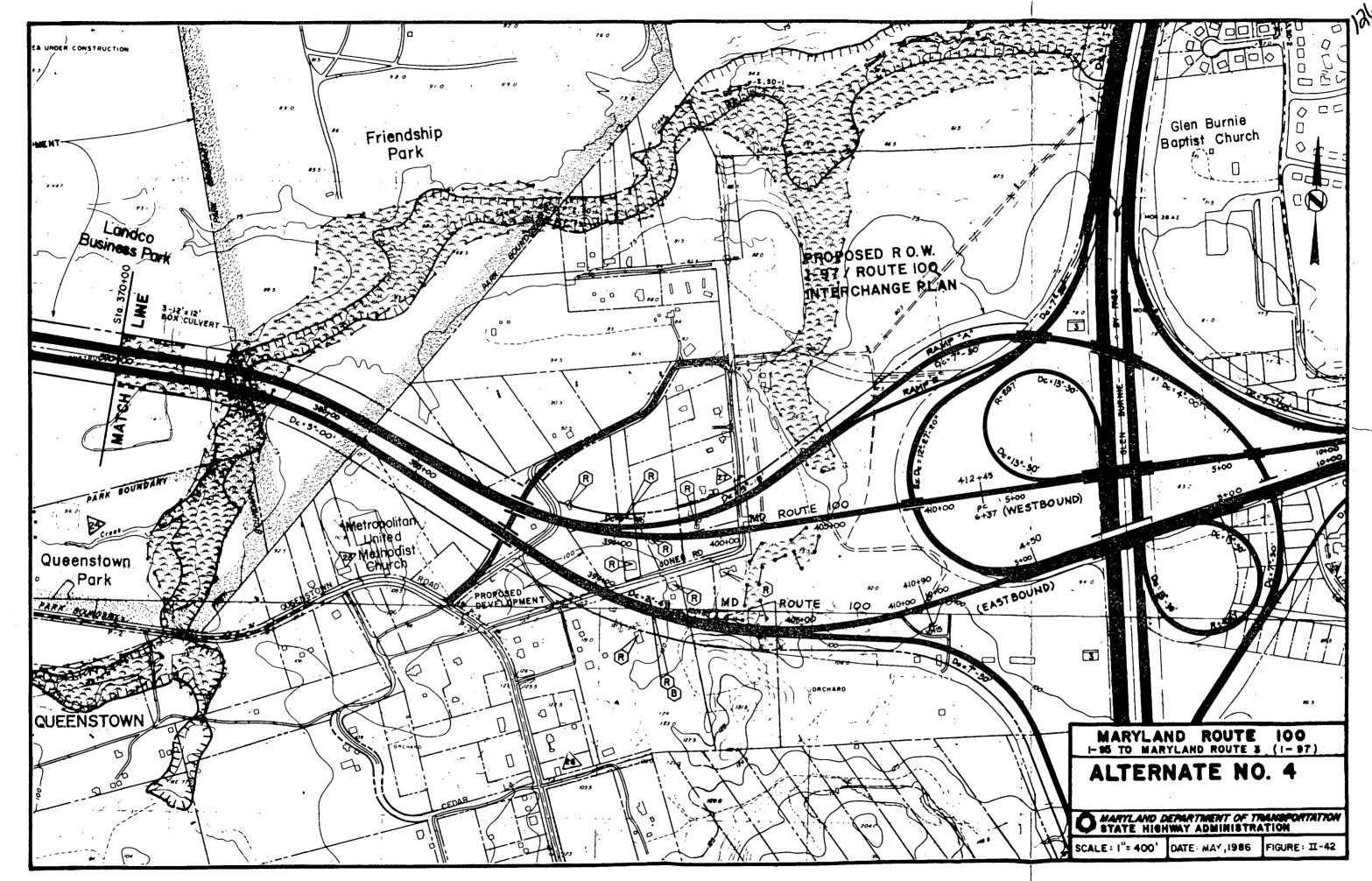




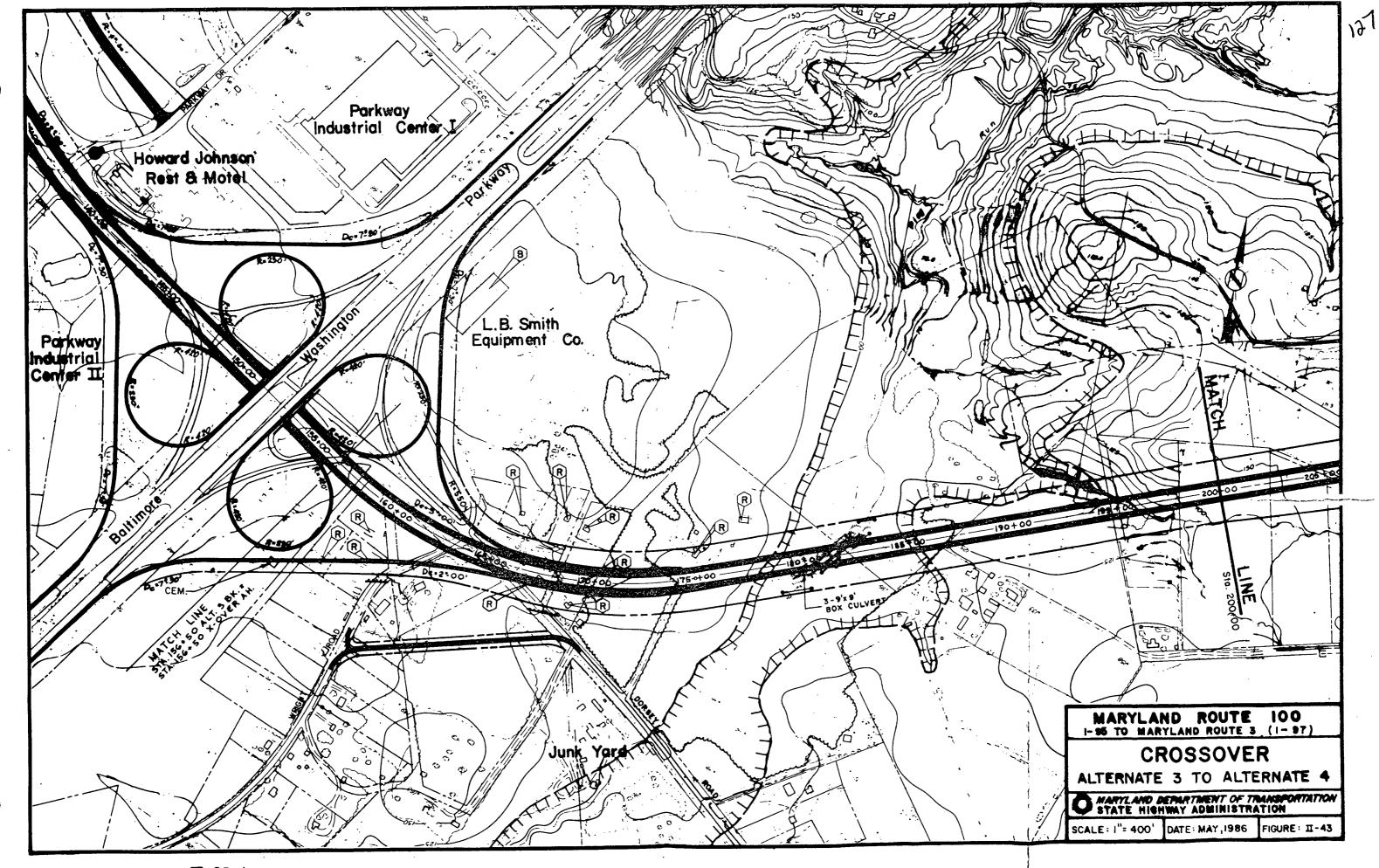


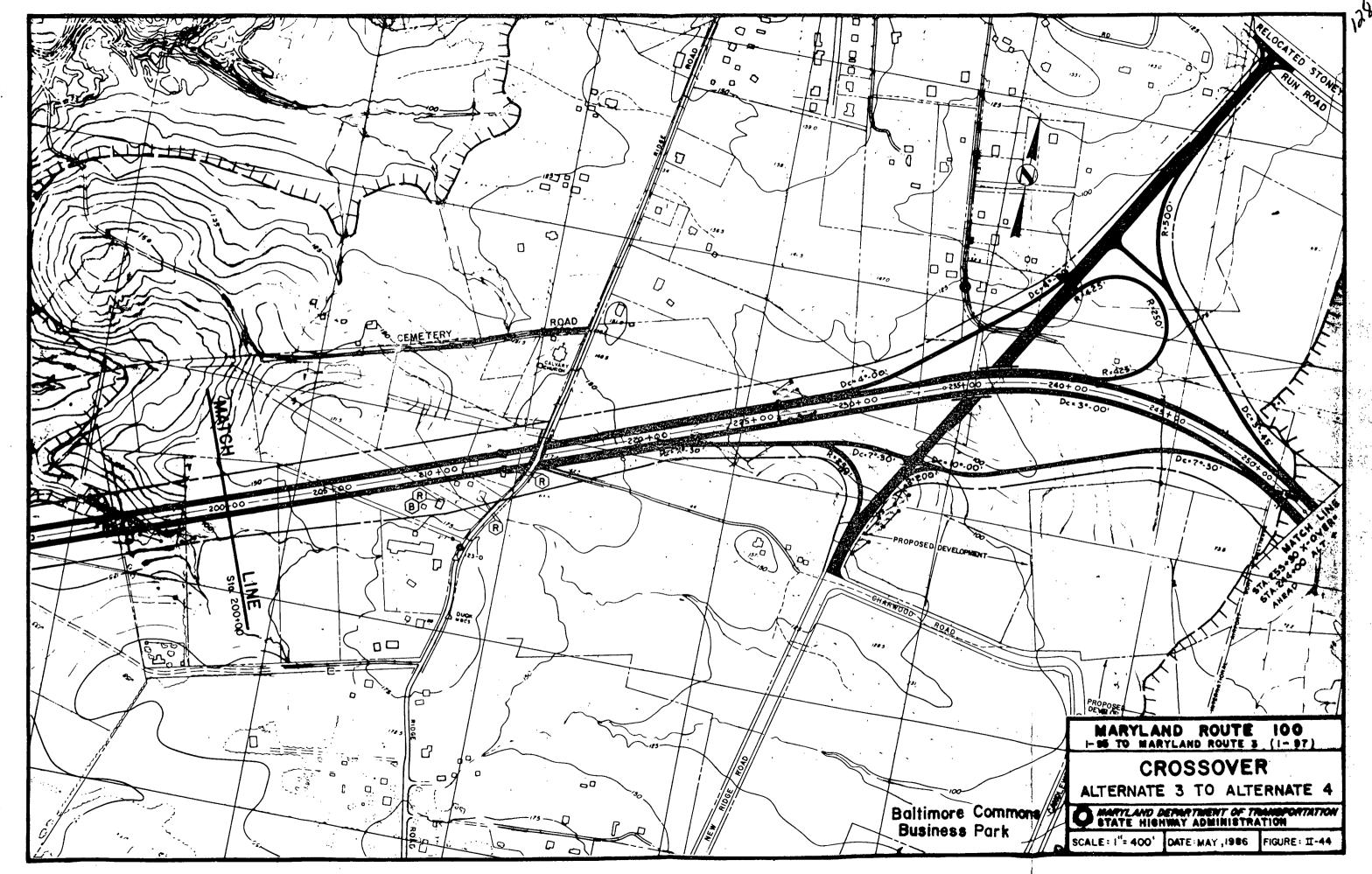


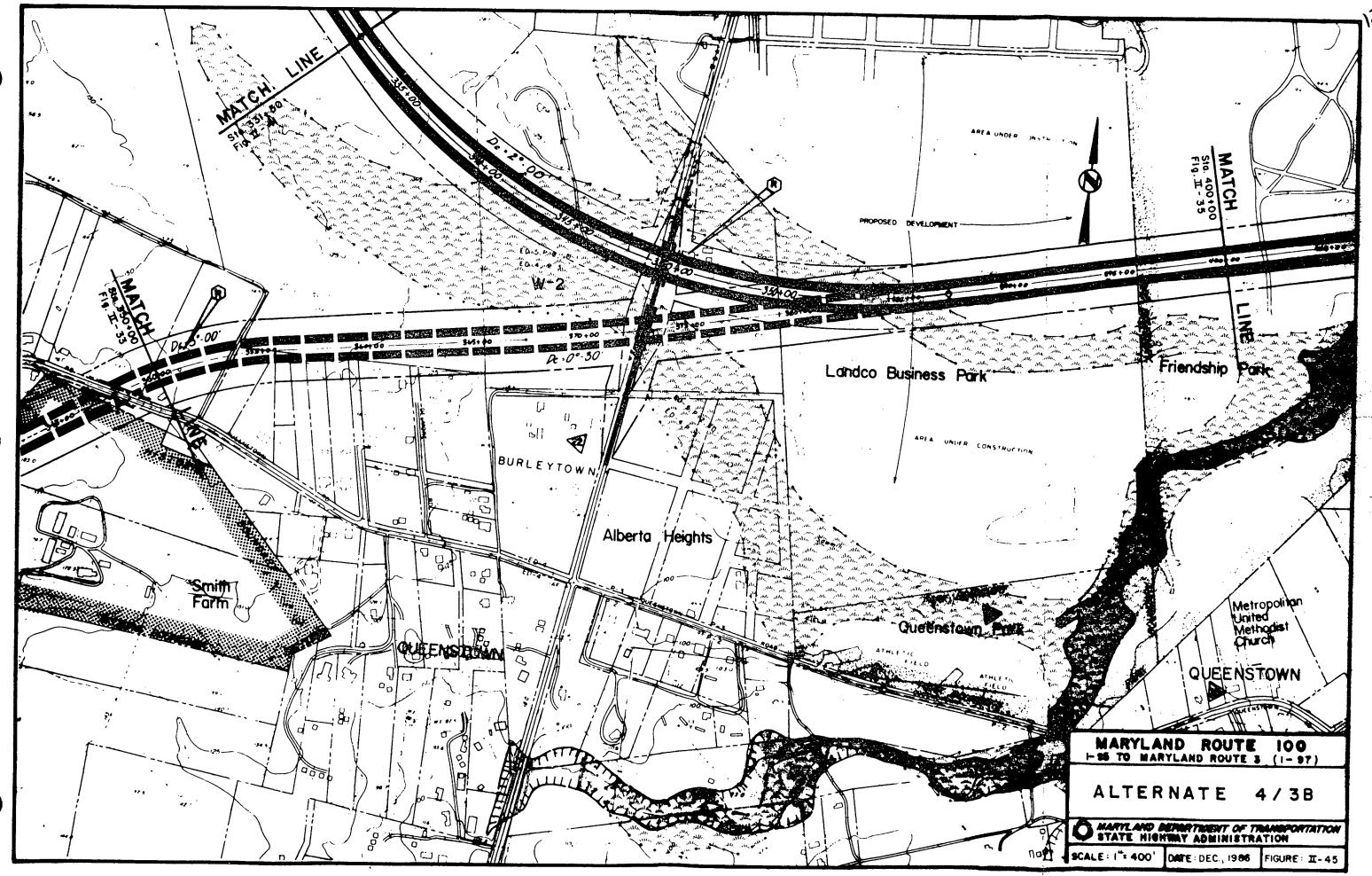


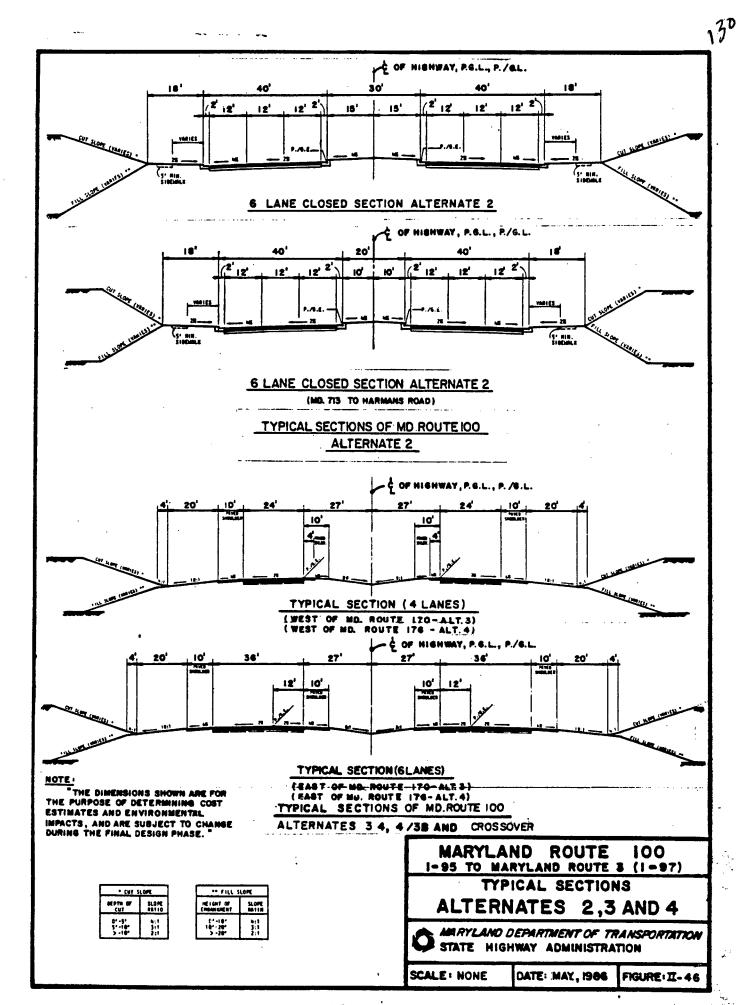


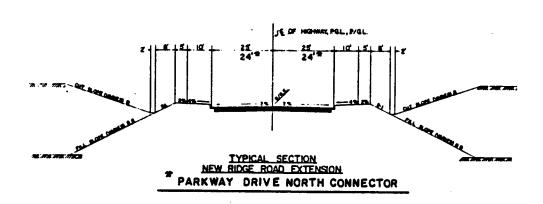
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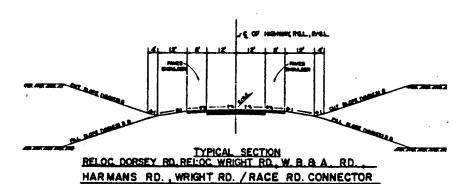




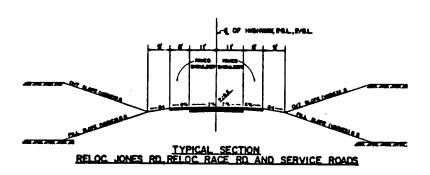








AND COLLECTOR ROADS



NOTE

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MARYLAND ROUTE 100

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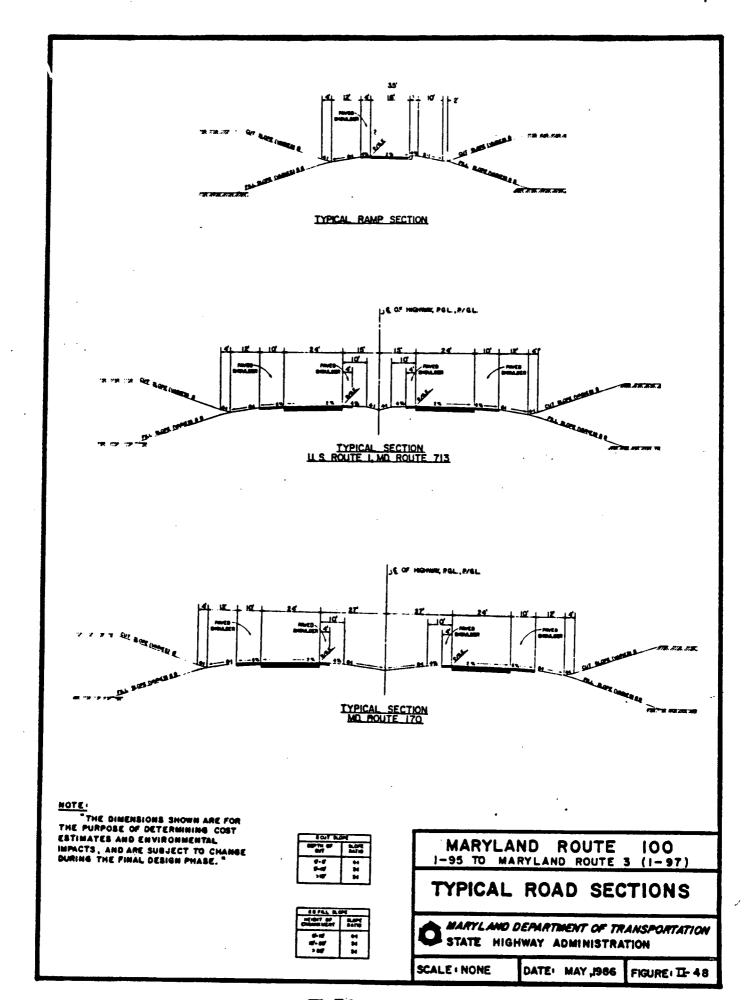


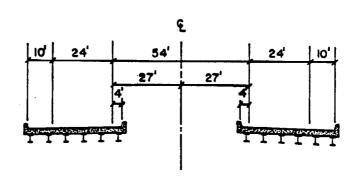
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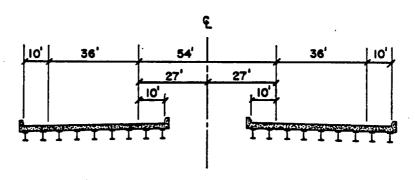
FIGURE: II-47

THE PROPERTY.

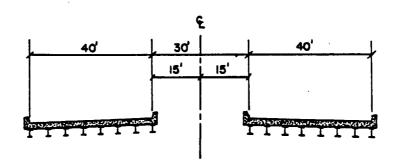




4 LANE BRIDGE SECTION ALTERNATES 3,4 AND CROSSOVER



6 LANE BRIDGE SECTION ALTERNATES 3,4 AND CROSSOVER



6 LANE CLOSED BRIDGE SECTION ALTERNATE 2

MARYLAND ROUTE 100 1-95 TO MARYLAND ROUTE 3 (1-97)

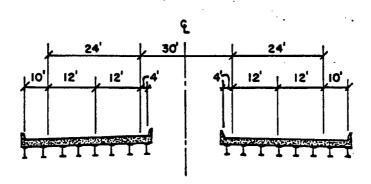
TYPICAL BRIDGE SECTIONS

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

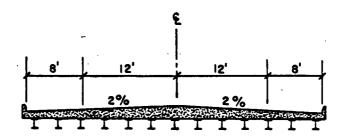
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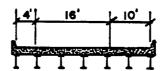
FIGURE: II-49



4 LANE DUALIZED BRIDGE SECTION U.S. ROUTE | AND MD. ROUTE 295



2 LANE OPEN SECTION COLLECTOR ROADS



RAMP SECTION

MARYLAND ROUTE 100 1-95 TO MARYLAND ROUTE 3 (1-97)

TYPICAL BRIDGE SECTIONS



MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

SCALE: NONE

DATE: MAY, 1986 FIGURE - II-50

III AFFECTED ENVIRONMENT

III. AFFECTED ENVIRONMENT

A. Social, Economic, and Land Use

Social Environment

a. <u>Population</u>

The Maryland Route 100 study corridor lies predominantly within northern Anne Arundei County, with the western portion extending into eastern Howard County. Each of these countles has sustained a very high growth rate over the past several decades, far in excess of the growth rates for the Baltimore Standard Metropolitan Statistical Area (SMSA) or the State of Maryland as a whole. The Howard County population increased 90 percent between 1970 and 1980, from a population of 62,400 to 118,600; and increased an additional 18.5 percent in the past five years to a 1985 population of The Anne Arundel County population increased 24.5 percent between 140,100. 1970 and 1980, from a population of 298,000 to 370,800; and has increased an additional 7.5 percent since 1980 to a 1985 population of 398,600. Most of this growth in Anne Arundei County has occurred in the northern portion of the county which includes the Route 100 study area. Table III-1 shows the past and projected population growth for these countles in relation to the Baltimore SMSA and the State of Maryland.

In order to provide a more detailed view of population in the Maryland Route 100 study area, Anne Arundel County and Howard County Census Tract data have been obtained from the respective planning agencies. The boundaries of those statistical areas which are directly overlain by the study corridor are shown on Figure III-1 and population data are presented in Table III-2.

	A.A. County	Howard County	Baltimore S.M.S.A.	Maryland
1960	206,634	36,152	1,803,745	3,100,689
1970 .	298,042	62,394	2,071,016	3,923,897
1980	370,773	118,570	2,174,023	4,216,446
1985	398,554	140,100	2,226,000	4,350,100
1990	435,000	165,600	2,296,000	4,535,450
2000	479,000	189,900	2,424,000	4,862,900
2005	490,000	211,700		.,002,000

(Source: U.S. Bureau of Census, Maryland Department of State Planning)

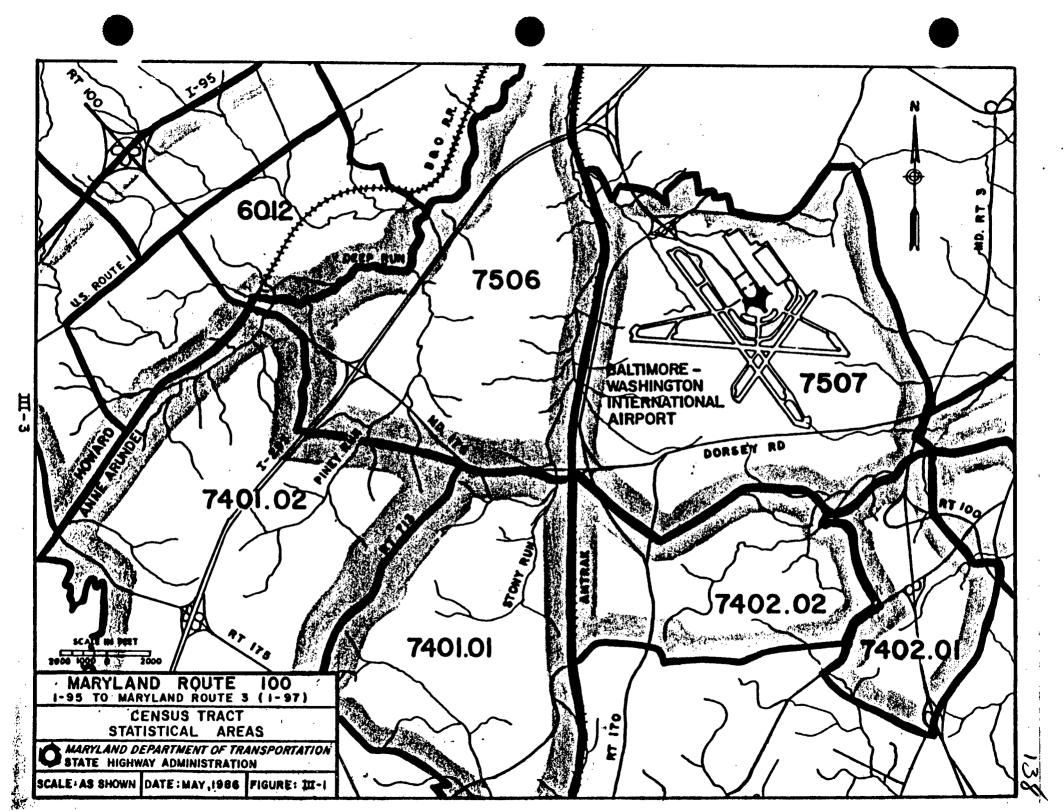


TABLE 111-2
STUDY AREA POPULATION

*A.A. Co. Census		Donulai	.1			• • •		
		Populat	ion			Househ	olds	
Tract	1970	1980	1985	2005	1970	1980	1985	2005
7401.01	2,028	13,087	15,359	18,840	760	3.973	4,894	6.686
7401.02	2,733	3,149	4,234	9,371	781	1,052	1,509	3,801
7402.01	5,162	7,293	7,162	8,069	1,413	2,396	2,474	3,117
7402.02	1,760	2,136	2,363	3,981	492	666	748	1,271
7506	1,908	1,650	1,564	1,406	507	525	523	525
7507	1,027	904	859	794	291	305	305	315
A.A. Co. Subtotal:	15,218	28,219	31,541	42,461	4,244	8,917	10,453	15,715
*Howard Co Census Tract	o. -							
6012	-	5,122	6,573	12,932	-	1,870	2,140	5,029
STUDY AREA	4 _	33,341	38,114	55,393	_	10 707	10' 500	20. 744
101716	-	55,571	30,114	55,353	-	10,787	12,593	20,744

^{*} Refer to Figure III-1

The data shows that 31,541 persons resided in the Anne Arundel County portion of the study area in 1985; or 7.9 percent of the total county population. The growth in these census tract areas since 1970 has been 107 percent, which is well in excess of the 34 percent experienced by Anne Arundel County as a whole. The population of the Anne Arundel County portion of the study area is projected to increase by an additional 35 percent in the next twenty years to a 2005 population of 42,461. As shown in Table III-2, the area of greatest population growth in the corridor has occurred in census tract 7401.01, which is bounded by Dorsey Road to the north, Ridge Road to the west and the AMTRAK Raliroad to the east.

A total of 6,573 persons live in the Howard County portion of the Route 100 study corridor (1985), which is 4.7 percent of the total Howard County population. The area's 18.2 percent population growth since 1980 is more than the 12.5 percent experienced by the county as a whole, where the most significant population growth has occurred in the Columbia area.

The total 1985 population of the statistical areas in both Howard and Anne Arundel Countles within the Route 100 study area is 38,114, and this is projected to increase to 55,393 by the year 2005.

Table III-3 shows that the minority composition of the study area portion in Anne Arundel County is 23.9 percent, which is greater than the overall county figure of 13.4 percent. The minority composition in the Howard County portion of the study area (Census Tract 6012) is 10.2 percent, while the total Howard County figure is 11.7 percent.

TABLE III-3

STATISTICAL DATA

1980 Census

A.A. Co. Census Tract	Median Family Income	Media Housing Value	Pop. below Poverty	Rac White	e (Percent <u>Black</u>) Others
7401.01	\$19,377	\$64,300	1,570	64.16	31.22	4.62
7401.02	25,429	61,633	197	90.76	7.62	1.62
7402.01	24,335 ·	64,900	420	86.56	10.82	2.02
7402.02	24,314	65,600	8	78.93	19.57	1.50
7506	26,066	54,909	123	86.73	12.06	1.21
7507	22,022	66,200	85	88.50	8.96	<u>2.54</u>
TOTAL: (A.A. Co.)	\$23,591	\$62,923	2,403	76.1	20.6	3.3
Howard Co. Census Tract			·			
6012	\$21,236	\$58,724	45	89.8	(10).2 —)

From 1980 Census data, the percentage of elderly persons (age 65+) in the Anne Arundel County portion of the study area was approximately 3.3 percent; and for Howard County Election District 1 the figure was approximately 8.9 percent.

b. Housing

The reported 1980 median house values in the Maryland Route 100 study corridor, which contains approximately 9,800 total housing units, was approximately \$62,500. The median rent per housing unit was \$237 per month. Median housing values for Anne Arundel and Howard Counties as a whole were \$65,700 and \$85,700 respectively.

The continuing rapid population growth in the study area has resulted in a significant increase in housing units, and this is projected to continue into the future. Table III-2 shows the existing and projected housing data for the census tracts encompassing the study area as developed by the Anne Arundel County and Howard County Offices of Planning and Zoning.

The 1985 household count for the Anne Arundel County portion represents a 146 percent increase since 1970, and this is projected to increase by another 50 percent by the year 2005. Reference to Table III-2 and Figure III-1 shows that essentially none of this housing growth is projected to occur north of Dorsey Road, while the area of most rapid growth will be census tract 7402.02; the Eimhurst-Munson Heights area.

Housing in the Howard County portion of the study area is projected to double in number by the year 2005 with the vast majority of this growth occurring to the west of U.S. Route 1.

c. Family income

Statistical data from the 1980 census (see Table III-3) show the Anne Arundel County portion of the study area to have had a median family income of \$23,591/year. This was slightly lower than that for Anne Arundel County as a whole (\$24,771) and slightly higher than the median for the State of Maryland (\$23,114). The percentage of the population in these census tract areas which are living below poverty level is approximately 8.5 percent. The Howard County portion of the study area (census tract 6012) shows a median family income of \$21,236, with approximately 2.3 percent of the population living below the poverty level.

d. Communities and Cities

The Maryland Route 100 Corridor is located within the metropolitan area of Baltimore City, whose southern boundary is approximately six miles north of the Corridor. Washington, D.C., the nation's capital, lies 20 miles to the southwest of the study area; while the City of Annapolis, Maryland's seat of government, is located approximately 15 miles to the southeast. Just beyond the eastern limit of the study area is the town of Gien Burnle which, with a 1980 population of 37,000, is a major center of retail and commercial activity in Anne Arundel County. Centered approximately five miles west of the study area in Howard County is the 14,000 acre planned community of Columbia, which has a 1985 population of approximately 62,000 and is where more than half of the County's 3,000 businesses have located.

Within the study area itself are a number of smaller communities (shown on Figure III-2) which maintain their individual identities. Included in these are the communities of Dorsey, Harmans, Burleytown/

Queenstown, and Matthewstown. Two of these are unique and distinct communities because of their heritage and maintenance of a strong sense of identity despite the land use changes occurring around them.

Matthewstown is a close knit minority community which has grown up around the original Matthews family who settled in the area as farmers approximately one hundred years ago. The physical extent of the community, as perceived by its residents, includes all of those homes on Matthewstown Road, Post Road, the north side of Ridge Chapel Road, and a scattering of homes around the Post Road-Harmons Road intersection. Nearly all of the people in this community, which consists of approximately thirty homes, are related to some degree to each other and can trace their lineage by blood or marriage to the original Matthews family. Children of this community have tried to remain in or return to the area, and thus its homes range in age from very old to new. The original Matthews house, at Matthewstown Road and Post Road, still exists and is occupied. Most of the residents are employed at Fort Meade, the Koppers plastic plant, or in construction contract work.

Queenstown is also a close knit and highly interactive minority community which has evolved and grown from four original families who first settled the area in approximately 1900. These original families were the Queens, the Galthers, the Burleys, and the Gambrilis. The original families were truck farmers, and the area retained this farming character, as the children grew to adulthood and built homes on family land, up until World War li when other economic opportunities developed. A number of additional families moved to the area after the original four, and marriages between these various families has resulted in the existing community where nearly all

residents can trace some family relationship to the others. The original family homes still exist and are being occupied.

The Queenstown Community as perceived by its residents includes all homes along Queenstown Road, and on the various side streets off of Queenstown Road, from Telegraph Road to Donaldson Avenue (a length of approximately 1.9 miles). Although current mapping shows two separate communities of Burleytown and Queenstown in the area, the residents view no such distinction, and consider the area to be a single community. The center for community interaction is the Metropolitan United Methodist Church, originally established in 1917 at Queenstown Road and Donaldson Avenue, and moved to its present location in 1976.

Housing growth in the Queenstown community, which currently consists of approximately 120 homes, has generally occurred as a result of family transactions, as children have tended to stay and settle in the community. Thus, ages of homes range from old to new. Economically, the families of Queenstown generally are in the lower to lower middle income range. Major employers for the community are Westinghouse and Fort Meade, and it has been estimated by community members that as many as a quarter of the residents are retirees.

Dorsey is a small residential community located on Dorsey Road between the Baltimore-Washington Parkway and U.S. Route 1. The community straddles the county line between Anne Arundel and Howard Countles and is approximately 50% minority. The old B&O railroad tracks follow the county border and divide Dorsey in two. The bulk of the minority residents live in the Anne Arundel County section. There are three industrial parks in the immediate vicinity.

Dorsey dates back to the nineteenth century and originated as a rall stop for the B&O rallroad. At one time there was a hotel (no longer existent) owned and operated by two sisters named Dorsey; hence the town's name. The primary landholders were members of three families, the Reimsnyder's, Powells and Goldman's. Most residents of Dorsey at that time were rallroad employees, and their dependents.

When the train station was abandoned the nature of the community changed. The town ceased to grow and residents who worked for the railroad either moved or found work elsewhere in the area, most notably at Fort Meade and the National Security Agency (NSA).

Harmans is a small community located along Dorsey Road between Route 170 and Ridge Road (Shipley's Corner). The town is adjacent to Baltimore-Washington International Airport and a large industrial park. Most of the area residents live in one of four subdivisions. Sandalwood, Ridgeview and Leeds are three adjacent subdivisions of different ages and character. Ridgeview and Leeds are somewhat older than Sandalwood and lie on either side of it. The homes in these subdivisions range from lower to middle income. Timber Ridge is a subdivision just east of Harmans that contains over 100 middle to upper middle income homes.

Harmans originated in the mid-nineteenth century as a rail stop for the Penn Central Railroad. At one time, Harmans had a black-smith shop, a cannery, a brick mining operation, a pigment mill, and a general store and post office. Another general store was located at Shipley's Corner and is preserved today as an historical landmark (Shipley House). There were five major families who owned the land around Harmans: the Shipley's, Hawkins, Kellys, Clarks, and Harmans (for whom the town was named).

Since the railroad station closed, Harmans, like Dorsey to the west, has changed. There is no longer as much cohesiveness in the community. Most residents work outside the area and three high schools draw from the community.

Approximately one and one-half miles east of Harmans Is McPherson. McPherson is a small cluster of homes located on the south side of Dorsey Road. At one time McPherson was a rall stop for the old and abandoned Washington, Baltimore and Annapolis (W.B.&A.) Rallroad.

Between Harmans Road and the AMTRAK rall line, east of Matthewstown, lies the Harmans Woods housing development. This community consists of seven to eight hundred homes all constructed within the last five years.

2. Community Facilities

The Maryland Route 100 study area supports a full range of community facilities, including eleven churches, five schools, and six parks and recreation areas. Figure III-2 shows the locations of these facilities, and they are identified in the legend to that figure.

A post office in the study area is located at Old Dorsey Road and Old Coaling Road. Fire protection is provided by Fire Company 21 located at Shipley Corner, and from the East by Gien Burnie Fire Department 33. Nearby police stations include the Waterloo State Police Barracks located at Maryland Route 175 and U.S. Route 1,a state police barracks near Maryland Route 176 on Hammonds Ferry Road and Anne Arundel County Police Headquarters located on Route 3 near Benfield Boulevard. The nearest health care facility is the North Arundel General Hospital located east of the study area in Gien Burnie.

3. Parks and Public Recreation

A total of six parks and public recreation areas serve the study area, and these are shown on Figure III-2. Four of these are Anne Arundei County facilities, one is a state park, and the remaining is under the ownership of the State Aviation Administration (SAA).

The Patapsco Valley State Park is a very large State owned land and forest reservation extending along the Patapsco River and its major tributaries which provides along its reach opportunities for recreational activities like camping, fishing, hiking, and canoeing. As shown on Figure III-2, a branch of the Patapsco Valley State Park reaches into the northern portion of the study area along Deep Run to a point approximately one mile north of existing Dorsey Road.

The remaining parks are community recreation areas containing basebail diamonds and other facilities. These are Queenstown Park located on Queenstown Road; Friendship Park, owned by SAA and leased by Anne Arundel County, located off of Dorsey Road north of Queenstown; Harmans Park located off Ridge Chapel Road at Ridge Road; Jessup and Dorsey Park located off Race Road; and the Severn-Danza Park located on Donaldson Avenue south of the study corridor.

4. Economic Profile

There are major centers of economic activity impacting upon the economic base of the Maryland Route 100 Study Corridor. These

Include the City and Port of Baltimore, the Baltimore-Washington International Airport, the Fort Meade military installation, and the government office complexes located in Annapolis. Each of these provides for employment and economic spin-offs to the study area, but the one which has the greatest impact upon the immediate Route 100 Study Corridor is the BWI Airport, which is located adjacent to Dorsey Road.

The Port of Baltimore is located approximately six miles north of the study area. With 45 miles of improved waterfront, it is the third largest port in terms of cargo value in the United States, and the second busiest containerized cargo port on the U.S. Atlantic and Guif Coasts. The port offers modern efficient facilities to handle the unloading and loading of up to 200 vessels at the same time, and serves 4,500 ships from 45 countries annually.

The Fort Meade military installation, located just south of the Maryland Route 100 Study Corridor, is an active U.S. Army Base. It, in conjunction with the rapidly expanding National Security Agency also on the Fort Meade military installation, is a major center of employment for the area.

The government complexes located in Annapolis are the centers for State, County, and City governments. Numerous state, county and city office buildings are located in and around Annapolis, with direct employment at all three levels estimated at approximately 16,000 people.

The Baltimore-Washington international Airport is the only major airport in Anne Arundel County, and the largest in the state. Operated by the Maryland State Aviation Administration, it provides air service to more than 240 domestic and overseas cities with 48 air carriers (passengers and freight) and commuter airlines that total 475 flights daily. BWI handled 4.5 million passengers in 1982, and also handles more than 60 percent of the region's air-cargo through its 8 cargo facilities. In addition to these typical airport operations, it has attracted a substantial amount of industrial development to the study area. Over 20,000 jobs in and around the airport have been generated as a result of this growth. Much of the existing and projected economic growth of the corridor, along with its associated traffic problems and service needs, can be directly or indirectly attributed to the BWI Airport presence. The 1987 BWI Master Plan calls for expansion of the airport runway system. Master Pian Public Hearings were held in December. 1986. Each of the runway expansion alternates under consideration would require additional use of the airport property south of the existing runways to Maryland Route 176. (See State Aviation Administration letter of December 30, 1985 In correspondence section). The SAA has recommended an expansion alternate south of and parallel to exiting runway 10/28.

There are currently ten industrial parks located within the Maryland Route 100 study area; six in Anne Arundel County and four in Howard County. A fifth industrial park is in the planning stages in the Howard County portion, and a seventh is under development in Anne Arundel County. These industrial parks are listed in Table III—4 and shown on Figure III—2.

Table III-5 summarizes 1980 census employment data for the study area, and for Anne Arundel and Howard Countles as a whole. The data show that the greater part of the labor force in the study area is employed in white collar occupations, although not to the same degree as the region as a whole. Unemployment rates varied significantly between the different census tracts, but the overall Anne Arundel County portion of the study area unemployment rate of 5.6 percent was slightly greater than that for Anne Arundel County as a whole. The 3.6 percent unemployment rate for the Howard County Portion of the study area was also greater than the entire Howard County Figure. Employment in farm operations is very minor throughout the study area. Anne Arundel County's single largest private employer, the Westinghouse Electric Corporation, with an employment of 15,000 people, is located just north of the Study Corridor adjacent to the BWI Airport.

TABLE 111-4 STUDY AREA INDUSTRIAL PARKS

Name	Approx. Acreage	Location
Friendship Airpark	27 Acres	South side of Dorsey Road at WB&A Road
BWI Commerce Park	60 Acres	Along Telegraph Road between Dorsey & Queens- town Roads
Baltimore Commons Business Park	400 Acres	North of Dorsey Road at Harmans
Airport industrial Park	65 Acres	NW Quadrant of BWI at Route 170
Parkway Industrial Center	200 Acres	NW Quadrant of Dorsey Road & B.W. Parkway
Parkway Industrial Center II	(being developed)	SW Quadrant of Dorsey Road & B.W. Parkway
Telegraph Industrial Park	40 Acres	East side of Telegraph at Wieker Road
Route 100 Industrial Park	176 Acres	East side of U.S. Route 1 North of Dorsey Road
Elkridge industrial Park	20 Acres	East side of U.S. Route 1 North of Dorsey Road
Harwood Industrial Park	35 Acres	East side of U.S. Route 1 North of Dorsey Road
Brookdaje industrial Park	16 Acres	East of U.S. Route 1 on Brookdale Road
Dorsey Business Center	82 Acres	N.E. Quadrant of U.S. Route 1 and Dorsey Road

TABLE III-5

EMPLOYMENT DATA
(1980 Census)

A.A. Co. Census Tract	Labor Total <u>No.</u>	Force Percent Unemployed	Percent White Collar	Occupati Percent Blue Collar	on Percent <u>Farm</u>	Percent Service
7401.01 7401.02 7402.01 7402.02 7506 7507	6148 1782 3936 1092 962 436	7.16 2.38 4.97 4.42 5.54 2.98	56.99 49.45 63.32 55.01 12.17 55.08	26.50 38.05 26.13 31.60 81.82 35.93	0.52 0.00 0.52 1.16 0.00 2.46	16.00 11.93 10.02 12.35 0.00 6.61
Howard Cou Census Tra						
6012	2776	3.60	49.51	37.23	0.90	12.36
A.A. Co. Total	172,785	4.54	60.3	12.08	0.87	26.75
Howard Co. Total	63,279	2.27	72.45	9.27	1.32	16.95

5. Land Use

a. Existing Land Use

Existing land use in the Maryland Route 100 study area is shown on Figure III-3. Residential land uses are generally located south of Dorsey Road in scattered communities described in Section III.A.1.d. Areas of commercial and light industrial activity are located throughout the study area in isolated locations or in conjunction with industrial parks which are more fully described in Section III.A.3. The remainder of the existing study area land use includes parcels of agricultural lands and conservational areas, woodlands, and open space, along with the large area covered by the BWI Airport.

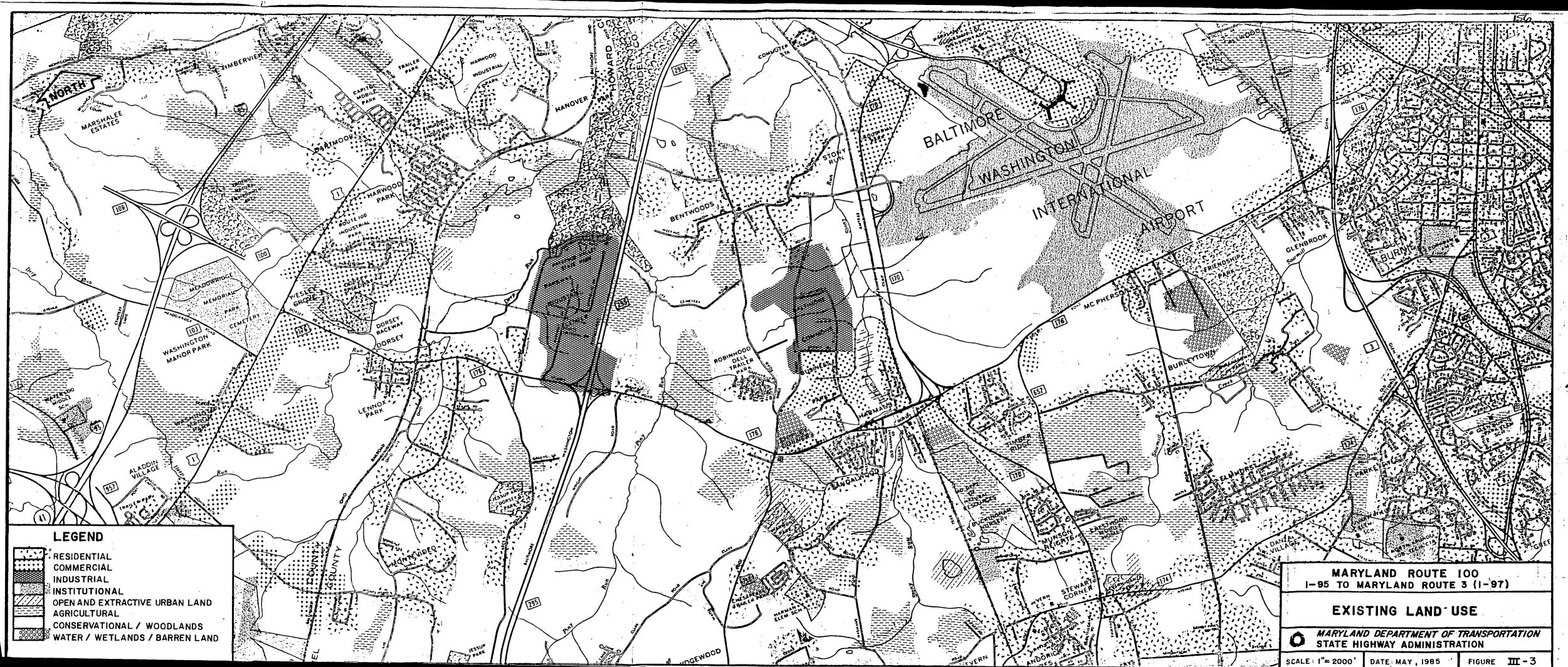
b. Future Land Use

Both Anne Arundel County and Howard County have established general development plans which include proposed land usage within their respective regions and serve as official policy for growth and development. The General Plan for Howard County was adopted in 1982. Because of its strategic location within the metropolitan Baltimore-Washington Corridor, increasing development is planned for the eastern portion of the County; and the challenge addressed by the General Plan was the need to accommodate this expected growth while maintaining the high quality of development which has characterized Howard County for the past two decades. The General Development Plan for Anne Arundel County, Maryland was adopted in 1978. Its expressed purpose is to establish policies to provide for and take advantage of future growth in a manner that will be beneficial to most people. It seeks to prepare for the County's future in a careful, positive, and consistent manner,

and to provide a policy framework within which decisions can be made to deal with problems facing the County. Information from proposed land use maps in these two documents have been incorporated onto Figure III—4 to show proposed land use for the Maryland Route 100 study area. The construction of a new Maryland Route 100 roadway connecting U.S. Route 1 with Maryland Route 3 is consistent with each of these development plans.

The Anne Arundel County General Development Plan proposes a near continuous band of light industry and industrial parks around the BWI Airport perimeter, and continued industrial park development in the Parkway industrial Center area. With the exception of open space and recreation areas, the remaining portion of the Anne Arundel County study area is proposed for residential land usage. Residential areas east of Telegraph Road and between Ridge Road and the Baitimore-Washington Parkway, will be rural (1/2 unit per acre or less), while residential areas west of the Baitimore-Washington Parkway and between Ridge Road and Telegraph Road are proposed to be low density residential areas (2 units per acre or less).

Figure III—4 shows that the Howard County General Plan calls for extensive industrial land use from the County line west to 1-95. West of 1-95, the proposed land use is predominantly residential, although a planned employment center is proposed for the S.W. quadrant of the interchange. The Howard County Office of Planning and Zoning projects that combined industrial and commercial land use in the Elkridge Election District (which includes the Howard County portion of the study areas) will increase from its 1985 area of 539 acres to 948 acres in the year 2005.



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B. <u>Transportation</u>

1. <u>Transportation Facilities</u>

The Maryland Route 100 Study Area and its surrounding region are serviced by major air, rall, ship, and highway transportation routes.

Two major links in the U.S. Interstate Highway System pass in a north-south direction through the Corridor. Interstate 95, as well as Maryland Route 295 (Baltimore-Washington Parkway), provides convenient automobile and truck access to Washington, D.C. to the south and to BaitImore and the entire U.S. Northeast Corridor to the north. Maryland Route 3 (Proposed interstate 97) will provide convenient interstate access south to Annapolis, as well as north to Baltimore. The study area's strategic location and excellent interstate highway access allows overnight truck transport to 30 percent of the nation's population and 36 percent of the nation's manufacturing establishments throughout the northeast, midwest and southeast. This consumer market within overnight reach of the study area represents: 70 million people, 31.5% of the effective buying income in the United States, and 29.3% of the retail sales in the U.S. Over 150 motor carriers are authorized to serve Anne Arundei County, and the southeast portion of Howard County is served by over 100 motor freight lines. The other major north-south route serving the study area is U.S. Route 1, roughly paralleling i-95, while the major east-west roadway is Maryland Route 176 (Dorsey Road).

Air service, both passenger and cargo, is provided by the Baitimore-Washington international Airport located adjacent to the Study Corridor. With 48 carriers it provides service to more than 240 domestic and overseas cities. In 1982, BWI handled a total of 4.5 million passengers on an average of 475 flights per day. It offers 24 hour air-cargo services through 8 cargo facilities.

Water transportation for the study area is provided by the nearby Port of Baltimore. Located as much as 200 miles closer to the midwest than any other of the Atlantic seaports, it is the third largest port in terms of cargo value in the U.S., and one of the safest and most secure ports in the world. It serves 4,500 ships from 45 countries annually.

Rail transportation is provided by the Chessie System (C&O/B&O/WM) and by AMTRAK, both of which have rail lines passing through the Study Corridor. AMTRAK has a commuter station adjacent to the EWI Airport, and with nine daily commuter trains it provides passenger transportation to cities throughout the U.S. Northeast Corridor.

2. Traffic Volumes

details in the project vicinity are shown in Figure I-3. Projected traffic volumes for the No-Build conditions in the design year 2010 are shown on Figure IV-1. These are Average Daily Traffic (ADT) volumes. The projected volumes indicate traffic demand associated with planned land use development and roadway improvements scheduled for implementation. These improvements include Maryland Route 176 (Dorsey Road) being upgraded to four lanes from Maryland Route 295 to Hammonds Ferry Road and Maryland Route 3 being upgraded to an interstate highway (I-97). The projected volumes assume that Route 100 is not built between I-95 and I-97.

As shown, projected traffic growth on Maryland Route 176 (Dorsey Road) is considerable since it will remain the major east-west roadway in the study area. The traffic increases average approximately 33 percent and range from 19 percent west of Route 295 to over 40 percent between Maryland Routes 713 and 170.

3. <u>Traffic Operations</u>

Level of service describes traffic operating conditions during peak hours and varies primarily with traffic volume, number of lanes and geometrics. It is a measure of such factors as speed, traffic interruptions or restrictions and freedom to maneuver. Six levels of service, designated A through F, from best to worst, have been established to identify traffic operations (<u>Highway Capacity Manual</u>, 1965). Level-of-service A represents a condition of relatively free flow (low volumes and high speeds). At level-of-service E, volumes are at or near the capacity of the highway. For a more detailed description of levels of service for uninterrupted and interrupted conditions, see the Glossary of Terms in Appendix A of this document.

A traffic analysis for the recent widening of Maryland Route 176 between Maryland Routes 295 and 652 has not been conducted. However, this widening is accepted as an interim relief measure and is not expected to significantly increase the level of service in this area. In the design year 2010, Maryland Route 176 will operate at a level-of-service F from U.S. Route 1 to 1-97 even though it would be four lanes wide between Maryland Route 295 and 1-97. The resulting level of service and traffic operations are not compatible with the 1978 General Development Plan for Anne Arundel County or the 1982 Howard County General Plan.

C. <u>Natural Environment</u>

Study Area Location

The Maryland Route 100 Study Corridor extends across northern Anne Arundel County Into eastern Howard County, Maryland. Figure I-1 is a location map of the Route 100 project. The area's physical geography, temperate climate, and association with the Baitimore Metropolitan area has provided a setting for a relatively rapid and recent residential growth trend. Much of the area does, however, still remain rural. Its nearness to Baitimore, and relative close proximity to Washington, D.C. and the seat of state government in Annapolis, provides assets which make the area a desirable place to live and work. The Baitimore/Washington International (BWI) Airport, located adjacent to the study corridor, has encouraged a rather extensive expansion of commercial and light industrial activities in the area.

2. Climate

Because of its latitude and proximity to the moderating influences of the Chesapeake Bay, the Maryland Route 100 study area experiences a relatively moderate, humid, temperate climate. Weather patterns tend to move from west to east, resulting in a continental type climate with well defined seasons. Average monthly temperatures at BWI Airport, adjacent to the study area, range from 33.4 degrees F. In January to 76.6 degrees F. In July. Minimum temperatures occur at the end of January and beginning of February with early morning temperatures averaging about 24 degrees F. Dally maximum temperatures occur in late July, averaging about 88 degrees F. The average growing season, or number of days between the last frost in the spring and the first frost in the fall, is 194 days.

Average annual precipitation at the BWI Airport is 40.5 inches. This is spread rather uniformly throughout the year, although the summertime is more prone to both heavy rain and drought conditions. Peak rainfall intensities are associated with thunderstorms or hurricanes. Significant freezing rain occurs on an average of two or three times per year, usually in January and February. The heaviest amount of snow usually falls in February. Snow flurries usually occur 25 days per year with snowfalls exceeding one inch occurring on an average of nine days per year.

3. Physiography - Topography

The Maryland Route 100 Study Corridor lies within two physiographic provinces, the Atlantic Coastal Plain and the Piedmont Plateau. The greater portion of the study area, including all of that within Anne Arundel County, lies within the Atlantic Coastal Plain province and is characterized by a level to gently rolling topography with slopes ranging from zero to ten percent. The western end of the study corridor, lying within Howard County, contains portions of both the Atlantic Coastal Plain and the Eastern Pledmont Plateau physiographic provinces. The Pledmont Province is composed of metamorphic rocks that have been upilifted and extensively folded and faulted, and exhibits a greater surface relief. In this area the relief is also level to rolling, but some slopes range up to fifteen percent.

Surface elevations in the study area range from a low of approximately 60 feet mean sea level (MSL), along the Deep Run floodplain to a high of approximately 240 feet MSL. at the I-95 interchange area.

4. Geology - Solls

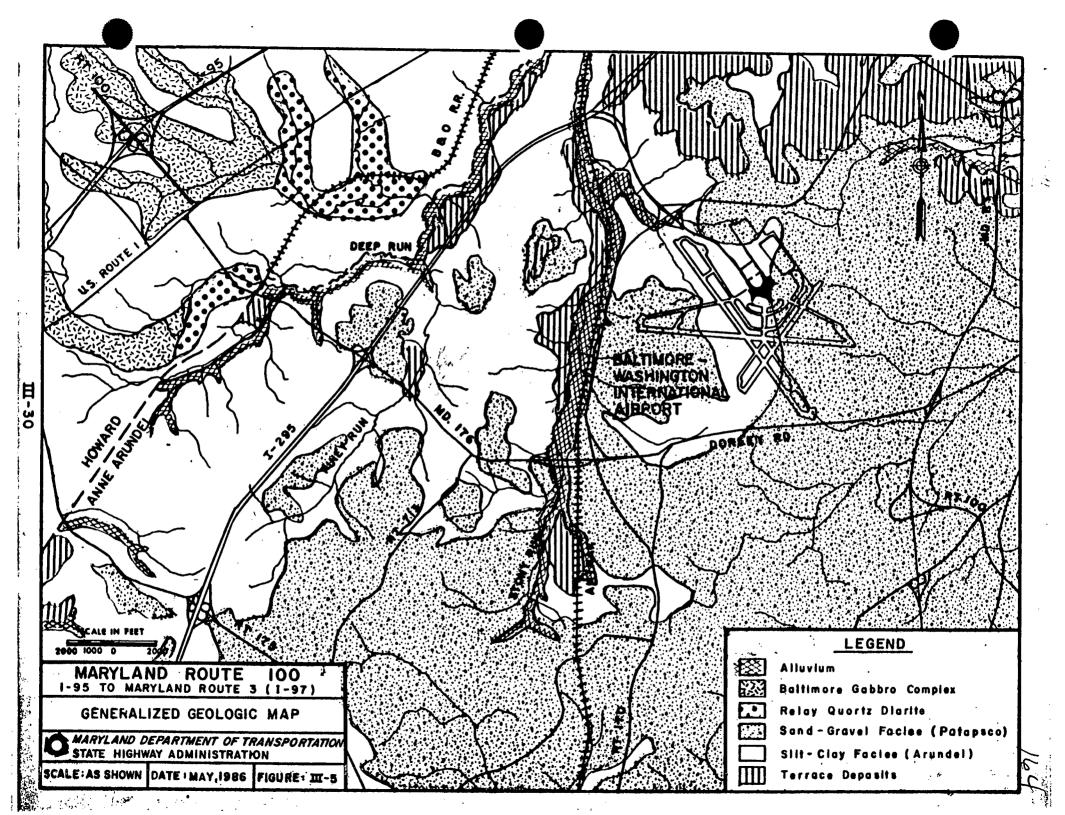
a. Geology

The Atlantic Coastal Plain Province, in which most of the study corridor lies, is underlain by a series of southeasterly dipping layers of unconsolidated sand and clay with lesser amounts of gravel. These sedimentary rocks form a relatively thin veneer over an eastward continuation of crystalline rock from the Pledmont Plateau, which outcrop in the western end of the study area.

The outcropping geological formations in the study area range in age from early Paleozoic in parts of the Howard County portion, to early Cretaceous in most of the Anne Arundel County portion, to recent along certain floodplains of the area. The specific formations found in the corridor are described as follows and as shown on Figure III-5.

Potomac Group - This complex group of sand-gravel and silt-clay facies, which were formerly divided into the Arundel and Patapsco formations, occupy nearly the entire northern third of Anne Arundel County and the great bulk of the study area. Thickness of the group ranges from 50 to 1,600 feet.

The Patapsco formation, or sand-gravel facles, outcrops in nearly the entire area east of Stony Run in Anne Arundel County and in large portions of the area west to Howard County. They are generally white, buff, red-brown to varicolored interbedded quartz sand, pebbly sand, gravel, and subordinate slit clay.



The Arundei formation, or silt-clay facies, outcrops extensively in the study area west of Stony Run and Into Howard County. They are generally red, tan, gray, buff, or mottled clay, silt, and subordinate fine to medium-grained muddy sand.

Baitimore Gabbro Complex - These are Early Piedmont Piutonic rocks outcropping in the U.S. Route 1 - 1-95 portion of the study area. The formation is mainly hypersthene gabbro with subordinate amounts of olivine gabbro, norite, anorthositic gabbro and pyroxenite.

Relay Quartz Diorite - This Early Pledmont Plutonic rock formation outcrops in areas east of U.S. Route 1 in Howard County. It is composed of intensively foliated, fine grained, light colored quartz diorite to albite granite.

Aliuvium - in the study corridor, aliuvium occurs along the Stony Run and Deep Run floodplains. It is composed of interbedded sand, slit-clay, and subordinate gravel. Aliuvium comprises very heterogeneous sediments with poorly-sorted muddy sand and slit the dominant lithologies. Organic matter, including leaves, branches, and logs, is a common component. In places, thin peats occur.

Terrace Deposits - Small areas of terrace deposits outcrop in the study corridor. These occur on terraces flanking Stony Run, Piney Run, and Deep Run as shown on Figure III-5. They are composed of a heterogeneous mixture of interbedded sand, gravel, and silt-clay, and are typically tan, buff, gray or reddish brown.

Present and potential geological resources of economic value in the study area include sand, clay and iron ore. Deposits of economically valuable sand occur in the sand-gravel facies of the Potomac Group (Patapsco formation) mainly in that portion of the study area east of Stony Run. These sand-gravel bodies range from 5 to 60 feet in thickness and consist of quartz sand, pebbly sand and sand gravel. A significant potential source of clay is in the slit clay facies (Arundel formation) west of Stony Run. These clays are lenticular, range in thickness from a few feet to 100 feet or more, and are suitable for bricks and other structural clay products. Around the turn of the century, one of the largest clay operations in the County was the Washington Hydraulic Pressed Brick Company, located south of Harmans. Several inactive or abandoned operations are located in this area.

From the early 1700's to the late 1800's, iron ore was one of Anne Arundei County's most important mineral resources. The ore occurs chiefly in the lower part of the slit clay facies, and several former iron ore operation sites are located on the western end of the study corridor, particularly between Deep Run and the Baitimore Washington Parkway. Maryland's largest iron ore operation was the Timber Neck Ore Banks (Great Falls iron Company) located about one mile northeast of the intersection of the B-W Parkway and Maryland Route 176. This area was once termed the "badlands" of Anne Arundei County due to the extent of the mining operations. No currently operational iron ore operations exist in the study area however.

Generally, geologic features of the study area pose no significant difficulty to roadway construction, although some precautions must be considered in highway design. Cut banks in thick Potomac clay bodies tend to be

unstable over long periods of time due to jointing; bank failures during wet weather stemming from slippage along joint planes are common as is wedging caused by freezing and thawing. Floodplain alluvium, as occur at Deep Run and Stony Run, generally underlie the floodplains from one valley wall to the other, and range in thickness from a few feet to as much as 15 feet. Constraints on construction in floodplains are several; the sediments are generally loose and water-saturated due to a perennially high water table and they are subject to inundation during flood events.

b. Soll Associations

The U.S. Soil Conservation Service along with the Maryland Agricultural Experiment Station has conducted soil surveys of Anne Arundel and Howard Counties. These surveys have classified and mapped the soils of the two counties into fifteen separate soil associations, where an association consists of at least one major soil series and one minor soil series which consistently occur together. The Route 100 Study Corridor encompasses four major soil associations. These soil associations are summarized below:

Evesboro-Rumford-Sassafras — Covering most of that portion of the study area in Anne Arundei County east of Ridge Road, this association consists of excessively drained and well-drained sandy and loamy solls, found on gently sloping to moderately steep slopes. The major solls have few limitations other than slope for residential and community development. Some important minor solls have limitations for use as building sites or for septic systems, because of their unstable substratum, slowly permeable sub-solls or seasonably high water table.

Mulkirk-Evesboro - This association covers the study area from approximately Ridge Road west to Deep Run in Anne Arundei County. It consists of well-drained loamy and clayey soils and excessively well drained sandy soils, found on nearly level to steep slopes. These soils are underlain by unstable clays, which pose a potential hazard to development.

Beltsviile-Chillum-Sassafras - Covering most of the Route 100 Study Corridor in Howard County, this association consists of deep, moderately well drained, gently sloping to strongly sloping soils of the Coastal Plain.

<u>Neshaminy-Monaito</u> - This soil association covers a small area between U.S. Route 1 and i-95 in the Howard County portion of the study corridor. It is composed of deep, well-drained, moderately slowly permeable, gently sloping to steep soils.

The Soil Conservation Service (SCS) has developed mapping for farmlands of statewide importance in Anne Arundel County. The information shows that there are no important farmlands in the study area west of the AMTRAK rail line. There are scattered areas of important farmlands between AMTRAK and the Baltimore Washington Parkway, but only a very small portion of these areas are classified as "Prime" farmland. No similar mapping for important farmlands has been performed by SCS for the Howard County portion of the study area.

An extensive evaluation of zoning maps and solis data for the MD Route 100 alternates has been performed by the Soli Conservation Service specifically for this project to determine if the Farmland Protection Policy Act (FPPA) applies to this area. The FPPA does not apply to any of the

alternates in Anne Arundei County due to either the preclusion from FPPA by current zoning, or to a lack of soils qualifying as prime or of statewide importance in those areas not precluded by zoning. However, a small area of statewide important soils was found to be applicable in Howard County.

5. Water Resources

a. Surface Water

Corridor lies entirely within the Patapsco River Watershed. That is, all surface runoff from the corridor ultimately finds its way to the Patapsco River and thence to the Chesapeake Bay. Within this major watershed, the study corridor crosses four tributary streams to the Patapsco River. These streams are Deep Run, Piney Run, Stony Run, and Sawmili Creek. Figure III-2 shows the drainage divides for their respective drainage areas. In addition to these streams, there are numerous natural and man-made ponds in the study area.

The total Patapsco River Watershed has a drainage area of 1056 square miles. The drainage area of those tributaries crossing the Route 100 Study Corridor totals approximately 41 square miles, or 3.9 percent of the Patapsco Watershed area. Some basic information on each of these tributary drainage areas is provided below:

<u>Piney Run</u> - Located entirely within Anne Arundel County, this stream is actually a tributary to and part of the total drainage area of Deep Run. The existing Dorsey Road crosses this stream approximately one-half mile east of the Baltimore/Washington Parkway. Its drainage area is 2.8 square miles.

Deep Run - This is the largest of the drainage areas overlain by the Maryland Route 100 Corridor, covering all of that portion within Howard County and extending into Anne Arundel County. Just north of Dorsey Road, the Howard/Anne Arundel County boundary leaves the B&O railroad line and follows this stream to the Patapsco River. Excluding the Piney Run subdrainage area, Deep Run has a total drainage area of approximately 17.8 square miles.

Stony Run - Generally paralleled on the east by the AMTRAK line, Stony Run drains that area of the study corridor which includes the community of Harmans and the western portion of BWI Airport. It has a total drainage area of approximately 9.9 square miles and flows directly to the Patapsco River.

Sawmill Creek - This stream drains the study corridor area east of Telegraph Road, including the community of Queenstown and the eastern portion of BWI Airport, as well as a major portion of Glen Burnie. With a total drainage area of approximately nine square miles, it is a tributary to Furnace Creek and Curtis Creek on their way to the Patapsco River. The U.S. Geological Survey did maintain a record gaging station on Sawmili Creek near Baltimore/Annapolis Boulevard (1944 to 1952) and recorded an average stream flow of 8.26 cubic feet per second (CFS). The peak 100-year flow at this location was determined to be 205 cfs.

(2) <u>Surface Water Quality</u> - Water quality standards have been developed by the State of Maryland for four different water use classifications, and all of the streams in the Maryland Route 100 corridor have been designated as Class 1 waters. Under this classification, the waters must be protected for contact recreation, fish and other aquatic life, and for

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wildlife. This protection is sufficiently stringent to allow for its use as a water supply.

The State does not have specific water quality sampling data for the four streams crossing the Route 100 corridor, but the West Chesapeake River Basin Water Quality Management Plan (1976) summarizes existing water quality for the Patapsco Watershed. Water quality is generally good with dissolved oxygen, pH, and temperature consistently meeting state standards. However, localized bacterial problems do occur. The streams are generally characterized by high turbidity and slow moving water. There are no known point source discharges of pollution into these streams, and the principle threat to water quality is from non-point source runoff from urban development.

(3) Floodplains - The four major streams of the Route 100 Study area typify most water courses in that they flow in definite channels bordered on both sides by flat areas or valley floors referred to as floodplains. The channel can contain within its banks a discharge of only moderate size, and during periods of high stage the floodplain is inundated and in effect becomes part of the river channel. These floodplains therefore provide design constraints on highway projects.

The Federal Emergency Management Agency (FEMA) under the National Flood insurance Program has mapped the limits of the 100-year floodplains for those streams in the Route 100 Corridor, and these floodplains are shown on Figure III-2. A 100-year flood is a storm that has a one percent chance of occurring in any year.



Ficodplains contribute to the area's environmental quality in a number of ways. They contain, retard and absorb ficod water, provide important wildlife habitats and buffer streams. Ficodplains are unsuitable for development which can be damaged by flooding or which will increase flooding.

Figure III-2 shows that Deep Run, Piney Run, Stony Run, and Sawmiii Creek all have 100 year floodplains along the study corridor, with some extending up to 600 and more feet in width.

b. Groundwater

Within the study area there are two major aquifers which supply groundwater for Anne Arundei County. These are the Patapsco and Patuxent formations, which occur as a series of Irregularly shaped wedges that dip gently, generally less than 1 degree, to the southeast. Groundwater is stored in the pore spaces of these granular deposits. The Patapsco formation outcrops extensively in the study corridor (See Figure III-5, Section III.C.4.), and these outcroppings serve as important recharge areas for the aquifer. The deeper Patuxent formation in the vicinity of the study area is a confined or artesian aquifer with its recharge area primarily to the west in Howard County.

The Patapsco is a muiti-aquifer formation consisting of irregularly stratified interbedded, variegated silt and clay and clayey, subgrounded, fine to medium grained quartzose sand; with minor amounts of gravel. Sand percentages of the total Patapsco thickness generally range between 25 and 50 percent. Individual sand beds often exceed 50 feet in thickness. It is an extremely productive groundwater source. Well yields

range from 3 to 2,160 gallons per minute (gpm); although yields over 1,000 gpm are exceptional. The Patapsco's transmissivity generally ranges between 160 ft 2 /day and 6,700 ft 2 /day (Hansen, 1972b) with the highest values occurring in Anne Arundel and Baltimore Countles. Storage coefficients for the formation tend to range between .005 and .00005.

The Patapsco Formation is the most widely used aquifer in the Maryland Coastal Plain, with most of this usage concentrated in the updip (that is: upwards and parallel to the dip of the formation) countles, including Anne Arundel. Generally, in most up-dip areas, the natural quality of Patapsco groundwater is good for potable supplies and most other uses. The water tends to contain less than 10 ppm of chlorides west of the Chesapeake Bay, and total dissolved solids are also low in the western portions of the formation. The up-dip portions of the formation which occur in the study area tend to yield very soft water, which is also acidic (low pH) with high concentrations of dissolved iron.

in parts of the Baltimore-Sparrows Point Industrial area, apparent over pumping and chemical contamination of the recharge zone in the past, seems to have altered the chemical quality of the formation's water. Some Patapsco wells in that Industrial area now produce water that is either abnormally acidic, high in hardness, and/or high in chlorides and total dissolved solids. This points out two potential problems with the Patapsco. These are: the possibility that over pumping in areas near to where the formation outcrops under brackish water could cause brackish water intrusion into the formation; and the possibility that indiscriminate dumping of wastes in the formation's recharge zones could contaminate the formation's groundwater.



The Patuxent Formation consists of irregularly stratified, cross-bedded and lenticular white or light gray to orange-brown, moderately sorted, angular sands and subgrounded gravels; also gray to ocherous silt and clay beds which occur in amounts ranging from less than 25 percent to greater than 75 percent of total formation. Like the Patapsco Formation, it is one of the most productive water bearing formations in Maryland. Its transmissivity ranges between 130 ft²/day and 10,700 ft²/day with the highest values appearing in Anne Arundel, Baltimore and Harford Counties. Typical Patuxent storage coefficients range between .001 and .00001. The best well yields range from a few hundred to 1,200 gallons per minute.

The natural water quality of the Patuxent Formation is generally good in most up-dip locations. In these up-dip areas, the formation's water is commonly soft, low in total dissolved solids (TDS), low in chlorides and with moderately low but acceptable pH levels. High iron content is, however, often a problem in the up-dip areas. Further down-dip the water tends to become harder, more alkaline, lower in dissolved iron content, higher in chlorides and higher in total dissolved solids until the water is too brackish for normal potable use in some parts of Maryland's Eastern Shore.

Arundei County maintains a major weil field which taps the Patapsco and Patuxent formation aquifers. This thirteen weil field is located along Dorsey Road and Hammonds Ferry Road and serves the Gien Burnie potable water service area. Two of the weils are observation wells only. Treatment is provided at the Dorsey Road Treatment Plant which provides aeration, chemical treatment, fluoridation, sedimentation, and flitration for a maximum capacity of 6.0 million gallons per day (mgd). Six of the weils in the Dorsey Road field are

drawing water from the Patapsco formation and five are drawing from the Patux-ent formation. The Patapsco wells range in total depth from 131 feet to 186 feet, and the Patuxent wells range from 474 to 590 feet. Figure III-2 shows the locations of these wells.

6. Ecology

a. Vegetation

With the advent of agricultural and urban land uses into the study area, formerly extensive woodlands have been greatly reduced. However, significant areas of woodlands do still remain. Brush, et al (1976), in the Vegetation Map of Maryland have identified large wooded areas in the corridor west of the Baltimore-Washington Parkway, along the Stony Run and Deep Run stream valleys, and in the southeastern portion of the study area. The woodlands along Stony Run and Deep Run have been identified as belonging to the River Birch-Sycamore Association, while the remaining woodlands belong to either the Tulip Poplar Association or the Chestnut Oak-Post Oak-Black Jack Oak Association. These associations are briefly described below:

River Birch-Sycamore Association - Associated species include, red maple, poison ivy, Virginia creeper, greenbriers, sweet gum, Japanese honeysuckie, southern arrowwood, tulip popular, spicebush, black gum, grape, ironwood, American holly, flowering dogwood, black cherry, green ash, white oak, brambies, elderberry, slippery elm, and sassafras.

Chestnut Oak-Post Oak-Black Jack Oak Association-Associated species include red maple, black gum, white oak, sassafras, green-briers, American holly, Virginia pine, black oak, Japanese honeysuckie, beech, early low blueberry, flowering dogwood, sweet gum, scarlet oak, Spanish oak,



mockernut hickory, Virginia creeper, biack cherry, sweet pignut hickory, dwarfhuckleberry, mountain laurel, southern arrowwood, and tail deerberry.

Tuilp Poplar Association - Associated species include red maple, flowering dogwood, Virginia creeper, black gum, white oak, sassafras, black cherry, grape, mockernut hickory, southern arrowwood, Japanese honeysuckie, pignut hickory, black oak, polson ivy, greenbriers, beech, spicebush, northern red oak, mapleleaf viburnum, early low blueberry, choke cherry, and brambies.

in addition to woodland vegetation, there are agricultural areas composed of old fleids, pasture, hay and grain crops; along with residential development with its associated vegetation of lawns, gardens, and ornamental trees and shrubs. Appendix D tabulates representative vegetation of the study area.

Threatened or Endangered Vegetation

The Maryland Natural Heritage Program maintains records of rare, threatened, or endangered plants which occur throughout the State, and their data indicate that no such species occur in the immediate vicinity of this project. Several state rare plants <u>Arundinaria gigantea</u> (Giant Cane), <u>Carex barrattii</u> (Barratt Sedge) and <u>Heionias bullata</u> (Swamp Pink) have been reported in the floodplains of Stony Run and Deep Run in the vicinity of Alternate 4. Two of these, <u>C. barrattii</u> and <u>H. bullata</u>, are federal candidate species presently under consideration by the U.S. Fish and Wildlife Service for listing as threatened or endangered species.

b. Wildlife

The diverse vegetation and land use patterns in the study area provide a variety of habitats for wildlife with four principal

types in abundance. These are forest, old field, wetland, and freshwater aquatic communities. Each habitat has its own characteristic wildlife population, and there is also a considerable amount of edge effect at the interface between habitats which enhances the productivity and diversity of wildlife. Appendix C lists representative species of animals of the study area. Birds, mammals, fish, frogs, salamanders, turtles, and snakes are all well represented.

Some of the streams in the project area are tributary to waters that have been recorded as anadromous spawning streams for species such as alewife, and white and yellow perch. However, streams that cross the study corridor are not known to serve as spawning areas.

Threatened or Endangered Wildlife

Except for occasional transient individuals, there are no known federally threatened or endangered species which reside in the study area, (refer to letter in correspondence section).

c. Wetlands

Wetland areas occur throughout the study area, predominantly along the major steams and tributaries. The U.S. Fish and Wildlife Service National Wetlands Inventory maps were used to identify wetlands of the study area, and these are shown on Figure III-2. Extensive areas of wetlands occur along Stony Run, and Saw Mill Creek and Deep Run, and scattered other pockets of wetlands occur throughout the corridor. These are all non-tidal wetlands of the Palustrine ecological system. Wetland areas along the streams are dominantly forested, broad leaf deciduous, mapped as having either temporarily flooded or seasonally flooded water regimes; with smaller areas of



narrow leafed, emergent vegetation of temporarily flooded water regime. The remaining wetlands include many open water, intermittently exposed ponds.

These wetlands are essential components of estuarine and freshwater ecosystems, providing valuable habitat and food for numerous species of plants and animals. Physically, the wetlands function as erosion control mechanisms and sediment traps. Hydrologically, vegetated wetlands function as buffer systems to flood water. Their unique water holding capacity, estimated to be as much as 300,000 gallons per acre, allows them to store excess water which is released at times of drought to aquifer recharge areas. Vegetated wetlands also provide significant pollution abatement by acting as nutrient sinks which decrease water pollution by metabolizing nitrates and phosphates and by absorbing and assimilating gaseous air pollutants.

A more detailed wetlands analysis has been performed for those areas that may be impacted by the developed alternates. Wetlands limits and characteristics were refined by the use of detailed soil series mapping from soil surveys of both Howard and Anne Arundel Counties, and by field investigations also. Field investigations were conducted on November 18, 1986 and March 30, 1987 with representatives of the U.S. Fish & Wildlife Service, the MD DNR wetlands Division, and the U.S. Corps of Engineers. Notes of this reconnaissance are included in the Correspondence Section. These soil surveys characterize the suitability of specific soils series for both wetland plants and wetland wildlife habitat. Ten separate wetland areas have been identified along the path of the selected alternate(Alternate 3B Modified). Limits of these areas are shown on Figures II-26 thru II-35, and Table III-6 summarizes information on each. Table III-6a summarizes data on wetlands associated only with the other Build Alternates.

TABLE III - 6 **DESCRIPTION OF WETLANDS**

			•		
Wetland (a Number	<u>Location</u>	<u>Classification</u>	Representative Vegetation	Approximate width thru Corridor (b)	Ÿ.
W-1	Along Sawmill Creek, East of Friendship Park	Palustrine forested Broad leaf deciduous Temporary flooding regime	Red Maple, Black Gum Winterberry, ferns, Chokeberry	775'	
W-2	Along Sawmill Creek near WB & A Road	Palustrine forested Broad leaf deciduous Temporary flooding regime	Sweet Gum, Red Maple, White Oak, arrowwood High brush blueberry	640'	
W-3	Buckingham Nursery	Palustrine forested and Palustrine emergent areas	Black Gum, Maple, Willows, River Birch, Cattails	675'	
W-4	Along Stony Run South of Koppers Plant	Palustrine forested and Palustrine emergent areas	Red Maple, Spagnum Moss, Winterberry, Viburnum	800'	
W-5	Stony Run Tributary NE of Harmons Park	Palustrine forested Broad leaf deciduous	Red Maple, Black Gum	570'	
W-6	Piny Run Tributary S.W. of Shipleys Corner	Palustrine forested, Broad leaf deciduous, Needle leaved evergreen	Red Maple, Black Gum, River Birch, Pitch Pine	180'	
W-7	Along Piny Run S. of Dorsey Road	Palustrine forested, Broad leaf deciduous	Red Maple, Black Gum, River Birch	250'	
W-8	Along Deep Run Trib. near Race Road	Palustrine forested Broad leaf deciduous	Sycamore, Red Maple, Viburnum	480'	
W-9	Along Deep Run North of Dorsey	Palustrine forested Broad leaf deciduous	Sycamore, Black Gum, Red Maple, Chokeberry	1760'	
W-10	Along Deep Run Trib. West of U.S. Route 1	Palustrine forested Broad leaf deciduous	Sycamore, Black Gum, Red Maple, Arrowwood	500'	
/ *					

⁽a) See Figures II-26 thru II-35
(b) Widths are approximate as estimated in the field and by soil survey data; may vary to time of year and hydrologic support system. Maps indicate approximate maximum extent.

TABLE III - 6 (a)
STUDY AREA WETLANDS SUMMARY

Wetland Number	Affected by Alternate No.	Location	Classification	Area (acres)
W2-1	2	BWI Airport nr. Post 11	PF01A	0.3
W2-2	2	BWI Airport @ Dorsey Rd.	PFOIA/PEMIE	1.9
W2-3	2	E. of Wright Rd. along Dorsey Rd.	PF0IA/R3UBL	4.5
W2-4	2	Along Dorsey Rd. opposite St. Marks Church	PFOIA	0.3
W2-5	2	01d Dorsey Rd. @ Dorsey Rd.	PEMIEX	0.2
W2-6	2	Between Dorsey & Old Dorsey W. of MD 170	PFOIE	2.1
W2B-1	28	S. of Friendship Pk. @ BWI	PFOIA	0.6
W-2B-2	28	Between WB & A Rd. & Route 3	PFOIA	1.9
W-2B-3	28	Along Jones Road	PFOIA	1.7
W-3A-1	3 A	At Bend in Jones Road	PFOIA	2.2
W-3A-2	3A	E. of WBA Rd., S. of Queens- town Road	PFOIA	` 2.0
W-3A-3	3A	W. of WB & A Rd.	PFOIA/R3UB	1.2
W-4-1	4	End of S. Thomas Rd.	POWHx/PEM5Gx/PF0IE	6.2
W-4-2	4	Along O'Connor Rd.	PFOIA	8.6
W-4-3	4	I 295/Race Rd. Int. Area	PFOIA	1.0
W-4-4	4	E. of I 295 @ Race Rd.	PFOIA	2.6
W-4-5	4	S.E. Quadrant I-295 Inter- change	R3UBI/PF0IE	5.5

TABLE III - 6 (a) (cont.)

STUDY AREA WETLANDS SUMMARY

Afforted by			
Alternate No.	Location	Classification	Area (acres)
4	I 295 interchange E. of I-295	PF01A/POWH	3.2
4 .	I-295 interchange N. of Rt. 100	PF01A/R3UB2H	1.6
4	Along Race Rd. E. of I-295	PFOIA	0.3
4	E. of Race Road	PFOIE/R3UBIA	1.7
4 .	E. of Deep Run	PFOIG	0.3
4	Patapsco St. Park	PFOIE	0.4
4	Patapsco St. Park, S. R/W	PFOIA	0.1
4	Patapsco St. Park, W. of Pond	PFOIA	1.3
4	Patapsco St. Park	PFOIE	1.0
4	Between Race Rd. & I-295	PFOIE	0.4
4	BWI Airport near Rt. 170	R3UB2	0.6
4	Patapsco State Park	PFOIA	0.8
4	Patapsco State Park	PFOIA	0.7
4	Patapsco State Park	R 4	0.1
4	Amtrack lines near I-170	PFOIA/POWx/ PEM5H/R3UBI	25.5
4	W. of Ridge Road	PFOIE	0.6
4	NW of W-4-21	PFOIA	1.0
4	BW & A Road	PFOIE	4.3
	Alternate No. 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Alternate No. Location I 295 interchange E. of I-295 I-295 interchange N. of Rt. 100 Along Race Rd. E. of I-295 E. of Race Road E. of Deep Run Patapsco St. Park Patapsco St. Park, S. R/W Patapsco St. Park, W. of Pond Patapsco St. Park Between Race Rd. & I-295 BWI Airport near Rt. 170 Patapsco State Park Patapsco State Park A Patapsco State Park A Patapsco State Park A Matrack lines near I-170 W. of Ridge Road NW of W-4-21	4 I 295 interchange E. of I-295 PFOIA/POWH 4 I-295 interchange N. of Rt. 100 PFOIA/R3UB2H 4 Along Race Rd. E. of I-295 PFOIA 4 E. of Race Road PFOIE/R3UBIA 4 E. of Deep Run PFOIG 4 Patapsco St. Park PFOIE 4 Patapsco St. Park, S. R/W PFOIA 4 Patapsco St. Park, W. of Pond PFOIA 5 PATAPSCO St. Park PFOIE 6 PATAPSCO ST. Park PFOIE 7 PATAPSCO ST. PARK PFOIE 8 PATAPSCO ST. PARK PFOIE 8 PATAPSCO ST. PARK PFOIE 9 PATAPSCO ST. PARK PFOIE 9 PATAPSCO ST. PARK PFOIA 9 PATAPSCO STATE PARK PFOIA

TABLE III - 6 (a) (cont.)
STUDY AREA WETLANDS SUMMARY

Wetland Number	Affected by <u>Alternate No.</u>	Location	Classification	Area (acres)
W-4-24	4	W. of WB & A Road	P35IA/PF0IA	3.4
W-4-25	4 .	E. of WB & A Road	PEM5A	0.1
W-4-26	4	E. of WB & A Road	POWX	2.0
W-4-27	4	Sawmill Creek area	PFOIA	1.7
W-4-28	4 .	Along Jones Road	PFOIA	2.2
WC-1	X Over	E. of Ridge Road	PEMIE	0.5
WC-2	X Over	E. of Ridge Road	PEM2A	0.3
WC-3	X Over	W. of Ridge Road	R41	0.1
WC-4	X Over	Piney Run N. of Dorsey Road	R35BI	0.8



7. Environmentally Sensitive Areas

Environmentally sensitive areas along the study corridor include the Troyhili Natural Environmental Area and the Maryland Department of Natural Resources' Buckingham Forest Tree Nursery.

In the eastern quadrant of the I-95 - Maryland Route 100 Interchange in Howard County is the Troyhili Natural Environmental Area. The area is a tract of approximately 57 acres of woodlands and pioneer growth which is also a historical site included on the National Register of historic places. Troy, which includes a house built in 1820, is the remaining fragment of an original 1100 acre parcel settled in 1695 by John Dorsey. Howard County has tentative plans for developing this site into an arboretum to be run by the Elkridge Heritage Society, which will include meadows and shrub planting, wildflower areas, and restoration of the existing building. The site will thus become an area of high scenic and environmental value. Since this area lies outside the study area limits, it will not be impacted by the project, and is not discussed further in this report.

The Buckingham Forest Tree Nursery is an approximately 130 acre area located adjacent to the AMTRAK line south of Dorsey Road (see Figure III-2). It is operated by the Maryland Department of Natural Resources to provide seedlings of various species for use throughout the State. Environmental concerns that have been identified for this site regarding impacts from a new roadway include loss of land for seeding beds, disruption or pollution of the spring fed system of irrigation ponds, and potential air pollution problems. A separate environmental study has been developed to address the concerns for this nursery, (Analysis of impacts on Buckingham Nursery resulting from Proposed MD Route 100 - October, 1986), and is available for review

at the Maryland State Highway Administration Library, 707 North Calvert Street, Baltimore, Maryland and at all State Depository Libraries. The results are summarized below and in Section IV.C.5 of this document.

