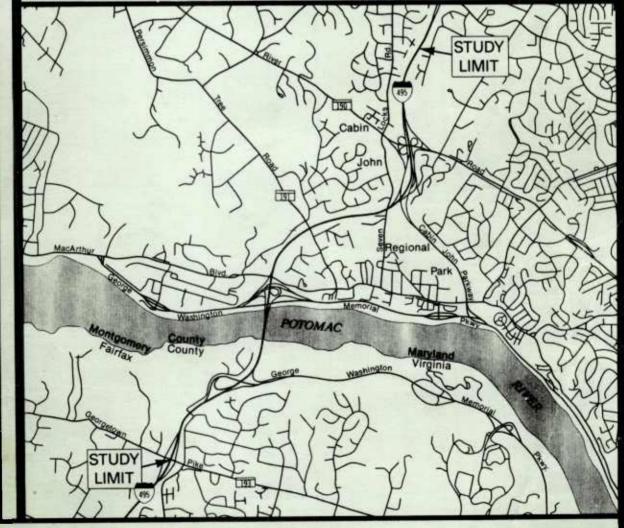
FINDING OF NO SIGNIFICANT IMPACT

for

Contract No. M 355-101-372 N

Interstate 495 (Capital Beltway) From North of Maryland Route 190 (River Road) to Virginia Route 193 (Georgetown Pike)

Montgomery County, Maryland and Fairfax County, Virginia



prepared by FEDERAL HIGHWAY ADMINISTRATION

and U.S. DEPARTMENT OF TRANSPORTATION MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION



Maryland Department of Transportation State Highway Administration Richard H. Trainor Secretary Hal Kassoff Administrator

July 29, 1988

Contract No. M 355-101-372 I-495 Capital Beltway from end of American Legion Memorial Bridge to MD 190 Montgomery County, Maryland

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Finding of No Significant Impact

Transmitted for your information is one copy (or copies) of the approved Finding of No Significant Impact. The document has been prepared in accordance with the CEQ Regulations, DOT Order 5610.1c and 23 CFR 771.

Alternate 2, inside widening, is the selected alternate.

Distribution of the Finding of No Significant Impact is made on behalf of the Federal Highway Administration in accordance with 23 CFR 771.

By:

Very truly yours,

Hal Kassoff Administrator

neil & Yederson

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

HK:NJP:tn Attachment cc: Mr. Bob B. Myers Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson Mr. John M. Contestabile

My telephone number is (301) 333-1110

Teletypewriter for Impaired Hearing or Speech 383-15-95 Stilmore Metro - 565-0451 D.C. Metro - 1-800-492-5062 Statewide Toli Free 707 North Calvert St., Baltimore, Maryland 21203-0717

State Highway Administration

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*Deputy Chief Engineer - Highway Development District Engineer Bureau of Highway Design Bureau of Bridge Design Bureau of Landscape Architecture CHARUES ADAMS BRK, 225 Office of Planning and Preliminary Engineering Project Development Division Bureau of Highway Planning and Program Development Office of Real Estate Bureau of Relocation Assistance Bureau of Acquisition Activities Federal-Aid Section - Office of Real Estate District Chief - Office of Real Estate State Highway Administration Library Equal Opportunity Section

*Cover letter only

FEDERAL HIGHWAY ADMINISTRATION FINDING OF NO SIGNIFICANT IMPACT

FOR

I-495 WIDENING FROM MD 190 TO AMERICAN LEGION MEMORIAL BRIDGE

The FHWA has determined that this project will not have any significant impact on the environment. This finding of no significant impact is based on the Environmental Assessment and the attached information, which summarizes the assessment and documents the selection of Alternate 2. The Environmental Assessment has been independently evaluated by the FHWA and determined to adequately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

For Acting Division Administrator

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I. RECORD OF DECISION

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MEMORANDUM OF ACTION OF ADMINISTRATOR HAL KASSOFF FRIDAY, MAY 10, 1985

Concurrence With Prior Action

In accordance with established procedures, a Final Environmental Document is being prepared for the project listed below. Both Location and Design approval will be requested from the Federal Highway Administration for Alternate 2 (Inside Widening Alternate).

 State Contract No. M-355-101-372 N;PDMS#151087. I-495 - from North of Md. Rte. 190 to the Virginia Rte. 193 Widening Study.

The decision to proceed in this manner was made by the Administrator at a staff meeting held on April 3, 1985.

Copy: Mr. J. A. Agro, Jr. Mr. G. E. Dailey Mr. N. Pedersen Mr. L. H. Ege, Jr. Mr. J. M. Contestabile Mr. J. F. Ross Mr. A. M. Capizzi Mr. E. M. Loskot Mr. M. Snyder Ms. C. Simpson SHA-Contract M-355-101-372 N



Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

May 10, 1985

MEMORANDUM

TO:

Mr. William I. Slacum, Secretary State Roads Commission

Neil J. Pedersen, Director FROM: neil & Vederson Office of Planning and Preliminary Engineering

Contract No. M 355-101-372 N SUBJECT: I-495 From North of Maryland Route 190 to Virginia Route 193 Widening Study PDMS No. 151087

The Bureau of Project Planning is preparing a Final Environmental Document for this project to be submitted to the Federal Highway Administration in May of 1985, requesting Location and Design Approval for Alternate 2 - Inside Widening Alternate. A decision to proceed with the recommendation was made at a Team Recommendation Meeting on April 3, 1985 by Administrator Kassoff.

The summary of this meeting and the Project Planning Recommendation Report is attached.

This information is being sent to you as part of the procedure by which you submit the action to Mr. Kassoff, receive his approval, and formally record and file this action.

5/10/85 Date Hal Kassoff Administrator * Subject to find Subject y grading & NJP:mm Attachment cc: Mr. John A. Agro, Jr. Mr. John J. Cahill, Jr. Mr. Michael Snyder Mr. Charles Anderson Mr. Louis H. Ege, Jr. Mr. Edward Terry Mr. Anthony M. Capizzi Mr. Gordon E. Dailey Mr: Thomas Hicks Mr. James Gatley My. S. Lewis Helwig Mr. Edward M. Loskot Ms. Cynthia Simpson Mr. J. L. White Mr. Jack F. Ross Mr. W. Owens - Mr. John M. Contestabile I-2

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



Maryland Department of Transportation

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State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

April 2, 1985

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MEMORANDUM

TO: Mr. Hal Kassoff Administrator

FROM: Neil J. Pedersen, Director Meil & Pedersen Office of Planning and Preliminary Engineering

SUBJECT: Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of Maryland Route 190 (River Road) to Virginia Route 193 (Georgetown Pike) PDMS No. 151087

This memo confirms the meeting scheduled in your conference room at 9:00 a.m. on Wednesday, April 3, 1985, for the presentation of the Project Planning Staff Recommendation. Attached for your use at this meeting are:

- Brochure distributed for the Project Public Hearing
- Staff Recommendation

The Project Planning Team recommends the selection of Alternate 2 which provides for the construction of an additional lane in both directions within the median area of I-495 and interchange ramp improvements. In addition, the construction of noise barriers in noise sensitive areas B and E and safety grading in selected areas are recommended.

The request for Location Approval for the recommended alternate may be processed by the preparation of a Finding of No Significant Impact (FONSI).

The transcript of the Public Hearing, the Environmental Assessment and other back-up data are available from the Project Manager, Mr. John M. Contestabile, whose telephone number is 659-1191.

NJP:mm Attachment

I-3

My telephone number is <u>659–1110</u> Teletypewriter for impaired Hearing or Speech 383-7555 Baltimore Metro — 565-0451 D.C. Metro — 1-800-492-5062 Statewide Toli Free P.O. Box 717 / 707 North Caivert St., Baltimore, Maryland 21203 - 0717

II. COMPARISON OF ALTERNATES

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II. <u>COMPARISON OF ALTERNATES</u> (<u>Table 1</u>)

وربيا والاستكان منتشد والأستجير منافرة المنتجر والاستناقات والاستنقاص والمراجب منافات بالاستناصي منافس متعجر ال

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		Alt. 2
	No-Build	Selected
	Alternate	Alternate
		<u></u>
Social, Economic, and Land Use Impacts		
- Displacements - Historic and Archeological	0	0
Sites Affected	0	0
- Public Recreational Lands	v	v
Affected	0	0
- Consistency with Master Plans	No	Yes
- consistency with Master Fians	140	165
Natural Environmental Impacts		
- Loss of Natural Habitat (Woodland		
Acres)	0	0
- Effect on Wildlife Populations	Õ	0
- Effect on Threatened or Endangered	·	-
Species	0	0
- Stream Crossings	0	0
- Wetlands Affected	õ	Õ
- Floodplain Acres Affected	õ	° Ö
- Air Quality Impact (Sites	v	0
Exceeding S/NAAQS)	0	0
- Noise Sensitive Areas Exceeding	v	6
Federal Abatement Criteria	6	6
rederar Abatement Criteria	U	Ū
<u>Cost (1987) Dollars)</u>		
- Planning	0	\$ 513,000
- Engineering	Ō	1,013,000
- Right-of-Way	Õ	0
- Construction	õ	33,000,000
	•	<u></u>
TOTAL COST		\$34,526,000