The Buckingham Nursery property is comprised of several habitat types based on natural successional stages, past mining practices and present nursery practices. Various portions of the property are used by State Forest, Park and Wildlife personnel for production of seedlings, seed orchards, field production areas, and tree plantation areas. There are also fallow fields, grass covered areas and newly cleared areas.

Seed areas are used to grow tree seedlings on an annual or blannual basis. Seed orchard areas are planted groves of trees used to produce seeds. These seeds are then harvested and used to produce seedlings. Field production areas are fields used to grow trees beyond the seedling stage. These trees are raised to sapling stage before being removed for planting elsewhere or are used to grow trees from which cuttings are taken on an annual basis.

There are several areas referred to as tree plantations and most of these are in white pines. The areas are used primarily for screening and aesthetics. Fallow fields are generally covered with sparse herbaceous growth, and these areas will be converted to tree production/propagation depending on the nursery scheduling. In addition, there are 15.1 acres of newly cleared land. A large portion is expected to be used in the near future for seed beds.

There are also wetland areas in the nursery described in the National Wetlands inventory as palustrine, forested broad leaf, deciduous, seasonal (PFOIC). This wetland type is characterized by a thin canopy,

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a well-defined shrub layer and hummocking. Red maple is the dominant canopy species, with sweet bay scattered throughout (facultative wetland species). Willow and tupelo are also occasional species. Pines and oaks are found along the drier edges and on raised areas which appear to be spoil piles and abandoned roadbeds.

Several small ponds are located within the nursery. These ponds are mostly excavated, having been created by past mining practices. The ponds are classified as PCWFx or PCWZx (palustrine, open water, unknown bottom, semipermanent or intermittently exposed/permanent, excavated). The largest pond is used as a source for nursery irrigation water.



D. Air Quality

The Maryland Route 100 project is within the Metropolitan Baitimore interstate Air Quality Control Region. While only a portion of the region does not meet the primary standards for carbon monoxide (∞), the entire region is subject to transportation control measures such as the Vehlicie Emission inspection Program.

A detailed microscale air quality analysis has been performed to determine the ∞ impact of the proposed project and is described in further detail in Section IV.D.

E. Noise

Existing Noise

Existing noise conditions in the study corridor are described in detail in Section IV.E.2., Ambient Noise Level Measurements, and in a supplemental report to this EIS (Maryland Route 100 - Noise Analysis Report). Noise sensitive areas along the study corridor such as residences, schools, hospitals, and parks, are identified in Section IV and ambient noise levels are presented.

In this assessment, noise levels are presented in terms of the A-weighted equivalent sound level, abbreviated here as Leq. It is a single number representation of the actual fluctuating sound level that accounts for all the sound energy during a given period of time. The units of Leq are A-weighted decibels or dBA. The A-weighting means that the sound level is measured in a method that approximates the response of the human ear with deemphasis of low and very high frequencies, and emphasis on the mid frequency range.

In most residential areas, Leq values generally range between 50 dBA and 70 dBA. Quiet rural areas can be below 50 dBA, while noisy urban areas with either high volumes of street traffic or aircraft overflights can be above 70 dBA. Tables in Section IV.E. present the measured existing or "ambient" values of Leq along the proposed Maryland Route 100 corridor. In general, existing Leq ranges from mid-50's dBA to upper 60's dBA. Only within approximately 50 feet of Dorsey Road do existing street traffic noise levels exceed 70 dBA Leq.



It should be noted that throughout the study area, noise from aircraft operations at Baitimore-Washington international Airport are audible, if not dominant. Aircraft noise, however, cannot be considered to completely cover up or "mask" street traffic noise. Aircraft noise is very different from street traffic noise, being characterized by relatively short duration, high level events, with quiet periods in between. Traffic noise, on the other hand, tends to be fairly constant in level, varying slowly as rush periods begin and end.

Thus, though aircraft noise exists, and was measured throughout the study area, it has been separated from the measured ambient Leq values. Tables in Section IV.E. showing measured ambient Leq values give both the total or "with aircraft" noise levels and the non-aircraft or "without aircraft" noise levels.

Future Noise impacts

The effects of noise from the proposed Maryland Route 100 are judged in accordance with Federal Highway Administration (FHWA) standards and Maryland State Highway Administration (SHA) guidelines. According to FHWA regulations as given in 23CFR772 or in FHPM 7-7-3, traffic noise impacts occur when:

"...the predicted traffic noise levels approach or exceed the noise abatement criteria (see Table III-7), or when the predicted traffic noise levels substantially exceed the existing noise levels."

FHWA regulations further state that noise impact should be assessed for the noisiest hour of the day in the design year (this is usually the peak hour). Maryland State Highway Administration also considers an increase of 10 dBA or more above existing ambient levels to represent a significant impact.

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TABLE III-7

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

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



Throughout the study corridor, all noise sensitive land uses are considered to fall in Activity Category B of Table III-7. Thus noise impacts occur when computed design year Maryland Route 100 traffic Leq values exceed 67 dBA, or when these computed levels exceed the measured "without aircraft" levels by 10 dBA or more.

F. Cuiturai Resources

1. Historic Sites

The Maryland Historical Trust, in conjunction with the State Highway Administration, has identified seventeen sites of historical significance in the study area. Two sites, the Smith farm located near Telegraph Road at Queenstown Road and the Shipley House located on Ridge Road south of Shipley Corner, are considered eligible for the National Register by the State Historic Preservation Officer. The remaining 15 sites have been designated as being of Maryland inventory Quality only, and not thought to meet the criteria for inclusion in the National Register. These historical sites are described in Table III-8 with their historical significance, and are located on Figure III-2.

The Bill Shipley House, (AA 125) is a frame house, built in the mid-nineteenth century, located on a hill overlooking the intersection of Dorsey and Ridge Roads. Consisting of two parts, the south section is two stories high and three bays long, with a long two story wing attached to the east on the rear side. Attached to the north side is another two story, 3 bay structure which served as a store until 1913. The house is complemented by a board and batten barn, numerous sheds and a frame corncrib which are located east of it. The building and its setting retain considerable integrity and is a visual reminder of the rural character of the area in the nineteenth and early twentieth century. It is also significant for its association with the Shipley family, prominent in the area, who built the house and occupied it until the sale to the current owner.



The Smith Farm is visually dominated by the large, two story, four bay frame house which sits on a hill overlooking the surrounding cropland. This large, rambling, frame structure, probably built in the third quarter of the nineteenth century by the Smith family, is complemented by numerous farm buildings of later vintage, and a family cemetery located next to the house. The farm is significant as a palpable link to the agrarian and rural character of this section of Anne Arundel County in the nineteenth and early twentieth century and for the architectural character of the house and its traditional setting.

2. Archeological Sites

A Phase | Archeological investigation of the project area identified 24 archeological sites that would be impacted by alternatives being considered. Of these, five prehistoric sites (18AN579, 18AN582, 18AN29A, 18AN352, 18AN580) and one historic site (18AN596) were identified as having potential National Register significance. One site, 18AN352, will not be impacted by alternates now being considered.

With the selection of Alternate 3B (Modified), Phase II archeological work will be undertaken at sites 18AN596, 18AN580, and either 18AN579 or 18AN582 to determine site boundaries, degree of impact, and National Register eligibility. If Alternate 4/3B had been chosen, Phase II archaeological work would have been undertaken at site 18AN29A.

Additional Phase I archeological reconnalssance would also have been undertaken in archeological test tract 12, along Alternate 4/3B which was not previously surveyed. This tract will not be impacted by Alternate 3B (Modified).

TABLE III-8

STUDY AREA HISTORICAL SITES

^{*} See Figure III-2 for location of site

IV ENVIRONMENTAL CONSEQUENCES

IV. ENVIRONMENTAL CONSEQUENCES

A. Social and Economic

1. Social impacts

a. Residential Displacement and Relocation Availability

Residential displacement is based on preliminary relocation studies conducted by the State Highway Administration. The preliminary relocation report is available for examination at the offices of the State Highway Administration, 707 North Caivert Street, Baltimore, Maryland. Relocation of any families and individuals displaced by the proposed project would be accomplished in accordance with the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (P.L. 91-646) and as amended in 1987. A summary of the relocation assistance program of the State of Maryland is given in Appendix B.

No-Bulld Alternate

The No-Build Alternate would result in no residential relocations or displacements. This alternate would not serve the planned residential and commercial development throughout the study area and is not consistent with proposed land use for both Anne Arundel and Howard Countles.

Maryland Route 100 Alternates

Alternate 2 - Option A would require the relocation of 38 residences of which 34 are owner-occupied and 4 are tenant-occupied, affecting approximately 152 persons.

Under Alternate 2 - Option B, 39 residences would be relocated involving 35 owner-occupied and 4 tenant-occupied residences. Approximately 156 persons would be affected by this alternate.

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The relocation of 39 residences would be required for Alternate 3 - Option A. These relocations include 31 owner-occupied and 8 tenant-occupied residences affecting approximately 156 persons.

Alternate 3 - Option B would require 29 residences to be relocated, of which 19 are owner-occupied and 10 are tenant-occupied. Approximately 116 persons would be affected.

The Alternate 3 interchange option at Maryland Route 295 would require 3 additional owner-occupied relocations; the interchange option at Maryland Route 713 would require no additional relocations; and the interchange option at Maryland Route 170 would require 1 additional owner-occupied relocation.

Alternate 38 (Modified), the selected alternate, would require 22 residences to be relocated of which 12 are owner-occupied and 10 are tenant-occupied. Approximately 88 persons would be affected.

For Alternate 4, 33 residences would be relocated of which 32 are owner-occupied and 1 is tenant-occupied. Approximately 132 persons would be affected by this alternate.

W.B.& A. Road would require 25 residences to be relocated of which 24 are owner-occupied and 1 is tenant-occupied. Approximately 100 persons would be affected.

The Alternate 3-Crossover-Alternate 4 alignment would require the relocation of 40 residences of which 37 are owner-occupied and 3 are tenant-occupied. This alternate would affect approximately 160 persons.

All the required relocations are expected to be completed in a timely, orderly and humane manner and without any undue hardship to those

affected. A reasonable lead time of 24 months from the date of the initiation of negotiations would be necessary to accomplish the required relocations. "Housing of Last Resort" would be utilized, if necessary, to provide comparable decent, safe and sanitary housing.

. A survey of the local real estate market reveals that there is sufficient comparable replacement housing in the area for the dislocated The survey for the Howard County area of the project was made in January, 1986 and the survey for the Anne Arundel County area of the project was made in March, 1987. Of the 25 homes found to be for sale in the Howard County area of the project, 3 were in the asking price range of \$30,000 to \$60,000 and 22 were greater than \$60,000. Four homes were found to be for rent with the monthly rent greater than \$300. All of the 118 homes found to be for sale in the Anne Arundei County area of the project were in the asking price range greater than \$60,000. Ninety-one rental units (twenty-four onebedroom apartments, 36 two-bedroom apartments, eleven two-bedroom homes, 18 three-bedroom homes and 2 four-bedroom homes) with monthly rents greater than \$300 were found to be available. However, it should be noted that the nearest replacement housing for those families displaced from the Queenstown community would be in the Gien Burnle/Ferndale or the Ft. Meade area since there is no sufficient housing available within the community. There are no adverse impacts expected to the communities to which the displacees may move and there are no known outside projects which would affect the availability of replacement housing. No significant change in population density or distribution is expected.

in addition to the required displacements, an additional amount of right-of-way would be required from other properties to accommodate



the new alignment required under each alternate. While much of the land is vacant, some parcels have been proposed for future development. Table S-1 in the summary shows the acreages affected by type under each alternate.

b. Effects on Minorities, Handicapped, Elderly Persons

The Build Alternates would have the following effects on minority residences:

Alternate 2 - Option A would displace 20 minority owner-occupied and 3 minority tenant-occupied residences. Approximately 80 persons would be involved. There would be 2 minority owner-occupied relocations from the Dorsey community located in the northwest quadrant of the existing Dorsey Road/Race Road intersection. From the immediate area east of the existing Dorsey Road/Maryland Route 295 interchange, 2 minority owner-occupied and 1 minority-tenant occupied residences would be displaced. The community of Shipley Corner would experience 4 minority owner-occupied, 1 minority tenant-occupied and 1 minority church displacement. One minority owner-occupied residence would be relocated from the southeast quadrant of the existing Dorsey Road/Maryland Route 170 interchange and 9 minority owner-occupied residences would be relocated from the Queenstown community.

Under Alternate 2 - Option B, 21 minority owner-occupied and 3 minority tenant-occupied residences would be relocated. This alignment has the same impacts as those for Alternate 2 - Option A, except that 10 minority owner-occupied residences would be displaced from the community of Queenstown.

The alignment for Alternate 3 - Option A would displace 24 minority owner-occupied and 1 minority tenant-occupied residences. There would be 5 minority owner-occupied relocations from the Dorsey community

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iocated in the northwest quadrant of the existing Dorsey Road/Race Road Intersection. From the immediate area east of the existing Dorsey Road/Maryland Route 295 interchange, 3 minority owner-occupied residences and 1 minority tenant-occupied residence would be displaced. One minority owner-occupied residence and 1 minority church would be displaced from the Shipley Corner community. There would be 4 minority owner-occupied relocations from the Burleytown section of Queenstown which lies along W.B.& A. Road north of Dorol Court and the Queenstown community near Jones Road would experience 8 minority owner-occupied relocations.

Alternate 3 - Option B would displace 9 minority owneroccupied and 2 minority tenant-occupied residences. This alignment has the
same impacts as those for Alternate 3 - Option A from 1-95 to the Maryland
Route 170 Interchange. East of Maryland Route 170, Option B curves northeasterly around the Queenstown community before tieing into existing Route 100 at
1-97. One minority tenant-occupied residence would be displaced from the area
where Option B crosses under Queenstown Road.

The Alternate 3 interchange option at Maryland Route 295 would require 3 additional minority owner-occupied relocations.

The Alternate 3 Interchange options at Maryland Route 713 and Maryland Route 170 would not require any additional minority relocations.

Alternate 3B (Modified), the selected alternate, would displace 7 minority owner-occupied and 3 minority tenant-occupied residences. There would be three minority owner-occupied relocations from the Dorsey community located in the northwest quadrant of the existing Dorsey Road/Race Road intersection. From the immediate area east of the existing Dorsey Road/Maryland Route 295 interchange, three minority owner-occupied residences and one



minority tenant-occupied residence would be displaced. One minority owner-occupied residence and one minority tenant-occupied residence would be displaced from the Shipley Corner community. There would be one minority tenant-occupied relocation from the Queenstown community in the vicinity of the Smith Farm.

For Alternate 4, 12 minority owner-occupied residences would be relocated. Along Weeping Willow Road just east of Maryland Route 295, two minority owner-occupied residences would be displaced. One minority owner-occupied residence would be relocated from the area north of Calvary Church along Ridge Road and 9 minority owner-occupied residences would be displaced from the Queenstown community.

Under the Alternate 3 - Crossover-Alternate 4 alignment, 25 minority owner-occupied residences and one minority tenant-occupied residence would be relocated. There would be 5 minority owner-occupied relocations from the Dorsey community located in the northwest quadrant of the existing Dorsey Road/Race Road Intersection. From the area immediately east of the existing Dorsey Road/Maryland Route 295 Interchange, 10 minority owner-occupied residences and one minority tenant-occupied residence would be displaced. One minority owner-occupied residence would be relocated from the area south of Calvary Church along Ridge Road and 9 minority owner-occupied residences would be displaced from the Queenstown community.

Alternate 4/3B would require three minority owner-occupied residences to be displaced. Two of these relocations are along Weeping Willow Road and one is in the area north of Calvary Church along Ridge Road.

Because of close community relationships, the State Highway

Administration will consider every reasonable measure to maintain neighborhood

continuity. Relocation Assistance personnel will meet with each person to ascertain their replacement housing needs prior to displacement. Every effort will be made to mitigate community disruption and serve the individual needs by conducting relocation assistance informational meetings. These meetings will be designed to solicit community input and ideas regarding comparable replacement housing. While comparable replacement housing is available in nearby areas, special efforts will be examined including the use of Last Resort Housing to maintain, where possible, community ties. Close Halson with community leaders will be maintained to insure that individual needs are meet through advisory services.

The needs of the elderly and handlcapped will be considered as well as those of minority individuals.

The construction of Alternates 3 or 4 would remove through traffic from the local road network and would thus have a positive impact on access and travel patterns for any elderly who may walk and drive along those roads.

c. <u>Summary of Equal Opportunity Program of Maryland State</u> Highway Administration

it is the policy of the Maryland State Highway Administration to ensure compliance with the provisions of Title VI of the Civil Rights Act of 1964, and related civil rights laws and regulations which prohibit discrimination on the grounds of race, color, sex, national origin, age, religion, physical or mental handlcap in all State Highway Administration program projects funded in whole or in part by the Federal Highway Administration. The State Highway Administration will not discriminate in highway plant



ning, highway design, highway construction, the acquisition of right-of-way, or the provision of relocation advisory assistance.

This policy has been incorporated into all levels of the highway planning process in order that proper consideration may be given to the social, economic, and environmental effects of all highway projects. Alleged discriminatory actions should be addressed to the Equal Opportunity Section of the Maryland State Highway Administration for investigation.

d. Access to Neighborhoods, Communities, and Community Facilities

For the most part, the Build Alternates would improve accessibility, travel time, and safety by separating local and through traffic. Access and travel time would improve for travel both within and outside the study corridor for intercounty commuters, local residents, and businesses in developing industrial areas. Maryland Route 100 would accommodate a majority of through and business truck traffic allowing less congested local business and residential use of Maryland Route 176 and intersecting streets. Interchanges would facilitate quicker and easier access, especially during peak volume periods.

No-Build Alternate — under this alternate, deteriorating traffic conditions will continue to worsen in the project area as congestion increases; posing hazards to children, bicyclists, pedestrians, and nearby residents. The increase in traffic and related congestion would lead to more disruptions to the residential and commercial development along existing Maryland Route 176 than would any of the build alternates. The No-Build Alternate would also lead to disruptions to communities along adjacent roads



(notably Queenstown Road) as traffic would increasingly use these roads to avoid the congestion along Route 176.

Alternate 2 - From I-95 east to Maryland Route 295, this alternate would disturb no communities except for the part of Dorsey Road at the Maryland Route 176/Race Road intersection where there would be 6 residential displacements and disruptions to patterns of interaction would occur. While this alignment which is on new location would divide the community, access across MD. Route 100 is provided via the intersection with Race Road. This alternate would remove the through traffic of Maryland Route 176 from Race Road west to U.S. Route 1 increasing safety and access to the developments in this area.

Under this alternate the intersection of Maryland Route 176/U.S. Route 1 would be relocated approximately 1/4 mile south, to opposite Meadowridge Road, due to interchange construction. The existing intersection will terminate with a cul-de-sac. This relocation would not result in any significant changes in access or driving time for those using Maryland Route 176. Interchange construction at U.S. Route 1 would also result in the relocation of a residential area access road to opposite the relocated entrance to the Maryland Route 100 Business Park. These relocations would not have significant adverse effects in terms of accessibility.

Alternate 2 would continue east across the Chessie System (B&O Railroad) and O'Connor Road on bridge, tying into existing Maryland Route 176 at Race Road. Parkway Drive South will be connected by service roads to the existing Maryland Route 176 and Parkway Drive North (Parkway Industrial Center access) will also be connected by service roads to the Alternate 2



alignment. Accessibility and travel time should not be significantly affected.

Alternate 2 then interchanges with Maryland Route 295, running parallel, and just south of, Maryland Route 176. Access from Wright Road would be relocated east of its present intersection. Existing Dorsey Road, east of Maryland Route 295, would become a service road accessed by Alternate 2 at the intersection with the relocated Wright Road. This causes the travel distance to St. Marks United Methodist Church from the east to increase by approximately one (1) mile and no other significant impacts on accessibility are anticipated.

From Maryland Route 295 east to Maryland Route 713 (Ridge Road), Alternate 2 would cause 4 residential relocations from the area of the existing Wright Road/Dorsey Road Intersection and at the Ridge Road/Dorsey Road Intersection, displacements of 7 residences, 6 businesses, a church and cemetery would cause disruptions to the community of Shipley Corner.

The Alternate 2 alignment shifts slightly north of Maryland Route 176 East of the Ridge Road Intersection to minimize impacts to the Sandalwood and Ridge View developments. There would, however, be an increase in traffic on some roads within the developments since access to the alignment in this area from the developments is limited to Leeds Road and Harmans Road. The Anne Arundel County Fire Department, located just east of Ridge Road, would be provided with emergency—only access to both eastbound and westbound Route 100. The Sandalwood development would have access from and to eastbound Route 100 at Leeds Road. There would be no direct access to Route 100 from

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Sandaiwood Court. At the existing entrance to the Baitimore Commons industrial Park, there would be an at-grade intersection allowing access to the industrial park to the north and Old Dorsey Road to the south. Access from Harmans Road to westbound Route 100 would be at this Intersection while access from Harmans Road to eastbound Route 100 would be at the existing Dorsey Road/Harmans Road Intersection. There would be access to and from westbound Route 100 at Shipley Avenue. Access to eastbound Route 100 from Shipley Avenue would be via U-turns at the Baitimore Commons industrial Park intersection and access to Shipley Avenue from eastbound Route 100 would be via U-turns at the Maryland Route 170 interchange. Near Sandalwood, there would be access to and from westbound Route 100 for those residences along the north side of Dorsey Road and these residences would have access to eastbound Route 100 via U-turns at the Route 713 Intersection and access from eastbound Route 100 via U-turns at the Baltimore Commons Industrial Park Intersection. Travel to the Wesley Grove United Methodist Church from the east would be increased by approximately three-fourths of a mile and travel from the church to the west would be increased by approximately two-thirds of a mile.

The Alternate 2 alignment then bridges over the AMTRAK railroad and interchanges with Maryland Route 170 (Camp Meade Road). Access to the road leading to the Buckingham Tree Nursery is maintained.

East of Maryland Route 170, Alternate 2 is north of existing Dorsey Road and does not directly impact the Timber Ridge development. There is an at-grade intersection with Maryland Route 652 (Telegraph Road) which maintains access to the development.

The Alternate 2 - Option A alignment then turns south of Maryland Route 176, Intersecting at-grade with W.B.& A. Road, and continues



onto the I-97/Route 100 interchange. Access to the northern section of Queenstown would be maintained by bridging over a relocated Jones Road. Alternate 2 - Option B continues to run parallel to Maryland Route 176 east of the intersection with Maryland Route 652, turning south along the edge of Friendship Park and tying into the I-97/Maryland Route 100 interchange which is identical to Option A. The VFW Post 160 building would be relocated under Option A while Option B would maintain access to the building since existing Dorsey Road would serve as a frontage road.

Under either option, there will be no significant increases in travel time or circuity of travel for the residents of Queenstown to use the existing road network. However, both options cross through the residential area of Queenstown near the existing Maryland Route 100 terminus at Maryland Route 3 with Option A requiring 9 relocations and Option B requiring 10 relocations at Maryland Route 3. Even though both options would bridge over a relocated Jones Road, the roadway would be a physical barrier that would essentially divide the community into north and south sections. Both options also would require the acquisition of the northern corner of the Metropolitan United Methodist Church property. Neither option would disturb Queenstown Park.

Alternate 3 - This alternate follows the alignment of Alternate 2 from U.S. Route 1 east to Maryland Route 295. Where relocated Dorsey Road ties into Race Road, there would be an interchange instead of the Alternate 2 at-grade intersection. This alternate would basically have the same effects as Alternate 2, except that 10 residential relocations would be required from the Maryland Route 176/Race Road Intersection. Access across the freeway is provided via an overpass on the relocated Race Road.

Alternate 3 begins to diverge south of Maryland Route 176 east of Maryland Route 295. Wright Road would be relocated and bridged over Route 100 to tie into existing Dorsey Road. Access to Route 100 from Wright Road would be at the relocated New Ridge Road interchange, increasing the travel distance from Wright. Road to westbound Route 100 and from eastbound Route 100 to Wright Road by approximately one and three-quarter miles. Four relocations would be required from the area of the existing Wright Road/Dorsey Road intersection. The Mount Pilgrim Baptist Church would be relocated. There would be no disturbance to St. Marks United Methodist Church, the Piney Run House, the Shipiey House, Harmans Park or the Assembly of God Church.

The interchange at the relocated New Ridge Road (Maryland Route 713) includes an at-grade intersection of New Ridge Road and Dorsey Road which provides convenient access for the Anne Arundel County Fire Department to both eastbound and westbound Route 100. This interchange would also require the relocation of Watts Avenue and Ridge Chapel Road, resulting in an at-grade intersection on Route 713. Existing Route 713 would terminate with cui-de-sacs at the freeway.

The relocated New Ridge Road would be slightly longer but similar access to the existing roads would be maintained and no significant adverse impacts on travel to and from this area is anticipated.

The Alternate 3 alignment then crosses Harmans Road which would be closed at the freeway. Access from Harmans Road south of the freeway to Maryland Route 176 would be via Ridge Chapei Road and relocated New Ridge Road. Access to Harmans Elementary School would be one mile longer and more circuitous for those from the Maryland Route 176 area normally using Harmans Road and increasing traffic would result in front of the school. Traffic



along Ridge Chapel Road is expected to increase due to the closing of Harmans Road and the provision of the interchange on MD Route 100 with the Relocated Ridge Road. No relocations are required from the Matthewstown community.

Maryland Route 652 (Telegraph Road) would be closed with cul-de-sacs just north of the Alternate 3 Interchange with Maryland Route 170. This road closure would have no significant effect on accessibility to the area, including the Munson Heights Development.

The Alternate 3 - Option A alignment would then continue eastward from Maryland Route 170 and across W.B.&A. Road 1,300 feet south of Queenstown Road. W.B. & A. Road would be closed with cul-de-sacs on each side of the freeway and thus residences along W.B. & A. Road south of the freeway would have to travel to Dorsey Road via Maryland Route 174 and 170 and to Queenstown via Route 174 and Queenstown Road. The freeway crosses under Queenstown Road, and Queenstown Road will remain at-grade. A swim club and 4 residences would be relocated and W.B.&A. Road would terminate at the freeway thus separating those residences along W.B.&A. Road south of the freeway from the Burleytown section of the Queenstown community at the intersection of W.B.& A. Road and Queenstown Road.

The Alternate 3 - Option A connection to 1-97 would be similar to Alternate 2 except that the ramp alignment would not cross Jones Road. The alignment would cross through the Queenstown community and require the relocation of 8 residences. Even though Queenstown Road would bridge over the freeway, the alignment in this area would act as a physical barrier that would essentially divide the Queenstown community into 'north' and 'south' sections.

Pag

From the Maryland Route 170 Interchange, the Alternate 3-Option B alignment would curve northeasterly and cross under Queenstown Road and continue north of the Burleytown & Alberta Heights sections of the Queenstown Community. Queenstown Road would bridge over the freeway at approximately its current grade. Two residences would be displaced from the area where the alignment crosses under Queenstown Road. Option B would then curve easterly and cross W.B.&A. Road and go through the Landco Business Park and Friendship Park before tying into existing Maryland Route 100 at 1-97. W.B.&A. Road would be terminated at the freeway with cui-de-sacs but no significant circuitous travel would result since access to Dorsey Road would be via Telegraph Road.

The nearest access to either option of Alternate 3 for residents of Burleytown and Queenstown would be at either Maryland Route 170 or 1-97. However, access and travel on the local road network would improve due to the removal of through traffic.

Alternate 3B (Modified) (Selected Alternate) — The selected alternate basically follows the alignment of Alternate 3 — Option B and would have many of the same effects on neighborhoods, communities, and local access. Alternate 3B (Modified) includes several provisions for minimizing access problems with the building of this freeway. These include: a bridge over Maryland Route 295 which would connect Race Road and Wright Road (See Figure II—30), bridging Harmans Road over Maryland Route 100 (See Figure II—32) and bridging W.B.&A. Road over Maryland Route 100 (See Figure II—34). Traffic on Ridge Chapel Road will still increase due to the Interchange of MD. Route 100 and Relocated Ridge Road (Figure II—31), but bridging Harmans Road over MD.



Route 100 will decrease this traffic by providing direct access to Dorsey Road.

Provisions for minimizing community disruptions include using a standard diamond configuration for the Race Road interchange (See Figure II-28) resulting in the relocation of 4 residences instead of 10 and shifting the alignment of the relocated Ridge Road (Figure II-31) to avoid the Mt. Pilgrim Baptist Church and cemetery. Bridging Harmans Road (Figure II-32) and W.B.& A. Road (Fig. II-34) over the freeway and providing a bridge over Maryland Route 295 to connect Race Road and Wright Road (Fig. II-30) also minimizes community disruptions by allowing access between neighborhoods without making the local residences utilize the freeway or causing circuity of travel.

For residents of Race Road, north of Maryland Route 176, and for residents of Wright Road (Fig. 11-29,30), some circuity of travel will result from Alternate 3B (Modified). Even though the travel distances may increase, the travel times may be reduced due to the relief of traffic congestion on Maryland Route 176 and access to Maryland Route 100.

The residents of Queenstown will experience very little circuity of travel. The only existing road in Queenstown to be cul-de-saced is Telegraph Road (Fig. ii-33) but W.B.&A. Road to Donaldson Avenue can serve this movement. Donaldson Avenue intersects W.B.&A. Road approximately 1.25 miles south of the Queenstown Road/W.B.&A.

The following table shows the distance and travel times for travel from Wright Road, Race Road and Queenstown Road to either end of the project (Maryland Route 176 intersection with U.S. Route 1 on the west end and Maryland Route 176 intersection with Hammonds Ferry Road on the east end).

Travel times were based on peak hour levels-of-service for Alternate 3B (Modi-fled) for the year 2010 and the No-Build Alternate for 1987 and 2010.

Response time from the Waterloo State Police Barracks located at the intersection of U.S. Route 1 and Maryland Route 175 to nearly all of the locations along the project would be less than the 1987 No-Build response time and would be less than the 2010 No-Build response time to every location in the study corridor (See the following Table).

TRAVEL TIMES AND DISTANCES

ALTERNATE 3B (MODIFIED) VS. THE NO-BUILD ALTERNATE

Alignment 	Alternate 3B (Modifled) 2010		No-Build Alternate 1987		No-Bulld Alternate 2010	
	Travei Distance (Miles)	Travei Time (Minutes)	Travel Distance (Miles)	Travei Time (Minutes)	Travel Distance (Miles)	Travel Time (Minutes)
Race Road to U.S. Rte. 1 Race Road to Hammonds Ferry	2.1	4.1	.1.6	4.4	1.6	6.4
Road	7.8	13.3	5.6	16.3	5.6	21.9
Wright Road to U.S. Rte. 1 Wright Road to Hammonds Ferry	4.6	7.6	2.2	6.5	2.2	9.4
Road	5.0	9.50	5.0	14.3	5.0	19.2
Queenstown Road to U.S. Rte. 1 Queenstown Road to Hammonds	7.3	13.3	7.0	18.8	7.0	23.9
Ferry Road	2.7	4.6	2.7	5.7	2.7	7.0



Alternate 4 - This alternate is on an alignment identical with the other build alternates until just before it crosses into Anne Arundei County where it swings northerly around Dorsey and the industrial parks fronting on Maryland Route 176. The alignment would not disturb any communities although 3 residential relocations are required from the area of Race Road north of the Parkway industrial Center i. East of the Route 295 interchange, this alternate would require 8 residential relocations from Weeping Willow Road and Bentwoods Road. By crossing under Ridge Road, this alternate would not disturb the Calvary Chapel Church but would require 4 residential relocations along Ridge Road north of Cemetery Road. Ridge Road would bridge over MD. Route 295 to provide access across the freeway.

The proposed connection of Stoney Run Road to New Ridge Road would improve accessibility and travel time between Maryland Route 176 and the residential area near Stoney Run Road.

Alternate 4 bridges over but does not interchange with Maryland Route 170 and thus access to Route 100 would be at the New Ridge Road Interchange (via Stoney Run Road) for Route 170 traffic traveling from the north or at the Maryland Route 176 interchange for Route 170 traffic traveling from the south.

South of Maryland Route 176, the new alignment under Alternate 4 would bisect W.B.&A. Road. The proposed bisection and closure of W.B.&A. Road by the new alignment would not significantly affect fire and police response time due to the proximity of alternative roads.

East of the Metropolitan United Methodist Church, the alignment would bridge over a relocated Jones Road which would maintain access to the northern section of Queenstown, and would then continue onto the I-97/Maryland Route 100 interchange.

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All other roads crossed by the new alignment in the study area will be bridged allowing continued, uninterrupted access and travel for area residents.

Alternate 4 follows the same alignment as Alternate 2, Option A, through the Queenstown community and would have the same impacts.

The Crossover Option (Alternate 3 to Alternate 4) - This alternate also separates through and local traffic, reduces congestion, and improves travel time on Maryland Route 100. However, just east of Maryland Route 295, Maryland Route 176 would dead end at Wright Road due to Interchange construction. All local traffic bound from or to Maryland Route 176 would have to utilize the new interchange at New Ridge Road. This increase in travel distance of up to 4 miles would result in inconvenience, less accessibility of services and facilities, circuity of travel, and increased travel time for residents along Maryland Route 176. Travel to the west of Maryland Route 295 for the Anne Arundel County Fire Department station located at Shipley Corner would be increased by approximately 2 miles. Ridge Road would bridge over the alignment.

West of Maryland Route 295, this alternate would have the same impacts as Alternate 3 and east of the New Ridge Road extension this alternate would have the same impacts as Alternate 4.

Between Route 295 and the New Ridge Road extension, this alternate would displace 11 residences from the area near the existing Wright Road/Dorsey Road intersection and 3 residences from Ridge Road south of the Calvary Chapel Church. Ridge Road would bridge over the freeway and the Calvary Chapel Church would not be disturbed.



Alternate 4/3B - From I-95 to just west of W.B.& A. Road, this alternate would have the same impacts as Alternate 4. From just west of W.B.& A. Road to Maryland Route 3 (I-97), this alternate would have the same impacts as Alternate 3-Option B although one residential relocation is required where the free-way crosses W.B.& A. Road.

e. Parks and Public Recreation Areas

The No-Build alternate would not directly impact any of the parks or public recreation areas in the study area. However, the congestion and low levels of service would make accessibility to these areas difficult and dangerous, especially for pedestrians and bicyclists.

Patapsco Valley State Park would be Impacted by Alternate 4 and Alternate 4/3B. Friendship Park would be Impacted by Alternates 2A, 2B, 3B, 4, 4/3B and the Crossover Option. These Impacts, possible avoidances and mitigation measures are discussed in Section IV.J.

Severn Danza Park, Harmans Park and Jessup and Dorsey Park would not be directly impacted by any of the build alternates and access to all parks and public recreation areas would be maintained and improved by any of the build alternates since through traffic would by removed from the local roads which access the parks.

2. Economic impacts

a. Business Displacement and Relocation

No-Bulid - The No-Bulid Alternate would have no business displacements.

Alternate 2 - Option A - This alternate would displace 12 businesses of which two are minority owned and occupied and one is minority tenant occu-



pled. Of the remaining businesses, 6 are owner-occupied and 3 are tenant occupied. One of these business relocations is a farm operation consisting of approximately 12.5 acres of active farmiand. These businesses employ a total of approximately 51 employees, five of whom are members of a minority group.

Alternate 2 — Option B — A total of 12 businesses would be displaced under this alternate, two of which are minority owned and occupied and one is minority tenant occupied. Of the remaining businesses, 6 are owner occupied and 3 are tenant occupied. One of these business relocations is a farm operation consisting of approximately 12.5 acres of active farmland. These businesses employ a total of approximately 51 employees, five of whom are members of a minority group.

Alternate 3 - Option A - Eight businesses would be relocated under this alternate including one minority owner occupied business. The remaining businesses involve three owner occupied businesses and 4 tenant occupied business. Two of these business relocations are farm operations consisting of approximately 12.5 and 7.0 acres of active farmland. A total of approximately 68 employees would be affected, of which 20 belong to a minority group.

Alternate 3 - Option B - Seven businesses would be relocated under this alternate. The businesses involve three owner occupied businesses and 4 tenant occupied businesses. One of these businesses is a farm operation consisting of approximately 12.5 acres of active farmland. A total of approximately 68 employees would be affected, of which 20 belong to a minority group.

The Alternate 3 Interchange options at Maryland Route 295, Maryland Route 713, and Maryland Route 170 would require no additional business relocations.

Alternate 3B (Modified) - The selected alternate has the same business relocations as Alternate 3 - Option B.

Alternate 4 - This alternate would displace 7 businesses, of which 2 are minority owned and occupied. The remaining relocations involve 4 tenant occupied businesses and one owner occupied business. One of these business relocations is a farm operation consisting of approximately 12.5 acres of active farmland. A total of approximately 56 employees would be affected of which 2 are members of a minority group. One of the businesses employs an estimated 30 individuals.

<u>Crossover (Alternate 3 to Alternate 4)</u> - A total of 7 businesses would be relocated under this alternate, of which 2 are minority owned and occupied businesses. One of these business relocations is a farm operation consisting of approximately 12.5 acres of active farmland. A total of approximately 58 employees of which 4 are members of a minority group would be affected.

Alternate 4/3B - This alternate would displace 6 businesses, ofwhich 1 is minority owned and occupied. The remaining relocations involve 3 tenant
occupied businesses and two owner occupied businesses. One of these business relocations is a farm operation consisting of approximately 12.5 acres of active farmland.
A total of approximately 56 employees would be affected of which 2 are members of a
minority group. One of the businesses employs an estimated 30 individuals.

A survey of the local real estate market reveals that there is a sufficient number of available replacement sites for sale or lease in both countles to accommodate the affected businesses.

All businesses would be assisted in finding suitable relocation sites in accordance with the requirements of the "Uniform Relocation Assistance and Land Acquisition Policies Act of 1970" (see Appendix B) and as amended in 1987. All relocations are expected to be completed in a timely, orderly and humane manner and with minimal economic impact to those affected. A lead time of 18 to 30 months would

be necessary to effect the required relocations. Business displacements are addressed in the Right-of-Way Relocation Report available for review at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland.

b. Effect on Regional Business Activities

The Maryland Route 100 Corridor is surrounded by centers of economic activity. These include the City and Port of Baitimore, the Baitimore-Washington International Airport, the Fort George G. Meade military installation and government office complexes located in Annapolis. The long range goal of both Anne Arundel and Howard Countles is to encourage growth of employment centers to compilment residential growth. Currently, Anne Arundel County has six industrial parks and Howard County has four industrial parks located within the Maryland Route 100 Corridor Study area.

The proposed project would accommodate the expansion of the industrial and business sector within the study area by improving access and efficiency of travel. The improvements also would attract new industry and business. However, the restrictions to the planned expansion of the BWI Airport imposed by Alternates 2 and 4 would have a limiting effect on growth since much of the industry and business in this area is centered upon airport activities. The State Aviation Administration and the Federal Aviation Administration are opposed to Alternates 2 and 4 (see letters, dated December 26, 1985, and October 2, 1986, respectively, Section VI).

Under the build alternates, interchange construction would facilitate more direct and quicker access to and from major highways and industrial/employment areas in the study corridor.



The residential communities would gain new employment opportunities within the corridor and improved transportation movement for the commuting residents.

The Growth Management Program of Anne Arundel County and the Howard County General Plan address the short, medium and long range trends for future development. Highway improvements are an integral part of these plans. Both counties' plans show the approximate corridor of the Alternate 3 - Option A alignment and include Maryland Route 100 as a needed transportation facility to accommodate existing and planned development. The construction of Maryland Route 100 and the planned improvements to existing Maryland Route 176 would enable the planned development of housing and employment centers to take place.

c. Effect on Local Business Activity

Except for Alternate 2, the build alternates would move a large portion of the through traffic away from the Maryland Route 176 corridor onto a new alignment. This may result in some loss of business and less visibility for commercial enterprises along Maryland Route 176 that depend on drive-by traffic (i.e., restaurants, motels, etc.). However, a new alignment would reduce congestion along Maryland Route 176 and facilitate access to these establishments, especially during the peak traffic hours.

The Interchange at U.S. Route 1 would permit quicker access to and from the Route 100 Business Park. The entrance to this industrial park would be moved from Amberton Drive to Milis Drive.

The proposed improvements would generally better accommodate existing and proposed industrial development occurring throughout the Maryland Route 176 corridor.

Under the Crossover Alternate, Maryland Route 176 would terminate Just east of the Maryland Route 295 Interchange. This may cause some loss of business to commercial developments along Route 176 since traveling from east of Route 295 to west of Route 295 via Ridge Road and the Crossover Alternate would be up to approximately 4 miles longer than traveling directly on route 176.

Alternates 2, 3 and the Crossover would also cause disruptions to business development near the existing Maryland Routes 176/295 interchange. Interchange reconstruction would not only block Maryland Route 176 and travel at this point, but also delegate access to the remaining businesses via fragmented individual access roads. The disjointed arrangement also would cause a loss of business for commercial development at this point. Alternate 3B (Modified), the selected alternate, includes a bridge over MD. Route 295 to connect Wright Road and Race Road: This bridge maintains traffic on the local road system and thus provides local residences access to businesses in the area.

d. Effect on Tax Base

This project would accommodate the efficient expansion of proposed development in the study corridor which in turn will have a positive effect on the countles' tax bases.

Since the Anne Arundei County General Development Plan - 1978, Howard County General Plan - 1982 and Regional Planning Council's General Development Plan - 1986 support growth in the area, and incorporate the approximate alignment of Alternate 3 - Option A in their plans, extensive development of residential and industrial land uses is planned to follow the completion of the project. As the area develops, it is likely that the property values and tax assessments will rise and the community will experience a rural to urban change in character. Improvements to the



transportation network and the planned expansion of the BWI Airport would support this planned transition from a rural and agricultural community to a more urbanized community.

improved accessibility after construction of a build alternate will encourage light industrial and commercial development within the study area. There are currently ten industrial parks located in the Corridor, six in Anne Arundel County and four in Howard County. Anne Arundel County has a seventh industrial park under development and Howard County has a fifth industrial park in the planning stages. Additional employment resulting from this industrial and commercial development will have a secondary effect of more service oriented employment in the study area.

The selected alternate of Maryland Route 100 and planned improvements to Maryland Route 176 are consistent with the planning goals of Anne Arundel and Howard Countles and would encourage continued development which is expected to expand the tax base for both countles. The current land use plans and zoning provide for the residential and commercial development that would minimize the cost of providing public services and facilities.

3. Land Use and Land Use Pianning

The growth in the Maryland Route 100 study area is consistent with the Anne Arundei County General Development Plan - 1978, the Howard County General Plan - 1982 and the Regional Planning Council's General Deviopment Plan-1986 as well as with the comprehensive zoning of the counties. Anne Arundel and Howard Counties support and encourage growth in the Maryland Route 100 Corridor where accessibility of employment and adequate highways exist or are planned to be improved. The study area enjoys good accessibility from the Baitimore and Washington

Metropolitan areas, the City of Columbia in Howard County and Annapolis, the State Capital, in Anne Arundel County. The selected alternate for Maryland Route 100 and planned improvements to Maryland Route 176 are consistent with the Development Plans of Anne Arundel and Howard Counties and the Regional Planning Council.

The future growth that is envisioned for the study area will have a significant impact on both the immediate local road system and the major highway system including interstate 95 to the west, interstate 97 (existing Maryland Route 3) to the east and interstate 695 to the north of the project area. The proposed highway improvements are needed to accommodate the future growth and to relieve the existing congestion on the transportation system. The counties acknowledge the need to improve this traffic corridor to better serve expanded light industrial development and the associated truck traffic in the BWI Airport area.

B. <u>Transportation</u>

The transportation goal of this project is to identify an alignment that adequately and safely accommodates the traffic needs of the study area. The 1990 Average Daily Traffic (ADT) and the design year 2010 forecasts for the No-Build Alternate, Alternates 2, 3 and 4 and the Crossover Option are shown in Figures IV-1 through IV-5. Design year 2010 ADT forecasts, number of lanes and levels of service for the No-Build Alternate, Alternates 2, 3 and 4 and the Crossover Option are shown in Figures IV-6 through IV-10. The higher volumes of the build alternates compared to the No-Build Alternate can be attributed to the greater capacity of a high speed controlled access facility versus the constrained capacity of the low speed uncontrolled access roadway of the No-Build Alternate. The higher volumes of the freeway facilities (Alternates 3,4 and the Crossover) versus the urban arterial facility (Alternate 2) can be attributed to the urban arterial having at-grade intersections and the accompanying signalization, lower design speed and subsequent lower



posted speed (60 mph design and 50 mph posted for the urban arterial versus 70 mph design and 55 mph posted for the freeway), and a higher accident rate (358 accidents per 100 million vehicles miles versus 68 accidents per 100 million vehicle miles). Up to 17% more east/west traffic would be carried within the study area in the design year (2010) by the freeway alternates compared to the urban arterial alternate since the freeway alternates would open a new corridor and allow existing Dorsey Road to handle local traffic. Also, the introduction of an urban arterial facility linking two major freeways (1-97 and 1-95) would create a bottleneck effect, produce confusion and conflicts between through and local traffic, and otherwise impede the continuous flow of traffic throughout the study area and surrounding region. The urban arterial does not provide for future lane expansion since it traverses between established developments (see Typical Sections, Figure 11-46) and it experiences a level-of service D along a stretch of its alignment in the design year (2010) indicating that it is approaching capacity.

Traffic operations associated with each alternate are discussed below.

No-Build Alternate - As shown in Figure IV-1, traffic volume increases along Dorsey Road between 1990 and 2010 are considerable (up to 25%). These increases result in a level-of service F along Maryland Route 176 (Dorsey Road) from U.S. Route 1 to Maryland Route 3 (1-97) as shown in Figure IV-6 even though the volume of traffic moving through the study corridor is significantly lower than the volumes of the build alternates.

The low levels of service on roads intersecting Dorsey Road (notably Maryland Route 295, Maryland Route 713 and Hammonds Ferry Road) contribute to the overall congestion and constrained capacity of this alternate.



Alternate 2 - As shown in Figure IV-2, between 1990 and 2010 traffic volume increases along this alignment range up to 28%. Figure IV-7 shows that a level-of-service C or better is attained along this alternate from interstate 95 to Maryland Route 3, except for that part of the alignment from Maryland Route 652 to the Dorsey Road tie-in where there is a level-of service D. These levels of service are higher than the No-Build Alternate even though the volumes are up to 125% greater.

Alternate 3 - Figure IV-3 shows that traffic volumes along this alignment increase up to 28% from 1990 to 2010. It also shows that the total volume of traffic moving through the study corridor is 11% greater than Alternate 2 at the western end and 16% greater at the eastern end. This greater capacity is achieved by opening a new highway corridor and allowing Dorsey Road to serve local needs. As shown in Figure IV-8, the alternate furnishes a level-of-service C along its alignment as well as a level-of-service C along Dorsey Road.

Alternate 4 - This alternate achieves the same traffic volumes as Alternate 3 as shown in Figure IV-4. Alternate 4 also furnishes a level-of-service C along its alignment as shown on Figure IV-9. As with Alternate 3, Alternate 4 allows Dorsey Road to serve local needs with a level-of-service C or better except for that part of Dorsey Road from Maryland Route 170 to the Dorsey Road intersection with Alternate 4 where there is a level-of-service E.

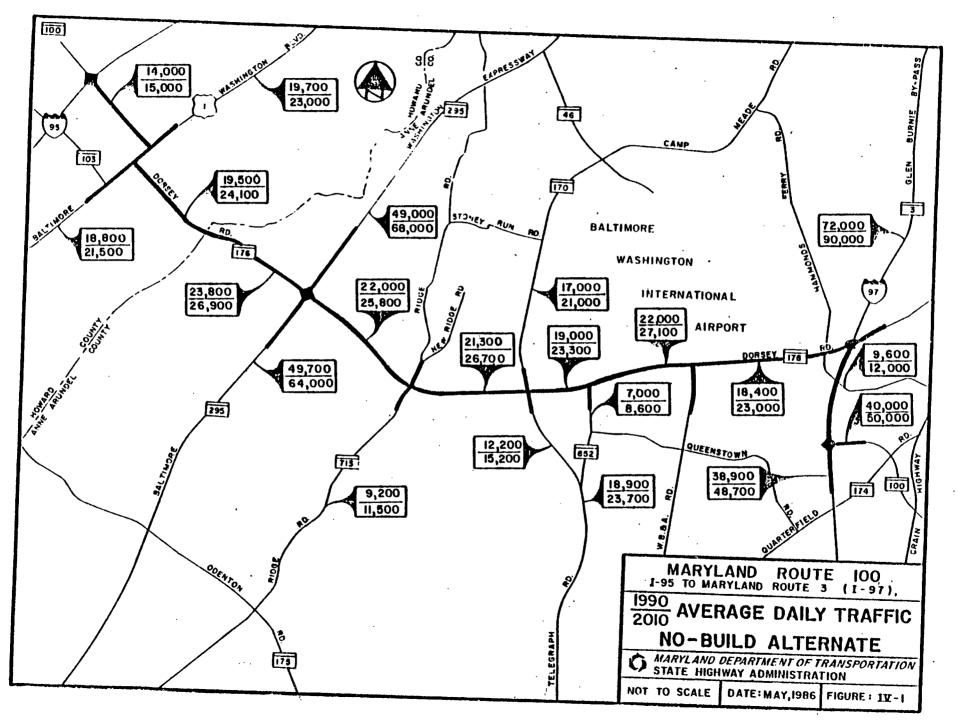
Crossover Option - By using the alignment of Alternate 3 from Interstate 95 to Maryland Route 295 and then crossing over to the Alternate 4 alignment from New Ridge Road to 1-97, the Crossover Option achieves the same volumes and levels of service as those sections of Alternate 3 and 4 as shown in Figures IV-5 and IV-10.



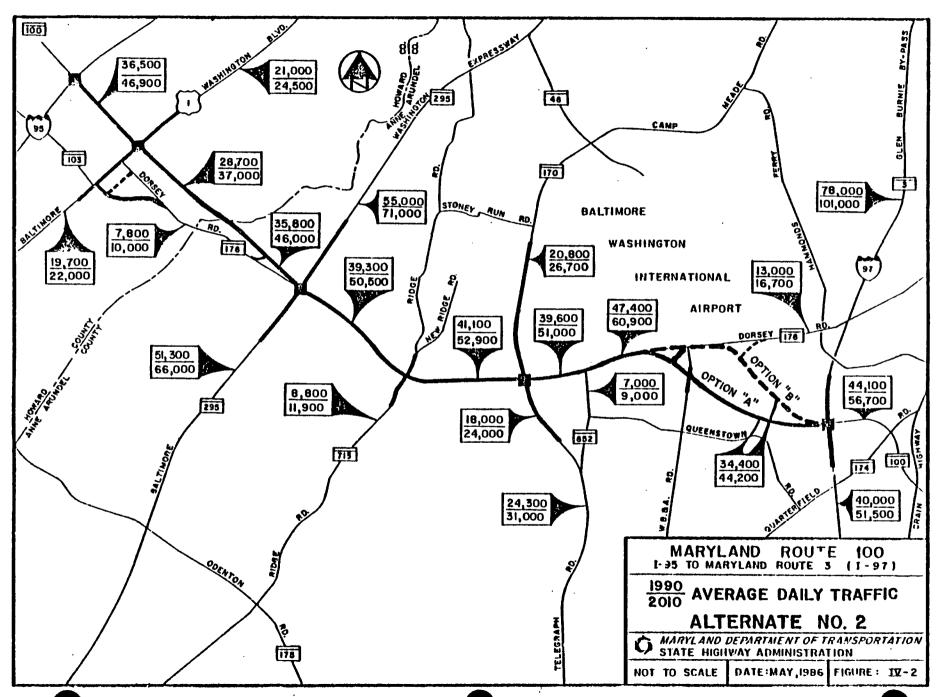
Alternate 4/3B - This alignment would have the same volumes and levels of service as Alternate 4 from i-95 to W.B.& A. Road (Figures iV - 4 and iV-9) and the same volumes and levels of service as Alternate 3 - Option B from W.B.&A. Road to i-97.

Under conditions similar to those in the study area, it has been found that controlling access to the main traffic routes will reduce the rate of accidents even though traffic volumes and speeds along the routes increase. The freeway build alternates would therefore reduce the high accident rate currently in the study area (see page 1-5). Alternates 3, 4, 4/3B and the Crossover would reduce the accident rate more than Alternate 2 would because of the greater control of access and absence of at-grade intersections (68 accidents per 100 MMM for the free-way alternates versus 358 accidents per 100 MMM for the urban arterial).

An existing 100 space park and ride lot located at the intersection of Dorsey Road and Wright Road would be required as part of the selected alternate's right-of-way. Because Route 100 will be a major East-West link connecting several important North-South freeways (i-95, MD Route 295 and MD Route 3/i-97) that serve a growing number of commuters between Baltimore and Washington, efforts will be made to replace it with a lot containing up to 150 spaces. Potential relocation sites include, but are not limited to, the following vacant tracts: the intersection of Dorsey Road and Faulkner Road, along Dorsey Road between existing Wright Road and relocated Wright Road, the intersection of Dorsey Road and relocated Ridge Road, and the intersection of relocated Ridge Road and relocated Watts Avenue. The terminus of existing eastbound Route 100 west of U.S. Route 1 is also used as an informal park and ride lot and efforts will be made to replace it with a lot containing approximately 75 spaces. Potential sites for this lot include along Dorsey Road east of U.S. Route 1 and Meadowridge Road.



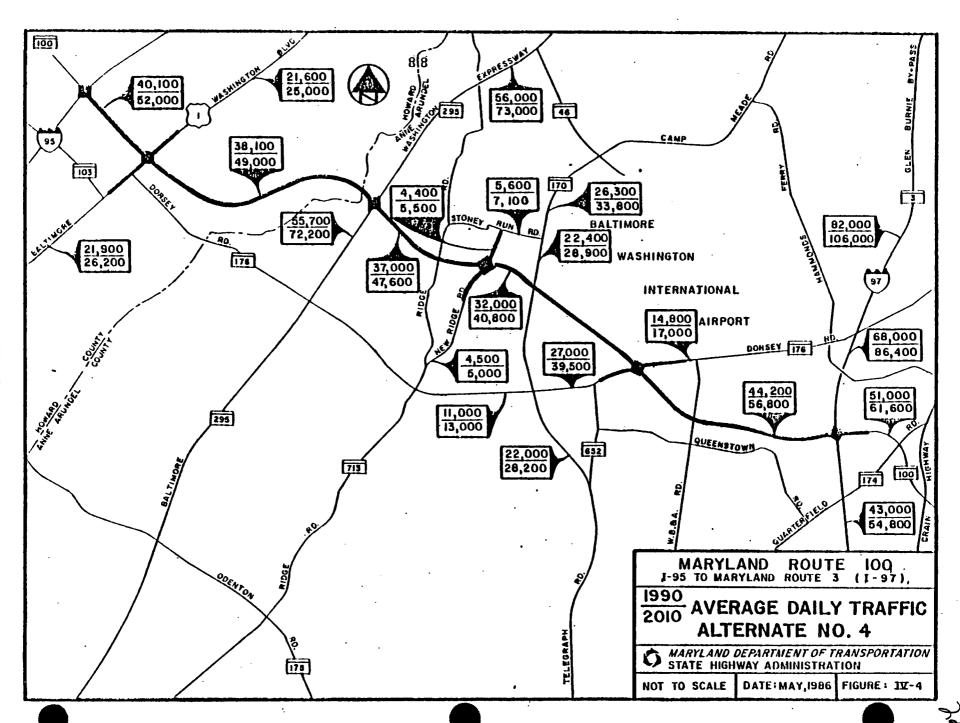


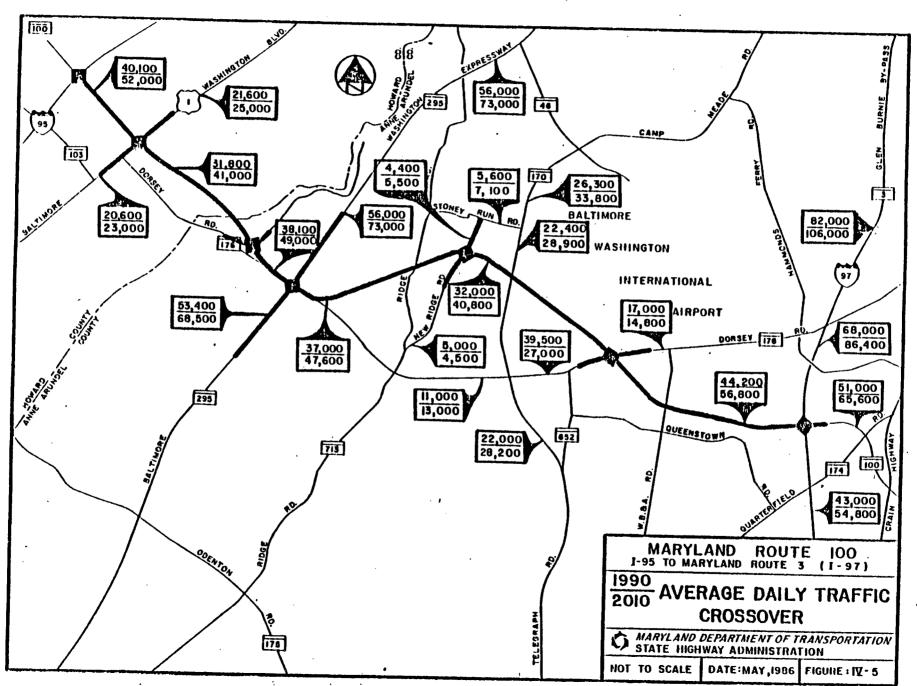




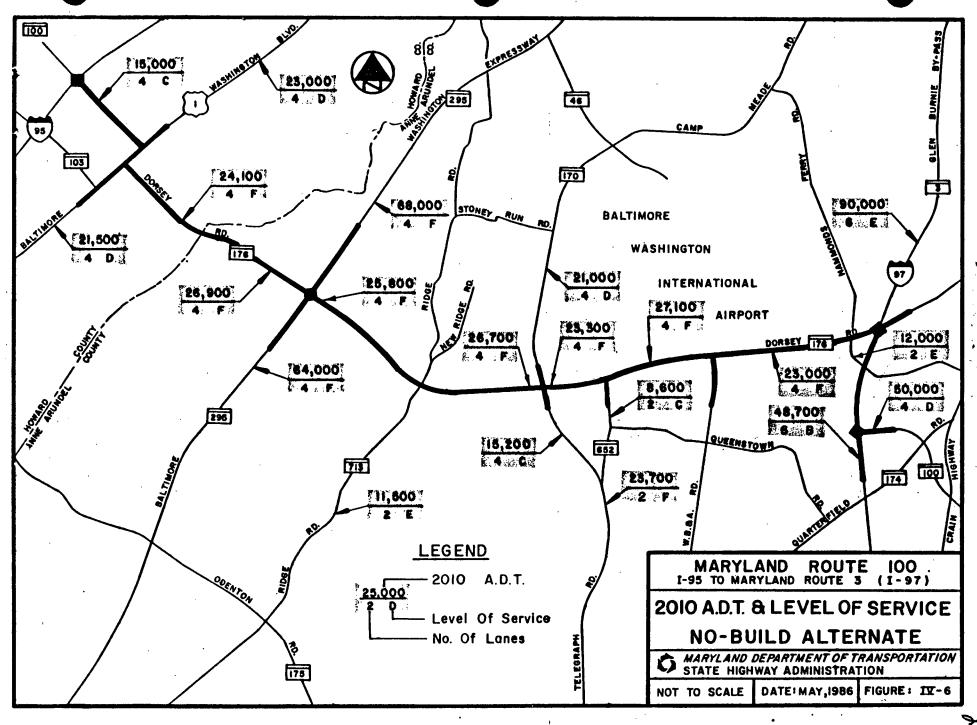
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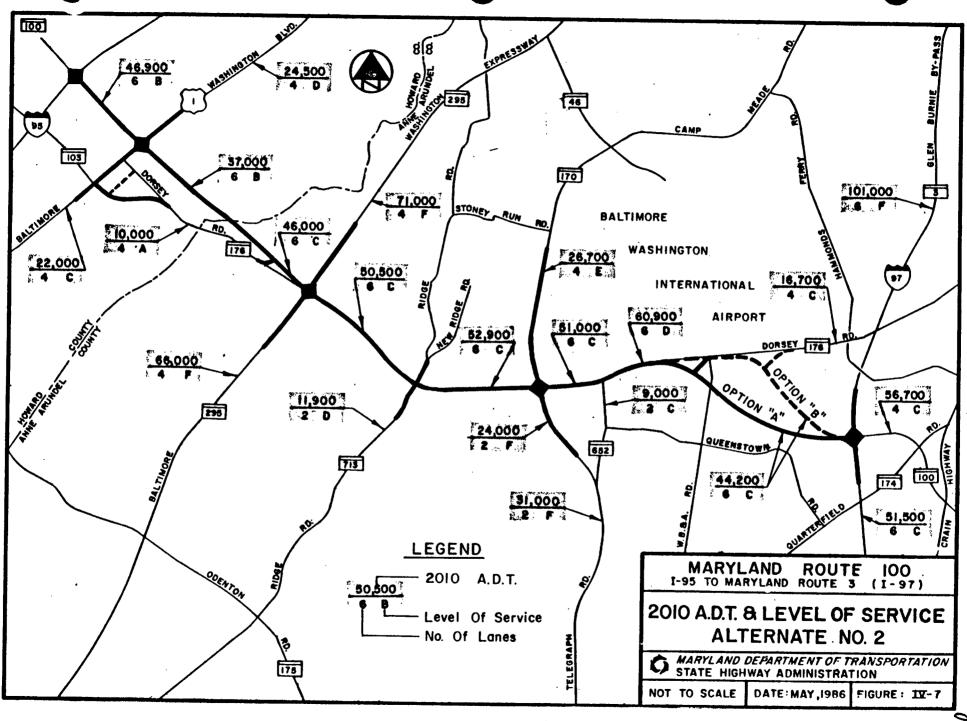








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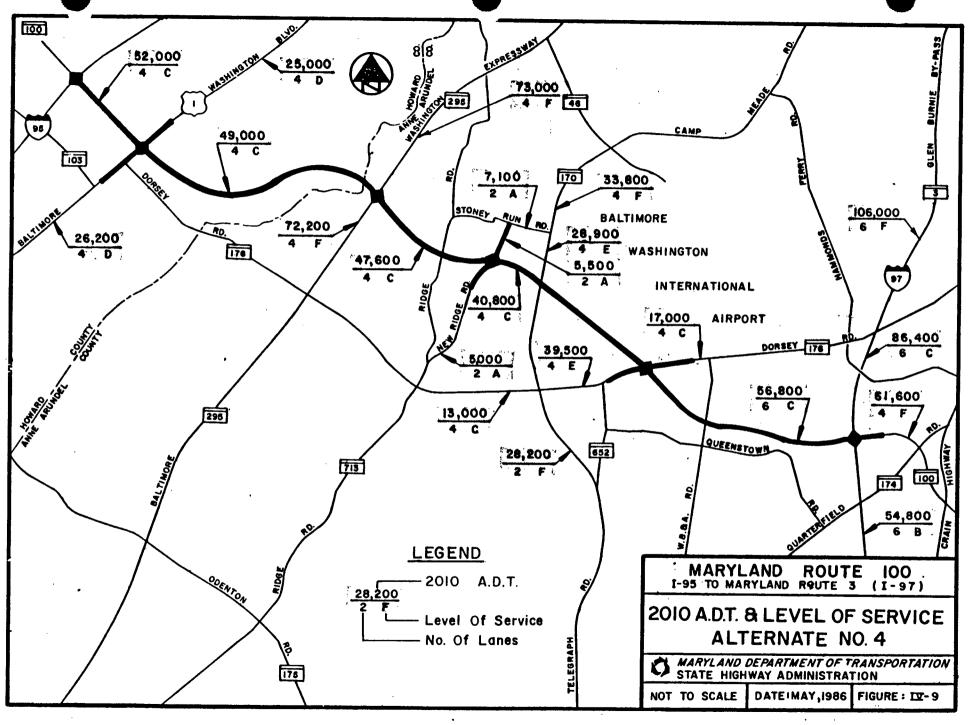
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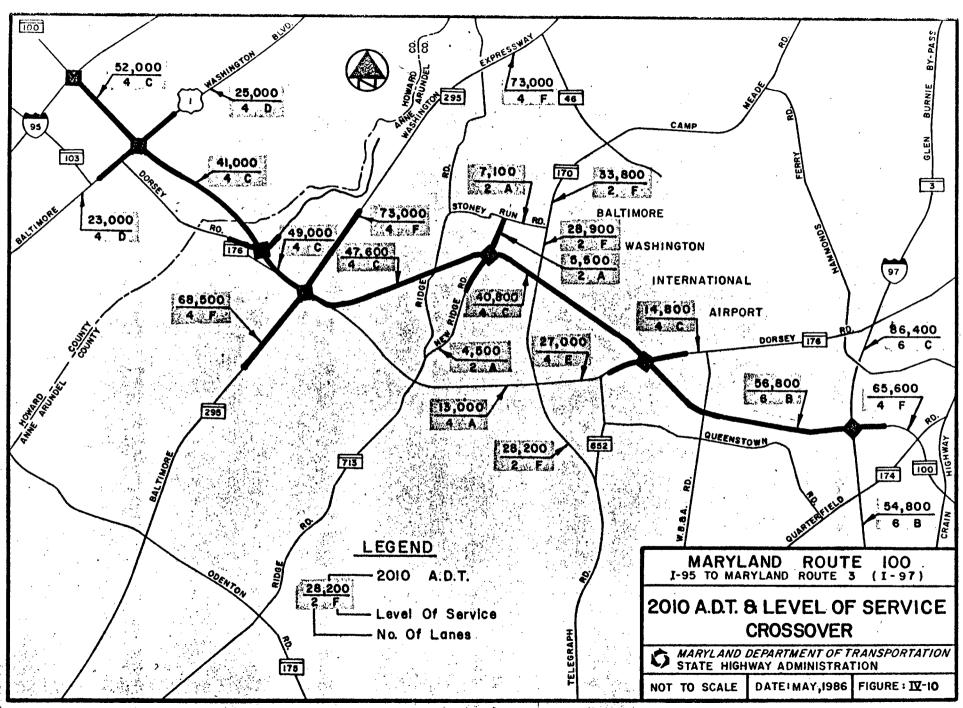
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C. Naturai Environment

1. Effects on Topography, Geology and Solis

a. Topography

Topographic modifications will be required to accommodate roadways, interchanges and grade separations and to provide compatibility with existing land usage. The crossing of natural drainage courses by the roadway will result in alterations in order to maintain existing flow patterns. Additionally, drainage modifications will be required along the length of each alternate for removal of runoff from the roadway and rerouting of overland flow.

Grade wise, Alternate 2 would provide the least impact due to its close proximity to existing Maryland Route 176 which requires the matching of existing grade. Alternates 3 and 4 would have a greater impact due primarily to the depth of excavation and heights of fill presently proposed. These alternates would have fill heights of nearly 50 feet and cut depths of nearly 30 feet. Of the two, Alternate 3 would have a lesser impact due to the more moderate terrain along its length, whereas Alternate 4 traverses more severe terrain. In Alternate 4, between the county line and the Baltimore—Washington Parkway, topography is more severe than along the other alternate routes and will result in greater topographic modifications such as deeper cuts and side hill cuts and fills. The crossover alternate would be above and below existing grade throughout its length with fills up to 40 feet in height and cuts up to 35 feet.

In summary, Alternate 4 and the Crossover Alternate would have the greatest impact upon topography, with Alternate 3 having a lesser impact, and Alternate 2 having the least of the build alternates.

b. Geology and Solls

The majority of all the proposed alignment alternates west of



Stony Run near Harmans are situated over silt-clay deposits, and the alternates east of Stony Run, with the exception of Alternate 4, are located entirely over sand-gravel deposits. Alternate 4 traverses an area of additional silt-clay deposits just west of Baltimore-Washington International Airport.

The surface solls in the study area are mapped by the U.S.D.A. Soll Conservation Service as loamy and clayey land of the Muirkirk-Evesboro Association over the western half of the project (corresponding to the silt-clay deposits of the Potomac Group) and sandy, gravelly solls of the Evesboro-Ramford-Sassafras Association in the eastern half (corresponding to the sand-gravel deposits).

Generally, geologic and soil features of the study area pose no significant difficulty to roadway design. Cut banks in thick Potomac clay deposits tend to be unstable over long periods of time due to jointing; bank fallures during wet weather stemming from slippage along joint planes are common as is wedging caused by freezing and thawing. Floodplain alluvium, as occur at Deep Run and Stony Run. generally underlie the floodplains from one valley wall to the other, and range in thickness from a few feet to as much as 15 feet. Constraints on construction in floodplains are several - the sediments are generally loose and water-saturated due to a perennially high water table and they are subject to inundation during flood events. The sands and gravels will provide better subgrade than clay sand silts for paving operations. The extent of encroachment, if any, on floodplains will be studied in detail during the engineering design phase. The soils of the Muirkirk Assoclation (predominantly slit and clay) are listed as unstable for roadways by the Soll Conservation Service, but the occurrence is very minor and upon compaction and/or capping by granular materials, these solls should provide acceptable subgrade. For the design phase of this project, detailed SCS Soil Surveys will be utilized.

No significant impact on the mineral resources of the study area are anticipated with any of the build alternates.

The U.S. Soll Conservation Service (SCS) in coordination on this project has performed an extensive evaluation of zoning maps and solls data to determine information regarding the acquisition of farmland. They have determined that the Farmland Protection Policy Act (FPPA) does not apply to any of the Alternatives in Anne Arundel County. However, a small area of statewide important solls was found to be impacted by Alternate 4 in Howard County. Tabulated below is a summary of their findings on the quantities of Farmland required for each alternate.

Prime Farmland		Statewide important Farmland
Alternate	_(Acres)	(Acres)
2A	0	<u> </u>
2B	0	0
. 3A	0	0.
3B	0	0
3B (Modified)	0	0
2/4 0	0	4
3/4 Crossover	0	0
4/3B	0	4

The Farmland Conversion impact Rating Form AD-1006 has been completed for this project and is included in the Coordination section of this report.

2. <u>Effects on Water Resources</u>

a. Surface Water

As discussed in Chapter III, there are four streams which drain the study area; Piny Run, Deep Run, Stony Run, and Sawmili Creek. Each of these would be crossed by any of the build alternates and would likely be affected both during and after construction.

Highway improvements and other changes due to increased urbanization of areas may have adverse effects on water resources including less infiltration and stream base flow, increased surface runoff and stream peak flow, and a reduction in lag time. The potential impacts on water quality in receiving streams



from alteration of drainage patterns and stream characteristics could result in changes including; sedimentation and erosion, thermal and water contamination.

Highway use results in the accumulation of potential water pollutants from roadway runoff, including vehicular oil, grease, gasoline and solvents, wear particles from clutches, brake linings and tires, and exhaust emissions which will collect on the road surface and nearby vegetation. Another source of contamination would be the use of chemicals such as de-loing compounds, abrasives applied to roadway surfaces, fertilizers, defoliants, and pesticides used in controlling natural areas.

The project will be designed in accordance with the Maryland Stormwater Management Act which limits increase in downstream discharges. By limiting the discharges into streams, the quantity of pollutants can also be limited, but the impact of these pollutants can be greatly reduced by controlling the amount of chemicals used for de-icing and maintenance, using grassed drainage ditches, stormwater management ponds, and other means for retarding the flow of stormwater runoff.

The close proximity of the build alternatives to the streams make stormwater management critical to maintaining water quality in the study area. Stormwater management features will be incorporated into the design of a selected alternative in the following order of preferences:

- (1) On-site inflitration
- (2) Flow attenuation by open swales and natural depressions
- (3) Stormwater retention structures
- (4) Stormwater detention structures

it has been proven that these measures can significantly filter out roadway pollutants as well as control the rate of runoff. Future runoff should not exceed present rates for existing land uses.

Many of the solls in the study area are highly erodible. Siltation and sedimentation, especially during construction, could cause physical damage such as clogging of ditches and conduits and alteration of stream channels. Small waterways, such as the upper reaches of streams in this area, are more susceptible to impacts associated with erosion and silting because of their shallow cross-sections and variable flows.

A sediment and erosion control program was adopted by the State Highway Administration in 1970. It incorporates the standards and specifications of the Soli Conservation Service, and specifies procedures and controls to be used in highway construction projects. These procedures and controls will be stringently applied to limit the generation and transport of silt. Since the alternates will pass through areas of varying slope, soli erodibility, stream size, and vegetation associations, specific control measures could best be defined after design features have been considered, but will include:

- (1) Staging of construction activities to permanently stabliize ditches at the top of cuts and at the foot of fill slopes prior to excavation and formation of embankment.
- (2) Seeding, sodding, or otherwise stabilizing slopes as soon as practicable, to minimize the area exposed at any time.
- (3) Appropriate placement and maintenance of sediment traps, temporary slope drains, and other control measures.
- (4) Placement of diversion dikes, energy dissipaters, mulches, and netting on slopes too steep to support vegetation.

Impoundments such as sediment ponds will be sized and located so as to maintain as much flow as possible, generally by allowing the drainage from undisturbed areas to bypass the construction site and go to its natural drainage



pattern. The construction will be closely monitored to minimize the debris and control waste areas. With the application of available erosion control technology, significant impact to surface water quality will be minimal.

Final design for the proposed improvements will include plans for grading, erosion and sediment control, and stormwater management in accordance with state and federal laws and regulations. They will require review and approval by the Maryland Department of Natural Resources - Water Resources Administration (WRA) and the Maryland Department of Health and Mental Hygiene - Office of Environmental Protection (OEP).

b. Groundwater

Potential groundwater effects could result from cut and fill operations causing changes in groundwater level and flow. Deep cuts could expose springs resulting in the reduction of the total amount of water available to the aquifer. Since the groundwater recharge area will be changed by construction of the roadway, improved drainage, and reduced vegetation, groundwater levels could be altered in certain areas.

Groundwater quality could be affected by leaching from exposed cuts and contamination from de-icing compounds, solvents, trace metals, herbicides, etc., associated with highways.

tration will conduct a hydrogeologic study of the area to determine any impacts of the project to groundwater. This study could include pre-construction and post-construction surveys of wells in the area. If significant changes to either the quality or quantity of well water occur as a result of the roadway construction, the State Highway Administration will either provide a replacement well for the affected property or compensate the property owner.

3. Floodplains and Stream Modifications

All of the proposed build alternates will cross at least one or more of the streams and their floodplains. During final design, a detailed hydrologic and hydraulic study will be prepared to identify the existing and proposed discharges and floodplains for various storm frequencies. Using these studies, the most appropriate structure for each floodplain and stream crossing will be determined. Preliminary hydraulic studies performed by the Bridge Development Section of the State Highway Administration indicate the following numbers and sizes of structures will be required for each alternate:

Alternates

Stream	<u>2A</u>	<u>2B</u>	<u>3A</u>	<u>3B</u>	<u>4</u>
Deep Run	3-10'x10'BC	3-10'x10'BC	3-10'x 10'BC	3-10'x10'BC	4-12'x11'BC
Piny Run	3-10'x9'5'BC	3-10'x9.5'BC	3-9'x9'BC	3-9'x9'BC	
Stony Run	3-10'x10.5'BC	3-10'x10.5'BC	3-8'x8'BC	3-8'x8'BC	4-10'X9'BC
Trib. to Stony Run			1-10'x9'BC	1-10'x9'BC	
Sawmili Creek	3-9'x8.5'BC	3-10'x9'BC	2-9'x9'BC	3-9'x8'BC	9'x8.5'BC

(Note: BC indicates Box Cuivert)

These structural sizes are preliminary only and may change when the final hydrologic and hydraulic studies are performed in the design phase of the project.

Any floodplain encroachment will be reviewed and coordinated with the U.S. Army Corps of Engineers to determine the need for a section 404 Permit. One major impact of encroachments could be a reduction in the efficiency of the natural stream floodplain system to convey water, which can



Increase flood stages upstream. However, through Incorporating standard hydraulic design techniques, any alternate should have a minimal impact on the ability of the floodplain to convey floodwater.

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

- (1) High probability of loss of human life.
- (2) Likely future damage that could be substantial in cost or extent.
- (3) Disruption of an emergency or evacuation route.
- (4) Notable adverse impact on "natural and beneficial floodplain values".

The use of standard hydraulic design techniques for all waterway openings would incorporate structures to limit upstream flood level increases and approximate existing downstream flow rates. Culverts will be set one foot below the existing culvert.

All four streams are designated Class I - Water Contact for Recreation and Aquatic Life by the Maryland Department of Health and Mental Hygiene. As such, all in-stream construction shall be prohibited from March 1 through June 15, inclusive, and stream areas must be stabilized. Rip Rap Will be installed at the inlet and outlet of all culverts.

Use of the most advanced sediment and erosion control techniques and stormwater management controls available will ensure that none of the encroachments will result in risks or impacts to the beneficial flood-plain values or provide direct or indirect support to further development within the floodplain. Preliminary analysis, in accordance with Executive



Order 11988, indicates that no significant floodplain impacts are expected to occur as a result of any proposed build alternates under consideration.

4. Effect on Wetlands

Pursuant to Executive Order 11990, Protection of Wetlands, wetland areas potentially affected by the proposed project were identified, based on The National Wetlands inventory (U.S.F.W.S.), and are shown on Figure III-2. Subsequent to this preliminary analysis, a more detailed delineation of wetlands was conducted using soil survey data and field investigations as discussed and summarized in Section III-C:6c. All of the proposed build alternatives affect palustrine forested, non-tidal wetlands. Approximate amounts of wetlands that may be affected are listed below. These areas are significantly higher than those presented in the DEIS because of the more recent detailed investigations.

	·
Location	Wetland Acreage(Approximate)
Alternate 2A Alternate 2B Alternate 3A Alternate 3B Alternate 3B(Modified Alternate 4 Alternate Crossover/4 Alternate 4/3B	48.8 41.6 53.5 54.3) 56.9 (Selected Alternate) 79.1 76.5
THE TOTAL TOTAL	77.3

Ten separate wetland areas have been identified along the selected alternate corridor (Alternate 3B Modified). These are shown on Figures II-26 through II-35 and described in Table III-6. Complete avoidance of these wetlands is not possible since they are linear features running continuously along streams running perpendicular to the path of the roadway. Selection of an alternative with lesser total wetland impacts is

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preciuded due to other considerations such as impacts to minority communities, 4(f) properties and BWI Airport.

Only Alternates 2A and 2B have significantly smaller wetland impacts than the Selected Alternate, and these do not provide a facility which satisfies the transportation objectives of the project. Alternates 3A and 3B, resulting in slightly smaller impacts on wetlands, would result in severe impacts on the cohesiveness of the community of Queenstown.

Wetiand W-1 (Figure II-35) borders two streams of Sawmili Creek east of Friendship Park. Shifting this alignment to the south to reduce the affected area could not be accomplished without severely impacting upon the Queenstown community, while shifting to the east is not possible because of engineering-design constraints. Alternate 3B (Modified) would impact approximately 7.0 acres of this wetland.

Wetland W-2 (Figure II-34) borders Sawmili Creek in the vicinity of W.B.&A. Road, and shifting of the Alternate 3B (Modified) alignment in this vicinity to either the North or South would not significantly reduce the quantity of area impacted. Approximately 4.9 acres of wetlands would be affected at this location.

Wetland W-3 (Figure II-33) is located within the Department of Natural Resources Buckingham Forest Tree Nursery, and the Alternate 3B (Modified) alignment through this area has been coordinated with the DNR to minimize impacts on the operation of the facility. Approximately 7.2 acres of wetlands would be affected.

Wetland W-4 (Figure II-32) borders Stony Run East of Harmans Road. Reducing the acreage affected at this location could only be accomplished by shifting the alignment South to cut through a large residen-

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tial subdivision along with several existing homes along Harmans Road. Approximately 5.7 acres would be affected in this wetlands area.

Wetland W-5 (Figure II-31) borders along an unavoidable narrow strip of a Stony Run tributary west of Matthewstown Road. Approximately 4.9 acres would be affected in this area.

Wetland W-6 (Figure ii-31) borders a tributary to Piney Run West of Shipley Corner. Shifting the Alternate 3B (Modified) alignment to the South at this location would not significantly reduce the area affected, while shifting to the north would result in more severe wetlands impacts. Approximately 1.5 acres would be impacted.

Wetland W-7 (Figure II-29) borders Piny Run East of the Baltimore Washington Parkway. Comments to wetland W-6 apply also to this area. Approximately 1.8 acres would be impacted at this location.

Wetland W-8 (Figures II-28 and II-29) borders along tributary to Deep Run West of the Baltimore Washington Parkway in the vicinity of Race Road. Approximately 5.8 acres of wetlands would be impacted in this area.

Wetland W-9 (Figure II-28) borders along Deep Run In Anne Arundel and Howard Countles and extends over a large area to the West of Deep Run In Howard County. Approximately 17.6 acres of wetlands would be impacted in this area. This is a reduction in the acreage affected by the original interchange configuration shown in Alternate 3B (Fig. II-13).

Wetland W-10 (Figure II-26) follows along a Deep Run tributary west of U.S. Route 1. Approximately 0.5 acres of wetlands would be impacted in this area from associated improvements to U.S. Route 1. This is a reduction from the original configuration of the service road shown in

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Alternate 3B (Fig. II-12).

Functions of these impacted wetlands are wildlife habitat, food chain support, flood desynchronization; and in the cases of wetlands (W's) 1,7,9 and 10 the opportunity for passive recreation. These same functions were identified for those wetland areas associated with the other build alternates; with Alternate 4 (passing through Patapsco State Park) having a greater area of impact on the passive recreation wetlands function.

Mitigation measures for wetlands impacts will be coordinated with the Department of Natural Resources, the Environmental Protection Agency, and the U.S. Fish and Wildlife Service. All unavoidable wetlands losses will be enhanced, reconstructed or replaced. All reasonable efforts will be made to locally replace wetlands in-kind in small areas as opposed to large tracts. Some forms of mitigation could be included with stormwater management ponds, diversion ditches, and check dams. The type of mitigation that will be implemented at each site will be determined in the design phase in coordination with the agencies mentioned above. Stringent sediment control measures will be applied and monitored to avoid significant sedimentation from highway construction. All improvements involving wetland encroachment will require a Section 404 Permit from the U.S. Corps of Engineers.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed new construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

5. Effects on Terrestrial and Aquatic Habitats

Both terrestrial habitats, and to a lesser degree, aquatic habitats would be affected by this project. Of the total highway right-of-way required by the alternatives under consideration, the following amounts have been identified as being of woodlands and old fleids:

No Build Alternate	0 acres
Alternate 2A	106.6 acres
Alternate 2B	86.5 acres
Alternate 3A	140.2 acres
Alternate 3B	137.8 acres
Alternate 3B (Modified)	125.7 acres
Alternate 4	109.8 acres
Crossover	151.2 acres
Alternate 4/3B	92.5 acres

The loss of habitat would be accompanied by a proportional loss in animal populations inhabiting these areas. Of the build alternates, Alternate 2 would have the least impact on terrestrial habitats as it follows the existing Dorsey Road alignment throughout much of its length. Alternates 3 and 4 would have a greater impact; however, it should be noted that proposed land use plans (see Figure III-4) call for essentially all of the land through which these alternates pass to be developed as either residential or industrial land uses.

Potential impacts do include sedimentation during construction and pollution by roadway runoff. Sediment and erosion control plans will help minimize the adverse effects of construction activities, and proper stormwater management will reduce the amount of roadway pollutants which reach the stream. The control measures should reduce these potential adverse impacts to aquatic life to negligible levels.

The selected Alternate, with its urban diamond interchange, will impact upon the Buckingham Forest Tree Nursery, by requiring the acquisition



of 17.4 acres of the property. This would affect approximately 1.8 acres of the mature Brigham Pine seed orchard, 0.9 acres of the mature Lobioliy Pine seed orchard and 0.9 acres of the mature White Pine seed orchard. The rest of the right-of-way would affect fallow fleids, storage areas and uncultivated forests. The right-of-way in the vicinity of MD Route 170 is currently being cleared for seedling beds.

Potential impacts upon both aquatic and terrestrial habitats in the Buckingham Nursery by Selected Alternate 3B modified could be minimized by bridging of the sensitive area. A special study of the effects of Selected Alternate 3B Modified on the nursery has been coordinated with the Department of Natural Resources and is available for review at the Maryland State Highway Administration Library, 707 North Calvert Street, Baltimore, Maryland and at all State Depository Libraries. The Study Concludes that solls of the Nursery should not be significantly impacted from heavy metals beyond a 35 to 50 meter distance from the edge of pavement, and that SO2 emissions will not be high enough to damage vegetation of the sight.

The projected quality of runoff from the highway, however, especially the bridge structure does exceed the background levels of the stream and exceeds the EPA chronic and acute criteria for the heavy metals lead, zinc, copper, cadmium and mercury. Cadmium, chromium, lead, and mercury also exceed EPA's domestic water supply criteria. Nutrients, solids, BOD, COD, and TOD are also significantly higher than the background levels of the stream. This potential impact could be alleviated by the construction of a closed drainage system to carry all stormwater runoff to an off site percolation pond. In addition, a water quality monitoring program could be conducted during construction and for a period of 2 years of roadway operation

to monitor water quality levels.

Consideration is also being given to relocating the entire Nursery operations. Discussions are currently ongoing with the Maryland Department of Natural Resources to determine if this is a reasonable or feasible solution. In the event it is determined that relocation of the Nursery is not feasible or reasonable, then all reasonable mitigation measures for the nursery will be incorporated into the project design.

Secondary impacts will occur as the improved highway allows the planned development to take place. This development will further impact the existing vegetation through the construction of residential subdivisions and commercial and industrial enterprises. The development resulting from this project, however, has been integrated into or will be restricted by the General Development Plans of both Anne Arundel and Howard Countles.

6. Effects on Threatened or Endangered Species

Correspondence with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources - Wildlife Administration, Indicates there are no known populations of federally listed threatened or endangered species along the study corridor to be impacted by the selected alternate. Three state rare plants Arundinaria gigantea (Giant Cane), Carex barrattil (Barratt Sedge) and Helonias bullata (Swamp Pink) have been reported in the floodplains of Stony Run and Deep Run in the vicinity of Alternate 4. Two of these, C. barrattil and H. bullata, are federal candidate species presently under consideration by the U.S. Fish and Wildlife Service for listing as threatened or endangered species.



7. Visual/Scenic Resource Impacts

a. Short-Term Effects

Construction related short-term impacts to visual/aesthetic resources would be common to all the build alternates. These include storage of construction materials and machinery, cut and fill operations, regrading required for the new facilities, and loss of vegetation.

b. Long-term Effects

Long-term visual/aesthetic impacts resulting from construction vary for each alternate. In general, because Alternate 2 more closely follows an existing roadway alignment and has fewer grade separated interchanges, its potential for long term adverse effects to visual scenic resources would be less that for Alternates 3 and 4.

Alternate 2: This alternate proposes a new interchange at U.S. Route 1, and an expanded interchange at the B.W. Parkway, both of which would have visual impacts upon nearby areas. The new intersection at the Race Road area would also impact visually on surrounding residences and the expanded roadway would also impact more severely on nearby residents of the Sandalwood Subdivision.

The Alternate 2A alignment would be visible from some residences in the Burleytown area, and would also result in major visual impacts to the northeastern portions of the Queenstown community.

The Alternate 2B alignment would result in visual impacts to the McPherson residential development and Friendship Park, as well as having major visual impacts on the northeastern portion of Queenstown.

Alternate 3: Alternate 3 proposes four grade separated Interchanges which would be visible to nearby residences. The Interchanges

require substantial amount of land and would be dominant visual elements where they occur. These are located at U.S. Route 1, the Race Road area, the B-W Parkway, and the relocated Ridge Road. The new Ridge Road Interchange would have adverse visual impacts to the Shipley House Historic Site and to Harmans Park, as well as to many residents of the Shipley Corner area. The Alternate 3 roadway would also result in visual impacts to the community of Matthewstown and to the Buckingham Forest Tree Nursery.