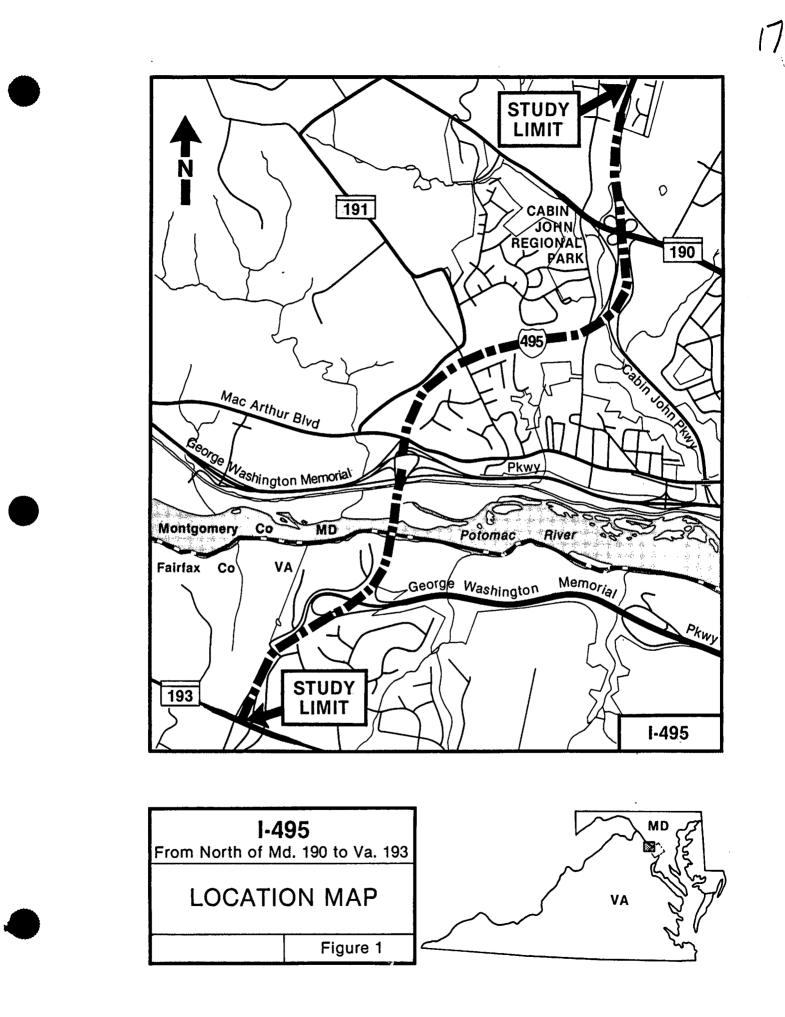
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SUMMARY OF ACTIONS AND RECOMMENDATIONS

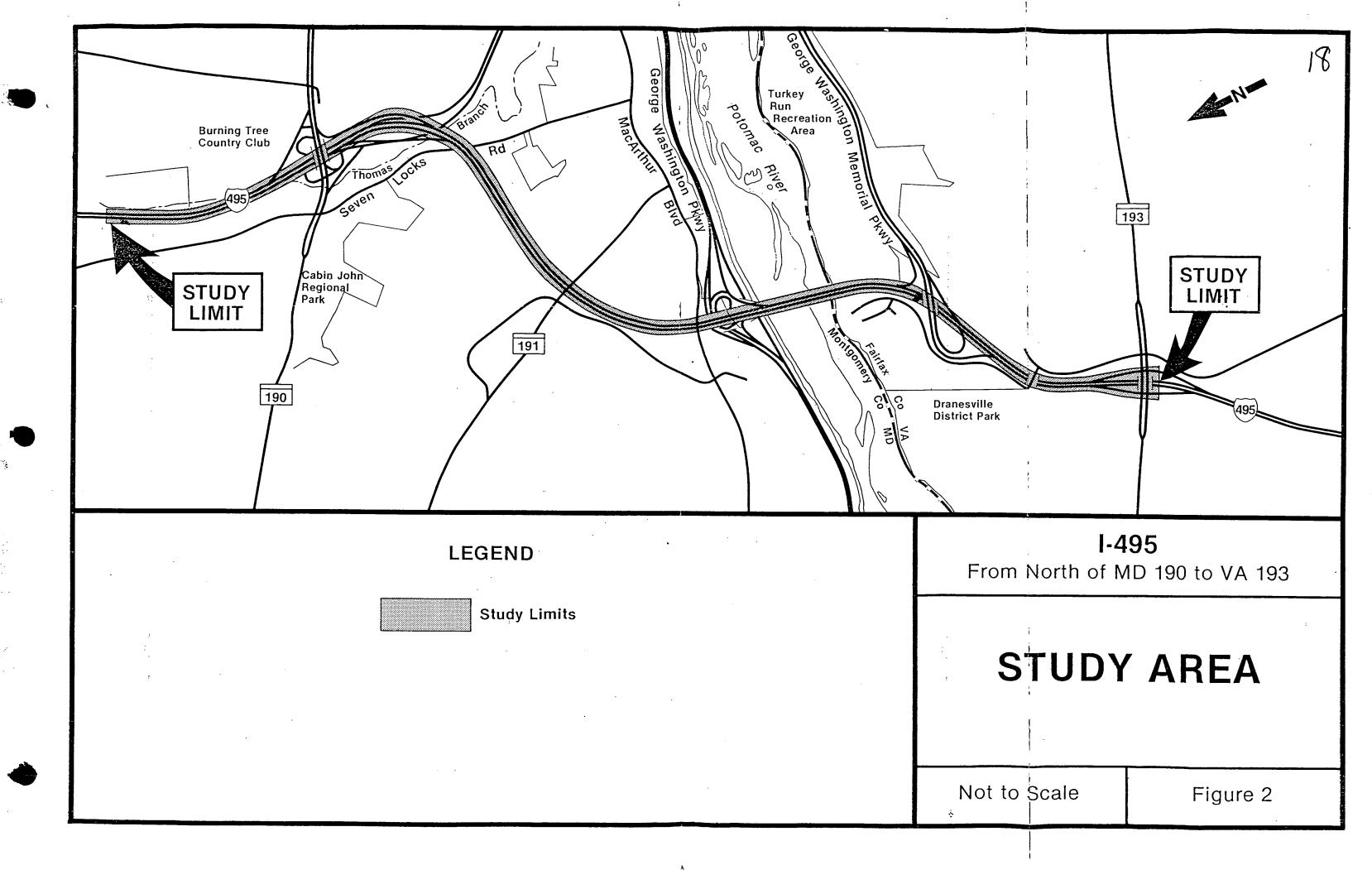


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III. SUMMARY OF ACTIONS AND RECOMMENDATIONS

A. <u>Background</u>

1. <u>Project Location</u>

The proposed widening of Interstate Route 495 is located in southwestern Montgomery County in Maryland and in northeastern Fairfax County in Virginia (see Figure 1). The roadway runs generally in a northsouth direction and crosses the Potomac River as it crosses the State line. The limits of the project planning study are from just north of Maryland Route 190 (River Road) to the vicinity of the C&O Canal in Maryland and from the vicinity of the C&O Canal to Virginia Route 193 (Georgetown Pike) in Virginia (see Figure 2). The northern project limits end in the area where the existing six lanes transition into eight lanes.

2. <u>Problems and Purpose of the Project</u>

The Capital Beltway within the study limit is one of only 3 six-lane segments remaining on the Beltway. The transportation problem in the study area is the lack of traffic capacity. During the morning peak hours, traffic volume exceeds capacity on the northbound lanes, with backups extending south of the American Legion Memorial Bridge over the Potomac River into Virginia. A similar condition occurs on the southbound lanes during the evening peak hours, with backups occurring from the bridge through the Maryland Route 190 interchange.

III-1

3. <u>Project Planning History</u>

a. <u>Program History</u>

This project was first introduced in the Maryland Department of Transportation's <u>1984-1989</u> <u>Consolidated Transportation Program (CTP)</u> for planning and engineering. It is also listed in the <u>1985-1990 CTP</u> for planning, engineering, and approximately 55% of the construction phase in fiscal years 1989 and 1990. It is currently listed in the Virginia Department of Highway's <u>Six</u> <u>Year Program</u>. In addition, the project is recommended in the <u>1983 Report on Comprehensive</u> <u>Planning Policies</u> by Maryland-National Capital Park and Planning Commission and in the <u>Draft 1984</u> <u>CTP Report</u>.

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b. <u>Project History</u>

Initial Project Planning studies for this project began early in 1983. An Alternates Public Meeting was held on October 4, 1984, followed by a Combined Location/Design Public Hearing which was held on January 23, 1985. An Environmental Assessment was completed and made available for public and agency review on December 21, 1984, prior to the Public Hearing.

The Virginia Department of Highways prepared a <u>Negative Declaration</u>, approved August 3, 1973, for the portion of this project located in Virginia. That document was reevaluated in

III-2

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October, 1983 and was found to still be appropriate. <u>The Negative Declaration</u> and the reevaluation are available at the Virginia Department of Highways and Transportation, 1221 East Broad Street, Richmond, Virginia 23219. Therefore, Location Approval has been granted for the Virginia project area.