The Alternate 3A alignment calls for a new grade separated interchange at Camp Meade Road which would result in adverse visual impacts to the Munson Heights Subdivision and to the Smith Farm Historical Site. The alignment would also significantly effect the visual environment through Queenstown.

The alignment of the selected alternate, Alternate 3B (Modified), with its grade separated interchange at Camp Meade Road, would have adverse visual impacts on Munson Heights and the Smith Farm, as well as to some residents of the Burleytown area and to Friendship Park.

Alternate 4: This alternate alignment calls for four new grade separated interchanges which would be visible to nearby residences. These are located at U.S. Route 1, the B-W Parkway, New Ridge Road, and at Dorsey Road. The new interchange at the Baltimore-Washington Parkway infringes upon property of the Patapsco Valley State Park, and this along with its associated bridges over Piny Run and Deep Run, would severely impact upon the visual aesthetic qualities of the area. The alignment would also result in visual impacts to both the Queenstown Park and Friendship Park recreation areas, as well as to the Queenstown community.



c. Mitigation Measures

Certain measures can be incorporated into the design of the proposed roadway to reduce the potential for visual resource conflicts. These mitigation measures fall into several categories.

I. Vegetation

Existing vegetation, particularly mature trees, will be preserved and protected whenever possible. In addition, the right-of-way and medians could be planted with indigenous deciduous and evergreen trees, shrubs, native grasses and groundcover. These would be planted in clumps and masses of varying configurations to provide variety and interest. Preservation and introduction of plant material will provide screening of the road from surrounding areas and of unattractive views from the road.

II. Grading

Final design of the roadways will correspond to existing grades and topography, thus minimizing the amount of cut and fill and regrading required, and disruption to existing landforms. Finished grading will blend in with the general character of the surrounding physical environment.

III. Screening

Visual screening through landscaping and privacy fencing will be incorporated into the final design of the project where feasible in the vicinity of residential areas.

8. Coordination

in addition to correspondence with appropriate resource agencies (Section VI), this project has been coordinated with representatives of the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, the Environmental Protection Agency, the Maryland Department of Natural Resources

Water Resources Administration (DNR - WRA), Forest Park and Wildlife Service, at the quarterly interagency review sessions of the State Highway Administration.

D. Air Quality impacts

1. Analysis Objectives, Methodology and Results

The objective of the air quality analysis is to compare the carbon monoxide (CO) concentrations estimated to result from traffic configurations and volumes of each alternate with the State and National Ambient Air Quality Standards (S/NAAQS). The NAAQS and SAAQS are identical for CO: 35 PPM (parts per million) for the maximum one-hour period and 9 PPM for the maximum consecutive eight-hour period.

A microscale ∞ pollution diffusion analysis was conducted using the third generation California Line Source Dispersion Model, CALINE 3. This microscale analysis consisted of projections of one-hour and eight-hour ∞ concentrations at sensitive receptor sites under the worst case meteorological conditions for the No-Build and the Build Alternates for the design year (2010) and the estimated year of completion (1990).

a. Analysis inputs

A summary of analysis inputs is given below. More detailed information concerning these inputs is contained in the Maryland Route 100 Air Quality Analysis which is available for review at the Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

Background ∞ Concentrations — in order to calculate the total concentration of ∞ , which occurs at a particular receptor site during worst case meterological conditions, the background ∞ concentrations are considered in addition to the levels directly attributable to the facility

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under consideration. The background CO concentrations were derived from the application of rollback methodology to on-site monitoring conducted at Fort George G. Meade during the period February, 1977. The resulting background concentrations are as follows:

O, PPM 1 hour 8 hour

1990 3.3 1.7 2010 2.6 1.3

Traffic Data, Emission Factors, and Speeds - The appropriate traffic data was utilized as supplied by the Bureau of Highway Statistics (June 1984, and September and October 1985) of the Maryland State Highway Administration.

The composite emission factors used in the analysis were calculated using the Environmental Protection Agency (EPA) MOBILE 3 (Mobile Source Emissions Model) computer program. An ambient air temperature of 20 degrees Fahrenheit was assumed in calculating the emission factors for both the 1 hour and 8 hour analysis in order to approximate worst case results for each analysis case. Credit for a vehicle inspection maintenance (I/M) emission control program beginning in 1984 was included in the emission factor calculations.

Average vehicle operating speeds used in calculating emission factors were based on the capacity of each roadway link from immediately adjacent links. Average operating speed ranged from 20 mph to 55 mph for the No-Bulid and Build Alternates depending upon the roadways under consideration.

Meterological Data - Worse-case meterological conditions of 1 meter/second for wind speed and atmospheric stability class F were assumed for both the 1 hour and 8 hour calculations. In addition, as stated above, a



worst-case temperature of 20 degrees Fahrenheit was assumed.

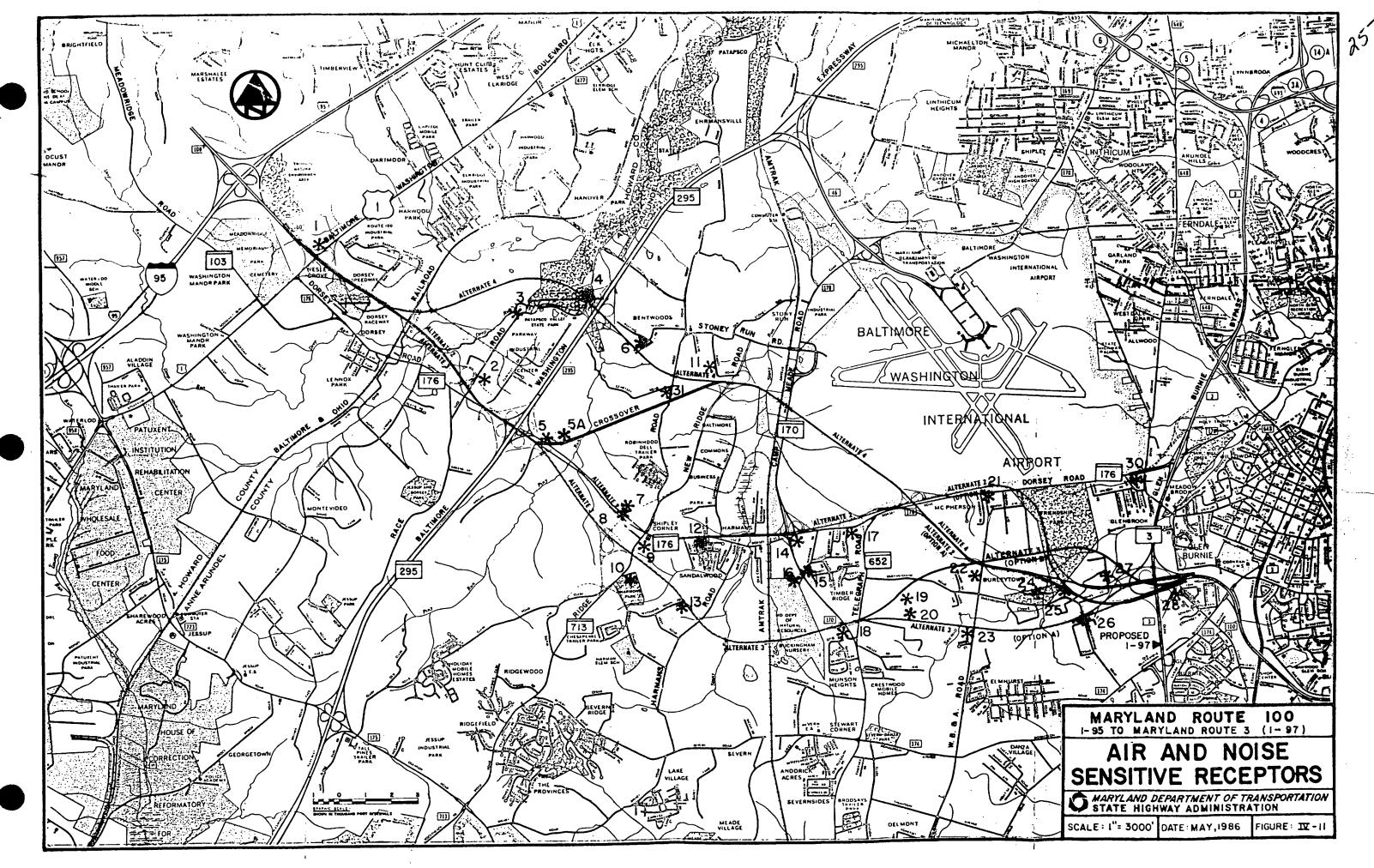
The wind directions utilized as part of the analysis were rotated to maximize ∞ concentrations at each receptor location. Wind directions varied for each receptor and were selected through a systematic scan of ∞ concentrations associated with different wind angles.

b. Sensitive Receptors

Site selection of sensitive receptors was made on the basis of proximity to the roadway, type of adjacent land use, and changes in traffic patterns on the roadway network. Thirty (30) receptor sites were chosen for this analysis consisting of twenty-three (23) residences, four (4) churches, two (2) parks and Buckingham Forest Tree Nursery. The receptor site locations were verified during study area visits by the analysis team. A general receptor site location map is shown on Figure IV-11 and specific sites are shown on Figures II-1 through II-34.



Site No.	Description/Location
1	Residence, NW US 1/MD 100 Interchange
2	Residence, Race Road near Dorsey Road
3	Residence, Race Road near Patapsco Valley State Park
4	Patapsco Valley State Park
5	Residence, NE MD 295/MD 100 Interchange
5A	Residence, NE MD 295/MD 100 Interchange
6	Residence, Bentwoods Road
7	St. Marks Church
8	Residence, SW Dorsey Road/Ridge Road Intersection
9	Shipley House (Historic)
10	Harmans Park
11	Residence, Valley Road
12	Residence, Sandalwood
13	Residence, Matthews Town Road
14	Residence, SE MD 170/MD 100 Interchange
15	Residence, Hawkins Road
16	Buckingham Forest Tree Nursery (air quality only)
17	Residence, Locust Drive
18	Residence, Otis Drive
19	Smith Farm (Historic)
20	Farmhouse, South of Queenstown Road/East of W.B. & A. Road
21	Residence, W.B. & A. Road/Dorsey Road Intersection
22	Residence, W. B. & A. Road/Queenstown Road
23	Residence, W.B. & A. Road/Dorol Court
24	Queenstown Park (Tennis Courts)
25	Metropolitan Church
26	Residence, Queenstown Road
27	Residence, Jones Road
28	Apartments, Old Stage Road
29	Emmanuel Church (not used)
30	Residence, Glenbrook
31	Calvary Chapel Church, Old Ridge Road



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c. Results of Microscale Analysis

The results of the calculations of ∞ concentrations at each of the sensitive receptor sites for the No-Build and Build Alternates are shown on Tables IV-1 and IV-2. The values shown consist of predicted CO concentrations attributable to traffic on various roadway links plus projected background levels. The No-Build Alternate assumes only the improvements as described in Section II are made to Maryland Route 176 and there is no extension of Maryland Route 100. in addition, the concentrations shown for Alternates 2A, 2B, 3B, 4 and 3 Crossover 4 assume a six (6) lane improvement which is the worst case alternate from an air quality viewpoint. The results of an analysis for the selected alternate, Alternate 3B (Modified), would be the same as those presented for Alternate 3-Option B. The results of an analysis for Alternate 4/3B would be the same as those presented for Alternate 4 for sites 1 to 23 and the same as those presented for Alternate 3-Option B for sites 24 A comparison of the values in Tables IV-1 and IV-2 with the S/NAAQS shows that no violations will occur for the No-Build or with any of the build alternates in 1990 or 2010 for the one-hour or eight-hour concentrations of ∞ .

The projected ∞ concentrations vary between alternates depending on receptor locations as a function of the roadway locations and traffic patterns associated with each alternate. The maximum one-hour concentrations associated with any of the alternates is only twenty percent (20%) of the one-hour S/NAAQS while the maximum eight-hour concentration is fifty percent (50%) of the eight-hour S/NAAQS.

2. Construction Impacts

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

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

3. Conformity with Regional Air Quality Planning

The project is in an air quality nonattainment area which has transportation control measures in the <u>State implementation Plan</u> (SIP). This project conforms with the SIP since it originates from a conforming transportation improvement program.

4. Agency Coordination

Copies of the Maryland Route 100 Air Quality Analysis have been circulated to the U.S. Environmental Protection agency and the Maryland Department of Health and Mental Hygiene - Air Management Administration and have been approved. The U.S. EPA approved the approach outlined for analyzing the air quality impacts of the project and offered no objections to completing



this portion of the environment study (letter dated August 19, 1986). The Maryland Air Management Administration found that the Air Quality Analysis for this project is not inconsistent with the Administration's plans and objectives (letter dated August 13, 1986). Both of these letters are contained in Section VI.

TABLE IV-I CO CONCENTRATION* AT EACH RECEPTOR SITE, PPM 1990

	1	1990													•	
	-	NO-E	BUILD	ALTERN	ATE 2-A	ALTERN	IATE 2-B	ALTERN	IATE 3-A	ALTERN	IATE 3-B	ALTERN	IATE 4	ALT.3 / ALT.4 CROSSOVER		
		I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I IIR.	8 HR.	
	1	3.9	2.1	4.2	2.4	4.2	2.4	4.1	2.4	4.1	2.4	4.2	2.4	4.	2.4	
	2	4.1	1.9	4.0	2.2	4.0	2.2	3.7	2.0	3.7	2.0	3.3	1.7	3.3	1.7	
	3	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	3.5	1.7	3.3	1.7	
	4	3.6	2.0	3.6	2.0	3.6	2.0	3.6	2.0	3.6	2.0	4.4	2.3	3.6	2.0	
	5	4.9	2.2	4.3	2.4	4.3	2.4	4.6	2.4	4.6	2.4	3.4	1.8	4.5	2.4	
	6	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	4.0	2.1	3.3	1.7	
<u> </u>	7	5.7	2.4	4.8	2.8	4.8	2.8	3.9	2.0	3.9	2.0	3.8	1.9	3.8	1.9	
	8	5.1	2.2	4.4	2.5	4.4	2.5	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9	
	9	5.1	2.2	4.4	2.5	4.4	2.5	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9	
	10	3.5	1.8	3.5	1.8	3.5	1.8	3.8	1.9	3.8	1.9	3.5	1.8	3.5	1.8	
	11	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	4.1	2.0	4.4	2.2	
	12	6.0	2.6	5.0	2.9	5.0	2.9	3.9	2.0	3.9	2.0	3.8	1.9	3.8	1.9	
	13	3.3	1.7	3.3	1.7	3.3	1.7	4.1	2.1	4.1	2.1	3.3	1.7	3.3	1.7	
	14	5.0	3.0	4.5	2.6	4.5	2.6	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9	
	15	4.6	2.1	3.8	2.2	3.8	2.2	. 3.9	2.3	3.9	2.3	3.9	2.3	3.9	2.3	
	16	4.2	2.0	3.8	2.2	3.8	2.2	3.9	2.3	3.9	2.3	3.9	2.3	3.9	2.3	

*INCLUDING BACKGROUND CONCENTRATIONS

1 HOUR = 3.3

8 HOUR = 1.7

THE S/NAAQS FOR CO: I HOUR MAX. = 35 PPM

8 HOUR MAX.= 9 PPM



TABLE IV-I (cont.) CO CONCENTRATION* AT EACH RECEPTOR SITE, PPM 1990

		NO-B	UILD	ALTERNA	ATE 2-A	ALTERN	ATE 2-B	ALTERN	IATE 3-A	ALTERN	ATE 3-8	ALTERN	ATE 4	ALT. 3 / CROSS	
		I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.
T	17	6.8	3.6	4.5	2.6	4.5	2.6	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9
	18	4.4	2.1	3.8	2.2	3.8	2.2	3.9	2.3	3.9	2.3	3.9	2.3	3.9	2.3
	19	3.3	1.7	3.3	1.7	3.3	.1.7	3.7	2.0	3.8	2.1	3.3	1.7	3.3	1.7
	20	3.3	1.7	3.3	1.7	3.3	1.7	3.8	2.1	3.7	2.0	3.3	1.7	3.3	1.7
	21	6.1	3.5	4.3	2.4	5.6	3.4	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9
	22	3.3	1.7	4.6	2.5	3.3	1.7	3.3	1.7	3.8	2.1	4.6	2.5	4.6	2.5
	23	3.3	1.7	3.3	1.7	3.3	1.7	3.7	2.0	3.3	1.7	3.3	1.7	3.3	1.7
	24	3.3	1.7	4.7	2.8	3.3	1.7	3.3	1.7	3.3	1.7	4.7	2.8	4.7	2.8
	25	3.3	1.7	4.7	2.8	4.4	2.6	3.6	1.9	3.3	1.7	4.7	2.8	4.7	2.8
	26	3.3	1.7	4.3	2.4	4.3	2.4	4.5	2.5	3.3	1.7	4.3	2.4	4.3	2.4
	27	3.3	1.7	5.4	2.9	5.1	2.9	3.7	2.0	4.0	2.3	5.1	2.9	5.1	2.9
	28	4.5	2.6	4.7	2.9	4.7	2.9	4.8	3.0	4.8	3.0	4.8	3.0	4.8	3.0
	30	7.0	3.7	4.1	2.2	- 4.1	2.2	3.8	1.9	3.8	1.9	3.8	1.9	3.8	1.9
	31	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	3.3	1.7	4.0	2.0	3.9	1.9
							·								
					·										

*INCLUDING BACKGROUND CONCENTRATIONS

HOUR = 3.3 8 HOUR = 1.7 THE S/NAAQS FOR CO: I HOUR MAX.= 35 PPM 8 HOUR MAX.= 9



TABLE IV-II CO CONCENTRATION* AT EACH RECEPTOR SITE, PPM 2010

			7		·		2010	· · · · · · · · · · · · · · · · · · ·						
	NO-	BUILD	ALTERN	ATE 2-A	ALTER	NATE 2-B	ALTERI	NATE 3-A	ALTERN	NATE 3-8	ÁLTERI	NATE 4	ALT.3	/ALT.4 SOVER
	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.
	3.3	1.8	4.0	2.3	4.0	2.3	3.7	2.1	3.7	2.1	4.0	2.3	3.7	2.1
2	3.8	1.7	3.7	2.1	3.7	2.1	3.4	1.9	3.4	1.9	2.6	1.3	2.6	
3	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	2.9	<u> </u>	 	, 1.3
4	3.0	1.6	3.0	1.6	3.0	1.6	3.0	1.6	3.0			1.5	2.6	1.3
5	5.0	2.0	4.2	2.5	4.2	2.5	4.5	2.4	4.5	1.6	4.4	2.1	3.0	1.6
6	2.6	1.3	2.6	1.3	2.6	1.3	2.6	 		2.4	2.7	1.4	4.4+	2.4
7	6.3	2.4	5.1	3.2	-			1.3	2.6	1.3	3.8	1.9	2.6	1.3
8	5.1			<u> </u>	5.1	3.2	4.2	2.1	4.2	2.1	3.1	1.6	3.1	1.6
9		2.1	4.4	2.6	4.4	2.6	3.3	1.7	3.3	1.7	3.1	1.6	3.1	1.6
10	5.2	2.1	4.3	2.6	4.3	2.6	3.3	1.7	3.3	1.7	3.1	1.6	3.1	1.6
	3.0	1.5	3.0	1.5	3.0	. 1.5	3.3	1.7	3.3	1.7	3.0	1.5	3.0	1.5
11	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	3.8	1.9	4.3	2.1
12	5.8	2.5	5.4	3.4	5.4	3.4	4.2	2.1	4.2	2.1	3.1	1.6	3.1	1.6
13	2.6	1.3	2.6	1.3	2.6	1.3	4.0	2.0	4.0	2.0	2.6	1.3	2.6	1.3
14	5.2	2.9	4.8	2.9	4.8	2.9	3.1	1.6	3.1	1.6	3.1	1.6	3.1	1.6
15	4.6	1.9	3.4	2.0	3.4	2.0	3.5	2.1	3.5	2.1	3.5	2.1		
16	4.0	1.7	3.4	2.0	3.4	2.0	3.5	2.1					3.5	2.1
	* 11101.11							4.1	3.5	2.1	3.5	2.1	3.5	2.1

*INCLUDING BACKGROUND CONCENTRATIONS

1 HOUR = 2.6 8 HOUR = 1.3

THE S/NAAQS FOR CO: I HOUR MAX. = 35 PPM

8 HOUR MAX.= 9 PPM



TABLE IV-II (cont.) CO CONCENTRATION* AT EACH RECEPTOR SITE, PPM 2010

		NO-B	UILD	ALTERN	ATE 2-A	ALTERN	ATE 2-B	ALTERN	ATE 3-A	ALTERN	ATE 3-B	ÅLTERN	ATE 4	ALT.3 / ALT.4 CROSSOVER		
		I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	I HR.	8 HR.	
Ī	7	7.7	4.5	4.5	2.7	4.5	2.7	3.1	1.6	3. I	1.6	3.1	1.6	3.1	1.6	
1	8	4.3	1.8	3.4	2.0	3.4	2.0	3.5	2.1	3.5	2.1	3.5	2.1	3.5	2.1	
Ti	9	2.6	1.3	2.6	1.3	2.6	1.3	3.2	1.8	3.1	1.7	2.6	1.3	2.6	1.3	
2	0	2.6	1.3	2.6	1.3	2.6	1.3	3.1	1.7	3.2	1.8	2.6	1.3	2.6	1.3	
2	21	6.9	3.9	4.3	2.5	6.3	4.0	3.1	1.6	3.1	1.6	3.1	1.6	3.1	1.6	
1 2	22	2.6	1.3	4.5	2.8	2.6	1.3	2.6	1.3	3.1	1.7	4.5	2.8	4.5	2.8	
	23	2.6	1.3	2.6	1.3	2.6	1.3	3.2	1.7	2.6	1.3	2.6	1.3	2.6	1.3	
2	24	2.6	1.3	4.9	3.0	2.6	1.3	2.6	1.3	2.6	1.3	4.9	3.0	4.9	3.0	
2	5	2.6	1.3	5.0	3.0	4.5	2.6	3.0	1.6	2.6	1.3	5.0	3.0	5.0	3.0	
2	26	2.6	1.3	4.3	2.5	4.3	2.5	4.3	2.5	2.6	1.3	4.3	2.5	4.3	2.5	
2	27	2.6	1.3	5.3	3.3	5.3	3.3	3.3	1.7	3.6	2.0	5.3	3.3	5.3	3.3	
2	8	5.0	3.1	5.2	3.4	5.2	3.4	5.3	3.5	5.3	3.5	5.3	3.5	5.3	3.5	
3	0	8. I	4.8	4.1	2.2	4.1	2.2	3.1	1.6	3.1	1.6	3.1	1.6	3.1	1.6	
3	11	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	2.6	1.3	3.8	1.7	3.6	1.7	

*INCLUDING BACKGROUND CONCENTRATIONS

1 HOUR = 2.6 HOUR = 1.3 THE S/NAAQS FOR CO: I HOUR MAX.= 35 PPM 8 HOUR MAX.= 9 PPM

Play



E. Noise impact Analysis

1. <u>introduction</u>

As discussed in Section III.E., traffic noise impacts occur when predicted Maryland Route 100 design year traffic noise levels exceed 67 dBA Leq or exceed the measured ambient "without aircraft" levels by 10 dBA or more. Where noise impacts occur, noise abatement methods are examined. This section identifies areas of noise impact for the various design alternatives, and then looks at the feasibility of using noise barriers to minimize or eliminate impacts. The following paragraphs first present the measured levels for the noise sensitive areas, then discuss noise prediction methods, identify areas of noise impact, and finally present an analysis of noise barrier feasibility.

2. Ambient Noise Levei Measurements

Twenty-nine noise sensitive areas (NSA's) were identified and analyzed in the study area (see Figure IV-11). All are categorized as Activity Category B in accordance with the FHWA noise abatement criteria and land use relationship shown on Table III-7. These are shown on Table IV-3 in section IV.D. Noise measurements were conducted at all of the noise sensitive areas (note that there are 30 numbered areas, but site number 16 is an air quality location only). A noise monitor was used for 20 to 30 minutes at each NSA. At most locations, printouts of Leq values permitted separation of non-aircraft noise level. The following table describes each NSA and gives the measured results in terms of dBA Leq.



TABLE IV-3 - NOISE SENSITIVE AREAS AND AMBIENT NOISE LEVELS

Noise Sensitive	With	without	D an aw ladd an
<u>Area</u>	Alrcraft	Alrcraft	<u>Description</u>
1	66	63	One (1) 2 story frame single family residence north side of U.S. Route 1 with direct access to U.S. Route 1.
2	70	61	One (1) 3 story frame single family residence with direct access to Race Road.
3	70	43	One (1) 2 story frame single family residence with direct access to Race Road.
4	68	42	Patapsco State Valley Park.
5	71	68	One (1) 2 story frame single family residence with direct access to Maryland Route 176.
6	68	43	One (1) 2 story frame single family residence with direct access to Bentwoods Road.
7	69	68	St. Marks United Methodist Church is a one (1) story brick building with direct access to Maryland Route 176. The church is air conditioned and has no day school.
8	70	58	One (1) 1 story single family residence with direct access to Maryland Route 713.
9	60	57	One (1) 3 story frame single family residence with direct access to Ridge Road (Shipley House Historic Site).
10	62	61	Harmans Park - Receptor site is at the back- stop of the baseball field.
11	76	44	One (1) 1 story stone single family residence with direct access to Valley Road off of Old Stony Run Road.
12	67	65	One (1) 2 story frame single family residence located on Sandalwood Lane with access to Maryland Route 176.
13	52	52	One (1) 1 story brick rancher single family residence with direct access to Matthews Town Road.

TABLE IV-3 NOISE SENSITIVE AREAS AND AMBIENT NOISE LEVELS (CONT'D)

Noise Sensitive Area	Measure With Aircraft	d Leq Witho <u>Alrcra</u>	
14	62	59	One (1) 3 story frame single family residence with direct access to Maryland Route 176.
15	61	56	One (1) 1 story brick rancher with carport, a single family residence with access to Hawkins Road.
16 (Air Quality onl	у)	Buckingham Forest Tree Nursery
. 17	70	70	One (1) 2 story frame and brick single family residence with direct access to Maryland Route 176.
18	58	58	One (1) 1 story frame single family residence with direct access to Otis Drive.
19	54	49	One (1) 3 story frame single family residence with direct access to Maryland Route 652 (Smith Farm - Historic Site).
20	54	49	One (1) 3 story frame single family residence with direct access to Maryland Route 652.
21	71	70	One (1) 2 story frame single family residence with direct access to Maryland Route 176.
22	53	49	One (1) 2 story frame single family residence with direct access to W.B.A. Road.
23	66	54	One (1) story ranch single family residence on Dorol Court.
24	57	52	Queenstown Park - Receptor site is the center of Tennis/Basketball Court with direct access to Queenstown Road.
25	59	54	Metropolitan United Methodist Church is a 1 story brick building with direct access to Queenstown Road. This church is air conditioned and has no day school.
26	61	55	One (1) 1 story ranch single family residence with direct access to Queenstown Road.
27	68	51	One (1) story frame single family residence with direct access to Jones Road.



TABLE IV-3 NOISE SENSITIVE AREAS AND AMBIENT NOISE LEVELS (CONT'D)

Notse		red Leq	
Sensitive Area	With <u>Aircraft</u>	Witho Aircra	
28	63	63	Apartments 3 story brick building with access to Old Stage Road.
30	70	70	One (1) 1 story frame single family residence with direct access to Elkridge Landing Road.
31	72	52	Calvary Chapel Church is a 1 story frame church on Old Ridge Road. This Church is air conditioned and does have a day school.

3. Predicted Noise Levels

a. Prediction Methodology

The method used to predict the future noise levels for the proposed extension of Maryland Route 100 was developed by the Federal Highway Administration of the U.S. Department of Transportation. The FHWA Highway Traffic Noise Prediction Model (FHWA Model) incorporates data pertaining to normal traffic volume increases over time, utilizes an experimentally and statistically determined reference sound level for three classes of vehicles (autos, medium duty trucks, and heavy duty trucks) and applies a series of adjustments to each reference level to arrive at the predicted sound level. The adjustments include: 1) traffic flow corrections taking into account number of vehicles, average vehicle speed, and specifies a time period of consideration; 2) distance adjustment comparing a reference distance and actual distance between receiver and roadway; and 3) adjustment for various types of physical barriers that would reduce noise transmission from source (roadway) to receiver.



Pursuant to the procedures published in the FHWA FHPM 7-7-3, prediction calculations and noise barrier calculations were performed utilizing a computer program version of the FHWA Model described in report FHWA-RD-77-108. The calculations do not predict future noise levels 'with aircraft since airplane noise is not generated by this project and cannot be mitigated by noise barriers.

b. Summary of Traffic Parameters

Traffic information for this analysis was prepared by the Maryland State Highway Administration's Bureau of Traffic Engineering and Bureau of Highway Statistics for the Design Year (2010).

in predicting noise levels and assessing noise impacts, the traffic characteristics yielding the worst hourly traffic noise impact on a regular basis for the design year for each alternate were used.

c. <u>Prediction Results</u>

Noise levels projected for the design year (2010) for the "Bulid" and "No-Build" alternatives are shown in Tables IV-4 and IV-5.

4. Noise impact Assessment

a. Impact Analysis and Feasibility of Noise Control

The determination of environmental noise impact is based on the relationship between the predicted noise levels, the established noise abatement criteria, and the ambient noise levels in the project area. The applicable standard is the Federal Highway Administration's Noise Abatement Criteria/Activity Relationship (see Table III-7) published in FHPM 7-7-3. When design year Leq noise levels are projected to exceed the abatement criteria or increase ambient conditions by 10 dBA or more, noise abatement measures (in general, noise barriers) are considered to minimize impact. Con-



sideration is based on the size of the impacted area (number of structures, spacial distribution of structures, etc.), the predominant activities carried on within the area, public input, the visual impact of the control measure, practically of construction, and economic feasibility.

PROJECT NOISE LEVELS TABLE IV-4

MARYLAND ROUTE 100 ALTERNATES 2A, 2B, 3A, 3B,4 & 3 CROSSOVER 4

}	T	T		DESIGN YEAR 2010 Leg							
NSA	DESCRIPTION		NT Lea		D	ESIGN Y	EAR 201	O Leq	·		
		with aircraft	without aircraft	2 A	28	3 A	38	4	3 X-OVER 4		
ì	RESIDENTIAL	66	63	67	67	68*	68 *	68*	68*		
2	RESIDENTIAL	70	61	67	67	69*	69 *	-	67		
3	RESIDENTIAL	70	43	-	-	-	-	59*	-		
4	RESIDENTIAL	68	42	-		_	_	67 *	-		
5	RESIDENTIAL	71	68	65	65	67	67	-	-		
				٠.							
6	RESIDENTIAL	68	43	-	-	-	-	67 , *	-		
7	CHURCH	69	68	66	66	67	67	-	-		
8	CHURCH	70	58	66	66	68 *	68 *	-	. =		
9	RESIDENTIAL	60	57	65	65	68 *	68*	-	_		
10	PARK	62	61	-	-	. 58	58	-	-		
11	RESIDENTIAL	76	44	_	-	-	_	66*	65 [*]		
12	RESIDENTIAL	67	65	71*	71*	-	-	-	_		
13	RESIDENTIAL	52	52	-	-	68 *	68*	-	-		
14	RESIDENTIAL	62	59	68*	68 *	-	-		-		
15	RESIDENTIAL	61	56	62	62	-	-	-	-		
16	RESIDENTIAL	Air Q Onl	uality y	-	-	-	-	-	-		
17	RESIDENTIAL	70	70	63	63	-	-	-	-		
18	RESIDENTIAL	58	58	-	-	70*	70*	-	_		
19	RESIDENTIAL	54	49	-	-	58	57	-	-		
50	RESIDENTIAL	54	49	-	-	71*	-	-	_		

PROJECT NOISE LEVELS TABLE IV-4 (CONT.)

MARYLAND ROUTE 100 ALTERNATES 2A, 2B, 3A, 3B, 4 & CROSSOVER 4

	AMBIE	NT Leq		Đ	ESIGN Y	EAR 201	O Leg	· · · · · · · · · · · · · · · · · · ·		
DESCRIPTION	with aircraft	without aircraft	2A	28	3A	38	4	3X-OVER 4		
RESIDENTIAL	71	70	-	72*	-	-	-	_		
RESIDENTIAL	. 53	49	61 [*]	_	-	65*	61 *	61*		
SWIM CLUB	66	54	-	-	63	-	•			
PARK	57	52	56		-	-	56	56		
CHURCH	59	54	62	62	-	-	62	62		
RESIDENTIAL	61	. 55	60	57	70*	-	-			
RESIDENTIAL	68	51	65*	65*	61*	62*	65*	65 [*]		
RESIDENTIAL	63	63	66	66	69 *	69 [*] .	69 [*]	69 [*]		
	-									
RESIDENTIAL	70	70	76 [*]	76*	75*	75 *	-	-		
CHURCH	72	52	-	-	-	-	61	64*		
					•			·		
						•	•			
			NOTE:							
				LEVELS	THAT E	THER WIL	L EXCEE	D FHWA		
				IO dBA	OR MORE	E ABOVE C	URRENT			
	RESIDENTIAL SWIM CLUB PARK CHURCH RESIDENTIAL RESIDENTIAL RESIDENTIAL	DESCRIPTION with aircraft RESIDENTIAL 71 RESIDENTIAL 53 SWIM CLUB 66 PARK 57 CHURCH 59 RESIDENTIAL 61 RESIDENTIAL 68 RESIDENTIAL 63 RESIDENTIAL 70	DESCRIPTION with aircraft without aircraft RESIDENTIAL 71 70 RESIDENTIAL 53 49 SWIM CLUB 66 54 PARK 57 52 CHURCH 59 54 RESIDENTIAL 61 55 RESIDENTIAL 68 51 RESIDENTIAL 63 63 RESIDENTIAL 70 70	DESCRIPTION with direcraft direcraft direcraft 2A RESIDENTIAL 71 70 - RESIDENTIAL 53 49 61* SWIM CLUB 66 54 - PARK 57 52 56 CHURCH 59 54 62 RESIDENTIAL 61 55 60 RESIDENTIAL 68 51 65* RESIDENTIAL 63 63 66 RESIDENTIAL 70 70 76* CHURCH 72 52 -	DESCRIPTION with without 2A 2B RESIDENTIAL 71 70 - 72* RESIDENTIAL 53 49 61* - SWIM CLUB 66 54 - - PARK 57 52 56 - CHURCH 59 54 62 62 RESIDENTIAL 61 55 60 57 RESIDENTIAL 68 51 65* 65* RESIDENTIAL 63 63 66 66 RESIDENTIAL 70 70 76* 76* CHURCH 72 52 - -	DESCRIPTION	DESCRIPTION with aircraft aircraft aircraft aircraft aircraft aircraft aircraft aircraft 2A 2B 3A 3B RESIDENTIAL 71 70 - 72* 65* RESIDENTIAL 53 49 61* 65* SWIM CLUB 66 54 63	DESCRIPTION with directal 2A 28 3A 38 4 RESIDENTIAL 71 70 - 72* RESIDENTIAL 53 49 61* 65* 61* SWIM CLUB 66 54 63 56 CHURCH 59 54 62 62 62 RESIDENTIAL 61 55 60 57 70* 65* RESIDENTIAL 68 51 65* 65* 61* 62* 65* RESIDENTIAL 63 63 66 66 69* 69* 69* RESIDENTIAL 70 70 76* 76* 75* 75* - 61 CHURCH 72 52 61		

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PROJECT NOISE LEVELS TABLE IV-5

MARYLAND ROUTE 100 - NO BUILD ALTERNATE

NSA		AMBIEN	1			DECIC	VEND	2010	1 4 4			
	DESCRIPTION	with	without			DESIGN	ILAR	2010	red			\dashv
		aircraft	aircraft		<u></u>				·			4
ı F	RESIDENTIAL	66	63	67								
2 F	RESIDENTIAL	70	61	62				· · · · · · · · · · · · · · · · · · ·				
5 F	RESIDENTIAL	71	68	76								
7 (CHURCH	69	68	70			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· - 1/	<u></u>			
8 0	CHURCH	70	58	62		٠.						
9 1	RESIDENTIAL	60	57	64								
12 1	RESIDENTIAL	67	65	66	•							
14	RESIDENTIAL	62	59	· 65			<u>.</u>		· · · · · · · · · · · · · · · · · · ·		<u> </u>	
.17	RESIDENTIAL	70	70	76								
21 8	RESIDENTIAL	71	70	76	,							
30	RESIDENTIAL	70	70	76 -								
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	•											
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Economic assessment is based on the following assumptions. An effective barrier should, in general, extend in both directions to four (4) times the distance between receiver and roadway (source). In addition, an effective barrier should provide a 7 to 10 dBA reduction of the noise level, as a preliminary design goal. For the purpose of comparison, a total cost of \$27 per square fcot is assumed to estimate total barrier cost. This cost figure is based on current costs experienced by the Maryland State Highway Administration and includes the costs of panels, fcotings, drainage, land-scaping, and overhead. In addition, the upset limit to determine how reasonable a barrier may be is \$40,000 per residence. This is an average cost figure based on current and projected barrier costs by the Maryland State Highway Administration.

No-Build Alternate - For the No-Build Alternate, eleven (11) noise sensitive areas were analyzed. Table IV-5 shows design year (2010) Leq noise levels would increase 1-8 dBA over present levels (without aircraft) and NSA's 5, 7, 17, 21 and 30 would exceed the noise abatement criteria of 67 dBA. These increases are due solely to increased traffic volumes on Dorsey Road and noise abatement measures are not recommended for this alternate.

Alternate 2A - Under this alternate, NSA's 12,14, 22, 27 and 30 would be exposed to traffic noise levels that in the design year (2010) either exceed FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels excluding alreaft (see Table IV-4). Table IV-6 summarizes the basic physical dimensions, estimated effectiveness, cost, number of residential units benefiting and the nominal cost per residence of barriers for each NSA.

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At NSA 12, a barrier 14 feet high and 1450 feet in length would provide a maximum of 9 dBA benefit to 19 residences at a total cost of \$548,000 or a cost per residence of \$29,000. The construction of a barrier at this location would be considered during final design if Alternate 2A is selected. This NSA is not located within the airport's noise zone.

At NSA 14, a barrier 20 feet high and 1000 feet in length would provide a maximum 5 dBA benefit to one residence at a cost of \$540,000. This barrier would be neither feasible nor reasonable because of cost and insufficient benefit and is not recommended.

At NSA 22 a barrier 20 feet high and 2800 feet in length would provide a maximum 7 dBA benefit to 3 residences at a total cost of \$1,512,000 or a cost per residence of \$504,000. This barrier would be feasible but not reasonable because of cost and is not recommended.

At NSA 27, a barrier 20 feet high and 800 feet in length would provide a maximum of 8 dBA benefit to one residence at a cost of \$432,000. This barrier would be feasible but not reasonable because of cost and is not recommended.

The Impact to NSA 30 is due solely to increased traffic along Dorsey Road and barrier construction is not feasible since the barrier would have to be segmented to provide access to cross roads.



Table IV-6 - Barrier Effectiveness
Alternate 2A

	Barrier	Dimensions	(Ft)			No. of Residences		Cost Per
<u>NSA</u> 12	Helght	Length	Benefit (dBA)		Cost	Benefiting	Re	esIdence
12	14	1450	9	\$	548,000	19	\$	29,000
14	20	1000	· 5	\$	540,000	1	\$	540,000
22	20	2800	7	\$1	,512,000	3	\$	504,000
27	20	800	8	\$	432,000	1	\$	432,000
30	(see	text)						

Alternate 2B - Under this alternate, NSA's 12,14, 21, 27 and 30 would be exposed to traffic noise levels that in the design year (2010) either exceed the FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels excluding aircraft (see Table IV-4). Table IV-7 summarizes the basic physical dimensions, estimated effectiveness, cost, number of residential units benefitting and the nominal cost per residence of barriers for each NSA.

The barriers associated with NSA's 12 and 14 would be the same as under Alternate 2A.

At NSA 27, a barrier 20 feet high and 3350 feet in length would provide a maximum 4 dBA benefit to one residence at a cost of \$1,809,00. This barrier is not reasonable or feasible and is not recommended.

For NSA's 21 and 30, vehicles on local, unlimited access roads are responsible for noise impact, and barrier construction is not feasible.



Table IV-7 - Barrier Effectiveness Alternate 2B

	Barrier i	Dimensions (/F+\			No. of Residences		Cost
			•			nes i delices		Per
<u>NSA</u> 12	<u>Height</u>	<u>Length</u>	Benefit (dBA)		Cost	Benefiting	Res	s i dence
12	14	1450	9	\$	548,000	19	\$	29,000
14	20	1000	5	\$	540,000	1	\$	540,000
21	(see	text)			•		-	
27	20	3350	4	\$1	,809,000	1	\$1	,809,000
30	(see	text)				·	7.	, ,

Alternate 3A - Under this alternate, NSA's 1,2,8,9,13,18,20,26,28 and 30 would be exposed to traffic noise levels that in the design year (2010) would exceed the FHWA noise levels excluding aircraft (see Table IV-4). A Leq of 61 dBA would occur at NSA 27 and is considered to impact on that location because of the relatively low ambient levels that exist when aircraft are not overflying the area. Table IV-8 summarizes the basic physical dimensions, estimated effectiveness, cost, number of residential units benefitting and the nominal cost per residence of barriers for each NSA.

At NSA 1, a barrier varying in height from 20-28 feet and 900 feet in length would provide a maximum of 7 dBA benefit to 3 residences at a total cost of \$519,000 or a cost per residence of \$173,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 2, a barrier 15 feet in height and 950 feet in length would provide 2 residences a maximum of 7 dBA benefit at a total cost of \$385,000 or a cost per residence of \$192,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 8, a barrier 20 feet high and 3,200 feet iong would provide 5 residences a maximum of 5 dBA benefit at a total cost of \$1,728,000 or a cost per residence of \$346,000. This barrier is neither reasonable nor feasible and is not recommended.



At NSA 9, a barrier^{£1} 20 feet high and 3,200 feet long would provide six residences a maximum 8 dBA benefit at a total cost of \$1,728,000 or a cost per residence of \$288,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 13, a barrier 18 feet high and 900 feet in length would provide 2 residences a maximum of 8 dBA benefit at a total cost of \$437,000 or a cost per residence of \$219,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 18, a barrier 18 feet high and 1200 feet in length would provide 4 residences a maximum of 9 dBA benefit at a total cost of \$583,000 or a cost per residence of \$146,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 20, a barrier 12 feet high and 400 feet long would provide one residence a maximum of 8 dBA benefit at a cost of \$130,000. This barrier is feasible but not reasonable because of cost and is not recommended.

At NSA 26, a barrier 9 feet high and 1000 feet long would provide 6 residences a maximum of 8 dBA benefit at a total cost of \$243,000 or a cost per residence of \$41,000. This barrier would be feasible but not reasonable because of cost and is not recommended.

At NSA 27, a barrier 20 feet high and 3,360 feet long would provide one residence a maximum of 4 dBA benefit at a cost of \$1,814,000. This barrier is not reasonable or feasible and is not recommended.

At NSA 28, a barrier 20 feet high and 800 feet long would provide 12 residential units a maximum of 7 dBA benefit at a total cost of \$432,000 or a cost per residence of \$36,000. This barrier would be reasonable

and feasible and is being considered under the construction of 1-97.

As for the other alternates, NSA 30 is impacted by noise from traffic on Dorsey Road and barrier construction is not feasible.

Table IV-8 - Barrier Effectiveness
Alternate 3A

					No. of	Cost
•	Barrier	Dimensions	(Ft)		Residences	Per
<u>NSA</u>	<u>Helght</u>	Length	Benefit (dBA)	Cost	Benefiting	Residence
. 1	20-28	900	7	\$ 519,000	3	\$ 173,000
2	15	950	7	\$ 385,000	2	\$ 192,000
8	20	3200	5	\$1,728,000	5	\$ 346,000
9	20	3200	8	\$1,728,000	6	\$ 288,000
13	18	900	8	\$ 437,000	2	\$ 219,000
18	18	1200	9	\$ 583,000	4	\$ 146,000
20	12	400	8 .	\$ 130,000	1	\$ 130,000
26	9	1000	8	\$ 243,000	6	\$ 41,000
27	20	3360	4	\$1,814,000	1	\$1,814,000
28	20	800	7	\$ 432,000	12*	\$ 36,000
30	(see te	xt)		·		•

*Estimated No. of Apartment Units

Alternate 3B - As shown in Table IV-4, NSA's, 1,2,8,9,13,18,22,27,28 and 30 would be exposed to traffic noise levels that, in the design year (2010), would exceed the FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels (excluding aircraft). Table IV-9 summarizes the basic physical dimensions, estimated effectiveness, cost, number of residential units benefiting and the nominal cost per residence of barriers for each NSA.

At NSA's 1,2,8,9,13,18,28 and 30, the barriers and associated effectiveness would be the same as those described in Alternate 3A.

At NSA 22, a barrier 20 feet high and 2800 feet long would provide 3 residences approximately 8 dBA benefit at a total cost of \$1,512,000 or a cost per residence of \$504,000. This barrier would be feasible but not



reasonable because of cost and is not recommended.

At NSA 27, a barrier 20 feet high and 2,250 feet long would provide one residence approximately 6 dBA benefit at a cost of \$1,215,000. This barrier is feasible but not reasonable and is not recommended.

Table IV-9 - Barrier Effectiveness
Alternate 3B

	Barrier	Dimensions	(Ft)		No. of Residences	Cost Per
<u>NSA</u>	<u>Height</u>	Length	Benefit (dBA)	Cost	Benefiting	Res i dence
1	20-28	900	7 .	\$ 519,000	3	\$ 173,000
2	15	950	7	\$ 385,000	2	\$ 192,000
8	20	3200	5	\$1,728,000	5	\$ 346,000
9	20	3200	8	\$1,728,000	6	\$ 288,000
13	18	900	8	\$ 437,000	2	\$ 219,000
18	18	1200	9	\$ 583,000	4	\$ 146,000
22	20	2800	8	\$1,512,000	3	\$ 504,000
27	20	2250	6	\$1,215,000	. 1	\$1,215,000
28	20	800	7	\$ 432,000	.12*	\$ 36,000
30	(see te	xt)		. =,	· -	30,000

^{*}Estimated No. of Apartment Units

Alternate 3B (Modified) - The selected alternate would have the same noise impacts as those described for Alternate 3B.

Alternate 4 - Under this alternate, NSA's 1,3,4,6,11,22, 27, and 28 would be exposed to traffic noise levels that, in the design year (2010), would exceed the FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels excluding aircraft (see Table IV-4). Table IV-10 summarizes the barriers for each of the impacted NSA's.

At NSA's 1 and 28, the barriers would be the same as those described in Alternate 3A and the barriers associated with NSA's 22 and 27 would be the same as under Alternate 2A.



At NSA 3, a barrier 12 feet high and 7000 feet long would provide 8 residences between a 5 to 10 dBA benefit of a total cost of \$2,268,000 or a cost per residence of \$284,000. This barrier would be feasible but not reasonable and is not recommended.

At NSA 4, a barrier 12 feet high and 2,000 feet long would provide between 7 and 10 dBA benefit in the park at a total cost of \$648,000. This barrier is feasible and will be considered during final design if Alternate 4 is selected.

At NSA 6, a barrier 12 feet high and 1,000 feet in length would provide 5 residences a benefit of between 5 and 10 dBA at a total cost of \$324,000 or a cost of \$65,000 per residence. This barrier is feasible but not reasonable and is not recommended.

At NSA 11, a barrier 12 feet high and 4,000 feet long would provide 3 residences and one church between a 5 to 10 dBA benefit at a total cost of \$1,296,000 or a cost per residence of \$185,000. This barrier is feasible but not reasonable because of cost and is not recommended.

Table IV-10 - Barrier Effectiveness
Alternate 4

NSA	Barrler Helght	Dimensions Length	(Ft) Benefit (dBA)	Cost	Residences Benefiting	Per Idence
1	20-28	900	7	\$ 519,000	3	\$ 173,000
3	12	7000	5–10	\$2,268,000	8	\$ 284,000
4	12	2000	7–10	\$ 648,000	· -	_
6	12	1000	5-10	\$ 324,000	5	\$ 65,000
11	12	4000	, 5– 10	\$1,296,000	3	\$ 185,000



Alternate 3/Crossover/Alternate 4 - Under this alternate, NSA's 1, 2, 11, 22, 27, 28, and 31 would be exposed to traffic noise levels that, in the design year (2010), would exceed the FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels excluding aircraft (see Table IV-4).

The barriers for NSA's 1, 2, and 28 are the same as for Alternate 3A and the barriers for 2, 22, and 27 are the same as for Alternate 2A.

At NSA 11 and 31, a barrier 12 feet high and 4,700 feet long would provide 5 residences and one church between 5 and 10 dBA benefit at a total cost of \$1,523,000 or a cost per residence of \$169,000. This barrier is feasible but not reasonable due to cost and is not recommended.

Table IV-11 - Barrier Effectiveness Alternate 3/Crossover/Alternate 4

NSA	Barrier Height	Dimensions Length	(Ft) Benefit (dBA)	Cost	No. of Residences Benefiting	Cost Per Residence
1	20-28	900	· 7	\$ 519,000	3	\$ 173,000
2	15	950	7	\$ 385,000	2	\$ 194,000
11&31	12	4700	5-10	\$1,523,000	5	\$ 169,000
22	20	2800	7	\$1,512,000	3	\$ 504,000
27	20	800	8	\$ 432,000	1	\$ 432,000
28	20	800	7	\$ 432,000	12	\$ 36,000

Alternate 4/3B - Under this alternate, NSA's 1, 3, 4, 6, 11, 22, 27, and 28 would be exposed to traffic noise levels that, in the design year (2010), would exceed the FHWA noise abatement criteria or increase by 10 dBA or more above current ambient noise levels excluding aircraft. The noise levels for NSA's 1,3,4,6,11 and 22 are shown in Table IV-4 under Alternate 4 and for NSA's 27 and 28 under Alternate 3B.



The barriers for NSA's 1,3,4,6,11 and 22 are the same as described for Alternate 4 and the barriers for NSA's 27 and 28 are the same as described for Alternate 3B.

Table IV-12 - Barrier Effectiveness
Alternate 4/3B

NSA	Barrler Helght	Dimensions Length	(Ft) Benefit (dBA)		Cost	No. of Residences Benefiting		Cost Per sidence
1	20–28	900	7	\$	519,000	3	\$	173,000
3	12	7000	5–10 .	\$2	,268,000	8	\$	284,000
4	12	2000	7–10	\$	648,000	-		-
6	12	1000	5–10	\$	324,000	5	\$	65,000
11	12	4000	5–10	\$1	,296,000	3	\$	185,000
27	20	2250	6	\$1	,215,000	1	\$1	,215,000
28	20	800	7	\$	432,000	12*	\$	36,000

^{*} Estimated No. of Apartment Units

b. Construction impacts

As with any major construction project, areas around the construction site are likely to experience varied periods and degrees of noise impact. This type of project would probably employ the following pieces of equipment which would likely be sources of construction noise:

Buildozers and Earth Movers Graders Front End Loaders Dump and other Diesel Trucks Compressors

the

Generally, construction activity would occur during normal working hours on weekdays. Therefore, noise intrusion from construction activities probably would not occur during critical sleep or outdoor recreation periods

F. impact on Historic or Archeological Sites

1. <u>Historic Sites - Consequences</u>

Seventeen historical sites are located within the study area; two sites are eligible for the National Register of Historic Places and the remaining 15 sites are not eligible, but are of Maryland inventory Quality. Refer to Table III-8 for level of significance.

The two sites eligible for the National Register are the Smith Farm (c.) and the Shipley House (J.). The Shipley House would not be directly impacted by any of the alternates, however, under Alternates 2 and 3, the site would be impacted by the close proximity of the alignments. Alternate 3-Option B would require the acquisition of some of the Smith Farm property but would not directly impact any buildings or the cemetery on the property. Alternate 3-Option A would be approximately 300 feet south of the Smith Farm and would therefore impact the property, but not adversely, due to the use of landscaping to provide a buffer zone.

The Maryland Historical Trust - State Historic Preservation Officer has determined that Alternate 3-Option B would have no adverse effect on the Shipley House or the Smith Farm conditional on landscaping plans which are reviewed and approved by the Maryland Historical Trust (see letter dated March 26, 1987 in section VI).

2. Archeological Sites

Five sites identified by the Maryland Geological Survey as potentially eligible for the National Register would be impacted by either the

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selected alternate, Alternate 3B (Modified), or by Alternate 4/3B. Since Alternate 3B (Modified) will impact four of these sites, phase II archeological studies to determine site extent, degree of impact, and eligibility for the National Register will be undertaken on sites 18AN596, 18AN580, and either 18AN579 or 18AN582. Sites 18AN579 and 18AN582 represent the same kind of activity with the same potential for research information. Site 18AN582 was not recommended for Phase II investigations by the Maryland Geological Survey since site 18AN579 offered superior site integrity. This work will be coordinated with the State Historic Preservation Officer.

if Alternate 4/38 had been selected, phase II archeological study would have been undertaken on site 18AN29A. In addition, phase I archeological reconnaissance would have had to be undertaken of the unsurveyed portions of archeological test tract 12. However, neither of these areas will be Impacted by Alternate 38 (Modified), the selected alternate.

G. Relationship between Short-term Effects and Long-term Productivity and Enhancement

All of the Build Alternates would allow traffic to move more efficiently through the study area. The proposed improvements should make the project area more attractive for economic development, thereby increasing employment opportunities in the study area.

Long term environmental effects include the elimination of active agricultural lands and woodlands and the acquisition of floodplain and wetland acreage. Noise levels would also increase in some areas.

Construction impacts which would have a short-term effect on the project area include erosion, siltation and stream turbidity. Dust and noise associated .with highway construction would also result in temporary



impacts. Every effort will be made by the State Highway Administration to minimize effects to the environment.

H. irreversible and irretrievable Commitment of Resources

The proposed project represents the irreversible and irretrievable commitment of woodlands and agricultural land for the highway right-of-way along with floodplain acreage and wildlife habitat. The land required for the project can be considered as permanently committed to a transportation corridor.

i. Energy impacts

Because of the resulting more efficient operating speeds, each of the freeway build alternates would require less operational energy usage than Alternate 2. Energy saved in operational energy requirements would more than offset energy expended in highway construction.

J. 4(f) Statement

1. Introduction

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. 303 (c)) requires that the proposed use of any land from either a public park of national, state, or local significance or from any historic site considered eligible for, or on the National Register of Historic Places be given particular attention. Final action requiring the taking of such land must document that there are no feasible and prudent alternatives to its use. Additionally, a full evaluation of measures to minimize harm must be made.

2. Description of the Proposed Action

The proposed action involves the construction of Maryland .

Route 100 as either a 6 lane urban arterial highway or a 4 to 6 lane divided

freeway between Maryland Route 3 (proposed i-97) and i-95. The alternates which were considered for this study are described in detail in Section ii-B. Alternate 2 - Options A and B and Alternate 3/Crossover/4 would impact upon Friendship Park. Alternate 4 and Alternate 4/3B would impact upon Friendship Park and the Patapsco Valley State Park. The selected alternate, Alternate 3B (Modified), would impact upon Friendship Park and the Smith Farm.

3. Description of 4(f) Resource

a. Friendship Park

Friendship Park is a 172 acre parcel of land originally acquired by BWi Airport to control the airspace for one of their runways. It is now leased by Anne Arundei County from the Maryland State Aviation Administration through the year 1992. The lease can be terminated on a one year notice if the Maryland Avaiation Administration determines that the land is needed for airport or other purposes. The bulk of this property is currently forested, unused, and inaccessible. Its general location in relation to the study area is shown on Figure III-2. The County has developed a recreation area in the northeast quadrant of the park which currently includes a recreation pond, parking, picnic tables and developed baseball diamonds. The only vehicle access to the recreation area is from Dorsey Road in the northeast corner of the tract. Park signs with regulations are posted at this entrance. Neither Program Open Space nor Land and Water Conservation Funds were used to acquire or develop Friendship Park. Along the Sawmili Creek valley through Friendship Park is a bridie trali which connects this park with Queenstown Park to the southwest. This is a vital trail link for horsemen traveling between W.B. & A. Road and the Andover Equestrian Center north of the Airport.



Bordering Sawmili Creek through Friendship Park is a wet-lands area (see Figure II-22) extending to a width of up to 500 feet. This is a Palustrine Forested broadleaf deciduous wetlands where the dominant canopy is 95% Red Maple with 5% other species. Water table can be plus or minus one foot from the surface in this area during different times of the year, and there are many hummocks. Associated secondary species in the canopy include Black Gum, Pin Oak & Cherry. Understory species include Magnolia, Winterberry, Skunk cabbage, Chain Fern, Cinnamon Fern, wood reed, Highbrush Blueberry, rhododendron, Uniola Laxa, Red Chokeberry and Lyonia.

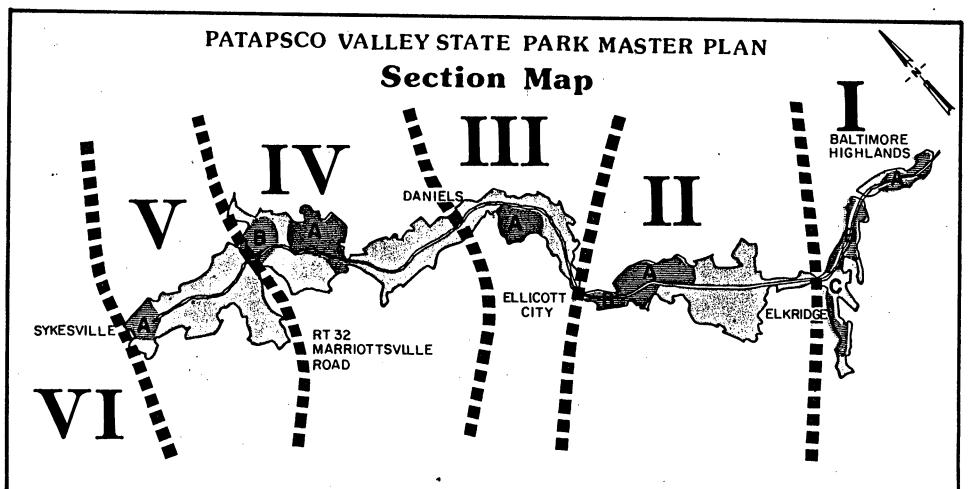
Approximately a thirty acre portion of this park property (a strip approximately 600 feet by 2,200 feet, see Figure iV-13) extending generally in a north-south direction through the parcel is non 4(f) property as per the lease description. This area is dedicated to runway lights for the Baltimore-Washington international Airport. An additional parcel of land (approximately 9 acres) is fenced off by the airport.

b. <u>Patapsco Valley State Park</u>

Patapsco Valley State Park is owned by the Maryland Department of Natural Resources. It consists of 11,347 acres (proposed to a total 15,200 acres), is 27 miles long and has an average width of one-half mile according to the "Patapsco Valley Master Plan", December, 1981. The Park is located in Carroll, Howard, Baltimore and Anne Arundel Counties with a north-south orientation along the Patapsco River. Existing and proposed recreational activities include canoeing, boating, fishing, swimming, multiuse trails for hikers, bicyclists and horseback riders, picnicking and camping.

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The Park is divided into five (5) sections (see Figure IV-12). Section I - Baltimore Highlands to Elkridge, extends along a 5.5 mile stretch of the Patapsco River and is located north of existing Maryland Route 176. This section includes three recreation areas: the Seven Ponds Area, the Halethorpe Farm Ponds area and the area located adjacent to the Baltimore-Washington Parkway. Access to Section I is provided via Ridge Road, River Road and Elkridge Landing Road. Most of the land in Section I lies in the floodplains of Deep Run and the Patapsco River. Family and group picnicking and an organized sports area are proposed for Section I-C, the Baltimore Washington Parkway area of Section I.



- I BALTIMORE HIGHLANDS to ELKRIDGE
- I-A Seven Ponds Area
- I-B Halethorpe Farm Ponds Area
- I-C Baltimore-Washington Parkway Picnic. Area
- II ELKRIDGE to ELLICOTT CITY
- II-A Ilchester Recreation Area
- II-B Ilchester Camping Area
- III ELLICOTT CITY to DANIELS III-A Hollofield Area

- IV DANIELS to MARRIOTTSVILLE ROAD
- IV-A Woodstock Area
- IV-B McKeldin Nature Interpretive Center
 - V MARRIOTTSVILLE ROAD to **SYKESVILLE**
- V-A Rainclisse Area
- VI SYKESVILLE to PARR'S SPRING

MARYLAND ROUTE 100 I-95 TO MARYLAND ROUTE 3 (I-97)

PATAPSCO VALLEY STATE PARK LOCATION PLAN

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

SCALE: NONE

DATE MAY, 1986 FIGURE: TV-12

c. Smith Farm

The Smith Farm is considered to be eligible for the National Register of Historic Places. It is located on a 46.3 acre parcel whose general location in relation to the study Area is shown on Figure III-2. Access to the site is from a drive entrance off of Route 652 (Telegraph Road) approximately 700 feet south of Queenstown Road. The Smith Farm is visually dominated by the large, two story, four bay frame house which sits on a hill overlooking the surrounding cropland. This large rambling frame structure, probably built in the third quarter of the nineteenth century by the Smith Family, is complemented by numerous farm buildings of later vintage and a family cemetery located next to the house. The farm is significant as a palpable link to the agrarian and rural character of this section of Anne Arundel County in the nineteenth and early twentieth century, and for the architectural character of the house and its traditional setting.

4. Impacts of the Alternates, Avoidance Options and Their Impacts, and Mitigation

a. Friendship Park

i) Impacts of Alternates

Alternate 2-Option A, Alternate 4 and Alternate 3/Crossover/4 would have identical impacts on the Friendship Park property. Approximately 4.0 acres of land would be used by the project in the southern extremity of the tract (see Figure IV-13). This amounts to approximately 3.0 percent of the total park property which is considered to be 4(f) property. The land being taken is currently wooded and unused, and is located approximately 2,500 feet distant from the County developed recreation area. No significant impacts on the recreation area itself would result from the land use change. These alternates would also impact upon approximately 1.8

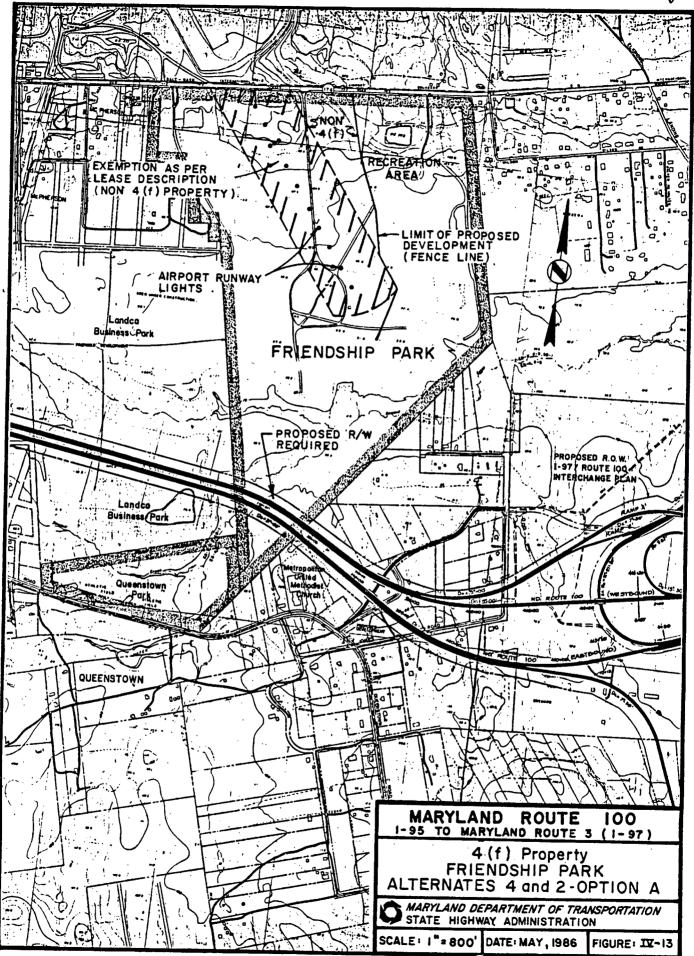


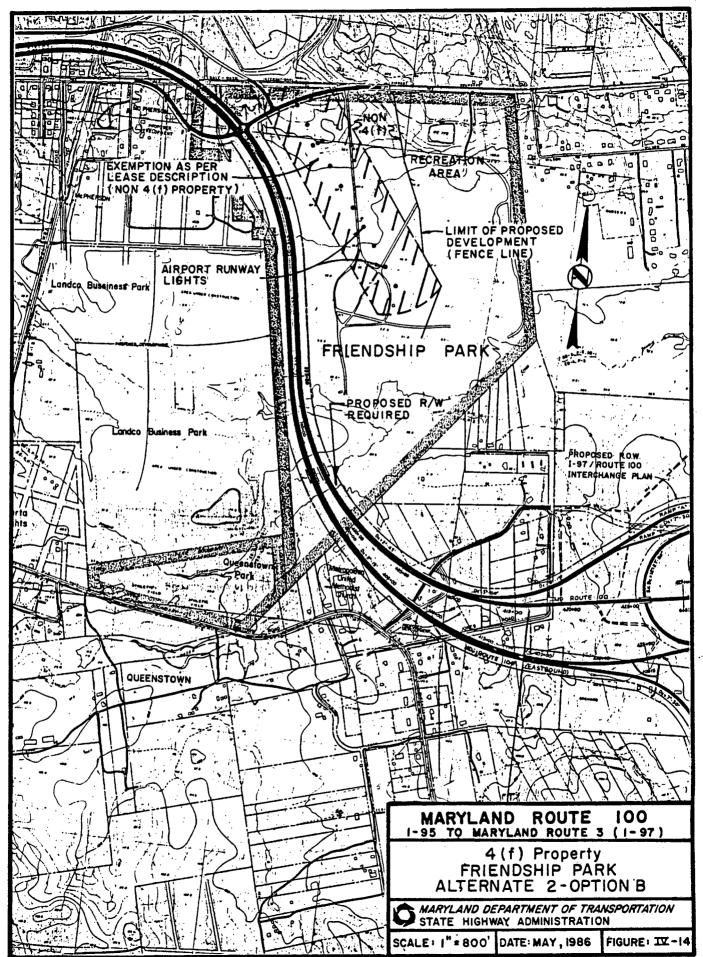
acres of wetlands within the Friendship Park property.

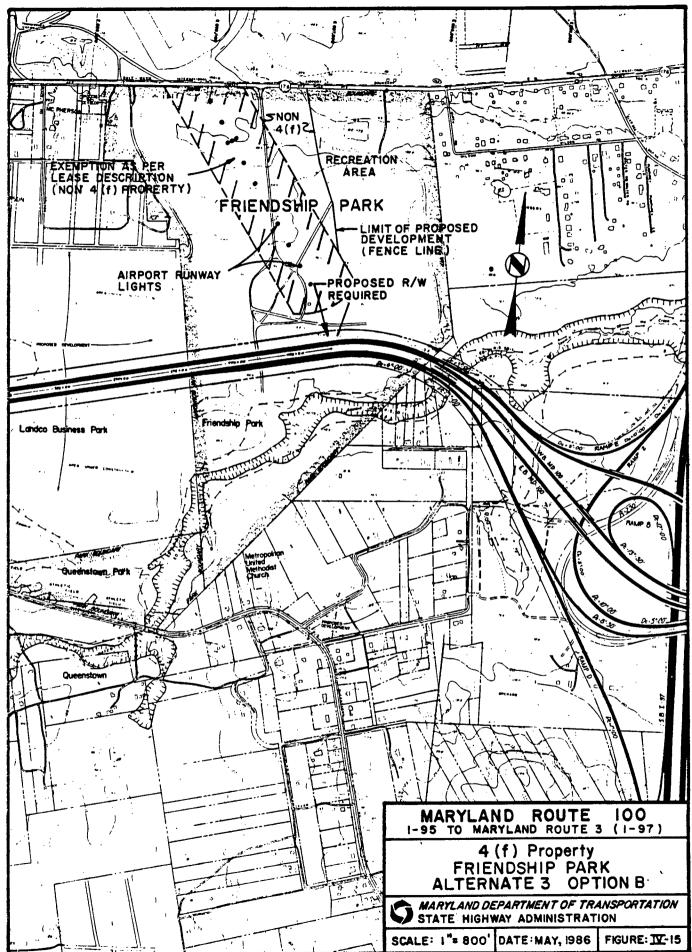
Alternate 2-Option B (see Figure IV-14) would involve a significantly greater land acquisition, as approximately 32.0 acres would be required for right-of-way. This alignment enters the tract from the north and follows along its western boundary to exit along the southeast boundary line. The land required for this alternate is also currently unused, and at its nearest approach is approximately 1,000 feet distant from the developed recreational area. The impacts upon the Sawmill Creek wetlands would total approximately 2.5 acres.

Alternate 3-Option B and Alternate 4/3B would also impact upon Friendship Park. Although Alternates 4, 3/Crossover/4, 2A and 2B would isolate the lower portions of the park property from the remainder, this impact would be greater with Alternate 3B or Alternate 4/3B. The proposed alignment would cut through the lower central portion of the property in an east-west direction and require approximately 14.2 acres of right-of-way. This would essentially bisect the property and isolate two major areas of the park. This required right-of-way is, however, also currently unused and is located approximately 800 feet distant from the recreation area. The proposed alignment is shown on Figure IV-15. Neither Alternate 3-Option B nor Alternate 4/3B would impact upon wetlands within the Friendship Park property.

Each of the above discussed alternates through Friendship Park would, without further mitigation measures, isolate portions of the Sawmili Creek stream valley along with potential access points to Queenstown Park, from Friendship Park users. They would also cut off the continuous







bridai trail along the Sawmili Creek valley which connects Friendship Park with Queenstown Park for horsemen and provides a vital trail link between W.B. & A. Road and the Andover Equestrian Center north of BWI Airport.

The No-Build Alternate would avoid the acquisition of park property but would not serve the transportation needs of the study area. Increased congestion and accident rates would occur along existing Maryland Route 176. The No-Build Alternate is not consistent with the Anne Arundel or Howard County General Development Plans.

ii) Avoidance Options and Their impacts

Two avoidance options have been developed for minimizing impacts upon Friendship Park. Development of these avoidance options has been constrained by engineering and design considerations, the existing location of the MD Route 100 - MD Rte. 3 interchange, and the presence of BWI Airport north of Dorsey Road. These three factors combined eliminate the possibility of developing an avoidance option with an alignment in a north-south direction east of the park. The first avoidance option is Build Aiternate 3-Option A as developed and detailed in Chapter II of this report. This alignment lies significantly south of Aiternates 2, 3B, 3/Crossover/4, 4 or 4/3B and avoids the entire Friendship Park property.

Alternate 3-Option A avoids the entire Friendship Park property, as well as adjacent Queenstown Park, by providing an alignment south of both of these areas. However, it would result in severe impacts on the community of Queenstown. This is a unique and distinct community because of its heritage and its maintenance of a strong sense of identity despite the land use changes occurring around it.

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It is a close knit and highly iteractive minority community which has evolved and grown from four original families who first settled in the area in approximately 1900. The original families were the Queens, the Galthers, the Burleys and the Gambrills. The original families were truck farmers, and the area retained this farming character, as the children grew to adulthood and built homes on family land, up until World War II when other economic opportunities developed. A number of additional families moved to the area after the original four, and marriages between these various families have resulted in the existing community where nearly all residents can trace some family relationship to the others. The original family homes still exist and are being occupied.

This Queenstown Community, as perceived by its residents, includes all homes along Queenstown Road, and on the various side streets off of Queenstown Road, from Telegraph Road to Donaldson Avenue (a length of approximately 1.9 miles). Although current mapping shows two separate communities of Burleytown and Queenstown in the area, the residents view no such distinction, and consider the area to be a single community. The center for community interaction is the Metropolitan United Methodist Church, originally established in 1917 at Queenstown Road and Donaldson Avenue, and moved to its present location in 1976.

Housing growth in the Queenstown community, which currentiy consists of approximately 120 homes, has generally occurred as a result of
family transactions, as children have tended to stay and settle in the community. Thus, ages of homes range from old to new. Economically, the families
of Queenstown generally are in the lower to lower middle income range, and it



has been estimated by community members that as many as a quarter of the residents are retirees.

Alternate 3-Option A would essentially bisect this community, particularly in the eastern portions along Queenstown Road, and result in the displacement and relocation of a large number of long established residents. Figures II-18 and II-19 show the locations of the twelve residences and one business which would require relocation. Within the Queenstown community itself there is essentially no available housing for these relocations to take place.

Besides this upheaval in existing community integrity, the new highway would have severe impacts on the cohesiveness of the remaining community. Although Queenstown Road would remain open to allow access between the northern and southern parts of Queenstown, Maryland Route 100 would serve as a visual and psychological barrier to discourage both residential interaction and the maintenance of a community identity.

Section IV-E shows that at two noise sensitive receptors in the Queenstown community, Alternate 3A would result in the sites being exposed to traffic noise levels that will increase by 10 dBA or more above current ambient noise levels.

Alternate 3 - Option A is therefore feit not to be a feasible and prudent alternate to the taking of property from Friendship Park.

The second avoidance option, compatible only with Alternate 2 - Option B, shifts the Alternate 2-B alignment farther to the west outside the park to generally parallel the western boundary of the property. This partial avoidance option is shown on Figure IV-16. The option still

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requires a small portion of land (5.2 acres) from the southern tip of Friendship Park. However, shifting the alignment farther south to completely avoid Friendship Park property would result in more severe impacts. This would include a significant acquisition from, and essentially the complete destruction of Queenstown Park, another 4(f) property. The partial avoidance option would also result in the taking of the Metropolitan United Methodist Church and nine homes in the Queeenstown Community (a unique and distinct minority community). By having the alignment shifted to the west of Friendship Park, this partial avoidance option would require the acquisition of property from the site of the proposed Landco Business Park and would also impact severely on the McPherson community. At the proposed Landco Business Park, currenty cleared for development, approximately 12 acres of the total 100 acre tract would need to be acquired. Through the McPherson residential area, 15 residential relocations would be required.

While Alternate 4, Alternate 2-Option A, or Alternate 3/Cross-over/4 would take less acreage from Friendship Park than the Selected Alternate, these alternates would severely impact the Queenstown community. Nine residences and one business would require relocation. In addition, approximately 15 homes along Jones Road would be isolated from the remainder of the community. Although access would be provided between these 15 homes and the remainder of Queenstown, the construction of MD 100 on fill would visually and psychologically sever the Jones Road residents from Queenstown. Replacement housing is not available within the community.

Alternate 4, Alternate 3/Crossover/4, and Alternate 4/3B would adversely impact the proposed expansion of the Baltimore Washington International (BWI) Airport, which is the major source of the region's economic

vitality and the impetus to the surrounding industrial development. These alternates traverse BWI Airport in an area now proposed for runway construction. Although it is physically feasible to construct MD 100 in a tunnel under the future runway, the cost of the tunnel would add \$45-65 million to the cost of these three Alternates, making the least expensive of these three Alternates approximately \$23-43 million more costly than the Selected Alternate. Furthermore, the Federal Aviation Administration has indicated that the construction of a runway over the highway would be undesirable from a safety aspect. The State Aviation Administration has commented that Alternate 4 is aligned with the flight approach to the existing 10-28 runway, creating a major safety problem for both aircraft and highway vehicles.

in addition to its impacts to Queenstown, Alternate 2-Option A proposed an urban arterial type facility which is inconsistent with the transportation objectives and community development goals of the area. Long distance, high-speed trips between two freeways, with a high percentage of trucks, is the type of traffic more desirably placed on freeway/expressway type facilities rather than at-grade arterials with no access control. Widening the existing MD 176 corridor would disrupt neighborhoods, create greater conflicts between through traffic and local traffic, result in higher accident rates, impede the continuous flow of traffic through the study area, be less conducive to large volumes of truck traffic, and would not accommodate the proposed industrial development.

III) Mitigation

Mitigation measures which would be employed for any alternate which impacts upon Friendship Park would include landscaping the fill slopes to minimize potential visual and aesthetic impacts on the park recrea-

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tion area. In addition, efforts will be made during final design to develop a feasible solution to provide access across Maryland Route 100 for horsemen and/or users of a park proposed by Anne Arundel County to run along Sawmill Creek. The park property acquisition is not programmed to take place prior to ROW acquisition for the Route 100/i-97 interchange, currently under design. Coordination of this matter will be continued with the Anne Arundel County Department of Recreation and Parks.

Mitigation to any wetlands which would be impacted in Friendship Park will be coordinated with the Department of Natural Resources, the Environmental Protection Agency, and the U.S. Fish & Wildlife Service. Stringent sediment control measures will be applied and monitored to avoid significant sedimentation from highway construction.

b. Patapsco Vailey State Park

i) impacts of Alternates

Alternates 4 and 4/3B would traverse the southernmost portion of the Park, Area I-C. They both would require the acquisition of approximately 16.1 acres for right-of-way (Figure II-38). This area serves as a watershed protection buffer for Deep Run. The nearest planned recreation area is located approximately 2,200 feet from the edge of right-of-way and is separated from the proposed road by a low ridge. The area affected is forested and the primary impact would be the loss of terrestrial habitat. No federal or state listed threatened, endangered plant or animal species inhabit this area. However, three state rare plants Arundinaria gigantea (Giant Cane), Carex barratti (Barratt Sedge) and Helonias bullata (Swam Pink) have been reported in the floodplains of Stony Run and Deep Run in the vicinity. Two of these, C. barrattii and H. bullata, are federal candidate species presently

under consideration by the U.S. Fish and Wildlife Service for listing as threatened or endangered species. There are no recreational uses planned for the area.

A noise analysis (Section IV.E.) Indicates that ambient noise levels in the Park would be approximately 42 dBA without aircraft (NSA 4). The projected noise levels would be approximately 67 dBA without aircraft. A barrier 12 feet high and 2000 feet long would provide between 7 and 10 dBA benefit in the park at a total cost of \$648.000.

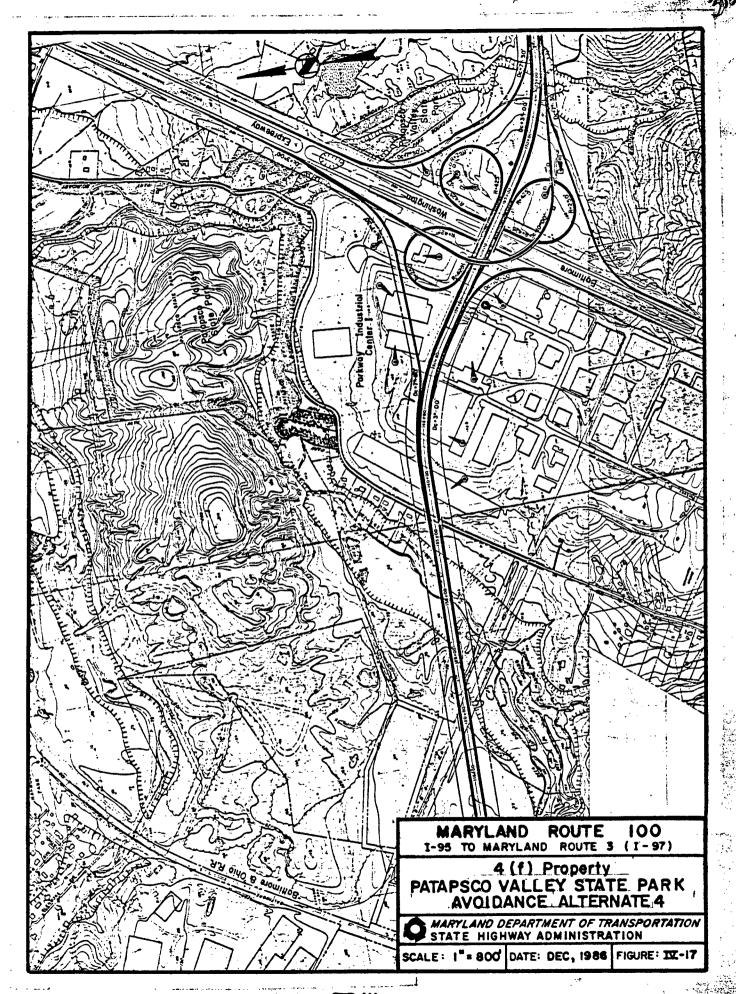
II) Avoidance Options and Their Impacts

Patapsco Valley State Park is a linear stream valley park which extends northward through Anne Arundel County. Shifting Alternate 4 further north would affect a proposed recreation area in Section I—C and would also bisect the area. This is not consistent with the previously cited Master Plan. Shifting the alignment to the south approximately 1,500 feet would avoid Park property acquisition. However, sufficient distance would not be provided between the Maryland Route 100/Maryland Route 295 interchange and the existing Maryland Route 176/Maryland Route 295 interchange. Furthermore, the Parkway industrial Center would be divided and eight industrial buildings would be acquired and displaced and the 5 residences on the east side of MD. Route 295 would be relocated. This avoidance alternate is shown on Figure IV—17.

The No-Build Aiternate would avoid the acquisition of Park property but would not serve the transportation needs of the study area. Increased congestion and accident rates would occur along existing Maryland Route 176. Also, the No-Build Alternate is not consistent with either the Anne Arundel or Howard County General Development Plan.

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The Crossover Option follows the alignment of Alternate 3 west of Maryland Route 295 and Alternate 4 east of New Ridge Road. A more detailed description of this Option is provided in Section II.B. This alternate avoids the acquisition of property from Patapsco Valley State Park. It also reduces congestion, separates through and local traffic, improves travel time for Maryland Route 100 travelers and avoids impacts to the Parkway industrial Center. However, interchange construction just east of Maryland 295 requires Maryland Route 176 to dead end at Wright Road (see Figure II-43).



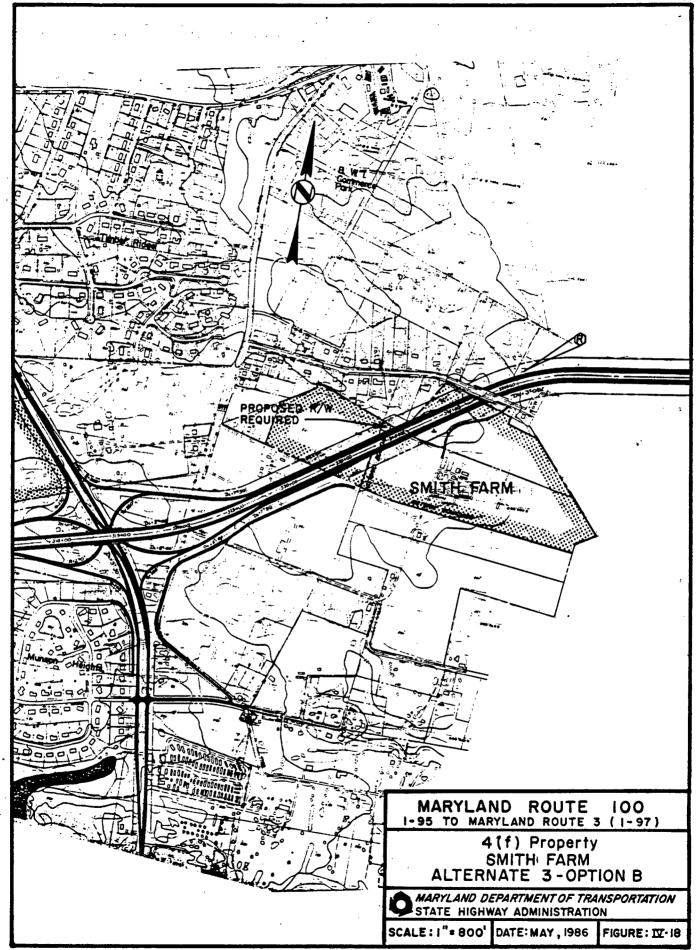
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FIG IV-17

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Thus local traffic would have to utilize the Interchange at the New Ridge Road Extension. The result would be circultous travel and increased travel time for residents and the Fire Department. In addition, the Crossover Option would have the same direct impacts to the planned expansion of the BWI Airport and Indirect impacts to the future economic development of the area as would Alternate 4.

Alternates 2A and 2B avoid impacts to Patapsco Valley State Park. However, Alternate 2A requires the acquisition of 4.0 acres from Friendship Park while Alternate 2B requires approximately 32 acres. Neither option for Alternate 2 satisfies the transportation objectives for this project.

Patapsco Valley State Park would not be affected by Alternate 3-Option A or B which are described in detail in Section II.B. Alternate 3 is consistent with Development Plans for both Anne Arundel and Howard Counties. As discussed in Section IV.I.4.a, Alternate 3-Option A is not considered a prudent and feasible alternate due to its impacts on the minority community of Queenstown.

III) Mitigation

If Maryland Route 100-Alternate 4 had been selected, mitigation of impacts to Patapsco Valley State Park would have been coordinated with the Maryland Department of Natural Resources and the National Park Service. Mitigation could have included landscaping the fill slopes and replacement of the land required for the proposed alternate. The Selected Alternate does not impact Patapsco Valley state Park.

Coordination with this agency regarding possible impacts to Patapsco Valley State Park has been on-going throughout the project plan-

ning process. See the letter of February 27, 1986, Maryland Department of Natural Resources, In the correspondence section of this document.

c. Smith Farm

i) impacts of Alternates

The Alternate 3-Option B alignment would cross directly through the west-central portion of this historical property. The right-of way required amounts to approximately 9.5 acres, or twenty percent of the entire historical property. None of the actual historical structures would be affected, however, as this land acquisition is over 500 feet from the historical farmhouse itself, and over 150 feet distant from any other structure on the property. Figure IV-18 shows the proposed Alternate 3 - Option B alignment as It affects this property.

The historical boundary of Smith Farm encompasses three separate land parcels, each of which is currently owned by a different person. Two of these parcels are on the east side of the Selected Alternate and one parcel is almost entirely on the west side.

For the two parcels on the east side, one of which includes the historical buildings and cemetery, access will be slightly altered as a result of the existing entrance drive (Smith Road) being terminated by the Selected Alternate. However, an access road to these parcels would be provided. This access road would begin at Queenstown Road just east of the location where Alternate 3B (Modified) goes under existing Queenstown Road and would terminate at the historic buildings. (See Figure II-33). Thus, access from Maryland Route 176 and points north would be nearly unchanged. From Maryland Route 170 south of Maryland Route 652, the travel distance would be increased by approximately 600 feet.

The parcel of the historic Smith Farm to the west of alternate 3B (Modified) is currently owned by a different owner than the two parcels to the east of the alignment. Although this farm is bisected by the alignment, nearly all of the parcel that is included in the historic Smith Farm boundaries falls on the west side of the alignment with access from existing Smith Road. Thus, access from the north will be unaffected. However, access from Maryland Route 170 south of Maryland Route 652 will be circuitous as a result of Maryland Route 652 being terminated just north of the Selected Alternate. The additional travel distance from Maryland Route 170 south of Maryland Route 652 would be approximately 1.9 miles.

A meeting was held on July 23, 1987 at the Smith Farm. In attendance were representatives of the Advisory Council on Historic Preservation, the State Highway Administration and the Federal Highway Administration as well as the three property owners whose property is included in the historic Smith Farm boundaries. This meeting was to show the revised access roads leading to Smith Farm to the land owners and Advisory Council representatives (See Figure IV-18). Also, the purpose of the meeting was to explain how SHA was proposing to mitigate the effects of the highway through the use of grading and landscaping as requested in the Advisory Council's letter dated July 1, 1987 (See Section VII, Comments and Coordination). Further coordination will continue in the design phase with the affected property owners to implement reasonable access proposals.

Section IV-E shows that the design noise levels at the Smith Farm (year 2010) would be 57 dBA for Alternate 3-Option B. The existing ambient noise level at the site, excluding aircraft noise, is 49 dBA.

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ii) Avoidance Options and Their impacts

Option B further south without having a more significant adverse impact on the Smith Farm than does the current alignment. Additional right-of-way would be required, and the structures themselves would likely be impacted.