21

The first stage of the bridge reconstruction for the structures over the Potomac River and the C&O Canal was completed in 1987. Rehabilitation of the bridge deck for bridge no. 15101 was delayed due to funding constraints. These bridges (Nos. 15101 over the C&O Canal and eastbound George Washington Memorial Parkway and 15100 over the Potomac River) can accommodate the additional through lanes on I-495 and auxiliary lanes between the George Washington Memorial Parkway (GWMP). On January 4, 1979, the Federal Highway Administration concurred that deck replacement and safety improvements for the Cabin John Bridge was a nonmajor action (same as current Categorical Exclusion). A Section 4(f) Evaluation was prepared to address the temporary impacts to the C&O Canal Park during bridge reconstruction. The Section 4(f) Statement (FHWA-MD-4(f)-82-02-F) was approved and Location Approval was obtained on March 26, 1984.

The I-495 project is scheduled to receive Location and Design Approval in 1988. Construction is scheduled to begin in Fiscal Year 1989.

c. <u>CTP and Federal Aid Funding Status</u>

The preliminary 1988-1993 CTP projects project funding as follows:

Planning	\$ 513,000
Engineering	1,013,000
Right-of-Way	0
Construction	\$33,000,000

The project was funded entirely with State monies during the Project Planning phase. However, it has been developed in accordance with Federal guidelines to assure its qualifications for Federal participation in subsequent phases, subject to the availability of Interstate 4R Funds.

B. <u>The Alternates</u>

1. <u>Description of Alternates</u>

a. <u>Alternate 1 - The No-Build Alternate</u>

This alternate would provide no major improvements to the through roadways or interchanges. Normal maintenance, such as resurfacing and bridge redecking, would be accomplished as warranted. As traffic volumes grow, the frequency and duration of congested periods would increase. Increasing congestion is expected to result in higher collision rates which already exceed statewide averages.

b. <u>Alternate 2 - Inside Widening</u> <u>The Selected Alternate</u>

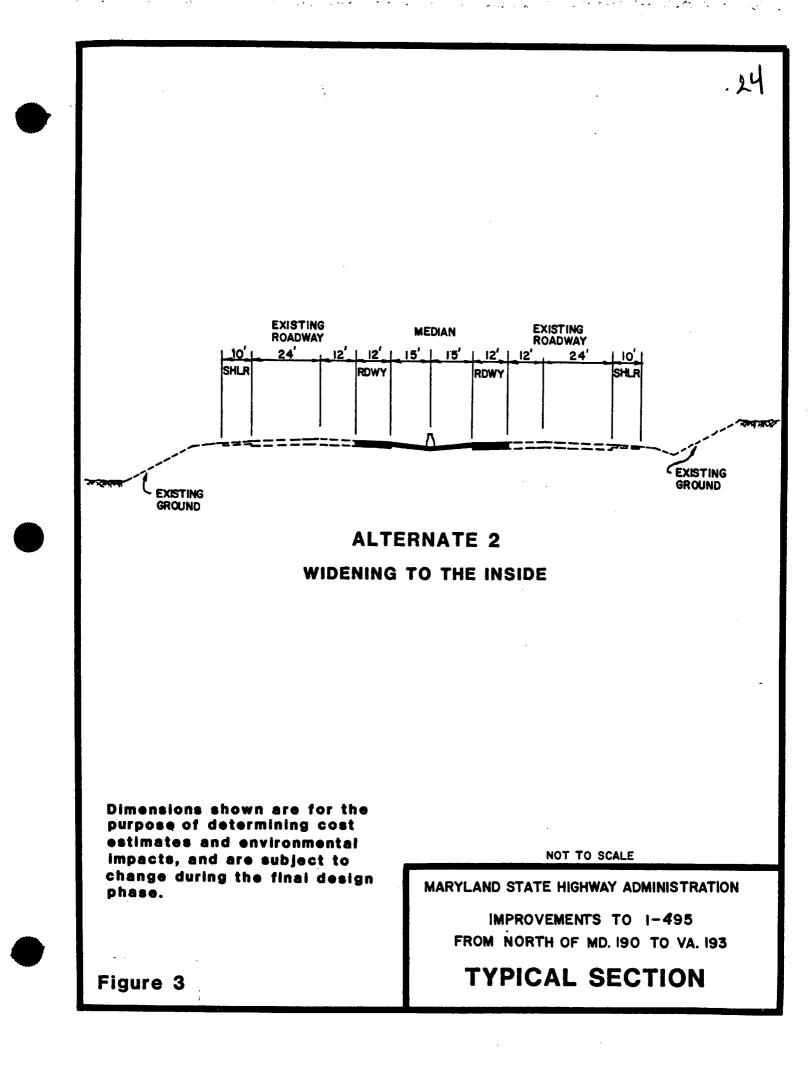
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This alternate proposes the addition of one lane in each direction to the existing six lane roadway. The additional two lanes will be constructed in the median and will be separated by a continuous concrete barrier (see Plates 1A, 1, and 2).

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Twelve foot shoulders on the median side and ten foot shoulders on the outside of the through travel lanes would be provided. To the right of each outside shoulder, a clear 24 foot unobstructed recovery area would be constructed where feasible within the existing right-of-way and environmental constraints (see Figure 3).

In interchange areas, acceleration and deceleration lanes would be lengthened to conform to current American Association of State Highway and Transportation Officials Standards. In addition, auxiliary lanes between the two George Washington Memorial Parkways (GWMPs) in Maryland and Virginia would also be needed to maintain an acceptable level of service. (These lanes are being built under the current bridge reconstruction project.) Retaining walls will be constructed to avoid using any additional right-ofway.



c. <u>Alternate 3 - Outside Widening</u> (Dropped after Alternates Meeting)

This alternate was dropped from further study after the Alternates Public Meeting due to public and agency comments, as well as environmental and engineering studies, which indicated that this alternate would more severely impact the local communities by moving traffic and associated noise impacts closer to nearby houses, and by imposing a greater impact on Thomas Branch and its floodplain. Alternate 3 proposed to add one lane in each direction on the outside of the existing six lane roadway.

2. Existing and Projected Traffic Conditions

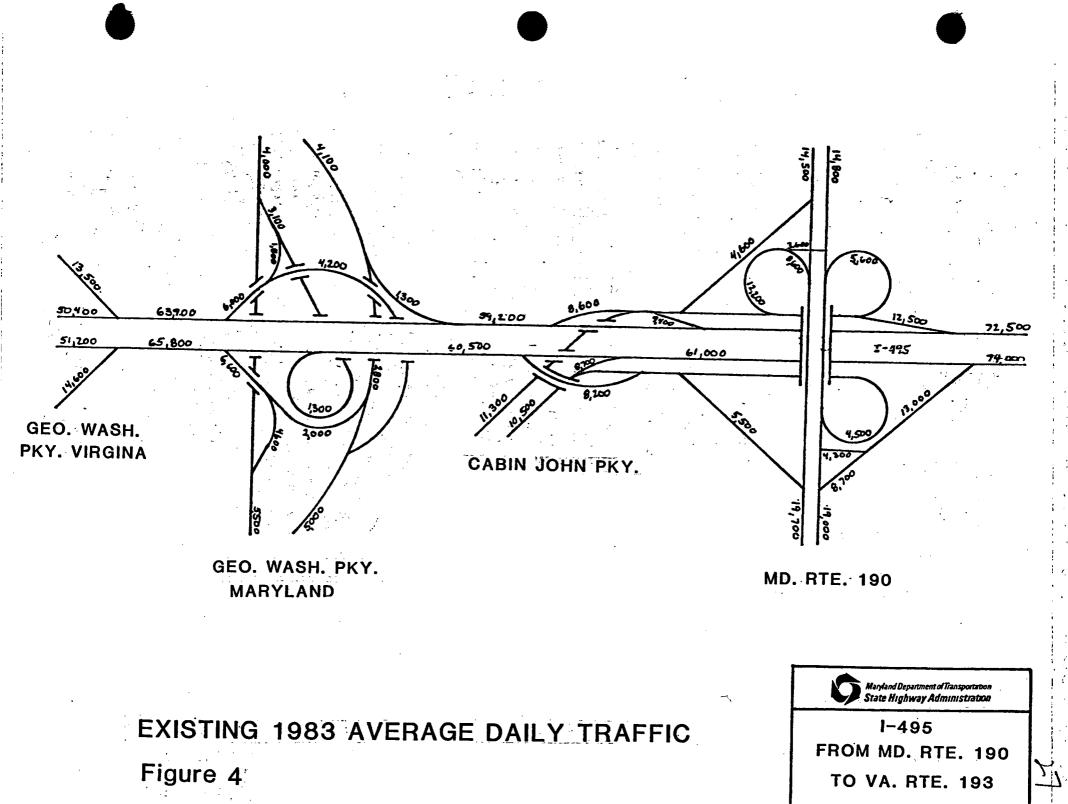
a. Levels of Service

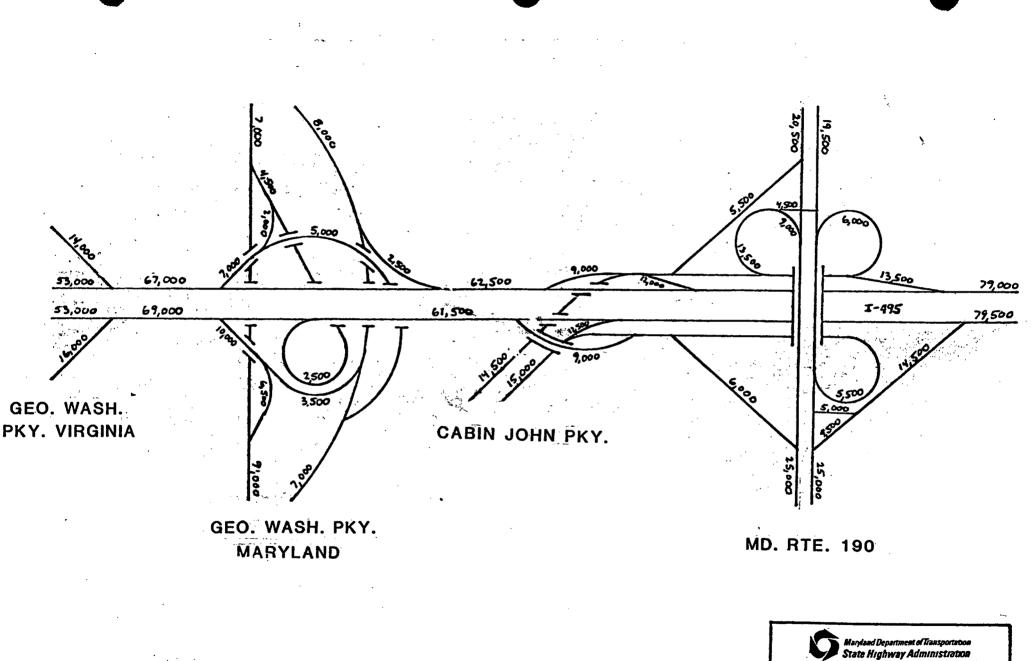
Quality of traffic flow along a highway is measured in terms of level of service (LOS). This measure is dependent upon highway geometry and traffic characteristics, and ranges from LOS "A" (Best), to LOS "C" (Minimum Desirable), to LOS "E" (Capacity), to LOS "F" (Worst or Forced Flow). The Capital Beltway within the study limits currently experiences forced flow (Level of Service "F") conditions during peak hours. Average Daily Traffic (ADT) has increased drastically since 1980. The permanent traffic counter station south of Maryland Route 191 recorded ADT's of 101,000 for 1980; 108,000 for 1981; 116,000 for

1982; and 120,000 for 1983. These figures represent a significant yearly increase of nearly 6% during those years. Traffic projections for the design year of 2010 indicate approximately 170,000 vehicles per day on the Beltway within the study limits (see Figure 4-12).

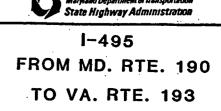
170,000 vehicles per day is the maximum volume of traffic that will be able to use the Beltway in the design year, given the constraints of only three lanes of capacity. Since the Beltway in the study area is already experiencing forced flow (LOS "F"), adding these projected traffic volumes without adding any lanes would result in much longer durations of "stop and go" congestion with speeds ranging from 0-30 miles per hour during peak hours.

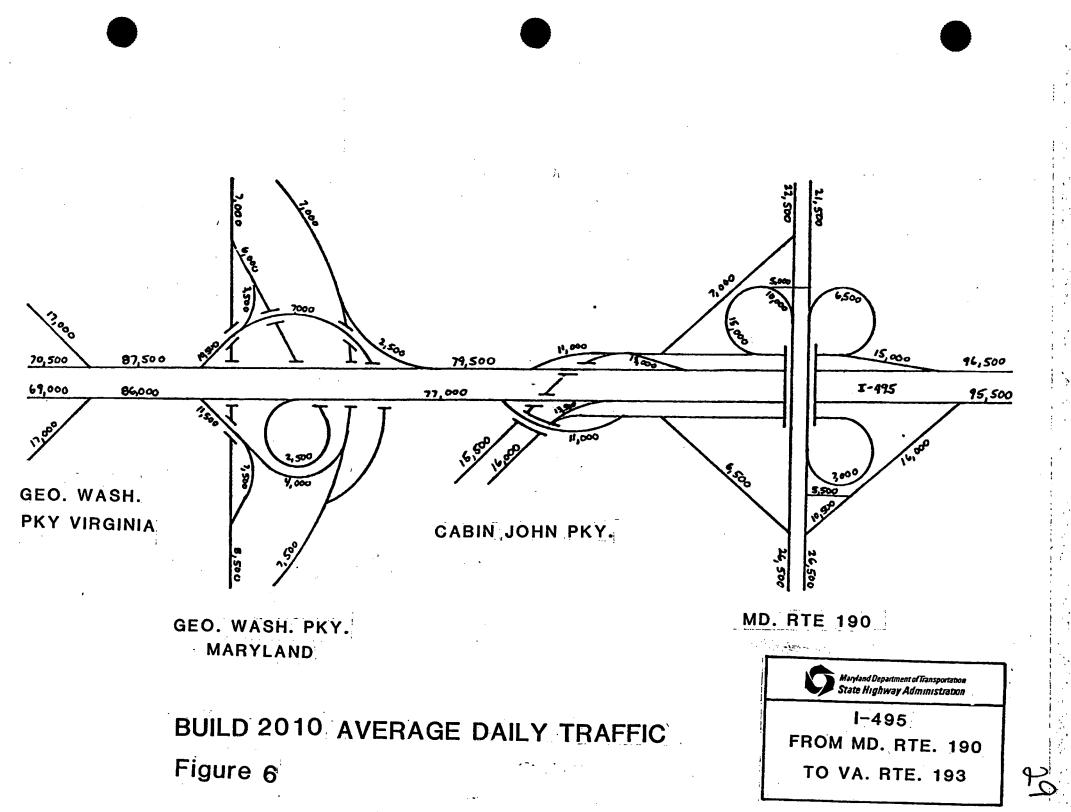
Under the Selected Alternate, the levels of service would range from LOS "C" to LOS "E" (see Table 2). Speeds would average about 50 miles per hour during peak hour and the forced flow would be eliminated.





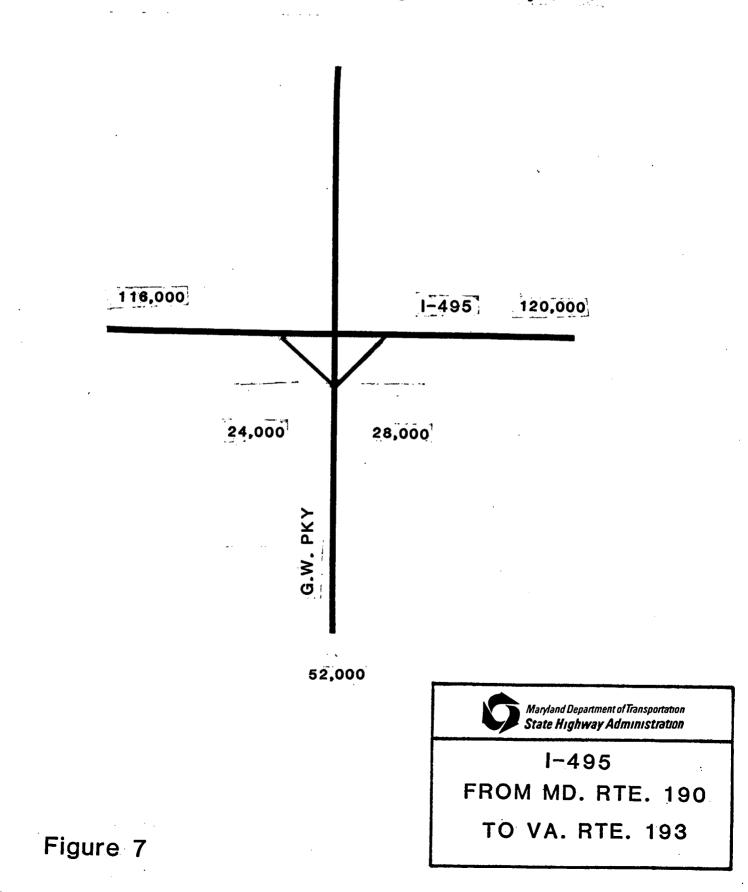
NO – BUILD 2010 AVERAGE DAILY TRAFFIC Figure 5







I-495 at George Washington Parkway (Va.)