Shifting the alignment to the north to avoid Smith Farm is possible, and an avoidance alternate has been developed to achieve this. The avoidance alternate is shown on Figure IV-19. The historical boundary is not impacted by this alternative; however, as many as eleven additional residences which would not otherwise be affected would be displaced by this avoidance alternate. Nine of these additional relocations are minority residences. These residences are part of the minority community of Queenstown.

Access to the Smith Farm would be slightly less affected by this avoidance alternate than for Alternate 3-Option B, but access by Telegraph Road from the north would still be eliminated.

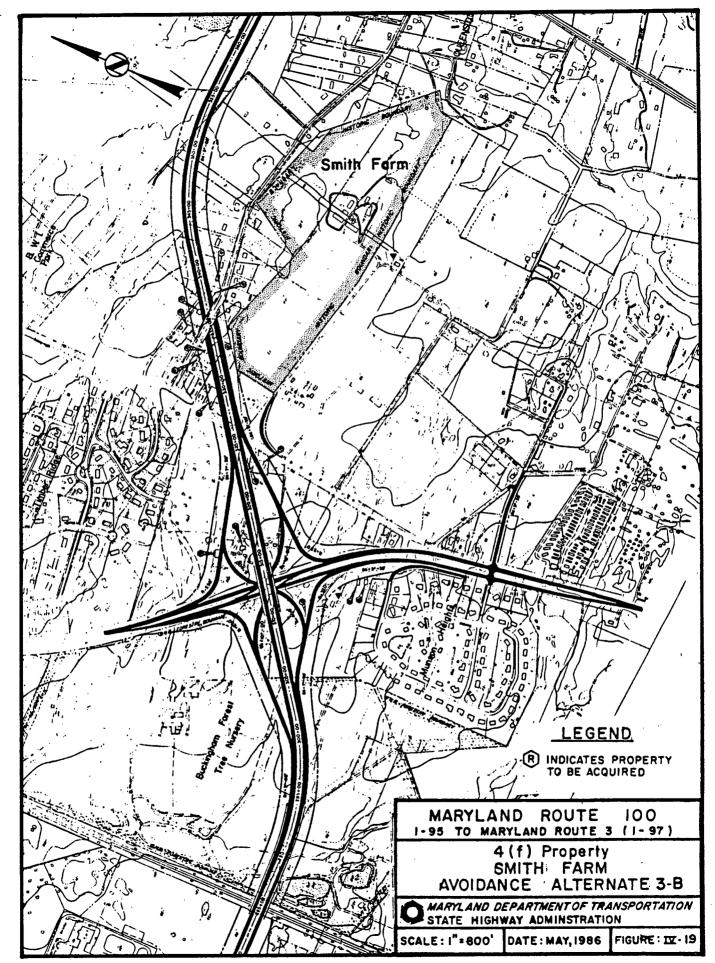
Selection of Alternate 2,4, 3/Crossover/4 or 4/3B would result in no impacts on the Smith Farm Historical Property, but they would result in 4(f) impacts on Friendship Park and/or Patapsco Valley State Park. Alternate 2 would not satisfy the transportation objective of this project. Alternate 3-Option A would not impact on Smith Farm but would result in the displacement of 12 minority owner-occupied residences and one minority business from Queenstown, a long established, unique and distinct minority community. Alternates 4, 3/Crossover/4 and 4/3B additionally are not desirable alternatives because of their direct impact to the planned expansion of the EWI Airport and indirect impact to the economic development of the area.

iii) <u>Mitigation</u>

Alternate 3-Option B is selected. Mitigation of impacts on the Smith Farm property will be coordinated with the Maryland Historical Trust, and will include landscaping of the fill slopes and screening of the historical structures from the proposed roadway. The Maryland Historical Trust has determined that there would be no adverse effect on the Smith Farm conditional on landscaping plans which are reviewed by the Maryland Historical Trust. The Advisory Council has determined that Selected Alternate 3B would have an adverse effect on the Smith Farm.

5. Conclusion

Based on the above information, there is no feasible and prudent alternative to the acquisition of property from Friendship Park and the Smith Farm. All possible planning has been provided to minimize harm to these sites. Coordination regarding possible impacts to Friendship Park has been on-going with Anne Arundel County Officials, the State Department of Natural Resources, and planning agencies throughout the project planning process; and further coordination with these agencies will be undertaken. Coordination regarding impacts to Smith Farm has been ongoing with the Maryland Historical Trust and will likewise continue.



DISTRIBUTION LIST

V. DISTRIBUTION LIST

Contract No. AA 682-101-570 Maryland Route 100 From I-95 to I-97

FINAL ENVIRONMENTAL IMPACT STATEMENT/ SECTION 4 (F) STATEMENT

FEDERAL AGENCIES

Department of Agriculture State Conservationist Soil Conservation Service 4321 Hartwick Avenue, Room 522 College Park, Maryland 20740

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

U.S. Environmental Protection Agency Region III Ms. Barbara D'Angelo, Acting Chief NEPA Compliance Section 841 Chestnut Street Philadelphia, Pennsylvania 19107 Attention: Mr. Jeffrey Alper

Mr. Larry Levine
Environmental Officer
Department of Housing and Urban Development
Curtis Building
Sixth and Walnut Street
Philadelphia, Pennsylvania 19106

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FEDERAL AGENCIES - cont'd.

Commander
Corps of Engineers
Baltimore District
Box 1715
Baltimore, Maryland 21201
Attention: NABOP-F

Division of NEPA Affairs Department of Energy Room 4G 064 1000 Independence Avenue, S.W. Washington, D. C. 20230

Mr. Paul Giordano, Regional Director Federal Emergency Management Agency Liberty Square Building 105 South 7th Street Philadelphia, Pennsylvania 19106 Attention: Mr. Walter Pierson

ELECTED OFFICIALS AND LOCAL GOVERNMENT AGENCIES

Mr. John J. Shanley Director, Public Works One Harry S. Truman Parkway Annapolis, Maryland 21401

Mrs. Florence B. Kurdle Planning and Zoning Officer Arundel Center Annapolis, Maryland 21401

Mr. Joseph J. McCann, Director Recreation and Parks Arundel Center Annapolis, Maryland 21401

Mr. George F. Niemeyer Director, Public Works 3430 Courthouse Drive Ellicott City, Maryland 21043

Mr. Thomas G. Harris, Jr., Director Office of Planning and Zoning 3430 Courthouse Drive Ellicott City, Maryland 21043

Mr. Guy Hager,
Director Intergovernmental
Assistance Clearinghouse
Department of State Planning
301 W. Preston street
Baltimore, Maryland 21201

STATE AGENCIES

Ms. Kathleen Fay State Depository Distribution Center Enoch Pratt Library 400 Cathedral Street Baltimore, Maryland 21201

STATE AGENCIES - cont'd.

Mr. Randy Harrill Water Resources Administration Department of Natural Resources Tawes State Office Building Annapolis, Maryland 21401

MARYLAND DEPARTMENT OF TRANSPORTATION

Director, Public Affairs Maryland Department of Transportation

Mr. Clyde E. Pyers, Director Division of Systems Planning and Development Maryland Department of Transportation

Mr. Larry Saben Washington Regional Office 8720 Georgia Avenue, Suite 904 Silver Spring, Maryland 20910

Mr. John Haifley Office of Legal Council Office of the Maryland Secretary of Transportation Maryland Department of Transportation

Maryland State Law Library Upper Level Court of Appeal Building 361 Rowe Boulevard Annapolis, Maryland 21401

STATE HIGHWAY ADMINISTRATION

*Deputy Chief Engineer - Development
Assistant Chief Engineer - Design
District Engineer
Bureau of Highway Design
Bureau of Bridge Design
Bureau of Landscape Architecture
Office of Planning and Preliminary Engineering
Bureau of Project Planning
Bureau of Planning and Program Development
Office of Real Estate
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District Chief - Office of Real Estate State Highway Administration Library Equal Opportunity Section Bureau of Highway Statistics

OTHERS

Colorado State Univesity Document Librarian Fort Collins, Colorado 20006

Mr. Arthur Kungle The Liberty Tree Project P.O. Box 3446 Annapolis, Maryland 21403

* Cover letter only

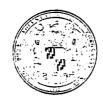
VI COMMENTS AND COORDINATION

VI. COMMENTS AND COORDINATION

A. COORDINATION

Coordination efforts with Anne Arundei and Howard Counties, Elected Officials, the public and appropriate review agencies have been discussed throughout this document and representative correspondence is included in this section.

Quarterly State Highway Administration Interagency Review Meetings that discussed this project were held on July 19, 1984, February 21, 1985 and January 21, 1987. In attendance at the July 19, 1984 meeting were representatives from the National Park Service, U.S. Fish and Wildlife Service and the Environmental Protection Agency. In attendance at the February 21, 1985 meeting were representatives from the Maryland Department of Natural Resources: Water Resources Administration - Wetlands Division, Environmental Protection Agency, U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers. In attendance at the January 21, 1987 meeting were representatives from the Maryland Department of Natural Resources: Water Resources Administration, MD DNR: Fisheries Division, MD DNR: Tidewater Administration, MD DNR: Wetlands Division, MD DNR: Coastal Resources Division, Maryland Department of State Planning, Maryland Department of Health and Mental Hyglene: Office of Environmental Programs, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Federal Highway Administration, Environmental Protection Agency and National Marine Fisheries Service.



TORREY C. BROWN, M.D. SECRETARY

JOHN R. GRIFFIN

DEPUTY SECRETARY

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES

FRED L. ESKEW
ASSISTANT SECRETARY
FOR CAPITAL PROGRAMS

CAPITAL PROGRAMS ADMINISTRATION

TAWES STATE OFFICE BUILDING ANNAPOLIS, MARYLAND 21401

July 2, 1984

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

Subject: Maryland Route 100 from MD Route 3 (I-97) to I-95

Contract No. AA 682-101-570

Dear Mr. Ege:

The Heritage Program Data Base includes no records for any rare species in the immediate vicinity of this project, as delineated in your transmittal of June 26, 1984. However, several state rare plants (<u>Arundinaria gigantea</u>, <u>Carex barrattii</u>, <u>Helonias bullata</u>) have been reported from the floodplain of Stoney Run between 1.5 and two miles downstream of the Alternate B Urban Arterial Alignment. Two of these, <u>C. barrattii</u> and <u>H. bullata</u>, are category 2 species presently under consideration by the U.S. Fish and Wildlife Service for listing as threatened or endangered species.

You map shows that the Alternate A Freeway passes through the Buckingham State Tree Nursery. Comments on that alignment should be requested from the Maryland Forest, Park, and Wildlife Service.

Sincerely,

Arnold Norden

Maryland Natural Heritage Program

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AN: lw

cc Andy Moser, U.S. Fish and Wildlife Service





United States Department of the Interior

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

July 9, 1984

Mr. Dennis J. Lew Environmental Management Group Maryland Department of Transportation P.O. Box 717 707 North Calvert St. Baltimore, MD 21203

Dear Mr. Lew:

This responds to your June 26, 1984 request for information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the impact area of Route 100 Project, Anne Arundel and Howard Counties, MD.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 Consultation pursuant to the Endangered Species Act of 1973 is required with the Fish and Wildlife Service. Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered.

The following "candidate" species (those placed under review in the Federal Register to determine suitability for listing) occur in the general project vicinity and may be present in the impact area, if appropriate habitat is present.

<u>Species</u> <u>Family</u> <u>Habitat</u>

<u>Helonias bullata</u> Liliaceae swamps, bogs, wet areas

<u>Carex barrattii</u> Cypenaceae swamps, bogs, wet areas

"Candidate" species are not legally protected under the Endangered Species Act and biological assessment requirements pursuant to that legislation do not apply to them. They are included here for the purpose of notifying you of possible future proposals and listings in advance, for consideration in your NEPA review process, and to encourage efforts to avoid adverse impacts to them. Additional information on these candidate species may be obtained by contacting the Maryland National Heritage Program, Tawes State Office Building, 580 Taylor Avenue, Annapolis, MD 21401, telephone 301/269-3656.

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Should you require additional endangered species information on this project, please contact Andy Moser or Judy Jacobs of my Endangered Species Staff, 301/269-6324.

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.

Sincerely yours,

Glenn Kinser Supervisor

Annapolis Field Office



DEPARTMENT OF NATURAL RESOURCES Maryland Forest, Park & Wildlife Service TAWES OFFICE BUILDING ANNAPOLIS, MARYLAND 21401

DONALD E. MacLAUCHEAN DIRECTOR

July 10, 1984

Mr. Louis H. Ege, Jr.
Bureau of Project Planning
State Highway Administration
P.O. Box 717/707 North Calvert Street
Baltimore, Maryland 21203-0717

Dear Mr. Ege:

TORREY C. BROWN, M.D.

SECRETARY

There are no known populations of listed threatened or endangered species within the area of project influence for proposed MD Rte. 100 from MD Rte. 3 (I-97) to Interstate Rte. 95, as described in your letter to me of June 26, 1984.

Sincerely,

Gary J. Taylor

Nongame & Endangered Species Program Manager

GJT:ba

cc: Carlo Brunori

VI-5





Maryland Historical Trust

February 21, 1985

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

> Re: Maryland Route 100 Maryland Rt. 3 to I-95 Contract No. AA 682-101-570 RF 162-1

Dear Ms. Simpson:

Thank you for your letter of December 28, 1984 regarding the above-referenced project.

We concur with your opinion that the Smith Farm and the Shipley House may be eligible for the National Register; however, we disagree with your opinion concerning Piney Run. We believe Piney Run to be inventory-level and not eligible for the National Register. Because there is disagreement, your office should submit documentation regarding the property to the National Register for a determination of eligibility.

We concur with SHA that the following sites as described in your letter are inventory-level and not eligible for the National Register:

- a. Frame dwelling
- b. Frame dwelling
- d. Frame dwelling and outbuildings
- e. Hawkins house (AA 231)
- f. Farm on Harmans Road
- g. Alpha Assembly of God Church
- h. Dwelling (within park property)
- k. Frame dwellings, 7114 Wright Street
- 1. Frame dwelling, Dorsey Rd., east of B-W Pkwy.
- m. Frame dwelling, Dorsey Rd., east of B-W Pkwy.
- n. Frame dwelling, 1576 Dorsey Road
- o. Frame dwelling on Abrahm Road
- p. Frame dwelling on Abrahm Road
- q. Frame dwelling on Dorsey Rd., west of B-W Pkwy.

If you have any questions, please call Kim Kimlin at 269-2438.

JRL/KEK/bjs

cc: Mr. Christhilf; Ms. Collins
Ms. Rita Suffness
Shaw House, Zi State Circle, Annapolls, Maryland 21401

Department of Economic and Community Development

J. Rodney Little, Director

State Historic Preservation Officer

(301)269-2212, 269-2438

VI-6



TORREY C. BROWN. M.D.
SECRETARY

JOHN R. GRIFFIN
DEPUTY SECRETARY

STATE OF MARYLAND DEPARTMENT OF NATURAL FESCURCES

FRED L. ESKEW
ASSISTANT SECRETARY
FOR CAPITAL PROGRAMS

CAPITAL PROGRAMS ADMINISTRATION

TAWES STATE OFFICE BUILDING ANNAPOLIS, MARYLAND 21401

October 15, 1985

Ms. Cynthia D. Simpson Acting Chief Environmental Management Department of Transportation Room 314 707 N. Calvert Street Baltimore, Maryland 21202

> Re: Maryland Route 100 from I-95 to I-97 Contract No. AA 682-101-570 P.D.M.S. No. 022007

Dear Ms. Simpson:

Given the information attached to your letter of August 26, 1985, concerning the above referenced project, it appears that Program Open Space funds were used to purchase properties impacted by both Alternate #4 and Alternate #3. These areas are protected by the Program Open Space law and should be avoided.

If further discussion of this matter is appropriate, please advise.

Sincerely,

William A. Krebs

Director, Program Open Space

WAK:CP/slt





ANNE ARUNDEL COUNTY

ANNAPOLIS, MARYLAND 21401

DEPARTMENT OF RECREATION AND PARKS

October 30, 1985

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

Re: Contract # AA-682-101-570
Maryland Rte. 100 from I-95
to I-97
P.D.M.S. No. 022007

Dear Ms. Simpson:

Neither Program Open Space nor Land and Water Conservation Funds were used to acquire or develop Friendship, Harmons or Queenstown Park.

A copy of the existing lease agreement between the County and the State Aviation Administration is enclosed.

If you require any additional information, please contact me.

Cordially yours,

A. James Vouzikas, Chief, Planning, Construction and Environmental Programs

AJV/mlj

cc: Joseph J. McCann, Director
William Rinehart, Parks Administrator



TORREY C BROWN M.D.

JOHN R. GRIFFIN

STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES MARYLAND GEOLOGICAL SURVEY

THE ROTUNDA
711 W. 40th STREET. SUITE 440
BALTIMORE, MARYLAND 21211

KENNETHIN WEAVER
DIRECTOR
MARYLAND GEOLOGICAL SURVEY
EMERY TI CLEAVES

DEPUTY DIRECTOR

Division of Archeology 338-7236

16 December 1985

Mr. Louis H. Ege, Jr.
Bureau of Project Planning
State Highway Administration
P.O. Box 717/707 North Calvert St.
Baltimore, Maryland 21203-0717

Dear Mr. Ege:

A Phase I archeological reconnaissance was conducted on three projected alignments and ancillary roads for the proposed Maryland Route 100 project from U.S. 1 to Maryland Route 3. The work consisted of background research and field reconnaissance.

The background research involved examining historic maps, site reports and site files. The historic maps were used as a guide to locations of early structures. The site reports indicated areas of the project that had been surveyed previously. The site files provided information available on known sites in the project area.

The field work included ground reconnaissance, surface collections, and test pits. The ground reconnaissance involved visually examining the project area. Surface collections of exposed areas and test pits excavations were used to locate sites.

Over 20 miles of project area were examined (figures la, lb, and lc). Three small segments of the alignment were not examined at this time: two landowners denied access to the land and one landowner was not reached. Each of these three areas has a high potential for archeological sites. If these segments are impacted by proposed construction, a Phase I archeological reconnaissance should be conducted on the effected areas.

A total of 19 sites were examined: 11 prehistoric, 6 historic, and 2 prehistoric and historic multicomponent sites. Sixteen of the sites are not potentially eligible for the National Register and, do not require additional testing, however, they should be considered sensitive areas and avoided if

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possible. Two sites located outside the current project alignments will require additional testing to determine their eligibility for inclusion to the National Register if they will be impacted by any construction related activities (figures 2 and 3).

One site within the project area may require additional testing if Alternate 2 or 3 is chosen. This site is a lithic workshop located on a terrace to the south of Deep Run (figure 4). The site is approximately 150 feet by 75 feet with natural geographical boundaries on its northern and eastern limits. Quartz cobbles are abundant over the entire site area examined. A total of 104 flakes, 8 tools, and 3 possible preforms were found while surface collecting an area approximately 7 feet by 40 feet exposed by a dirt road. Ten flakes and a projectile point were found in 2 test pits. This site may provide information on settlement patterns and specialized site usage. It is recommended that this site be avoided if possible. If avoidance is not possible, a Phase II investigation will be necessary to determine if the site is eligible for inclusion on the National Register.

Sincerely.

Lori Frye

Archeologist

LF:1w

cc: Rita Suffness Dennis Curry



C.M. PWORE D. YBERDT

JOHN R. GRIFFIN

STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES MARYLAND GEOLOGICAL SURVEY

THE ROTUNDA
711 W. 40th STREET, SUITE 440
BALTIMORE, MARYLAND 21211

KENNETH N. WEAVER
DIRECTOR

MARYLAND GEOLOGICAL SURVEY

EMERY T CLEAVES

Division of Archeology 338-7236

19 March 1986

PROJECT PLANNING

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

Dear Mr. Ege:

On March 7 and 17, 1986, a Phase I archeological recomnaissance was conducted on Alternate 3, option B for the proposed Route 100 project in Anne Arundel County. Two archeological sites were located: a prehistoric lithic scatter and a farm complex dating to the early 1900s. The lithic scatter (18AN588), of doubtful National Register eligibility, is outside of the right-of-way and will not be affected by the proposed work. The historic site (18AN587) does not appear to be potentially eligible for the National Register and will not require additional testing because of its relatively recent age and replication at other sites. No archeological site was located within the proposed right-of-way that extended within the historic boundary around the Smith Farm complex.

Sincerely,

Lori Frye

Archeologist

LAF:1w

cc: Cynthia Simpson Rita Suffness

KENNETH N. WEAVER

DIRECTOR

MARYLAND GEOLOGICAL SURVEY

DEPUTY DIRECTOR

EMERY T. CLEAVES



TORREY C. BROWN, M.D. SECRETARY

JOHN R. GRIFFIN DEPUTY SECRETARY

STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES

MARYLAND GEOLOGICAL SURVEY

2300 ST. PAUL STREET BALTIMORE, MARYLAND 21218

Division of Archeology (301) 554-5530

11 February 1987

DEVELOPY OF BUILDING

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

RE: Maryland Route 100

Modified Alternate 3b Alignment

Dear Mr. Ege:

I recently completed a Phase I archeological reconnaissance of a proposed Maryland Route 100 modified 3b alignment and access roads in Anne Arundel County. The area reconnoitered included: an access road in the Route 100 Industrial Park (Hunters Mill Road) proposed to connect the park with Route 100; a modified 3b alignment which runs between Wright Road and Maryland Route 713; and an access road proposed to connect Watts Avenue with Route 713.

The modified 3b alignment consists of a redesigned Alternate 3 corridor, partially surveyed by Lori Frye (see File Report 193) in 1985. A portion of this alternate was not accessible during her work and was subsequently recommended for Phase I survey if the alternate was chosen. As well as the areas that would be impacted in the new design, the unsurveyed portion of her study was included in the current project.

The entire project area was surveyed by foot since the proposed alignments traversed areas which were considered to have moderate potential for prehistoric and historic sites. The following is a summary of the work accomplished:

Hunters Mill Road (access road)

The entire area proposed for this access road had been cleared for development and was disturbed. Consequently, no testing was done at this location.

Alternate 3b Modified (between Wright Road and Maryland Route 713)

The entire alignment was treated as a test locus and traversed on foot. Two small benches and several level hilltops were shovel tested. A total of 9 shovel test pits were placed along this proposed alignment along with surface collection along dirt access roads, yards, and in remnants of previously cultivated fields. No cultural material was found in any of the test pits or in surface collection. However, this alignment crosses the Shipley family cemetery, the site of approximately 30 marked graves dating between the early to late 19th century.

Watts Road (access road)

The entire area was traversed on foot; however, it consisted of low lying undulating terrain in comparison to its higher surroundings. Ground exposed areas were surface collected (40% visibility). No cultural material was found during visual examination. This alignment also impinges on a small cemetery at the intersection of Watts Road and Route 713, consisting of 4 to 6 marked graves (dates not observed).

As the result of the survey no prehistoric or historic archeological sites were found; however, two cemeteries are within the proposed rightsof-way of the alternates. One cemetery appears to be associated with the Shipley Historic site which parallels the eastern side of Route 713; neither cemetery is of archeological significance.

An addendum report which can be added to the Frye report will be forthcoming; in the meantime if you have any questions about this matter or if I can be of further assistance, please do not hesitate to call me.

Hettie L. Ballweber

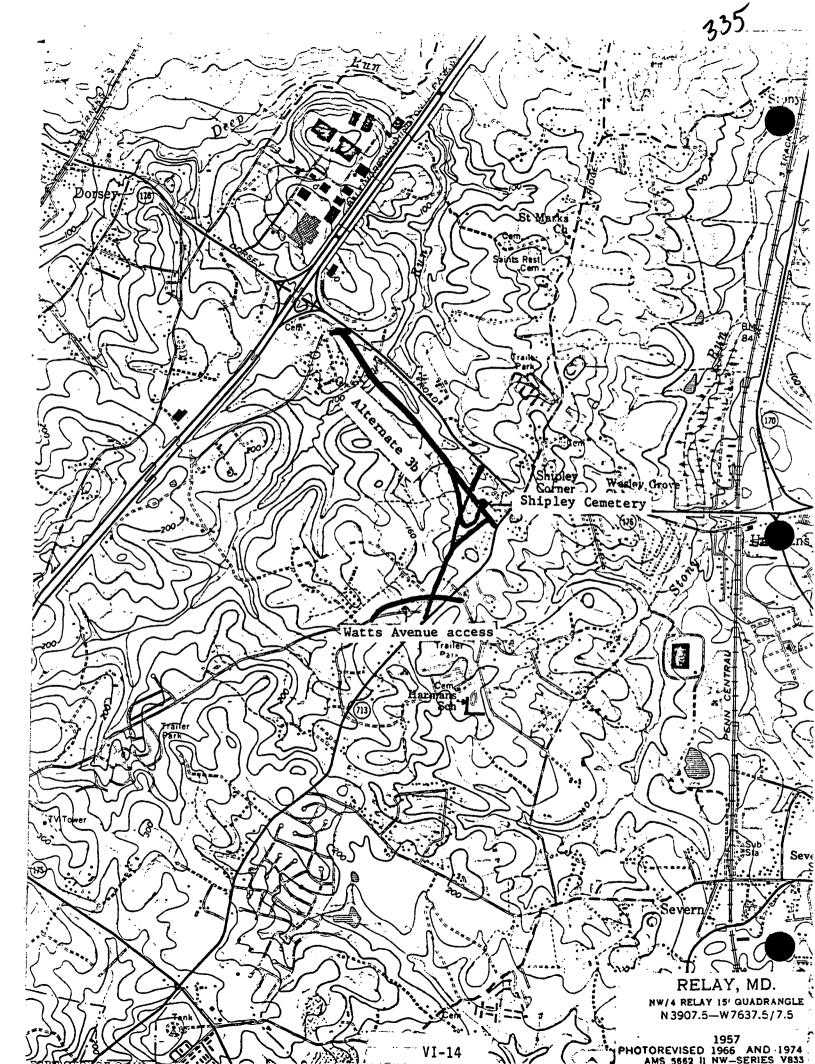
letti & Boya

Archeologist

HLB:1w

cc: Cynthia D. Simpson

Rita Suffness





Maryland Department of Transportation

William K. Hellmann Dec 30

85-0025

BUREAU OF PROJECT PLANNING

10 32 AM 185 Theodore E. Mathison

STATE AVIATION ADMINISTRATION

MEMORANDUM

TO:

Hal Kassoff

Administrator

State Highway Administration

FROM:

Theodore E. Mathison

Administrator " ...

DATE:

DEC 28 1995

SUBJECT: Rt. 100 Alternates

BEC 27 1985

DIRECTOR. OFFICE OF PLANNING & PRELIMINARY ENGINEERING

The SAA has reviewed the alternates for Rt. 100 alignment in the vicinity of Baltimore/Washington International Airport (BWI) (Attachment No. 1). The following are the features of each option, as they relate to the future development of BWI, which are of concern to the SAA.

1. ALTERNATE 2 (Option A)

This option would severely restrict several potential sites for new air carrier runways.

- a) The section of roadway between Telegraph Road and Friendship Park would intersect a site for a parallel 15/33 runway (Option G, Attachment No. 2). This runway would parallel Runway 15R-33L and would be 4,300' from it to meet Federal Aviation Administration separation criteria. Elimination of the runway could seriously limit BWI's growth.
- b) The section from Telegraph Road to WB & A Road would conflict with a parallel 10-28 runway alignment at the current separation criteria of 4,300 feet. (Option A, Attachment No. 3).
- ALTERNATE 2 (Option B) 2.
 - a) Impacts of la, and b apply.
- b) The section from Telegraph Road to Friendship Park would restrict the separation distance between a new parallel runway and the existing 10-28 runway to 3,000 feet. The FAA is reviewing the

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Memorandum Page 2

separation distance (4,300) for all landing conditions and may revise downward the criteria. However, no decision is expected for several years. Thus, the SAA is concerned that the option to meet the 4,300' criteria is not precluded.

ALTERNATE 3

- a) No objections as aligned.
- 4. ALTERNATE 4 (Option A)
 - a) Impacts of la, and b apply.
- b) In order to allow for a parallel 10-28 or 15-33, the section between Dorsey Road and Camp Meade Road would have to be underground.
- c) The section from Camp Meade Road to the west aligns with the existing 10-28 runway. This means aircraft departing and arriving would be flying at very low altitudes directly over traffic. Planes approaching from the west with their high powered landing lights and large physical presence (e.g. B-747 with a 197' wing span) will impact vehicular traffic safety. Conversely, vehicle headlights will create glare in the cockpits of departing and arriving aircraft creating a major air safety problem.
- d) The alignment would isolate a sizeable portion of Airport property from the airport proper, and could limit full utilization of the isolated property.

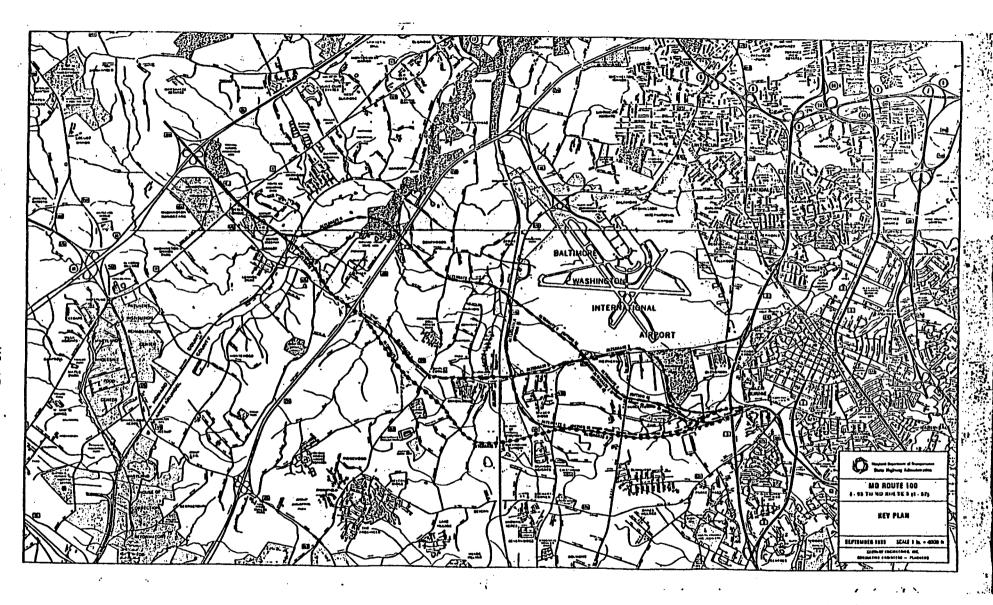
5. ALTERNATE 4 (Option B)

- a) The same concerns as stated in 4c above also apply to this Alternate.
- b) An interchange located at the intersection of Rt. 100 and Rt. 170 would encroach on a sizeable portion of airport property.

In summary, the SAA has serious concerns of the effect that either option of Alternate 2 or 4 will have on current and future runway configurations. The only Alternate for which we have no serious objections is Alternate 3.

TEM: lab Attachments

cc: N. Pederson

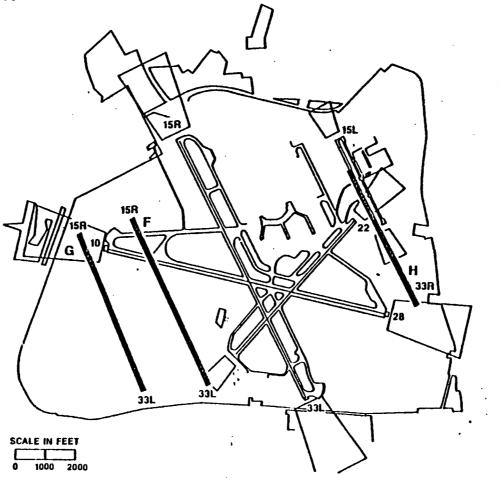


Attachment No. 1

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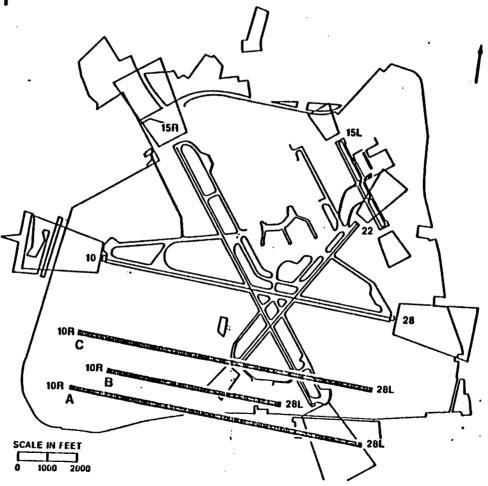


RUNWAY SCENARIOS





RUNWAY SCENARIOS



US Department of Transportation

Federal Aviation Administration

MENTINCO 321013 PROGRAM RECEIVED NOV 2 0 1986 P STATE ALIATION **ADMINISTRATION**

SASHINGTON AIRPORTS DISTRICT OFFICE 1900 S. Washington Street, Room 200 Falls Church, Virginia Telephone (703) 285-2579 22046

> PLAKNING & ENGINEERING'

RECEIVED

OCT 0 9 1986 B

STATE AVIATION

ADMINISTRATION

MARYLAND

October 2, 19

Mr. Theodore E. Math Administrator MD-DOT. State Aviation Administration P. O. Box 8766, BWI Airport Baltimore, Maryland

Dear Mr. Mathison:

We have reviewed your letter dated September 24, 1986, requesting comments on the proposed location of Maryland Route 100 in the vicinity of BWI Airport. While we understand the need for roadway development to alleviate traffic congestion near the airport, we are also concerned that new plans not interfere with airport operations, safety and growth potential.

Our review shows that Alternate 3A is far enough away from airport property to have no foreseeable adverse impact on the airport. Alternate 3B has only a minimal adverse impact on the airport. Therefore, Alternates 3A or 3B are acceptable, with Alternate 3A being the preferred routing.

The proposed Alternate 4 with tunnels and open cuts presents serious problems that render it unacceptable. Our concerns are as follows:

-The tunnels and open cuts could be designed to satisfy the safety areas and clearances required by airport design advisories for a minimum level of safety. However, any open cuts in the infield area are hazards to aircraft that should be avoided, and are less safe than a full length tunnel or Alternate 3 routing. In addition to aircraft safety problems, the open cuts could present problems with CFR vehicle access in emergencies, airport security and interference from street and auto lights.

-The routing of the road through airport property would increase the cost of future runway and taxiway development. additional cost of construction due to the road incursion would not be eligible for Federal funding.

-This routing would also limit the flexibility of planned development. Once the tunnels are in place, the runway and taxiway location and alignment would be fixed. This could result in a less than optimum location for the proposed new runway with respect to the FAA separation study underway.

-Alternate 4 with open cuts requires FAA concurrence with the release of airport property. We discourage the release of airport land for non-aviation uses. As a minimum we would require a fair market value be assessed, and these funds placed in a discrete account for airport capital improvements.

The proposed Alternate 4 with a continuous tunnel would eliminate many of the problems that the open cuts present. However, unless the entire length of the tunnel is constructed to support runway and taxiway loads, the additional construction costs and limited flexibility for development still present considerable problems.

We fully understand the position you are in with the conflicts between preserving the local communities, meeting the traffic capacity demands, and continuing to improve the airport. In this regard, we recommend that Alternative 3A or 3B be pursued for the location of Maryland Route 100. The effect on the airport of these two alternatives is acceptable. Since Alternative 4 could have an adverse effect on safety, land and construction costs, and future development potential, we consider it unacceptable.

Please keep us apprised of the status of the proposed routing discussions, and do not hesitate to contact us if we can be of further assistance.

Sincerely,

William 'A. Whittle, Manager

Washington Airports District Office



BUREAU OF PROJECT PLANNING

Jan 22 9 38 AM '86

ANNE ARUNDEL COUNTY

ANNAPOLIS, MARYLAND 21401

DEPARTMENT OF RECREATION AND PARKS

January 16, 1986

Mr. Louis H. Ege, Jr., Acting Chief Bureau of Project Planning Maryland Department of Transportation P.O. Box 717/707 North Calvert Street Baltimore, Maryland 21203-0717

Re:

Contract No. AA 682-101-570 Maryland Route 100 from I-95 to I-97, P.D.M.S. No. 022007

Dear Mr. Ege:

In response to your letter of January 2, 1986 regarding the above-mentioned project, and the effects Alternates 2A, 2B and 4A will have on Friendship and Oueenstown Parks.

I am responding to your items 1, 2, and 3 as follows:

- 1. Friendship Park is critical in meeting the recreational needs of the Greater Glen Burnie area. A trip to this park anytime during the daytime hours, particularly on weekends, will show how much people use this park. There is one ballfield used primarily by picnickers and families on outings. The setting of the park, which is quite obvious upon visiting it, is primarily a quiet place for people to come and relax away from the urban environment of Glen Burnie. Its loss to the community would be significant.
- 2. The required property is significant to the recreational uses of this property, in as much as it would effect the environment of the park, because of increased traffic, noise and air pollution. It has been proposed that we connect Friendship Park with Queenstown Park which is contiguous. The construction of this road would prevent us from making this connection.
- 3. I am forwarding herewith a copy of the site plan for Friendship Park as well as a plan indicating a proposed development of the section which will be transversed by this road.

It is unfortunate that all of these Alternates have such an adverse effect on this much used public facility. We wish there were alternatives which would not have such a negative impact on these parks.

344

January 16, 1986 Mr. Louis H. Ege, Jr., Acting Chief Bureau of Project Planning Maryland department of Transportation

Page (2)

If you have any questions, or need additional information, please contact me by calling 987-9600.

Cordially yours,

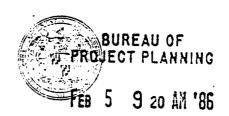
A. James Vouzikas, Chief Planning, Construction & Environmental Programs Recreation & Parks

AJV/vif

cc: Joseph J. McCann, Director, Recreation and Parks William A. Rinehart, Parks Administrator Jack Keene, Recreation and Parks

ENCLOSURE:

345



Grand Buddheld Aban Carter

DEPARTMENT OF NATURAL RESOURCES MARYLAND FOREST, PARK AND WILDLIFE SERVICE BUCKINGHAM FOREST TREE NURSERY HARMANS, MARYLAND 21077 TELEPHONE: (301) 768-7367

JOHN S. AYTON

February 3, 1986 File: 5400

RE: Contract No. AA 682-101-5; P.D.M.S. No. 022007 Maryland Route 100 From Maryland Route 3 to Interstate 95

Ms. Cynthia Simpson
Maryland Department of Transportation
State Highway Administration
P.O. Box 717
707 N. Calvert Street
Baltimore, Maryland 21203

Dear Ms. Simpson:

This letter is in reference to your inquiry of January 29, 1986. I told Mr. Dooley, in a telephone conversation on January 4, 1986, that the Bensen Ray property, recently acquired with Program Open Space Funds, will be developed into a seedling production area by this fall.

The development of this new area has been made necessary by the major increase in seedling demands caused by the Chesapeake Bay Program and by the New Federal Farm Reserve Bill. These two demands for reforestation planting stock and the increased planting on stripmines in Western Maryland has caused our production to go from 4,000,000 seedlings per year to 12,000,000 seedlings per year. In order to meet this major production increase, we had no choice but to develop the new ground.

Sincerely,

John Ayton Nursery Manager

JA/jla

VI-24

cc: James Roberts
Patrick Bright



Department of Natural Resources MARYLAND FOREST, PARK & WILDLIFE SERVICE Tawes Office Building Annapolis, Maryland 21401

DONALD E. MACLAUCHLAN

TORREY C. BROWN, M.D. SECRETARY

February 27, 1986

Mr. Louis Ege, Jr.
Maryland Department of Transportation
State Highway Administration
P.O. Box 717
707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: MD Rt. 100 from I-95 to I-97 Contract No. AA 682-101-570

Dear Mr. Ege:

In answer to your 17 February 1986 letter concerning proposed Route 100 through Patapsco Valley State Park, we offer the following comments.

Alternate 4 would irrevocably diminish the value of a parcel of parkland several times the size of the 16.1 acres actually needed for the right-of-way. Part of the proposed interchange lies squarely on top of the parkland extending along Piney Run. The alignment itself would create an island of land which would no longer function as a wooded buffer protecting Deep Run. To that end, the answer to your first question regarding significance is most assuredly, yes, i.e. passive recreation areas are an integral part of the master plan for Patapsco as well as all our parks.

I'm unclear as to the meaning of your second question. It seemingly establishes a dichotomy in which those lands "chosen" for specific recreational uses are in turn protected by some kind of property relegated to a category called "buffer". This is, of course, not the case. Intensively developed areas are carefully selected and designed so as to allow for safe, controlled public access. An equal number of recreational pursuits rely on the availability of undeveloped (natural condition) tracts. This area of the park serves just such a purpose, and is, in and of itself, as important for recreation as any area of the park. In this context (and in answer to your second question), it most assuredly is recreational, not merely buffer.

VI-25 (301) 269-3776

Telephone ____(3

TTY FOR DEAF: STATEWIDE 1-800-492-5062; BALTIMORE 269-2609

Mr. Louis Ege, Jr. February 27, 1986 Page two

I strongly encourage you to continue investigation of those options depicted in Figure 1 (attached to your 17 February letter) which do not require use of parkland.

Please let me know if you need additional information. Also, as project planning progresses, if it appears that Alternate 4 is the prime candidate, we will have additional comment. By copy of this memo, we ask the Water Resources Administration to keep us abreast of the project as well.

Sincerely,

Donald E. MacLauchlan

Director

DEM:SEM:dec

cc: J. Burtis

- D. Hathway
- D. Gavor
- J. Hearn
- P. Bright
- G. Cheers



ANNE ARUNDEL COUNTY POLICE DEPARTMENT

HEADQUARTERS

201 Robert Crain Highway, Millersville, Maryland 21108 (301) 987-4050 867-4050 PROJECT PLANNING.

MAR 10 12 28 PH 106

COL. WILLIAM S. LINDSEY
Chief of Police

Mr. Louis H. Ege, Jr.
Deputy Director
Project Development Division
P.O. Box 717/707 North Calvert St.,
Baltimore, Maryland 21203

Dear Mr. Ege,

As a result of reviewing the proposals for the Maryland Rt. 3/Interstate 97 plans for Anne Arundel County, the following observations were formulated. The Alternate 4, and Alternate 2, Option B plans present what appear to be the most minimal impact on police services to those areas affected. Of particular concern to this department, is the sub-dividing of present communities, which could result in an increase if response times to calls for service. Consideration should be given to ensure that ample ingress, and egress routes to maximize police and fire response are provided to high density areas.

If I may be of any further assistance, please feel free to contact me at 301-987-4050 Ext. 208.

Sincerely,

Officer W. Wayne Jones #261
Research and Development Section
Anne Arundel County Police Dept.,
Millersville, Maryland 21108

COLONEL PAUL H. RAPPAPORT



DEPARTMENT OF POLICE FOR HOWARD COUNTY

3410 COURT HOUSE DRIVE, ELLICOTT CITY, MD. 21043 992-2200

March 12, 1986

Louis H. Ege, Jr.
Deputy Director
Project Development Division
Maryland Department of Transportation
707 North Calvert Street
Baltimore, Maryland 21203

ATTENTION: Cynthia D. Simpson, Chief

Environmental Management

RE: Contract No. AA 682-101-570

Dear Sir:

I have reviewed, as per your request of February 20, 1986, the proposed development of Route 100 from Route 95 eastward into Anne Arundel County.

The overwhelming majority of the proposed highway construction is located in Anne Arundel County and does not impact the Howard County Police Department.

Those parts of the proposed project which are to be located in Howard County appear, from a law enforcement point of view, to be virtually identical in location and impact.

The completed road development project appears to greatly improve both the north-south traffic flow on Route 1 and the eastward flow from Route 95 into Ame Arundel County. Under the current road configuration, Route 95 traffic into Anne Arundel County must exit that highway and use local feeder roadways. The project will allow such traffic to remain on a major highway and eliminate much congestion on local feeder roadways.

I look forward to the completion of the project and feel that it will improve, rather than hinder, the response time for police services in that part of Howard County. This section of the new Route 100 itself will not provide easier access to anything in Howard County. Instead, the traffic it removes from local roadways will permit emergency vehicles a safer and faster response to calls for service.

If you have further questions regarding this or similar matters, please contact Sergeant E. Lawrence Knutson of the Research and Planning Division at 992-2205.

Sincerely,

Colonel Paul H. Rappaport

Chief of Police

PHR:sd

ANNE ARUNDEL COUNTY

ANNAPOLIS, MARYLAND 21401

DEPARTMENT OF RECREATION AND PARKS

March 17, 1986

19: 3 30 PM 186

Mr. Louis H. Ege, Jr. Bureau of Project Planning Maryland Department of Transportation P.O. Box 717 Baltimore, Maryland 21203-0717

Re: Contract No. AA-682-101-570 Maryland Route 100 from I-95 to I-97 PDMS. No. 022007

Dear Mr. Ege:

Mr. James Vouzikas, who wrote you on January 16 concerning the impact of the proposed Route 100 alignments on Friendship Park, has asked me to convey some additional design requests to you.

First, we have recently met with an active group of Anne Arundel County horsemen who currently use a bridle trail between Queenstown Park and Friendship Park as part of a trail system linking western portions of the County with our Equestrian Center at Andover Park in Linthicum. This group is very concerned that Route 100 will cut this vital access link. We would like to propose that at the point where Route 100 crosses Sawmill Creek or at some nearby point, a large culvert or other structure be provided to maintain the bridle trail. The interior dimensions of the structure would need to be a minimum of eight feet (8') wide by ten feet (10') high.

Second, of the alignment options sent for our consideration, Alternate 2 Option B (Plan sheet 4) clearly has the greatest adverse impact on Friendship Park. Not only does it occupy the entire west side of the park, as opposed to crossing only the southwest corner as do the other alignments, but its interchange with Dorsey Road would clearly make entering the park from Dorsev Road much more hazardous.

I thank you for your consideration of these matters in making your final selection of the alignment of Route 100.

Sincerely yours,

- rom

John T. Keene

Capital Projects Officer

Recreation and Parks Department

JTK/vif

cc: Joseph J. McCann, Director, Recreation and Parks

William A. Rinehart, Parks Administrator

Cynthia E. Young, PATH

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B. COMMENTS

1. Combined Location/Design Public Hearing

A Combined Location/Design Public Hearing for this project was held on June 12, 1986, at Andover Senior High School, Linthicum, Maryland. Mr. Ed Meehan, District Engineer for the State Highway Administration in District #5, presided. Representatives of the State Highway Administration's Office of Planning and Preliminary Engineering explained the project process and the alternatives under consideration and provided a environmental overview of the study area. Representatives of the State Highway Administration explained the right-of-way acquisition process and the relocation assistance program. Persons attending the Public Hearing were provided a copy of the "Combined Location/Design Public Hearing" brochure which summarizes features of the alternates. The Draft Environmental impact Statement and a public information display were available for review prior to and at the hearing.

An official transcript was prepared of the Location/Design Public Hearing. The hearing record contains the remarks of 43 speakers, along with several written statements. Copies of the transcript are available for review at the Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland.

A summary of the comments made at the Public Hearing and the responses thereto follows:

a. Roland Davis (Chief Transportation Planner, Anne Arundel County)

Bert Haus (Director of Sales, Dickenson Heffner, Inc.)

Chuck Pruet (Westinghouse Defense Center)

Jim Vecheck (Timber Ridge Improvement Association)

Comment:

Supports Alternate 3 - Option B.

Response:

Alternate 3- Option B, with some modifications, has been chosen.

b. Arthur Kungle, Jr., - President, The Liberty Tree Project

Comments:

Opposed Alternate 3 because of the following impacts:

- I. Suifur Dioxide and acid rain from the highway could hurt the plants and trees in the Buckingham Forest Tree Nursery.
- II. Roadway goes through an established grafted White Pine Seedling Orchard in the nursery.
- III. Did not feel that the DEIS addressed any of the sensitive issues pertaining to the nursery.

Response:

Resources concerning impacts to the Buckingham Forest Tree Nursery has been ongoing throughout this project. In addition, a study examining the impacts of this project on the nursery has been performed and is available for review at the Maryland State Highway Administration Library, 707 North Calvert Street, Baltimore, Maryland and at all State Depository

Libraries.

C. Steve Armsey - Vice President, Oxford Development Corporation

Comments

- I. Requested that relocated Amberton Drive tie Into U.S. Route 1 at the same location as the entrance to their proposed business park.
- Requested that the high-speed ramp from westbound Maryland Route 100 to north bound U.S. Route 1 be located at or near the location where the left-turn movement from this ramp to southbound U.S. Route 1 is in order to provide more weaving distance for motorists desiring to turn left into their proposed business park.
- III. Supports the cloverleaf Interchange at U.S. Route 1 as shown on the plans.

355

Responses:

- i. The relocated Amberton Drive has been located so as to minimize impacts to an existing residence and an existing nursery.
- II. The high-speed ramp as shown on theplans is necessary to achieve the high est level-of-service for the interchange and to provide for a smooth transition between the two highways for motorists. Even with this high-speed ramp, there would be sufficient weave distance for motorists desiring to turn left into the proposed business park at the northern entrance as shown on develop ment plans.
- III. The selected alternate, Alternate 38 (Modified), Includes the cloverleaf Interchange at U.S. Route 1 (see Fig. II-26).

d. Curtis Warren

Comment:

Expressed concern about the circuity of travel, the mixing of local and through traffic on the new freeway and the separation of the Race Road and Wright Road neighborhoods caused by the closing of Dorsey Road at Maryland Route 295.

Response:

A bridge over Maryland 295 connecting Race Road and Wright Road has been incorporated into the selected alternate to provide for local traffic.

e. Raymond B. Davis

Comments:

- 1. Stated that the ramps from Alternate 3 that Intersect Dorsey Road at Forest Avenue would Increase traffic on Forest Avenue.
- II. Stated that If one of the drawbacks to Alternate 4 was a lack of access to the existing industrial centers west of Maryland Route 295, ramps from Parkway Drive North to Alternate 4 could be constructed.
- III. Stated that the project would adversely affect the air quality in the area.

Responses:

- Under the selected alternate, the Race Road Interchange has been revised to a standard diamond configuration.
- II. Alternate 4 requires acquisition of land from the Patapsco Valley State Park. Even if Alternate 4 were selected, ramps from the north section of Parkway industrial Center I could not be furnished because of the geometric imitations imposed by the interchange at Maryland Route 295. These ramps would also require the acquisition of at least 2 businesses and additional land from the Patapsco Valley State Park.
- III. As shown in section IV. D, the ambient air quality will be improved since the project will enhance the flow of traffic through the area.

f. Paul L. Saval - Saval Food Products

Comment

Opposed the 'Option' for relocating Dorsey Road at U.S. Route 1 since it impacts a proposed food distribution warehouse. Stated that the "Option'would be more expensive because of higher right-of-way costs.

Response:

Under the selected alternate, the 'Option' for relocating Dorsey Road at U.S. Route 1 has been chosen and has been shifted slightly to the west onto an existing right-of-way. This 'Option' does not require any residential relocations and would be less expensive to construct than the other alignment since it is much shorter.

g. Connie Both

Comment:

Ms. Both favored Alternate 4 with a connection to Alternate 3-Option B. (See her letter and response thereto contained hereinafter).

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h. Alexander Brown-President, Sandalwood Improvement Association

Comments:

Mr. Brown supported Alternate 4 with a connection to Alternate 3-Option B because of the following reasons:

- I. Alternate 3B will break and damage community relations in the area by cul-de-sacing many major roadways.
- II. Alternate 3B does not separate through and local traffic.
- III. Alternate 3B will leave north Anne Arundel County with only one direct east-west roadway which will severely limit future expansion.

Responses:

I. and II.

Under the selected alternate, abridge over Maryland Route 295 connecting Race Road and Wright Road and bridges forcarrying Harmans Road and W.B.& A. Road over the freeway have been provided to alleviate community disruptions.

- III. The Anne Arundel County General Plan shows the approximate corridor of Alternate 3-Option A and Is the basis upon which development in the area has been implemented and planned.
- 1. Werner E. Minshall Parkway Industrial Center

Comment:

Mr. Minshail expressed concern about the effects of the project on the Parkway Industrial Center.

Response:

Several meetings were held with Mr. Minshall and his engineering firm to coordinate the impacts of the project on existing and proposed developments in the Parkway Industrial Center.

j. Richard Zabionski - Provinces Civic Association

Comments:

Mr. Zablonski favored Alternate 4 with a connection to Alternate 3-Option B for the following reasons:

- 1. Alternate 4 would reduce Ridge Road traffic by 30-35% and Alternate 3B would increase Ridge Road traffic by 37%.
- ii. Harmans Road would be closed by Alternate 3B.
- III. Alternate 4 would cost \$29 million less than Alternate 3B.

Responses:

- As shown in section IV, travel on Ridge Road south of Dorsey Road is expected to reach 11,500 average daily traffic(ADT) in the design year 2010 for the No-Build Alternate. Under Alternate 3B, it is expected that the ADT on Ridge Road south of Dorsey Road would be 12,600, an increase of approximately 10%. Figure IV-9 shows that the ADT on New Ridge Road north of Dorsey Road would be 5,000 in 2010. This would be traffic going into the Baltimore Commons industrial Park. The 2010 ADT on Ridge Road south of Dorsey Road would be atleast 11,500 under Alternate 4.
- The selected alternate includes bridging Harmans Road over Maryland Route 100.
- III. Due to tunneling costs through the Baltimore Washington International Airport, Alternate 4 wouldcost up to \$36 million more than the selected alternate.
- k. Daie Ross Vice-President, ROJAC Group

Comment:

Mr. Ross expressed concern about the effects of the project on access to the Howard Johnson's hotel and restaurant in the Parkway industrial Center.

Response:

The selected alternate includes a standard diamond interchange at Race Road and provides for access to the Parkway industrial Center from this interchange and from Dorsey Road.

i. Steven J. Hartman - MiE Development Corporation

Comment:

Stated that he was originally in favor of Alternate 3B, but as a result of listening tocomments at the Public Hearing, he would be in favor of Alternate 4 with a connection to Alternate 3-Option B.

Response:

The selected alternate was chosen over Alternate 4/3B for several reasons. First, Alternate 4 requires the acquisition of land from Patapsco Valley State Park which is prohibited under Federal Law If a feasible and prudent alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundel County and the Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington international Airport, and according to

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Federal Aviation Administration regulations, the highway would have to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

m. William Cooper - Elmhurst Improvement Association

Camment:

Objected to the closing of W.B.& A. Road.

Response:

The selected alternate provides for bridging W.B.& A. Road over Maryland Route 100.

n. Tom Dixon - President, Harmans Civic Association

Comments:

Mr. Dixon supported Alternate 4 with a connection to Alternate 3-Option B for the following reasons:

- 1. Alternate 3B severs continuous travel on Dorsey Road, Harmans Road and Ridge Road.
- II. The Alternate 4 Interchange with Maryland Route 295 could be shifted to the south to avoid impacting residences on Race Road and Bentwoods Road.
- III. Alternate 4 does not conflict with the planned expansion of the Baitimore Washington Airport.

Responses:

- I. The selected alternate provides for a bridge over Maryland Route 295 connecting Race Road and Wright Road which allows for local traffic circulation Harmans Road will also bridge over the selected alternate. Continuous travel on Ridge Road is provided via the relocated Ridge Road as shown on the plans.
- II. Shifting the Alternate 4 Interchange with Maryland Route 295 to the south to avoid any residential relocations would result in greater impacts to the area of Patapsco Valley State Park east of Route 295, greater impacts to the Deep Run flood plain, decreased weaving distance between this interchange and the existing Dorsey Road/Route 295 interchange and would require at least 4 business relocations.
- III. Pursuant to Federal Aviation Administrations, a tunnel would have to be constructed for Alternate 4 through the airport property which would make the total cost of Alternate 4 up to \$36 million more than the selected alternate.

o. Irene Hebron - Concerned Citizens for a Fair Route 100

Comments:

- Supported Alternate 4 with a connection to Alternate 3-Option B because she felt that Alternate 3 unjustly impacted black communities in the area.
- II. Stated that many of the required residential relocations are retired persons and that they would find it financially difficult to relocate.

Responses:

The selected alternate, Alternate 38 (Modified), was chosen ١. over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a 'feasible and prudent' aiternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundei County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington international Federal Aviation Administration regulations would Airport. require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

During the course of the MD Route 100 study, concerns were raised regarding the impacts of the project. The selected alternate, Alternate 3B (Modified), incorporates several design changes of the 'historicai' alignment (Alternate 3-Option A) to address these concerns. These include the alignment shift at the project's eastern end in order to minimize impacts to the community of Queenstown, the standard diamond interchange at Race Road and selecting the full cloverleaf Interchange at MD. Route 295. In total, the design changes made by the State Highway Administration resulted in a reduction in the number of residences displaced by MD. Route 100 from 43 to 22. Alternate 38 (Modified) also includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. This project has been reviewed by the Equal Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964 (see letter dated June 26, 1986.)

II. The relocations required for this project will be resolved in a timely and humane fashion and will be accomplished in accordance with the Uniform Relocation Assistance and Land Acquisition Policies Act of 1970 (P.L. 91-646) and/or 49 CFR Part 25—the new regulations.

p. Howard E. Wagner, Jr.

Comment:

Supported Alternate 4 with a connection to Alternate 3-Option B because Alternate 3-Option B would cut through his farm and divide it in half and it would be a 4 to 5 mile trip to get from one side to the other.

Response:

The alignment of Alternate 3-Option B in the vicinity of the Smith Form has been located in order to minimize impacts on existing residences. Provisions to provide access between the remaining parcels of the farm and/or acquisition of remnant parcels will be investigated during final design.

q. Sylvia Garrison

Comment:

Supported Alternate 4 with a connection to Alternate 3-Option B because a disproportionment number of the relocations required under Alternate 3-Option B are minorities.

Response:

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the

southwestern corner of the Baitimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

During the course of the MD Route 100 study, concerns were raised regarding the impacts of the project. The selected alternate, Alternate 3B (Modified), incorporates several design changes of the 'historical' alignment (Alternate 3-Option A) to address these concerns. These include the alignment shift at the project's eastern end in order to minimize impacts to the community of Queenstown, the standard diamondinterchange at Race Road and selecting the full-cloverleaf interchange at MD. Route 295. In total, the design changes made by the State Highway Administration resulted in a reduction in the number of residences displaced by MD. Route 100 from 43 to 22. Alternate 38 (Modified) also includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. This project has been reviewed by the Equal Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964 (see letter dated June 26, 1986).

r. Melvin Kelly - President, Severn improvement Association Art Bohilnger
Sandy Mosher
Catherine Gaither
Virginia Warren
Louis Fellinger
Barbara Taylor
Edward Kennedy
Beathsader Wombie



Comment:

Favor Alternate 4 with a connection to Alternate 3-Option B. Response:

The selected alternate was chosen over Alternate 4/3B for severai reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law If a 'feasible and prudent' alternative Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundel County and the Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington international Airport, and according to Federal Aviation Administration regulations, the highway would have to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

s. David Williams - Associate Professor of Biology,
Anne Arundel Community College

Comment:

Opposed Alternated 3 due to the potential adverse impacts upon the Buckingham Forest Tree Nursery.

Response:

Coordination with the Maryland Department of Natural Resources concerning impacts to the Buckingham Forest Tree Nursery has been ongoing throughout this project. In addition, a study examining the impacts of this projecton the nursery has been performed and is available for review at the Maryland State Highway Administration Library, 707 North Calvert Street, Baltimore, Maryland and at all State Depository Libraries.

t. Geraid Taibert - Maryland Department of Agriculture

Comment:

Stated that whichever route is selected, the impacts on farmland and natural resource areas should be minimized.

Response:

Minimization of impacts on agricultural land and natural areas, as well as residential and commercial areas, has been a consideration throughout the study. Minor alignment shifts will be considered during final design of the project to reduce impacts as much as feasible.

u. Mary Rosso

Comment:

Supported Alternate 4 with a connection to Alternate 3-Option B because it minimizes impacts to existing communities.

Response:

The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to communities. The selected alternate, Alternate 38 (Modified), includes several provisions to reduce both community impacts and the number of relocations required (see Section IV.A).

V. Gene Floyd - President, North Anne Arundel County Chamber of Commerce

Comment:

Stated that the Chamber of Commerce, In an Executive Session, chose not to select one alternate over another, but that the project should proceed as expeditiously as possible.

Response: None required.

W. Jean Creek - President, Anne Arundel County NAACP

Comment:

Supported Alternate 4 with a connection to Alternate 3-Option B. Relayed the concerns of the members of the black communities of Harmans and Queenstown regarding the adverse and disproportionate impact to those communities.

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Response:

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a 'feasible and prudent' aiternative exists. Aiso, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundei County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baitimore Washington international Federai Aviation Administration regulations would Airport. require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

During the course of the MD Route 100 study, concerns were raised regarding the impacts of the project. The selected aiternate, Aiternate 3B (Modified), incorporates severai design changes of the 'historicai' alignment (Alternate 3-Option A) to address these concerns. These include the alignment shift at the project's eastern end in order to minimize impacts to the community of Queenstown, the standard diamond interchange at Race Road and selecting the full cloverleaf interchange at MD. Route 295. in total, the design changes made by the State Highway Administration resulted in a reduction in the number of residences displaced by MD. Route 100 from 43 to 22. Alternate 3B (Modified) also includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. This project has been reviewed by the Equai Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964 (see letter dated June 26, 1986.)

x. Marion Blades

Comment:

Expressed concern about noise impacts the project would impose on the area.

Response:

The effects of noise from the proposed Maryland Route 100 are judged in accordance with Federal Highway Administration standards and MD State Highway Administration guidelines. A discussion of the noise impacts of the proposed project and any mitigation measures for those impacts is contained in section IV. E of this Final Environmental impact Statement.

y. Theodore Sophecleus - Councilman, Anne Arundel County

Comment:

Stated that elected officials and the public have been involved in this project for several years. Requested that the State Highway Administration inform the public of the reasons for selecting an alternate.

Response:

The reasons for selecting Alternate 3B (Modified) are presented in this Final Environmental impact Statement. A news release explaining why Alternate 3B (Modified) was selected was made public in the local news media and sent to everyone was selected on the project mailing list.

z. Basil Smith

Comments:

Supported Alternate 4 with a connection to Alternate 3-Option B for the following reasons:

- I. Alternate 3 disrupts local traffic patterns and there-fore limits access to the existing and proposed industrial parks in the area.
- II. Alternate 4/3B would be \$20 million less than Alternate 3B which could be to mitigate the to the Baltimore Washington international Airport.

Response:

- I. The State Highway Administration believes that the selected alternate provides the needed access to the existing and planned development in the area. The selected alternate, Alternate 3B (Modified), includes several provisions for maintaining access to the local road network (see Section II.B.4).
- II. Federal Aviation Administration regulations would require Alternate 4 to be constructed in a tunnel through the airport property which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

aa. Willis Henry

Conment:

Supported Alternate 4 and requested that W.B.& A. Road be kept open.

Response:

Alternate 3B (Modified) has been selected for the reasons discussed in Section II.B.4.

The selected alternate includes bridging W.B.& A. Road over Maryland Route 100.

nus

bb. Michele H. Schrock - Preserve Arundel Trails for Horses (PATH)

Comment:

Supported Alternate 4 with a connection to Alternate 3-Option B. Expressed concern about the project's impact on bridie trails in the area and requested that W.B. & A. Road be kept open to allow PATH members access to areas through Friendship Park.

Response:

The selected alternate, Alternate 3B (Modifled) includes bridging W.B.& A. Road over Maryland Route 100. In addition, the feasibility of including a trail crossing of the roadway will be investigated during final design.

CC. Tyras S. Athey - Anne Arundei County Delegate to the Maryland House of Representatives.

Comment:

Expressed concern about the closing of Harmans Road and W.B. & A. Road.

Response:

The selected alternate includes provisions for bridging Harmans Road and W.B. & A. Road over Maryland Route 100.

2. Written Comments

Written statements and other exhibits in lieu of or in addition to oral presentations at the Location/Design Public Hearing were accepted by the State Highway Administration until June 27, 1986 for inclusion in the "Public Hearing Transcript". These written statements and responses thereto are contained hereinafter. The "Public Hearing Transcript" is available for public review at the State Highway Administration, 707 North Calvert Street, Baltimore, Maryland, and at District #5 Headquarters, Defense Highway, Annapolis, Maryland. Those comments received after June 27, 1986, were not included in the "Public Hearing Transcript". However, whenever possible, comments received after that date were considered in the decision making process and all comments were and will continue to be responded to.

hr., Advanced Systems Development Division 5730 Baymeadow Drive Gien Burnie, Maryland 21061 Telephone (301) 787-3783



DEVELOPMENT
DEVELOPMENT
DIVISION

APR 16 9 08 AN

April 3, 1986

Mr. Hal Kassoff
Administrator
Maryland Department of Transportation
Maryland State Highway Administration
P. O. Box 717
707 N. Calvert Street
Baltimore, MD 21203

Dear Mr. Kassoff:

I understand that the Maryland State Highway Administration has agreed to accelerate the construction timetable of Route 100 from Route 3 to Insterstate 95 in Howard County and that there will be a Public Hearing held on Route Alternatives.

Although I will not be able to attend the hearing, it would be appreciated if you would reflect in the public record, my support of "Alternative 3" as the preferred alignment.

Thanking you in advance.

Sincerely,

David A. Rossi

President and General Manager

DAR/drs

RECEIVED

#590 APR 14 1986

D-54 DIRECTOR, OFFICE OF

PLANNING & PRELIMINARY ENGINEERING

ATE HWY ADE:

17R 86 12: 46

Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

APR 2 4 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3

PDMS No. 022007

DEVELOPMENT DIVISION NPR 25 9 42 M '86

Mr. David A. Rossi President and General Manager Gould, Inc. 6730 Baymeadow Drive Glen Burnie, Maryland 21061

Dear Mr. Rossi:

Thank you for your letter dated April 3, 1986 in which you expressed your support for the Maryland Route 100 project and particularly for Alternate 3.

Due to the increasing need for this facility, construction could start by late 1989 if funding is available.

I regret that you will be unable to attend the Public Hearing scheduled for June 12, 1986; however, you will be informed of developments on the project via the distribution of a hearing brochure to our project mailing list.

Should you have any questions, please feel free to contact Mr. Neil J. Pedersen, Director of the Office of Planning and Preliminary Engineering, at 659-1110.

Sincerely,

HAL KASSOFF

Hal Kassoff Administrator

HK:tlh

cc: Mr. E. H. Meehan

Mr. W. R. Clingan

Mr. N. J. Pedersen

Mr. L. H. Ege, Jr.

Mr. R. E. Moon

Note: For additional response, see

page VI-64

My telephone number is 659-1111

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 · 0717

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007

Combined Location/Design Public Hearing

Maryland Route 100

I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Scholl

NAME JESSE C. FLY LOIS E. FLY DATE 13 Quine 80
PLEASE ADDRESS //25 DOLSEY RD.
PRINT ADDRESS // AD DOCUMENT ADDRESS // AD DOCUMENT
CITY/TOWN HANOVEL STATE MD ZIP CODE 21076
I/We wish to comment or inquire about the following aspects of this project:
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<u> </u>
Please add my/our name(s) to the Mailing List.*
Please delete my/our name(s) from the Mailing List.
*Persons who have received a copy of this brochure through the mail are already on the project Mailing 'ist. VI-51

William K. Helimann Secretary Hal Kassoff Administrator

July 16, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Mr. and Mrs. Jesse C. Fly 1125 Dorsey Road Hanover, Maryland 21076

Dear Mr. and Mrs. Fly:

This is to acknowledge receipt of your comments dated June 13, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State High-way Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Louis H. Ege, J. Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Ronald E. Moon∨

Mr. James T. Johnson

Note: For additional response, see page VI-64

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My telephone number is 659-1130

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

I-95 to Maryland Route 3 (I-97)
Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

						88	-, ⊀
	NAME _	James C. Vechee & Highways Com Improvement As:	mittee. Timbo	of Roads er Ridge	DATE	June 25,	1986
PLEASE PRINT	ADDRES	7400 Hawkins D		Maryland	UATE.		1,00
	CITY/TO	WN Hanover	STAT	E_Md.	ZIP C	ODE_210	76
I/We wist	to com	ment or inquire	about the f	ollowing asp	ects of the	nis proje	ct:
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Please	delete m	y/our name(s) fro	om the Maiiin		/South Rosere growth.		
*Persons	s who ha	ve received a co lailing List.					1
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Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary

Hai Kassoff Administrator

August 4, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

Mr. James C. Vecheck, Chairman Roads & Highways Committee Timber Ridge Improvement Association 7400 Hawkins Drive Hanover, Maryland 21076

Dear Mr. Vecheck:

This is to acknowledge receipt of your comments, on behalf of the Timber Ridge Improvement Association, in support of the Alternate 3 alignment for the construction of Maryland Route 100. Your statement, along with the testimony you provided at the public hearing on June 12, has been entered into the transcript and made a part of the official project record. We appreciate the support of your community for this project, and would like to assure you that your views will be considered before a final decision is made concerning the project.

Thank you for your comments. Via the project mailing list, you will be kept aware of future developments and advised of the decision made by the State Highway Administration.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

Ronald E. Moon

Project Manager

LHE: REM: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-64

VI-54

PROJECT DEVELOPMENT DIVISION

11011 McCormick Road Hunt Valley, Maryland 21031

(301) 667-7700

McCormick IIE Properties, Inc.

A RICHARD UHLIG

June 26, 1986

Maryland State Highway Administration P. O. Box 717 Baltimore Maryland 21203

Dear Sirs:

As a major development company on the East Coast, and as a developer in the proposed Route 100 corridor, I feel that the position of this Company should be made relative to the location and design of Maryland Route 100 from Interstate 95 to Maryland Route 3.

McCormick Properties is in the process of developing a 92.5 acre site boardering Dorsey Road east of Telegraph Road and west of the Baltimore-Annapolis Boulevard. Our plans call for approximately 10 to 14 professional buildings on this site. As with all of McCormick Properties' business centers, we are concerned not only with our park, but how we impact our neighbors. We have taken great pains to insulate our neighbors to the south, east and west from our development. With the type of development we are proposing, it is necessary that we have good access and good support from the County and State governments.

McCormick Properties has investigated all alternatives presented concerning the alignment of Route 100 as defined above. It is our opinion that Alternate 3. Option B is the preferred Route. This route gives the greatest flexibility for economic growth while retaining the residential character of the area.

McCormick Properties strongly supports the economic and comprehensive plans of Anne Arundel County to continue commercial development in the area surrounding the Baltimore-Washington International Airport. It is our professional opinion that this growth is logical and is of great benefit to Anne Arundel County and the State of Maryland.

The other alternatives for locations for Route 100 deny the type of economic growth that Anne Arundel County and the State need. We have exhaustively studied the growth patterns in the Baltimore/Washington/Annapolis region and feel that Alternative 3. Option B best aids all concerned parties.

We would like to have this letter be contained in your analysis of the location of this designated highway.

Sincerely,

J. Richard Uhlig Vice President

CAR/wjk



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary Hal Kassoff Administrator

July 29, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100

I-95 to Maryland Route 3 (I-97)

PDMS No. 022007

Mr. J. Richard Uhlig Vice President McCormick Properties, Inc. 11011 McCormick Road Hunt Valley, Maryland 21031

Dear Mr. Uhlig:

This is in reference to your letter of June 26, 1986 stating the position of the McCormick Company relative to the location and design of the proposed Maryland Route 100 from Interstate 95 to Maryland Route 3.

We appreciate the support of the McCormick Company for this project and have noted your preference for Alternate 3, Option B. I want to assure you that your comments and concerns regarding this project will be fully evaluated and will receive every consideration before an alternate is selected for Maryland Route 100.

Thank you for writing. Your letter will be entered into the public hearing transcript and made a part of the official project record. You will be advised of the decision selecting an alternate for the location of Maryland Route 100 by the State Highway Administration via the project mailing list.

John H. (

Louis H. Ege, J. Deputy Director

Project Development Division

LHE:ss

cc: Mr. N. J. Pedersen

Mr. E. H. Meehan

Mr. R. E. Moon

Mr. J. T. Johnson

Note: For additional response, see page VI-64

My telephone number is 659-1130

379

DEVELOPMENT DIVISION Jun 21 2 on FM '86

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007

Combined Location/Design Public Hearing

Maryland Route 100

I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

	NAME Scott Kozel	DATE 5-31-86
	-	Franklin St.
	CITY/TOWN · Richmond	STATE Va. ZIP CODE 23221
I/We wist	to comment or inquire about	the following aspects of this project:
	= am in favor o	f the construction of
one	of the treeway	alternates for Rte.
100.		
	like the way -	that Option 3 serves
the		
Option	on 4 is consider	a service standpoint
favor	Option 3A from	a service standpoint
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Please	add my/our name(s) to the Mail	ing List.*
VIII	delete my/our name(s) from the	
*Person	ns who have received a copy of	this brochure through the mail are aiready



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary Hai Kassoff Administrator

July 16, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Mr. Scott Kozel 3212-A W. Franklin Street Richmond, Virginia 23221

Dear Mr. Kozel:

This is to acknowledge receipt of your comments dated May 31, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State High-way Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Louis H. Ege, Jr.

Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Ronald E. Moon

Mr. James T. Johnson

Note: For additional response, see page VI-64

RECE

JUN 1 T 1985TATE HIGHWAY ADMINISTRATION DIRECTOR, OFFICE QUESTIONS AND/OR COMMENTS

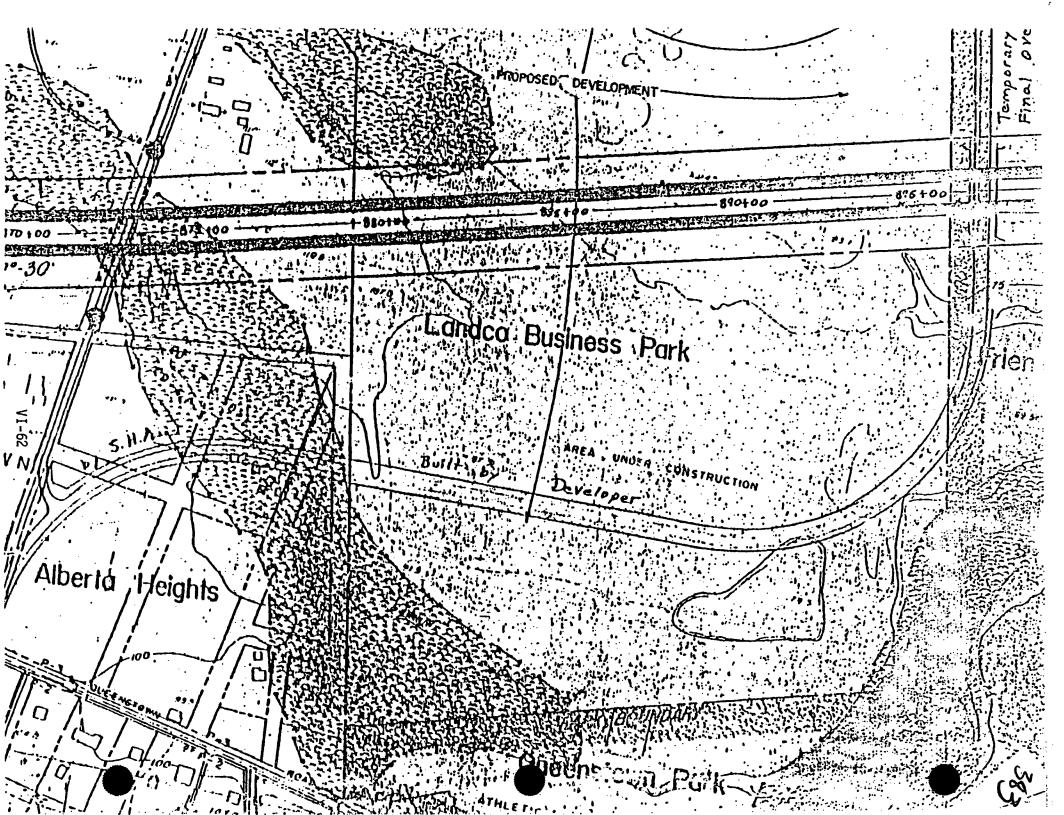
PLANNING & PRELIMINARY ENGINEERING
Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing

Maryland Route 100

I-95 to Maryland Route 3 (I-97) Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

	NAME SOUTH SHORE DEVELOPMENT CO., INC. DATE June 9, 1986
PLEASE PRINT	ADDRESS c/o ANAREX, INC. 503 Ritchie Highway
	CITY/TOWN Severna Park STATE MD ZIP CODE 21146
1/We WIS	sh to comment or inquire about the following aspects of this project:
We s	strongly recommend Alternate 3, Option A, which meets the needs of the
commercia	al and industrial land both existing and planned. A freeway is needed to
relieve (Dorsey Road and to carry the heavy flows of east-west traffic through
Anne Arur	ndel County and Howard County industrial areas.
Alte	ernate 3, Option B, not only costs more than Option A, but, displaces far
more par	kland, recreation sites, historical sites, industrial sites, woodlands,
wetlands.	, floodplains, and streams. Furthermore, it places an undesirable and
unnecessa	ary double curve in the freeway between Mountain Road and Telegraph Road.
0f (our closest interest, is the landlocking most of the Landco Business Park
which is	in a final stage of engineering. Anne Arundel County has requested that
you conti	inue W. B. & A. Road to Dorsey Road to serve industrial land north and
south of	Route 100. It would become an important link between industrial areas.
Aqa	in, we urge you to choose Alternate 3, Option A, but if Option B is chosen,
please pl	lan to continue W. B. & A. Road per our attached sketch and as recommended
to you by	y the Anne Arundel County Office of Planning and Zoning.
Pleas	e add my/our name(s) to the Mailing List.*
Pleas	e delete my/our name(s) from the Mailing List.
*Perso	ns who have received a conv of this brochuse through the mail are already

on the project Mailing List.



William K. Hellmann Secretary Hal Kassoff

Administrator

July 7, 1986

Re: Contract No. AA 682-101-570

Maryland Route 100
Interstate Route 95 to
Maryland Route 3
(Interstate Route 97)

PDMS No. 022007

South Shore Development Co., Inc. c/o Anarex, Inc. 503 Ritchie Highway Severna Park, Maryland 21146

Gentlemen:

This is to acknowledge receipt of your mailer dated June 9, 1986 regarding the proposed construction of Maryland Route 100. Your comments will be made a part of the official project record by being entered into the Public Hearing transcript.

We appreciate your support of the project and want to assure you that the concerns you have noted will receive every consideration before a decision is made concerning this project. You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Very truly yours,

neil & Pedeson

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

NJP:tn

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon J.

Note: For additional response, see page VI-64

VI-63

Additional response to letters from:

David A. Rossi, dated April 3, 1986 Jesse C. and Lois E. Fly, dated 13 June 1986 James C. Vecheck, dated June 25, 1986 J. Richard Uhilg, dated June 26, 1986 Scott Kozel, dated May 31, 1986 South Shore Development Co., Inc., dated June 9, 1986

The State Highway Administration believes that the selected alternate, Alternate 3B (Modified), provides the needed service to the area while minimizing impacts to local communities. The 'Option B' for Alternate 3 was developed specifically to minimize impacts to the established minority community of Queenstown. Several provisions have been included in the selected alternate to maintain local traffic circulation. These include a bridge over MD Route 295 connecting Race Road with Wright Road, bridging Harmans Road over MD Route 100 and bridging W.B. & A. Road over MD. Route 100.

6-13-86 386

Mr. Neil Pederson Director Office of Planning and Preliminary Engineering State Highway Administration Post Office Box 717 Baltimore, Maryland 21203-0717

Dear Mr. Pederson.

This is in regard to the State's proposal to build Maryland route 100 from 195 in Howard county to Maryland route 3 (soon to be 197) in Anne Arundal County. I have reviewed the materials about this project which your staff has provided me and I have the Following comments:

- 1. Your staff is to be commended for their thorough and comprehensive analysis. As a resident of the affected area for the last ten years, I am well aware that the community opposition has been a significant hinderance to this project, and that a solution which will please everyone is not possible. I understand how difficult it must be for your staff to deal with the frustrations which accompany this project.
- 2. I think that it is essential that the option chosen be one of the freeway options. I recognize that my neighbors may object to any of the options. However, I believe that they do not realize that if no freeway option is built soon, the traffic from the explosive commercial growth in the area will be such that they will no longer be able to tolerate living in the homes which they sought to protect.
- 3. Irrespective of which freeway option is chosen, the State should keep open all current north-south thoroughfares, particularly Ridge and Harmons Roads. You amy want to count vehicular traffic on these roads now. believe that you may be surprised at how much traffic they handle. Moreover, they are essential to maintaining the rapid availability of emergency vehicles. In particular, access for the police who have to come to us from east county would be significantly limited by closing either of these thoroughfares.
- 4. Specifically, I would like to offer my support for Alternative #4, and to present my analysis of the advantages and disadvantages of this option:

PRO

- --- Will disrupt the fewest residences (29) in total and the same number of minority residences as alternative #3B.
- -- Is significantly less costly then alternative #3B. -- Will have one fewer interchange than alternative #3B, reducing the potential for accidents which, increases with interchanges which are close together.

-- Will occupy much of the land which is now in the airport's noise zone and which the State will be forced to purchase in the future anyway.

-- Will provide better access to the airport from I95 and I97 since the interchange at Ridge Road will be closer to the airport passenger entrance.

-- Will be supported by the community better than any other option, resulting in faster construction

CON

-- Will require the State to use some of the airport property for a road -- you will have a hard time selling this within your own bureaucracy, but you can argue that the State could expand the airport south-east under alternative #4 which would not be possible under any of the other alternatives -- The industrial park developers will pressure you to select any of the other options so that they can use immediate access to the freeway as a selling point -- you can counter that any freeway, even without immediate access, is better than none.

Thank you for adding me to the mailing list for this project. I hope that you choose a freeway option since I believe that a limited access highway is essential to the continued economic growth of this area of the State and to the continued viability of our community.

Sincerely,

1713 Prairie Court Severn, Md. 21244

RECEIVED

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary Hai Kassoff

Administrator

July 17, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. W. H. Heygster 1713 Prairie Court Severn, Maryland 21144

Dear Mr. Heygster:

This is in response to your letter of June 13, 1986 regarding the proposed construction of Maryland Route 100 from Interstate Route 95 to Maryland Route 3. We appreciate your views and comments in support of a freeway option for Maryland Route 100, and have noted your preference for Alternate 4. I would like to assure you that your comments will be fully evaluated and will receive every consideration before an alternate is selected.

Thank you for writing and letting us know of your thoughts. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript. In accordance with your request, we have added your name to the project mailing list. Via this list, you will be kept aware of future developments and advised of the decision made by the State Highway Administration.

Very truly yours,

neil of Redesen

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

NJP:tlh

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon V. Mr. James T. Johnson

Note: For additional response, see page VI-105

VI-67



19 June 1986

ATE HAY ADM Mr. Hal Kassoff
State Highway Administrator
707 N. Calvert St.
11M 65 7: 33 Baltimore, Md. 21202

Dear Mr. Kassoff.

The following members of the MUNSON HEIGHTS Community in Severn strongly support building a Rte. 100 extension, however, we are opposed to Alternate 3b. We support many other communities and business groups in favoring Alternate 4 with the 3b option, as stated at the Public Hearing on 12 June 1986.

OUR OBJECTIONS TO ALTERNATE 3b ARE FOR THE FOLLOWING REASONS:

- 1. Obvious disruption of local traffic.
- 2. Noise pollution if Alternate 4 is built the need for measures to reduce noise will be far less the noise will be in primarily non-residential areas.
- 3. Illogical flow of traffic proposed, i.e. one east-west road vs. two.
- 4. Concern over fire and police access.
- 5. Impact on minority communities.
- 6. Disruption of the BUCKINGHAM Forest Tree Nursery.
- 7. Environmental impact on woodlands and wetlands.

8. Disparity of costs.

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Yound FINNEN 229 otis Dr William TAylor 201 otis Dr Richard M. Smowite 203 Otis DR. Melun A. Gutto 212 otes DR. Claudette Bailey 205 Otis Dr Thomas L Herson 2019 Otis DR Theodor Sammer 211 Otis PR Robert Wille 221 Otis DR. Staffer & Finker 229 Ottes Dr. Charles Johnson 122 Gerald DR David Segre 98 Otto Dr. Hur cha Luesque 5 GeRald C.T. margaret & Fix 112 Denson Dry Jamilly G. Crham 7708 Telegraph Road Sandra M. Cochrax Derthe Waldo 7704 Telegraph Rd Laurine, V. Reninger 7700 Telegraph / Rk. Howard E. Reninger Marianne Bedure 7700 Lelegraph Rd. 117 Otes Diese Robus & Balunce 117 OFS BRIVE Sonely Hopkins 120 Oto On Sener Tenye Nodine 215 Otis Dr Severn Shelley W. Jerring 223 Otis Dr., Severn Eugen R. Finas 225 Otio Dr. Leven. 108 OH'S DR, & Souren, ma Soll Bah Line

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Waller Stein 12 7 Den SON D. R. SOVERN, Md.
Vern Thomas 114 Gerald Drive Sever MP.
Jayla Thomas 114 Gerald Dr. Seven Md 21144
Darhard Beach 120 Geraed Rd. Severn 21144

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Kathy Nieves 8 Herald It Leven Med 5/144

John K Writt. 100 0715 DR. Soum. mo 21144

Rean E Writt 106 ats Dr. Severn md 2/149

Charles M. Magn 102 0+13 DKIVE, SEVERN, MD. 21144

Parmola Lay Mayor 102 0+15 Dr. Severn, Md. 21144

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cc:

- Mr. Neil Pederen, Director, Office of Planning and Preliminary Engineering, State Highway Administration
- Mr. Edward Meehan, District Engineer, District #5, State Highway Administration
- Mr. Gene Straub, Acting District Engineer, District #7, State Highway Administration
- Mr. Ronald Moon, Project Manager, Project Development Division, State Highway Administration
- Mr. James Johnson, Vice President, Century Engineering, Inc.

Honorable O. James Lighthizer, County Executive

- Ms. Virginia Clagett, Chairperson, Anne Arundel County Council
- Mr. Theodore Sophocleus, Anne Arundel County Councilman
- Mr. Michael Gilligan, Anne Arundel County Councilman
- Mr. Edward Ahern, Jr., Anne Arundel County Councilman
- Mr. Dave Boschert, Anne Arundel County Councilman
- Ms. Carole Baker, Anne Arundel County Councilman
- Ms. Maureen Lamb, Anne Arundel County Councilman

Senator Michael Wagner, District 32

- Mr. Tyras Athey, Delegate, Chairman, Ways and Means Committee
- Mr. Patrick Scannello, Delegate
- Mr. George Schmincke, Delegate

Concerned Citizens for a Fair Route 100



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff

Administrator

JUL 1 5 1986

RE:

Contract No. AA 682-101-570 Maryland Route 100 Interstate Route 95 to Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. Arthur V. Bohlinger 108 Otis Drive Severn, Maryland 21144-1142

Dear Mr. Bohlinger:

This is to acknowledge receipt of the petition, signed by seventyfour members of the Munson Heights Community, favoring Alternate 4 with Option 3-B for the construction of the proposed Maryland Route 100. The objections by the community to Alternate 3 for Maryland Route 100 have been noted and will be considered before a decision is made on the project.

The petition will be made a part of the official project record by being entered into the public hearing transcript.

> Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon

Note: For additional response, see page VI-105

VI-74



Bengtson, DeBell, Elkin & Titus, P.C.

Consulting Engineers, Surveyors, Planners & Landscape Architects

Office Locations

Virginia

Pairfex County
Loudoun County
Prince William County
Virginia Beach

Meryland

Montgomery County Anne Arundel County/BWi

Paul E. Bengtson, P.E.
John T. DeBell, P.E., L.S.
John M. Elkin, Jr., L.S.
C. Terry Titus, L.S.
Richard E. Hurney, P.E.
Gilbert H. Paige
Janice S. Mustlan
Eugene D. Thayer, P.E.
Miles M. Potter, P.E.

Charles F. Dunlep, L.S.
Arthur L. Woods, III. F.E.
Kimwood J. Partenheimer, P.E.
William R. Leonard, C.F.O.
Robert A. Munse, P.E.
L. Claude Schuermann, L.S.
Thomas W. Derrickson, L.A.
Henry J. Ellis, L.S.
Theodore R. Weitl, P.E.

Alexander March

June 2, 1986

Maryland State Highway Administration Office of Planning and Preliminary Engineering P.O. Box 717 Baltimore, Maryland 21203-0717

Attention: Mr. Neil J. Pedersen

RE: MD. Rte 100

Dear Mr. Pedersen:

Please include our firm on the project mailing list. It is not our intent to introduce any testimony, nor to take any position in the matter.

Unofficially, we are in support of any road improvement and/or road construction projects which will alleviate the traffic conjection on Maryland's highways. To the extent practical and possible, we will endeavor to enlist the support of our clients and friends for this projects.

Sincerely,

BENGTSON, DeBELL, ELKIN & TITUS, P.C.

Miles M. Potter. P.E.

_miles M. Potter, P.E Vice President

MMP/idb

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JUN 10 1986

MANUAL & PRELIMINARY ENCINEERING

2600 CABOVER DRIVE SUITE A HANOVER, MD 21076 (301) 768-1193

VI-75

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

DATE JUNE 19, 1986

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

BENGTSON, DeBELL, ELKIN & TITUS, P.C.

I-95 to Maryland Route 3 (I-97)
Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High S

PLEAS PRINT	ADDRESS 2600 CABOVER DRIVE, SUITE A
I/We v	CITY/TOWN HANOVER STATE MD ZIP CODE 21076 wish to comment or Inquire about the following aspects of this project:
1) We	e are in support of the immediate construction of Route 100.
2) We	e are concerned that all alignments except Alternative 4 replace Rte. 100
8.8	a continuous east-west highway. Our concern is that over the years we
ha	we seen and experienced the impact on traffic of necessary maintenance
pr	ograms and accidents on limited-access highways. As you are intimately
si	gare, it does not take much to turn a highway into a parking lot or to gnificantly reduce its capacity. th the continued development in the BWI area, the availability of a local-
	ea, arterial service road as an alternative to Rte. 100 will become
in	creasingly important. We request that you give some serious consideration
to	maintaining Rte. 176 as an alternative to MD Rte. 100.
*	
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Z Ple	ase add my/our name(s) to the Mailing List.*
Ple	ase delete my/our name(s) from the Mailing List.
*Per	sons who have received a copy of this brochure through the mail are already the project Mailing List. VI-76



State Highway Administration

William K. Helimann Secretary Hal Kassoff Administrator

July 9, 1986

RE: Contract No. AA 682-101-570 N

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Bengston, DeBell. Elkin & Titus, P.C. 2600 Cabover Drive Suite A Hanover, Maryland 21076

Gentlemen:

This is to acknowledge receipt of your comments dated June 19, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Very truly yours

Louis H. Ege, Jr.

Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehah

Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

VI-77

My telephone number is 659-1130

Teletypewriter for Impaired Hearing or Speech 383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 · 0717

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THE UNITED COUNCIL OF CIVIC ASSOCIATIONS

OF ANNE ARUNDEL CO., INC.

P.O. BOX 263 GLEN BURNIE, MD. 21061

COMMUNITY GOVERNME	COMMUNITY	CITIZENS		GOVERNMENT
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Mr. Louis Ege Jr.
Director Project Development Div.
Rm 301
State Highway Administration
707 N.Calvert St.
Baltimore.Md. 21202

June 24,1986

DEVELOPMENT DIVISION JUN 26 2 05 FM '86

Dear Mr.Ege

The United Council of Civic Associations Inc., which represents 19 Associations, voted unanimously at our June 23. General membership meeting to support the Severn Improvement Assoc. position for the extension of Route 100; Using alternatives # 4 & #3B. We feel every effort should be made to spare communities from any disruption and it appears this can be accomplished without jeopardizing the public safety. Therefore, we believe it is the State's obligation to use those alternatives which address both the traffic conjestion and also maintains the integrity of the communities.

Sincerely

Francis Courtney II a

Francis Courtney II President



State Highway Administration

William K. Heilmann Secretary
Hal Kassoff

Hal Kassoff Administrator

July 3, 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 95)

PDMS No. 022007

Mr. Francis Courtney, II
President
The United Council of Civic
Associations of Anne Arundel
County, Inc.
P.O. Box 263
Glen Burnie, Maryland 21061

Dear Mr. Courtney:

This is to acknowledge receipt of your letter dated June 24, 1986 supporting the position of the Severn Improvement Association for the extension of Maryland Route 100 using Alternates 4 and 3-B. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript, and your comments will be addressed in the Final Environmental Impact Statement.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Very truly yours,

Louis H. Ege,

Deputy Director

Project Development Division

LHE:tlh

cc: Mr. Neil J. Pedersen,

Mr. Edward H. Meehan Mr. Ronald E. Moon Mr. James T. Johnson

Note: For additional response, see page VI-105

VI-79

My telephone number is 659-1130

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

7903 Citadel Drive Severn, MD 21144 June 28, 1986

DEVELOPMENDEVELOPMENDIVISION

Ronald Moon State Highway Administration Project Development Division P.O. Box 717, Baltimore, MD 21203

Dear Mr. Moon.

I am a resident of the community known as The Provinces, and am a member of the Provinces Civic Association. I attended the combined location/design public hearing on Maryland Route 100 on June 12, 1986.

I commute and travel regularly over Ridge Road (MD-713) between Annapolis Road (MD-175) and Dorsey Road (MD-176). Prior to April 1, 1986, I worked regularly at the Parkway Industrial Center on Dorsey Road, and I am fully aware of the severe traffic congestion in that area. From 1975 to 1978 k worked off of Elkridge Landing Road in Linthicum, so that I am .also aware of the major increase in traffic over the past 10 years in the Route 100 corridor.

I feel very strongly that the proposed Route 100 extension from MD-3 to I-95 must be built as soon as possible to provide adequate roadways for both private and commercial transportation in this area.

also urge the SHA to accept the obvious, overwhelming support shown at the meeting for ALTERNATE-4, combined with ALTERNATE-3B, and make the decision to build that alternate. Alternate-3 drew support only from one Anne Arundel County official, a representative of Westinghouse, one commercial developer, and a resident of the Timber Ridge development. is an alternate that would have an extremely adverse impact on me, and my neighbors, as well as on many residents of other developments south of Dorsey Road. Blocking Harmons Road would greatly increase traffic on Ridge Chapel Road past Elementary School and would, I am sure, increase the travel distances for school buses serving that school. Placing a Route interchange on Ridge Road south of Dorsey road would make 100 Ridge Road an inviting alternative to MD-295 for many NSA commuters, increasing traffic on Ridge Road by over (according to SHA projections) and seriously impacting traffic access to The Provinces and other Ridge Road communities. ALTERNATE-4 (with ALTERNATE-3B) will definately help our local traffic problems. Alternate-3 helps the commercial developers at our expense.

Sincerely yours,

Michael C. Davie



State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

July 29, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100

I-95 to Maryland Route 3 (I-97)

PDMS No. 022007

Mr. Michael C. Davis 7903 Citadel Drive Severn, Maryland 21144

Dear Mr. Davis:

This is to acknowledge receipt of your letter dated June 28, 1986 supporting Alternate 4, combined with Alternate 3B, for the location of the proposed Maryland Route 100. Your letter will be made a part of the official project record by being entered into the public hearing transcript.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views, and assure you they will be considered before a final decision is made concerning the project.

Very truly yours,

Louis H. Ege, Jr Deputy Director

Project Development

LHE:ss

cc: Mr. N. J. Pedersen

Mr. E. H. Meehan Mr. J. T. Johnson

Mr. R. E. Moon

Note: For additional response, see page VI-105

VI-81

June 29, 1986

Dear Sir,

As a thirteen year resident of the Provinces, I am concerned about plans for the new Route 100 freeway. I strongly support the alternate 4 plan with 3B east of Route 652. I would appreciate your help in this matter.

Sincerely,

Joseph F. Ferrero

Josh F. Ferrer

7898 North Cartier Ct.

Severn, Maryland 21144



State Highway Administration

William K. Hellmann Secretary

Hal Kassoff Administrator

July 3, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. Joseph F. Ferrero 7898 North Cartier Court Severn, Maryland 21144

Dear Mr. Ferrero:

This is to acknowledge receipt of your letter of June 29, 1986 supporting a combination of Alternates 4 and 3-B for the proposed Maryland Route 100. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript, and will be considered before a final decision is made for this project.

very truly yours,

Louis H. Ege, J

Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon

Mr. James T. Johnson

Note: For additional response, see page VI-105

AUL S. SARBANES

COMMITTEES

IG. MOUSING AND URBAN AFFAIRS
FOREIGH RELATIONS
JOINT ECONOMIC

Mniled Slales Senale

WASHINGTON, D.C. 20510

June 27, 1986

OFFICES:

SD-33: DIRESEN SENATE OFFICE SUILDING WASHINGTON, D. C. 2081G 802-224-4824

> 1618 FEDERAL OFFICE BUILDING BALTIMORE, MARYLAND 21201 902-4426

1110 FIDIER LANC SEVER SPRING. MARYLAND 20910 589-8800

CUMBERLAND 722-8388

SALISBURY \$46-4998

Hal Kassoff
State Administrator
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kassoff:

I am enclosing for your review letters I received from several constituents. The letters raise some serious concerns about the alignment of Route 100. Although this is not primarily a federal matter, I would appreciate it if you would address the concerns raised and provide my constituents with an appropriate response.

Your attention to this matter is appreciated.

With best regards,

Sincerely.

Paul S. Sarbanes

United States Senator

PSS/cso: .. Enclosure

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RECEIVED

JUL# 7 1986

OIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING The Honorable
Elizabeth Doles
Office fo the Secretary
Federal Dept. of Transportation
Room 10200
460 7th ST.
Washington, D.C. 20590

THOMAS A DIXON JR TATT MINGE CHAPEL MANGEMENT BIDGE CHAPEL MANGEMENT BIDTE

Dear Secretary Doles:

A public hearing was held by the Maryland Highway Administration on June 12, 1986 at the Andover Senior High School in Linthicum, Maryland. This was a combined location and design public hearing on Maryland Route 100 from I-95 to Maryland Route 3 (I-97). All of the alternates were presented and by a vocal majority which included 9 Civic Associations and number of corporations. the alternate selected was freeway Alternate 4 connecting to 3B in Friendship Park to 301 (I-97). This was a decision rendered by both the Black and White communities and Buckingham State Nursery. We are hoping the Maryland Highway Administration will submit the result to your office for funding as soon as possible. If this does not happen, then the Federal Highway Aid Program which will expire in September is not likely to be approved by congress this year. It would be in the best interest of the total communities involved that the results be submitted to your office as soon as possible. The hearing was recorded.

Jely June: H Truison ?

President

Harmans Civic Association

Maryland Highway Administration Contract No. AA-682-101-570 PD MS No. 022007 The following are the project planning team:

Neil J. Petersen rector
lice of Planning and liminary Engineering Highway Admin.
orth Calvert Street timore, Md.
)1) 659-1110

Mr. Edward H. Meehan District Engineer District 5 State Highway Admin. 138 Defense Highway Annapolis, Md. 21401 (301) 841-5460

Mr. Gene Strate
Acting District
Engineer District 7
State Highway Admin.
P.O. Box 306
5111 Buckeystown Pike
Frederick. Md. 21701
(301) 662-1171



State Highway Administration

William K. Hellmann Secretary

Hai Kassoff Administrator

RE: JUL 2 4 1986 Contract No. AA 682-101-570 Maryland Route 100 Interstate Route 95 to Maryland Route 3 (Interstate Route 97) PDMS No. 022007

Mr. Thomas A. Dixon, Jr., President Harmans Civic Association 7677 Ridge Chapel Road Hanover, Maryland 21076

Dear Mr. Dixon:

This letter is in reference to your recent correspondence to Secretary Elizabeth Hanford Dole of the U.S. Department of Transportation and the Honorable Paul S. Sarbanes of the United States Senate. Senator Sarbanes forwarded your letter to my office and asked that I reply directly to you.

In regard to the Combined Location/Design Public Hearing held on June 12, 1986 at the Andover Senior High School in Linthicum, I would like to advise you that the purpose of this public hearing was not to select an alternate, but to present the results of our studies and to solicit public comment and testimony pertaining to the Draft Environmental Impact Statement and the alternates being considered for the proposed Maryland Route 100. The decision on the selection of an alternate will not be made until all comments received at and subsequent to the public hearing and as a result of the circulation of the Draft Environmental Impact Statement have been fully considered and evaluated. That decision will be made by this Administration and with the concurrence of the Federal Highway Administration.

> Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

> > Hal Kassoff Administrator

> > > Note: For additional response, see page VI-105

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HK:tlh

Secretary Elizabeth Dole Senator Paul Sarbanes

bcc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon Ms. Angela B. Hawkins Mr. James T. Johnson, Sr.

My telephone number is 659-1111

Teletypewriter for impaired Hearing or Speech 383-7555 Baitimore Metro - 565-0451 D.C. Metro - 1-800-492-5062 Statewide Toil Free P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

RE: CONTRACT NO. A4 661-111-570 MARYLAND ROUTE 100 FROM 1-95 TO 1-97.

1 EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Name

Address

1864 Bestilli Flee

RE: CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100 FROM 1-95 TD 1-97

I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 36 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES. HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 10C OF THE STIGMA OF SEEMING RACISM.

Name

Address

Jua Queenstrum Po Suran MD 21144



State Highway Administration

William K. Hellman Secretary

Hal Kassoff

Administrator

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JUL 29 1985

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97

PDMS No. 022007

Mr. Arthur Turner 7864 Bastille Place Severn, Maryland 21144

Dear Mr. Turner:

I am responding on behalf of Senator Paul S. Sarbanes, to your comments concerning the Maryland Route 100 project and your support for a combination of Alternate 4 and Alternate 3-B in the vicinity of Friendship Park. We have received many comments on the Maryland Route 100 project since the public hearing, held on June 12, 1986.

We are currently reviewing all comments received. decision will not be made until all comments have been considered. The minimization of impacts to homes and communities will be an important consideration when making the final decision. appreciate your input in this matter.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF Administrator

HK: tlh

Senator Paul S. Sarbanes cc:

> Mr. Neil J. Pedersen Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105



State Highway Administration

JUL 2 5 1988

William K. Hellmann Secretary

Hal Kassoff Administrator

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007 DEVELOPMENT
DIVISION
JUL 28 II 02 MM 186

Mr. Phillip Small 762 Queenstown Road Severn, Maryland 21144

Dear Mr. Small:

I am responding on behalf of Senator Paul S. Sarbanes, to your comments concerning the Maryland Route 100 project and your support for a combination of Alternate 4 and Alternate 3-B in the vicinity of Friendship Park. We have received many comments on the Maryland Route 100 project since the public hearing, held on June 12, 1986.

We are currently reviewing all comments received. A final decision will not be made until all comments have been considered. The minimization of impacts to homes and communities will be an important consideration when making the final decision. We appreciate your input in this matter.

Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK: tlh

c: Senator Paul S. Sarbanes

Mr. Neil J. Pedersen Mr. Louis H. Ege, Jf. Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

My telephone number is 659-1111

411

FE: CONTRACT NO. AA 682-101-57 MARYLAND ROUTE 100 FROM 1-96 TO 1-97

1 EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 3E IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Mailing Admin Pio Box goz Glan Enemie madzieti

RE: CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100 FROM 1-95 TO 1-97

I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Name Address 1468 Bace Rock
Hanover, MD 2/176-11/-



State Highway Administration

William K. Helimann Secretary

Hal Kassoff

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HOISIVI

JUL 2 5 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mr. Joseph Rogers P.O. Box 902

Glen Burnie, Maryland 21061

Dear Mr. Rogers:

I am responding on behalf of Senator Paul S. Sarbanes, to your comments concerning the Maryland Route 100 project and your support for a combination of Alternate 4 and Alternate 3-B in the vicinity of Friendship Park. We have received many comments on the Maryland Route 100 project since the public hearing, held on June 12, 1986.

We are currently reviewing all comments received. A final decision will not be made until all comments have been considered. The minimization of impacts to homes and communities will be an important consideration when making the final decision. We appreciate your input in this matter.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK: tlh

cc: Senator Paul S. Sarbanes

Mr. Neil J. Pedersen Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

My telephone number is 659-1111



State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

JUL 29 1986

RE:

Contract No. AA 682-101-570 Maryland Route 100

Interstate Route 95 to Interstate Route 97 PDMS No. 022007

DEVELOPMENT DIVISION AND 186

Ms. Irene Hebron 7468 Race Road Hanover, Maryland 21076-1114

Dear Ms. Hebron:

I am responding on behalf of Senator Paul S. Sarbanes, to your comments concerning the Maryland Route 100 project and your support for a combination of Alternate 4 and Alternate 3-B in the vicinity of Friendship Park. We have received many comments on the Maryland Route 100 project since the public hearing, held on June 12, 1986.

We are currently reviewing all comments received. A final decision will not be made until all comments have been considered. The minimization of impacts to homes and communities will be an important consideration when making the final decision. We appreciate your input in this matter.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

> Hal Kassoff Administrator

HK: tlh

cc: Senator Paul S. Sarbanes

Mr. Neil J. Pedersen Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

My telephone number is 659-1111

June 30, 1986

Mr. Ronald Moon
Project Engineer
Maryland Department of Transportation
State Highway Administration
Office of Planning and
Preliminary Engineering
Box 717
Baltimore, MD 21203

RE: Maryland Route 100 Extension from I-95 to Maryland Route 3 (I-97)

Dear Mr. Moon,

Red Roof Inns is currently operating a motel at the Southwest quadrant of the Baltimore-Washington Parkway at Dorsey Road (Rt. 176) in Anne Arundel County. The property lies at the south entrance to the Parkway Industrial Center.

On Thursday, June 12, 1986 a Red Roof Inns representative attended a combined location/design review public hearing to learn about the various alternatives currently under consideration for the extension of Maryland Route 100 from I-95 to Rt. 3 in Glen Burnie, Maryland.

What we learned was very disturbing.

Under the Alternate Number 3 scenario, the intersection of the Baltimore-Washington Parkway at Dorsey Road would become a closed interchange with access to the Parkway Industrial Center becoming unusually cumbersome and potentially dangerous (a single turn access would be replaced with 4 turns including a 270 degree off ramp with an abrupt left merge and left hand turn into the Parkway Industrial Center).

Alternate #3 of the Maryland Route 100 extension significantly compromises access to this established hospitality interchange and represents a harsh solution to the Dorsey Road traffic congestion problems. The Alternate #4 location of Rt. 100 represents a reasonable and attractive compromise while it simultaneously relieves the traffic congestion on Dorsey Road.

Mr. Ronald Moon June 26, 1986 Page Two

We strongly urge your reconsideration of the Maryland Route 100 extension in favor of the Alternate #4 northern route.

Best regards,

RED ROOF INNS, INC.

William Denk President

WD:1p

CC: Dale L. Ross
 Howard Johnsons Motor Lodge at Dorsey Rd.
6101 Montrase Rd. #400
 Rockville, MD 20852-4816

William F. Grovermann
Department of Economic and Community Development
45 Calvert Street
Annapolis, MD 21401

William K. Heilmann Secretary Hal Kassoff Administrator

August 13, 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. William Denk, President Red Roof Inns, Inc. 4355 Davidson Road Hilliard, Ohio 43026-9699

Dear Mr. Denk:

This is in reference to your letter of June 30, 1986 concerning the proposed extension of Maryland Route 100 from Interstate Route 95 to Maryland Route 3. I would like to thank you for having a representative of your company attend the Public Hearing in June and for letting us know of the concerns you have with the alternates being considered for the location of this proposed highway.

We appreciate your views and the concerns you have with the proposed construction of Maryland Route 100. I want to assure you they will be fully evaluated and will receive every consideration before an alternate is selected for Maryland Route 100.

Thank you for writing and letting us know of your concerns. Your letter has been made a part of the official project record by being entered into the Public Hearing transcript. You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

Ronald E. Moon

Project Manager

Note: For additional response, see page VI-105

LHE:REM:tlh

cc: Mr. N. J. Pedersen

Mr. E. H. Meehan

Mr. J. T. Johnson, Sr.

My telephone number is 659-1106

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

PROJECT DIVISICH Jul 2 08 FN '86

1915 Hilltop Road Jessup, Maryland 20794

June 30, 1986

Mr. Louis H. Ege, Jr., Deputy Director Project Development Division (Room 310) State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

> Re: Draft Environmental Impact Statement/Section 4(f) Evaluation

Dear Mr. Ege:

I have carefully reviewed the DRAFT ENVIRONMENTAL IMPACT STATEMENT/ SECTION 4(f) EVALUATION for Maryland Route 100.

In my opinion, a combination of two alternates should be adopted to provide an acceptable east/west highway. Alternate 4 should be used from Interstate 95 to about the area of WB&A Road (north of Burleytown) and Alternate 3 Option B can be used from approximately WB&A Road to the Interstate 97/Route 3 interchange.

The Alternate 4-3B corridor appears to be better suited for the impact of a major highway since a majority of the land in that corridor is proposed or actual industrial use due to the close proximity of the airport. The passage of the highway through undeveloped or partially developed land with sparse residential population would have less displacements of homes and businesses. With using the Alternate 3B from north of Burleytown to the interchange with Route 3/I97, I count twenty residential and two business displacements according to the maps of Alternates 3 and 4 in the study.

I am concerned about the noise level impacts to residents already settled in this Alternate 4-3B corridor or any of the alternates which may be adopted. I understand that noise from raised roads affects a greater area than noise from roads level to the ground and that roads in cuts provide a suitable way to reduce the noise especially in non-congested areas. Since the draft indicates that building barriers is not feasible for many of the noisy, sensitive areas, I expect that the State Highway Administration will utilize road design and any other planning as a means to reduce the noise generated by Maryland Route 100. Alternate 4, I believe, can give the planners more flexibility in addressing noise reduction since there are fewer established communities (housing developments) within close proximity.

Mr. Louis H. Ege, Jr. June 30, 1986 Page Two

In considering the controversy regarding the airport, I know that the Maryland State Aviation Admin. is opposed to Alternate 4. However, I feel that we must protect the individuals of our established communities especially south of Dorsey Road between Route 1 and Old Telegraph Road from the adverse affects of a major highway. We are already exposed to the airport noise. I trust there is an abundance of ingenuity to overcome any obstacles to airport expansion if Alternate 4 is adopted.

My proposal should not affect the Smith Farm. However, it will have a tremendous impact on Patapsco Valley State Park and Friendship Park. I see giving up the 36 acres of parkland as a trade-off for an individual's right to protect his welfare and property in the midst of tremendous pressures for economic development by the State and County.

The final document should be changed to reflect data compiled from the combination of Alternate 4-3B proposal. These comments do not reflect the opinion of the Jessup Improvement Association since we have not had a meeting in which the matter could be voted upon by the general membership. Thank you for this opportunity to respond to such a major project.

Sincerely,

Barbara Studer

BS/1ms



State Highway Administration

William K. Helimann Secretary Hal Kassoff

Administrator

August 4, 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

Ms. Barbara Studer 1915 Hilltop Road Jessup, Maryland 20794

Dear Ms. Studer:

This is to acknowledge receipt of your letter dated June 30, 1986 supporting Alternate 4, combined with Alternate 3-B, for the location of the proposed Maryland Route 100. We appreciate your review of the Draft Environmental Impact Statement and the concerns you have expressed in regard to the impacts resulting from the construction of this project. I would like to assure you that they will be fully considered before any decisions are made and that your concerns will be addressed in the Final Environmental Document.

Your letter has been entered into the public hearing transcript and made a part of the official project record. Via the project mailing list, you will be kept aware of future developments and advised of the decision made by the State Highway Administration.

Very truly yours,

Louis H. Ege, Jr.

Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon

Mr. James T. Johnson

Note: For additional response, see page VI-105

DIRECTOR, OFFICE

PLANNING & PRELIMINARY EN

The Provinces Civic Association P.O. Box 313 Jessup, Maryland 20794

June 23. 1986

Maryland Department of Transportation State Highway Administration Office of Planning & Preliminary Engineering Box 717

Baltimore, Maryland 21203

Greetings:

The Board of Directors of the Provinces Civic Association favor Alternate 4, with Alternate 3B east of Rt. 652 and 170, for the location of the new Maryland Rt. 100 between I-95 and Rt. 3 (I-97). The Provinces Civic Association has over 250 members and represents the 900 homeowners in the Provinces subdivision at Ridge and Severn Roads in Severn, Maryland. Our community is approximately one mile from the proposed Alternate 3 location and two miles from the proposed Alternate 4 location. We favor Alternate 4 for the following reasons:

- 1 Alternate 4 displaces less residences than Alternate 3.
- 2 Alternate 4 does not affect any historical or archeological sites.
- 3 Alternate 4 requires far less residential right-of-way, affects less woodland, less wetlands, and less flood plain than 3B.
- 4 Alternate 4 would REDUCE Ridge Road traffic past our homes by 30-35%. Alternate 3 would INCREASE Ridge Road traffic past our homes by 37%.
- 5 Alternate 4 put this industrial/commuter oriented freeway in the industrial zone where it belongs. Alternate 3 puts it right through a residential area!
- 6 Alternate 4 would not change any roads south of Dorsey Road, just decrease their traffic flow. Alternate 3 would close Harmans Road access to Dorsey Road and possibly congest and complicate the new Ridge Road access to Dorsey Road. The Alternate 3 changes could increase emergency service response times to our community and others nearby).
- 7 Alternate 4 is favored by the Anne Arundel County Police Department.
- 8 Alternate 4 will cost NINETEEN to TWENTY NINE MILLION DOLLARS LESS than Alternate 3.
- 9 Alternate 3 only helps the industrial developers and outside commuters at the expense of local residents. Alternate 4 helps everyone!

Please maximize the benefit of this much needed freeway, and improve the quality of life for our residents by selecting Alternate 4, with the 3B alternate east of Rt. 652 to help Queenstown residents. Thank you.

> Citil Daniels Laurie Ortel-Daniels

VI-99 President



State Highway Administration

William K. Hellmann Secretary Hal Kassoff

Administrator

July 24, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100

Interstate Route 95 to Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Ms. Laurie Ortel-Daniels President The Provinces Civic Association P.O. Box 313 Jessup, Maryland 20794

Dear Ms. Ortel-Daniels:

This is to acknowledge receipt of your letter dated June 23, 1986 supporting Alternate 4, with Option 3-B east of Maryland Route 652, for the location of the proposed Maryland Route 100. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State High-way Administration and kept aware of future developments via the project mailing list. We appreciate your views, and those of the Board of Directors of the Provinces Civic Association, and assure you they will be considered before a final decision is made concerning the project.

Very truly yours,

neil & Yederen

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

NJP:tlh

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

My telephone number is 659-1110

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007
Combined Location/Design Public Hearing
Maryland Route 100
I-95 to Maryland Route 3 (I-97)
Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

NAME	Patterson Mosher	DATE_6-12-86				
PLEASE ADDRESS	113 Otis Drive					
CITY/TOW	IN SEVERN STATE ML	ZIP CODE 21144				
I/We wish to comment or inquire about the following aspects of this project:						
	I Seens apparent from the	public hearing				
that the mu	jointy of weal comment	e and Gusivessos				
	opsel P.L. 100 extension					
	ration to alternate 3					
	for Dff. 4 with 36.	<u> </u>				
Orfice, Enc	issonmental import on IRE	Buckingham Plee				
Mussey, E.	Ted on the ministy com	writiss have all				
	freefully SUILD THE					
Please add my/o	ur name(s) to the Mailing List.*					
Please delete my	/our name(s) from the Mailing List. VI-	101				
*Persons who hav on the project Ma	e received a copy of this brochure throu ailing List.	igh the mail are already				



William K. Heilmann Secretary Hai Kassoff Administrator

July 9, 1986

RE: Contract No. AA 682-101-570 N

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mr. Patterson Mosher 113 Otis Drive Severn, Maryland 21144

Dear Mr. Mosher:

This is to acknowledge receipt of your comments dated June 12, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Louis H. Ege, J. Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehar

Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page Vi-105

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100 I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

ASE % CASEY MILLER BORRES + BLESS DATE 13 JUN 86 PLEASE PRINT ZIP CODE 21049 I/We wish to comment or inquire about the following aspects of this project:. THINK FINAL ROUTE Please add my/our name(s) to the Mailing List.* Please delete my/our name(s) from the Mailing List. VI-103 *Persons who have received a copy of this brochure through the mail are aiready

on the project Mailing List.



William K. Helimann Secretary Hai Kassoff

Hai Kassoff Administrator

July 9, 1986

RE: Contract No. AA 682-101-570 N

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mr. Skip Case c/o Casey, Miller, Borris & Burns 5457 Twin Knolls Road Suite 305 Columbia, Maryland 21045

Dear Mr. Case:

This is to acknowledge receipt of your comments dated June 13, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript. A decision will not be made on a final alternate until all comments received during and subsequent to the Public Hearing have been evaluated.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning this project.

very truly yours,

Louis H. Ege, Jr Deputy Director

Project Development Division

LHE:tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-105

Additional response to letters from:

A. M. Heygster Munson Heights Community, dated 19 June 1986 Bengston, DeBell, Elkin & Titus, P.C., dated June 2, 1986 and June 19, 1986 Francis Courtney II, dated June 24 1986 Michael C. Davie, dated June 28, 1986 Joseph F. Ferrero, dated June 29, 1986 Thomas A. Dixon, Jr., dated June 17, 1986 Art Turner Phillip Small Joseph Rogers Irene Hebron William Denk, dated June 26, 1986 Barbara Studer, dated June 30, 1986 Laurie Ortei-Daniels, dated June 23, 1986 Patterson Mosher, dated June 12, 1986 Skip Case, dated 13 June, 1986

The selected alternate, Alternate 38 (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law If a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as Identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 38 (Modified) incorporates several design changes of the "historical" alignment (Alternate 3-Option A) that has resulted in a reduction of the number of residences displaced by MD Route 100 from 43 to 22. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate. Alternate 38 (Modlfled) includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities.

CYNTHIA E. YOUNG
ATTORNEY AT LAW
1202 WEST STREET
ANNAPOLIS MARYLAND 21401
(301) 269-7699

May 15, 1986

Mr. Louis H. Ege, Jr.
Bureau of Project Planning
Maryland Department of Transportation
P.O. Box 717
Baltimore, Maryland 21203-0717

Re: Contract No. AA-682-101-570 Md. Route 100 from I-95 to I-97 PDMS. No. 022007

Dear Mr. Ege:

I am writing you on behalf of PATH (Preserve Arundel Trails for Horses).

PATH is concerned that the above project may have the effect of severing bridle trails from Andover and Friendship Parks to Queenstown Park and south along WB&A Road. Mr. John T. Keene of the Anne Arundel County Parks Department has already addressed this problem in his letter to you of March 17, 1986.

We would appreciate a culvert or other underpass so that our trail system will not be forever disrupted. Attempting to pass under 100 amid traffic on a roadway is extremely dangerous unless there is trail space left which is separated from the roadway by a guard rail or curb. Drivers cannot always see a horse on a road shoulder at dusk in such a location. Therefore, the culvert proposed by Mr. Keene would be greatly appreciated by us and could also serve as a pass-through for Sawmill Creek.

I have in my possession drawings for the design of such an underpass, which I could make available to you if you need them. Let me know what PATH can do to help.

Please do not cut forever what has taken many years of hard labor for us to accomplish. Please provide for PATH and leave our trail intact. Thank you.

Very truly yours,

Cynthia E. Young

CEY:nv

cc: John T. Keene



State Highway Administration

428

William K. Heilmann Secretary

Hai Kassoff Administrator

June 3, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100

I-95 to Maryland Route 3

PDMS No. 022007

Ms. Cynthia E. Young Attorney at Law 1202 West Street Annapolis, Maryland 21401

Dear Ms. Young:

Thank you for your letter dated May 15, 1986 expressing your concerns on behalf of PATH (Preserve Arundel Trails for Horses) as they relate to the Maryland Route 100 project.

Please be advised that during the final development phase of our studies PATH's interest will be given every consideration and efforts will be made to develope a feasible solution.

If you should have any questions or require any information please feel free to contact the project Manager Mr. Ron Moon at 659-1106.

Louis H. Ege,

Deputy Director \
Project Development Development

Project Development Division

LHE:cd

cc: Mr. N. J. Pedersen

Mr. E. H. Meehan

Ms. C. D. Simpson

Mr. R. E. Moon

VI-107



The Liberty Tree Project P.O. BOX 8446 ANNAPOLIS, MARYLAND 21408

May 5, 1986

Mr Hal Kassoff State Highway Administrator Maryland Department of Transportation P. O. Box 717 Baltimore, Maryland 21203-0717 RECEIVED

MAY 8 1986

E-24

GEETUL DEFICE OF

PARAMES & PERSONNEY ENGINEERING

Gentlesir:

Thank you for the Public Notice, as of May 1st, concerning proposed construction of Maryland Route 100 south of BWI Airport. We would like to have a copy of the Draft Environmental Impact Statement because several versions of the proposed highway would cut through the Maryland State Tree Nursery in several ways. If this is not possible, we must say that the availability of Statements seems well intended, but it is inadequate. The hours in which the statement is open for inspection may correspond to the Department's schedule, but this discriminates—like the Library of Congress is now doing—against those who have to be elsewhere at work then. The locations also are certainly spread-out, if not wide-spread. In order to remedy, at least in part, these inadequacies, please arrange to place the Draft Environmental Impact Statement at:

The Maryland Agricultural Experiment Station, And The University of Maryland, College Park, Maryland, 20742

The Department of Natural Resources Library, and the Maryland State Library, Rowe Boulevard, Annapolis, Maryland 21401

The Enoch Pratt Free Library, Cathedral Street, Baltimore, Maryland.

Thus may better opportunity for study and comment be open to more, if not all.

Copies: Board of Public Works
The General Assembly
The Agricultural Experiment Station
The State Library
the press

President

Kingle J



State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

MAY 22 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

DEVELOPMENT.
DIVISION

N 23 9 30 M '88

Mr. Arthur Kungle, Jr., President The Liberty Tree Project Post Office Box 3446 Annapolis, Maryland 21403

'Dear Mr. Kungle:

In response to your letter dated May 5, 1986, I am forwarding you a copy of the Draft Environmental Impact Statement for the Maryland Route 100 project.

The Environmental Impact Statement has been placed in locations convenient to those living in the project area. The document is available at the Linthicum Library, which has evening hours.

Should you require any further information, please contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Sincerely BY:
ORIGINAL SIGNED BY:
HAL KASSOFF

Hal Kassoff Administrator

HK:bh Attachments

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Ms. Cynthia D. Simpson

Mr. Ronald E. Moon

VI-109



The Liberty Tree Project P.O. BOX 3446 ANNAPOLIS, MARYLAND 21403

July 5, 1986

Mr Louis H. Edge Jr Deputy Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Room 310 Baltimore, Maryland 21202

Gentlesir:

In comment on the Draft Environmental Impact Statement for Maryland Route 100, it is totally inadequate with regard to the Maryland State Forest Service Buckingham Tree Nursery. More generally the Enivronmental Assessment Form (x-xiv) often answers no what could be yes, i. e. 12, 15, 22, 26-30,

With regard to the Tree Nursery, the Statement considers: Stoney Run but not as it goes through the nursery; area parks but not the restorer of parks; threats to flora but not to the sustaining flora of the nursery; threats to water supply but not danger and damage to the rebuilder of forests (see J. Evelyn, <u>Sylva</u>, 1662); threats from air pollution to people but not to plants or soils; costs of moving and building but not really with regard to the Tree Nursery; future impact to the area but not for Maryland and Delaware if we lose one of our best means of countering clearing, concrete -- the death of soils and life, and development -- which is destruction.

Other serious considerations for us include some probably less familiar to you and the Highway Administration's distinguished analysts: Genetic diversity in species as well as among species (see N. Myers, GAIA, 1985), and paths for plants to move and soils to grow (see LTP's Sylva, herba and terra-as Time moves on, 1985), the effect of local as well as long distant transport of air pollutants (see, EPA's Acid Deposition and Air Pollutant Transport 198 & AMVA's "Auto Emissions Conference" Baltimore, 1986). Only a road over, and not through, the Tree Nursery is acceptable -- with no fill, no run-off, no leaching, no poisoning water or soil. It is no answer to say the nursery could be moved because if we can't learn to live in a sustainable and non-destructive way here and soon, how in heavens name can we expect to so somewhere and sometime hence? Land Use or Abuse? (Leider, 1986) Nature's Garden for Victory and Peace (Carver, 2/14/42), 'In the end men will destroy the earth.' (Scweitzer, 20th cent.) "Which shall it be?' (Wells, Of Things to Come).

Alternate 3 would go through the tree nursery, alternate 4 through the airport -- to which it too objects -- but a buried road through the edge of the BWI airport could safely allow planes to taxi and fly Sincerely,

over.

Copies as appropriate

hur Kungle Jr, President and for The Liberty Tree Project

VI-110

Response to letter from Arthur Kungle Jr., dated July 5, 1986:

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law If a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as Identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and plan-Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate. Coordination with the Maryland Department of Natural Resources concerning the Buckingham Forest Tree Nursery has been ongoing throughout this project. In addition, a study of the impact of the project on the nursery was performed and is available for review at the State Highway Administration Library, 707 N. Calvert Street, Baltimore, Maryland and at all State Depository Libraries.

RECEIVED

DIRECTOR, OFFICE OF PLANNING & PRELIMITARY ENGINEERING

Dear Gentlemen (5)

El am a member of Mt. Pilgrim Baptist church, and have been a member as fou back as for ow the consender. They mame is Frank Mundell and el am 15 years old. il feel that you should not tear it down for one good reason and that's Lecause of Phillip Mundell. Phillip Mundell when went to Mt. Pelgrim ever since she was born, and so did her parents, and she died when I was born at 7 months. El am her Dor. and Thellis Mundell is my mother. Do, el think that ejou should let the church stay and try to think of a new way to baild a road. Sincerly, Frank Mundell

VI-112

RECEIVED JUN #1 1986

PLANNING & RELINIMENT LYMINEERING DE MONT CONCESSA;

I have lived here on Dorsey Rd and home attended Mt. Pilgrim Baptist Chrisch most of my life. It paddens me to think that is just a few short month the possibility of losing this priviledge is greatly

Not only would I be
losing my Church Home but I
stand to lose the ferial resting
place of my Soulanter and
other family and friends
who hald a special place in
my heart. This church does
hold ford memories for all
who came here since it was
built in 1921. almost a century
of inspiring old and young
christian alike jit seems a
waste to tearn down a church
to make room for a highway
all the meighbors in surrounding
areas had started here from

a chied and although many have left to attend other Churches that has been since built, we are have good close relationships one with another, I know that progress is good but it can be consisted of both the sed and the new. Progress never how to be destroying all the sed to make room for oney the new for if this were truet our world would have no need for see the knowledge gained from the early inventore, discoverers, and agnisses. For this reason I ask of you - please find a way to build forward our church and cemetary, Compromises can be made in order to make the time is taken to de so. Fut you family or church in Den place, surely you conit help but have compassion for us. Then you'll be fair in deciding on this issue, is still

pame - with out my church next door, and it would bush out only to find that I would be ro larger can go to worship there, It would be sad judged.

Truely yours, Victoria Hundele

a Member of Mr. Pilyrim Bapt. Chirch.



State Highway Administration

July 21, 1986

William K. Hellmann Secretary Hal Kassoff Administrator

RE: Contract No. AA 682-101-570

Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Mr. Frank Mundell Ms. Victoria Mundell Mount Pilgrim Baptist Church 1429 Dorsey Road Hanover, Maryland 21076

Dear Mr. Mundell and Ms. Mundell:

This letter has been written in care of the Mount Pilgrim Baptist Church due to the lack of return address information.

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that every consideration is being given to minimize the impacts as presented at the recent Public Hearing. We are currently evaluating means to lessen impacts to the church property. No decisions will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

neil & Pederen

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

NJP:tlh

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr. Mr. Konald E. Moon

Ms. Angela B. Hawkins

Note: For additional response, see page VI-144

VI-116

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baitimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Caivert St., Baltimore, Maryland 21203 - 0717

to be. combined w/ # 682 438 Do: Whom it May Coreers!, Once upon a time in america, the Land of the Free and the Home of the Brave it had thet - " a Man's home is he Castle". Thus heing true - How much shore Shall the Home of God be looked upon! Is there nothing left in our world forday to be held as pacred! You have taken ben Ohomes and we-for the pake of advantument, reluctantly moved on. We know that change and progress is inevitable, but at what puie must it cost us. Mt. Pilgrim Baptist Church was builtin1920-1921,

VI-117

and from that time-it has seen the neighbors from Queenstown Mg Matthews Jawn, Sevell Jown and Dorsey Md, Come in for worship. Mt. Filgrim has grown in some ways and on Rope is that with Gal on our side, it will Continue to progress, It may seem like 60 yrs showed not be taken ento consideration, but I pay that our nation has beauch many statues and monuments, leven. homes of Jamous historiana that was even younger. Now man look at and feel why save this long time-old - seemingly writtles building, 20 this I pay let be remember,

'Dondt judge a book

by ite lover; For only
when the pages are
closely read and examined

can be come to a

conclusion of its value,

centent all worth.

When you come in you'll fill a place of warmth, close family this both Spiritual and physical physical. Throughout these boyrs we have made late of friends who started out in this Church and although they have moved in we of still keep in close contact. Many of these along with those of us what remain have laid our love one to rest Leve. We would not want to see them dis-

VI-120

to be combined 442.

I don't want you to
the doesn the church
and the cimitary
bleause I have love
ones in there and
whats the only
church I gato on
Sunday and you
can put the road
some where else.

Angela Wecton
age - 10,
a member of
Mt. Pilgim Baptist
Church on Dorsey Rd.

RECEIVED

JUN . JURA

DIRECTOR, O. 1122 UP PLANNING & PRELIMINARY ENCIREERING

11733 South Laurel Dr Laurel, MD 20708

RECEIVED

TRECTOR, OFFICE OF STANDING & PRELIMINARY ENCIREERING

To whom it May concern.

DEVELOPMENT DIVISION 9 II 14 MM '80

L'am a member of mount Pelgira. Baptists Church and live heard about the road constructors Thinking about tearing down our church to make another road. You don't just want to tear down the church but you want to remove the cemetary also.

you have planned to do. It has blen there for so long It has been there for 60 years.

My Great Grand Parent, went to that church. It might be an old worn out building to you, but to me its a beautiful place to worship bod's name, and many beautiful memories. We put so much time and effort into that church to make it something for sup us to be proud of. and you want to come along and destroy all of our hand work we put into that church.

If you don't feel a list of sorrow

01 guilt when you think about Terning VI-122

but memous, and alot of hard work

Senceraly nanette weedon age 15 Amendende mount Pelgin Roptist Cherch

PS.

We all not going to give expour church without a fight. We will fight till the birrial of proythat the Lord will touch your heart and minds and make you decide in our bown, and leave our church alone!



State Highway Administration

William K. Helimann Secretary Hal Kassoff

Administrator

July 21, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mrs. Lora Weedon
Ms. Nanette Weedon
Ms. Angela Weedon
11733 South Laurel Drive
Laurel, Maryland 21078

Dear Mrs. Weedon, Ms. Weedon, and Ms. Weedon:

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that every consideration is being given to minimize the impacts as presented at the recent Public Hearing. We are currently evaluating means to lessen impacts to the church property. No decisions will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

neil & Yellson

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

NJP: tlh

cc: Mr. Edward H. Meehan,

Mr. Louis H. Ege, Jy.

Mr. Ronald E. Moon

Ms. Angela B. Hawkins

Note: For additional response, see page VI-144

VI-124

RECEIVED

6-1-86

DIRECTOR, OFFILE OF PRELIMINARY ENGINEERING

To whom it may concern,

I'm a member of Mt. Pelgrim Baptist church. The reason is notted with gonitive mile julies todo beneamon mile sausost bus laurb ett jo privorm ett bluada yett Frinkt to assarg ett sporquis tair (1) etc. enals the el um trove ton bluce le sansad & grandparents and family members to be moved. The shows has Deen up for almost 70 years, D that see bloods the dailte I st say tan land so be moved for a rode you have !send inot = four boarls Strown work ap event finant wards when down blues not great to road from some other place.

PROJECT
-DEVELOPMENT
DIVISION
JUN 11 4 28 PM '86

Tonija Ross = age 13



State Highway Administration

William K. Heilmann Secretary Hai Kassoff Administrator

July 14, 1986

Re: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Ms. Tonya Ross Mount Pilgrim Baptist Church 1429 Dorsey Road Hanover, Maryland 21076

Dear Ms. Ross:

This letter has been written in care of the Mount Pilgrim Baptist Church due to the lack of return address information.

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that we are investigating means to try to minimize the impacts as presented at the recent Public Hearing. No decision regarding alternatives will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

neil & lederer

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

NJP:tn

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon

Ms. Angela B. Hawkins

Note: For additional response, see page VI-144

VI-126

My telephone number is 659-1110

To Whom It May Concern:

I am a member of Mount Pilgrim:Baptist Church.

I do not feel that the church and it's grounds should be destroyed for a highway. I am sure you can find a better area to build your highway without destroying our church and it's ground around it.

I am sure you are aware that we have loved ones buried on the church grounds. Surely, you would not like for anyone to remove your loved ones from their resting place. The thought of this makes me ill.

I pray night and day that this will not happen.

If the shoe was on the other foot how would you feel and what would you do?

Please take into consideration that this church has been a landmark in our community for many years.

Let your conciencious be your guide, and take your time and consider all the facts and feelings of the community before you make such a drastic decision.

Sincerely, Doul
Sister Beverly Dow

DEVELOPMENT DEVELOPMENT DIVISION JUN 11 4 28 PM 96



DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING



State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

July 11, 1986

Re: Contract No. AA 682-101-570 Maryland Route 100

Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Sister Beverly Dow Mount Pilgrim Baptist Church 1429 Dorsey Road Hanover, Maryland 21076

Dear Sister Dow:

This letter has been written in care of the Mount Pilgrim Baptist Church due to the lack of return address information.

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that we are investigating means to try to minimize the impacts as presented at the recent Public Hearing. No decision regarding alternatives will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

neil & Ledeson

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

NJP:tn

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon Ms. Angela B. Hawkins

· 公司 (1987年 1985年 19

ris. Augera D. Hawaring

Note: For additional response, see page VI-144

VI-128

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

My name is Rodney Wise I am a member of mt Pilge Baptist. I have been one since I was born. My mother and started there, so do her mother and off the family before us. This not west Afamily Church of I surrounding neighborhood. Now I've you want to Build look At cell the areas In back of us. and there would be not need to brother our

Rodney Wise 14 YRS.

RECEIVED

DIRECTOR, OFFICE OF PLANNING & PLELIMINARY ENGINEERING

PROJECT DIVISION

DEVELOPMENT

JUN 11 4 28 PM '86

My name is shown Wise. And I have been a member OF Mt. Pilgrim Baptist Churcht Since 7 was born. I am M YEARS Old. and I Think relevy, un nessary, to take our Church and g Church has been here sor about 60 years. If you want 40 Build more highway's are many surrounding corea to do 66 with 04 Destarbil the resting Place, and DUR Church. Please Bonsider This. rester. This are was The frist Church In Own Oreg and is the one I started

Shawn Wise

RECEIVED

JUN 11 1986

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

38. My 85 4 11 Mul

DIVISION DEVELOPMENT PROJECT 081-1 Andram a member of mt. P. Igrir.

Baptist church

Church and graves may

be onestroyed is very upsetting

to me. why must this be done

of All the areas to failed

new highways, why can't it be

done some pliner else. I

Morant pilgrim Baptist Church on

Dorsey Rd.

CRAIS WISE

RECEIVED

JUN 10 1986

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

Dowhom it May Concern; Mt Pelguin Baptist Church Ras my Church home sible the day of was find peace & Jay , the emperation and Spiritual quidence for my life This had been the Church frame of my parents their parents would be a terrible waste to tear down such a place that has inspired the people of many neighborhood surrounding mt. Pilgrin Sylvia

PLANTING & PARTICULARY EXCHANGE

JUN #686



State Highway Administration

William K. Helimann Secretary Hal Kassoff Administrator

July 28, 1986

Re: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mrs. Sylvia Wise Ms. Shawn Wise Mr. Rodney Wise Mr. Craig Wise

Mount Pilgrim Baptist Church

1429 Dorsey Road

Hanover, Maryland 21076

Dear Mrs. Wise, Ms. Wise, and Messrs. Wise:

This letter has been written in care of the Mount Pilgrim Baptist Church due to the lack of return address information.

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that every consideration is being given to minimize the impacts as presented at the recent Public Hearing. We are currently evaluating means to lessen impacts to the church property. No decisions will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

Meil & Paderson

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

457 CONTINUES

NJP:tn

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon

Ms. Angela B. Hawkins

Note: For additional response, see page VI-144

VI-133

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baitimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baitimore, Maryland 21203 - 0717

To whom it may concerns

at 1429 Horsey Road, Hanover MD. 21076, MOUNT PILCRIM BAPTIST CHURCH HAS been a great aid to this community for such a long time and is still aiding those which are in need. Mount pilgrim has become a part of our life and we don't with to depart from it or it from us. We have Love ones laid to rest on the grounds and we don't want them disturbed. We feel that there is a nother route that could be used instead of this plan route which would interfer with our services to the AIMIGHTY GOD.

THANKS.

William F. Wheele

Rosie B. Wheeler

RECEIVED

PLANNING & PRELIMINARY

DIVISION DEVELOPMENT PROPERTY



State Highway Administration

July 21, 1986

William K. Helimann Secretery Hal Kassoff Administrator

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

Mr. Charles R. Mundell Mr. William F. Wheeler Ms. Rosie B. Wheeler Mount Pilgrim Baptist Church 1429 Dorsey Road Hanover, Maryland 21076

Dear Mr. Mundell, Mr. Wheeler, and Ms. Wheeler:

This letter has been written in care of the Mount Pilgrim Baptist Church due to the lack of return address information.

In response to your letter concerning the Mount Pilgrim Baptist Church as it relates to the Maryland Route 100 project, I want to assure you that every consideration is being given to minimize the impacts as presented at the recent Public Hearing. We are currently evaluating means to lessen impacts to the church property. No decisions will be made until these studies have been completed.

Thank you for your letter, and if you should have any questions, please feel free to contact the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

neil & Pederen

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

NJP: tlh

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr/.

Mr. Ronald E. Moon

Ms. Angela B. Hawkins

Note: For additional response, see page VI-

My telephone number is $\begin{array}{c} VI-135\\ 659-1110 \end{array}$

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

Dear Mr. Pedersen.

I have only one question to pose to you. Why?

I realize that we are living in a fast paced world, where there must be changes to enhance and make progress; but WHY should we destroy what has gone on before?

Yes, I know you have heard all of this before, but not from me and not for the cause of the most sacred thing that I know of. GOD'S house of worship and resting place for his saints.

There are many sentimental and spiritual reasons that I could give for not wanting Mt. Pilgrim Baptist Church and it's ground destroyed, but somehow I don't think that they would be good enough in the eyes of "Progress". So I will ask my one and only question. WHY?

Will have you decided to take our church and cemetery? There is vacant ground next door to our church for at least a mile long, headed in the direction of Washington Boulevard. This does not take into consideration how wide this area stretches, but it is there.

WHY take away something that can scatter GOD'S flock, when you have land that could be used instead. The ironic side of this thought is that NO ONE or ANYTHING is on that land.

WHY I ask you, perform something so sacrilegious?

I beg of you, PLEASE consider the possibility of using the land that I have mentioned.

Whatever your final decision might be, I pray that it is done after total consideration of the LITTLE PEOPLE and LITTLE CONGREGATIONS which will be hurt.

Thank you for your consideration.

Mice Sparrow

Member of Mt. Pilgrim Baptist Church

RECEIVED

DIRECTOR, OFFICE UP PLANNING & PRELIMINARY ENGINEERING



State Highway Administration

William K. Hellmann Secretary Hal Kassoff

Administrator

July 14, 1986

Re: Contract No. AA 682-101-570 Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97) PDMS No. 022007

PDM5 NO. 0220

Ms. Alice Sparrow c/o Mt. Pilgrim Baptist Church 1429 Dorsey Road Hanover, Maryland 21076

Dear Ms. Sparrow:

Thank you for your letter of June 10, 1986 expressing your concerns about the effects of the proposed Maryland Route 100 on the Mount Pilgrim Baptist Church and cemetery. We appreciate your views and assure you they will be fully considered before a final decision is made concerning the project. In regard to the effects of the proposed highway construction on the church, I also want to assure you that every consideration is being given to your concerns and that we are investigating what options might be available that would avoid or minimize impacts to the church property.

Again, thank you for letting me know of your concerns. Your letter will be entered into the public hearing transcript and become a part of the official project record. Via the project mailing list, you will be made aware of future developments and advised of the decision made by the State Highway Administration.

Very truly yours,

neil & Pederan

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

NJP:tn

cc: Mr. Edward H. Meehap

Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon√

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-144

VI-137

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Caivert St., Baltimore, Maryland 21203 · 0717

June 211, 1986

We do not wish MOUNT PILGRIM BAPTIST CHURCH 1429 Dorsey Road to be re-located. Modes & Murfell X Manay Harris 100 100 Alie E. Sperson Stra Sigmon Linda Williams Meteria C. Dorse Butara Jangles Tous. Whelevy Willio By Richard Founder sions) w Interior Constince Dorsey Thomas J. Mundell glig M. Handon Throng Coffee fainell the per Cypthia & Minor Larlene Bruner i. Frank Muste Jarry J. Edwards & Demadette Yarku Producey unde Wa Dankil Verna V. Ldwards Croig Wise Bruly Dow Marie Kampey James Rochels Showing Bitty Chistry fames m mande Linda Cox Jane Kacal Bishop water 7-1 all (Wins Wearing) Herry Like . Mattinge Heat Henise Weldon (her ten 160Hest Shangi Butter Maple & Tetal al Paulley Raymond Parker antonio week Chowles Edward nanette Weedon Kalpigus e Lynds 1400 5 W 150 5, Antonio weedon angela Zverden Victoria Mundel

Hose Chattin.

Curtis cristy Gardner Chesley doe Eldudgo Hlenn Wotson Camere West Beatrece Sellel Ethel R Sewell Ellen Feeld Bessie Clentone Steve allon Helen Well Louise Wells golie E. warren Linds Prewer pames W. M. Lel

TOUNT ACCORPORATE

460

MT. PILGRIM BAPT. CH. 1429 DORSEY BD. Please help us save our Church and Cemetary located at: 1429
Dorsey Rd. . Your signature and address would be greatly appreciated. The Pastor and members THANK YOU. Mayou moore Social Journsend Kevin Covene ppnne montgonery Ruhy, Lipsons Lforthy Smith Jugan Butte Rebecca mitchell Diemine Kember Wanda Claus Florice Teller 29 00 Clicatt Brugh Lorous Steams Work E. Jones Deborah & Busco Cheryl Clark 5056 Morwood averve Losalerol M Hazeleva milliet (phouse 2739 Milla Silve 2604 Jr. Potaporo Ove Showade/ Doger. BITE Mack Sandra name Erevost double 534 N. Buce St 01223 Erthal Glow Helen mcke Delorer Polmen Kornerve William North Mule Jahry Diek Sather 313. M. Cary St. 21223 Model normal Michael Beel Roosevelt Allen the follow Femelda Baxley Kosalie nancia Done Some Ethe eluppins Patricia yachroyh 30is more Bern Horris Bownie Black Nooie Wermony Kenneth Sullin Hous Lawson Towards Levelon Celesta Smith Dian Flower

incompaishall Barnes Eunice G. McNais Ennest S. McMain Horace Baker Deans, Workey Harrey /ay/n Belly TAylon Ionya Thylon Downotte Taylor Monte Tryba Maurice TAylor nolyty Trekon Daymon Taylor DAMAY El TAY faretta proun Intonio prown Tarloya frown

Your aignature and address would be greatly appreciated. The Pastor and members thank you. MT. PILGRIM BAPT. CH., 1429 DORSEY RD. NAME The Son A. Matthe Earl Sparrow 451 GHOWOOD CT 6-coolpord ct Baltimore md 21227 Geresa M. Palme 9801 Empire ct Denkiele , 700 : 20754 Baborah Miles delvia R. Blackstone 1940 Ruchelle Aug 524. 6332 Meadowlidgeld. District Hats, MD. 20747 Balt., MD 21227 + Ruth A. Rowles SEIT ELLEAGIE ST. LANHAM MO 20706 Jeneth M. Swett * Deborah Adams 2902 Carlton AUENE. 17165 Horp String Wash , DC 20018 Poul Cinclian 3903 384h St. BRENTWOOD, Md. 2012 Styrone RIGGS 420 TOHN CARMAN 2418 CHAPMAN RO. HYATISVILLE, MD. 20783 + Many (Joseph 5813 Roumoke AUR RIVERLAL MO 2013)

* Alice Abbott

SS18 Volta Aue

Bladensburg md
20716

*Charles I Lings 4004 Laurence St Chan mana me 20722

RECEIVED

JUN 28 1986

DIRECTOR, OFFICE OF PLANNING & PLEISMIARY ENGINEERING.



1 196-2403 - 796-2403

Cheryl Spacrow

G436 Meadow Ridge & A

Baltimore Mis 21227

Lorn Sparrows 6436 Meadowridge RD. Baltimon, m.d. 21227



State Highway Administration

William K. Heilmann Secretary

Hai Kassoff Administrator

July 16, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

The Reverend William Wheeler c/o Mrs. Alice Sparrow 6 Coolpond Court Baltimore, Maryland 21227

Dear Reverend Wheeler:

The purpose of this letter is to advise you that we have received the petition containing the signatures of members and friends of the Mt. Pilgrim Baptist Church, located at 1429 Dorsey Road in Hanover, Maryland.

In response to the concerns that have been expressed by your church membership about the effects of the Maryland Route 100 project on the church and cemetery, I want to assure you that we are investigating means to try to minimize the impacts as presented at the recent Public Hearing. A decision regarding alternatives will not be made until these studies have been completed.

The petition will be made a part of the official project record and will be entered into the Public Hearing transcript. I would like to thank you and the members of the Mt. Pilgrim Baptist Church for letting us know of your concerns. If you should have any questions or need any further information, please contact the Project Manager, Mr. Ronald E. Moon, at (301) 659-1106.

Very truly yours,

neil & redesen

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

NJP:tlh

cc: Mr. E. H. Meehan

Mr. L. H. Ege, Jr. Ms. A. B. Hawkins Mr. R. E. Moon√ Mr. J. T. Johnson

Note: For additional response, see page VI-144

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech 383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717 Additional response to letters concerning the relocation of the Mt. Pilgrim Baptist Church:

Under the selected alternate, Alternate 38 (Modified), the alignment of the relocated Ridge Road has been located so as to not require the relocation of the Mt. Pligrim Baptist Church or the cemetery next to the church (see Figure 11-31).

Timber Ridge Drive Hanover, MD. 21076 May 2B, 1986

Mr. Hal Kassoff State Highway Administrator State Highway Administration Post Office Box 717 Baltimore, Maryland 21203-0717 PROJECT
DEVELOPMENT
DIVISION
JUN 4 4 56 PH '81

Dear Mr. Kassoff:

Due to previous engagements, I can't be at the MD 100 location/design public hearing on June 12, 1986. I would appreciate it if this letter would be entered into the records regarding community reaction to the project.

There are, in our perception, several problems with the MD 100 project. The first is procedural: the State Highway Administration considers only highway generated noise impact on a community affected by the new alignment, even though another state agency, the State Aviation Administration, is also a noise generator. In the cases of Timber Ridge and Queenstown, at least, the BWI Airport generates easily as much noise within these communities as is expected by the highway. Thus, the highway could easily push the average day-night noise levels of such communities to the point that they don't any longer comply with existing noise standards for residential communities. Thus, we feel that the cumulative impact of Airport and highway noise, both generated by state agencies, should be considered when evaluating environmental impact on our communities. The practical results would be in the form of detailed highway location, the use of sound barriers, berms, trees and highway elevation.

Included in this cumulative noise assessment should be the proposed new 10-2B runway locations now under study by the State Aviation Administration. There we are contemplating a runway half as far from Timber Ridge as the present location. Due to the inverse square law of noise level with distance from the runway, we should anticipate an eventual 6 dB overall increase in airport noise. Add this to a 3 dB increase in highway noise and this puts portions of Timber Ridge up to the 25 dB area.

The other concern is the same as expressed in 1973. The MD 170/176 intersection should be reworked to eliminate the traffic light so as to allow continual free flow of commuter traffic from MD 100 to MD 170 and hence to Westinghouse and NSA in the morning. This is a potential generator of intense air pollution due to the known fact that idling internal combustion engines spew out far more pollution than ones running at their maximum efficiency points. Also, of course, a car driving through the intersection is there less of the time than is one awaiting a light change.

In 1973 we were told that the SAA would not consider this intersection "because it wasn't in the study area". It wasn't there either because the SAA didn't think of it, or didn't want to bother with the issue. In 1986 we would like the MD. D.O.T. to "bother with it" because it directly affects our livelihood which the state is duty bound to protect.

CC: T. Athey HWY ABbphocleus N. J. Pederson

JN 86 11: 07

RECEIVED Buck

JUN 4 1986

F-25 DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING



State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

RE: Contract No. AA 682-101-570 N
Maryland Route 100
Interstate Route 95 to
Interstate Route 97

PDMS No. 022007

Mr. Dan Buck 916 Timber Ridge Drive Hanover, Maryalnd 21076

Dear Mr. Buck:

This is to acknowledge receipt of your letter dated May 28, 1986 expressing your comments on the Maryland Route 100 project.

Your letter will be made a part of the official project record by being entered into the Public Hearing transcript, and your comments will be addressed in the Final Environmental Impact Statement.

We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Sincerely,

Hal Kassoff Administrator

HK:tlh

cc: Delegate Tyras Athey

Councilman Theodore Sophocleus

Mr. Neil J. Pedersen Mr. Edward H. Meehan Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson

Note: For additional response, see page VI-149

My telephone number is 659-1111

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100 I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

NAME DANIEL C. RUCHE	DATE 6/13/86
PLEASE ADDRESS 916 TIMBER RIDGE DIZ	
CITY/TOWN HANDOGR STATE MID	ZIP CODE 21076
1/We wish to comment or inquire about the following as	spects of this project:
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5176 ADTACENT TO TIMBER RIDGE, AND AT	-SETUL OF LOD DO SHIT
CHANGE, THIS SHOULD INCLUDE BOTH USERTICAL	RETLECTING WALLS
AND BOWLFER TREE GROVES FOR SOUND	ABSORPTION
Please add my/our name(s) to the Mailing List.*	
	I-147
*Persons who have received a copy of this brochure thro	ugh the mail are already



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary Hai Kassoff Administrator

July 16, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Mr. Daniel C. Buck 916 Timber Ridge Road Hanover, Maryland 21076

Dear Mr. Buck:

This is to acknowledge receipt of your comments dated June 13, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State High-way Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Louis H. Ege, Jr.

Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon Mr. James T. Johnson

Note: For additional response, see page VI-149

Additional response to letters from Dan Buck, dated May 28 and June 13, 1986

The State Highway Administration believes that the selected alternate, Alternate 3B (Modified), provides the needed service to the area while minimizing impacts to local communities. An air quality analysis was performed for all alternates and was approved by the U.S. Environmental Protection Agency (letter dated August 19, 1986) and the Maryland Department of Health and Mental Hygiene (letter dated August 13, 1986). This analysis, using 30 receptor sites (one of which was located in Timber Ridge), concluded that there would be no violations of the State and/or National Ambient Air Quality Standards for either the 1-hour or 8-hour concentrations of CO for any alternates. This analysis was based on an at-grade intersection of MD. 170 and Dorsey Road under Alternate 3. Since this project does not generate aircraft noise and because aircraft noise cannot be mitigated with normal practices (i.e., noise barriers), design year 2010 noise levels with aircraft were not calculated.

Citizens			
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PLANNING & PRELIMINARY ENGINEERS	noon		
PLANNING			
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MD 100 and as an area trail.
and menter of the Das D
MD 100 and an area travident and mentar of the Deep Run Ciric

So alternate 3 is out unless it comes with a subway or short-hop ar Committee servite. On second thought even that would be a had deal.
even that would be a had dool.
Thank you, Curtis R Warren
7320 Kare Rd. Honover, mil 21076
and the control of th

Figures II-13; II-14; II-15 ed to give an overing make-up of the community etad by the propose Most of the imput. ting to the econo l residents is from of the total area popu A population and not the Blac ill experience the greate lig. Thus the nego o coulso

Uprooting the elderly is both

they troumatic and economically

Figure II-13 Race Road & Norsey Road Vicinity note: Color code for Minority Black homes Red - designated for taking Green- not designated for taking Hotal homes - 21 1. Retired male; widower 2. Retired female, widow 3 Retired married couple; alderly of Retired morried couple; olderly; h Retired Jamale; widow le Retired Jemale; widow 7 Retired Jamale; single; heart pot 8 Retired male; single 9 Retired morried couple (RED) 10 Retired Jemole; widow (RED) Retired Jemole; widow 12 Male head of household heart patient in household (RED) 13 Female head of household; retarded adult in household (RED 14 Jamala head of household 15 Male head of household; mentally derabled adult in household 16 Married couple; husband physically dusted

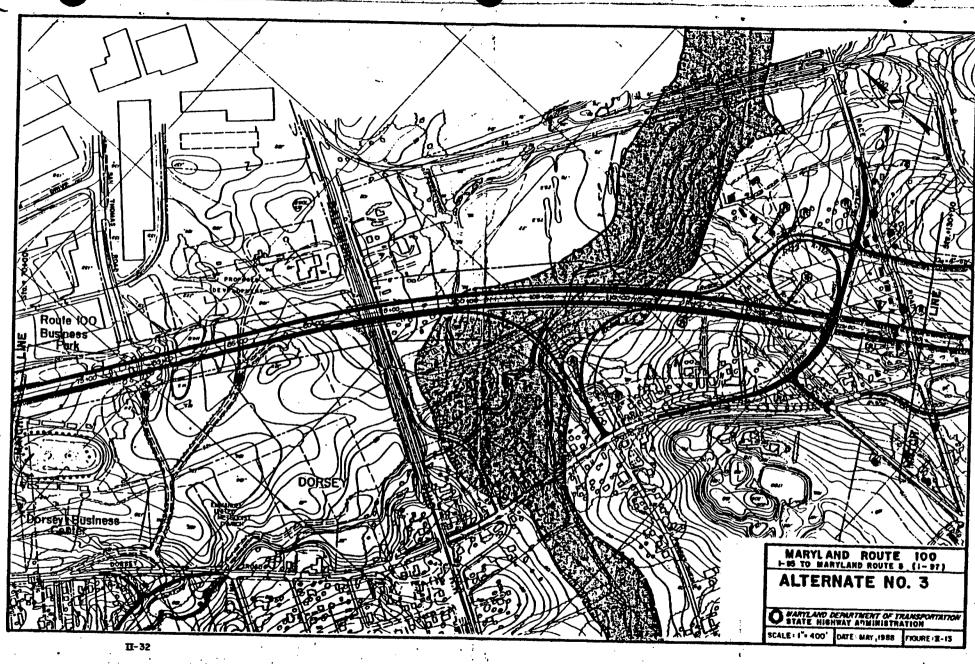
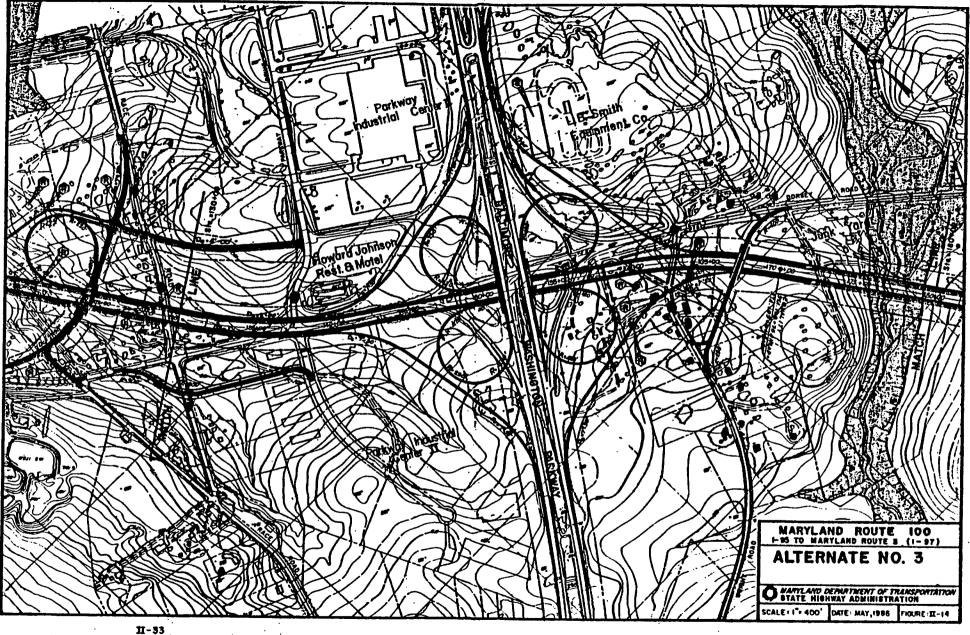
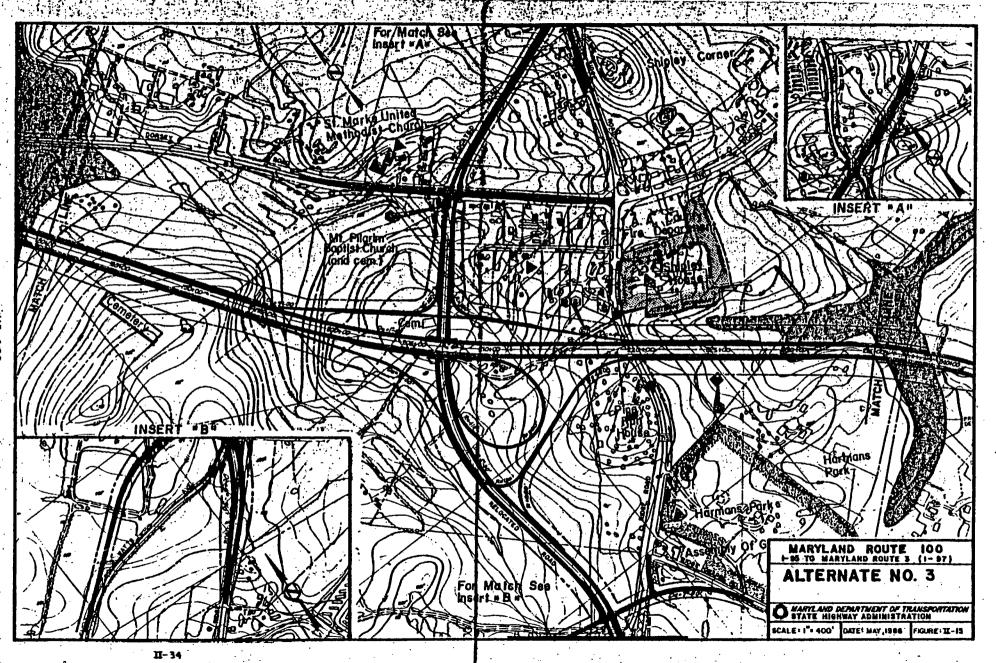


Figure II-14 Wright Road & Dorsey Road Vicinity 1 Ratined Jemole; wedow; elderly; heart patrent 2 Retired Jemole; single head of houshold 3 Retired Jemole; widow of Retired morried couple (RED) 5 Retired Jemale: widow; elderly: heart patient (RED) 6 Retired male; widower; physical handicap (RED) 7 Retired Jemale; single head of household 8 Retiret Jemole; single head of household; mentally handicapped Married couple; histored physically handicapped (RED) 10 Angle female; head of household; partial



Lagure II-15 Ridge Road & Dorsey Road Vicinity
Total homes - 15

1 Retired manied couple
2 Retired male; head of household
3 Retired married couple; both deabled
4 Retired female; single; head of household
5 Retired female; rundow
6 Retired female; widow



14 La

1440 Dorsey Road Hanover, MD 21076 June 8, 1986

Mr. Neil J. Pedersen - Director Office of Preliminary Planning & Engineering State Highway Administration

DEVELOPME DIVISION UN 27 | 52 PM

Gentlemen:

we, the concerned citizens for a fair (alternate) Route 1005 are taking this opportunity to inform you of the adverse impact that the proposed alternates one, two and three and the crossover of alternates three and four would inflict upon our minority community, socially, financially and environmentally.

Due to the adverse effect we would like it to be a matter of record that we strongly recommend alternate four without the crossover but including the 3B provisions.

We are a group of concerned minority (Black) citizens from the area roughly bounded by Race and Faulkner Roads on the west, Harman Road on the east, the Jessup and Dorsey Park on the south and Hanover Road on the north.

This is a wide area but historically we have been forced into widely scattered areas due to convenants and real estate practices supported and/or tolerated by this 'Free State' of Maryland.

Our ancestors settled in this area in this area in the 1800's as tenant farmers and landholders. Those without land seized every opportunity that presented itself to become landholders.

As early as 1842, before the demise of slavery, one of our ancestors, namely Mr. Peter Gambrill and his wife Elizabeth, gave a parcel of land to a dedicated group who sought to establish a church for the citizenry of this and adjacent areas. The property was located north of Dorsey Road off Ridge Road.

From this humble beginning, most revered black institution now known as St. Mark UMC Church evolved and has been in continuous operations for 144 years. In 1992 we are planning a gala celebration to commemorate our one hundred and fiftieth anniversary.

Not long after this church was established another community group affiliated themselves with a society known as the Sons and Daughters of Abraham and located on Abraham Road which is just east of what is now exchange of the Baltimore-Washington Expressway at Dorsey Road. Abraham Road is also nearly directly across from Wrights! Road.

This society took upon itself the awesome task of affording opportunities for Blacks to become landowners since Blacks were not able to deal financially with the banks of the period.

This was done by pooling money and buying properties from dissatisfied white landowners who had come upon hard times and were reluctant to let their comtemporaries know of their plight.

The society known as the Abraham Lodge would purchase the land and sell parcels to interested Blacks and give the purchaser as much time as was needed to pay back the money to the lodge. Most of the black land-owners in the area adjacent to the lodge purchased their homes in this manner.

The land for the Old Harman School (Colored) was purchased by the Abraham Lodge and deeded to the county of Anne Arundel in order that the Black Community could avail itself of the Rosenwald Grant to get a school in the area. Before this was done the only building available to Black children was St. Mark Church. Here they obtained both their secular and religious training because the county did not provide a building to educate Blacks.

As near as can be ascertained at this time 90% of this land is still owned by Blacks.

By 1927 when Dorsey Road was first paved the black community had been well established in the aforementioned boundaries which included Dorsey, Sewell Town, Matthews Town, Harman, Severn, Linthicum and other areas.

The first church was now in its third building and had moved to Ridge Road. Ten years earlier the people from the Queenstown area had moved out (1917) and established a church on Queenstown Road, though a few of the families still attend St. Mark Church.

In 1955 the Board of Education of Anne Arundel County declared the old Harman School and the property on which it stood excess property. The Black community rallied again and purchased the property back from the county. In 1968 the St. Mark Church built its fourth building to house

its congregation on this property that has so much history and fond memories for many of the members of St. Mark. This move placed the church building much closer to its parishioners making the access to the church much less time consuming.

The present estimated value of this property is in excess of three-quarters of a million dollars.

All proposed alternates with the exception of alternate four will split this 150 year old + community in several ways thus eviscerating our scattered but closely knitted Black community.

For those of us who live on the western side of the Baltimore-Washington Expressway we find that to get to our beloved church we will be forced to enter a high speed expressway, pass our church and to circle back to it. The same dangerous and time consuming task will face us when we enbark on our return trip.

The same thing will be true when these people attempt to visit their relatives and friends on Wright Road.

Parishioners and friends beyond the Route 170 will also be forced on high speed highways to get to their church and visit friends.

One half of the homes on this western side of the expressway are inhabited by retired persons and one fourth of the other homes have residents who will reach retirement age within five to ten years. Thus three fourth of these homeowners will find it most difficult financially if not impossible to avail themselves of relocating efforts. After working thirty, forty and more years the state of Maryland is coming along with three or more proposals that will totally devastmenthese people in the years when they are least able to bounce back.

We, the concerned citizens for a fair 100 strongly urge the approval of alternate four without the cross over between alternate three and four but including 3B to save the Queenstown community.

Signed,

Irene Hebron

Designated Correspondent

Dr. Preston Hebron
Designated Correspondent

Mr. Curtis warren

Convener

P.S. We also are wondering if the principle of gerrymandering has been used in the planning of these alternates. It seems as if there has been a concerted attempt on the part of those responsible for planning to target Black areas for disruption, upheaval or possible demise. Not too many years ago the Matthews Town community had a gigantic struggle to keep their community intack. The Queenstown Community has had to fight and is still fighting diligently in an effort to save their community from destruction and now the areas mentioned in this letter are targeted. All of these communities are Black communities. As we look at the winding and curving of these alternates and couple this with the battling to save the Black communities we wonder if the principles of gerrymandering isn't being used to get rid of black populated areas.

PAUL S. SARBANES MARYLAND

COMMITTEES:

FOREIGN RELATIONS

KING, HOUSING AND URBAN AFFAIRS

OFFICES:

SD-332 DIRESEN SENATE OFFICE BUILDIP WASHINGTON, D. C. 20510 202-224-4524

> 1518 FEDERAL OFFICE BUILDING BALTIMORE, MARYLAND 21201 962-4436

1110 FIDLER LANE SILVER SPRING, MARYLAND 20810 589-5800

CUMBERLAND: 722-5389

SALISBURY: 546-4998

United States Senate

WASHINGTON, D.C. 20510

June 25, 1986

Hal Kassoff State Administrator State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Dear Mr. Kassoff:

I am enclosing for your review a letter I received from Irene Hebron, Dr. Preston Hebron and Curtis Warren. The colletter raises some serious concerns about the alignment of Route 100. Although this is not primarily a federal matter, I would appreciate it if you would address the concerns raised and provide my constituents with an appropriate response.

Your attention to this matter is appreciated.

With best regards,

Sincerely,

Paul S. Sarbanes United States Senator

PSS/cso Enclosure

LATE HEY ALL

JUN 65 7:31

RECEIVED

JUN : 1986

OIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

1440 Dorsey Road Hanover, MD 21076 June 8, 1986

RECEIVED

Mr. Neil J. Pedersen - Director
Office of Preliminary Planning & Engineering
State Highway Administration

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

Gentlemen:

We, the concerned citizens for a fair (alternate) Route 100, are taking this opportunity to inform you of the adverse impact that the proposed alternates one, two and three and the crossover of alternates three and four would inflict upon our minority community, socially, financially and environmentally.

Due to the adverse effect we would like it to be a matter of record that we strongly recommend alternate four without the crossover but including the 3B provisions.

We are a group of concerned minority (Black) citizens from the area roughly bounded by Race and Faulkner Roads on the west, Harman Road on the east, the Jessup and Dorsey Park on the south and Hanover Road on the north.

This is a wide area but historically we have been forced into widely scattered areas due to convenants and real estate practices supported and/or tolerated by this 'Free State' of Maryland.

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The land for the Old Harman School (Colored) was purchased by the Abraham Lodge and deeded to the county of Anne Arundel in order that the Black Community could avail itself of the Rosenwald Grant to get a school in the area. Before this was done the only building available to Black children was St. Mark Church. Here they obtained both their secular and religious training because the county did not provide a building to educate Blacks.

As near as can be ascertained at this time 90% of this land is still owned by Blacks.

By 1927 when Dorsey Road was first paved the black community had been well established in the aforementioned boundaries which included Dorsey, Sewell Town, Matthews Town, Harman, Severn, Linthicum and other areas.

The first church was now in its third building and had moved to Ridge Boad. Ten years earlier the people from the Queenstown area had moved out (1917) and established a church on Queenstown Road, though a few of the families still attend St. Mark Church.

In 1955 the Board of Education of Anne Arundel County declared the old Harman School and the property on which it stood excess property. The Black community rallied again and purchased the property back from the county. In 1968 the St. Mark Church built its fourth building to house

its congregation on this property that has so much history and fond memories for many of the members of St. Mark. This move placed the church building much closer to its parishioners making the access to the church much less time consuming.

The present estimated value of this property is in excess of threequarters of a million dollars.

All proposed alternates with the exception of alternate four will split this 150 year old + community in several ways thus eviscerating our scattered but closely knitted Black community.

For those of us who live on the western side of the Baltimore-Washington Expressway we find that to get to our beloved church we will be forced to enter a high speed expressway, pass our church and to circle back to it. The same dangerous and time consuming task will face us when we enbark on our return trip.

The same thing will be true when these people attempt to visit their relatives and friends on Wright Road.

Parishioners and friends beyond the Route 170 will also be forced on high speed highways to get to their church and visit friends.

One half of the homes on this western side of the expressway are inhabited by retired persons and one fourth of the other homes have residents who will reach retirement age within five to ten years. Thus three fourth of these homeowners will find it most difficult financially if not impossible to avail themselves of relocating efforts. After working thirty, forty and more years the state of Maryland is coming along with three or more proposals that will totally devasted these people in the years when they are least able to bounce back.

We, the concerned citizens for a fair 100 strongly urge the approval of alternate four without the cross over between alternate three and four but including 3B to save the Queenstown community.

Signed,

Irene Hebron

Designated Correspondent

Dr. Preston Hebron

Designated Correspondent

Mr. Curtis Warren

Convener

P.S. We also are wondering if the principle of gerrymandering has been used in the planning of these alternates. It seems as if there has been a concerted attempt on the part of those responsible for planning to target Black areas for disruption, upheaval or possible demise. Not too many years ago the Matthews Town community had a gigantic struggle to keep their community intack. The Queenstown Community has had to fight and is still fighting diligently in an effort to save their community from destruction and now the areas mentioned in this letter are targeted. All of these communities are Black communities. As we look at the winding and curving of these alternates and couple this with the battling to save the Black communities we wonder if the principles of gerrymandering isn't being used to get rid of black populated areas.



Maryland Department of Transportation

State Highway Administration

JHH 1 8 1986

William K. Hellmann Secretary

Hal Kassoff Administrator

RE:

Contract No. AA 682-101-570

Maryland Route 100

Interstate Route 95 to Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Ms. Irene Hebron Dr. Preston Hebron Mr. Curtis Warren 1440 Dorsey Road Hanover, Maryland 21076

Dear Ms. Hebron, Dr. Hebron, and Mr. Warren:

I am writing in response to your letter of June 8, 1986 to 🚍 Mr. Neil J. Pedersen, the State Highway Administration's Director of the Office of Planning and Preliminary Engineering, and copied to Senator Paul S. Sarbanes, in which you expressed your concerns with the effects of the proposed construction of Maryland Route 100 on your community.

I want to thank you for writing and letting us know of your concerns, and also for the insight that you have provided in regard to the history and background of your community. We appreciate your views and assure you they will receive every consideration before any decisions are made concerning this project. You can also be assured that, in the event an alternate affecting your community is selected for the proposed Maryland Route 100, the State Highway Administration will make every effort to ensure that the highway would have minimal impact on the community and would be compatible with its surroundings.

Your letter will be entered into the public hearing transcript and made a part of the official project record. You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

> Hal Kassoff Administrator

HK: tlh

Senator Paul S. Sarbanes

Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-184

659-1111

My telephone number is,

Teletypewriter for Impaired Hearing or Speech 383-7555 Baltimore Metro - 565-0451 D.C. Metro - 1-800-492-5062 Statewide Toll Free P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

COMMITTEES:

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> 1518 FEDERAL OFFICE BUILDING BALTIMORE, MARYLAND 21201 962-4436

1110 FIDLER LANE SILVER SPRING, MARYLAND 20910 589-8800

SALISBURY: 546-4998

CUMBERLAND: 722-5369

United States Senate WASHINGTON, D.C. 20510

HOUSING AND URBAN AFFAIRS FOREIGN RELATIONS JOINT ECONOMIC

June 11, 1986

Mr. Hal Kassoff State Highway Administrator 707 N. Calvert Street Baltimore, Maryland 21202

Dear Hal:

Enclosed is a copy of correspondence I received from Mr. and Mrs. Willard M. Womble. The letter raises some serious concerns about highway construction in their area. I would greatly appreciate it if you would carefully review this matter and provide me with an appropriate response.

Your attention to this matter is greatly appreciated. With best regards,

Sincerely,

Paul S. Sarbanes United States Senator

PSS/gmp Enclosure

E HWY ADA DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

دَخ <u>: د</u>خ دَغ ا

HONORABLE SENATE PAUL SARBANES U. S. SENATE WASHINGTON, D. C. 20510

DEAR SENATE:

THERE ARE MANY REASONS WHY WE THINK THAT THE RESIDENCE OF WRIGHT ROAD SHOULD NOT DISTURBED, AND DISPLACED.

REASON NUMBER ONE IS THAT THE DESINATED PORTION TO BE CHANGED OR FAMIL'IES TO BE

REASON NUMBER TWO IS THAT WRIGHT ROAD IS A DEAD END. WHY USE A DEAD END ROAD R AN EXPRESS ROUTE?

THE THIRD REASON IS THAT WE WERE ASSURED THE ALTERNATE (4) FOUR FREEWAY FROM JTE 170 - 1-95 WOULD BE USED FOR ROUTE 100, AND WRIGHT ROAD AREA WOULD NOT BE

AFTER WE WERE TOLD THAT WRIGHT ROAD/DORSEY ROAD AREA WOULD NOT BE CHANGED AUSE OF ROUTE 100, WE THE AREA RESIDENCE HAD EXTENSIVE PROPERTY IMPROVEMENTS MADE.

TO NAME A FEW OF THE 'IMPROVEMENT: ADDITIONAL ROOMS ON OUR HOUSES, CARPORT ADDED, CITY WATER AND LARGER SCEPTIC TANKS SYSTEM 'INSTALLED, LANDSCAPPING, SHRUBY, NEW GRASS, AND FRUIT TREES WERE PLANTED.

None of these communities are being saved, we would recommend alternate 4 - EWAY FROM ROUTE 170 to 1-95 be used lineader that our properties and homes saved.

SINCERELY,

WILLARD M. BEATHSADER M. WOMBLE



Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary

Hal Kassoff Administrator

JUL 08 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

The Honorable Paul S. Sarbanes United States Senator Suite SD 237 Dirksen Senate Office Building Washington, D.C. 20510 DEVELOPMENT DEVELOPMENT

Dear Senator Sarbanes:

1.11.11.11.11.11.11

This is in response to your letter of June 11, 1986 in regard to concerns that have been raised by Mr. and Mrs. Willard M. Womble about highway construction in their area. I would like to thank you for bringing this matter to my attention, and want to clarify some of the issues that were raised in Mr. and Mrs. Womble's correspondence.

The State Highway Administration has, over the past several years, worked closely and consulted with various community organizations and citizen associations in developing alternates for the construction of Maryland Route 100 that would minimize community impacts, and yet would still fulfill the primary goal of providing a much needed link in the highway system serving northern Anne Arundel County. This community involvement has resulted in significant changes in our proposed alignments and reductions in the number of residential relocations that would be required, particularly in the Queenstown and Harmans areas. We are continuing to further refine and revise the project alternates so as to reduce even further residential and community impacts.

Recently, a draft Environmental Impact Statement for the proposed Maryland Route 100 was prepared and, with the concurrence of the Federal Highway Administration, circulated for public and agency review and comment. That document discusses the need for the project, the various alternates under consideration, as well as the social, economic, and environmental impacts of those alternates. A Public Hearing was held on June 12, 1986 to present the results of our studies and to gather additional comments and citizen input. Although we have stated a preference for Build Alternate 3-B for the Maryland Route 100 project, I want to assure you that a final decision will not be made until all comments have been thoroughly evaluated and considered.

My telephone number is 659-1111

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Slatewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

JUL 0 8 1986

The Honorable Paul S. Sarbanes

Page Two

With regard to the issues involving the effects of Maryland Route 100 in the vicinity of Wright and Dorsey Roads, either Alternate 2, or the preferred alternate, Alternate 3-B, will require a number of residential relocations, all of which are occupied by minority families. I regret that misinformation has been given to the residents of this area by outside sources that an alternate not affecting Wright Road would be used for the proposed Maryland Route 100 and that no changes would be made to the area. In regard to the issue of Wright Road being used as an express route; this will not be the case. The construction of Maryland Route 100 would require a portion of Wright Road to be relocated; however, the character of the road would not be altered and it would still serve as a local access road from Dorsey Road.