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EXISTING 1984 AVERAGE DAILY TRAFFIC

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I-495 at Va. 193

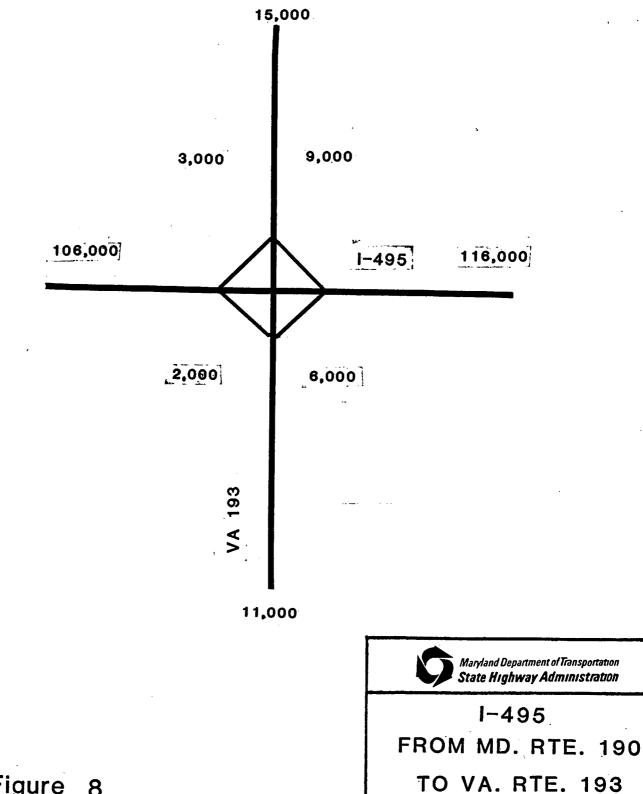
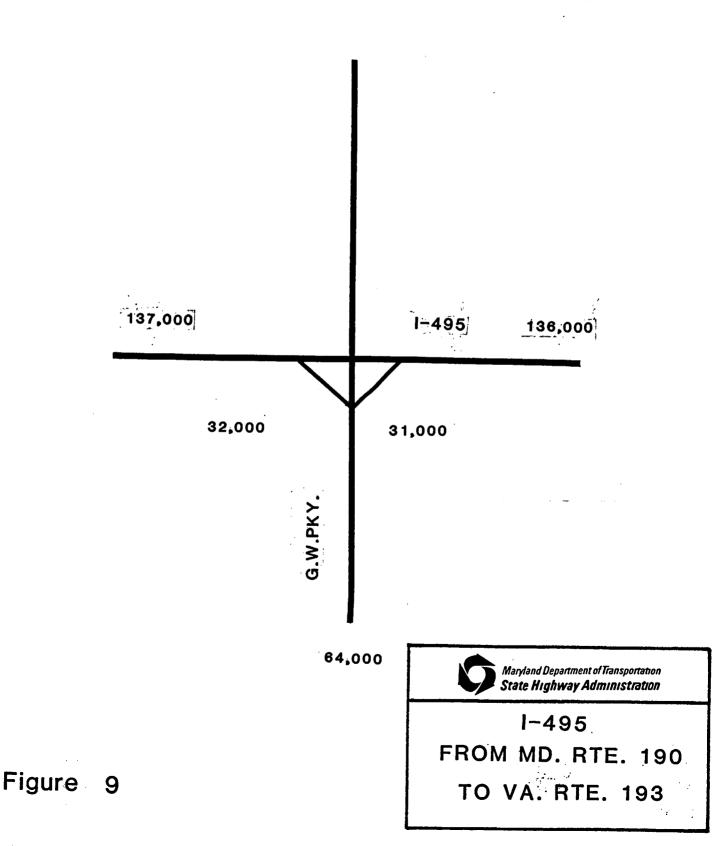


Figure 8 **NO-BUILD 2010 AVERAGE DAILY TRAFFIC**

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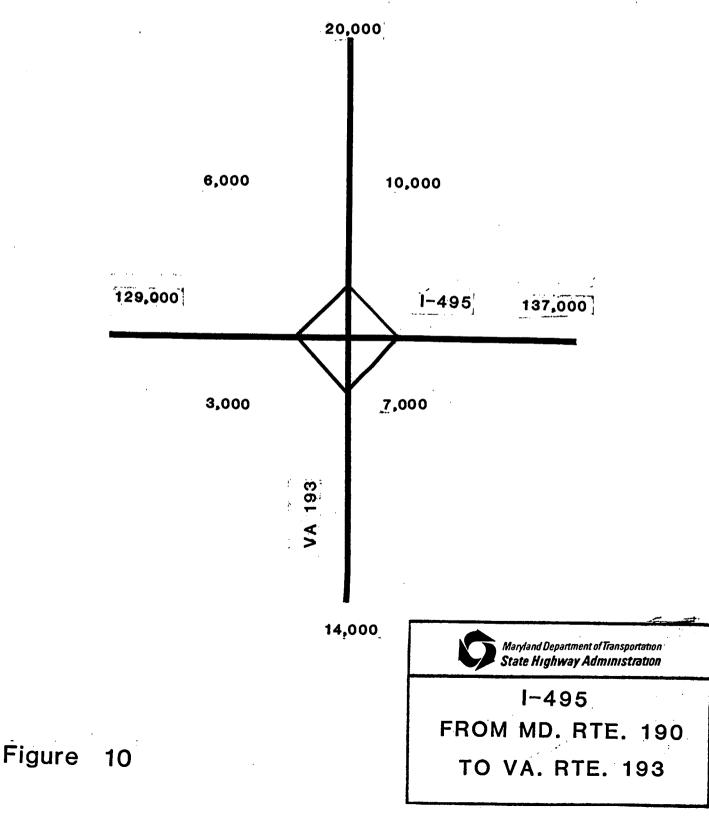


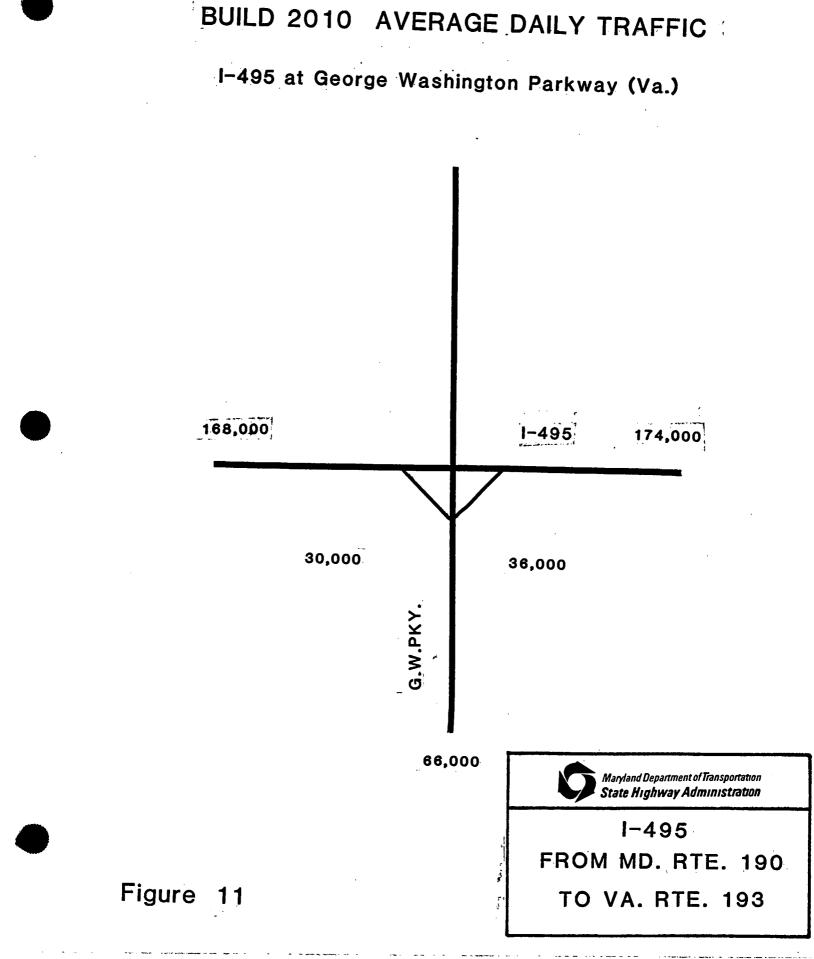


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NO-BUILD 2010 AVERAGE DAILY TRAFFIC

I-495 at Va. 193



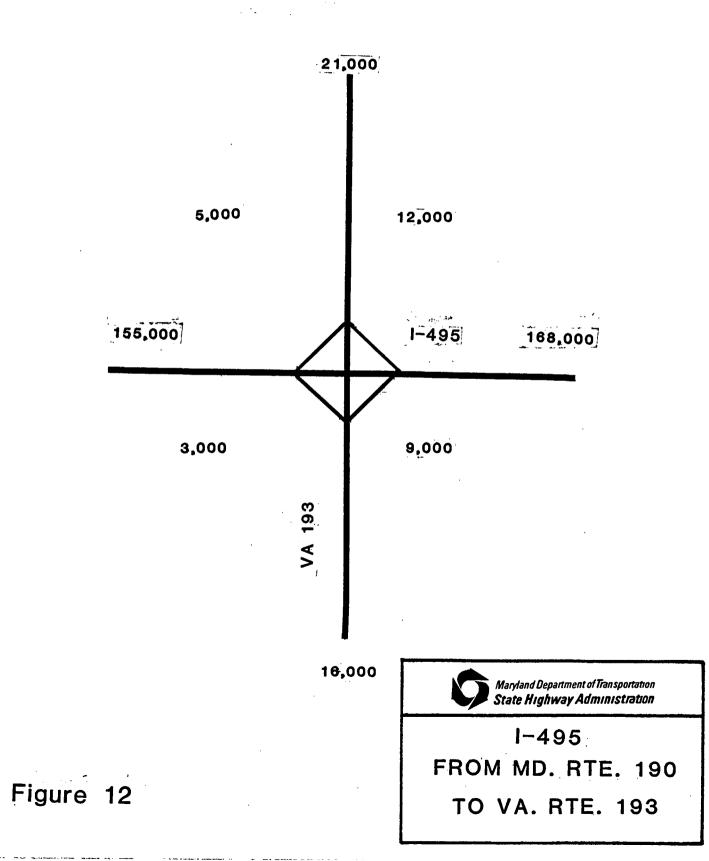


BUILD 2010 AVERAGE DAILY TRAFFIC

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I-495 at Va. 193

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AVERAGE DAILY TRAFFIC/LEVEL OF SERVICE TABLE 2

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	Existing 1983	No-Build 2010	Build _2010
I-495 (N. of MD 190) MD 190 Interchange	140,000/E D	160,000/F F	180,000/E E
I-495 (GWMP - MD 190) GWMP Interchange (Maryland)	120,000/E F	125,000/E C	150,000/E C
I-495 (@ Potomac River) GWMP Interchange (Virginia)	130,000/F E/F	135,000/F F	165,000/E F
I-495 (S. of GWMP)	120,000/E	125,000/E	145,000/E

b. Accident Rates

Because of these high volumes of traffic, this segment of the Beltway experiences an accident rate of 89 accidents per one hundred million vehicle miles of travel. This is 31% higher than the statewide average of 68 accidents per one hundred million vehicle miles for highways of similar design.