I hope that this has provided you with sufficient information to respond satisfactorily to your constituents. Again, thank you for your interest in this much needed highway improvement project.

Sincerely, ORIGINAL SIGNED-BY: HAL KASSOFF

Hal Kassoff Administrator

HK:tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon ✓

Ms. Angela B. Hawkins

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-184

PAUL S. SARBANES

nking, mousing and urban affairs
Foreign relations

JOINT ECONOMIC

United States Senate

WASHINGTON, D.C. 20910

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CUMBERLAND: 722-5368

RECEIVED"

JUN 20 1986

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

June 18, 1986

Mr. Hal Kassoff
State Administrator
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kassoff:

I am enclosing for your review a letter I received from Virginia Warren. The letter raises some serious concerns about the allignment of the proposed Route 100 from I-95 to Maryland Route 3/I-97. Although this is not primarily a federal matter, I would appreciate it if you would address the concerns raised and provide Ms. Warren with an appropriate response.

Your attention to this matter is appreciated.

With best regards,

Sincerely,

Paul S. Sarbanes United States Senator

- PSS/cso Enclosure

ATE HWY ADA

JUN 65 1: 21

7117 WRIGHT ROAD HANOVER, MARYLAND JUNE 2, 1986

HONORABLE SENATE PAUL SARBANES U. S. SENATE WASHINGTON, C. C. 20510

THE HONORABLE PAUL SARBANES:

THE MARYLAND DEPARTMENT OF TRANSPORTATION PRESENTED THE DRAFT ENVIRONMENTAL IMPACT STATEMENT ON MAY 22, 1985 AT THE HARMAN IMPROVEMENT ASSOCIATION MEETING. THE MAPS REFLECT A CHANGE WHICH HAD NOT BE SHOWN IN THE PREVIOUS MEETING. I AM OPPOSING ROUTE 34 AND 38 FROM 170 TO 1-95. I AM IN FAVOR OF ALTERNATE 4 - FREEWAY FROM ROUTE 170 TO 1-95.

THE COMMUNITIES INVOLVED ARE BLACK MINORITY, WHO ARE RETIRED, WIDOWS AND WIDOWER, DISABLE AND ELDERLY. I LIVE IN A UNIQUE COMMUNITY BECAUSE THE FOREFATHER PURCHASE THE LAND AND WILLED THE LAND TO THEIR CHILDREN. THE RESIDENTS ARE RELATED TO SOME DEGREE TO EACH BY BLOOD AS WELL AS MARRIAGE. THE PRESSURE I HAVE EXPERIENCE SINCE 1974 HAS BEEK STRESSFUL. COMPARING PATAPSCO VALLEY STATE PARK TO A COMMUNITY NEARLY A CENTURY OLD HE SAYING THE VALUE OF THE LIFE OF PEOPLE HE NOT EQUAL TO DESTRUCTION OF TREES.

THE FAA HAB NOT MADE A DECISION ON LOCATIONS OF RUNWAYS AT THE BY! AIRPORT. THE PLANES ARRIVAL AND DEPARTURE BY RADAR AND OTHER SOPHISTICATED ELECTRONIC DEVICES.

EACH COMMUNITY WAS NOT TREATED THE SAME, FOR INSTANCE, WRIGH ROAD RESIDENTS WAS NOT INFORMED WERE THEY COULD RELOCATE.

THE DRAFT ENVIRONMENT IMPACT STATEMENT STATES IMPROVEMENTS OF MARYLAND ROUTE 176 WOULD ENABLE THE PLANNED DEVELOPMENT OF HOUSING. WHY TEAR DOWN SOME HOUSES AND BUILD OTHERS.

THE ALTERNATE (4) FOUR FREEWAY IIS LESS EXPENSIVE AND WOULD NOT DISTRUB OR INTERRUPT ANY COMMUNITY.

I WOULD APPRECIATE ANY ASSISTANCE YOU COULD GIVE.

SINCERELY,
VIRGINIA 1. WARREN

Ticionia S. WARREN



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff

Administrator

JUL 0 7 1985

e: Contract No. AA 682-101-570

Maryland Route 100

Interstate Route 95 to Maryland Route 3 (Interstate

PDMS No. 022007

Mrs. Virginia I. Warren 7117 Wright Road Hanover, Maryland 21076

Dear Mrs. Warren:

This is in response to your letter of June 2, 1986 to Senator Paul S. Sarbanes in which you expressed your concerns about the proposed construction of Maryland Route 100 from Interstate Route 95 to Maryland Route 3. Senator Sarbanes has forwarded your letter to my office and asked that I reply directly to you.

We appreciate your views and the concerns you have with the proposed construction of Maryland Route 100. I want to assure you they will be fully evaluated and will receive every consideration before an alternate is selected for Maryland Route 100.

Thank you for writing and letting us know of your concerns. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript. You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

> Hal Kassoff Administrator

- HK:tn

cc: Senator Paul S. Sarbanes

Mr. Neil J. Pedersen

Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

Ms. Angela B. Hawkins

Mr. Ronald E. Moon

Note: For additional response, see page VI-184

My telephone number is 659-1111

Teletypewriter for Impaired Hearing or Speech
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P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

PAUL S. SARBANES

COMMITTEES:

JOINT ECONOMIC

ING, HOUSING AND URBAN AFFAIRS FOREIGN RELATIONS

United States Senate

WASHINGTON, D.C. 20510

June 6, 1986

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1110 FIDLER LANE SILVER SPRING, MARYLAND 20910 549-8800

CUMBERLAND: 722-5389

DEVELOPMENT DIVISIOH

Mr. Hal Kassoff
State Administrator
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

Dear Mr. Kassoff:

I am enclosing for your review a letter I received from Thomas Dixon. The letter raises some serious concerns about the allignment of Route 100. Although this is not primarily a federal matter, I would appreciate it if you would address the concerns raised and provide Mr. Dixon with an appropriate response.

Your attention to this matter is appreciated.

With best regards,

Sincerely,

Paul S. Sarbanes United States Senator

PSS/cso Enclosure

> RECL JUN 10 198-

F-39
DIRECTOR, OFFILE DE
PLANNING & PRELIMINARY ENGINEERING

ALL HAY ADA

N E5 12: 54

Harmans Civic Association, Inc.

Houmars

The Honorable Senator Paul Sarbanes U.S. Senate Washington, D. C. 20510

June 1, 1986

Dear Senator:

This letter concerns the proposed construction of Route 100 from I-95 to the proposed new I-97 formerly Route 301. My name is Thomas A. Dixon, Jr., President of the Harmans Civic Association and Chairman of the State Tax Assessment Appeals Board in Anne Arundel County.

We do want to see Route 100 constructed, we feel that it is needed. We do feel however, that of all the alternates, alternate 4 would best suit our total community. We feel that under Section 4F-771.135 that an exception should be made because long standing minority communities should not be disturbed. They are families that are related in all communities, starting with Race Road in Dorsey, Maryland, Wright Road in Hanover, Maryland and on Dorsey Road in the vicinity of St. Marks' Church. 85% of these individuals are on fixed incomes. This is an even better reason to choose alternate 4 with a 3B crossover in Queenstown.

So under the Civil Rights Division of the Federal Department of Transportation in which we are dealing with 3 minority communities, alternate 4 should be chosen. The Chief of Police and Fire Department are concerned about the various dead ending of roads under the other proposals they find disturbing because of response time.

I shall await your reply.

Sincerely

hones A. Dixon, Jr.

Copies sent to: Senator Charles McC. Mathias Elizabeth Doles Office of the Chief Counsel





William K. Helimann Secretary Hal Kassoff Administrator

JUL 0 2 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Maryland Route 3
PDMS No. 022007

Mr. Thomas A. Dixon, Jr., President Harmans Civic Association, Inc. 7677 Ridge Chapel Road Hanover, Maryland 21076

Dear Mr. Dixon:

This is in response to your letter of June 1, 1986 to the Honorable Paul S. Sarbanes of the United States Senate in which you expressed your concerns with the proposed construction of Maryland Route 100 from Interstate Route 95 to Maryland Route 3. Senator Sarbanes has forwarded your letter to my office and asked that I reply directly to you.

The State Highway Administration has, as you know, worked very closely over the past several years with the Harmans Civic Association in developing an alternate for the proposed Maryland Route 100 that would have a minimal impact to your community. More recently, we have met on several occasions with the Queenstown community to learn of their concerns and, as a result, have developed a modification to Alternate 3 that avoids disruption to most of that community. This revised Alternate, Alternate 3-B, was presented at the Public Hearing on June 12, 1986, along with two other Build Alternates, as well as options that were applicable to the basic Build Alternates.

I want to assure you that we are continuing to investigate the reduction of impacts of proposed Maryland Route 100 on residential communities, and in order to avoid any disruption to community services, such as police and fire protection, are reevaluating the proposed closing of Harmans and W.B.&A. Roads.

JUL 0 2 1986

Mr. Thomas A. Dixon, Jr.

Page Two

Although Alternate 3-B remains the preferred alternate of the State Highway Administration, a final decision will not be made until all comments received at the Public Hearing, and as a result of the review of the Draft Environmental Impact Statement, have been fully evaluated and considered.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:tlh

cc: Senator Paul S. Sarbanes
Senator Charles McC. Mathias
Secretary Elizabeth Dole
Secretary William K. Hellmann

bcc: Mr. Neil J. Pedersen
Mr. Edward H. Meehan
Ms. Angela B. Hawkins
Mr. Louis H. Ege, Jr.

Mr. Ronald E. Moon

Note: For additional response, see page VI-184

505

Additional response to letters from:

Curtis Warren, dated June 12, 1986 Irene Hebron, Dr. Preston Hebron and Curtis Warren, dated June 12, 1986 Willard M. and Beathsader M. Womble Virginia I. Warren, dated June 2, 1986 Thomas A. Dixon, Jr., dated June 1, 1986

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law If a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as Identified in the Howard County, Anne Arundei County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 38 (Modified) Incorporates several design changes of the "historical" alignment (Alternate 3-Option A) that has resulted in a reduction of the number of residences displaced by MD Route 100 from 43 to 22. Alternate 4/3B also traverses and southwestern corner of the Baltimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate. Alternate 3B (Modified) Includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridg-Ing Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. This project has been reviewed by the Equal Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964 (see letter dated June 26, 1986).

June 10-1986

My, Ron Moor

We are very concern with alternate 4, We feel it is so unfair to the people who now live in the Bertwoods community, as of now we live daily with the Hoese of ariplanes, and yes, we are very aware of BWI noise program. as I have talked with you Mortgoney and Mrs. Barbara Lrey. But luther of these people can tell us yes or ho in 1487. The noise program will reach the Bentwoods Community We don't know when the program will reach our comminity will it be two years? or ten years? or not at all, That why, o would like the state skightway administration, to look over. The problems we now live with in the Bentwoods Community

before its to late. We will have to deal on a daily bases with road truffice. We already have air truffice. The air truffice comes and gas. But that road truffic is gaing to be all the time. nut too much concern is giving to the Bentwoods Community For one we are a very oracl corrunity Mughe the fuling are in The future the House program well be in our community, so put atternate 4 in Bentwoods would be fine, Wrong, Let me tell you from my own experence. Its a living Kell, you don't want to put any. more money into your home, Time don't know what the futures halds for as, What Chappens. If alternate 4 gues in Bentimons; and BWI program doesn'teame This far ? ar they don't have

the money to brug ow homes?

Thank (faw) The Droth f- Harringer

7209 Benturado Rd Harovii Mil 2/076 859-5389



Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary Hai Kassoff Administrator

July 14, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mrs. Dorothy Horringer 7209 Bentwoods Road Hanover, Maryland 21076

Dear Mrs. Horringer:

This is in reference to your letter to Mr. Ronald E. Moon dated June 10, 1986, expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript. We want to assure you that we appreciate the concerns you have with the effects on your home and the Bentwoods Community should Maryland Route 100 be constructed on the Alternate 4 alignment. I also want to assure you they will be fully considered and addressed before a decision is made on the selection of an alternate for Maryland Route 100.

Thank you for writing and letting us know of your concerns. Via the project mailing list, you will be kept aware of future developments and advised of the decision made by the State Highway Administration.

Very truly yours,

Louis H. Ege, Tr. Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehay Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

Note: For additional response, see page VI-189

My telephone number is 659-1130

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

Additional response to letter from Dorothy and Jack Harriger, dated June 10,

Alternate 4 has not been selected. Questions pertaining to impacts from the Baitimore Washington international Airport should be directed to the State

5//

PROJECT DEVELOPMENT DIVISION Jun 27 2 on PH 181

other local access rotos

"1055 FOR LOCAL CITIZENIRY

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

PLEASE PRINT CITY/TOWN COLUMBIA i/We wish to comment or inquire about the following aspects of this project: MD. ASSOC. OF BICYCLE ORGANIZATIONS, PRESIDENT THE THE OF BALTIMORE BICYCLE THE MEMBEL ORGANIZATIONS, ARE AFFECTED BICYCLISTS HAVE CKOSS ROADS IN THE AREA TO MATOK WHILE ON KOAD UNDER AS ATV EXPRESSIONAY CONSTRUCTED BICYCLISTS ON EXPRESSIVAYS WOULD PROHID IT B/CYCLE M EAST-WEST PIRECTION. MMOST TOTALLY BICHOLING WOULD RESTRICTED TO BEING A NEIGHBOOK HOOD ACTIVITY -ACCESS 4CCESS HIGH SCHOOLS TO GRADE SCHOOLS AND BUSINESSES. WHICH ARE THE AREA 13/CY-GROWING RAPIDLY TRANSPORTATION. IT SHOWD NOT REQUIKES THAT EXISTING EXISTING FEDERAL LAW. WHICH WOULD BE HEREEABLE TO MABO: REVISE MD TO W HERE 70 PRIOR ACCESS BY BICYCLISTS EXISTS TINOTHER OPTION: B Please add my/our name(s) to the Mailing List, T MAY DE ON ALREADY, SINCE T RECE Please delete my/our name(s) from the Mailing List. -> A CONTINUOUS SERVICE ROAD, OR *Persons who have received a copy of this brochure through the mail are already

VI-190

on the project Mailing List.



Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary Hal Kassoff Administrator

July 16, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Mr. James M. Tordella, President Maryland Association of Bicycle Organizations 10353 Maypole Way Columbia, Maryland 21044

Dear Mr. Tordella:

This is to acknowledge receipt of your comments dated June 12, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concern-

ery truly yours

Louis H. Ege, J Deputy Director

Project Development Division

LHE: tlh

cc: Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon Mr. James T. Johnson

Note: For additional response, see page VI-192

My telephone number is___659-1130

513

Additional response to letter from James M. Tordella, dated 12 June 1986:

Alternate 3B (Modified) includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. Bicycle traffic would be maintained on those roads where it currently exists.

514

PROJECT DEVELOPMENT DIVISION 21 2 ON PN '88

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

I-95 to Maryland Route 3 (I-97)
Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

	NAME Re	v. Diane_	Summerh	il/	DATE 6/12/86
PLEASE PRINT	ADDRESS_	6955 Da	orseg Roa	d	
	CITY/TOWN	Dorrey	STATE_	MD	ZIP CODE 2/227
i/We wish to comment or inquire about the following aspects of this project:					
-					
My co	oncerns a	es pastor	of Emman	use United	Methodist
Church in Dorsey are two-fold:					
- I protection of the little Zion Cemetery near the intersection					
- of Route 1 and Ambaton Drive and					
- 2) the integrity of the communities through which the					
- road must traverse, with as little disruptional					
local traffic flow as possible.					
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I,	um also c	encerned th	at you decid	de as sorn	as possible so
property	owners	on make		cordingly.	Many one
daugling in uncertainty.					
Please add my/our name(s) to the Mailing List.*					
Please delete my/our name(s) from the Mailing List.					
*Persons who have received a copy of this brochure through the mail are already on the project Mailing List.					

VI-193



William K. Hellmann Secretary Hal Kassoff Administrator

July 16, 1986

Contract No. AA 682-101-570 RE:

Maryland Route 100 Interstate Route 95 to Interstate Route 97 PDMS No. 022007

The Reverend Diane Summerhill 6955 Dorsey Road 21227 Dorsey. Maryland

Dear Reverend Summerhill:

This is to acknowledge receipt of your comments dated June 12, 1986 expressing your views on the Maryland Route 100 project. Your letter will be made a part of the official project record by being entered into the Public Hearing transcript.

You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list. We appreciate your views and assure you they will be considered before a final decision is made concerning the project.

Louis H. Deputy Director

Project Development Division

LHE: tlh

Mr. Neil J. Pedersen

Mr. Edward H. Meehan Mr. Ronald E. Moon

Mr. James T. Johnson

Note: For additional response, see page VI-195

659-1130 My telephone number is,

Additional response to letter from the Rev. Diane Summerhill, dated June 12, 1986:

As shown on Figure 11-26, the Zion Cemetery near the intersection of U.S. Route 1 and Amberton Drive will not be directly impacted by the selected alternate, Alternate 3B (Modified). Although the direct access to the cemetery from U.S. Route 1 is blocked by the ramps for the MD Route 100/U.S. Route 1 interchange, access to the cemetery from Amberton Drive is maintained.



4351 Garden City Drive Suite 300 Landover, Maryland 20785 301-459-8700

Oxford Development Enterprises, Inc.

June 12, 1986

Mr. Ronald E. Moon Project Manager Project Development Division State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

RE: Maryland Route 100 Project

Dear Mr. Moon:

Attached is a copy of the statement and exhibits I presented for the public record at the Public Hearing for the referenced project on June 12, 1986.

I am a Vice President with Oxford Development Enterprises, Inc. and am representing the Troy Hill Business Park Partnership. This is a Maryland General Partnership between Transcontinental Properties and Oxford with Oxford being the Managing Partner.

Sincerely, TROY HILL BUSINESS PARK PARTNERSHIP

Steven D. Armsey

SDA/jp enclosure

4963/PD30.03A



Presentation to Maryland State Highway Administration at Maryland Route 100 Location/Design Public Hearing

June 12, 1986

My name is Steven D. Armsey, Vice President of Oxford Development Enterprises, Inc. I am here representing the Troy Hill Business Park Partnership which has submitted a sketch plan to Howard County for the development of a 192-acre site fronting on the west side of U.S. Route 1 just north of the proposed U.S. Route 1/Maryland Route 100 interchange. We have proposed to develop the parcel into a business park, known as Troy Hill Corporate Business Park, under the right of existing zoning.

Given the traffic generated by our proposed development (a large portion of which has already been considered in your planning) and the proximity of the proposed two site access points to the interchange, the eventual design of the interchange will have impact on access to the development and vice versa. In light of the mutual desire for smooth and safe traffic flow for through traffic as well as those desiring access to properties along U.S. Route 1, I offer the following comments for your consideration:

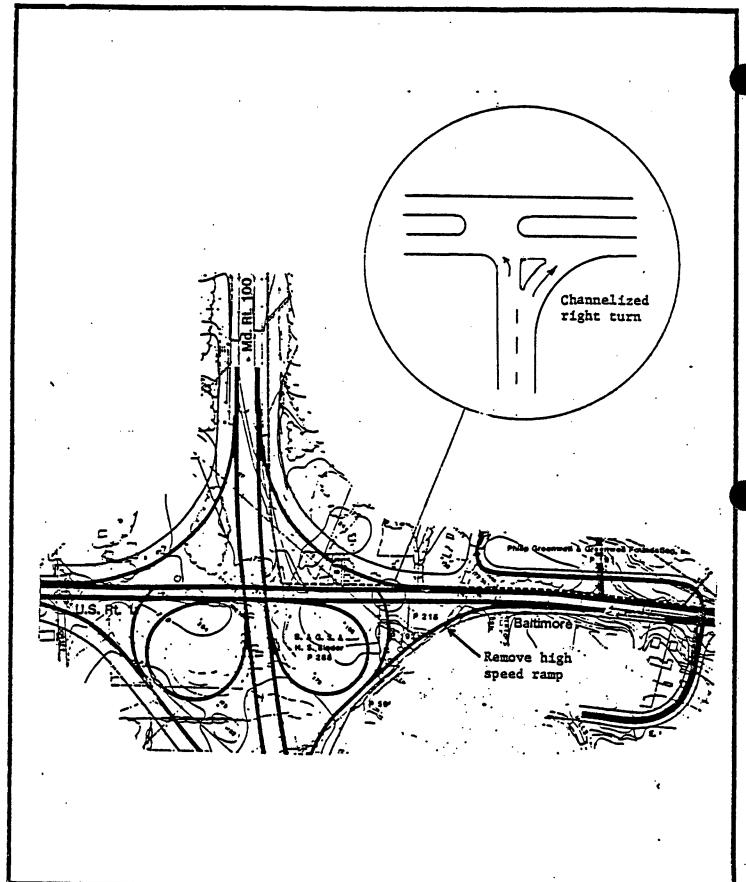
1. traffic analysis we commissioned for our that proposed development confirmed that the interchange design as proposed by the Maryland State Highway Administration is needed to meet the traffic demand for all users in the area. An at-grade intersection at this location will eventually become jammed with continued development and traffic growth. The heavy left turn movements from eastbound Maryland Route 100 to northbound U.S. Route 1 and from northbound U.S. Route 1 to westbound Maryland Route 100 require the loop ramp interchange design as proposed. Hence, we support the interchange design as proposed.



- 2. We offer one minor revision to the interchange design in the interest of safety. We suggest that the high speed off-ramp for westbound Maryland Route 100 traffic to turn right to northbound U.S. Route 1 be aligned to intersect with U.S. Route 1 at or near the same location for the ramp for left turns onto U.S. Route 1. The attached sketch illustrates this concept. We feel this would be desirable because it will provide more weaving distance for motorist desiring to turn left into the Troy Hill Corporate Business Park and other properties that the first access point will serve. As a benefit to the State of Maryland, it will reduce acquisition of right-of-way in that quadrant and reduce construction costs. Such a revision will not adversely affect the overall operation of the interchange.
- 3. We also support the relocation of Amberton Drive as proposed by the State. However, we recommend that the exact relocation of intersection coincide with our proposed southern access point to avoid an undesirable offset intersection situation. The attached sketch plan, as submitted to Howard County, illustrates this alignment.
- 4. If Howard County approves our development plan, the State may not have to build the service road connection to U.S. Route 1 in the northwest quadrant. The internal public road system for the Troy Hill Corporate Business Park would include a public road connection to the properties south of our parcel affording them access to U.S. Route 1. This plan will also reduce the amount of right-of-way acquisition required by the State in the affected area.

In conclusion, as a landowner/developer in the area of the proposed Maryland Route 100/U.S. Route 1 interchange, we strongly support the State's planned highway improvement and specifically the interchange design. We trust you will consider our suggested modifications. Furthermore, as our project moves forward, we intend to coordinate with your agency for required improvements along U.S. Route 1 that will serve the needs of through traffic as well as access to our property and others adjoining us.

Note: For additional response, see page VI-203



BMI

PROPOSED MODIFICATION TO RAMP DESIGN

Exhibit

June 12, 1986

939 Smith Rd., Severn, MD. 21144

Maryland Department of Transportation
State Highway Administration
Office of Planning and Preliminary Engineering
Box 717,
Baltimore, MD.

Gentlemen:

I would like to offer my comments and objections on proposed Rt. 100 extension from I-95 to Md. Rt. 3.

First of all, I would like you to know that I am a long time resident of Severn. I have lived my entire life (63 years) on our farm (approximately 50 acres) which is coowned by my brother, Charles. E. Wagner and myself, Howard E. Wagner. The Wagner farm is located on the east side of Rt. 652, south of Queenstown road, and north of Rt. 170/652 ince the early 1900s. We have taken care of the land, paid taxes on it, and want to keep it.

The proposed Alternate 3B would seriously effect the farm. road path would cut the farm in half on a diagonal line from NE corner of the farm near Queenstown road to SW corner of the farm near Rt. 652/170 intersection. The proposed road path would cut through the most fertile part of the land, and take a tenant house, tractor shed, storage shed, and possibly a barn and garage. The roadway would be within 200 feet of my house. The roadway would take away my access road to Rt. 652 and half of the farm's road frontage to Rt. 652. I am not sure how the State would provide me with access to the other side of the farm, but I would have to travel several miles from my home to reach the other side of the farm. The proposed Alternate 3B would also cut me off from the community of Severn. I would have to travel several miles out of my way to get to the Post Office since Rt. 652 to 170 would be The net result of this proposal is that the road would destroy our farm and ruin the value of the land.

The Alternate 3A also effects the farm but not to as great an extent. It cuts through the south end of the farm and would result in many of the disadvantages as the Alternate 3B path. Therefore I am not in favor of Alternate 3A either.

I would like to know why alternate 3B road path can't be shifted south of our farm and make use of State owned property that the State Roads purchased many years ago.

I would also like to know why the State Road Commission favors Alternate 3B which is the most expensive to construct (\$153.9M according to your estimates). I would think that the 3/4 Crossover, which is considerably cheaper (\$15.8M less) would be a more appropriate course. It does not effect the Queenstown community any more than alternate 3B. And, it keeps the hustle, bustle, traffic, and noise near Rt. 176, the Airport, and the industrial centers for which it is intended to serve. Why destroy what is left of a small rural area and waste additional tax payers dollars.

One final comment. I tried to mail you my comments using the business reply form that was attached to the back of the Combined Location/Design Public Hearing Document (PDMS NO 022007). It was returned to me by the Post Office stamped Return to Sender, Business Reply Permit Cancelled.

Sincerely,

Howard E. Wagner

Howard E. Wagner

Response to letters from Steven D. Armsey, dated June 12, 1986 and Howard E. Wagner, dated June 12, 1986:

Mr. Armsey's letter is a copy of the statement he presented at the Public Hearing. The comments in Mr. Wagner's letter were expressed at the Public Hearing by Howard E. Wagner, Jr. Responses thereto are given in Section VI.B.1.

Here is a copy of my speich, as well as, the signatures of collected (I such tadd any!). I hope these and all the comments on June 12, will influence 5HA to build alterrate 4.

a have some additional comments to make. In regard to the levels of service for alt of, doesn't it make sense that more traffic would retiline the Drew Ridge Food Therton interchange than projected? If tray on Dursay over to the VFW interchange is coing to be at a level of E, then more feegle world rise the order interchange which is frojected at only a level of A. One the high levels of service projections on Rt. 170 reflecting aid the traffic trying to get to Rt. 100? I assume that to be the Case. Therefore, to the volume of traffic taken into account when designing interchanges? The VFW interclange is not will designed fee that many autos. Isn't there some way of improving it to include more continuous flow, instead of ubilitying so many stop signs? If not the lare the ramps I fares?

are litemated? D'yrow the number of lives is taken into account, which confuses me even more for example, or PG I-4 Rt 450 hus 1,800 A.D.T. with Danes and is at a result of C. Wherein, on PMI-204 The Ridge Ridge

is projected to have 5,000 H.DT with I laws, and will be at a level of A. These would are similar in nature, I that soction of Thew Riches would remain as is, so why the discrepancy? There are others.

Does Flo do address sourcles for evenyone in the caridar? Because several people I spoke with didn't get a quen buichuse ahead of time. Were all the residents of Harman's Woods and Munson Heights notified? Because neither of those communities has an association. Is it possible for me to get a copy of the Transcript? I would like to have a list of all those who spoke including their addresses.

Thanks afort & hope to hear flow you soon Some Doth Toat Chanlery Ct. Hanner, MB 21016 760-3367.

- 1. At the meeting that Mr. Moon had in April with the Sandalwood Association, it was recognized that Alternate 4 could also utilize the Option B that Alternate 3 uses. Nowhere in the Draft Environmental Impact Impact Statement (DEIS) is this pointed out. There was low attendance at that meeting which did not give the State Highway Administration (SHA) or our local officials a good impression. As a result, those of us who did attend were concerned as to how the community actually felt. So, I canvassed the Sandalwood community on Saturday (June 7) with a petition. Over 1/2 of the residents were home. No one was in favor of Alternate 3, and I found widespread support for Alternate 4 with Option B. Here are the many signatures.
- 2. Alternate 4 has the least relocations of homes and businesses. It takes more farmland, but less that Alternate 3 in acres being actively used. Alternate 4 takes less woodland acres than Alternate 3, even with going through Patapsco State Park. It would cost less in right-of-way, relocation, and construction costs. It has less noise impacted sites than Alternate 3. Alternate 3 Option B affects the historic Smith Farm property, as well as, three archeological sites. Alternate 4 impacts no historical or archeological sites even utilizing Option B because of where the two would connect.
- 3. The least amount of stream crossings there are, the better the likelihood of not disrupting existing floodplain levels. Alternate 3 has more stream crossings, and takes almost 4 times as much floodplain acreage as Alternate 4. Alternate 4 also takes less wetland acreage which is essential as a buffer system to flood waters. Section 4, pages 38 & 39 of the EIS discuss all the problems associated with construction across and in floodplains. Our floodplain level is already in jeopardy. Between the builder's grading, and the dumpage of debris into the stream behind us, there is already a threat to Lemon Tree Ct. and Leeds Rd. The EIS also states that floodplain problems could increase flood stages upstream. These streets would be upstream of Alternate 3.
- The EIS states that Alternate 3 would "open a new corridor". That is not true. We currently have one east/west road. Alternate 3 would cul-de-sac Dorsey Rd., and still allow for just one east/west If Alternate 4 were constructed, there would be two uninterrupted thoroughfares that could be utilized. This really should be When one examines the projected levels of service, it becomes even more obvious. Levels of service measure the amount of traffic using a road. It goes from A to F with F being stand-still Currently, Dorsey Rd. is at a level of E. construction. Rt. 170 would be at levels of E and F, and so would part of Dorsey Rd. This makes no sense. With Alternate 4, more traffic would utilize the New Ridge Road Extension than they project, but with Alternate 3 the traffic would still be sitting in line waiting to get on Rt. 100. If Alternate 4 is built, both roads would be available for traffic to utilize. The EIS states that the aim of this project is "to relieve existing problems along major routes in the study area". Alternate 3 does not accomplish this goal at all.

- 5. The EIS states the "build alternates improve access to parks and keep the existing road network intact". Alternate 3 is a mess! It either cul-de-sacs, relocates or both, every local road it crosses but one (Queenstown Rd.). How is that keeping the existing road network intact? The EIS states also that "SHA finds 3B provides the needed service for transportation with minimal impacts to adjacent communities". Alternate 3 just squeezes by several existing communities. By Alternate 4 utilizing Option B, it would provide the least amount of unnecessary disruption.
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- 7. The Fire Department is not the only service affected. The Anne Arundel County Police Department submitted a letter to SHA favoring Alternate 4 over Alternate 3. The department is concerned with the "sub-dividing of present communities, which could result in an increase in response times to calls for service". Plus, Alternate 3 cul-de-sacs Harmans Rd. meaning a tremendous increase in traffic utilizing Ridge Chapel Road which is right in front of Harmans Elementary School.
- The airport also submitted a letter to SHA. It states that there are no potential problems with Alternate 3. but lists numerous reasons why Alternate 4 is bad. A major point is the New Ridge Rd. Extension interchange. They are concerned about automobile headlights affecting the departing aircraft at the existing Stoney Run Runway, as well as, the visibility of the planes being a safety problem for the drivers. Well, if you investigate Option B, it shows that these same problems could exist for the current Dorsey Rd. Runway and would be even worse if BWI built its proposed runway 15 L 33 R which would be east of the Dorsey Rd. Runway. But none of this is stated (in the BWI letter). I'm not trying to put down I'm just stating that the airport would like to make Alternate 4 look as bad as possible and Alternate 3 look wonderful. when in actuality, the airport has problems with both proposals because it wants to expand. Besides, we all currently travel down Dorsey Rd. with aircraft landing over us with no major safety

- 9. It is going to be tough getting Alternate 4 built through Patapsco State Park. However, if the Federal Highway Administration (FHA) had not considered it a viable alternate, then it would not have been studied in the first place. Now we only have to convince the Department of Natural Resources (DNR) and the Federal Department The state would be required to replace the parkland taken and the EIS states that a noise barrier is also feasible for the park. Plus, that section of the park is such rough terrain that it would be difficult for hikers to even utilize it. However, DNR insists that Alternate 4 would be a significant impact, therefore, we must appeal to the Federal Department of Interior. influence SHA enough to consider building Alternate 4, and they can't get past DNR permits, then we have got to go above DNR to the Interior Department. The Section 4(f) evaluation states that "no other feasible and prudent alternative" be available or parkland cannot be taken. We've got to insist that Alternate 3 is not feasible, but utterly ridiculous. I have the address for the Department of Interior, as well as some points to make in a letter to them if you would like to see me afterwards.
- 10. "The counties acknowledge the need to improve this traffic corridor to better serve expanded light industrial development and the associated truck traffic in the BWI Airport area." Alternate 4 provides excellent access for Landco, Friendship Airpark, BWI Commerce, and Baltimore Commons Industrial Parks. An access road from Alternate 4 to Race Rd. could be provided to accommodate Parkway Industrial if the state wanted to alleviate all the truck traffic. With Alternate 3 only Parkway Industrial truck traffic would be off of Dorsey Rd. Also, the EIS states that the "local businesses might experience some loss of activity under the build alternates since a large portion of the through traffic would be moved away from the Md. 176 corridor". Well, not only would that be a problem for businesses, but for all the existing traffic. Where would it go? Alternate 4 would cause less traffic tie-ups.
- 11. The EIS states that "the transportation goal of this project is to identify an alignment that adequately and safely accommodates the traffic needs of the study area". That alignment has been identified, and it is Alternate 4 with Option B! The document states (Page IV-12) that Alternate 4 allows "continued, uninterrupted access and travel for area residents", and that's what we want built!

The following people support the Alternate 4 Option alignment for the extension of Mc Route 100.

MAME Comie Both Lugarre Korgilis PADRESS ... 7527 (Jarberry Ct. 7521 CRANBERRY Ct. Danes & margaret Smith 7517 Cranberry Ct. Carol Lech 7513 Sabbran Court Tom Seil-Sandra Buckley Sent a Levat blander Leffind Swartzlander 2511 Saffran Court 7509 Saffron Sout 7505 Saffron Court 7505 Saffron Ct. 7506 Saffron Et. 7506 Saffron Et. Strolly of Haberta MM. Kalesko Lucia m. Echenaria 7500 Saffron CT Book ara Holmes 75/2 Suffron CF Raghe Shames 75/8 Cranberry of Home Phylus Willed William Both 7524 Cranberry Of 7526 Crawthely Cf 7527 Cientery CK Agnes Expsesselv Herris Hofmoster Garil C. Foundstore 7225 Chamberry CV 7523 Cronberry Ct. 1308 Strawberry Lone Susan Seelle 7512 Sandlewood CR My Sille E Four 7512 Sandlerand Ct 7510 Southwood CT

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The following people supposed the Alternate of Option B alignment For the extension of md. Poute 100. Alexander D. Brown 7504 ackermann Ct. Honores Me Blanda Brown 7504 ackermann Ct. Hanner Mc Party Ellen ayers 1505 ackermann & Hanover MI Hoven Ayers 7505 ackermann Ct Hanover MI Helbert Eldudge /2 1328 Craghell CT HANDLET ML There & Martin 1326 Crayfull of Various md.

Maria Melende 1324 Croghell Hanover mo
fore Melende 1324 CRAGHII, HANOVER, MA Maelere Mindell 1322 Ceaslis Ct. Hanger, Md. =1026 Alexander Harde 1318 Craighill CT, Hawover mo 21076 Martina W. Grothy 1316 Graphill Ct. Hanover MD 210th Frem to S lost 1316 Caphell Ct Hanover Md 218. Learne Cacques 1323 Crashell Ct. Marous New 218 Tickard Megues 1323 Crapill Co. Harver Mayor Marcia Breston 1302 Strawberry in Harove Md 2107 Styl of Brion. 1302 STRAWBERRY LA, HANDLER, MALLOSG Chament Lipscond 7525 CRANBERRY Ct, HANGUER, MD21076

Cheng A. Green Bray Ct Alanover MD21076

Clery T. Stepless 7528 Cranberry Ct, Hanner, Majore

Josep 7. Stepless 7528 Cranberry Ct, Hanner, Majore

Josep 7. Stephens 7528 Cranberry Ct, Hanner, Majore

1528 Cranberry Ct, Hanner, Majore

1528 Cranberry Ct, Hanner, Majore

1528 Cranberry Ct, Hanner MD21076

Connie L. Both
7527 Cranberry Court
Hanover, Maryland 21076
July 4, 1986

Governor Harry R. Hughes The State House -Annapolis, Maryland 21401

Dear Sir:

I am writing in regard to the proposed extension of Maryland Route 100. The State Highway Administration (SHA) had a Combined Location/ Design Public Hearing on June 12. 1986. At this hearing, it quickly became apparent that local support is overwhelmingly behind the construction of Alternate 4 with Option B. SHA's preferred alignment is Alternate 3 with Option B. I realize that your term in office is coming to a close, but I also realize that you are very concerned about important local issues. I hope that you will use your influence to help us in this matter. Our local representatives have not researched all of the ramifications of Alternate 3, and therefore have lent their support to its construction. Testimony at the hearing brought out facts that they were unaware of, and hopefully, the convincing evidence has swayed them to change their positions.

Alternate 4 has two obstacles. It would traverse Patapsco State Park and a corner of the BWI Airport property. Even so, as an environmentalist, I feel that the benefits of Alternate 4 far outweigh its negatives; throughout the entire alignment, Alternate 3 causes more environmental degradation than Alternate 4. I have enclosed the speech that I presented at the Public Hearing which highlights these impacts.

A major concern that I have come to realize (since speaking) is the "impact that Alternate 3 would cause to the Buckingham Forest Tree Nursery. It is the only reforestation nursery for the entire state of Maryland and is presently also supplying Delaware with sapplings. The nursery is ideal with rich floodplain soil, surrounding clear ponds, nearby wildlife populations, and good topography. The Department of Natural Resources (DNR) should be more concerned with the devastation caused by Alternate 3 than with Alternate 4. DNR stated that Alternate 4 would cause a significant impact to the park. However, I disagree. That particular section of Patapsco State Park is such rough terrain that it would be difficult for hikers to even utilize it. If Alternate 4 is built, the land would be replaced by SHA acre for acre with much better property. Plus, the Draft Environmental Impact Statement states that a noise barrier is feasible for the portion of the park crossed.

RECEIVED.

JUL 017 1986

EXEC. LIEPT.

534

BWI Airport claims that Alternate 4 would cause safety problems. However. I feel that any alignment that is constructed will cause the airport problems because of its desire to expand. Alternate 4 could be built below grade across the BWI property. This would allow for safe verhead air traffic - safer than currently exists on Dorsey Road (Route 176).

Aside from the environmental issues. Alternate 4 with Option B would allow for two uninterrupted thoroughfares. Whereas, Alternate 3 disrupts the entire local road network with numerous cul-de-sacs and relocations. including dead-ending Dorsey Road at Route 295. Alternate 4 would also allow Westinghouse traffic to access Route 100 directly via Stoney Run Road. This would further relieve traffic congestion on Dorsey Road.

Alternate 4 is a much more compatible alignment allowing for continued. uninterrupted access and travel for local and through traffic. It has the overwhelming support of local residents, as well as, businesses. Several businesses spoke at the Public Hearing against Alternate 3 and in favor of Alternate 4. SHA had sent them separate letters urging them to support Alternate 3, but they did not. For instance, the BWI Commerce Park supported Alternate 4, while the Parkway Industrial Center chose to point out all of the bad points of Alternates 2 and 3.

Please consider these points carefully and help us get the best possible road built. Alternate 4 with Option B appears the majority of those involved and also causes the least environmental damage.

Thank you for your kind attention to this matter, and I look forward to hearing from you.

Sincerely.

Connie L. Both

- 535
- 1. At the meeting that Mr. Moon had in April with the Samualwood Association, it was recognized that Alternate 4 could also utilize the Option B that Alternate 3 uses. Nowhere in the Draft Environmental Impact Impact Statement (DEIS) is this pointed out. There was low attendance at that meeting which did not give the State Highway Administration (SHA) or our local officials a good impression. As a result, those of us who did attend were concerned as to how the community actually felt. So, I canvassed the Sandalwood community on Saturday with a petition. Over 1/2 of the residents were home. No one was in favor of Alternate 3, and I found widespread support for Alternate 4 with Option B. Here are the many signatures.
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- The airport also submitted a letter to SHA. It states that there are no potential problems with Alt. 3. but lists numerous reasons why Alt. 4 is bad. A major point is the New Ridge Rd. Extension interchange. They are concerned about automobile headlights affecting the departing aircraft at the existing Stoney Run Runway, as well as, the visibility of the planes being a safety problem for the drivers. Well, if you investigate Option B, it shows that these same problems could exist for the current Dorsey Rd. Runway and would be even worse if BWI built its proposed runway 15 L 33 R which would be east of the Dorsey Rd. Runway. But none of this is stated (in the BWI letter). I'm not trying to put down Option B. I'm just stating that the airport would like to make Alt. 4 look as bad as possible and Alt. 3 look wonderful, when in actuality, the airport has problems with both proposals because it wants to expand. Besides, we all currently travel down Dorsey Rd. with aircraft landing over us with no major safety problems.

1025q

It is going to be tough getting Alt. 4 built through Patapsco State Park. However, if the Pederal Highway Administration (PHA) had not considered it a viable alternate, then it would not have. been studied in the first place. Now we only have to convince the Department of Natural Resources (DNR) and the Federal Department of Interior. The state would be required to replace the parkland take and the BIS states that a noise barrier is also feasible for the park. Plus, that section of the park is such rough terrain that it would be difficult for hikers to even utilize it. However, DNR insists that Alt. 4 would be a significant impact, therefore, we must appeal to the Pederal Department of Interior. If we influence SHA enough to consider building Alt. 4. and they can't get past DNR permits, then we have got to go above DNR to the Interior Department. The Section 4(f) evaluation states that "no other feasible and prudent alternative" be available or parkland cannot be taken. We've got to insist that Alt. 3 is not feasible, but utterly ridiculous. I have the address for the Department of Interior, as well as some points to make in a letter to them if you would like to

10. "The counties acknowledge the need to improve this traffic corridor to better serve expanded light industrial development and the associated truck traffic in the BWI Airport area." Alt. 4 provides excellent access for Landco, Priendship Airpark, BWI Commerce, and Baltimore Commons Industrial Parks. 'An access road from Alt. 4 to Race Rd. could be provided to accommodate Parkway Industrial if the state wanted to alleviate all the truck traffic. Dorsey Rd. Also, the EIS states that the "local businesses might large portion of the through traffic would be moved away from the businesses, but for all the existing traffic. Where would it go? Alt. 4 would cause less traffic tie-ups.

11. The EIS states that "the transportation goal of this project is to identify an alignment that adequately and safely accommodates the traffic needs of the study area". That alignment has been identified, and it is Alt. 4 with Option B! The document states (Page IV-12) that Alt. 4 allows "continued, uninterrupted access and travel for area residents", and that's what we want built!

10259

The following people support the Alternate 4 Option alignment for the extension of net. Route 100. MAME Comie Both 7527 (Lowberry Ct. - Tupone Konglins 7521 CRANBERRY Ct. --- Jones & margaret Smith 7517 Cranberry Ct. .- Carol Sect 7513 . Sa 66m - Court -Jon Seil-Sandin Buckley 751 Saffra Court

John Dieself 7509 Saffra Court

Just Revalt Courte 7505 Saffra Court

Just La Winder 7505 Saffra Cf.

MM. K. Delesko 7506 Saffra Cf.

Jusia M. E. chenaria 7500 Saffra Cf. Roodson Holmes 75/2 Suffer C+ Rash Stan --- 75 K /affron C+ 7518 Carling of Blom P. Sikler 7524 Cranlery Cf. 7526 Crawtury Cf. Willian Both 7527 Culy CK Cyreo Fiscond Henris Hisporta 7225 Crankery C. 7523 Cranberry Ct. 1310 Strawley In _ _ Carol C. Pourdetire 1308 Strawberry Lane Susan Leille 7512 Sandlewood CK Ky Sille & four 7512 Soudlerad CX 17510 Sallwood CT.

The following people support the Alternate 4 Option B alignment for the extension of Md. Route 100. ADDRESS Bell I de Poole Food Sondalwood of Kinde Landed . FI handsluck 10EP Calind & Femile 7501 SANDLEWOLD CT. Mary Zaletakus 7503 Sandburrd Ct. 7503 Southementet. C.E. Oldanus. 7505 Sandlewood Cit. Marcy Hlenn 7509 Sandelweed Ct. 7509 Sondalwood Q. Teresa Fowley TWENDOLIN MONROE-SURLES 1507 SANDLEWOOD 68. allonse Sules 1509 Sandleword Crust The Range 7522 Sinch free Ct. 7524 feron. True & : James & Florer & 7532 Famon Tree CF Margene M. Moch 7532 Lemon Tree CF Mark R. Kircheval 7533 Leman Tree Ct Get (ishinhu 7533 homen The Ct. 753, LemonTue Ch Laver Stake Gat Brokingh 7529 Lemontree Ct Verty Xucas 1500 STLAWberry Lane: Skantflores Vimala Peddiszti 1303 Strawlerry Jane 7500 Ackeman Ct. Hay 2508 Askermena CT HANGUSZ

. :. . The following people supposed the Alternated Option B alignment For the extension of Md. Poute 100. Algorida D. Brown 7504 ackermen Ct. Harrive Me Blanda Brown. 7504 Clckermann Ct. Hunner Mc Olety Ellen ayers 1505 ackermann Cl. Thrown MA Lillest Eldudgs fr 1328 Carglill CT HANDET MI There & Mate 1326 Crayfill of Variety and.

Morna MElender 1324 Crayfull - Harrow mp.

More Melende 1324 CRAGHII, HANOVER, MD. Mbelere Mindell 1322 Ceaslie Ct. Hanacer, Nid. 21070 allefander Harder 1319 Craighill CT, Handoer MD 21576. Martina W. Grofty 1316 Gaiglill Ct. Hanover, MD 21076 Jennes A lot 1316 lieghell Cf Hancie, Mel 210 Lianne licque 1323 Crachill Ct. Steron, 7.6 20 Tichard Regues 1323 Crapbill Co. Shinever hill dies - 18 Kucia Breston 1302 Strawberry Un Houve-Md 210-- Style of Bream. 1302 STRAWBERKY LIS, HANDER, MANSON Chromothe Land Took CRANBERRY CH, HANDUR, MOSINGE Ching St. Hescand 7525 Cranberry Ct Alanow Moso Lessy J. Steples 7528 Cranberry Ct, Klainer, Whole Joseph 7. Steples 7528 Cranberry Ct, Klainer, Whole Joseph 7. Steples 7528 Cranberry Ct, Hower Mb 21076

VI-219



Maryland Department of Transportation

State Highway Administration

AUG 0 7 1986

William K. Hellmann Secretary

Hal Kassoff Administrator

RE: Contract No. AA 682-101-570

Maryland Route 100

I-95 to Maryland Route 3 1-970

PDMS No. 022007

PROJECT
EVELOPMENT
DIVISION

B 2 33 PN '81

Ms. Connie L. Both 7527 Cranberry Road Hanover, Maryland 21076

Dear Ms. Both:

This is in response to your letter of July 2, 1986 to Senator Paul Sarbanes concerning the proposed construction of Maryland Route 100 from I-95 to Maryland Route 3. Senator Sarbanes forwarded your letter to my office and asked that I reply directly to you.

I want to assure you that your support of Alternate 4, combined with Option 3-B, for the construction of Maryland Route 100 has been noted and that your letter and the testimony you presented at the public hearing will be considered along with all other comments received. We are currently reviewing all comments received as a result of the June 12, 1986 public hearing and from the circulation of the Draft Environmental Impact Statement. A final decision will not be made until all comments have been evaluated. The minimization of impacts to homes and communities will be an important consideration when making the final decision. We appreciate your input in this matter.

Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

> Hal Kassoff Administrator

HK: bh

cc: Senator Paul S. Sarbanes

Mr. Neil J. Pedersen Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon Mr. James T. Johnson

Note: For additional response, see page VI-221

My telephone number is 659-1111

Response to letters from Connie Both, the transcript of her testimony given at the Public Hearing and a letter dated July 4, 1986.

The selected alternate, Aiternate 3B (Modified), was chosen over a combination of Alternate 4 with Aiternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and plan-Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate. Aiternate 3B (Modified), includes several provisions for maintaining traffic on the local road network. Include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B.& A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. The project will be designed in accordance with current Water Resources Administration and State Highway Administration criteria which requires that the construction results in no significant increase in the 100-year floodplain.

parkway center

PARKWAY INDUSTRIAL CENTER 7223 PARKWAY DRIVE, SUITE 209 DORSEY, MD. 21076 (301) 796-4446/ WASH. 621-2850 ELN TELEX: 910-350-1615

Mr. Neil J. Pedersen, Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, Md. 21203

Dear Mr. Pedersen,

REPLY TO: P.O. BOX 8754 BALTIMORE, MARYLAND 21240 - 0754

June 26, 1986

DEVELOPMENT DIVISION JUN 27 11 26 MM '86

I met with Mr. Ron Moon on June 23, 1986 in reference to State Highway Administration's 2 options to link Routes 103 (Meadowridge Road) and 176 (Dorsey Road) pertaining to Maryland Route 100.

As the developer of Dorsey Business Center I feel it would be beneficial for the State of Maryland to consider linking these 2 roads at the entrance of our new park. Your original designs were predicated on our property maintaining its old character, a speedway. As you know we are developing an excess of 600,000 sq. ft. of office space at this location. Due to the change in land use, I am requesting the cooperation of your office to work with us on this matter.

Your office should be in receipt of our traffic study for Dorsey Business Center. Mr. Moon is in favor of my company looking into this matter. I will generate a traffic study by Greenhorne & O'Mara, Inc. to look at my development's impact on your 2 options.

I am of the understanding that you are approximately 2 weeks away from deciding on one of the two options. I am hopeful you can delay that decision until the results of my traffic study are in. At that time I would like to further discuss this matter with you, in person.

I look forward to working with you on this project.

incerely yours

Mark Levy Project Manager

Dorsey Business Center

cc: Mr. Ron Moon v

ML:ts



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary

Hal Kassoff

July 31, 1986

RE: Contract No. AA 682-101-572

Maryland Route 100

I-95 to Maryland Route 3 (I-97)

PDMS No. 022007

Mr. Mark Levy Project Manager Dorsey Business Center P.O. Box 8754 Baltimore, Maryland 21240-0754

Dear Mr. Levy:

This is in reference to your letter of June 26, 1986 concerning the proposed relocation of Maryland Route 176 (Dorsey Road) in the vicinity of the Dorsey Business Center. Your request to modify the options being considered for this relocation, so as to provide a direct connection between Maryland Route 103 and the entrance to the business park, has been taken under advisement and will be investigated during the further development of the project.

I would like to thank you for your interest in this project and for your desire to develop a design for the relocation of Dorsey Road that would be mutually beneficial and in the best interests of both the State Highway Administration and the Dorsey Business Center. We look forward to receiving the results of your traffic study and will advise you of any decisions that are made. However, at this point in time I do not anticipate a final decision being made on either Maryland Route 100 or this section of Dorsey Road for several weeks.

Should you like to discuss this matter further, or if you should need additional information, please let me know.

Very truly yours,

neil & Rederin

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

NJP:ss

cc: Mr. E. H. Meehan

Mr. G. R. Straub

Mr. L. H. Ege, Jr.

Mr. R. E. Moon

Mr. J. T. Johnson .

Note: For additional response, see page VI-228

My telephone number is 659-1110

SIBREA & BLOOM

ATTORNEYS AT LAW 208 W. PENNSYLVANIA AVENUE TOWSON, MARYLAND 21204

JOHN E. SIBREA MILLARD D. BLOOM

SUSAN L. MacDONALD

June 27, 1986

DEVELOPMENT BEVELOPMENT BOIVISION JUNES 3 12 PM '86

Mr. Neil J. Pederson, Director
Office of Planning & Preliminary Engineering
State Highway Administration
707 North Calvert Street
Baltimore, Maryland 21202

RE: Contract No. AA 682-101-570 PDMS No. 022007 Md. Rte. 100 I-95 to Md. Rte. 3 (I-97)

Dear Mr. Pederson:

Kindly be advised that this office represents the owners of fee simple property, consisting of approximately one and one-half acres, improved by several buildings, and situated at 6748 Dorsey Road, in Howard County.

According to the proposals, presently before the State Highway Administration, Rte. 100 will be extended from Rte. 95 to Rte. 3, thus causing Rte 176 (Dorsey Road) to be closed at the intersection with Rte. 1

Our clients presently lease the aforementiond land and buildings to a R.V. dealership, R.V. Unlimited, Inc., which requires public exposure to induce the sales and service of R.V. motorhomes, trailers and camping equipment. That the tenants have advised the owners that they will not renew the lease or exercise their option to purchase the property as the change of the traffic pattern will greatly damage their business.

Although our clients are opposed to the pending proposal, they recognize that the extension of Rte. 100 will in fact be accomplished. Therefore, it is our request that the extension be accomplished doing the minimal damage to our clients and perhaps saving the State of Maryland additional expenses.

I call your attention to pages 20 & 21 in the green book distributed at the public hearing held on June 12, 1986. Alternate 2 & Alternate 3 show the proposed blocking of Rte. 1 and further establish the relocation

of Rte. 176 (Dorsey Road) beginning opposite the intersection of Md. Rte. 103 (Meadowridge Road) and U.S. Rte. 1 as fully described in the green book on page 13, 3rd paragraph under sub-title "Alternate 2 - Urban Arterial".

We are proposing that the "Option" road be considered rather than the present designated road which would tie into Md. Rte. 176 near Magnolia Avenue. After reviewing the site and the plans we believe the "option" road is mere feasible for the following reasons:

- 1. It would allow the "option" road to exit onto Rte. 176, to the left of clients' property routing traffic in front of the property rather than to the rear of the property as proposed by the original plan.
- 2. That the construction of the "option" road is much shorter in length than the proposed road. Considerably reducing the building costs.
- 3. That the "option" road would run parallel to Rte. 1 allowing it be a service road, if necessary.
- 4. That it is our understanding there are no buildings in the path of the "option" road which would have to be purchased or condemned while the proposed road would require the razing of at least three houses.

We believe that it would be to the best interests of both the State of Maryland, Howard County, and our clients that the "option" road be given primary consideration in your final plans.

Because of the importance of this matter to both our clients and their tenants, we respectively request an opportunity to meet with you or your Representative at your earliest convenience in order that we can further discuss the ramifications of the existing proposals.

I would appreciate a prompt response in order that appropriate action can be initiated to best protect our clients' interests.

Thanking you for your kindest consideration, I remain

MILLARD D. BLOOM

Very truly

- c/c Mr. Gene R. Straub
 Acting District Engineer, District #7
 State Highway Administration
 P.O. Box 308
 5111 Breckeystown Pike
 Frederick, Maryland 21701
- c/c Mr. Ronald E. Moon
 Project Manager
 Project Development Division
 State Highway Administration
 707 N. Calvert Street
 Baltimore, Maryland 21202
- c/c Mr. James T. Johnson Vice President Century Engineering, Inc. 32 West Road Towson, Maryland 21204



Maryland Department of Transportation

State Highway Administration

July 16, 1986

William K. Heilmann Secretary

Hai Kassoff Administrator

RE: Contract No. AA 682-101-570 Maryland Route 100

Interstate Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. Millard D. Bloom SIBREA & BLOOM Attorneys-at-Law 208 W. Pennsylvania Avenue Towson, Maryland 21204

Dear Mr. Bloom:

This is in reference to your letter of June 27, 1986 expressing the concerns of your clients as to the effects of the proposed relocation of Maryland Route 176 on their property and business situated at 6748 Dorsey Road in Howard County.

We appreciate your views and have noted your preference for an option that would best serve the needs of your clients. I want to assure you that every consideration will be given to your recommendations in the selection of an alternate for the relocation of Maryland Route 176; however, a decision will not be made until all comments received during and subsequent to the Public Hearing have been evaluated.

Thank you for writing and letting us know of your concerns. Your letter will be made a part of the official project record and will be entered into the Public Hearing transcript. You indicated in your letter that you would like to meet to discuss the ramifications of the proposals for the relocation of Maryland Route 176. I agree with your assessment of the importance of this matter and believe that such a meeting would be mutually beneficial to both your clients and the State Highway Administration. You may arrange a meeting by calling either my office, at 659-1110, or the Project Manager, Mr. Ronald E. Moon, at 659-1106.

Very truly yours,

Neil & Yedesen

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

Note: For additional response, see page VI-228

NJP:tlh

cc: Mr. E. H. Meehan

Mr. L. H. Ege, Jr.

Mr. R. E. Moon Mr. J. T. Johnson

My telephone number is 659-1110

Teletypewriter for Impaired Hearing or Speech
383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

Additional response to letters from:

Mark Levy, dated June 26, 1986 Miliard D. Bioom, dated June 27, 1986

Under the selected alternate, Alternate 3B (Modified), an adjustment to the 'Option' for relocating Dorsey Road at U.S. Route 1 has been chosen (see Figure 11-27).

parkway center

PARKWAY INDUSTRIAL CENTER 7223 PARKWAY DRIVE, SUITE 209 DORSEY, MD. 21076 (301) 796-4446/ WASH. 621-2850 ELN TELEX: 910-350-1615 REPLY TO: P.O. BOX 8754 BALTIMORE, MARYLAND 21240 - 0754

June 24, 1986

Mr. Ronald E. Moon State Highway Administration 707 North Calvert St. P. O. Box 717 Baltimore, Maryland 21203-0717

Re: Route 100 @ Parkway Industrial Center

Dear Mr. Moon:

This letter will serve as a clarification of Parkway Center's recent testimony at Andover High School regarding the development of Route 100 and its impact upon our tenants and our company. As the representative of 40 companies, with more than 5,000 employees, we are understandably concerned that the State Highway Administration is aware of our concerns regarding future access to Parkway Industrial Center.

The advent of Route 100 is something which we have been waiting for since 1965. It was apparent then, and more so now, that an east west corridor would be necessary for the area to prosper, and we supported all efforts to have the highway constructed, and to that effect dedicated land to the State of Maryland for the proposed interchange at Maryland 295 and Maryland 176. Maryland Route 100, however, was not constructed, and Parkway continued to develop.

In 1980, we acquired and developed Parkway Center II, and in the process spent \$150,000 on road and signal improvements at the intersection of Parkway Drive and Dorsey Road. These added improvements allowed us to develop Parkway Center II into the premier high-tech office park in Anne Arundel County. Our concept for the development evolved from the existing road patterns. These conditions provided our office tenants with the convenience of immediate access to the Baltimore-Washington Parkway, and to the major "generators" North and South. Additionally, the road patterns enabled us to attract Red Roof Inn, a McDonalds Restaurant, and to develop a retail service center.

VI-229
National Association of Industrial and Office Parks

Page 2

June 26, 1986

These retail developments were undertaken for 2 reasons; our tenants consistently requested the services, and the road patterns allowed for the traffic flows necessary for their successful operation. All of these retail businesses have exceeded their sales projections, and all would be irreparably harmed if the current road patterns were altered.

The harm to Parkway Center's operations would also be significant. Our tenants perception that the now convenient access would be altered to a pattern which is markedly less convenient, would deter the larger expansions many of our tenants are planning. This perception of a less convenient road pattern, although slight in the layman's eyes, is often the most significant factor in a Fortune 500 company's location decision. For this reason it's importance cannot be overstated.

However, having said this, Parkway continues to believe that the development of Route 100 is a needed and important highway project. We believe that its development would be an important step in the future of the Greater BWI Area.

Realizing its importance, we decided at our expense to employ Whitman, Requardt and Assoc. to investigate the impact of the alternative alignments on Parkway Industrial Center's existing access.

Initially Whitman reviewed the Alternative 3-B. Various concepts for exiting and entering Parkway I & II were explored. Throughout this process it became apparent that a connection between the two parks was essential, and that a more convenient "service" road into Parkway II should be evaluated. The enclosed plans are meant to illustrate our current thinking in regards to the 3-B Alternative. If this alternative is selected, we would like the opportunity to further refine this design.

Page 3

June 26, 1986

Whitman also has investigated Alternative-4. We did not develop any drawings for this plan when it became apparent that this alternative would provide Parkway Center with the best access of all alternatives shown, and would not require any re-design. For this reason Alternative-4 is Parkway Center's preferred alignment.

Parkway is interested in seeing the development of the Route 100 project proceed. We believe we have addressed our concerns regarding the importance we attach to the current access we now enjoy. As we have stated, any change to the existing configuration must be measured against the ideal interchange we have now. We believe suitable solutions can be designed and only request that these solutions be given proper consideration.

Sincerely,

PARKWAY INDUSTRIAL CENTER

General Partner

H. Beard - Whitman Requardt

H.Kassof, SHA Administrator

B. Hellman, Secretary of Transportation Curtis Warren - Deep Run Civic Assoc. Jim Hodges - Deep Run Civic Assoc.

T. Sophocleus, Anne Arundel County Council

B. Athey, Md. Senate, 32nd Legislative District M. Wagner, Md. Senate, 32nd Legislative District

VACEN J. HADDAWAY

THOMAS R. SILCOX

ROBERT W. LONG

HARRY C. MACKAY

ROBERT B. NAENY

EOWARO A. SERP FRANK H. TIGHE, JR. JAMES A. AVIRETT, JR.

RICHARO J. KANE

PHILLIP LEE
WILLIAM A. DELOACHE
THOMAS M. SMITH
G. STUART MENZIES

BEVERLY M. JOHNSON

DONALO E. KLINGLER

JAMES O. ARMACOST, II

HARRY B. BEARD, JR. CHARLES W. DEAKYNE

WHITMAN, REQUARDT AND ASSOCIATES

Sngineers

EZRA 8. WHITMAN, 1963 GUSTAV J. REQUARDT, 1978

2315 SAINT PAUL STREET BALTIMORE, MARYLAND 21218

(301) 235-3450

KENNETH A. McCORD THOMAS J. SHAFER JOHN B. GILLETT J. DONALD PAULUS CHARLES R. LORTZ JOHN S. MAYNES

July 3, 1986

Mr. Ronald E. Moon State Highway Administration 707 North Calvert Street P. O. Box 717 Baltimore, Maryland 21203-0717

Re: Route 100 @ Parkway Industrial Center

Dear Mr. Moon:

Enclosed are four (4) copies of the "Parkway Center Proposal for Adjustments to Route 100 Alternate 3-B" Plan with revised date of July 3, 1986 to be attached to the letter to you dated June 24, 1986, from Mr. Leslie Legum of the Parkway Industrial Center.

If you have any questions, please contact us.

Very truly yours,

WHITMAN, REQUARDT and ASSOCIATES

Harry B. Beard W.O. #40221

cc: Mr. Legum
Mr. Minshall

VI-232



STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING TRACT No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

Please delete my/our name(s) from the Mailing List.

I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

The First National Bank of Maryland Abram J. Kronsberg, Vice President NAME Corporate Facilities Division PLEASE ADDRESS P.O. Box 1596 ; BANC 102-191 PRINT CITY/TOWN Baltimore STATE Maryland ZIP CODE-21203 I/We wish to comment or inquire about the following aspects of this project: VI-233 Please add my/out name(s) to the Mailing List.*

have received a copy of this brochure through the mail are already

First National Bank of Maryland wishes to submit the following testimony regarding the proposed location/design of Maryland Route 100:

- 1. A number of legitimate concerns have been raised by various groups regarding the alternates proposed by MDOT/SHA; every alternate will in some way have a negative impact on the community. However, one alternate <u>must</u> be selected. To accept the no-build alternative would be to condemn the business and residential interests in this area to continued failing intersections, increased safety problems, and limited development opportunities inconsistent with the objectives of general plans adopted by the affected counties.
- 2. Of the remaining alternates, the most desirable is the one that will promote:
 - accessibility of commercial/industrial properties,
 - visibility of commercial/industrial properties;
 - freedom of turning novements; and
 - enhancement of through traffic movements and volumes.

The alternate that best achieves these objectives is Alternate 3, as modified by a proposal submitted by Mr. Minshall of the Parkway Industrial Center.

3. Alternate 4 diverts much of the main flow of traffic away from the commercial/industrial development along Rt. 176 (which development depends on accessibility/visibility) without a significant improvement in the levels of service in that area. Alternate 2 comes closer to maximizing opportunities within the corridor, but the proposal for a straight at-grade intersection at Race Road near the Parkway Industrial Center fails to consider the stressed levels of service such an

intersection will experience, particularly at peak hours. Turning movements will be at risk and safety could deteriorate below current levels due to the need to cross an upgraded multilane facility such as Rt. 100 will be.

Alternate 3 is the best alternate, with one enhancement. As Mr. Minshall proposes, a bridge should be constructed at Parkway Drive and Rt. 100 to allow freedom of movement between the north and south sides of $_{
m c}$ the Parkway Industrial Center. This center was designed, marketed and built as an intergrated facility. Certainly, First National Bank depends heavily on business generated from the entire Center, as well as the community at large. Without a bridge at Parkway Drive and Rt. 100, Rt. 100 will constitute a barrier that will impair business. Additionally, a bridge will facilitate the through (north-south) movement of traffic in the Center instead of forcing such traffic to gerrymander its way through various intersections and interchanges. More direct access between the north and south sides of the Center will promote greater safety (fewer intersections and interchanges to negotiate) and will reduce the volumes such intersections and interchanges will be forced to initially carry, potentially adding to their design life.

THE FIRST NATIONAL BANK OF MARYLAND

Vice President

Date: July 7, 1986



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

TOT I was

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 (Interstate Route 97)

PDMS No. 022007

Mr. Abram J. Kronsberg Vice President The First National Bank of Maryland Corporate Facilities Division P.O. Box 1596; BANC 102-191 Baltimore, Maryland 21203

Dear Mr. Kronsberg:

This is to acknowledge receipt of your letter regarding the proposed location/design of Maryland Route 100. The testimony submitted by the First National Bank of Maryland will be entered into the public hearing transcript and will become a part of the official project record.

We appreciate the support of the bank for the project and want to assure you that your comments will be considered before a final decision is made concerning the project. You will be advised of the decision made by the State Highway Administration and kept aware of future developments via the project mailing list.

Very truly yours,

neil & Pederson

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

NJP:ss

cc: Mr. Edward H. Meehan

Mr. Louis H. Ege, Jr.

√Mr. Ronald E. Moon

Mr. James T. Johnson, Sr.

558

Response to letters from:

Lesile Legum, dated June 24, 1986 Harry B. Beard, dated July 3, 1986 Abram J. Kronsberg, dated July 7, 1986

Several meetings have been held with representatives of Parkway industrial Center concerning the impacts of the project. As a result of this coordination, Alternate 38 (Modified) includes a standard diamond interchange at Race Road and an alignment shift just west of MD. Route 295.

RECEIVED

JUN 2 1986

LOF INVESTMENTION

7870 QUARTERFIELD ROAD SEVERN, MARYLAND 21144 MAY 24, 1986

MR. WILLIAM K. HELLMAN, SECRETARY
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
P.O. BOX 717
BALTIMORE, MARYLAND 21203-0717

RE . ROUTE 100'S IMPACT UPON THE QUEENSTOWN COMMUNITY

DEAR MR. HELLMAN:

'TRUTH STOOD ON ONE SIDE AND EASE ON THE OTHER; IT HAS OFTEN BEEN SO.'' WAS IT JUST SIMPLER TO DESTROY THE SINGLE BLACK COMMUNITY THAN TO DISCOMFORT THE OTHERS? IT SEEMS SO. AND IF NOT, YOU HAVE FAILED YOUR RESPONSIBILITY FOR YOU, AS A PUBLIC OFFICIAL, MUST AVOID NOT ONLY THE UGLY FACT BUT ALSO THE SUSPECT APPEARANCE.

SINCERELY

NANCY W. GIST

CC: T. ATHEY, M. WAGNER



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary Hal Kassoff Administrator

JUN 2 4 1986

Ms. Nancy W. Gist 7870 Quarterfield Road Severn, Maryland 21144

Dear Ms. Gist:

This is in response to your letter of May 24, 1986 to Secretary Hellmann.

The State Highway Administration has had several meetings with the Queenstown community and has developed an alternate that avoids disruption to most of the community. This alternate, 3B, was presented at the Public Hearing recently held on June 12, 1986, along with several other options.

All comments received at the hearing and as a result of the circulation of the Draft Environmental Impact Statement will be considered before any final decision is made.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

> Hal Kassoff Administrator

HK:bh

cc: Mr. Neil J. Pedersen Louis H. Ege, Jr.

Ms. Angela B. Hawkins

Note: For additional response, see page VI-260

Mary E. Gaither 503 Queenstown Road Severn, MD 21144

MR. WILLIAM K. HELLMAN. SECRETARY
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
P.O. BOX 717
BALTIMORE. MARYLAND 21203-0717

RE: ROUTE 100'S IMPACT UPON THE QUEENSTOWN COMMUNITY

DEAR MR. HELLMAN:

I HAVE TO ASK, TO WONDER, AND TO PRAY ABOUT A PUBLIC AGENCY THAT WOULD ALLOW FORTY TO SIXTY MINUTES OF DAILY WEEKDAY TRAFFIC TO DESTROY A COMMUNITY THAT HAS STOOD SINCE THE BEGINNING OF THE CENTURY. I DO NOT WANT TO MOVE, AND I WILL DO EVERYTHING PRACTICAL AND POSSIBLE NOT TO MOVE. ROUTE 100 CANNOT BE MORE IMPORTANT THAN MY COMMUNITY, MY HOME, MY FAMILY.

SINCERELY,

MARY GAITHER

CC: T. ATHEY, M. WAGNER

RECEIVED

JUN 2 1986

DE BRUTE CREATION

William K. Heilmann Secretary Hal Kassoff Administrator

JUN 2 4 1986

Ms. Mary E. Gaither 503 Queenstown Road Severn, Maryland 21144

Dear Ms. Gaither:

This is in response to your letter to Secretary Hellmann.

The State Highway Administration has had several meetings with the Queenstown community and has developed an alternate that avoids disruption to most of the community. This alternate, 3B, was presented at the Public Hearing recently held on June 12, 1986, along with several other options.

All comments received at the hearing and as a result of the circulation of the Draft Environmental Impact Statement will be considered before any final decision is made.

Sincerely,

ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:bh

cc: Mr. Neil J. Pedersen

Wr. Louis H. Ege, Jr. Ms. Angela B. Hawkins

Note: For additional response, see page VI-260

416 QUEENSTOWN ROAD SEVERN, MARYLAND 21144 MAY 24, 1986

MR. WILLIAM K. HELLMAN, SECRETARY
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
P.O. BOX 717
BALTIMORE, MARYLAND 21203-0717

RE: ROUTE 100'S IMPACT UPON THE QUEENSTOWN COMMUNITY

DEAR MR. HELLMAN:

I QUESTION A MOVE THAT WREAKS HAVOC UPON ONE COMMUNITY--A BLACK COMMUNITY--AND LEAVES NON-BLACK COMMUNITIES UNSCATHED, UNTOUCHED, VIRTUALLY UNDISTURBED. THE ROUTE 100 PROJECT WREAKS NOT ONLY HAVOC--IT REEKS RACISM.

SINCERELY,

SYLVIA GARRISON

CC: T. ATHEY, M. WAGNER

RECEIVED

MAY 29 1985

SECRETARY DE TRANSPORTATION

STATE HWY ADM

2 JIN 86 2: 45

The preceeding form letter was also received from:

Bertha Clark, dated May 24, 1986 Clifton Galther, dated May 24, 1986



William K. Hellmann Secretary Hal Kassoff Administrator

JUN 19 1986

Ms. Sylvia Garrison 416 Queenstown Road Severn, Maryland 21144

Dear Ms. Garrison:

This is in response to your letter of May 24, 1986 to Secretary Hellmann.

The State Highway Administration has had several meetings with the Queenstown community and has developed an alternate that avoids disruption to most of the community. This alternate, 3B, was presented at the Public Hearing recently held on June 12, 1986, along with several other options.

All comments received at the hearing and as a result of the circulation of the Draft Environmental Impact Statement will be considered before any final decision is made.

> Sincerely ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:bh

cc: Mr. Neil J. Pedersen

Mr. Louis H. Ege, Jr. Ms. Angela B. Hawkins

Note: For additional response, see page VI-260

VI-244

My telephone number is 659-1111

The preceeding response was also sent to:

Bertha Clark 719 Queenstown Road Severn, Maryland 21144

Clifton Galther 503 Queenstown Road Severn, MD 21144

JUN 2 198F

OF THE PERSON

768 QUEENSTOWN ROAD SEVERN, MARYLAND 21144 MAY 24, 1986

MR. WILLIAM K. HELLMAN, SECRETARY
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
P.O. BOX 717
BALTIMORE, MARYLAND 21203-0717

RE: ROUTE 100°S IMPACT UPON THE QUEENSTOWN COMMUNITY

DEAR MR. HELLMAN:

HOW CAN A ROAD GO HAPPILY ALONG SKIPPING FIRST ONE COMMUNITY, THEN ANOTHER, AND THEN INVEIGLE ITSELF THROUGH ONE LONE, BLACK EIGHTY-YEAR-OLD COMMUNITY? THE EFFORT MADE NO ATTEMPT AT SUBTLETY: AT FIRST IT WAS THE CHURCH. THEN IT WAS TWOSCORE HOUSES. THEN IT WAS A LITTLE THIS (THE CHURCH'S PARKING LOT) AND A LITTLE THAT--ANYTHING AND EVERYTHING TO WIPE OUT QUEENSTOWN. IT SEEMS THAT A FOOTNOTE TO THE ROUTE 100 PROJECT IS "GET QUEENSTOWN!"

CC: T. ATHEY, M. WAGNER

The preceeding form letter was also received from:

Josle E. Warren, dated May 24, 1986 Ralph Robinson, dataed May 24, 1986 Verdella Parker, dated May 24, 1986 Sandora Bouyer, dated May 24, 1986

William K. Heilmann Secretary Hal Kassoff Administrator

JUN 2 4 1986

Mr. Melvin L. Kelly 768 Queenstown Road Severn, Maryland 21144

Dear Mr. Kelly:

This is in response to your letter of May 24, 1986 to Secretary Hellmann.

The State Highway Administration has had several meetings with the Queenstown community and has developed an alternate that avoids disruption to most of the community. This alternate, 3B, was presented at the Public Hearing recently held on June 12, 1986, along with several other options.

All comments received at the hearing and as a result of the circulation of the Draft Environmental Impact Statement will be considered before any final decision is made.

Sincerely,
ORIGINAL SIGNED BY
HAL KASSOFF

Hal Kassoff Administrator

HK:bh

cc: Mr. Neil J. Pedersen
Mr. Louis H. Ege, Jr.
Ms. Angela B. Hawkins

Note: For additional response, see page VI-260

VI-248

My telephone number is 659-1111

The preceding response was also sent to:

Josie E. Warren 7637 Old Telegraph Road Severn, Maryland 21144

Raiph Robinson 825 Queenstown Road Severn, Maryland 21144

Verdella Parker 811 Queenstown Road Severn, Maryland 21144

Sandora Bouyer 810 Queenstown Road Severn, Maryland 21144

JUN 2 198F

OF THE PERSON

782 QUEENSTOWN ROAD SEVERN, MARYLAND 21144 MAY 24, 1986

MR. WILLIAM K. HELLMAN. SECRETARY
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
P.O. BOX 717
BALTIMORE, MARYLAND 21203-0717

RE: ROUTE 100'S IMPACT UPON THE QUEENSTOWN COMMUNITY

DEAR MR. HELLMAN:

I KNOW I OPERATE WITHIN A MOBILE SOCIETY. RECENTLY, I LEARNED THAT I ALSO AM OPERATED BY A MOBILE SOCIETY. ROUTE 100 HAS DECIDED NOT ONLY WHERE I SHOULD LIVE BUT WHEN I MUST MOVE THERE. "THESE ARE THE TIMES THAT TRY MEN'S SOULS" AND RISK WOMEN'S WRATH. "TYRANNY, LIKE HELL, IS NOT EASILY CONQUERED; YET WE HAVE THIS CONSOLATION WITH US, THAT THE HARDER THE CONFLICT. THE MORE GLORIOUS THE TRIUMPH." THE ISSUE OF ROUTE 100 VERSUS THE QUEENSTOWN COMMUNITY PROMISES TO BE LONG AND THREATENS TO BE UNHAPPY. FOR QUEENSTOWN, THIS IS HOME; AND WE ARE IN IT FOR THE DURATION.

SINCERELY

RAYMOND NICHOLSON

CC: T. ATHEY, M. WAGNER

The preceeding form letter was also received from:

Giorestine Toies, dated May 24, 1986 Mary Kess, dated May 24, 1986 Thomas W. Thompson, dated May 24, 1986 Eisie M. Toies, dated May 24, 1986 Lavinia Smith, dated May 24, 1986



William K. Helimann Secretary Hal Kassoff Administrator

JUN 2 4 1986

Mr. Raymond Nicholson 782 Queenstown Road Severn, Maryland 21144

Dear Mr. Nicholson:

This is in response to your letter of May 24, 1986 to Secretary Hellmann.

The State Highway Administration has had several meetings with the Queenstown community and has developed an alternate that avoids disruption to most of the community. This alternate, 3B, was presented at the Public Hearing recently held on June 12, 1986, along with several other options.

All comments received at the hearing and as a result of the circulation of the Draft Environmental Impact Statement will be considered before any final decision is made.

> Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:bh

cc: Mr. Neil J. Pedersen

LMr. Louis H. Ege, Jr.

Ms. Angela B. Hawkins

Note: For additional response, see page VI-260

VI-252

My telephone number is 659-1111

Teletypewriter for impaired Hearing or Speech
383-7555 Baitimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toll Free
P.O. Box 717 / 707 North Calvert St., Baltimore, Maryland 21203 - 0717

The preceding response was also sent to:

Giorestine Toles 724 Queenstown Road Severn, Maryland 21144.

Mary Kess 551 Queenstown Road Severn, Maryland 21144

Thomas W. Thompson 7606 W.B.& A. Road Glen Burnle, Maryland 21061

Elsie M. Toles 724 Queenstown Road Severn, Maryland 21144

Lavinia Smith 734 Queenstown Road Severn, Maryland 21144

CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100 RE: FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES. HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Name. Address Hanner me

OF THE STIGMA OF SEEMING RACISM. Vamo ZIIC Wright Rd

CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100

I EARNESTLY REQUEST THAT YOUR OFFICE GIVE

THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 30

IN THE VICINITY OF FRIENDSHIP PARK. SUCH

ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND

COMMUNITIES. IT ALSO WILL RTD PROJECT 100

SERIOUS CONSIDERATION TO A CONFIGURATION

Address

CONTRACT NO.

FROM I-95 TO I-97

CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100 RE: FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RIG PROJECT 100 OF THE STIGMA OF SEEMING RECISM.

Name

1.

Address

USOO QUEENSTOWN SEVERN, Md. 21144

CONTRACT NO. AA 6 HARYLAND ROUTE 100 RE: AA 682-101-570 FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38, IN THE VICINITY OF FRIENDSHIP PARK. ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISH.

5000

Name Address A ... tal Duck

CONTRACT NO. AA 682-101-670 MARYLAND ROUTE 100 FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RIG PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Name

Address

Malling Alles Pille Box gas

CONTRACT NO. AA 68 AA 682-101-570 FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Address

RE. CONTRACT NO. CONTRACT NO. AA 682-101-570 FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RAGISM.

Name

Address

<u>900</u>

CONTRACT NO. AA 682-101-570 HARYLAND ROUTE 100 FROM I-95 TO I-97

> I EARNESTLY REQUEST THAT YOUR OFFICE GIVE SERIOUS CONSIDERATION TO A CONFIGURATION THAT WILL COMBINE ALTERNATE 4 WITH ALTERNATE 38 IN THE VICINITY OF FRIENDSHIP PARK. SUCH ADJUSTMENT WILL SAVE FAMILIES, HOMES, AND COMMUNITIES. IT ALSO WILL RID PROJECT 100 OF THE STIGMA OF SEEMING RACISM.

Name.

Address

Elmer & Louse Severa Md. 21144

The preceding form letter was also received from:

Wilber Jones, Jr. Rev. & Mrs. James H. Graves Daniei Butier Marva A. Gaither Gertrude Dailey Willard M. Wombie Janis K. Lindsay Lawreance A. Buriey, Jr. Eilen R. Watkins Lavinia Smith Barbara Jones Steriing Long Virginia i. Warren Marie B. Buriev Manuei & Giadys Jones Ethei O. Langley Julie Jones Phyliis Matthews Wanda J. Singleton Lawrence & Edna Weils Charles H. Hines Nancy Gist Martha Bradford Aifonso S. Matthews Ciifton Gaither Timothy Graham, Jr. Mary A. Graham Mr. & Mrs. Reginaid A. Brashears Basii Jones, Sr. Sylvia Garrison Leroy N. Buriey Willis G. Henry Mary E. Gaither Emerson Hebron Esther V. Thomas Rodney Jones Betty B. Smail Frank Hebron Eisie M. Toles Giorestine Toles Winifred G. Queen Mr. & Mrs. William Bouyer Neilie L. Butier Lionei Butier Michaei Cornish Mabei J. Snipes irene Hebron Dorothy V. Fauikner Daisy Jones Anita R. Turner

Mr. & Mrs. Joseph N. Jones Ernest C. Rogers Daisy Baker Ray Moore, Jr. Evelyn J. Moore Robert Dailey Mary V. Hebron Wilson Hebron Doris Long Emma C. Hebron



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

August 5, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97

PDMS No. 022007

Mr. and Mrs. Elmer Aulton 655 Queenstown Road Severn, Maryland 21144

Dear Mr. and Mrs. Aulton:

I am responding to your comments on behalf of Secretary William K. Hellmann and Mr. Louis H. Ege, Jr., concerning the Maryland Route 100 project and your support for a combination of Alternate 4 and Alternate 3-B in the vicinity of Friendship Park. We have received many comments on the Maryland Route 100 project since the public hearing, held June 12, 1986.

We are currently reviewing all comments received. A final decision will not be made until all comments have been considered. The minimization of impacts to homes and communities will be an important consideration when making the final decision. We appreciate your input in this matter.

Sincerely.

Hal Kassoff

Administrator

HK:tlh

cc: Secretary William K. Hellmann

Mr. Neil J. Pedersen Mr. Louis H. Ege, Jr. Mr. Ronald E. Moon Mr. James T. Johnson

Note: For additional response, see page VI-260

VI-256

The preceding response was also sent to:

Luther A. Hebron, Sr. 7332 Race Road Hanover, MD 21076

John R. Griffin 500 Queenstown Road Severn, MD 21144

Joseph Rogers
P.O. Box 902
Glen Burnle, MD 21061

Mr./Mrs. Larry E. White, Sr. 631 Jones Road Severn, MD 21144

Deborah Shorter 7110 Wright Road Hanover, MD 21076

Esther Watts 7326 Race Road Hanover, MD 21076

George Caldwell, Jr. 284 Caldwell Road Pasadena, MD 21122

Wilbur Jones, Jr. 601 Jones Road Severn, MD 21144

Rev. & Mrs. James H. Graves 823 Queenstown Road Severn, MD 21144

Daniel Butler 7837 Clark Station Road Severn, Maryland 21144

Marva A. Galther 8316 Jacobs Road P.O. Box 344 Severn, MD 21144

Gertrude Dalley 508 Jones Road Severn, MD 21144 Willard M. Womble 7119 Wright Road Hanover, MD 21076

Janis K. Lindsay 7611 Lilly Ave. Severn, MD 21144

Lawrence A. Burley, Jr. 501 Queenstown Road Harmans, MD 21077

Eilen R. Watkins 782 Queenstown Road Severn, MD 21144

Lavinia Smith 734 Queenstown Road Severn, MD 21144

Barbara Jones 501 Queenstown Road Harmans, MD 21077

Sterling Long 7151 Wright Road Hanover, MD 21076

Virginia I. Warren 7117 Wright Road Hanover, MD 21076

Marie B. Burley 507 Queenstown Road Severn, MD 21144

Manuel & Gladys Jones 517 Queenstown Road Severn, MD 21144

Ethel O. Langley 7804 Quarterfield Road Severn, MD 21144

Julle Jones 501 Queenstown Road Harmans, MD 21077 Phyliss Matthews 509 Queenstown Road Severn, MD 21142

Wanda J. Singleton 501 Queenstown Road Harmans, MD 21077

Lawrence & Edna Wells 819 Queenstown Road Severn, MD 21144

Charles H. Hines 1411 Valentine Ave. Glen Burnie, MD 21061

Nancy Gist 7870 Quarterfield Road Severn, MD 21144

Martha Bradford 2560 Arunah Ave. Baltimore, MD 21215

Alfonso S. Matthews 509 Queenstown Road Severn, MD 21144

Clifton Galther 503 Queenstown Road Severn, MD 21144

Timothy Graham, Jr. P.O. Box 22 Severn, MD 21144

Mary A. Graham P.O. Box 22 Severn, MD 21144

Mr. & Mrs. Reginald Brashears 453 Queenstown Road Severn, MD 21144

Basil Jones, Sr. 501 Queenstown Road Harmons, MD 21077

Sylvia Garrision 416 Queenstown Road Severn, MD 21144 Leroy N. Burley 501 Queenstown Road Harmans, MD 21077

WIIIIs G. Henry 423 Queenstown Road Severn, MD 21144

Mary E. Galther 503 Queenstown Road Severn, Md 21133

Emerson Hebron Box 7318 Ridge Road Hanover, MD 21076

Esther V. Thomas 326 Highland Drive Glen Burnle, MD 21061

Rodney Jones 627 Jones Road Severn, MD 21144

Betty B. Small 762 Queenstown Road Severn, MD 21144

Frank Hebron 7468 Race Road Hanover, MD 21076

Elsle M. Toles Box 724 Queenstown Road Severn, MD 21144

Glorestine Toles Box 724 Queenstown Road Severn, MD 21144

Winifred G. Queen 111 N. Hollins Ferry Road Glen Burnle, MD 21061

Mr. and Mrs. Willam Bouyer 810 Queenstown Road Severn, MD 21144

Nellie L. Butler 7837 Clark Station Road Severn, MD 21144 Lionei R. Butier 7837 Clark Station Road Severn, MD 21144

Michael Cornish 6778 Halfcrown Court Columbia, MD 21045

Mabel J. Snipes 504 Queenstown Road Severn, MD 21144

Irene Hebron 7468 Race Road Hanover, MD 21076

Dorothy V. Faulkner 7325 Race Road Hanover, MD 21076

Daisy Jones 627 Jones Road Severn, MD 21144

Anita R. Turner 7864 Bustilie Road Severn, MD 21144

Mr. & Mrs. Joseph N. Jones 440 Queenstown Road Severn, MD 21144

Ernest C. Rogers 922 South Wieker Road Severn, MD 21144

Dalsy Baker 1430 Dorsey Road Hanover, MD 21076

Ray Moore, Jr. 733 Chapeigate Drive Odenton, MD 21113

Evelyn J. Moore 733 Chapeigate Drive Odenton, MD 21113

Robert Dailey 508 Jones Road Severn, MD 21144 Mary V. Hebron 7332 Race Road Hanover, MD 21076

Wilson Hebron 7649 Harmans Road Hanover, MD 21076

Doris Long 7151 Wright Road Hanover, MD 21076

Emma C. Hebron 7649 Harmans Road Hanover, MD 21076 Additional response to preceding letters:

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington international Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.

During the course of the MD Route 100 study, concerns were raised regarding the impacts of the project. The selected alternate, Alternate 3B (Modified), Incorporates several design changes of the "historical" alignment (Alternate 3-Option A) to address these concerns. These include the alignment shift at the project's eastern end in order to minimize impacts to the community of Queenstown, the standard diamond interchange at Race Road and selecting the full cloverleaf Interchange at MD Route 295. In total, the design changes made by the State Highway Administration resulted in a reduction in the number of residences displaced by MD Route 100 from 43 to 22. Alternate 3B (Modifled), also includes several provisions for maintaining traffic on the local road network. These include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B.& A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts to local communities. This project has been reviewed by the Equal Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964 (see letter dated June 26, 1986).

LTERNA

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100

I-95 to Maryland Route 3 (I-97)

Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Schol

MR. & MRS.

NAME ROBERT E. BAXTER SR.