The rate of fixed object type collisions exceeds the statewide average by 8%. These collisions are mainly associated with weaving at interchanges and "stop and go" traffic flow associated with congestion. In addition, the .5 mile segment of the inner loop from the Virginia Line to the bridge over George Washington Memorial Parkway is designated a High Accident Section.

Recognizing the need to reduce the accident rate, and because traffic volumes are expected to

III-8

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increase substantially, 8 through lanes are required for the entire length of the project.

3. <u>Environmental Overview</u>

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An <u>Environmental Assessment</u> was prepared and distributed prior to the public hearing for this project. Alternate 2 was identified as the Preferred Alternate and is now the Selected Alternate.

The following sections summarize the impacts of the Selected Alternate.

a. <u>Social, Economic, and Land Use Impacts</u>

(1) <u>Social Impacts</u>

This alternate would relieve traffic congestion on the Beltway and improve safety and access to community facilities and services both in the study area and in the metropolitan Washington region as a whole. No relocations or displacements would be necessary, and no impacts to the integrity or cohesion of local communities would occur. There would be no recreational areas, parkland, or historic and archeological sites affected.

(2) <u>Summary of the Equal Opportunity Policy</u> of the Maryland State Highway Administration'

TITLE VI STATEMENT

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

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This policy has been incorporated into all levels of the highway planning process in order that proper consideration may be given 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.

(3) <u>Economic Impacts</u>

The Capital Beltway is a vital link to the Washington, D.C. and northern Virginia market areas and employment centers. Alternate 2 would provide the "missing link" in the form of two additional lanes, which would relieve the bottleneck in the study area. Providing these lanes would alleviate the already severe congestion and safety problems which delay the exchange of goods and services.

In light of the high levels of traffic forecast for this area of the Beltway, it is clear that providing these lanes would be an important step in addressing the transportation needs of the growing Washington, D.C. and northern Virginia market areas.

III-10

(4) Land Use Impacts

The Selected Alternate is consistent with local land use goals, and is not expected to have an impact on land use in the study area other than to reinforce the master plan goals for providing an adequate transportation network to support planned development.

(5) <u>Historical and Archeological Resources</u>

The Maryland State Historic Preservation Officer has determined that the proposed project would have no effect on any historic sites on or eligible for the National Register of Historic Places (see the letter in the Correspondence Section dated December 18, 1984).

The Heritage Resources Branch of the Fairfax County Office of Comprehensive Planning recommends that the two archeological sites located within the Virginia portion of the study limits be fenced during construction to ensure that neither site is disturbed without further controlled investigation. Both of the sites will be fenced and avoided during construction of the project.

III-11

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The Maryland State Archeologist has determined that no archeological sites will be impacted (see the letter from the State Archeologist dated June 2, 1983). 40

b. <u>Natural Environmental Impacts</u>

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(1) <u>Wildlife and Habitat</u>

The proposed project lies in a highly urbanized study area which provides little natural habitat for wildlife, although some undeveloped land lies adjacent to I-495 in Cabin John Creek Regional Park. No terrestrial habitat would be affected by the proposed improvements.

Coordination with the Maryland Department of Natural Resources and the U.S. Fish and Wildlife Service indicates that there are no known populations of threatened or endangered plant or animal species in the area.

(2) <u>Surface Water</u>

Thomas Branch, a tributary to the Potomac River, runs parallel to I-495 from north of the study to its confluence with the Cabin John Creek at River Road. It was extensively channelized and relocated during the original construction of I-495. Cabin John Creek runs parallel to and is crossed by I-495 at Cabin John Parkway. Neither of the streams will be relocated.

III-12

Number of comes Constructed Before I-495 Opened (1962/1963) 3 (With a 5 dBA Reduction and Impacted

TABLE 3-A

1-495 NOISE ABATEMENT ANALYSIS SUMMARY

Noise # Sensitive		of Impacted w/>		Noise Levels Range (leq)			Barriers			Cost	Cost With Berm	
		Than 5 dB Reduction	Ambient	No Build Design Year)	Build (Design Year)	Build w/ Barrier (Design	Length (Ft.)	Height (Ft.)	Cost 1 \$ Mil.	Per Res (\$)	Total	Per Res.
A ^C	4	44	61-74	66-73	67-74	61-65	+6,493'	19'-22'	3.85	87,500		
<u>A-1</u>		27	71-74	70-73	71-74	64-66	3,744	20 '	2.06	76,300		
В	21	38	62-72	67-71	68-72	58-65	+3,850'	20'	2.07	54,500	2,017,800	53,100
С	0	4	61-66	63-68	64-69	56-60	+2,200'	20'-25'	1.48	370,000	1,122,000	280,500
D	1	25	64-66	70-71	71-72	60-63	+5,740'	18'-23'	3.56	142,400	2,385,000	95,400
Е ²	0	55	63-70	69-72	70-73	60-64	+3,980'	18'-24'	2.57	46,700	1,966,772	35,760
F	0	1	62	<u>68</u>	69	59	+410'	22'	243,540	243,540	203,470	203,470

1 Based on a square foot cost of \$27.00.

2 Includes Carderock Srings Elementary School (factored in as 10 residents) and Gibson Grove Zion Church (factored in as 5 residents).

3 Dates roadway opened to traffic - 12/62 Potomac River to MD 190, 11/63 MD 190 to MD 191.

c Berm feasibility performed under previously documented study.

4 Detailed berm analysis includes quantity estimates for cubic yards of fill and surface area of the berm, seeding and mulching, and clearing and grubbing. Existing mature vegetation which serves as a buffer would be lost. TABLE 3

BUILD ALTERNATE NOISE LEVELS

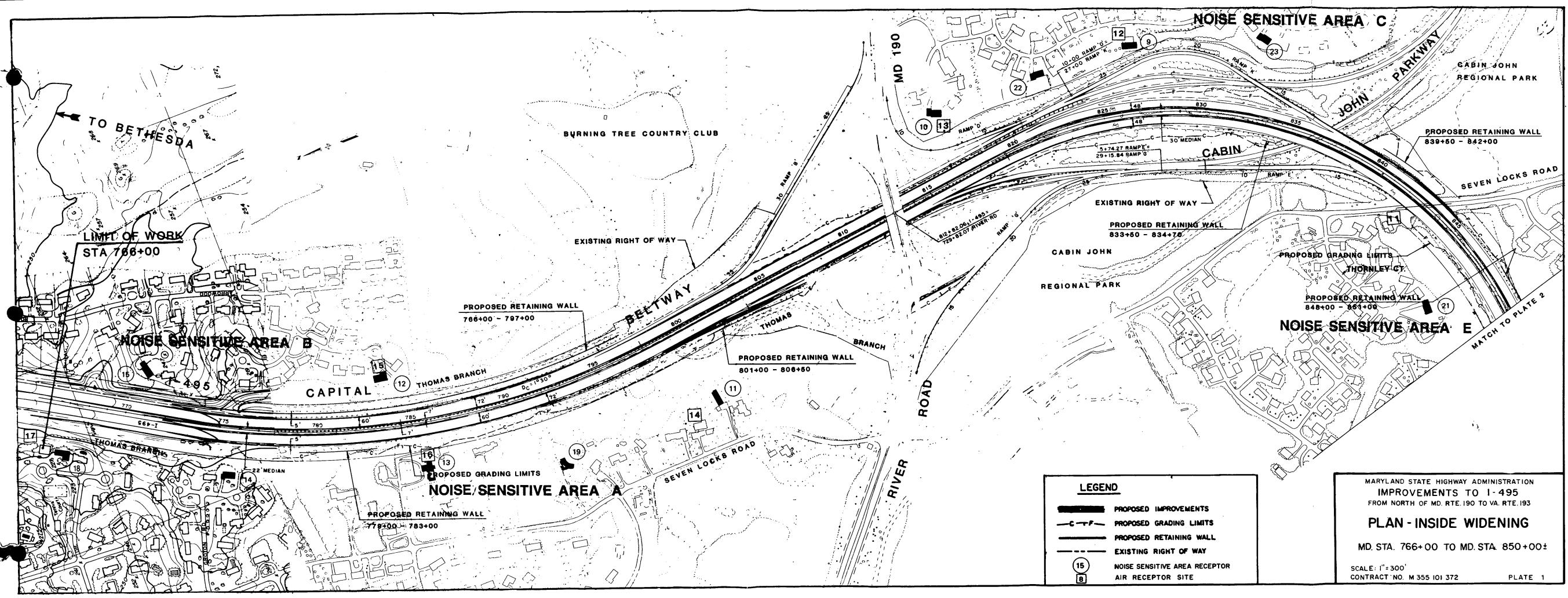
Noise Sensiti	ve Recept	cor	Ambient	No-Build	Build
Area	Site	Address	Leq	Leq	Leq
А	11	8405 Seven Locks Road	67 *	66	67
	13	7706 Cindy Lane	70 *	71	72
	14	7704 Groton Road	69	71	72
	16	7604 Carteret Road	74	73	74
	18	7605 Dwight Drive	70 *	70	74
	19	8613 Seven Locks Road	61 *	67	68
A-1	14	7704 Groton Road	69	71	72
	16	7604 Carteret Road	74	73	74
	18	7605 Dwight Drive	70 *	70	71
	2(1-270)	7504 Glennon Avenue	72	71	72
В	8	7409 Arrowwood Road	68	67	68
	12	7725 Arrowwood Court	72	71	72
	15	3 Arrowwood Terrace	68	70	71
	17	9104 Kittery Lane	69	67	68
	20	7417 Arrowwood Road	62	67	68
С	9	7541 Pepperell Drive	61	66	67
	10	33 Pepperell Court	66	68	69
	22	7525 Pepperell Drive	63	65	66
	23	7613 Royal Dominion Drive	62	63	64
D	3	8513 Carlynn Drive	66 *	70	71
	4	6925 Persimmon Tree Lane	66 *	71	72
	6	8021 Cypress Grove	66	70	71
E		School) Persimmon Tree Lane	69 *	69	70
	5	8218 Stone Trail (24 hr. monitoring)	70	72	73
	7 7	7608 Hamilton Springs Road	63	71	72
		016 Thornley Court	66	69	70
F	1 8	700 Eggert Drive	62	68	69
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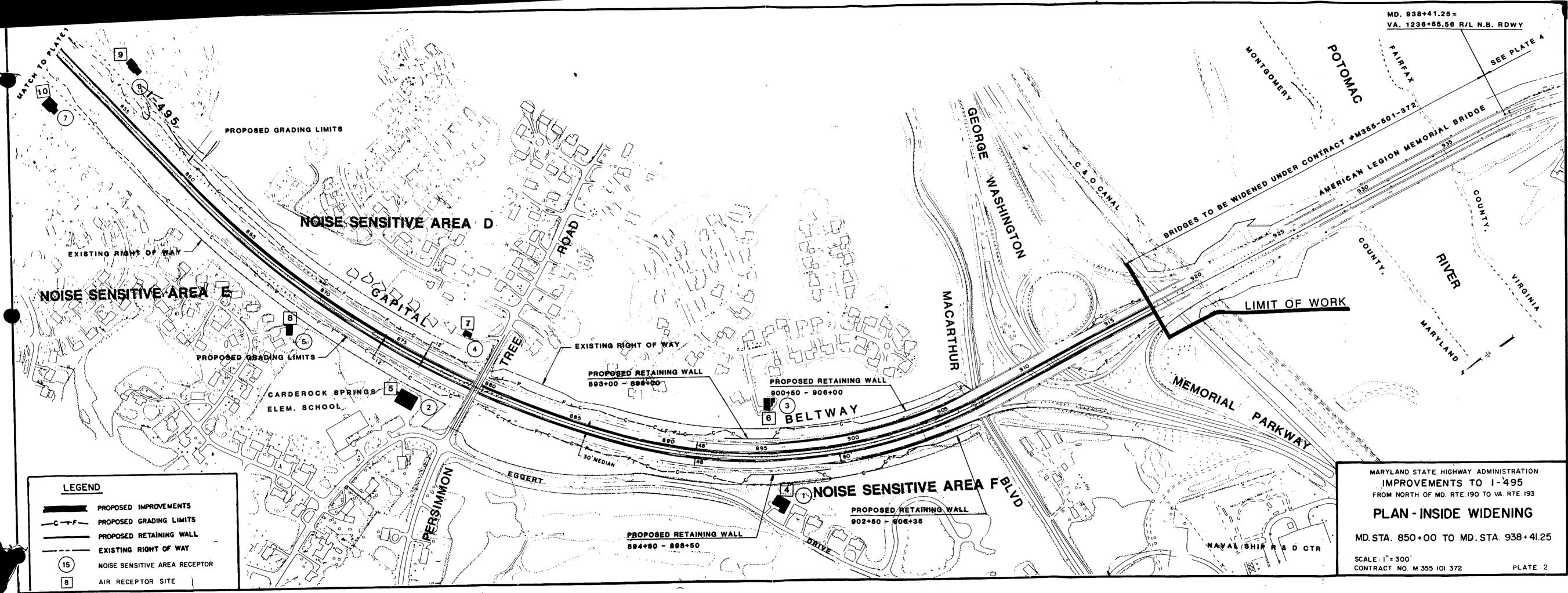
* New ambient readings taken

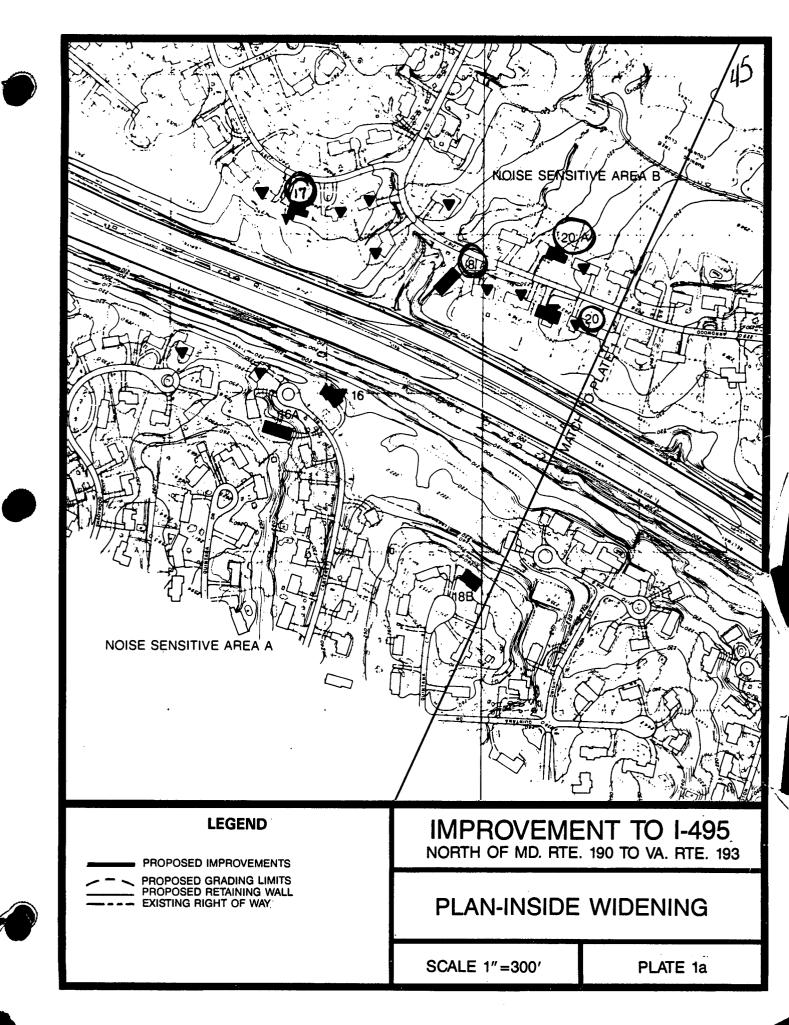
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Erosion, sediment control, and stormwater management plans will be implemented in order to minimize potential impacts to these streams. These plans will be reviewed and approved by the Maryland Department of Natural Resources.

Improvements to the outside of the roadway would occur within the existing right-of-way, and retaining walls would prevent any encroachments into the 100-year floodplain, as well as any new stream crossings.

(3) <u>Wetlands</u>

There are wetlands in the study area. Impacts to these wetlands are not anticipated.

c. <u>Noise Summary</u>

In accordance with the Federal Aid Highway Program Manual, Volume 7, Section 7, Chapter 3, this project was analyzed for noise impacts under the Type I program. As was described previously, the proposed project consists of the addition of two lanes in the median of existing I-495.

The Type I program addresses noise impacts created by new construction or reconstruction projects. Noise mitigation is considered under this program when Federal Highway Administration Noise Abatement Criteria are approached or exceeded

III-13

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or when predicted noise levels substantially exceed the existing levels. In Maryland, substantial means noise increases by 10 dBA or more over existing levels. The Noise Abatement Criteria for residential areas is 67 decibels. The land use adjacent to the study section of I-495 is primarily residential.

The following items were considered in determining potential noise impacts:

- Identification of existing land use (1)
- Existing noise levels (2)
- (3) Prediction of future design year noise levels
- (4) Potential traffic increases.

The existing noise levels, as well as the future design year build and no-build noise levels, are shown in Table 3. As can be seen, both future build and no-build levels will approach or exceed the Noise Abatement Criteria. There would be a maximum 9 decibel increase with the build alternate when compared to existing noise levels.

In order to determine if noise mitigation should be considered, a comparison was made between existing noise levels and projected build levels. As stated previously, there would be a maximum of a 9 decibel increase when comparing the build alternate noise levels with existing noise

III-14



levels.