PLEASE PRINT

ADDRESS 7395 S. AFTON COURT

CITY/TOWN HANDVER STATE MD .ZIP CODE 21ハ76

I/We wish to comment or inquire about the following aspects of this project:

It is the only logical choice for a

COST CONSC IENC E

> State Highway Administration!

is / provides :

- l. Shortest length
- Minimum disruption on congested Dorsey Road. 2.
- Fewest residential and business relocations.
- $\underline{\underline{N}} = \underline{\underline{O}} = \underline{\underline{H}} = \underline{\underline{I}} = \underline{\underline{S}} = \underline{\underline{I}} = \underline{\underline{C}} = \underline{\underline{A}} = \underline{\underline{L}} = \underline{\underline{S}} = \underline{\underline{I}} = \underline{\underline{T}} = \underline{\underline{S}}$ involved !!!
- 5. Finished Project provides:
 - 4 to 6 lanes of THRU traffic as an outter loop between I-95 and Gibson Island.
 - Local thru traffic unaffected by keeping Improved Dorsey Road in tack.
 - With 8 to 10 lanes for traffic this Alternate 4 plus Dorsey Road will resolve traffic problems until the year 2000 !!!!!!

MAKE THE $\underline{C}_\underline{O}_\underline{S}_\underline{T}__\underline{C}_\underline{O}_\underline{N}_\underline{S}_\underline{C}_\underline{I}_\underline{E}_\underline{N}_\underline{C}_\underline{E}$

CHO I C E ALTER NA TE 1111111

Please add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

^{*}Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

The preceding form letter was also received from:

William F. Bramer
Nancy Barry
John F. Barry, Jr.
Robin Mahistedt
Eunice Grap
Edward M. Calvert, Jr.
Lucy Bowling
Walter A. Harris
Herman D. Sizemore
William Henry
Robert Bradshaw
Garnet Ward

Mr. and Mrs. Ernest M. Wallace
Mr. and Mrs. P.E. Harris, Jr.
Mr. and Mrs. W. Leroy Heatwole
John Cline
Ty Schw....
Tom Lisowsky
Stephen Lisowsky
Adele K. Karp
Charlotte Winters
John S. Bowers
Mr. & Mrs. Carl L. Cruise, Sr.



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

October 3, 1986

RE:

Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

Mr. and Mrs. Robert E. Baxter. Sr. 7395 South Afton Court Hanover, Maryland

Dear Mr. and Mrs. Baxter:

Thank you for your recent comments in which you indicate support for Alternate 4 for the Maryland Route 100 project.

A decision will not be made on the final alternate until all comments received during and subsequent to the public hearing have been reviewed. Your support for Alternate 4 will be given serious consideration.

As requested, your name has been added to the project mailing list.

Very truly yours.

Louis H. Ege, Jr. Deputy Director

Project Development Division

Project Manager

Note: For additional response, see page VI-265

VI-263

My telephone number is 659-1106

585

The preceding response was also sent to:

William F. Bramer 9717 Early Spring Way Columbia, MD 21046

Nancy Barry 7392 South Dunrobin Court Hanover, MD 21076

John F. Barry 258 Dogwood road Millersville, MD 21108

Robin Mahistedt 7400 South Robin Court Hanover, MD 21076

Eunice Grap C 86-Holiday Mobile Est. Jessup, MD 20794

Edward M. Calvert, Jr. 9809 Langs Road Baltimore, MD 21220

Lucy Bowling 7396 South Afton Court P.O. Box 53 Hanover, MD 21076

Walter A. Harris 24 Leeds Road Hanover, MD 21076

Herman D. Sizemore 205 Mapie Avenue Pasadena, MD 21122

WIIIIam Henry 18 Leeds Road Hanover, MD 21076

Robert E. Bradshaw 428 W. Greenwood Road Linthicum Heights, MD 21090

Garnet Ward 6 Leeds Road Hanover, MD 21076 Mr. & Mrs. Ernest M. Wallace 20 Leeds Road Hanover, MD 21076

Mr. & Mrs. P.E. Harris, Jr. 24 Leeds Road Hanover, MD 21076

Mr. & Mrs. W. Leroy Heatwole 15 Leeds Road Hanover, MD 21076

John Cline 2511 Pittland Lane Bowle, MD 20716

Tom Lisowsky 1366 Weeping Willow Hanover, MD 21076

Stephen Lisowsky 1366 Weeping Willow Hanover, MD 21076

Adele K. Karp 9505 White Spring Way Columbia, MD 21046

Charlotte Winters 7399 South Elden Court Hanover, MD 21076

Mr. & Mrs. Carl L Cruise, Sr. 7398 South Eldon Court Hanover, MD 21076

586

in addition, the following response is offered:

The selected alternate, Alternate 3B (Modified), was chosen over a combination of Alternate 4 with Alternate 3-Option B (Alternate 4/3B) for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law if a "feasible and prudent" alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as Identified in the Howard County, Anne Arundel County and Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses the southwestern corner of the Baltimore Washington International Airport. Federal Aviation Administration regulations would require the highway to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate. Aiternate 3B (Modified), Includes several provisions for maintaining traffic on the local road network. These Include providing a bridge across Maryland Route 295 connecting Race Road with Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B. & A. Road over Maryland Route 100. The State Highway Administration believes that the selected alternate provides the needed service to the area while minimizing impacts.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. AA 682-101-570 - PDMS No. 022007 Combined Location/Design Public Hearing Maryland Route 100 I-95 to Maryland Route 3 (I-97) Thursday, June 12, 1986 - 7:30 p.m. - Andover Senior High Sch PLEASE ADDRESS_ PRINT I/We wish to comment or inquire about the following aspects of this project:

ALTERNA

[☐] Piease add my/our name(s) to the Mailing List.*

Please delete my/our name(s) from the Mailing List.

^{*}Persons who have received a copy of this brochure through the mail are already on the project Mailing List.

VI-266

	STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS	SEP	0
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,	*Persons who have received a copy of this brochure through the mail are air on the project Mailing List.	eady	

VI-267



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

October 3, 1986

RE: Contract No. AA 682-101-570

Maryland Route 100 Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

Mr. Authur Lisowsky 1366 Weeping Willow Road Hanover, Maryland 21076

Dear Mr. Lisowsky:

Thank you for your recent comments in which you indicate support for Alternate 4 for the Maryland Route 100 project.

A decision will not be made on the final alternate until all comments received during and subsequent to the public hearing have been reviewed. Your support for Alternate 4 will be given serious consideration.

As requested, your name has been added to the project mailing list.

Very truly yours,

Louis H. Ege, Jr.
Deputy Director
Project Development Division

by:

Ronald E. Moon

Project Manager

LHE: REN :cd

William D. Miller, Jr. 7539 Ridge Road Hanover, Maryland 21076

June 1, 1986

Mr. Neil J. Pedersen, Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

RECEIVED

Mr. John W. Gladding, Jr., Chief District #5 Office of Real Estate State Highway Administration 138 Defense Highway Annapolis, Maryland 21401 DIRECTOR, OFFICE GF PLANNING & PRELIGHTIALLY SHIPL SERVING

Gentlemen:

I own property located in the Proposed Route 100 study area. I have reviewed the Draft Environmental Impact Document as well as the State Highway Administration (SHA) document issued on or about May 30, 1986 and titled: Combined Location/Design Public Hearing Maryland Route 100 I-95 To Maryland Route 3 (I-97). In my efforts to fully comprehend and assess the myriad of issues, factors and ramifications associated with Route 100, and in order to prepare intelligent comments for the public record, I request your responses to the following:

(My questions are oriented, generally, towards the impact of Alternate 3 (a or b) based upon my understanding that SHA has a preference for that alternate)

- 1) What consideration has been given to the projection that selection of Alternates 3B, 4 or Crossover 3/4 would result in disproportionate impact upon "minority" residences (34% for 3B, 38% for Alt. 4 and 49% for the Crossover 3/4)?
- 2) Utilizing a scaled map and corresponding reference sheet, identify (by owner name, site address and plat number) the "minority" residences affected by Alternate 3B.
- 3) What criteria or definition has SHA utilized in determining whether a residence constitutes a "minority" residence?
- 4) Utilizing a scaled map and corresponding reference sheet, identify (by parcel and owner name) the projected amount of acreage required for right-of-way in the "residential", "commercial, "industrial", "agricultural" and "parkland/public recreation categories, assuming Alternate 3B is selected.

- 5) Explain the criteria utilized to categorize required right-of-way acreage as "residential", "commercial", "industrial", "agricultural" and "parkland/public recreation".
- 6) In estimating the cost of right-of-way (Alternate 3B), what criteria, guidelines and/or standards have been employed? e.g. "best economic use", "present use", "zoning status". If such information is contained in policy, procedure or operating manuals, or in memoranda or other SHA documents, provide copies of same.
 - 7) The estimated cost of right-of-way associated with Alternate 3B is \$22.8 million. On a parcel by parcel basis (or site by site if you prefer), how is estimated cost allocated? e.g. Smith parcel/Hanover-\$150,000improvements/\$55,000acreage. (If confidentiality is a concern, identify sites by numbers or letters within a particular geographic area)
 - 8) The estimated cost of relocation associated with Alternate 3B is \$1 million. On a parcel by parcel basis, assuming that basis was utilized by the SHA, how is estimated cost allocated?

Gentlemen, these are only a few of the questions I wish to resolve prior to completion of my public comments on Route 100. I shall not, however, burden you with additional questions and concerns at this time inasmuch as there is little time left before the public hearing on June 12. I do respectfully request your response to my inquiry no later than June 8 so that I can complete my public comments prior to the hearing.

Thank you in advance for your attention in this matter.

Sincerely,

William D. Miller, Jr.

REGISTERED MAIL
RETURN RECEIPT REQUESTED



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

August 1, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to

Maryland Route 3 PDMS No. 022007

Mr. William D. Miller, Jr. 7539 Ridge Road Hanover, Maryland 21076

Dear Mr. Miller:

This is in response to the questions you submitted with your letter of June 1, 1986 concerning the Alternate 3 alignment for proposed Maryland Route 100 from Interstate Route 95 to Maryland Route 3 and in response to your June 11, 1986 letter to Mr. Jack . Gladding.

In response to your specific questions in your June 1, 1986 letter, the following is submitted:

- 1. What consideration has been given to the projection that selection of Alternates 3-B, 4, or Crossover 3/4 would result in disproportionate impact upon "minority" residences (34% for 3-B, 38% for Alternate 4, and 49% for the Crossover 3/4)?
 - Consideration of impacts upon minority communities was undertaken as required in 23 CFR, Section 710.405. Furthermore, the study alignments were modified to minimize impacts to all improved properties. During the design stage, additional engineering feasibility studies will be conducted to further minimize impacts.
- Utilizing a scaled map and corresponding reference sheet, identify (by owner name, site address, and plat number) the "minority" residences affected by Alternate 3-B.
 - Attached are scaled maps (1"=400') of Alternate 3-B. Residences that would be affected by this alternate are indicated by a hexagonal symbol with the letter "R" on these maps. Those residences that are minority occupied are not specifically identified on these maps. The information that has been developed in this stage of

Mr. William D. Miller, Jr. August 1, 1986
Page 2

the study is for the purpose of estimating costs and determining environmental impacts. Neither the actual ownership of affected properties nor the ethnic background of these property owners will be determined until such time as final plans and metes and bounds plats are prepared. You should be advised that the information regarding occupants of dwellings that may be required for the proposed Maryland Route 100 was obtained from the best source available at the time, and has not been verified by interview.

- 3. What criteria or definition has the State Highway Administration utilized in determining whether a residence constitutes a "minority" residence?
 - The criteria or definition that the State Highway Administration uses in determining whether a residence constitutes a "minority" residence is in accordance with the provisions of 23 CFR, Part 710 Right-of-Way General. Information including minorities is obtained from visits to the project area and from Census Tract data.
- 4. Utilizing a scaled map and corresponding reference sheet, identify (by parcel and owner name) the projected amount of acreage required for right-of-way in the "residential", "commercial", "industrial", "agricultural", and "parkland/public recreation" categories, assuming Alternate 3-B is selected.
 - The projected amount of acreage required for a right-of-way for Maryland Route 100 has not yet been determined on a parcel by parcel basis. The individual property owners who may be affected have not been identified during this stage of the study. The actual ownership of affected properties will be determined at such time as metes and bounds plats have been developed and titles researched. The amount of acreage required for right-of-way in the categories you refer to has been estimated from Anne Arundel and Howard County zoning maps, and may not represent the actual land use in all cases.
- 5. Explain the criteria utilized to categorize required right-of-way acreage as "residential", "commercial", "industrial", "agricultural", and "parkland/public recreation".
 - The criteria you refer to categorize the types of land being affected, (i.e., residential, commercial, industrial, etc.), and are based on current zoning maps prepared by Anne Arundel and Howard County. These maps and the designated land use categories are utilized in grouping the different zoning areas being affected.

Mr. William D. Miller, Jr. August 1, 1986
Page 3

- 6. In estimating the cost of right-of-way (Alternate 3-B), what criteria, guidelines and/or standards have been employed, e.g., "best economic use", "present use", "zoning status"? If such information is contained in policy, procedure, or operating manuals, or in memoranda or other State Highway Administration documents, provide copies of same.
 - In the Project Planning stage of the study, right-of-way costs are based on the current zoning use for the land. After right-of-way plats have been developed and individual parcels are identified, land appraisals are initiated. The appraisers investigate each individual property's highest and best use from an economic viewpoint, and evaluate it accordingly to determine its fair market value. This appraisal policy is established by standardized appraisal practices and procedures established by recognized professional appraisal societies. To evaluate the fair market value of property requires considerable research and changes over the time it may take to develop the required right-of-way plats. Therefore, in the Project Planning phase of the study, estimates are based on current zoning.
- 7. The estimated cost of right-of-way associated with Alternate 3-B is \$22.8 million. On a parcel by parcel basis (or site by site if you prefer), how is estimated cost allocated, e.g., Smith parcel/Hanover-\$150,000 improvements/\$55,000 acreage? (If confidentiality is a concern, identify sites by numbers or letters within a particular geographic area), and
- 8. The estimated cost of relocation associated with Alternate 3-B is \$1 million. On a parcel by parcel basis, assuming that basis was utilized by the State Highway Administration, how is estimated cost allocated?
 - The estimated right-of-way and relocation costs have not been developed on a parcel by parcel basis, or allocated between land and improvements. The estimates that are developed in this stage of the study are for planning purposes only, and are determined from on-site visits to the project area. Detailed appraisals will be completed when actual effects of the project are known.

If you believe that your property may be affected by this project, or if you need additional information regarding right-of-way or relocation issues involving the proposed Maryland Route 100, please feel free to contact the State Highway Administration's Office of Real Estate in Annapolis at 841-5464.

Mr. William D. Miller, Jr. August 1, 1986
Page 4

With regard to your June 11, 1986 request to Mr. Jack Gladding to obtain detailed information regarding all right-of-way acquisitions in Anne Arundel County, we cannot honor your request due to the size and complexity of the data requested. The staff work required to honor your request would be far greater than can be justified as a public expenditure. If you wish to make copies of files of information which is not confidential, you can make arrangements to do so at a cost of 15 cents per page. As we discussed by telephone, I am investigating what would be involved in compiling summary information for the Maryland Route 176 and I-97 Section C projects and will contact you regarding the availability of these data.

Very truly yours,

neil J Pederson

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

NJP:bh Enclosure

cc: Mr. Robert Finck

Mr. Nolan Rogers

Mr. Edward H. Meehan Mr. Jack W. Gladding

Ms. S. K. Bauer

Ms. Angela B. Hawkins Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson Mr. Ronald E. Moon Maryland Department of Transportation State Highway Administration Office of Planning and Preliminary Engineering Attn: Mr. Neil J. Pedersen Director 707 North Calvert Street Baltimore, Maryland 21203

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING DIVISION DI VISIONI DI

Dear Mr. Pedersen:

I am in receipt of your letter dated August 1, 1986 regarding my June 1, 1986 and June 11, 1986 requests for certain information concerning proposed Route 100 and completed SHA right-of-way acquisitions in the County of Anne Arundel, respectively.

With regard to your responses to some of the specific questions I posed in my June 1 letter, please consider this my formal and adamant objection to the evasive, contradictory and patently erroneous responses furnished by your office. I implore you to immediately re-consider your responses to the items discussed below and to provide me with supplemental answers as soon as possible.

ITEMS 2 and 3 (of your response)

You failed to indicate which of the potentially affected properties SHA considered to be "minority" properties. You stated, in pertinent part, that, "(t) he information that has been developed in this stage of the study is for the purpose of estimating costs and determing environmental impacts." You later claimed that, "(n) either the actual ownership of affected properties nor the ethnic background of these property owners will be determined until...final plans and metes and bounds plats are prepared." Nonetheless, you went on to explain that, "(i) nformation including minorities is obtained from visits to the project area and from Census Tract data." In summary, you then assert that the SHA projections made in accordance with applicable law "...based upon the best source available at this stage of planning." (emphasis supplied)

Mr. Pedersen, your refusal to supply this information cannot be justified by the reasons advanced in your letter. While you recognize that federal and state laws require study and consideration of minority impacts, your response suggests a SHA unwillingness to subject your projections to public scrutiny. I suggest that you provide the information requested and I will, at my own expense and time, obtain and supply you with current and accurate information regarding the projected minority impacts of Route 100. I can not stress enough that my request to you was received prior to the Public Hearing in June 1986. Had you actually responded to my request in a reasonable period of time, I would have been able to "upgrade" the reliability of your projections during the "public comment" phase of the process. There is, of course, still ample time for my data to be compiled and supplied to you prior to the final SHA decision. Obviously, if SHA has no interest in obtaining such accurate information, feel free to disregard this portion of my request.

Mr. Neil J. Pedersen August 9, 1986 Page 2

ITEMS 7 AND 8. (of your response)

You state that, "The estimated right-of-way and relocation costs have not been developed on a parcel by parcel basis, or allocated between land and improvements." (emphasis supplied) You further state that, "The estimates developed in this stage of the study are for planning purposes only, and are determined from on-site visits to the project area." (emphasis supplied)

This response is especially offensive because it contains patently contradictory and false information. It does, however, have one redeeming feature: Your response clearly acknowledges that SHA's estimates for total right-of-way costs were based upon "on-site visits to the project area". Is it your position that such visits did not result in compilation of parcel by parcel estimated right-of-way costs? Are you actually content to suggest that your estimated cost of \$22.8 million was arrived at without benefit of parcel by parcel estimates? In any event, consider this my formal and adamant supplemental request for parcel by parcel estimated or projected right-of-way costs as previously set forth in my June 1 letter.

With regard to my June 11, 1986 request regarding SHA right-of-way acquisitions in Anne Arundel County, this is to formally request an opportunity to visit your office and review and, as necessary, make copies of SHA files containing to information described in said request. (I have attached a copy of that letter for your convenience.) Of course, I shall be prepared to reimburse your office for the costs of copies in the amount of 15 cents per page. Please advise me as soon as possible regarding the exact date, time and place I should report inorder to review your files. My preference is any Monday through Saturday during the month of August 1986 after 1:00p.m. In the interest of minimizing your valuable time, I may be accompanied by an auditor who, I'm certain, is more adept at this type of undertaking than the undersigned.

Mr. Pedersen, consider the foregoing request a request pursuant to the applicable "Freedom of Information Act" provisions governing the Maryland Department of of Transportation/State Highway Administration. Should you find this request deficient or incomplete in any respect, please advise me immediately.

William D. Miller, Jr.

598

7539 Ridge Road Hanover, Maryland 21076 June 11, 1986

Mr. John W. Gladding, Jr. Chief District #5 Office of Real Estate State Highway Administration 138 Defense Highway Annapolis, Maryland 21401

Dear Mr. Gladding:

This is a request for information and documents regarding State Highway Administration (SHA) "right-of-way" acquisitions in Anne Arundel County, Maryland.

In particular, please furnish a list of SHA "right-of-way" land and property acquisitions for the past five (5) years including: 1) location of property and owner name(s); 2) address of property acquired; 3) size of property acquired (by acreage or square footage); 4) zoning of property at time of acquisition; 5) use of property at time of acquisition; 6) amount paid to owner(s) for land, and the amount paid for improvements. Additionally, please supply all SHA reports, memoranda, summaries and correspondance regarding said acquisitions. Finally, for the same five (5) year period, furnish a list and copy of Court decisions resolving valuation/eminent domain disputes between SHA and property owners in Anne Arundel County.

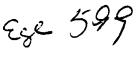
Upon receipt and review of this request, please notify me as to the date upon which you expect to furnish the information discussed above. Thank you in advance for your prompt attention in this matter.

Sincerely,

William D. Miller, Jr.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED







Maryland Department of Transportation

State Highway Administration

October 22, 1986

William K. Helimann Secretary
Hal-Bassoff DEVELOPHIA

Mr. William D. Miller 7539 Ridge Road Hanover, Maryland 21076

Dear Mr. Miller:

This is in response to your August 9, 1986 letter and several subsequent telephone conversations in which we discussed your information request.

First, with regard to Items 2 and 3 of my August 1, 1986 letter, we feel that enough time and effort were expended in visits to the project area to determine the percentage of residential displacements which would involve minority families for each of the alternatives studied. We feel our information is sufficiently accurate to be used as input to the decision regarding the alignment for Maryland Route 100. If you would like more detailed information regarding the methodology used to determine minority impacts, I can arrange for a meeting with the Office of Real Estate staff who performed the studies. Of course, we would welcome any information which you may wish to provide regarding minority impacts of the alternatives under consideration.

With regard to your request for right-of-way cost estimates on a parcel-by-parcel basis for the alternates under consideration for Maryland Route 100, we will not provide this information in order to protect both the State Highway Administration and the owners of the parcels during future right-of-way negotiations. Our refusal to provide you this information is done so under the provisions of Section 10-618 of Maryland Public Law.

During our telephone conversations, you agreed to limit the request contained in your June 11, 1986 letter to only those projects in the vicinity of the Maryland Route 100 corridor which have been constructed in the last five years. Attached you will find a map and list showing all projects in the vicinity of the Maryland Route 100 corridor which have been constructed in the past five years. A review of our records indicates that the only projects for which right-of-way was required were the Maryland Route 176 projects which are currently under construction. Since negotiations are still on-going with property owners on these projects, we will not release information associated with individual parcels under the terms of Section 10-618 of Maryland Public Law.

Mr. William D. Miller October 22, 1986 Page Two

If you wish to further discuss this matter, please feel free to contact me.

Very truly yours,

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

NJP:tn Attachment

cc: Mr. Robert J. Finck

Mr. Nolan Rogers

Mr. Barry Ditto

Mr. Jack Gladding

Ms. Angela Hawkins Mr. Louis H. Ege, Jr.

MD 100 CORRIDOR SPECIAL PROJECTS PROGRAM IMPROVEMENTS COMPLETED OVER LAST FIVE YEARS

- MD 295 MD 175 to Hanover Road; resurface; completed FY 84.
- 2. MD 176 US 1 to Parkway Drive; safety and resurface; completed FY 84.
- 3. MD 176 Parkway Drive to MD 652; widen and resurface and signalization; completed FY 85.
- 4. MD 176 0.2 mile east of MD 295; carpool lot 100 spaces; completed FY 81.
- 5. MD 174 Old Stage Road to Thelma Avenue; widen and resurface; completed FY 86.

PROJECTS UNDER CONSTRUCTION

- MD 176 Bridge 2051 over Amtrak; bridge deck replacement and widening; under construction.
- 2. MD 176 MD 652 to Hammonds Ferry Road; widen and resurface; scheduled for fall, 1986.

Michael G. Miller 7522 Ridge Road Hanover, Maryland 21076

June 25, 1986

Mr. Louis H. Ege, Jr.
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street
Room 310
Baltimore, Maryland 21202

Re: FHWA-MD-EIS-86-01-D

Dear Mr. Ege:

DEVELOPMENDIVISION

Jul 1 2 09 PM

I am deeply concerned about the plans for Route 100 as described in the environmental impact statement and further discussed iff the public hearing of June 12th. Four points summarize these concerns:

All of the alternates reflect a pattern of racial insensitivity and discrimination. Blacks are disproportionately displaced or adversely impacted by noise; compared as a percentage of the total population of the study area.

Alternate 3 involves extensive "dead-ending" of existing roads. Ridge Road is proposed to be dead-ended directly in front of my house and this will result in a significant diminution of my home's value.

I favor the "5th" alternate which was overwhelmingly supported by the civic associations and families present at the June 12th hearing: Alternate 4 to the route 170 area; combined with Alternate 3b east of that vicinity.

I am concerned that there be full recognition of the rapidly escalating property values in the BWI corridor for those of us who may loose property to Route 100. The appraisal process must safeguard the interests of those of us who may loose land that could otherwise be held for substantial gains as the long term development of this economic corridor materializes.

I own property in the proposed right-of-way for Alternate(s) 3 and respectfully request a response to the following questions.

QUESTIONS PERTAINING TO CURRENT RESIDENCE AT 7522 RIDGE ROAD (PINEY RUN HOUSE):

WHY IS THE ALTERNATE 3 ALIGNMENT DRAWN SO AS TO TAKE A CORNER OF THIS PARCEL (ON RIDGE ROAD NORTH OF THE DRIVEWAY) WHEN THIS COULD BE REMEDIED BY SHIFTING THE ALIGNMENT SLIGHTLY NORTHWARD WITHOUT IMPACTING THE HISTORIC DISTRICT OF SHIPLEY HOUSE. NOTE: BOTH PROPERTIES ARE HISTORIC AND NEITHER HAS BEEN ACTUALLY ACCEPTED OR REJECTED FOR THE HISTORIC REGISTER.

THE PROPOSED CUL-DE-SAC ON RIDGE ROAD IS DEPICTED IN ALT 3 SOUTH OF MY EXISTING DRIVEWAY. IS THIS ACCURATE? WILL THE STATE PAY FOR A NEW DRIVEWAY FAR REMOVED FROM THE "DEAD-END" THAT YOU PROPOSE TO CREATE. WILL THE ROAD BE ABOVE GRADE HERE?

WITH THE CUL-DE-SAC, HOW MANY DRIVING FEET ARE THERE BETWEEN MY HOME AND THE NEW PRIME INTERSECTIONS (ROUTE 100 @ NEW RIDGE; AND ROUTE 100 @ DORSEY RD). HOW DOES THIS COMPARE TO THE EXISTING DISTANCE BETWEEN MY PROPERTY AND THE CURRENT INTERSECTION AT DORSEY ROAD?

SINCE THE STUDY INDICATES MY PROPERTY WILL SUFFER AN ADVERSE NOISE IMPACT (I.E. GREATER THAN 10% TO 68db BASED ON RECEPTOR 9) AND THERE ARE NO PLANS TO PERFORM NOISE ABATEMENT; DOES THIS MEAN THAT MY PROPERTY WILL BE PURCHASED BY THE STATE OR THAT I WILL OTHERWISE BE COMPENSATED? (ALT 3)

WHY IS THE NO-BUILD ALTERNATE THE ONLY OF THE 4 CHOICES IN WHICH THE PERCENTAGE OF DISPLACEMENTS FOR BLACKS IS LESS THAN OR EQUAL TO THE PERCENTAGE OF BLACKS IN THE STUDY AREA? BLACKS COMPRISE ONLY 21% OF THE STUDY AREA POPULATION? WHAT EVIDENCE TO YOU HAVE TO ALLAY FEARS THAT THIS IS YET ANOTHER EXAMPLE OF RACIAL DISCRIMINATION?

HOW MUCH OF THE PROJECTED RIGHT-OF-WAY ACQUISITION COST FOR ALTERNATE 3 IS COMPRISED OF YOUR ESTIMATE FOR LAND TO BE TAKEN FROM MY PROPERTY AT 7522 RIDGE ROAD?

IS THE LAND I WOULD LOSE FROM MY HOUSE COUNTED IN THE PROPERTY OWNER IMPACT STATISTICS? IF NOT, WHAT WOULD BE THE REVISED STATISTICS (TOTAL AND BY RACIAL GROUP) FOR RESIDENTIAL LAND TAKEN, COUNTING LOSS OF SOME LAND BUT WHERE THE OWNER DOESN'T LOSE THE ACTUAL HOUSE?

IN LIGHT OF THE DORCHESTER REZONING DECISION RELEASED ON MAY 30TH, WILL THE RIGHT OF WAY ACQUISITION BUDGET HAVE TO BE INCREASED, OR WAS IT ALREADY ASSUMED THAT ACQUISITION COSTS IN THE RIDGE ROAD & WRIGHT ROAD AREAS WOULD BE AT COMMERCIAL/INDUSTRIAL PROPERTY VALUE RATES?

Route 100
Response to Impact Statement
Michael G. Miller

QUESTIONS PERTAINING TO WRITER'S 5.14 ACRE PARCEL KNOWN AS 7531 RIDGE ROAD:

HOW MUCH OF THIS 5.14 ACRES (PARCEL 248) FALLS WITHIN THE ALT 3 RIGHT-OF-WAY, AND IS THAT THE AMOUNT OF LAND YOU PROPOSE TO TAKE?

UP UNTIL WHAT DATE OR MILESTONE MAY I CONTINUE TO PURSUE MY DEVELOPMENT PLANS FOR THIS PARCEL. ARE COUNTY OFFICIALS FREE TO ENTERTAIN/APPROVE A REZONING, IF ALL NON-ROUTE 100 ISSUES ARE SATISFACTORY? WOULD SHA OPPOSE MY REZONING APPLICATION (FOR 7531 OR 7522 RIDGE ROAD TO C2 OR W1B)?

WHAT DOLLAR ESTIMATE OF RIGHT-OF-WAY COSTS FOR THIS PROPERTY WAS USED TO ARRIVE AT THE GRAND TOTAL ESTIMATED FOR ALT 3 IN THE ENVIRONMENTAL IMPACT STATEMENT?

WHERE DOES THE LOSS OF THIS LAND SHOW UP IN THE TABLE S-1 SUMMARY OF IMPACTS TABLE? IF NOT INCLUDED IN THE TABLE, WHAT WOULD THE TABLE TOTALS BE (TOTAL AND BY RACE) IF LOSS OF UNDEVELOPED LOTS WERE COUNTED?

PLEASE MAIL ME A COPY OF THE "PRELIMINARY RELOCATION REPORT" REFERRED TO ON PAGE IV-1 OF THE ENVIRONMENTAL IMPACT STATEMENT.

GENERAL OUESTIONS:

PLEASE EXPAND YOUR TABLE OF ENVIRONMENTAL IMPACTS TO INCLUDE THE FOLLOWING FOR EACH ALTERNATE (GIVING SUBTOTALS BY RACIAL GROUP):

NUMBER HOUSES DISPLACED?

NUMBER HOUSES LOSING SOME LAND, BUT RESIDENCE NOT DISPLACED.

NUMBER RESIDENCES ADVERSELY IMPACTED BY NOISE (AS DEFINED IN ENVIRONMENTAL IMPACT STATEMENT).

NUMBER OF OWNERS OF CURRENTLY UNDEVELOPED PARCELS BEING WHOLLY TAKEN FOR RIGHT-OF-WAY? NUMBER OF OWNERS LOSING PARTIAL PARCELS?

PLEASE IDENTIFY THE 3 MOST RECENT SHA ROAD PROJECTS WHICH RESULTED IN OVER 5 RIGHT OF WAY ACQUISITION CASES, AND INDICATE THE ROAD PROJECT, TIME FRAME, THE PARCELS ACQUIRED, THE PRICES PAID AND THE DETAILS OR SETTLEMENT, I.E. advance acquisition, negotiated, eminent domain, out of court, etc.

Route 100 Response to Impact Statement Michael G. Miller

Thank you for your interest in citizen concerns. I look forward to a written response the the specific issues raised in this letter.

Sincerely,

Michael G. Miller 7522 Ridge Road

Hanover, Maryland 21076



Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary

Hal Kassoff Administrator

October 10, 1986

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Maryland Route 3
PDMS No. 022007

Mr. Michael G. Miller, Jr. 7522 Ridge Road Hanover, Maryland 21076

Dear Mr. Miller:

I am responding to your letter concerning the Maryland Route 100 project from Interstate Route 95 to Maryland Route 3. Before answering your specific questions, I would like to state that the State Highway Administration has given serious consideration to the impacts on minority communities and has revised Alternate 3 to avoid splitting the Queenstown community and to minmize impacts.

In response to your specific questions pertaining to your current residence at 7522 Ridge Road, the following is submitted:

- 1. Why is the Alternate 3 alignment drawn so as to take a corner of this parcel (on Ridge Road north of the driveway) when this could be remedied by shifting the alignment slightly northward without impacting the historic district of Shipley House? NOTE: Both properties are historic and neither has been actually accepted or rejected for the Historic Register.
- Maryland Historical Trust, two (2) sites (the Shipley House and the Smith Farm) are considered possibly eligible for the National Register by the State Historical Preservation Officer. The Piney Run House was designated as being of Maryland Inventory Quality only. The alignment of Alternate 3 was doundaries, but to minimize impacts to, and the number of relocations from the community along Ridge Road.

VI-285

- The proposed cul-de-sac on Ridge Road is depicted in Alternate 3 south of my existing driveway. Is this accurate? Will the State pay for a new driveway far removed from the 'dead-end' that you propose to create? Will the road be above grade here?
- All work necessary to maintain access to residences not required for relocation will be undertaken by the State Highway Administration. Ridge Road will remain at its existing grade. The Alternate 3 alignment will be approximately ten feet (10') lower than the existing grade of Ridge Road.
- 3. With the cul-de-sac, how many driving feet are there between my home and the new prime intersections (Route 100 at New Ridge; and Route 100 at Dorsey Road)? How does this compare to the existing distance between my property and the current intersection at Dorsey Road?
- The distance from your driveway to the Route 100/New Ridge Road interchange would be approximately 3500 feet. The distance from your driveway to Dorsey Road via the New Ridge Road would be approximately 4500 feet. The existing distance from your driveway to the current Ridge Road/Dorsey Road intersection is approximately 1200 feet.
- 4. Since the study indicates my property will suffer an adverse noise impact (i.e., greater than 10% to 68 dba based on Receptor 9) and there are no plans to perform noise abatement; does this mean that my property will be purchased by the State or that I will otherwise be compensated? (Alternate 3)
- The study indicates there would be an 11 dba increase in existing noise levels, without contributing aircraft noise, to 68 dba in the design year of 2010. It is not the policy of the State Highway Administration to purchase property experiencing an increase in noise levels or to provide monetary compensation.

- 5. Why is the no-build alternate the only one of the 4 choices in which the percentage of displacements for blacks is less than or equal to the percentage of blacks in the study area? Blacks comprise only 21% of the study area population. What evidence do you have to allay fears that this is yet another example of racial discrimination?
- consideration of impacts to minority communities was undertaken as required in 23 CFR, Section 7610.405. The study alignments were drawn to minimize impacts to all improved properties. The Draft Environmental Impact Statement has been reviewed by the Equal Opportunity Section of the State Highway Administration and found to be in compliance with Title VI of the Civil Rights Act of 1964. As was stated previously, Alternate 3B was developed to minimize impacts to a minority community.
- 6. How much of the projected right-of-way acquisition cost for Alternate 3 is comprised of your estimate for land to be taken from my property at 7522 Ridge Road?
- The estimated right-of-way cost has not been developed on a parcel by parcel basis. Specific appraisals will be made when the final acquisition requirements are known.
- 7. Is the land I would lose from my house counted in the property owner impact statistics? If not, what would be the revised statistics (total and by racial group) for residential land taken, counting loss of some land but where the owner doesn't lose the actual house?
- The following table lists the total residential acreage required for right-of-way for the alternates presented in the DEIS. These totals have been estimated from Anne Arundel and Howard Counties! zoning maps. The projected amount of acreage required for right-of-way has not yet been determined on a parcel-by-parcel basis. Neither the actual ownership of affected properties nor the ethnic background of these property owners will be determined until such time as final plans and metes and bounds plats have been prepared.

- 8. In light of the Dorchester rezoning decision released on May 30th, will the right-of-way acquisition budget have to be increased, or was it already assumed that acquisition costs in the Ridge Road and Wright Road areas would be at commercial/industrial property value rates?
- The property was assessed on the zoning in place at the time the estimate was made in early 1986. Another right-of-way estimate will be prepared for the selected alternate and changes made where necessary.

In response to your questions pertaining to your 5.14 acre parcel known as 7531 Ridge Road, the following is submitted:

- 1. How much of this 5.14 acres (Parcel 248) falls within the Alternate 3 right-of-way, and is that the amount of land you propose to take?
- As depicted on the tax maps of Anne Arundel County, parcel 248 contains 10.29 acres, of which approximately 6.1 acres are required for the Alternate 3 right-of-way.
- 2. Up until what date or milestone may I continue to pursue my development plans for this parcel? Are County Officials free to entertain/approve a rezoning, if all non-Route 100 issues are satisfactory? Would SHA oppose my rezoning application (for 7531 or 7522 Ridge Road to C2 or W1B)?
- Anne Arundel County is responsible for all rezoning decisions. The State Highway Administration would not oppose the rezoning; however, a recommendation would be made that the portion of the property required for Maryland Route 100 not be allowed to be developed.

- 3. What dollar estimate of right-of-way costs for this property was used to arrive at the grand total estimated for Alternate 3 in the Environmental Impact Statement?
- · Please see response Number 6 on page 3.
- 4. Where does the loss of this land show up in the Table S-1 Summary of Impacts Table? If not included in the Table, what would the Table totals be (total and by race) if loss of undeveloped lots were counted?
- · Please refer to the response to Question 7 in the previous section.
- 5. Please mail me a copy of the "Preliminary Relocation Report" referred to on page IV-1 of the Environmental Impact Statement.
- The Preliminary Relocation Report is a confidential document and is not provided the general public. If you believe your property is affected, please contact Mr. John W. Gladding, Jr. of the State Highway Administration's District #5 Real Estate Office at 138 Defense Highway, Annapolis, Maryland 21401, telephone 841-5464.

In response to your general questions, the following is submitted:

- Number houses displaced?
- The residential displacements and the minority residential displacements required under each alternate are presented in the Summary of Impacts Table of the DEIS, a copy of which is enclosed.
- 2. Number houses losing some land, but residence not displaced?
- The projected amount of acreage required for a right-of-way for Maryland Route 100 has not yet been determined on a parcel by parcel basis. The individual property owners who may be affected have not been identified during this stage of the study. The actual ownership of affected properties will be

determined at such time as metes and bounds plats have been developed and titles researched. The amount of acreage required for right-of-way in the categories you refer to has been estimated from Anne Arundel and Howard Counties' zoning maps, and may not represent the actual land use in all cases.

- 3. Number residences adversely impacted by noise (as defined in Environmental Impact Statement)?
- The following table lists the number of residences determined to experience noise impacts (as defined in the DEIS) in the design year, 2010:

Alternate	No. Residences Experiencing Noise Impact
2 - Option A	24
2 - Option B	21
3 - Option A	42*
3 - Option B	38*
4	31*
3/Crossover/4	26* •

- * Includes 12 Apartment Units on Stage Road.
- 4. Number of owners of currently undeveloped parcels being wholly taken for right-of-way? Number of owners losing partial parcels?
- · Please refer to the response to question Number 2.

Louis H. Ege, J. Deputy Director

Project Development Division

LHE:bh

cc: Mr. Neil J. Pedersen Mr. Ronald E. Moon

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From:

U.S. Department of Transportation

Office of the Secretary of Transportation

Draft Environmental Impact Statement/Section 4(f)

Evaluation, Maryland - Anne Arundel and Howard Counties, Maryland Route 100 from I-95 to MD 3 (I-97) Subject:

Date: MAY 2 2 1986

Memorandum

FHWA-MD-EIS-86-01-D

Reply to Attn. of:

Eugene L. Lehr

Chief, Environmental Division

Eugene W. Cleckley Chief, Environmental Operations Division, HEV-11

We appreciate the opportunity to review this DEIS. We have no comments.



United States Department of the Interior

OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

JUL 1 1 1986

In Reply Refer To: ER 86/693

or 17 3 or PH 88

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
711 West 40th Street, Suite 220
Baltimore, Maryland 21211

Dear Mr. Elinsky:

This is in response to the request for the Department of the Interior's comments on the draft environmental/Section 4(f) statement for SR-100 Extended (from I-95 to SR-3/I-97), Anne Arundel and Howard Counties, Maryland.

SECTION 4(f) STATEMENT COMMENTS

We find that Alternate 3A is the alternative which would have the least harm to Section 4(f) resources, and the Department of the Interior would have no objection to its approval under 49 USC 303.

Although it appears that there will be no direct impact to historical sites eligible for the National Register, we, nevertheless, recommend with regard to the second proviso of Section 4(f) — measures to minimize harm — that appropriate landscaping and screening, as determined necessary in consultation with the State Historic Preservation Officer (SHPO), be used to serve as a visual and sound buffer.

With regard to archeological resources the draft statement indicates the need for Phase II studies, and, accordingly, we recommend the continued coordination and consultation with the SHPO for the protection and preservation of any identified archeological resources.

ENVIRONMENTAL STATEMENT COMMENTS

Fish and Wildlife Resources

We find the document adequate in describing the existing natural resources, but inadequate in its discussion of the extent of impacts upon these resources and efforts to mitigate them.

Mr. Emil Elinsky

Section II... Alternates -- Additional alternates deserve serious consideration in order to significantly reduce impacts upon fish and wildlife resources. For example, a combination of Alterna-Although inclusion of tive 2B and 3B just east of McPherson. Alternative 3B at this point would adversely impact Sawmill Creek and its associated wetlands, these impacts could be significantly reduced by inclusion of various mitigation measures such as spanning the wetlands, reducing the median width where possible, and tightening fill slopes to 1.5:1. Similar mitigation measures should also be considered for other alternates, especially Alternate 3A.

Section III.C.6.b., page III-40, second paragraph -- The final document should specify the type and height of the obstructions and what the "other factors" are which restrict anadromous use of the impacted waterways.

<u>Section III.C.6.c., pages III-40 through III-41 -- It is stated</u> that small areas of wetlands exist along Deep Creek. the vegetation along this waterway (see page III-38, second paragraph) is indicative of the presence of temporarily-flooded forest wetlands.

Section IV.C.1.b., pace IV-39 and Section IV.C.3., pages IV-43 through IV-44 -- It is stated that a detailed study of floodplain encroachment will be undertaken during the engineering design phase. Since it was not stated what types of structures were assumed to be in place for the preliminary analysis, we recommend that the State Highway Administration perform an analysis to determine the amount of floodplain encroachment involved, i.e., culverts and fill within the 100-year floodplain. The final document should present the assumptions and results of this analysis for each alternate.

Section IV.C.4., pages IV-44 through IV-45 -- The final document should state the amount of wetlands impacted at each crossing for each alternate.

The statement that "...wetland reconstruction will be provided where practicable... should be revised to indicate that all unavoidable wetland losses will be replaced.

Further coordination with the U.S. Fish and Wildlife Service (FWS) is recommended in order to determine the presence and extent of wetlands, and the impacts and appropriate mitigation measures before selection of an alternate.

Mineral Resources

The draft statement provides a detailed description of the sand and gravel and clay deposits within the project area, but does

VI-293

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Mr. Emil Elinsky

not assess potential impacts the project would have on the resources. Iron has also been produced within or near the study area in the past, but iron deposits are not mentioned in the report.

We suggest subsequent versions of the document identify all mineral resources and mineral producing facilities/within the project area and include a brief description of the potential impacts to the mineral environment from project implementation. If no impacts are expected, a statement to that effect would ensure that mineral resources have been considered during the planning process.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

Because an Army Corps of Engineers permit will be required for placement of fill material in wetlands, the FWS will review and make recommendations on the permit application.

The FWS advises that its position on an Army Corps of Engineers permit would be to recommend: (1) selection of an alternate that minimizes or adequately mitigates impacts upon fish and wildlife habitats; (2) implementation of measures to minimize impacts upon wetlands, such as spanning the wetland, tightening fill slopes to 1.5:1, and reducing the median width; (3) replacing all unavoidable wetland losses at a ratio to be determined by appropriate habitat evaluation procedures; (4) implementation of a wetland replacement plan that has been coordinated with and approved by the Maryland Department of Natural Resources and the FWS; and, (5) incorporation of an effective sediment and erosion control plan and a stormwater management plan. Should Alternative 3B be selected and efforts are not undertaken to significantly reduce impacts to the 15 acres of wetlands along this alignment, the FWS would recommend denial of a permit.

SUMMARY COMMENTS

The Department of the Interior has no objection to Section 4(f) approval of Alternate 3A. At this time, we object to Section 4(f) approval of the other alternates. Further coordination on mitigation for streams, wetlands, and wildlife habitat impacts is recommended with the FWS prior to the circulation of the final statement.

As this Department has a continuing interest in this project, we are willing to cooperate and coordinate with you on a technical assistance basis in further project evaluation and assessment. For matters pertaining to recreational and cultural matters, please contact the Regional Director, National Park Service,

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Mr. Emil Elinsky

Mid-Atlantic Region, 143 South Third Street, Philadelphia, Pennsylvania 19106 (telephone FTS 597-7013, commercial 215/597-7013). For matters pertaining to fish and wildlife resources, please contact the Field Supervisor, U.S. Fish and Wildlife Service, 1825-B Virginia Street, Annapolis, Maryland 21401 (telephone FTS 922-2007; commercial 301/269-5448). Questions on mineral resources should be directed to the Chief, Intermountain Field Operations Center, Bureau of Mines, P.O. Box 25086, Building 20, Denver Federal Center, Denver, Colorado (telephone FTS 776-0263, commercial 301/236-0263).

Thank you for the opportunity to provide these comments.

Sincerely,

ruce Blanchard, Director Environmental Project Review

cc:

Mr. Louis H. Ege, Jr. Deputy Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street, Room 310 Baltimore, Maryland 21202

Mr. J. Rodney Little Maryland Historic Trust John Shaw House 21 State Circle Annapolis, Maryland 21401

RESPONSES TO U. S. DEPARTMENT OF THE INTERIOR LETTER DATED JULY 11, 1986

- The selected alternate follows the alignment of Alternate 3A from 1-95 to MD Route 170. East of MD Route 170, the Option B alignment for Alternate 3 was selected in order to minimize impacts to the unique and distinct minority community of Queenstown.
- 2. The State Highway Administration will continue coordination with the State Historic Preservation Officer to Identify possible measures to minimize harm to any historical sites eligible for the National Register.
- 3. The State Highway Administration will continue coordination with the State Historic Preservation Officer with regards to the protection and preservation of any identified archeological resources.
- 4. Combining Alternate 2B with 3B just east of McPherson would require the largest land acquisition from Friendship Park of any of the alternates. Also, combining an urban arterial highway (Alternate 3) has several capacity and safety problems as described in Section IV.B.
- 5. Section III.C.6.b has been revised to identify the obstructions which restrict anadromous use of the impacted waterways.
- 6. Section III.C.6.c includes detailed delineation of the wetlands in the area.
- 7. The type of structures proposed for each stream crossing for the selected alternate, Alternate 3B (Modified), are shown on Figures 11-26 to 11-35. The project will be designed in accordance with the current Maryland Water Resources Administration and State Highway Administration criteria which require that preconstruction and post-construction hydrologic and hydraulic models (TR-20 and HEC-2 computer programs) be developed and that the construction results in no significant increase in the 100-year floodplain.
- 8. Section IV.C.4 incudes the amount of wetlands impacted at each crossing for the selected alternate, Alternate 3B (Modified). All unavoidable wetlands losses will be replaced, with the first option being replacement within the same watershed. All improvements involving wetland encroachment will require a Section 404 Permit from the U.S. Army Corps of Engineers. A field review was held on November 18, 1986 with representatives of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the Maryland Department of Natural Resources to Identify wetland areas along the selected alternate. Notes of this field review are on page VI-298. Mitigation measures will be coordinated with the appropriate agencies.
- 9. Refer to Section IV.H for information regarding the impact of the project on mineral resources in the project area.

- 10. The State Highway Administration will continue coordination with the Maryland Department of Natural Resources to minimize impacts to wetlands and streams. Whenever reasonable, measures will be included in the final design of the project to minimize impacts to wetlands. Decisions on the side slopes cannot be made until the final horizontal and vertical alignment is known.
- 11. The State Highway Administration believes that the selected alternate, Alternate 3B (Modified), provides the needed service to the area while minimizing impacts to communities and the natural environment. Coordination will continue with the Maryland Department of Natural Resources and the State Historic Preservation Officer in order to minimize adverse impacts on the natural environment and cultural resources.

NOTES OF MEETING

<u>Date</u>: November 18, 1986 <u>Project</u>: MD Route 100

Subject: Wetlands field reconnaissance of MD Route 100 Study Area

Contract No: AA 682-101-570

PDMS No. 022007

CEI Contract No. 85-0025-P-41

Prepared By: Century Engineering, Inc.

Attendees:

Terry Dean

Steve Harmon

U.S. Army Corps of Engineers

U.S. Army Corps of Engineers

U.S. Army Corps of Engineers

U.S. Fish & Wildlife Service

Mike Hollins

MD DNR-Non Tidal Wetlands

Mary Ellen Dore

Jim Dooley

MD State Highway Administration

Alan K. Marteney Century Engineering, Inc.

John Rist Century Engineering, Inc.

Century Engineering, Inc.

The attendees met at 9:00 a.m. on site at the MD Route 100 Study Area.

Ms. Echols of The U.S. Fish and Wildlife immediately asked for clarification on the purpose of this field visit. Jim Dooley explained that the purpose was to coordinate with these various agencies, to examine the wetlands of the study area which would be affected by the selected alternate (Alternate 3-B), to confirm the general limits and types of these wetlands, and to discuss possible mitigation measures.

Ms. Echols voiced strong objection to the fact that an alternate had been selected prior to her input on the various alternates' impacts, and before comments on the Draft EIS had been resolved stating that her purpose for coming here was not to mitigate a selected alternate, but rather to investigate the impacts of several alternates in a scoping process before an alternate was selected. She indicated that she did not believe the EIS process had properly been performed.

Mr. Hollins seconded this general opinion, stating that there were real questions about whether the NEPA and coordination process had been compiled with. It was his feeling that resolution of their comments on the Draft EIS and field investigation of all alternates should have occurred prior to and been incorporated into the selection process. He had expected to examine wetlands for all alternates on this field investigation.

Mr. Dooley discussed why the other alternates were not particularly feasible based on considerations other than those for wetlands, and that complete avoidance of wetlands was not possible because they were linear features running perpendicular to the path of the roadway. If they wished to look at wetlands other than for Alternate 3-B, we were prepared to do that also. NOTES OF MEETING (continued)

November 18, 1986 MD Route 100 Page Two

He also explained that It has become the Bureau's policy for recently planned and future projects to involve these wetlands agencies in the Draft EIS stage, but that these same criteria cannot be retroactively applied to projects that had begun years past, as in the case of MD Route 100.

Ms. Echols stated that the various wetland agencies would write to Ms. Cynthia Simpson of the Bureau of Project Planning's Environmental Division to express their displeasure and to resolve these problems. She also stated later that this was an issue she would take up with the Federal Highway Administration.

It was then agreed that the group would at least investigate the wetlands associated with Alternate 3-B on this day. Alternate mapping showing the affected wetlands were passed out and the wetlands reconnaissance began at Sawmili Creek in Friendship Park. Specific comments and descriptions for the several wetland areas visited are attached as separate pages to these notes, but general comments common to all wetlands include the following:

- * Ms. Echols stated that each wetland which would be affected by any alternate should be shown on a map with a numerical designation. In the EIS each of these designated wetlands should be discussed individually, as was done on the Route 29 project.
- * Each wetland discussion should contain, as a minimum, a classification of the wetland and a description and listing of species of the dominant vegetative canopy and understory, performed by field studies of a competent wetlands specialist.
- * The delineation of wetland limits should be more exactly defined. Mr. Hollins stated that, in general, <u>all</u> floodplain areas will be wetland areas; <u>but</u> SHA cannot simply assume that. Limits should be defined by field investigation of vegetation and hydric indicators.
- * Where the limits of wetlands cannot be visually defined (as was decided at wetland 3B-5), they should be determined by soil probes. This procedure should be recorded with maps and forms, showing locations of probes and soil profiles. When Mr. Dooley indicated that in such circumstances the SHA might assume the entire floodplain a wetlands as a worst case scenario, Mr. Hollins of MD DNR stated that "The Corps of Engineers requires documentation of wetlands.", (this was agreed to by Mr. Harmon), and making such assumptions could result in misleading impact data.
- * Based on the above revised wetland delineations, new acreages should be developed for impact determinations on those wetlands.

NOTES OF MEETING (continued)
November 18, 1986
MD Route 100
Page three

After investigating five (5) wetlands which covered the eastern half of the study area, the group broke for lunch and then reconvened for further site work. Apparently speaking for the other agencies, as well as himself, Mr. Hollins stated that he did not believe any worthwhile purpose was being accomplished on this field survey, that he had many other more pressing matters awaiting him back at his office, and suggested that this field investigation should be ended. He indicated that the group should come back together again after the above mentioned recommendations had been accomplished. If this were to delay the scheduling of the project, then it would simply have to be delayed. Ms. Echols and Dore expressed agreement. Ms. Dore also stated that she wanted to see specific information on each stream crossing with stormwater management and sediment control measures to be applied, along with discussions of impacts above and below these individual crossings. Mr. Harmon requested that all stream crossings be clearly shown on the mapping. Ms. Echois requested that mapping show locations and sizes of all bridges and culverts for a worst case scenario.

Mr. Dooley stated that much of the information that was being requested would not be available until final design, but that their comments would be passed along to higher authorities. The meeting dispersed at approximately 2:00 p.m.

ATTACHMENT 1

Notes on Wetland Sites

* Site NO. 3B-1 Sawmili Creek Crossing at Friendship Park: (one system for both crossings)

This is a Palustrine Forested broadleaf deciduous wetlands, of "C" water regime. The wetland is toe to toe in this area and the mapping delineation and acreages affected should be revised. Dominant Canopy is 95% Red Maple with 5% other species. Water table can be plus or minus one foot from surface during different times of the year. Soil is currently 18 inches to saturation, and there are many hummocks. Associated secondary species in canopy included Black Gum, Pin Oak and Cherry. Understory species include Magnolia, Winterberry, Skunk cabbage, Chain Fern, cinnamon fern, wood reed, highbrush blueberry, rhododendron, unloia Laxa, red chokeberry and Lyonia.

* Site No. 3B-2 W.B. & A Road Vicinity:

This area is classified PFOIA and very similar to site 3B-1. Dominant Canopy is Sweet Gum (50%), red Maple (25%), and white oak (25%). Hydric indicators include high brush blueberry, arrow wood and sweet pepper bush.

* Site No. 3B-3 Buckingham Nursery:

All flood plains in this area, which constitute a much larger area than current wetlands mapping, will be wetlands. Acreages will have to be recalculated accordingly. Black Gum and Maple are co-dominant canopy species, with river birch and willows. Different classifications of wetlands occur in the area.

* Site No. 3B-4 Area near Koppers:

This wetlands area incudes both Palustrine Forested and Palustrine Emergent areas. Significant areas of standing water occur. Dominant Canopy is Red Maple. Associated species include spagnum moss, sweet bay magnolia, winterberry, viburnum, golden rods, and manna grass. Agencies need to know whether this is bridged or culverted.

* Site No. 3B-5 Near Harmons Park:

This area is not shown on mapping as a wetlands. Hollins stated that soils work will have to be done in here to determine how much of the area is wetlands, as much is questionable. The immediate stream corridor itself is wetlands. There are scattered oaks in the questionable area. The necessary study will correlate soils with vegetation, and should be a full scale study and delineation. Hollins did not accept the proposition that the entire floodplain could be considered a wetlands as a worst case scenario.



Soil Conservation Service

4321 Hartwick Road, Room 522 College Park, Maryland 20740

June 10, 1986

Mr. Louis H. Ege, Jr.
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street, Room 310
Baltimore, Maryland 21202

Dear Mr. Ege:

The Soil Conservation Service has reviewed the draft Environmental Impact Statement/Section 4(f) Evaluation for Maryland Route 100, Anne Arundel and Howard Counties, Maryland. We offer the following comments:

Section III, Figure III-3. There are some discrepancies between the map and legend. A forest-cover overlay which is present on the map does not appear in the legend. Large portions of the map have no overlay. What is the land use in these areas?

<u>Page III-30</u>, Soil Associations. The use of soil associations is good for general planning. For the design phase, however, the detailed Soil Survey for Howard County and for Anne Arundel County should be used. The most recent soils interpretations for Howard County can be obtained by contacting the Soil Conservation Service (SCS) or Soil Conservation District (SCD) in Ellicott City. For Anne Arundel County, this information can be obtained from the SCS/SCD office in Annapolis.

Page III-38, Ecology. The sections on vegetation, wildlife, and wetlands are very general. Most of the information appears to have been derived from a review of published maps and reports. We suggest that on-site sampling of flora and fauna be conducted to verify this information.

Page III-41, Wetlands. The report refers to palustrine forested wetlands that are "...of temporary or seasonal nature; with smaller areas of temporary, narrow leafed, emergent vegetation." This sentence is misleading. It should be corrected to state that most of the palustrine forested wetlands were mapped as having either temporarily flooded or seasonally flooded water regimes, while the palustrine emergent wetlands were mapped as having a temporarily flooded water regime.

In addition, you should be aware that the NWI maps were prepared by photointerpretation of color infrared transparencies, with limited ground-truthing. The maps are suitable for general planning purposes but need to be field-checked during the design phase of the project.



Mr. Louis H. Ege, Jr.

2

Page IV-37 to IV-47, Natural Environment. The description of effects in this section is very general and would benefit greatly from site-specific information. If detailed information will not be available until later in the planning or design process, we suggest that this be noted in the report.

Thank you for the opportunity to review this draft Environmental Impact Statement.

Sincerely,

PEARLIE S. REED

State Conservationist

cc:

J. B. Newman, Director, Ecol. Sciences Div., SCS, Washington, DC

Ser (acting)

RESPONSES TO U. S. DEPARTMENT OF AGRICULTURE LETTER DATED JUNE 10, 1986

- 1. The forest-cover overlay which is present on the map is shown in the legend to correspond to Public or Community Recreation Areas. The only portion of the map with no overlay is the right-of-way for I-95 which is a full access-controlled freeway.
- 2. Detailed soil surveys will be used for the final design of this project.
- 3. A more detailed wetlands analysis has been performed for those areas that may be impacted by the selected alternate, Alternate 3B (Modified), which included on-site investigation.
- 4. The referenced sentence has been revised.
- 5. This document discusses specific impacts to the natural environment to the extent possible (see Section IV.C).

13 June 1986

Planning Division

Mr. Louis H. Ege, Jr., Deputy Director Project Development Division (Room 310) State Highway Administration 707 North Calvert Street Baltimore, Maryland 212202 DEVELOPMENT DEVISION DIVISION 0c1 22 9 34 AH '86

Dear Mr. Ege:

Reference Neil J. Pedersen's letter of 9 May 1986 regarding the review of the Draft Environmental Impact Statement (DZIS)/Section 4(f) Evaluation for Maryland Route 100 in Anne Arundel County and Howard County, Maryland. The comments provided below address the proposed work as it relates to the Corps of Engineers' areas of concern including flood control hazard potential, permit requirements under Section 404 at the Clean Water Act, and other direct or indirect impacts on existing or proposed Corps of Engineers' projects.

There are no existing or proposed Corps of Engineers projects in the vicinity of Maryland Route 100.

As stated on page IV-43 of the DEIS, flood plain impacts from the construction will be quantified during final detailed design. This will be adequate for compliance with Federal, state and local flood plain regulations.

The DEIS states that any improvements involving wetland encroachment will require a Section 404 Permit from the U.S. Army Corps of Engineers. The DEIS also mentions that wetlands potentially affected by the projected were identified based on the National Wetlands Inventory (NWI) prepared by the U.S Fish and Wildlife Service. Since the Corps of Engineers and the Fish and Wildlife Service use different criteria in classifying wetlands, delineation and determination of project area wetlands should be done or approved by the Corps of Engineers. If you have any questions concerning wetlands in the project area, please contact Ms. Linda Milchling, Western Shore Permits Section at (301) 962-4253.

If you have any other questions concerning these comments, please contact me or have a member of your staff contact my action officer, Mr. Larry Lower at (301) 962-4710.

JAMES F. JOHNSON Chief, Planning Division

RESPONSE TO U. S. ARMY CORPS OF ENGINEERS LETTER DATED 13 JUNE, 1986

- 1. No response required.
- 2. No response required.
- 3. A more detailed wetlands analysis has been performed for those areas that may be impacted by the selected alternate, Alternate 3B (Modified). This included a field review at which representatives from the U. S. Army Corps of Engineers were present. The State Highway Administration will continue coordination with the Corps of Engineers concerning impacts to wetlands.



UNITED STATES ENVIRONMENTAL PROTEOTION AGENOV

341 Chestnut Building Philadelphia, Pennsylvania 19107

Mr. Louis Ege, Jr.
Deputy Director
Project Development Division (Rm. 310)
Maryland State Highway Administration
707 N. Calvert Street
Baltimore, Maryland 21202

Re: Maryland Rt. 100 DEIS

Dear Mr. Ege:

In accordance with the provisions of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, EPA has reviewed the Draft Environmental Impact Statement (DEIS) for the above referenced project. The DEIS clearly presents the bridge construction options under consideration but EPA has rated the project EC-2 pending selection of the preferred option. A summary of the rating definitions is attached for your reference.

Our particular concerns are outlined below.

Ground Water

Based on our review of the DEIS, it is not clear whether studies to determine the impact of the highway on ground water supplies, as referenced on page IV-42, will actually be conducted. The document states that these "should" be performed, but offers no assurance that they will in fact be performed. EPA requests that the FEIS make that assurance, since the results of the studies could show adverse effects of the highway on the availability and quality of drinking water from a public water supply system. These impacts must be clearly stated in the FEIS and should be the culmination of a hydrogeologic study of the area. Needless to say, the findings of such a study should play an important role in selecting the final alignment.

Wetlands

EPA recommends, to the greatest extent possible, that all wetlands associated with each alternative be identified and assessed by field inspections conducted jointly with the appropriate State and Federal agencies, rather than depending solely on the delineation of the National Wetland Inventory. This will supply the SHA with more accurate information from which the final selection can be made.

JUL 7 1986

DEVELOPMENT DIVISION 18 2 02 PN '86

We also recommend that maximum use be made of structures to span wetlands as necessary, and therefore minimize impacts. During the selection process, careful attention should be given to evaluating the quantity and quality of affected wetlands to reduce encroachment on these sensitive areas. Mitigation for damages shall be coordinated with the appropriate agencies to ensure that definitive mitigation plans are presented in the final document.

Environmentally Sensitive Areas

If Alternate 3 is chosen as the preferred alignment, the results of the Buckingham Nursery Study should be included in the FEIS.

Section 4(f) Impacts

All prudent alternatives to the procurement of parklands for the project should be thoroughly explored prior to selecting an alignment. Court challenges involving Section 4(f) impacts have been particularly effective and failure to include adequate documentation in the FEIS for these acquisitions could cause unnecessary delays in implementing the project.

EPA appreciates having been included in the coordination process for this project and looks forward to participating in future coordination efforts. In particular we wish to be included in any field views scheduled to assess the wetland impacts. We also wish to be afforded the opportunity to review the stream crossing plans scheduled to be developed from the hydrologic and hydraulic studies during the design phase of the project.

Should you have any questions, or if we can be of additional assistance, feel free to contact Jeffrey Alper at 215-597-7817.

Sincerely,

Richard V. Pepino, Chief NEPA Compliance Section

Enclosure

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified eny potential environmental impacts
requiring substantive changes to the proposal. The review may have disclosed
opportunities for application of mitigation measures that could be
accomplieded with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacte that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or epplication of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be evoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alterna tive or consideration of some other project alternative (including the no action elternative or e new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatiefectory
The EPA review has identified edverse environmental impacts that ere of
sufficient magnitude that they are uncertisfectory from the standpoint of
public heelth or welfare or environmental quality. EPA intends to work with
the lead egency to reduce these impacts. If the potential unsatistactory
impacts are not corrected at the final EIS stage, this proposal will be
recommended for referral to the CEQ.

Adequecy of the Impact Statement

Category 1-Adequate

SPA believes the draft EIS edequately sete forth the environmental impact(s) of the preferred alternative and those of the elternatives reasonably evail able to the project or action. No further enalysis or data collection is necessary, but the reviewer may suggest the eddition of clerifying language or information.

Category 2—Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the ection. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate
EPA does not believe that the draft EIS edequately acceeded potentially
significant environmental impacts of the ection, or the EPA reviewer has
identified new, reasonably aveilable alternatives that are outside of the
spectrum of elternatives analyzed in the draft EIS, which should be analyzed
in order to reduce the potentially significant environmental impacts. EPA
believes that the identified additional information, data, analyses, or
discussions are of such a magnitude that they should have full public review
et a dreft stage. EPA does not believe that the draft EIS is adequate for the
purposes of the NEPA end/or Section 309 review, and thus should be formally
revieed and made aveilable for public comment in a supplemental or revieed
dreft EIS. On the bhais of the potential significant impacts involved, this
proposal could be a candidate for referral to the CEQ.

*From EPA Manuel 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

RESPONSE TO U.S. ENVIRONMENTAL PROTECTION AGENCY LETTER DATED JULY 7, 1986

- 1. If it is determined to be required, the State Highway Administration will conduct a hydrogeologic study of the area to determine any impacts of the project to groundwater.
- 2. A more detailed wetlands analysis has been performed for those areas that may be impacted by the selected alternate, Alternate 3B (modified), that included the use of detailed soil series mapping and field investigations (see Notes of Meeting, page VI-298). The State Highway Administration will continue coordination with the appropriate State and Federal Agencies concerning the impact of the project on wetlands.
- 3. The Buckingham Forest Tree Nursery Study is provided as a supplement to this Final Environmental Impact Statement.
- 4. Avoidance alternates for the impacted 4(f) resources are presented in Section IV.I. The hydrologic and hydraulic reports and construction plans will be reviewed by the Water Resources Administration. The U.S. Environmental Protection Agency will also be provided copies for review.



U.S. Department of Housing and Urban Development

Philadelphia Regional Office, Region III Liberty Square Building 105 South Seventh Street Philadelphia, Pennsylvania 19106-3392

JUL 3 1986

Mr. Louis H. Ege, Jr.
Deputy Director
Office of Planning and Preliminary Engineering
State Highway Administration
707 North Calvert Street - Room 310
Baltimore, MD 21202

DEVELOPMENT DIVISION JUL 18 2 03 PH '06

Dear Mr. Ege:

We have completed our review of the Draft Evnironmental Impact Statement for Maryland Route 100 Extended from I-95 to Route 3/I-97. In general, we find the document to be comprehensive and complete, however, we do have a number of specific comments, as follows.

- 1. Figures III-3 and 4 show existing and proposed land uses respectively. We feel that this information would be enhanced if there was included, as well, a tabular summary of the major land uses shown on each map. Also, it is not clear whether the proposed land use map envisions a target year or is an end state plan. However, since the Howard County General Plan appears to use the year 2005, it would be of value to know what changes in anticipated land use are projected to occur throughout the entire study area by that target year.
- 2. Although impacts upon floodplains and wetlands are discussed on pages IV-43-44, the document makes no reference to compliance requirements required by Executive Orders 11988 and 11990.
- 3. Table IV-4 Project Noise Levels, includes Ambient Leq both with and without aircraft. Design year 2010 noise levels do not, however, appear to reflect future noise levels contributed by aircraft. Inasmuch as ambient levels with aircraft were included it would seem that the future noise impact picture should be shown on the same basis, namely, with and without aircraft. We believe that this would be a more forthright presentation of noise impacts.

4. Although 4(f) impacts are discussed extensively, we do not feel that we can comment fully on this matter until a firm decision is made on the final alignment.

Thank you for the opportunity to comment.

Sincerely,

Lawrence Levine

Regional Environmental Officer

RESPONSE TO U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT LETTER DATED JULY 3. 1986

- 1. The existing land use map is based on the land use maps of the Maryland Department of State Planning, 1981. The proposed land use maps are based on the Howard County and Anne Arundel County master plans.
- 2. Reference to the compliance requirements of Executive Orders 11988 and 11990 is made in Sections IVC.3 and IV.C.r, respectively.
- 3. Since aircraft noise cannot be mitigated with conventional methods (i.e. noise barriers), future noise levels 'with aircraft' were not calculated.
- 4. The State Highway Administration will continue coordination with the appropriate agencies concerning impacts of the project to 4(f) resources.



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Washington, D.C. 20230

OFFICE OF THE ADMINISTRATOR

July 10, 1986

Mr. Louis H. Ege, Jr.
Deputy Director Project Development
Division (Room 310)
State Highway Administration
707 North Calvert Street
Baltimore, MD 21202

DEVELOPMENT DIVISION 116 10 02 AM '86

Dear Sir:

This is in reference to your draft environmental impact statement for Maryland Route 100 from I-95 to I-97. Enclosed are comments from the National Oceanic and Atmospheric Administration.

We hope our comments will assist you. Thank you for giving us an opportunity to review the document.

Sincerely,

David Cottingham

Ecology and Conservation Division

David Cottingham

Enclosure





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN DERVICE Meanington, D.C. 19200

JUL 0 7 1986

TO:

BF/ECD - David Cottingham

FROM:

Nxl - John J. Carey

SUBJECT:

DEIS 8605.04 - Contract No. AA 682-101-570,

Maryland Route 100

The subject DEIS has been reviewed within the areas of the National Ocean Service's (NOS) responsibility and expertise, and in terms of the impact of the proposed action on NOS activities and projects.

Geodetic control survey monuments may be located in the proposed project area. If there is any planned activity which will disturb or destroy these monuments, NOS requires not less than 90 days notification in advance of such activity in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation required for NOS monuments. For further information about these monuments, please contact Mr. John Spencer, Chief, National Geodetic Information Branch (N/CG17), or Mr. Charles Novak, Chief, Network Maintenance Section (N/CG162), at 6001 Executive Boulevard, Rockville, Maryland 20852.





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Management Division Habitat Conservation Branch Oxford Laboratory Oxford, Maryland 21654

June 27, 1986

Neil J. Pedersen, Director Office of Planning and Preliminary Engineering State High Administration 707 North Calvert Street Baltimore, Maryland 212012

Attn:

Dear Mr. Pedersen:

Mr. Louis H. Ege

The National Marine Fisheries Service has reviewed the Draft Environmental Impact Statement (DEIS) entitled Maryland Route 100, Interstate Route 95 to Maryland Route 3, Anne Arundel and Howard Counties, and offers the following comments for your consideration.

Although it stated that blockages preclude the use of streams in the project area by anadromous species (page III-40), it should be noted that several of those streams support migratory fish runs below the obstructions. It would be useful to include a map illustrating the limit of migration in relation to the proposed highway alignments. Prohibiting in-stream construction from 1 March to 15 June (page IV-44) should reduce impacts to anadromous species spawning downstream. Furthermore, implementation of sediment control (page IV-41) and stormwater management measures (page IV-40) should reduce habitat degradation during construction and operation of the proposed highway.

It appears from the analysis provided in the document that Alternate 2B will result the least overall natural environmental impacts. This alternate is also one of the least expensive options.

We appreciate having had the opportunity to comment on the subject DEIS.

Sincerely,

RECEIVED

JUN, 30 1986 #750

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

ward W? Chris Asst. Branch Chief



RESPONSE TO U. S. DEPARTMENT OF COMMERCE LETTER DATED JULY 10, 1986

1. Letter from National Ocean Service, dated July 7, 1987.

If any geodetic control survey monuments are disturbed or destroyed by the project, the State Highway Administration will notify the National Ocean Service and provide for their relocation.

2. Letter from National Marine Fisheries Service, dated June 27, 1986.

Ail in stream construction for Class i streams will be prohibited from March 1 to June 15, inclusive. The standard erosion and sediment control practices, as developed by a joint State Highway Administration/Water Resources Administration Task Force in 1984, will be used on this project. These practices will be monitored and strictly enforced.

86.08.13 1.5.0.1



OFFICE OF ENVIRONMENTAL PROGRAMS DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 WEST PRESTON STREET . BALTIMORE, MARYLAND 21201 . AREA CODE 301 . 383-

TTY FOR DEAF: Balto. Area 383-7555 D.C. Metro 565-0451

Adele Wilzack, R.N., M.S., Secretary

William M. Eichbaum, Assistant Secretary

August 13, 1986

DEVELOPMENT DIVISION Aug 18 10 00 AN '86

Ms. Cynthia D. Simpson, Acting Chief Environmental Management Bureau of Project Planning (Room 310) State Highway Administration 707 North Calvert Street Baltimore, MD 21202

RE: Contract No. AA 682-101-570
Maryland Route 100
Interstate Route 95 to
Interstate Route 97
PDMS No. 022007

Dear Ms. Simpson:

We have reviewed the Draft Air Quality Analysis for the above subject project and have found that it is not inconsistent with the Administration's plans and objectives.

Thank you for the opportunity to review this analysis.

Sincerely,

Edward L. Carter, Chief Division of Air Quality Planning and Data Systems

Air Management Administration

ELC/cp



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building Philadelphia, Pennsylvania 19107

AUG 1 9 1986

Cynthia D. Simpson, Chief Environmental Management Project Development Division (Rm. 310) MD State Highway Administration 707 North Calvert Street Baltimore, MD. 21202

Re: MD Route 100

Draft Air Quality Analysis

Dear Ms. Simpson,

In accordance with the responsibilities delegated to EPA under Section 309 of the Clean Air Act and the National Environmental Policy Act, EPA Region III has reviewed the above referenced document. We are satisfied with the approach outlined for analyzing the air quality impacts of the project and offer no objections to completing this portion of the environmental study.

Thank you for including EPA in the coordination process: Should you have any questions, or if we can be of additional assistance, please contact Jeffrey Alper at 215/597-7817.

Sincerely,

Richard V. Pepino, Chief NEPA Compliance Section



Harry Hughes
Governor
Joseph Curran, Jr.
Lt. Governor

STATE OF MARYLAND DEPARTMENT OF AGRICULTURE

Wayne A. Cawley, Jr.
Secretary
Hugh E. Binks
Deputy Secretary

JOL U 12 5" PM 200 DIVISION

June 30, 1986

Ronald E. Moon State Highway Administration 707 N. Calvert Street Baltimore, Maryland 21202

REF: Comments - Maryland Route 100 Project

Dear Mr. Moon:

The Maryland Department of Agriculture has an interest in the proposed Maryland Route 100 Project. I wish to submit the following statement which was read at the Public Meeting on June 11, 1986 but has not previously been submitted in writing:

The Maryland Department of Agriculture has an interest and a responsibility to promote the retention, conservation and preservation of productive agricultural and forest land. The Governor's Executive Order on Policies to Guide State Actions for the Physical and Economic Development of Maryland requires State agencies to "...conduct State projects, programs and investments such as highways..." and "...to minimize the conversion of productive agricultural and forest land...". Further on, however, the Executive Order also calls for "...the efficient provision of transportation services...".

This project clearly requires a decision which balances the public's need for improved transportation, for retention of natural resources and agricultural land and for environmental protection. We would expect that with whichever route is selected, the impact on farmland and on natural resources areas such as the State's only tree nursery, for example, would be minimized to any possible extent such that their productive capacity and environmental quality would be maintained.

Thank you for the opportunity to express our views.

Wayne A. Cawley, Jr.

Secretary

WAC:mj

TELEPHONE NUMBER (301) 841-5880
50 HARRY S. TRUMAN PARKWAY, ANNAPOLIS, MARYLAND 21401

RESPONSE TO MD DEPARTMENT OF AGRICULTURE LETTER DATED JUNE 30, 1986

Minimization of impacts on agricultural land and natural areas, as well as residential and commercial areas, has been a consideration throughout the study. Minor alignment shifts will be considered during final design of the project to reduce impacts as much as feasible.



MARYLAND

DEPARTMENT OF STATE PLANNING

301 W. PRESTON STREET BALTIMORE, MARYLAND 21201-2365

HARRY HUGHES

CONSTANCE LIEDER

July 1, 1986

RECEIVED

JUL 7 1986

Mr. Neil Pedersen
Department of Transportation
Office of Planning and Preliminary Engineering
707 N. Calvert Street
Baltimore, Md., 21201-0717

DIRECTOR, COTICE OF PLANNING & PRELIMINARY EXCLUSERING

SUBJECT: REVIEW AND RECOMMENDATION

State Application Identification Number: MD860514-0369

Applicnat: MDOT - State Highway Administration

Description: Draft EIS/Section 4(f) Evaluation - Md. Rte. 100

From I-95 to I-97, AA682-101-570

Location: Anne Arundel County

Dear Mr. Pedersen:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 16.02.03, the State Clearinghouse has coordinated the intergovernmental review of the referenced subject. As a result of the review, it has been determined that the subject is generally consistent with Maryland's plans, programs and objectives as of this date. Several environmental issues will require further analysis prior to any decision regarding alternatives. It is requested that the additional information needed be circulated for review before finalizing the EIS document.

All directly affected State and local public officials were provided notice of the subject. Review comments were requested from the following local jurisdictions and regional and State agencies:

Anne Arundel County, Regional Planning Council, Department of Pubic Safety and Correctional Services, Department of Budget and Fiscal Planning, Department of Economic and Community Development, including the Maryland Historical Trust (SHPO), Office of Environmental Programs of the Department of Health and Mental Hygiene, Department of Natural Resources, including the Coastal Zone Resources Division, Department of General Services, Department of Education, and the Department of State Planning.

The following specific comments are provided for your consideration:

The State Historic Preservation Officer has determined that the subject may affect archeological or historic resources listed in, or possibly eligible for the National Register of Historic Places. Section 106 of the National Historic Preservation Act and the federal Advisory Council on Historic Preservation's

Mr. Neil Pedersen July 1, 1986 Page Two

regulations (36 CFR Part 800) require that the Advisory Council be given the opportunity to comment when a federal undertaking will affect resources listed in or eligible for the National Register. In accordance with a 1981 suspension of Section 800.4 of the Advisory Council regulations, the time in which a "determination of effect" is made can be decreased, if the federal agency and the State Historic Preservation Officer concur that resources are eligible for listing on the National Register. It is recommended that the federal agency or State agency or local government to which compliance responsibility is delegated prepare and submit the requisite documentation to the Keeper of the National Register for a formal "determination of eligibility" within one year from the date the State Historic Preservation Officer and the federal agency concurred that resources are eligible for listing. If the federal agency does not agree with the opinion of the State Historic Preservation Officer, a "determination of eligibility" must be requested from the National Register before proceeding. For more information about the requirements of Section 106 and the Council's regulations, the applicant should contact the State Historic Preservation Officer. The Trust indicated that MHT is working closely with the State Highway Administration to complete the Section 106 requirements.

Department of Education noted that there appears to be no direct impact on any of the five school sites within the study area: Waterloo Middle, Harman Elementary, Severn Elementary, Quarterfield Elementary and North Arundel Voc. Tech. Alternate No. 3 does propose the closing of Harmans Road. The impact of this road closing should be studied with regard to any increases in traffic on nearby roads. In particular, the potential impact on Ridge Chapel Road which provides access to Harman Elementary School should be studied.

Department of Natural Resources advised that correspondence (copies attached) dated June 27th and June 12th were forwarded to the applicant, summarizing the Department's comments. The Department noted that sediment and erosion control measures and stormwater management will require review and approval by the Administration. Also, any wetland impacts will require mitigation. A survey should be made of the location to determine whether any rare plants are present. The Department also had comments relating to irrigation, water supply, air quality and circulation and access to the Buckingham State Nursery. Further environmental analysis and discussions are requested.

Department of State Planning noted (copy attached) that the reference subject was reviewed and in general the Department has no objection to the proposed construction. However, the Department feels that the building alternatives could adversely affect parkland, wetland, streams, the Patuxent River Primary Management Area and other environmentally sensitive locations. It is suggested that the Patuxent River Policy Plan be used to guide construction decisions within the Patuxent Primary Management Areas. Since there appears to be a considerable number of environmental concerns, further environmental analysis should be conducted and reviewed prior to any decision on an alternative route.

Regional Planning Council noted (copy attached) that the subject is consistent with regional plans and programs. The Office of Planning and Zoning has been coordinating with the State Highway Administration on this study and is preparing written comments for the record, in addition to previous correspondence. This subject is being reviewed concurrently by the Transportation Steering Committee.

Mr. Neil Pedersen July 1, 1986 Page Three SCH#MD860514-0369

In response to the review request, this letter with attachments constitutes the initial review. The applicant is required to include a copy of this letter with attachments and a statement of consideration given to the comments and recommendation with the application that is submitted to the federal approving authority. A copy of this statement should also be submitted to the State Clearinghouse. Additionally, you are required to place the State Application Identification Number (SAI) on the application for financial assistance.

The Clearinghouse must be informed if the recommendation cannot be accommodated by the federal approving authority. The Clearinghouse recommendation is valid for a period of three years from the date of this letter. If the approving authority has not made a decision regarding the subject within that time period, information should be submitted to the Clearinghouse requesting a review update.

We appreciate your attention to the intergovernmental review process and look forward to continued cooperation.

Sincerely

Guy W. Hager, Director

Maryland State Clearinghouse for Intergovernmental Assistance

GWH:SB:mk

Attachment

cc: Bruce Gilmore - DNR
Clyde Pyers - DOT
Ed Wise - DECD
Max Eisenberg - OEP
Daryl Rawlings - RPC
Louis Stettler - DBFP
Frank Hall - DPS&CS
Betsy Barnard - DHMH
Eric Walbeck - DGS
Skipp Sanders - DOE
William Smith - DSP
Emory Harrison - DSP



Regional Planning Council

2225 North Charles Street J. Hugh Nichols, Chairman

Baltimore, Maryland 21218-5767 (3)
Alfred P. Gwynn, Executive Director

(301) 383-5838 🗀 🗀

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JUN 27 1736

June 20, 1986

Mr. Guy W. Hager, Director Maryland State Clearinghouse for Intergovernmental Assistance Department of State Planning 301 West Preston Street Baltimore, Maryland 21201

Metropolitan Clearinghouse
Review and Referral Memoran-
dum, Project: 0369-86094
Draft EIS/Sec. 4(f) Evaluation

State Clearinghouse #: 860514-0369

Re

Dear Mr. Hager:

The attached review and referral memorandum is certification that the above referenced project has undergone review and comment by the Regional Planning Council and a recommended action has been determined based on the Council's findings.

Comments on this project were requested from: Anne Arundel County.

We appreciate your attention to Metropolitan Clearinghouse procedures. If you have any questions, please contact us at 383-7110.

Sincerely,

Daryl L. Rawlings, Coordinator Metropolitan Clearinghouse

Attachment

REGIONAL PLANNING COUNCIL 2225 North Charles Street Baltimore, Maryland 21218

RPC Meeting: June 20, 1986

ANNE ARUNDEL COUNTY

Project:

0369-86094

Draft EIS/Sec. 4(f) Evaluation. MDOT-SHA have submitted an EIS for MD Rt. 100 Extended under Sec. 4(f) Evaluation for Anne Arundel County. The purpose is to study proposed alternates for the construction of MD 100 from I-95 in Howard County to MD Rt. 3/I-97 in Anne Arundel County. It also includes improvements to existing highways in the area involved.

Referral Source:

Department of State Planning

COMMENTS

This project is consistent with regional plans, programs, and policies.

The Office of Planning and Zoning has been coordinating with the State Highway Admin-istration on this study and is preparing written comments for the record, in addi-

tion to previous correspondence.

This project is being reviewed concurrently by the Transportation Steering Committee.

Recommendation:

Endorsement is recommended.

I HEREBY CERTIFY that at its 258th meeting, which was held on June 20, 1986, the Regional Planning Council concurred in this Review and Referral Memorandum and incorporated it into the minutes of that meeting.

Executive Director

FROM: Ms. Jackie McMillan Office of Flanning	DATE: May 20, 1986
and Zoning Arundel Center	RPC MESTING: June 20, 1986
Annapolis, Maryland 21401	Joint RPC/CMISA Review Cycle (up to 60 days)
RE: REFERRAL COORDINATOR REVIEW SUR	MARY
Project: Draft EIS/Sec. 4(f) Evalu	uation
R & R File Number: 0369-86094	
Comments should be return by:	6/10/86
This project has been forwarded ments or agencies (check appropriate the reviewing agencies):	to the following local depart- blanks and attach comments from
Planning Environmental Protection Others (Specify)	Public Works Human Relations

JURISDICTION'S COMMENTS	
Check One This jurisdiction has no commen	ts on this proposal.
This project is consistent with of local comprehensive plans, g	or contributes to the fulfillment oals, and objectives.
This project raises problems coplans, or intergovernmental, enissues, and a meeting with the	ncerning compatibility with local vironmental, or civil rights applicant is requested.
Argue: Or Interkovelumental' eu	ncerning compatibility with local vironmental, or civil rights the applicant is not requested.
This project is generally consistying comments are necessary (as	stent with local plans, but qualitach comments).
RETURN TO:	Signature Jackie McChulla_
Coordinator, Metropolitan Clearinghoungional Flanning Council	
2225 North Charles Street Baltimore, Maryland 21218	Agency: DIANNING of ZUNING
	Date: 6/16/66

TO: Ms. Jackie McMillan

Office of Planning and

Zoning

Arundel Center

Annapolis, Maryland 21401

Date: May 20, 1986

RE:

PROJECT REVIEW FORM

Project: Draft EIS/Sec. 4(f) Evaluation

R & R File Number: 0369-86094

Comments should be returned by:

6/10/86

Check One

This agency has no comments on this	proposal.
This project is consistent with or of local comprehensive plans, goals,	contributes to the fulfillment and objectives.
This project raises issues concerning plans or intergovernmental problems, applicant is requested. (Explain be	and a meeting with the
This project raises issues concerning plans or intergovernmental problems; applicant is <u>not</u> requested. (Explain	however, a meeting with the
✓ This project is generally consistent ing comments are necessary. (Explain	with local plans, but qualify-
Comments This Office has been of Highway Administration on this whiten comments for the record correspondence.	Study and is propariya
RETURN TO LOCAL REFERRAL COORDINATOR	Signature Roland Lauria
NAMED ABOVE	Title Plannor III
·	Agency Office of Planning
	& Zoung.

STATE OF MARYLAND WATER RESOURCES ADMINISTRATION ANNAPOLIS, MARYLAND 21401

RECEIVED

JJL - 1 1986

SUBJECT: - MD 860514-0369 - WEWED

TO:

Sam Baker, State Clearinghouse

301 W. Preston St. RM 1104

Baltimroe, Md. 21201

- FROM: Virginia Tauber

June 27, 1986

Regarding our phone conversation of this morning, I am attached all additional information that I have received on the subject Clearinghouse Project.

Thank You.

May 15, 1986

Maryland State Clearinghouse for Intergovernmental Assistance 301 West Preston Street Baltimore, MD 21201-2365

MEPT: 21 OF STATE PLANNING RECEITED

JUN 12 1985

SUBJECT: REVIEW	COMMENT	AND	RECOMMENDATION
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State Identification Number: MD860514-0369

Applicant: MDOT - State Highway Administration

De	escription: Draft EIS/Section 4(f) Evaluation - Md. Rte. 100 from I-95 to I-97, AA682-101-570
Responses mu	ust be returned to the State Clearinghouse on or beforeJune 20, 1986
Based on a r	eview of the notification information provided, we have determined that:
Check One:	
WI	is consistent with our plans, programs, and objectives. For those agencies ich are responsible for making determinations under the following federal ensistency requirements, please check the appropriate response:
-	It has been determined that the subject has "no effect" on any known archeological or historic resources and that the requirements of Section 106 of the National Historic Preservation Act and 36 CFR 800 have been met for the subject.
` <u>-</u>	It has been determined that the requirements of Maryland Coastal Zone Management Program have been met for the subject in accordance with 16 USC 1456, Section 307(c)(1) and (2).
2) It qu	is generally consistent with our plans, programs, and objectives, but the alifying comment below is submitted for consideration.
in	raises problems concerning compatibility with our plans, programs, or jectives, or it may duplicate existing program activities, as indicated the comment below. If a meeting with the applicant is requested, please eck here
ne	ditional information is required to complete the review. The information eded is identified below. If an extension of the review period is requested, ease check here
5) It	does not require our comments.
COMMENTS:	PLEASE SEE ATTACHED COMMENTS
(Additional	comments may be placed on the back or on separate sheets of paper)

Name: Dr. Askew Skipp Sanders

VI-331 Organization: MD STATE DEPT. OF EDUCATION

YLAND STATE DEPARTMENT OF EDUCATION
200 WEST BALTIMORE STREET
BALTIMORE, MARYLAND 21201
(301) 659-2534

DATE____June 6, 1986___

To: Skipp Sanders

FROM. Al Abend

Subject Intergovernmental Review: MD. RTE 100 from I-95 to I-97

Skipp, I have reviewed the above proposal for impact upon public school facilities. There appears to be no direct impact on any of the five school sites within the study area: Waterloo Middle, Harman Elementary, Severn Elementary, Quarterfield Elementary and North Arundel Vos. Tech. Alternate No. 3 does propose the closing of Harmans Road. The impact of this road closing should be studied with regard to any increases in traffic on nearby roads. In particular, the potential impact on Ridge Chapel Road which provides access to Harman Elementary School should be studied.

ACA/1pj

cc: Yale Stenzler

TORREY C. BROWN, M.D. JOHN R. GRIFFIN DEPUTY SECRETARY



JAMES W. PECK DIRECTOR

STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES WATER RESOURCES ADMINISTRATION

TAWES STATE OFFICE BUILDING ANNAPOLIS, MARYLAND 21401

June 27, 1986

MEMORANDUM

TO: Virginia Tauber

Clearinghouse Coordinator

FROM: Wanda Adams woft

EIS Comments Coordinator

SUBJ: MDOT - State Highway Administration

MD 86051400369

Please find attached copies of comments sent directly to SHA regarding the DEIS for MD 100 from I-95 to I-97, WRA No. 71-PP-0004, SHA No. AA-682-101-570.

WDA:das

Attachment

11-333	
x2265	

655

TORREY C. BROWN, M.D.
SECRETARY

JOHN R GRIFFIN
DEPUTY SECRETARY





STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES WATER RESOURCES ADMINISTRATION TAWES STATE OFFICE BUILDING ANNAPOLIS, MARYLAND 21401

June 27, 1986

Mr. Louis H. Ege, Jr.
Project Development Division
State Highway Administration
Room 310
707 N. Calvert Street
Baltimore, MD 21202

Re: WRA File No. 71-PP-0004 SHA No. AA-682-101-570 MD 100 from I-95 to I-97 DEIS/Section 4(f) Evaluation

Dear Mr. Ege:

The above referenced project was circulated throughout the Administration and to other Agencies within the Department of Natural Resources for review and comments. The following represents a summary of comments provided by the Divisions within the Water Resources Administration. Comments provided by the Maryland Forest, Park and Wildlife Service were forwarded directly to Mr. Hal Kassoff.

As stated within the document, sediment and erosion control measures, as well as stormwater management for the project, will be subject to review and approval by the Administration in accordance with Sections 8-1105 and 8-11A-05, respectively, of the Natural Resources Article, Annotated Code of Maryland.

In accordance with Section 8-803 of the Natural Resources Article, Waterway Construction Permits will be required, as discussed in the document, for any project activities which will alter the course, current, or cross-section of Deep Run, Piney Run, Sawmill Creek or Stony Run. Any wetlands impacts will require mitigation.

No mention was made as to whether a field survey for aquatic species was performed; such a survey should be performed. In addition, documentation that streams in "the study corridor are not known to serve as spawning areas because of obstructions and other factors" should be provided (see Page III-40).

Mr. Louis H. Ege, Jr. June 27, 1986
Page Two

As two Maryland State rare plants, Helonias bullata and Carex barrattii, could occur within the project area if appropriate habitat is present and as both species are "candidates" for listing as threatened or endangered by the U. S. Fish and Wildlife Service (Section V), a survey should be made of the project area to determine whether they are present.

Since the subject document was not of sufficient detail to render a decision on the alternate which would have the least impact, the Sediment and Stormwater Division has recommended Alternate 2B be selected. Either of Alternate 2 would involve the least soil disturbance. Option 2B involves slightly less wetlands as well as soil of poor quality. Alternate 4 involves more streams and more terrain and, therefore, has greater potential for soil problems than the other ones. Alternate 3B would be the most objectional due to the size of the area and large amount of wetlands involved. The Administration recommends the selection of the alternate to have the least impact on the stream channels, floodplains and environment. Furthermore, the Flood Management Division of this Administration will have a new helpologic and hydrualic analyses available in the near future for Dorsey Run.

Finally, further elaboration should be made as to whom would be responsible for locating and defining the uses of all active wells within the affected area (Page IV-42).

Sincerely,

Randy Hamill

Randy L. Harrill Chief, Waterway Permits Division

RLH: WDA: das

cc: Earl Shaver, WRA Sediment & Stormwater Division Virginia Tauber, Clearinghouse Coordinator



Department of Natural Resources

MARYLAND FOREST, PARK & WILDLIFE SERVICE

Tawes Office Building

Annapolis, Maryland 21401

6570 Coulo

DONALD E. MACLAUCHL DIRECTOR

June 12, 1986

Mr. Hal Kassoff Administrator State Highway Administration P. O. Box 717/707 North Calvert Street Baltimore, Maryland 21203-0717

Dear My 350ff:

TORREY C. BROWN, M.D.

SECRETARY

Tappreciate the excellent cooperation that you and your staff have provided in regards to the extension of Maryland Route 100.

Since you and Assistant Secretary Harrison met in December 1984, our nursery staf has been in contact with your staff regarding the possible location through the Buckingham State Nursery.

To date, the following actions have occurred regarding the nursery.

- 1. The intersection with Maryland Route 170 has been redesigned to reduce the amount of seedling production space which will be lost.
- 2. A study has been initiated by the State Highway Administration to determine the environmental impacts upon air and water quality. I would request that the study be completed as soon as possible so that we can have a better understanding of the potential problems facing us in order to react accordingly.
- 3. Discussions with your design people have continued regarding the bridge to pass over the railroad. We have requested an extension to provide for access as well as for improved air flow. This is still in the discussion phase. I would ask for your support in the redesign.

For the public hearing of June 12, 1985, I would request that the following concerns be entered into the hearing record. These concerns involve both the construction phase and the potential impacts following construction.

VI-336
Telephone 269-3776
TTV FOR DEAF- STATEWINE 1-801-492-5082- RAI TIMORE 269-2609

yr. Hal Kassoff page two June 12, 1986

A. Irrigation Water Supply

1. Runoff water from highway containing salt and other chemicals.

The land along the right-of-way and all surrounding land drains into the nursery irrigation system pends. The preliminary plan indicates that the road surface will also drain in the direction of the irrigation system supply. Salt or any other chemical run-off from the highway will make it unfit for irrigation purposes. Contaminated water cannot be allowed access to the underground supplies since some of the irrigation supply comes from springs.

Interference with supply stream that crosses the proposed right-of-way.

Water is supplied to the irrigation ponds by a combination of springs and a stream that flows across the highway right-of-way that is the carrier of surface water as well as water from additional holding ponds on the southwest corner of the nursery. Current and future projected irrigation requirements for the nursery are 90,000 gallons per hour. Under normal conditions, this would require 720,000 gallons of water twice a week during the growing season. Additional water is used during the spring for frost protection. In order that this supply be maintained, the stream flow across the right-of-way must be uninterrupted during the construction phase as well as after the construction is complete.

3. Runoff water during construction permitting chemicals and silt to access the irrigation supply.

The amount of loose soil involved with the proposed construction and fill makes siltation a major concern. Also, chemicals and oils that may be present around a large construction project such as this must be prevented from entering the drainage system.

4. Chemical spills due to highway accidents.

Accidents along any highway are always possible no matter what precautions are taken to prevent them. Any accident involving oil and chemical spills can spell disaster should it get into the water supply system. Some type of safeguard and backup system will have to be provided in case such a spill occurs.

- B. Air Quality and Circulation
 - 1. Pollutants from highway traffic.

The volume of traffic this highway will carry and its elevation raise grave concerns about pollutants such as carbon monoxide (CO), nitrogen oxides (NO $_{\rm X}$), hydrocarbons, unburned gasoline vapors plus heavy metals

Mr. Hal Kassoff Page three June 12, 1986

and other related aerosol/particulate matter. These materials released into the air and caused to settle onto the nursery during major inversions can cause serious damage if not total destruction to many of our crops and/or seed orchards.

2. Creation of non-circulating air pockets caused by the proposed construction.

The proposed fill poses a serious problem with air flow in a north, south direction. The railroad grade running along the west side of the nursery and the higher ground near Route 170 already cause a problem with the east, west flow of air. The fill will cause the creation of pockets of still air, increasing frost damage in early spring and providing an opportunity for air pollutants to settle. Spring and providing will offer some help but will have to extend at least 1200 feet from the railroad to provide protection to the critical area.

3. Salt spray from the highway.

Salt spray thrown into the air in the winter by vehicles and snow plows can have an adverse impact on seed orchards and production area next to the highway. The highway will go right by two major seed orchards on one side and part of the seedling production area on the other. The elevation of the highway only magnifies the distance from the roadway this spray can carry with the air currents.

- C. Access to Southern Part of the Nursery
 - 1. Access and security during and after construction.

The highway will cut the property in half. It is imperative that access be provided across the right-of-way during construction as well as after the highway is operational. The location of the access is critical because of the large aerial platform used to work in the seed orchards. The highway location will eliminate the existing east, west access from the western boundary along the railroad to the seed orchards. Due to the security requirement of the nursery, the right-of-way will have to be fenced. It will also have to be fenced during construction.

2. Access of construction vehicles to construction site.

Access to the construction site by construction vehicles is also a concern. Using existing roads through the nursery will have adverse impact on the operation. Existing roads are light duty and would not take heavy loads.

Mr. Hal Kassoff Page four June 12, 1986

- D. Loss of Property and Productivity
 - 1. Seed orchard preservation.

The construction area lightly impacts the "seed orchards" on the south side of the construction. The damage can be minimized if care is taken with minimal disturbance or one-sided construction techniques.

2. Loss of "Brigham White Pine" seed orchard.

The proposed R-O-W and fill proposed would eliminate the "Brigham White Pine" seed orchard. This two-acre orchard produces now, from 400 to 500 pounds of seed worth about \$40,000 a year for improved seed on the open market. It would take us about 30 years to develop another orchard of present capacity for this strain of white pine. Extension of the bridge and minimal impact techniques could save about half of the existing orchard.

3. Loss of approximately 15 acres in addition to the white pine orchard.

The R-O-W proposal will consume approximately 17 acres. The area presently is occupied by the Brigham seed orchard and our mulching area. Production expansion is planned for this area. We must maintain the area capable of seedling production. We are very limited in the amount of adjacent land that could be acquired due to permanent improvements that surround the property on all sides.

E. Maintain constant coordination during the design phase to assure satisfactory accomplishment of the criteria.

Constant negotiations will be required at every step of the planning process to resolve such issues as bridge length, access, contain runoff to protect water supply, airborne pollutants and one-sided construction methods.

In summary, there are many potential problems outlined which would severely hinder plant production at the nursery. The nursery serves as the only source of seedlings, wildlife plants and shade trees for our state forestry program. Both public and private ownerships depend upon the nursery for planting materials. Unless the impacts and problems are addressed in a satisfactory manner, production at the nursery will be seriously reduced or eliminated. Should this occur, the only alternative is to relocate the nursery, at a cost which could exceed eight (8) million dollars.

Mr. Hal Kassoff Page five June 12, 1986

We look forward to hearing from you on further updates and to a continuing cooperative working relationship.

Sincerely,

Donald E. MacLauchlan Director

DEM/JBR/1s

663

M E M O R A N D U M

TO:

Guy Hager

THROUGH:

Bill Smith

FROM:

Harvey Gold

SUBJECT:

Draft EIS Section 4f Evaluation

DATE:

June 27, 1986

The comprehensive section has reviewed this proposal and in general has no objection to the roadway. We do however, feel that the build alternatives could adversely affect parkland, wetland, streams, the Patuxent River Primary Management area and other environmentally sensitive areas. (Specific comments are enclosed) Secretary Lieder has also received a letter (copy enclosed) from the Liberty Tree Project expressing concern about the affect of the proposed highway on Buckingham State Tree Nursery.

Since there is a considerable number of environmental concerns about this project, the State Highway Administration should consider a meeting with this Ocparion (or any other State agency that has expressed concern) before a decision on the alternative is made on July 7, 1986.

It is also suggested that a member of this Department attend the quarterly review meetings for this project.

HG: WMS:alg

June 27, 1986

Harvey Gold

A-95 Comment

Draft EIS section 4f Evaluation

MD Rte 100 From I-95 - I-97

Portions of this project are in the Patuxent River Primary Management area and are subject to the Patuxent River Policy Plan adopted by the General Assembly in 1984. The Policy Plan is a component of the States' comprehensive program to restore the Patuxent River. It addresses such problems as non source pollution, water quality, aquatic resources and growth through The Primary Management Handbook.

All of the build alternatives proposed would adversely affect the streams (Piney Run, Stoney Run, Deep Creek and Sawmill Creek) floodplains and wetlands in the Primary Management area.

It is felt that these facts should be considered in the alternative selection and that if a build alternative is selected, the Primary Management Area Handbook should be used as a guideline to help mitigate the effect of the highway on these.

It is also suggested that a representative of this Department be included at the quarterly interagency review sessions for this project.

HG:alg

June 18, 1986

Harvey,

I've reviewed the draft E.I.S. for Maryland 100 and offer the following general comments:

- The most significant issue from the SCORP prospective is the impact on State-owned recreation and open space lands, especially Patapsco State Park (Alternate 4). Buckingham Nursery is impacted by Alternate 3. I would recommend against Alternate 4 due to its impact on the State Park. DNR is dealing with MDOT on this issue.
- Friendship Park is heavily impacted by Alternates 2B and 3B, and to a lesser extent by Alternate 2A and 4.
- All alternates involve stream crossings, wetland destruction, and destruction of prime farmland and woodland. From a review of the "Summary of Impacts" on page vii in the EIS, all of the alternates are in conflict with policies/recommendations in the Maryland Recreation and Open Space Plan in one form or another. Actions proposed in the EIS which are inconsistent with the State Recreation and Open Space are:
 - the destruction of wetlands all alternates
 - destruction of prime farmland/forest land all alternates
 - impact State recreation/open space land alternates 3 & 4
 - impact local parkland alternates 2A, 2B, 3B, 4
 - impact historical sites alternate 3B
 - impact archaeological sites all alternates

Pat Pudelkewicz

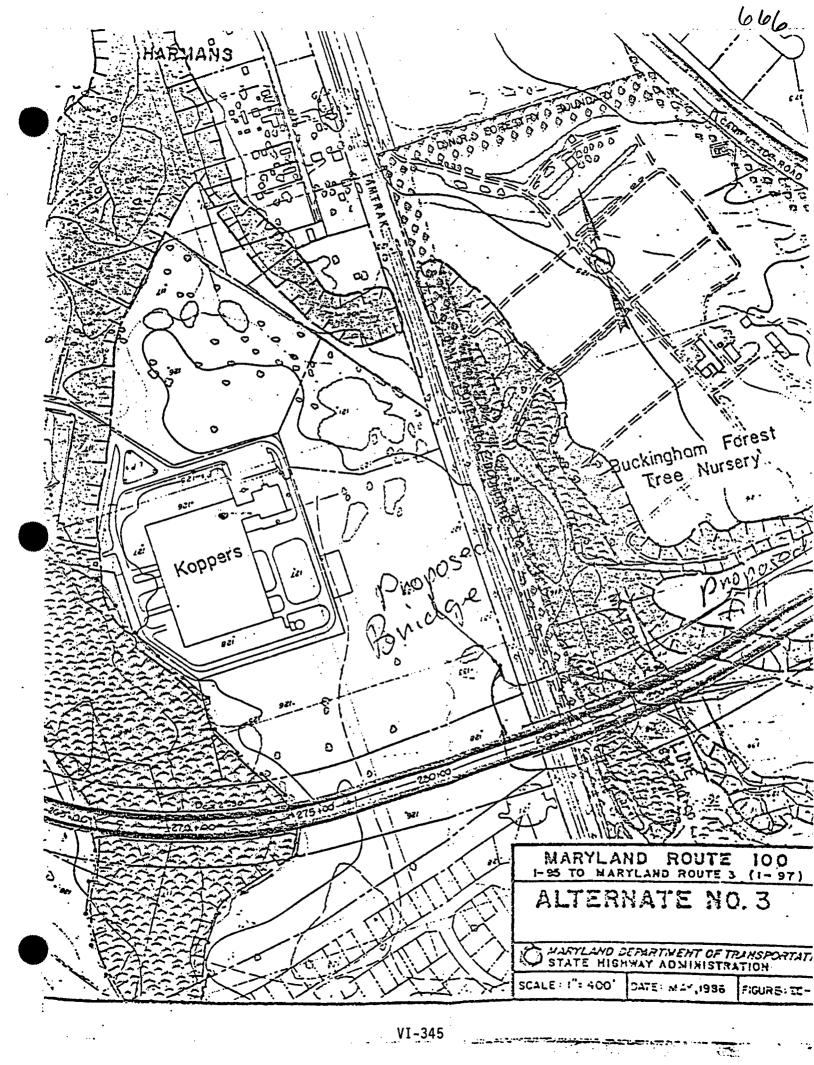
June 18, 1986

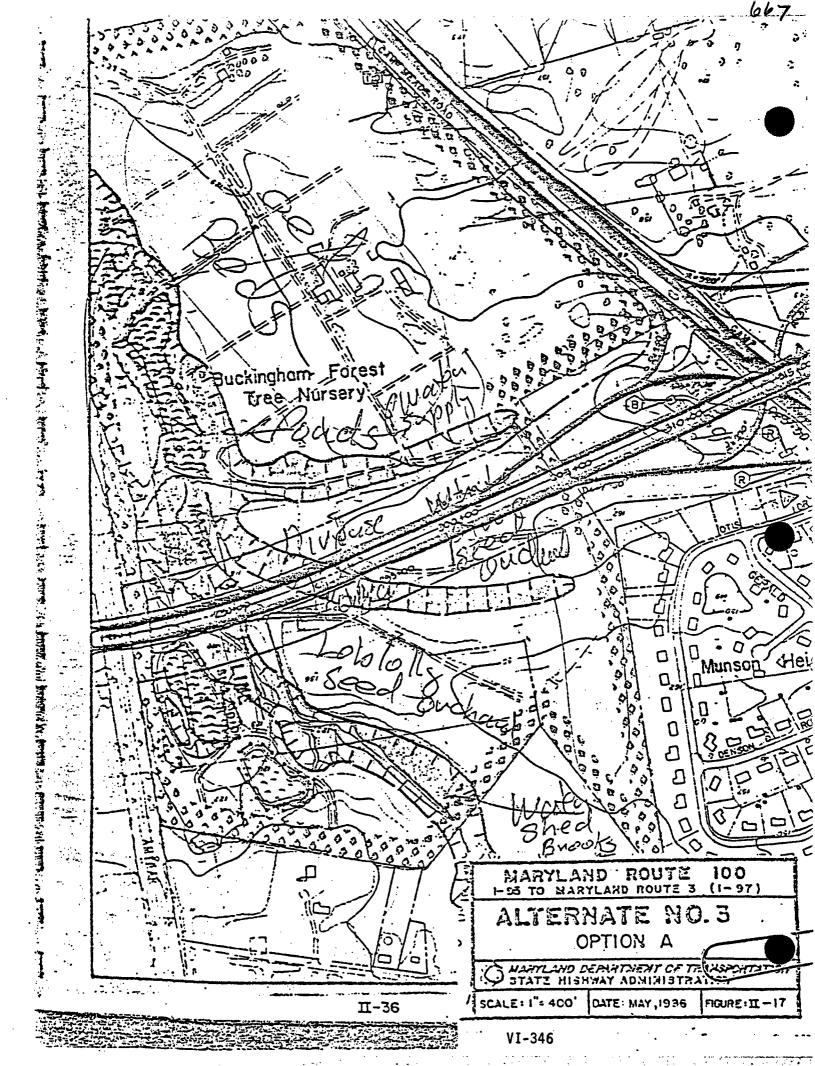
Harvey,

Given the short amount of time available, I have only general comments:

- 1. East-West traffic in N. AA. Co. is heavy/facilities need improvement.
- 2. All alternates involve potential environ. impacts resulting from streams xings, infringement on forest/park areas, etc.
- 3. Most significant issue to State vis-s-vis environment appears to involve intrusion into State-owned lands; DNR is involved to deal with these issues; Roland's group can look at, also.
- I have no preference re alternative #3 affects Buchingham
 Nursery, #4 affects Patapsco Park; all others affect Sawmill
 Creek Park. If other considerations are o.k., perhaps, go
 with alt. that traverses Sawmill Park only at the southern
 end (to minimize impact); avoid Patapsco.

Larry D.





MARYLAND ROUTE 100 PUBLIC MEETING

June 12, 1986

The Maryland Department of Agriculture has an interest and a responsibility to promote the retention, conservation and preservation of productive agricultural and forest land. The Governor's Executive Order on Policies to Guida State Actions for the Physical and Economic Development of Maryland requires State agencies to "...conduct State projects, programs and investments such as highways....to minimize the conversion of productive agricultural and forest land..." Purther on, however, the Executive Order also calls for "the efficient provision of transportation services."

This project clearly requires a decision which balances the public's need for improved transportation, for retention of natural resources and agricultural land and for environmental protection. We would expect that with whichever route is selected, the impact on farmland and on natural resources areas such as the State's only tree nursery, for example, would be minimized to any possible extent such that their productive capacity and environmental quality would be maintained.

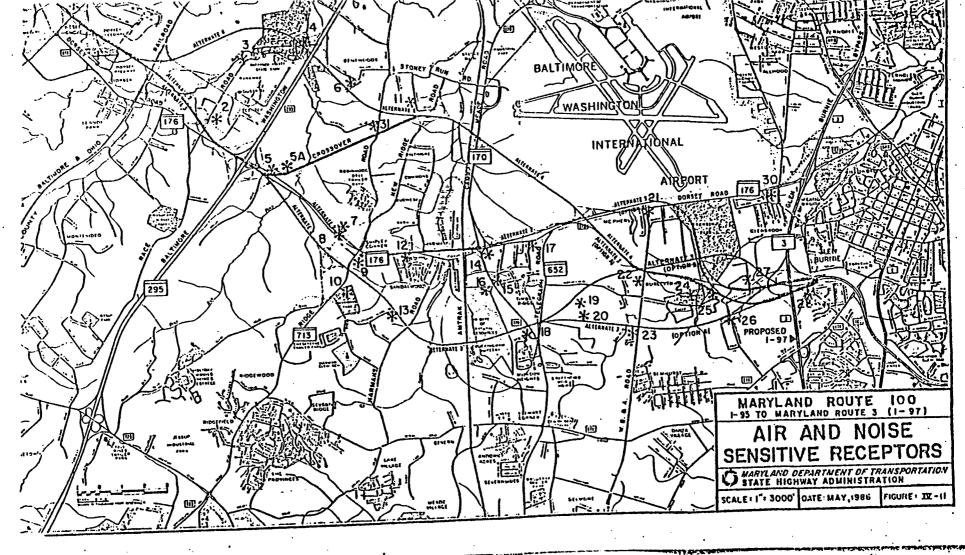
SUMMARY OF IMPACTS TABLE S-I

	ALTERNATES						
	NO- BUILD	2A	28	AE	38	4	3 CROS
SOCIO-ECONOMIC IMPACTS							
RESIDENTIAL DISPLACEMENTS	0	38	39	42*	32*	29	37
MINORITY RESIDENTIAL DISPLACEMENTS	0	20	21	21	11	11	18
BUSINESS DISPLACEMENTS	0	12	12	8	7	7	7
ACCESS TO COMMUNITY FACILITIES MODIFIED	NO	YES	YES	YES	YES	YES	YES
PARKLAND AFFECTED - ACRES	0	4.1	32.7	0	14.2	21.6	4.1
HISTORIC SITES AFFECTED	0	0	0	0	1	0	0
ARCHEOLOGICAL SITES AFFECTED	- 0	2	2	· 3	3	0	1
CONSISTENT WITH DEVELOPMENT PLANS	NO	NO	ИО	YES	YES	NO	NO.
NATURAL ENVIRONMENT IMPACTS							
PRIME FARMLAND SOILS - ACRES	0	.66	.66	7.62	7.62	9.18	0
ACTIVE AGRICULTURAL LAND - ACRES	0	16.8	12.3	54.4	43.5	16.8	16.8
STREAM REALIGNMENT - LINEAR FEET	0	0	0	0	0 -	0	0
NEW STREAM CROSSINGS	0	4	4	6	7	3	5
WETLANDS - ACRES	0	9.00	2.12	7.10	15.19	11.60	9.13
FLOODPLAIN - ACRES	0	17.18	17.24	33.32	34.16	8.77	25.70
WOODLAND - ACRES	0	47.61	39.71	59.47	61.35	41.68	54.25
OLD FIELD - ACRES	0	58.97	46.82	80.65	76.37	68.07	96.92
THREATENED OR ENDANGERED SPECIES	0	0	0	0	0	0	0
AIR QUALITY IMPACTS +	0	0	0	0	0	0	0
NOISE LEVEL IMPACTS ++	5	5	5	11	10	8	7
COSTS (x \$1,000,000)						٠.`	
RIGHT OF WAY	0	12.1	16.1	23.4	22.8	18.2	18.0
RELOCATION	0	0.5	1.3	1.3	1.0	0.8	1.0
CONSTRUCTION	0	101.6	103.8	119.1	130.	105.8	119.1
TOTAL.	0	114.2	121.2	143.8	153.9	124.8	138

^{* ·} REPRESENTS WORSE CASE COMBINATION OF INTERCHANGE OPTIONS

^{+ .} SITES EXCEEDING S/NAAQS

^{+ +} NSA'S EXCEEDING FEDERAL NOISE ABATEMENT CRITERIA OF THE INCREASE



RESPONSES TO COMMENTS FROM MARYLAND STATE CLEARING HOUSE

- 1. The State Highway Administration will continue coordination with the State Historic Preservation Officer to minimize impacts of the project on archeological and historical resources.
- 2. Under the selected alternate, Alternate 3B (Modified) Harmans Road will bridge over MD Route 100 and, therefore, no significant increase in traffic is expected on Ridge Chapei Road.
- 3. The State Highway Administration will continue coordination with the Maryland Department of Natural Resources to minimize impacts on the natural environment. Detailed sediment and erosion control measures and stormwater management plans will be developed during final design and will be reviewed by the Water Resources Administration. All improvements involving wetland encroachment will require a Section 404 Permit from the U.S. Army Corps of Engineers. A detailed study of the impacts of the project on the Buckingham Forest Tree Nursery is available for review at the State Highway Administration Library, 707 North Caivert Street, Baitimore, Maryland and at all State Depository Libraries.
- 4. The State Highway Administration will continue coordination with the appropriate agencies to minimize impacts on the natural environment. All streams and drainage basins affected by the project drain into the Patapsco River.
- 5. See responses to letters from the Office of Planning and Zoning of Howard County, the Anne Arundei County Department of Recreation and Parks and the Anne Arundei County Department of Public Works.



Maryland Historical Trust

DEVELOPMENT
DIVISION

BROJECT

May 12, 1986

Ms. Cynthia Simpson, Manager Environmental Management MDOT-SHA 707 North Calvert Street P. O. Box 717 Baltimore, Maryland 21203-0717

RE: Contract No. AA 682-101-571
Maryland Route 100
from Maryland Route 3 (I-97)
to Interstate Route 95
F.A.P. No. RF 162-1
P.D.M.S. No. 022007

Dear Mr. Simpson:

Our office has reviewed your letter of December 20, 1985, and plans for this project. After site visits we have made the following determinations of effect:

- A. for Alternate 2
 - 1. Smith Farm no effect
 - 2. Shipley House no adverse effect
- B. for Alternate 3
 - 1. Smith Farm no adverse effect provided that an adequate landscaping is reviewed by our office and then implemented. If there is disagreement regarding landscaping, the matter must be referred to the Advisory Council for resolution pursuant to 36 CFR 800.6(b).
 - 2. Shipley House
 - a. Alternate 3 as shown on the MD Rt. 713 option plan sheet adverse effect
 - b. interchange option as shown on Plan Sheet 2 adverse

In addition, we agree with SHA that Calvary Chapel, 7300 Ridge

Ms. Cynthia Simpson, Manager May 12, 1986 Page 2

Road, is not elibilbe for the National Register.

We have also reviewed your letter of May 1, 1986, and the maps showing Alternate 3 Option B. This alignment would have an adverse effect on the Smith Farm.

Please call George Andreve if you have any questions or comments.

Sincerely

J. Rodney Little

Director

State Historic

Preservation Officer

JRL/GJA/mmc

CC: Eleni Silverman Rita Suffness Ms. Lina Collins



Maryland Historical Trust

DEVELOPMENT
DEVELOPMENT
DEVELOPMENT

July 3, 1986

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

RE: Contract No. AA 682-101-570

MD Rt. 100 from MD Rt. 3

(I-97) to I-95

P.D.M.S. No. 022007

Anne Arundel and Howard Counties

State Clearinghouse #MD860514-0369

Dear Mr. Ege:

We have received your letter of 26 June 1986 regarding the archeological concerns for the above-referenced project, and we have examined the draft EIS for the project.

We understand that an additional Phase I archeological reconnaissance survey of the expanded project area was conducted during 1985-86. According to Table IV-II in the DEIS (pg IV-78), the 1985-86 survey identified 17 new archeological sites and re-examined six previously recorded sites in the study area. We have not, however, received any detailed information concerning the survey results, specifically: site descriptions and exact locations, explanation of testing methodology and results, and documented assessments of the sites' significance. fore, we are unable to accurately evaluate the project's effects on archeological resources or to determine the need for further work. To allow us to complete our evaluations of the identified sites, we requested that you provide us with a copy of the project survey report or a detailed executive summary which includes this information. Upon receipt of this information we will promptly complete our review. Thank you for your assistance.

Mr. Louis H. Ege, Jr. July 3, 1986 Page 2

If you have any questions, please contact Ms. Beth Brown of our staff at (301) 269-2438.

Sincerely,

Richard B. Hughes State Administrator of Archeology

RBH/BCB/mmc

CC: Mr. Paul Wettlaufer

Mr. Sam Baker

Mr. Tyler Bastian

Mr. George Andreve

Ms. Donna Ware



Maryland Historical Trust

July 21, 1986

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

Dear Ms. Simpson:

Our office has reviewed SHA's letters and proposed alternates for Maryland Route 100. After visiting the sites, we have made the following determinations of effect:

- 1. For Alternate 2 (Plan Sheet 2), we agree that there will be no adverse effect on the Shipley House.
- 2. For Alternate 3:
 - a. We agree with SHA that there will be no adverse effect on the Smith Farm conditioned on the utilization of a landscaping plan, subject to our review and comment. This alignment was shown on Plan Sheets 3 and 4.
 - b. Shipley House-adverse effect for alignments shown on the Md. Rt. 713 option plan sheet and Plan Sheet 2.
- 3. For Alternate 3, Option B-adverse effect on the Smith Farm.

Ms. Cynthia Simpson July 21, 1986 Page 2

In addition, we agree with SHA that Calvery Chapel (formerly St. Marks Church) at 7300 Ridge Road would not be eligible for the National Register.

Please call George Andreve if you have any questions or comments.

Sincerely,

J. Rodney Little

Director

State Historic

Preservation Officer

JRL/GJA/mmc

CC: Ms. Linda Collins

Harrison B. Wetherill, Jr.



Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary Hal Kassoff Administrator

June 26, 1986

MEMORANDUM

TO:

Mr. Louis H. Ege, Jr.

Deputy Director,

Project Development Division (Room 310)

FROM:

Walter Owens, Jr.

Deputy Chief,

Equal Opportunity Section

SUBJECT: Draft Environmental Impact Statement

Contract Number: AA 682-101-570

Maryland Route 100

te Guers, fr.

The subject document has been reviewed and found to be in compliance with Title VI of the Civil Rights Act of 1964.

Should you have any questions, please contact me on extension 1513.

WOJ:dao

VI-357

THOMAL'S G. HARRIS, JR. CHRECTOR 92-2350

DEAF TELETYPE NUMBER 992-2323



DIVISION OF LAND DEVELOPMEN AND ZONING ADMINISTRATIO JOHN W. MUSSELMAN, CHIEF 992-2352

DIVISION OF COMPREHENSIVE AND TRANSPORTATION PLANNING AMAR S. BANDEL, CHIEF 992-2357

OFFICE OF PLANNING & ZONING OF HOWARD COUNTY

GEORGE HOWARD BUILDING 3430 COURT HOUSE DRIVE, ELLICOTT CITY, MARYLAND 21043-4589

July 7, 1986

Neil J. Pedersen, Director Office of Planning and Preliminary Engineering Maryland Department of Transportation State Highway Administration P. O. Box 717/707 North Calvert St. Baltimore, Maryland 21203-0717

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINI

Re:

Maryland 100 Draft Environmental Impact Statement, I-95 to Maryland Route 3 Combined Location/Design Public Hearing on June 12, 1986

Dear Mr. Pedersen:

Enclosed are the coordinated comments and recommendations of this office and the Department of Public Works concerning the above mentioned project. Please note that these comments address only those portions of the project area which are within, adjacent to, or of direct impact on Howard County.

The comments from this office are by letter of June 30, 1986, from Carl Balser, and the comments from the Department of Public Works are by letter of June 20, 1986, from Elizabeth A. Calia.

If you have any questions concerning the enclosed comments and/or recommendations, please call me at your convenience.

Sincerely yours

Thomas G. Harris.

Director

TGH.JR.:st Encls.

cc: George F. Neimeyer William A. Riley Amar S. Bandel

File: 10.224

1

THOMAS G. HARRIS, JR.
DIRECTOR
992-2350

DEAF TELETYPE NUMBER



DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION JOHN W. MUSSELMAN, CHIEF 902-2352

DIVISION OF COMPREHENSIVE AND TRANSPORTATION PLANNING AMAR S. BANDEL CHIEF 992-2357

June 30, 1986

OFFICE OF PLANNING & ZONING OF HOWARD COUNTY

GEORGE HOWARD BUILDING 3430 COURT HOUSE DRIVE, ELLICOTT CITY, MARYLAND 21043-4589

MEMORANDUM

TO:

AMAR S. BANDEL, Chief

Division of Comprehensive & Transportation Planning

FROM:

CARL BALSER, Transportation Planner

Transportation Planning Section

RE:

MD 100 DRAFT ENVIRONMENTAL IMPACT STATEMENT

The following represent coordinated staff comments of this office and the Howard County Department of Public Works (reference Attachment A) regarding the Draft EIS for the proposed extension of MD 100 from I-95 in Howard County to MD 3 (I-97) in Anne Arundel County. These comments primarily address those portions of the proposed roadway which lie within or immediately adjacent to Howard County.

- O Under all alternatives, the bridge over the B & O Railroad tracks and O'Connor Road should accommodate the potential expansion of O'Connor Road to a Major Collector (60' to 80' R.O.W.) as shown on the 1982 Howard County General Plan.
- Alternate No. 3 and the Crossover Alternate from No. 3 to No. 4 provide the most efficient access to nearby areas of Howard County including Dorsey, Lennox Park, Elkridge, Deep Run and Hanover Park. In particular, by providing a grade separation at Race Road, this alternate will provide the greatest accessibility to the existing industrial area of Hanover Park, as indicated on the General Plan, and the projected Deep Run industrial area, located east of the B & O tracks, west of the County line, north of MD 176 and south of Hanover Road. This office, therefore, endorses either Alternate 3 or the Crossover Alternate.
- O Alternate 4 provides the least favorable access to adjacent areas of Howard County. This alternate also requires acquisition of a significant swath of land through Patapsco State Park, a pristine and sensitive wooded and streamside environment of regional significance. Such an alignment can be expected to seriously degrade the aesthetic qualities of this irreplacible natural resource.

Amar S. Bandel June 30, 1986 Page two

Furthermore, Alternate 4 subdivides the Deep Run area in such a manner as to seriously reduce the accessibility to and development potential of the remaining parcels. This office is, therefore, opposed to Alternate 4.

- o The population and housing data for Howard County appear to be Round III forecasts. A Round III forecast was developed in 1983 and agreed to by RPC and DSP. The correct data should be used for this study. Attachments B and C indicate corrected data for Tables III-l and III-2 respectively.
- Associated with the U.S. 1/MD 100 interchange is the proposed relocation of access to the Route 100 Business Park approximately 1,100 feet north of the present entrance at Amberton Drive. The proposed relocated access drive, as shown under all alternates, would cross the 100 year floodplain and possibly require relocation of the stream. The potential impacts of this crossing should be more fully explored with the Howard County Department of Public Works. If possible the relocated entrance should be repositioned to avoid the floodplain or to at least minimize any adverse impacts.
- o In a related matter a citizen has brought to the attention of this office and the Department of Public Works that the relocated access road as shown would likely pass through one or more of his commercial greenhouses which he alleges are not shown on the alignment maps. SHA should verify the exact location of these buildings relative to the relocated access road and either adjust the alignment to avoid these buildings or indicate the presence of the buildings to be displaced by the interchange improvements.
- o SHA should also show the proposed entrance to the Troy Hill Business Park to be located west of U.S. I opposite the relocated entrance to the Route 100 Business Park. It appears from recently submitted subdivision plans that the entrance may not be fully compatible with SHA's intersection design or the western service road. This area should be further analyzed.
- o Under Alternate No. 2, it is anticipated that the at-grade intersection with MD 100 which ties into Dorsey and Race Roads will be inadequate to accommodate the projected growth of future commuter and industrial (i.e., truck) traffic in this vicinity. This office does not favor Alternate 2.
- o Of the two relocation options for MD 176 immediately east of U.S. 1, the option which connects to existing MD 176 closest to U.S. 1 (i.e., the dotted line option depicted on page II-21, et al) will create the least adverse impact to residents in the Lennox Park area. Furthermore, this alignment provides the most direct access to existing and proposed employment sites along MD 176, but does not encourage through trips on MD 103/MD 176. This option is also compatible with Howard County Capital Project J-4070B for the extension of Dorsey Run Road. These offices, therefore, endorse the western or dotted line connection.

GEORGE F. NEIMEYER NIRECTOR. 992-2400

> Deaf TDD Number 967-2323



DEPARTMENT of PUBLIC WORKS of HOWARD COUNTY 3430 COURT HOUSE DRIVE, ELLICOTT CITY, MARYLAND 21043

June 20, 1986

1 HACHMEN

Bureau of Engineering William E. Riley, Chief **Bureau of Environmental Services** thes M. Stvin, Chief Bureau of Facilities John Zitnyer, Chief Bureau of Highways Granville W. Wehland, Chie Bureau of Inspections, Licenses, and Permits M. Robert Gern **Bureau of Utilities** Robert M. Beringer, Chief

MEMORANDUM

TO:

Amar S. Bandel, Chief Division of Comprehensive and Transportation Planning

THROUGH:

William E. Riley, Chief Bureau of Engineering

FROM:

Elizabeth A. Calia, Chief McCalcul Division of Roads, Bridges and Storm Drainage

SUBJECT:

MD 100 from I-95 to I-97

In review of the alternates presented at the public hearing on Thursday, June 12, 1986, all alternatives within Howard County are essentially the same. The route location from Anne Arundel County towards the location of the interchange with US I is fixed.

Within Howard County, existing MD 176 (Dorsey Road) would be terminated with a cul-de-sac just east of US 1. The SHA is proposing two options of tying Dorsey Road to US 1. Both options call for a new roadway link from Drosey Road to end opposite the existing intersection of MD 103 (Meadowridge Road) and US 1. Howard County prefers the westernmost option for this link which calls for turning off Dorsey Road near the proposed cul-de-sac and running parallel to US 1 and turning west to be opposite the MD 103/US 1 intersection. This alignment is compatible with Howard County Capital Project J-4070B Dorsey Run Road Extension. Attached is a vicinity map from the completed alignment study showing our new alignment for Dorsey Run Road and the SHA connection to MD 176. We wish that the Dorsey Run Road alignment be shown on the SHA plans. We anticipate that approximately 90 acres industrially zoned acreage will utilize the northern leg of the proposed roadway yielding an ADT of approximately 6,700. We believe this volume will be in excess of that on the SHA connector road and that Dorsey Run Road should be treated as the "through road" with the SHA link connecting perpendicularly.

3-1A11

VI-362

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11

Amar S. Bandel June 30, 1986 Page three

- The future extension of Dorsey Run Road to relocated MD 176 should be shown on schematic drawings for all alternates.
- Since this project encompasses two jurisdictions, all discussions and 0 graphic summaries of impacts (e.g. displacements, acreage required, noise impact zones, etc.) should include a breakdown by jurisdiction.

If you have any questions concerning the attached or the above, please contact me at your convenience.

CB/mjh

Attachments

William E. Riley Elizabeth Calia David R. Holden Paula O'Connor File, TR 2(a) 2490B

TO:

Amar S. Bandel, Chief Division of Comprehensive and Transportation Planning

SUBJECT:

MD 100 from I-95 to I-97

-2-

In the alternate SHA link option, the relocated roadway skirts the existing floodplain and requires the taking of one house. The total taking is approximately 50% more than Howard County's preferred option. The topography in that area is also much more rolling increasing the overall construction cost. The link road itself would be approximately 50% longer under this option. The community of Lennox Park has expressed a desire that commercial traffic be kept out of the community. The westernmost option keeps commercial traffic as far from this community as possible.

Regarding the relocation of the entrance to Route 100 Industrial Park, the proposed location of the intersection occurs at or very near the slump in US 1 and lies within a 100 year floodplain on both sides of US 1. Much of the western service road lies within the floodplain. The proposed entrance road may also require the taking of one of the existing commercial businesses (greenhouses). We would like the SHA to consider locating the proposed entrance further away from the interchange at the crest of the hill through Lot 6 of the business park. We assume this will again be a signalized intersection and should provide ample sight distance, eliminate taking any business, and remove the intersection from the floodplain. Recently Troy Hill submitted a subdivision for review that locates one of their entrances opposite the proposed entrance to the Route 100 Business Park. This entrance conflicts with and may require some minor redesign of the western service road.

This division endorses Alternate 3 with the above in consideration. If there are further questions related to this memorandum, please contact Charles Dammers of this Division or myself.

0

TABLE III-1

REGIONAL POPULATION DATA

	A.A. County	Howard County	Baltimore S.M.S.A.	Maryland
1960 1970 1980 1985 1990 2000 2005	206,634 298,042 370,773 398,554 435,000 479,000	36,152 62,394 118,570 141,000 /40, 168,000 /60, 218,000 /89, 240,000 2//	990 2,295,000 990 2,424,000	3,100,689 3,923,897 4,216,446 4,350,100 4,535,450 4,862,900

(Source: U.S. Bureau of Census, Maryland Department of State Planning)

A Hachment &

TABLE III-2
STUDY AREA POPULATION

A.A. Co.* Census Tract	1970 _	Populat 1980	ion 1985	2005	1970	Househ 1980	olds 1985	2005
7401.01 7401.02 7402.01 7402.02 7506 7507	2028 2733 5162 1760 1908 1027	13087 3149 7293 2136 1550 904	15359 4234 7162 2363 1564 859	18840 9371 8069 3981 1406 794	760 781 1413 492 507 291	3973 1052 2396 666 525 305	4894 1509 2474 748 523 305	6686 3801 3117 1271 525 315
A.A. Co. Subtotal:	15218	28219	31541	42461	4244	8917	10453	15715
*Howard Co Census Tract	• •	•	657	3 12,73	12	1970	2140 2471	- 5029 5088
6012	•	5122	6158	1 1,6 88	3 -	1870	24/1	
STUDY AREA TOTAL:	-	33341	-37699 ≥71	-54149 4 <i>55</i> , 39		10787	12924	20803

^{*} refer to Figure III-1

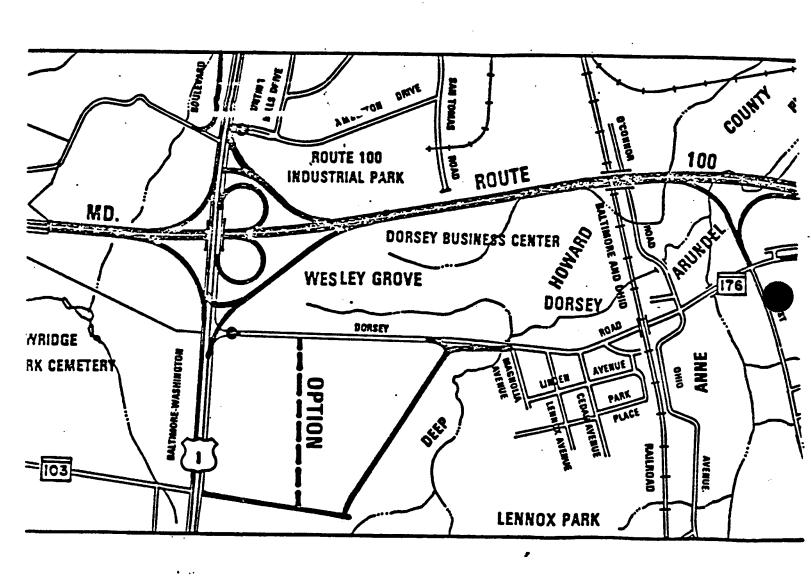
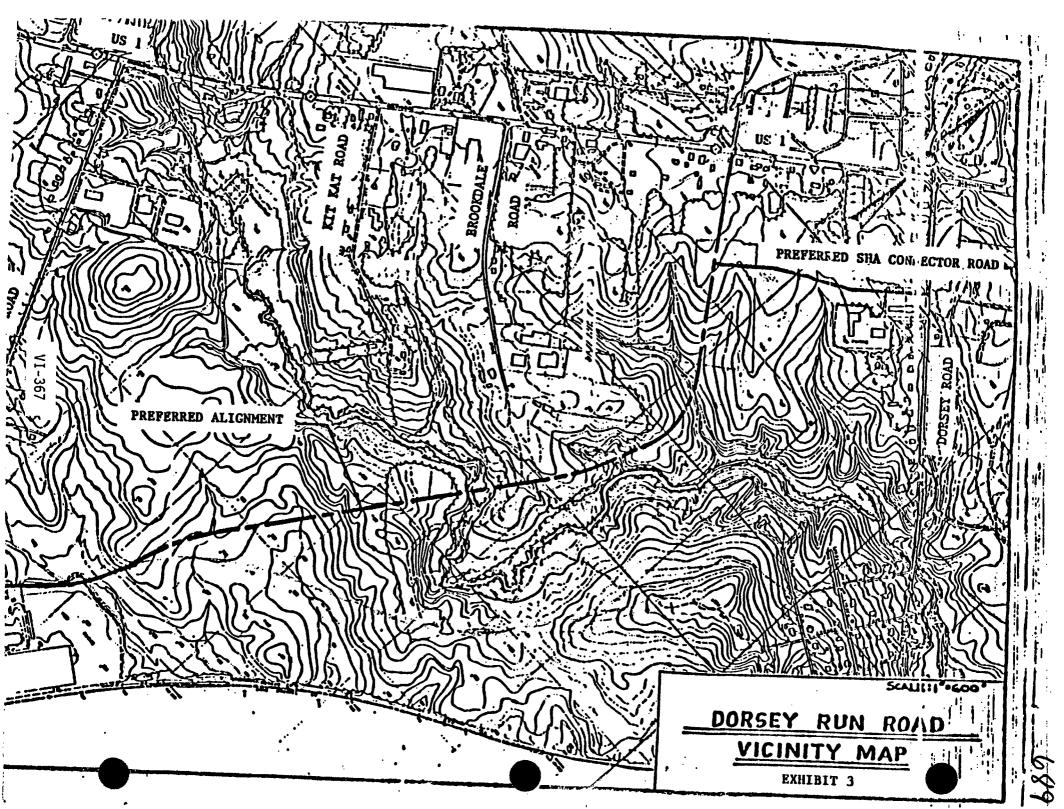
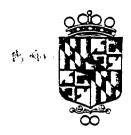


EXHIBIT 2

RESPONSE TO OFFICE OF PLANNING & ZONING OF HOWARD COUNTY LETTER DATED JULY 7, 1986

- A. Transportation Planning Section, letter dated June 30, 1986.
 - 1. The bridge over the B&O Railroad tracks will be designed to accommodate the potential expansion of O'Conner Road.
- 2. and 3. Alternate 3 has been selected in this area.
 - 4. The referenced data has been Incorporated.
- 5. and 6. Under the selected alternate, the relocated entrance to the Route 100 Business ark has been located so as to minimize impacts to the greenhouses and a residence which currently exist in the area. Further coordination with the Howard County Department of Public Works will be undertaken to minimize impacts and ensure that the entrance to the proposed Troy Hill Business Park is compatible with the relocated road.
 - 8. Alternate 2 has not been selected.
 - 9. Under the selected alternate, a modification of the 'option' for relocating Dorsey Road at U.S. Routel has been chosen (see Figure 11-27).
 - 10. The future extension of Dorsey Run Road is shown on the plan sheets and labeled as 'Proposes County Road by Others'.
 - 11. The Impacts are shown per alternate for the entire study area.
- B. Department of Public Works of Howard County, letter dated June 20, 1986.
 - Under the selected alternate, a modification of the 'Option' for relocating Dorsey Road at U.S. Routel has been chosen. The proposed Dorsey Run Road Extension is shown on the plan sheets and is treated as the through road.
 - 2. See above response A.5.
 - 3. Alternate 3 has been selected in this area.





ANNE ARUNDEL COUNTY

ANNAPOLIS, MARYLAND 21401

DEPARTMENT OF RECREATION AND PARKS

June 11, 1986

Mr. Louis H. Ege, Jr., Deputy Director Project Development Division (Room 310) State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Dear Mr. Eqe:

This letter builds upon this department's previous comments on the proposed alignment of Route 100 as it impacts upon Friendship Park, which were sent to you on January 16 and March 17, 1986. After examining the Draft Environmental Impact Statement for Route 100, we were distressed that the recommended alignment 3-B bisects the park, isolating the Sawmill Creek Stream Valley and potential access points to Queenstown Park from Friendship Park users. Should 3-B be the final alignment selected we urge the use of landscaping to mitigate the road's impact on the park as much as possible.

Our principal concern, however, is to maintain the integrity of the bridle trail between Friendship and Queenstown Parks. As mentioned in my March 17 letter, we would like to see a large culvert (8' wide X 10' high- minimum demensions) adjacent to the Sawmill Creek crossing to accommodate the horsemen in the park. With option 3-B, the actual stream crossing occurs outside the park boundaries, but since the Route 100 right-of-way is directly contiguous to the park property, I believe the trail could still be accommodated.

This structure would maintain this vital trail link for horsemen traveling between WB&A Road and the Andover Equestrian Center north of the airport, and in addition would permit access to the Sawmill Creek Stream Valley for pedestrians and small maintenance vehicles.

Thank you for your consideration of this request. Please do not hesitate to contact me should you need additional information concerning this proposal.

Sincerely

John T. Keene

Capital Projects Officer

JTK/vif

cc: Joseph J. McCann, Director, Recreation and Parks William A. Rinehart, Parks Administrator Roland Davis, Planning and Zoning Cynthia Young, PATH



DEPARTMENT OF PUBLIC WORKS 1 HARRY S. TRUMAN PARKWAY ANNAPOLIS, MARYLAND 21401

June 30, 1986

DEVELOPMENT DIVISION Jul 10 2 37 PM 986

Mr. Louis H. Ege, Jr., Deputy Director Project Development Division (Room 310) State Highway Administration 707 North Calvert Street Baltimore, MD 21202

Re: Draft Environmental Impact Statement for Maryland Route 100 Extension

Dear Mr. Ege:

Our Bureau of Engineering has reviewed the Draft Environmental Impact Statement for Maryland Route 100 and feels there is no question that this project is needed to relieve the existing traffic (which is operating at capacity now) and the expected traffic growth on Dorsey Road due to the development planned for this area.

Dorsey Road, as you know, is the only East-West corridor in the North County area. It is for this reason that the "No Build Option" would not be in Anne Arundel County's best interest, nor would it be in agreement with the General Development Plan for Anne Arundel County (1978) or the Regional Planning Council General Development Plan (1982).

While reviewing the remaining alternate routes proposed for Maryland Route 100, we considered the impact to our County roads, environment, and the citizens. We feel that Alternate 2, which would be an "at grade" boulevard, would still create traffic congestion due to the intersecting roadways.

Alternate 3 would impact the existing local County Roadway System the most. This alternate would call for cul-de-sacs of local roads including Dorsey Road at Wright Road (19 closing with Alt. 3A and 21 with Alt. 3B). By using this alternate, it would also cause a severe impact to the Anne Arundel County Fire Station on Dorsey Road. The closing of Ridge Road would reduce the response time to communities north and south of the

June 30, 1986

station. A general overview of Alternate 3 shows that the extensive closing of local roads would sever communities and cause existing travel patterns to be severely changed.

Alternate 4 with Option 3B around the community of Queenstown is the best alignment for Anne Arundel County in our opinion. We offer the following reasons for this option.

- 1. Dorsey Road would remain "as is" for an alternate East-West movement for local residents.
- 2. Existing businesses along Dorsey Road would be less impacted.
- 3. Police and Fire Departments' response time would not be affected.
- 4. B&A Boulevard would remain open for access to Glen Burnie for local residents.
- 5. Requires the least amount of residential property
- 6. Displacement of residential, business and farm residents would be minimized.
- 7. There would be no impact to archeological or historic sites.
- 8. The total amount of acreage required would be less than any other alternate except for Alternates 2 and "No Build".
- 9. Total cost of the project would be less than Alternates 3.

Thank you for giving us the opportunity to comment on this matter.

Very truly yours,

DEPARTMENT OF PUBLIC WORKS

Danny G. Boyd, Director

DGB/vkw

cc: Charles D. Storm

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RESPONSE TO ANNE ARUNDEL COUNTY DEPARTMENT OF RECREATION AND PARKS LETTER DATED JUNE 11, 1986

Since Alternate 38 (Modified) has been selected, further coordination with the Anne Arundel County Department of Recreation and Parks will be undertaken in an effort to maintain access between the areas of Friendship Park Isolated by the project.

RESPONSE TO ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS LETTER DATED JUNE 30, 1986

- 1. The No-Build Alternate has not been selected
- 2. Alternate 2 has not been selected.
- 3. Under Alternate 3b (Modified), several provisions to minimize impacts on the local road system have been included. These include a bridge over Maryland Route 295 connecting Race Road and Wright Road, bridging Harmans Road over Maryland Route 100 and bridging W.B.& A. Road over Maryland Route 100. A relocated Ridge Road is provided to maintain access between communities north and south of the alignment.
- 4. The selected alternate was chosen over Alternate 4 with a connection to Alternate 3-Option B for several reasons. First, Alternate 4 requires the acquisition of land from the Patapsco Valley State Park which is prohibited under Federal Law If a 'feasible and prudent' alternative exists. Also, the selected alternate closely follows the corridor for the extension of Maryland Route 100 as Identified in the Howard County, Anne Arundel County and the Regional Planning Council Master Plans. This corridor is the basis upon which development in the area has been implemented and planned. Alternate 4/3B also traverses international Airport and according to Federal Aviation Administration regulations, the highway would have to be constructed in a tunnel through this area which would cause the total cost of Alternate 4/3B to be up to \$36 million greater than the selected alternate.



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

July 17, 1986

Ms. Cynthia D. Simpson Chief, Environmental Management Maryland Dept. of Transportation State Highway Administration P.O. Box 717 707 North Calvert St. Baltimore, MD 21203-0717 DEVELOPMENT DEVELOPMENT BE

Re: Farmland Protection Policy Act Form AD-1006 for MD Route 100 from I-95 to I-97 in Howard and Anne Arundel Counties, Maryland.

Dear Ms. Simpson:

An extensive evaluation of the zoning maps and soils data was made for the alternative routes in this project. The FPPA does not apply to any of the alternatives in Anne Arundel County due either to preclusion from FPPA by current zoning or to lack of soils qualifying as prime or of statewide importance in those areas not precluded by zoning. A small area of statewide important soils was found in alternative 4 in Howard County. For this reason, the information in Part II of the attached AD-1006's pertains only to Howard County.

For clarification purposes, the percentages in Part II are based on the total land area in the county, and the percentage in Part IV.D. is based on total farmland as defined in FPPA.

If I can be of further assistance, please contact me at 301-694-6822 in Frederick, MD.

Sincerely,

CARL E. ROBINETTE Area Soil Scientist

Enclosures

cc:

Jack Helm, District Conservationist, SCS, Ellicott City, MD James Wist, District Conservationist, SCS, Annapolis, MD



U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 23 May 86						
Name Of Project Maryland Route 100 (Form 1 of	Feder	rderal Agency Involved Federal Highway Administration						
Proposed Land Use	Count	ueral High	way Aomini	STrailion				
See Attachment		ne Arundel	and Howar	d Counties	<u> </u>			
PART II (To be completed by SCS)(Data for	Howard Co. onl	y)	Request Received	1 By SCS 6- 4	5-86			
Does the site contain prime, unique, statewide		Yes N	O Acres Irrigat	ed Average Far	m Sizè			
(If no, the FPPA does not apply - do not con			None	117				
Major Crop(s/	iction	fined in FPPA						
Corn Small Grain, Soybeans, Hay	OO Assessment	% 54	Acres: 7	Acres: 70,600 % 4 Date Land Evaluation Returned By SCS				
Howard Co. LESA								
	Howard Co.	LESA S	ystem 7/17/86 Alternative Site Rating					
PART III (To be completed by Federal Agency)			Site A 2A Site B2B Site C3A Site D3B					
A. Total Acres To Be Converted Directly	w ."· ."/ L ±1±1		246.8	368.0	520.1	564.3		
B. Total Acres To Be Converted Indirectly			0	0	0	0		
C. Total Acres In Site			246.8	368.0	520.1	564.3		
PART IV (To be completed by SCS) Land Evalu	ation Information							
A. Total Acres Prime And Unique Farmland			0	0	0	0		
B. Total Acres Statewide And Local Importa	ant Farmland		0	0	0	0		
C. Percentage Of Farmland In County Or Loc	al Govt. Unit To Be Co	nverted	0	0	0	0		
D. Percentage Of Farmland In Govt, Jurisdiction V	Vith Same Or Higher Rela	ative Value	100	100	100	100		
PART V (To be completed by SCS) Land Evalu								
Relative Value Of Farmland To Be Conv	erted (Scale of 0 to 100	9 Points)	0	0	0	0		
PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in		faximum Points						
1. Area In Nonurban Use								
2. Perimeter In Nonurban Use					1			
3. Percent Of Site Being Farmed								
4. Protection Provided By State And Local	Sovernment							
5. Distance From Urban Builtup Area								
6. Distance To Urban Support Services								
7. Size Of Present Farm Unit Compared To	Average							
8. Creation Of Nonfarmable Farmland								
9. Availability Of Farm Support Services			•					
10. On-Farm Investments				 				
11. Effects Of Conversion On Farm Support				ļ				
12. Compatibility With Existing Agricultural				 				
TOTAL SITE ASSESSMENT POINTS	160							
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)								
Total Site Assessment (From Part VI above or site assessment)	a local	160						
TOTAL POINTS (Total of above 2 lines)								
Site Selected:	Date Of Selection			Was A Local Site Assessment Used? Yes □ No □				
Heason For Selection				·				

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 23 May 86						
Name Of Project (Fede			ieral Agency Involved					
Maryland Route 100 (Form 2 of 1) Proposed Land Use	Count	Federal Highway Administration						
See Attachment	Aı	Anne Arundel and Howard Counties						
PART II (To be completed by SCS)(Data for He	oward Co. only)	Date	Request Receiv	ed By	SCS 6-5			
Does the site contain prime, unique, statewide or local important farmland?				No	Acres Irrigated.	Average Farr	m Size	
(If no, the FPPA does not apply - do not complete additional parts of this fo					None	117		
Major Crop(s) Farmable Land In Govt. Jurisdic					Amount Of Far	mland As Def	ined in FPPA	
Corn Small Grain, Soybeans, Hay Acres: 86,200			% 54		Acres: 70,	60.0	<u>% 44</u>	
Name Of Land Evaluation System Used Name Of Local Site Assessment				Date Land Evaluation Returned By SCS				
Howard Co. LESA Howard Co. LESA S								
PART III (To be completed by Federal Agency)			Alternative Site Rating Site A 4 Site B 3/4 Site C Site D					
A. Total Acres To Be Converted Directly			474.5	5	21.9			
B. Total Acres To Be Converted Indirectly			0		0			
C. Total Acres In Site			474.5	5	21.9			
PART IV (To be completed by SCS) Land Evaluation	on Information			i				
A. Total Acres Prime And Unique Farmland			0	1	0			
B. Total Acres Statewide And Local Important	Farmland		4		0			
C. Percentage Of Farmland In County Or Local G	ovt. Unit To Be Conve	rted	.006	1	0			
D. Percentage Of Farmland In Govt, Jurisdiction With	Same Or Higher Relative	Value	68.4	1	100			
PART V (To be completed by SCS) Land Evaluation	on Criterion							
Relative Value Of Farmland To Be Converte	d (Scale of 0 to 100 Po	ints)	67		0			
PART VI (To be completed by Federal Agency)	Maxir	num						
Site Assessment Criteria (These criteria are explained in 7 C	FR 658.5(b) Poir							
Area In Nonurban Use	15		8					
2. Perimeter In Nonurban Use			5					
3. Percent Of Site Being Farmed	2.	1						
4. Protection Provided By State And Local Gov		5	0					
5. Distance From Urban Builtup Area								
6. Distance To Urban Support Services	<i>c</i>	,	0					
7. Size Of Present Farm Unit Compared To Ave								
8. Creation Of Nonfarmable Farmland		5	5					
9. Availability Of Farm Support Services		5						
10. On-Farm Investments		0						
11. Effects Of Conversion On Farm Support Services 25								
12. Compatibility With Existing Agricultural Use			5					
TOTAL SITE ASSESSMENT POINTS			39					
PART VII (To he completed by Federal Agency)		Ì						
Relative Value Of Farmland (From Part V)	10	0	67					
Total Site Assessment (From Part VI above or a lo site assessment)	ocal 16	0	39					
TOTAL POINTS (Total of above 2 lines)			106					
Site Selected: Date	e Of Selection			Was	A Local Site A		d? lo 🛘	
durant services								

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STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts 1 and 111 of the form.
- Step 2 Originator will send copies A, B and C together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).
- Step 3 SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.
- Step 4 In cases where farmland covered by the FPPA will be converted by the proposed project, SCS field offices will complete Parts II, IV and V of the form.
- Step 5 SCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for SCS records).
- Step 6 The Federal agency involved in the proposed project will complete Parts VI and VII of the form.
- Step 7 The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

- 1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
- 2. Acres, planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in §658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points:

Total points assigned Site $A = 180 \times 160 = 144$ points for Site "A."

Maximum points possible 200



PROJECT DEVELOPMENT DIVISION

HAR 32 8 42 AM '87

March 26, 1987

Maryland Historical Trust

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

Dear Ms. Simpson:

Our office has reviewed the additional information provided by Rita Suffness concerning the effects of this project on the Shipley House and Smith Farm. Based on this, we now concur in a determination of no adverse effect on both properties, conditional on landscaping plans which are reviewed and approved by this office.

As noted in staff discussions, it is our understanding that State Highway Administration will meet with the owners of the Smith Farm to discuss satisfactory egress alternatives required by the destruction of the historic driveway. Your cooperation in this regard will be greatly appreciated.

If you have any further questions or comments, feel free to contact Al Luckenbach at 974-4450.

Sincerely,

J. Rodney Little

Director

JRL/AHL/meh

cc: Mr. Harrison B. Wetherill, Jr.

Ms. Linda Collins

Ms. Donna Ware

Mr. Paul Wettlaufer

Ms. Rita Suffness

VI-378

Subsidiary of Kidde, Inc.

MEMORANDUM OF MEETING

TO:

Distribution List

FROM:

Elaine L. Cappucci / R. Scott Sternberger

DATE:

March 30, 1987

TIME:

8:30 a.m.

SUBJECT:

MD 100 Wetlands Field Review

J.O. No. 01-86173A2

IN ATTENDANCE:

Steve Harman
Diane Eckles
Mike Slattery
Cas Teherian
Lee Carrigan

Elaine Cappucci Scott Sternberger Army Corps of Engineers

U.S. Fish and Wildlife Service MD Dept. of Natural Resources MD Dept. of Natural Resources MD State Highway Administration MD State Highway Administration

Kidde Consultants, Inc. Kidde Consultants, Inc.

I. Introduction

Kidde Consultants opened the meeting by explaining the agenda for the field review. They gave all attendees a set of plans showing the wetlands and the soil boring locations and a booklet with information about the vegetation, soils, and hydrologic characteristics of each wetland. The consultants explained that they had deliniated wetlands only in the path of the alternate alignments (2, 3A, and 4). The selected alignment, 3B modified, was deliniated previously by another firm. Kidde asked that any questions about the selected alignment be directed to the State Highway Administration (SHA). Kidde pointed out that they did not deliniate the wetlands in the areas where the alternate alignments overlap mainly at the western end to the I-295 interchange and at the eastern Route 3 interchange.

The resource agencies then had the following questions:

1. The Fish and Wildlife Service (FWS) asked what lists were used to determine plant indicator status. Kidde stated that they used the 1986 edition of "Wetland Plants of the State of Maryland" to indicate regional status. When no listing was available on the

Subsidiary of Kidde, Inc.

Memorandum of Meeting Subject: MD 100 Wetlands Field Review March 30, 1987 Page 2

state list for a particular plant, the FWS northeast region list was used and is indicated with an asterick. A dashed line is used when no listing was found for a plant in either publication.

2. The FWS asked when the project would go under construction.

The SHA stated that they were not certain of the scheduling for this project. They said that normally when a project is in the state that this one is, it takes about five years to get it to construction. The SHA said they must also coordinate these projects with the counties to develop planning priorities.

II. Field View

Kidde Consultants conducted the field view. The wetlands sites are presented here in numerical order although they were not visited in that order during the field view. Due to time limitations all the deliniated wetlands were not visited during the field view. The wetlands visited were those that the consultants felt had the highest values or those with questionable boundaries which the consultants felt the agencies should review. The Army Corps, DNR, and FWS agreed with the boundaries of those wetlands not viewed based on Kidde's descriptions of the areas. The agency said that they would have to look at these areas if any of these alternates go into final design. The resource agencies' comments for each site are included and any changes they requested will be incorporated into final plans and report.

A. ALTERNATE 2

W2-1

This wetland was not visited during the field view, but all were in agreement with the boundaries set by Kidde Consulants based Kidde's description of the area.

W2-2

Subsidiary of Kidde, Inc.

Memorandum of Meeting Subject: MD 100 Wetlands Field Review March 30, 1987 Page 3

This wetland was viewed from the road. All of the wetland could not be seen because it lies within the airport property. All agencies agreed with the boundaries.

W2-3

This wetland includes a drainage channel which runs adjacent to Dorsey Road, part of Piney Run Creek, and two forested areas.

The Army Corps stated that it appears that the wetland receives runoff from Dorsey Road but asked where the wetland drains. Kidde responded that there are drainage channels in the wetland that lead into the larger drainage channel feeding Piney Run Creek.

Everyone agreed on the boundaries of this wetland.

W2-4, W2-5

These wetlands were viewed from the road, no changes were requested.

W2 - 6

After field checking the wetland, all agencies agreed with the boundaries of this wetland.

B. ALTERNATE 2A

This alignment is the same as the portion of Alternate 4 from Dorsey Road to Maryland Route 3. For the wetlands which fall in this alignment, see W4-23, W4-24, W4-25, W4-26, W4-27, and W4-28.

Subsidiary of Kidde, Inc.

Memorandum of Meeting Subject: MD 100 Wetlands Field Review March 30, 1987 Page 4

C. ALTERNATE 2B

W2B-1, W2B-2

This wetland was not visited during the field view, but all were in agreement with the boundaries set by Kidde Consultants based Kidde's description of the area.

W2B-3

The review team observed several great horned owls nesting in the wetland. All were in agreement with the boundaries of this wetland.

C. ALTERNATE 3A

W3A-1

The review team observed several great horned owls nesting in this wetland during the field view. All were in agreement with the boundaries of this wetland.

W3A-2, W3A-3

This wetland was not visited during the field view, but all were in agreement with the boundaries set by Kidde Consultants based Kidde's description of the area.

E. ALTERNATE 4

W4-1

 The Army Corps questioned whether the fill material (from the adjacent industrial development along the northern edge of the wetland) was in place when the wetland was being deliniated.

Kidde Consultants explained that the fill was being placed at the time of the deliniation however, additional material had been placed in the area

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since that time.

The Army Corps asked what is the water source for the pond?

Kidde stated that the pond is fed by a small tributary and possibly from groundwater. The pond outlets into a small stream which runs through the wetland.

The FWS, DNR and the Army Corps indicated that the boundaries were adequate for preliminary assessment. If this alternate went into final design, another field view would be required.

W4 - 2

The wetland is bisected by the Baltimore and Ohio Railroad tracks. The area South of the tracks has hydric soils, but most of the vegetation are not wetland species. The area is dominated by Red Maple but there are scattered River Birch. Soil samples taken during the field view show a very gray top layer which is probably derived from the railroad. The soil is very sandy. The FWS stated that the area near the tracks is a transition area and maybe should be taken out. The Army Corps stated that the entire area should probably be left in, although it would require further study if this alignment were selected. At that time more definite boundaries could be set.

The Army Corps asked what the source of water is for this wetland. Kidde Consultants said that the area is fed by runoff from the ridge at the northwest end of the wetland, and probably by groundwater.

The FWS asked what soil series is present here. Kidde Consultants checked the Howard County Soil Survey book and found that it is the Fallsington Series a poorly drained soil with a chroma of 1 to 3 in the A horizon.

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All agreed to leave the boundaries at the locations set by Kidde, but that they would need to be examined more closely in the future.

W4 - 3

All were in agreement with Kidde's boundaries for this wetland.

W4-4

 DNR asked what type of structure would be used at Piney Run Creek.

The SHA said that they did not know at this point.

 The FWS asked if Kidde had used the topography to determine the wetland boundaries.

Kidde Consultants said that topography was used to determine the boundaries.

The boundaries were not changed.

W4-5

Kidde stated that they wanted the resource agencies to thoroughly check this wetland because they had found hydric soils on the slopes and plateaus and were uncertain if these areas should be called wetland. In order to be conservative these areas shown on the field view plans.

The FWS and Army Corps took several soil samples on the slope area. The FWS said that the soil probably is light colored because it is acidic, not because it is hydric. Iron may be leaching out due to the acidity. The FWS felt the soil was more white (showing acidity) than gray or black.

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The FWS said that on the floodplain areas, alluvium is present and the soil is definitely hydric. DNR agreed. There is mottling in both the A and B horizons and the vegetation shows the area to be wetlands. The Army Corps agreed and said that there is no mottling present on soils further up the slope.

The FWS asked what soil series is present here. Kidde checked this later in the Anne Arundel County Soil Survey and discussed it with the FWS. The soil belongs to the keyport and Fallsington series. The Fallsington series is highly acidic.

The agencies said that the slopes and plateaus should be taken out but the floodplain areas should be left in.

W4-6, W4-7

This Wetland was not visited during the field view, but all were in agreement with the boundaries set by Kidde Consultants based on Kidde's description of the area.

W4-8, W4-9

All were in agreement with the boundaries of these wetlands based on their field view.

W4-10, W4-11, W4-12, W4-13, W4-14

Kidde Consultants explained that these wetlands are located in Patapsco Valley State Park. They are mainly upland drainage channels and headwater areas. The consultants said the areas are similar to wetlands W4-17 and W4-18 on the other end of the park which were reviewed earlier in the day. The agencies decided not to look at these wetlands at this time, but said they would need to look at them if any action were taken on this alternate. all the agencies agreed on the boundaries, based on Kidde's descriptions of the areas.

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W4-15

DNR stated that the buttressed tree trunks and pockets of standing water were good evidence of the presence of wetlands.

All agreed with Kidde's boundaries for this wetland.

W4 - 16

This wetland was not reviewed as it is within the airport property. All agreed with the boundaries based on Kidde's description of the area.

W4-17

The Army Corps stated that maybe only the lowest swale areas should be included in this wetland, but that the boundaries could be left as they are at this time. The FWS and DNR agreed.

W4-18, W4-19

All agreed with the boundaries set by Kidde.

W4 - 20

All present agreed that this is a very high value wetland. The boundaries were not changed.

W4-21, W4-22

These wetlands were not visited, but all were in agreement with the boundaries set by Kidde Consultants based on Kidde's description of the areas.

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W4-23, W4-24

The FWS and DNR questioned why the consultants did not consider the small area between these two wetlands to be wetland, Kidde explained that there is a ridge between the two which does not have hydric soils or wetlands vegetation. After field checking the area, the agencies agreed with Kidde's boundaries.

W4-25, W4-26, W4-27

These wetlands were not visited, but all were in agreement with the boundaries set by Kidde consultants based on Kidde's descriptions of the areas.

W4 - 28

The field review team observed several great horned owls nesting here during the field view. No changes to the boundaries were requested.

F. CROSSOVER ALT. 3 TO ALT. 4

None of the wetlands in this alignment were vistied. The resouce agencies said they may want to review them in the future.

WC-1, WC-2

Kidde described these wetlands to the agencies. They lie just east of W4-20. All agreed to the boundaries based on Kidde's description.

WC-3

This wetland is a swale carrying upland runoff to a tributary of Piney run Creek. As it lies in a fenced off private property, the agencies decided not to look at it, but accepted the boundaries based on Kidde's description.

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WC-4

Kidde explained that this wetland includes Piney Run Creek only. The Creek banks are several feet high and no hydric soils or wetlands vegetation was found at the top of the banks. The agencies agreed with the boundaries.

Conclusion

The agencies stated that if any of the alternate alignments were selected they would want to review the wetlands more carefully. Some questionable areas were left in during this field view in order to be conservative.

cc: All Attendees
Dave Manly

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A.L.

ACTION

- INFO

Advisory Council On Historic Preservation

The Old Post Office Building 1100 Pennsylvania Avenue, NW, #809 Washington, DC 20004

JUL | 1987

Mr. Emil Elinsky
Division Administrator
Federal Highway Administration
The Rotunda, Suite 220
711 West 40th Street
Baltimore, MD 21211-2187

REF: Construction of Maryland Route 100 Smith Farm and Shipley House Anne Arundel County, MD

Dear Mr. Elinsky:

On June 10, 1987, the Council received your letter requesting our comments on the referenced project in accordance with Section 106 of the National Historic Preservation Act. While we concur with your determination that the Shipley House will not be adversely affected, we are unable to agree with your determination in regard to the Smith Farm.

Alternate 3-B Modified, the proposed alignment for Route 100, will separate roughly one-third of the Smith Farm cropland from the farmhouse and outbuildings; alter the physical environment of the property, removing the main buildings from their historic association with the land; and introduce audible, visual and atmospheric elements which are out of character with the rural setting of the National Register property. Since the information submitted indicates that the setting is one of the most significant elements of the historic property, such alteration and intrusions meet the criteria of adverse effect set forward at 36 CFR \$800.9 of the Council's regulations.

Accordingly, you should initiate consultation on ways to avoid, reduce, or mitigate this adverse effect with the Maryland State Historic Preservation Officer and the Council pursuant to \$800.5(e) of the Council's regulations.

We believe that the proposed grading and landscaping of the roadway might adequately mitigate this adverse effect. However in light of the expressed opposition of the property owners and other interested persons, we feel that alternative alignments should be further explored. We suggest that a meeting be arranged on site to discuss the planning issues involved, and the landscape plans.

Pending receipt of the Council's comments, you should refrain from taking or sanctioning any action that could result in an adverse effect to the property or that would foreclose the consideration of alternatives to avoid or reduce the adverse effects.

Please contact Betsy Updike at 202-786-0505 to arrange the details of such a meeting.

Appergly,

Don IV Klima

Chief, Eastern Division of Project Review

VII LIST OF PREPARERS

VII.

LIST OF PREPARERS

This Final Environmental impact Statement was prepared by the Maryland Department of Transportation, State Highway Administration in consultation with the Federal Highway Administration. The following personnel were instrumental in the preparation of this document:

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VIII APPENDICES

APPENDIX A - GLOSSARY OF TERMS

GLOSSARY OF TERMS

(These terms may appear either in the EIS or as noted on the drawings.)

Arterial Highway

A highway primarily for thru-traffic, usually

on a continuous route.

Auxiliary Lane

The portion of roadway adjoining the traveled way for parking, speed change, or for other purposes supplementary to the thru-traffic

movement.

Average Dally Traffic-

A.D.T.

The total volume of auto and truck traffic passing a given point in both directions during a given time period (greater than one day and less than one year) in whole days, divided by the number of days in that time

period.

Control of Access

Full-Complete restriction of access on a thru facility except at interchanges. Grade sep-

arations for all crossings.

Uncontrolled-Access control limited only to safe geometrics. All crossroads, driveways, etc., may have points of ingress or egress.

Design Hour Volume -

DHV

The percent of average daily traffic (ADT) generally accepted as the criterion used in geometric design of rural and urban highways. Ideally the 30th highest hourly volume during a year, the DHV is commonly found to vary

from 8% to 12% of the ADT.

Design Speed

A speed selection for purposes of design and correlation of those geometric features of a highway, such as curvature and sight distance, upon which safe operations is depen-

dent.

Expressway

A divided arterial highway for thru-traffic with full or partial control of access and generally with grade separations at major

highways.

Freeway

An expressway with full control of access, grade separations at all roadway crossings. Access is permitted only at interchanges.

Frontage Road

A road contiguous to and generally paralleling an expressway, freeway, parkway or thrustreet. Designed to intercept, collect and distribute traffic desiring to cross, enter or leave such highways and may furnish access to property that otherwise would be isolated as a result of the controlled access. (Also referred to as a Service Road.)

Grade Separation

Bridge structure such as an underpass or overpass that vertically separates two or more intersecting roadways, thus permitting traffic to cross without interference.

Housing of Last Resort

A Maryland SHA program to rehouse people who are displaced by right-of-way acquisition for highway projects when the cost to do so exceeds the limits of the Uniform Relocation Act.

Interstate Freeway

A freeway primarily for thru-traffic with full interchanges for access. Interchange spacing is generally greater than that for a freeway.

Levels of Service

Levels of service are a measure of the conditions under which a roadway operates as it accommodates various traffic volumes. Influencing factors include speed, travel time, traffic interruptions, maneuvering freedom, safety, driving comfort, economy, and of course, the volume of traffic.

Levels of service on expressways and freeways with uninterrupted flow conditions are ranked from A to F (best to worst) as follows:

<u>Level A</u> - free traffic flow, low volumes; high speeds.

<u>Level B</u> - stable traffic flow, some speed restrictions.

<u>Level C</u> - stable flow; increasing traffic volumes.

<u>Level D</u> - approaching unstable flow, heavy traffic volumes, decreasing speeds.

<u>Level E - low speeds</u>, high traffic volumes approaching roadway capacity; temporary delays.

<u>Level F</u> - forced traffic flow at low speeds; low volumes and high densities; frequent delays.

For interrupted flow conditions, such as major highways and arterials with traffic signals, the following levels of service apply.

<u>Level A</u> - free flow, no delay at traffic signals.

<u>Level B</u> - occasional delays at traffic signals.

<u>Level C</u> - increasing volumes; moderate delays at traffic signals.

<u>Level D</u> - lower speeds; increasing volumes, frequent delays at traffic signals.

<u>Level E</u> - low speeds; high traffic volumes; signal backups almost to the previous light.

<u>Level F</u> - forced traffic flow; successive backups between signals.

Major Highway

An arterial highway with intersections atgrade and direct access to abutting property, and on which geometric design and traffic control measures are used to expedite the safe movement of thru-traffic.

Median

That portion of a divided highway separating the travelled ways for traffic in opposite directions.

initial - to be constructed initially.

<u>Ultimate</u> - the configuration subsequent to future construction.

Right-of-Way (Line) R/W, R.O.W.

The outer limits, inside which the State owns and maintains, for a highway facility.

Section 4(f)

Section 4(f) of the Department of Transportation Act requires that the publicity—owned land from a park, recreation area, wildlife and/or waterfowi refuge, or historic site of national, state or local significance can be used for Federal—Aid Highway projects only if there is no feasible and prudent alternative to its use, and if the project includes all possible planning to minimize harm to "4(f) lands".

Service Road

See "Frontage Road"

Shoulder

That portion of a highway adjacent and parallel to the travelled roadway for the accommodation of stopped vehicles for emergency use and for lateral support. May or may not be fully paved.

Side Siopes

The slope of earth permissible in given locations, as a ratio of horizontal to vertical measurement (2:1, 4:1, 6:1).

Vehicle Recovery Area

That portion of ground adjacent to the travelled roadway that is clear of any fixed obstructions. For safety operation, generally no less than 30 feet measured from the edge of the travelled lane.

Wetlands

The term "wetlands" refers to those areas that are inundated by surface or groundwater with a frequency sufficient to support, and under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

APPENDIX B - SUMMARY OF RELOCATION ASSISTANCE PROGRAM

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

"SUMMARY OF THE RELOCATION ASSISTANCE PROGRAM OF THE

STATE HIGHWAY ADMINISTRATION OF MARYLAND"

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

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

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

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

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

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

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

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

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

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

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

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

The "Uniform Relocation Assistance and Reai Property Acquisition Policies Act of 1970" requires that the State Highway Administration shall not proceed with any phase of any project which will cause the relocation of any persons, or proceed with any construction project, until it has furnished satisfactory assurances that the above payments will be provided and that all displaced persons will be satisfactorly 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.

APPENDIX C - REPRESENTATIVE ANIMALS OF THE ROUTE 100 STUDY AREA

APPENDIX C

REPRESENTATIVE ANIMALS OF THE ROUTE 100 STUDY AREA

Fish

Blacknose dace, Rhinichthys atratulus Bluegili, Lepomis macrochirus Bluespotted sunfish, Enneacanthus gloriosus Brown bullhead, ictalurus nebulosus Eel, Anguilla rostrata Fallfish, Semotilus corporalis Golden shiner, Notemigonus crysoleucas Killifish, Fundulus sp. Largemouth bass, Micropterus salmoides Madtom, Noturus gyrinus Pumpkinseed, Lepamis globosus Redbreast sunfish, Lepomis auritus Shiner, Notropis sp. Tesellated darter, Etheostoma olmstedl Whiteperch, Morone americana Yellowperch, Perca flavescens

Frogs

Bullfrog, Rana catesbelana
Chorus frog, Pseudacris triserlata
Cricket frog, Acris crepitans
Fowler's toad, Bufo Woodhousel
Green frog, Rana clamitans
Green tree frog, Hyla cinerea
Leopard frog, Rana pipiens
Spring peeper, Hyla crucifer

<u>Salamanders</u>

Mud salamander, <u>Pseudotriton montanus</u>
Red-backed salamander, <u>Plethodon cinereus</u>
Red salamander, <u>Pseudotriton ruber</u>
Spotted salamander, <u>Ambystoma maculatum</u>
Two-Lined salamander, <u>Eurycea bislineata</u>

Turtles

Box turtle, <u>Terrapene carolina</u>
Mud turtle, <u>Kinosternon subrubrum</u>
Painted turtle, <u>Chrysemys picta</u>
Snapping turtle, <u>Chelydra serpentina</u>

Appendix C (cont'd.)

Snakes

Black racer, Coluber constrictor
Black rat snake, Elaphe obsoleta
Copperhead, Agkistrodon contortrix
Corn snake, Elaphe guttata
Garter snake, Thamnophis siratallis
Green snake, Opheodrys aestivus
Hognose snake, Lampropeitis getulus
Ringneck snake, Diadophis punctatus
Ribbon snake, Thamnophis sauritus
Water snake, Natrix sipedon
Worm snake, Carphophis amoenus

Birds

American egret, Casmerodius aibus Barn owi, Tyto alba Barred owi, Strix varia Black vulture, Coragyps atratys Blue bird, Siaila siails Blue Jay, Cynaocitta cristata Bobwhite quali, Colinus virginianus Canada goose, Branta canadensis Cardinai, Richmondena cardinalis Cattle egret, Bubulcus Ibis Common crow, Cornus brachyrhynchs Common grackie, Quiscalus guiscula Fish crow, Corvus ossifragus Great blue heron, Ardea herodlas Gren heron, Butorides virescens Herring guii, Larus argentatus Junco, Junco hyemalis Least tern, Sterna albifrons Laughing guil, Larus atricilia Mallard duck, Anas platyrhynchos Mocking bird, Mimus polygiottos Mourning dove, Zenaldura macroura Osprey, Pandion hallaetus Pheasant, Phasianus coichicus Pied-billed grebe, Podliymbus podiceps Quail, Colinus virginianus Red-tailed hawk, Buteo jamaicensis Redwing blackbird, Agelalus phoeniceus Ruffled Grouse, Bonasa umbellus Sparrow hawk, Falco sparverius Starling, Sturnaus vulgaris Turkey vulture, Cathartes aura White-throated sparrow, Zonotrichia albicollis Woodcock, Philohela minor

Appendix C (cont'd.)

Mamma Is

Cottontall rabbit, Sylvilagus floridanus Eastern mole, Scalopus aquaticus Flying squirrel, Claucomys volans Grey squirrel, Sciurus carolinensis Grey fox, Urocgon cinerdargenteus House mouse, Mus musculus Mink, <u>Mustela vison</u> Muskrat, Odantra zibethica Opossum, Dideiphis virginiana Otter, Lutra canadensis Raccon, Procyon lotor Red fox, Vulpes vulpes Red Squirrel, Tamiasclurus hudsonicus Shrew, Biarina brevicauda Striped Skunk, Mephitis mephitis Virginia deer, Odocolleus virginianus White footed mouse, Peramyscus leucopus Woodchuck, Marmota monax

APPENDIX D - REPRESENTATIVE VEGETATION OF THE STUDY AREA

APPENDIX D

REPRESENTATIVE VEGETATION OF THE STUDY AREA

Aider, Ainus sp. American holly, ilex opaca Arrow-arum, Peitandra Virginica Arrowhead, Sagittaria sp. Arrowwood, Vaccinium dentatus Ash, Fraxinus sp. Aster, Aster sp. Begger-tick, Bidens sp. Big cordgrass, Spartina cynosuroides Black Cherry, Prunus serotina Black gum, Nyssa Sylvatica Biack Jack oak, Quercus marijandica Black willow, Salix nigra Bramble, Rubus sp. Burrweed, Sparganium sp. Buttonbush, Cephaianthus occidentalis Cattail, typha sp. Chestnut oak, Quercus prinus Duckweed, Lemna sp. Eiderberry, Sambucus canadensis Elodea, Elodea sp. Flowering dogwood, Cornus florida Giant reed, Phragmites communis Golden rod, Solidago sp. Grape, Vitis sp. Green ash, Fraxinus pennsylvanica Greenbrier, Similax sp. Hickory, Carya sp. Honeysuckie, Lonicera japonica ironwood, Carpinus caroliniana Jewelweed, impatiens capensis Joe-pye-weed, Eupatorium dubium Lizard's tali, Saururus cernuus Loosetrife, Lynthrum sp. Magnolia, Magnolia sp. Nettie, Urtica dioica Oaks, Quercus sp. Panic grass, Panicum ciandestinum Pickerei week, Pontederia cordata Poison ivy, Rhus radicans Pondweed, Potamogeton Post oak, Quercus stellata Red maple, Acer rubrum River Birch, Betuia nigra Rose mailow, Hibiscus moscheutos

Appendix D (cont'd.)

Saltmeadow cordgrass, Spartina patens Sassafras, Sassafras albidum Sedges, Carex sp Slippery elm, Ulmus rubra Smartweed, Plygonum punctatum Spatteredock, Nuphas advena Spicebush, Lindera benzoin Spikerush, Eleocharis Sumac, Rhus sp. Swamp Rose, Rosa palustrus Sweet gum, Liquidambar styraciflua Sycamore Plantanus occidentalis Tear Thumb, Ploygonum sagittatum Three Square, Scirpus americanus Tulip popiar, Lirlodendron tulipifera Virginia creeper, Parthenocissus quinquefolia Water IIIy, Nymphaea odorata Water willow, Decadon verticiliatus White oak, Quercus alba

APPENDIX E - REFERENCES

REFERENCES

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