Several types of noise mitigation were investigated and considered for this project (see Table 3-A). Noise abatement is considered when the Federal Highway Administration Noise Abatement Criteria are approached or exceeded or when noise levels increase 10 dBA or more over the existing levels.

However, when comparing build and no-build noise levels in the design year (one of the State Highway Administration's reasonability criterion), the build levels are only 1 decibel higher than the no-build condition, a difference that is not discernible to the human ear. This indicates that a significant increase in noise levels or impacts is not predicted as a direct result of the roadway project. The increase in predicted noise levels over existing levels would not be a result of the proposed project, but rather it would be a function of the normal increase in traffic resulting from planned area growth and development. Because all roadway widening will be in the median and the noise source is not any closer to receptors along the highway, a significant change in noise levels between the no-build and build alternatives would not occur.

Another reasonability criterion centers on when the noise sensitive areas become exposed to

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the noise source. It has been determined that a majority of sensitive receptors, in this case residences, were constructed after the initial construction of I-495. With the exception of the homes in noise sensitive area B, the transportation facility was opened for traffic before the majority of homes were occupied. Individuals purchasing these homes were aware of I-495, which has always been a major transportation facility intended to carry high volumes of traffic.

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The feasibility and cost-effectiveness of noise mitigation was also considered in the decision making process. The State Highway Administration designs noise barriers to achieve a 7-10 decibel reduction in noise levels. However, any impacted noise receptor which will receive a 5 decibel reduction is considered when determining the cost effectiveness of a barrier.

Cost-effectiveness is determined by dividing the total number of impacted sensitive sites, in a specified noise sensitive area, that will receive at least a 5 dBA reduction in noise levels into the total cost of the noise mitigation. The costeffectiveness methodology has changed from that shown in the 1984 Environmental Assessment. At that time, the approximate cost of barriers was based on an in-place cost of \$25 per square foot. Only first row residences were factored into the

III-16

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cost per residence. The State Highway Administration has established approximately \$40,000 per residence protected as being the maximum cost for a barrier that is considered reasonable.

The analysis completed shows that the barriers investigated at noise sensitive areas along I-495 would exceed \$40,000. Table 3-A shows the approximate length and height barrier needed to obtain a 7-10 decibel reduction, the total cost of the barrier, the number of impacted sites receiving at least a 5 decibel reduction, and the cost per residence.

Noise barriers in the form of walls would achieve the design goal of reducing noise levels 7-10 decibels for all noise sensitive areas. It would be physically feasible to construct the barriers. However, all areas would exceed the State Highway Administration's \$40,000 upper limit.

In addition to noise walls, other abatement measures were considered as outlined in the Federal-Aid Highway Program Manual 7-7-3. These include:

> (a) Traffic Management Measures (e.g., traffic control devices and signing for prohibition of certain vehicles [heavy trucks], time use restrictions for certain types of vehicles, III-17

modified speed limits, and exclusion lane designations).

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These types of measures are not appropriate for an interstate highway serving high volumes of through traffic. It is not possible to prohibit heavy trucks from this type of facility.

- (b) Alterations of Horizontal and Vertical Alignment. This also is not a reasonable alternate because the project consists of widening the existing facility within the median.
- (c) Acquisition of Real Property or Property Rights to Establish Buffer Zones or Install Earth Berms. Existing residential development immediately adjacent to the roadway makes it infeasible to acquire significant amounts of property for buffer areas.

Earth berms were investigated. The results are also shown in Table 3-A. This study considered the use of berms to lessen or, in certain cases, eliminate the need of a noise barrier wall. For locations III-18

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where berm placement is possible, costs were computed.

Areas where berms were not considered feasible (NSA's A through D and F) consist of locations with limited right-of-way, locations with existing cut slopes equal to or in excess of 2:1 and locations where berm placement would require filling, relocation or major alterations in drainage or wetland areas.

The analysis for berm placement as an alternative to noise barrier walls concludes that berms provide a cost-effective system at one of the six areas studied for abatement. Area E would have a resulting cost-per-residence of \$35,760 for a wall placed on top of a berm approximately 3,800 feet in length. The wall would range from 8 to 24 feet in height.

However, all of the homes that could be protected by the berm were built after I-495 was opened to traffic. Also, the difference between projected build and no-

III-19

build levels in the design year varies from 1 to 2 decibels. Additionally, there would be a loss of the existing mature vege-tation buffer within the right-of-way. Therefore, noise mitigation is not reasonable and will not be provided for this area as part of the proposed widening.

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All other areas have resulting costs for berms or berm-wall combinations that exceed costeffective criteria. Those costs range from \$53,100 to \$280,500 per residence.

(d) Noise insulation of public building or non-profit structures. The Carderock Elementary School and the Gibson Grove A.M.E. Zion Church are located in the study area. Both of these facilities are airconditioned. The Gibson Grove Church also has storm windows added to its original wood frame windows. They can both operate with the windows closed, which provides relief from outside noise levels. The cost of noise insulation of III-20

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public use or non-profit institutional structures as a noise abatement measure may be included in Federal-aid project costs. Since both of these facilities are insulated, there is no need to consider additional abatement measures.

After considering all of the above factors an in spite of public support for noise barriers, it has been determined that noise mitigation is not warranted under the current project. The determination has been made based on the following:

- There is little difference between the future noise levels for the expanded facility and the traffic noise levels for the no-build condition.
- With the exception of the receptors at NSA B, a majority of the development occurred after the initial construction of the roadway.
- All but one area (NSA E) exceeds the State Highway Administration's cost-perresidence limit for noise mitigation.
 During the final design of the project, landscaping and vegetative planting will be incorporated into the plans for the project to screen residential areas from

III-21

the roadway to the extent reasonable. One such area is the area of the retaining wall located along the ramp from westbound Maryland Route 190 to northbound I-495.

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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 that would likely be sources of construction noise:

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Bulldozers and Earth Movers Graders Front End Loaders Dump and Other Diesel Trucks Compressors

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

Maintenance of construction equipment will be regular and thorough to minimize noise emissions because of inefficiently tuned engines, poorly lubricated moving parts, poor ineffective muffling systems, etc.

Temporary fencing will be considered in heavy residential areas, where feasible, to screen construction activities.

III-22

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<u>Air Quality Analysis</u>

An air quality analysis indicates that the proposed project would not result in violations of either the one-hour or eight-hour State and National Ambient Air Quality Standards. Copies of the air analysis were provided to the Environmental Protection Agency and the Maryland Air Management Administration. Both agencies found that the project was consistent with the State Implementation Plan for air quality (see the letters in the Correspondence Section both dated December 14, 1984).

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

C. <u>Positions Taken</u>

d.

1. <u>Elected Officials</u>

There have been numerous exchanges of correspondence with elected officials on this project on both the State and Federal level. Much of this correspondence concerns inquiries on behalf of constituents rather than a statement of position. In general, these inquiries concerned the noise and/or safety grading issue rather than the need for the project.

III-23

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2. <u>Citizens Associations</u>

Correspondence has been received from eleven citizens groups concerning this project. Ten of these groups have formed a coalition, "Citizens Against Beltway Noise". Many letters and petitions were received requesting that noise barriers be included with the project.

There were thirty-seven speakers at the January 23, 1985 Public Hearing. Questions about the following aspects of the project were raised: noise barrier need, noise barrier costs, noise monitoring methods, safety grading need, air and water pollution, and requests for another hearing.

After the Public Hearing, two meetings were held with Carderock Spring residents and Thornley Court residents on January 29th and 31st, respectively, to more fully discuss the noise issue.

3. <u>Agencies</u>

Agency comment has generally been neutral or favors the inside widening alternate. Areas of agency concern regard potential impacts to Thomas Branch and potential noise impacts.

The Montgomery County Department of Transportation and the Maryland-National Capital Park and Planning Commission support the inside widening and the construction of noise barriers.

III-24

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D. <u>Recommendations and Supporting Reasons</u>

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The project planning team recommends Alternate 2 (inside widening) as the alternate which best meets current and projected traffic needs.

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In regard to the need for safety grading, a detailed analysis of the fixed object accidents identified two high accident areas; in the vicinity of Maryland Route 190 bridge over I-495, and along a curve on the outer loop of I-495 approaching the George Washington Memorial Parkway interchange in Maryland. The team feels that it is in the latter location that safety grading would be of benefit and it is recommended as part of this project in this location.

III-25

IV. PUBLIC HEARING COMMENTS

IV. PUBLIC HEARING COMMENTS

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A Combined Location/Design Public Hearing for this project was held on January 23, 1985 at Carderock Springs Elementary School. A complete transcript of all comments made at the hearing is available for review at the Office of Planning and Preliminary Engineering, State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202. Written comments received after the Public Hearing are discussed in the Correspondence Section beginning on page V-1.

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- 1) Betsy Lawrence, Cabin John's Citizens Association
 - a. Favors inside widening.
 - Supports sound diversion, especially in the vicinity of Gibson Grove Church and 20 nearby houses at Seven Locks Road.
 - c. Requests that proposed recovery area on each side of the Beltway be reduced as much as possible to save trees and other vegetation.
 - d. Concerned about safety on existing southbound ramp from the George Washington Memorial Parkway to the Cabin John Bridge.

RESPONSE:

- The selected alternate is the inside widening alternate.
- b. Noise barriers are not recommended as part of this project. See discussion which begins on page III-13.

c. An analysis of fixed object accidents resulted in a recommendation that safety grading be a part of this project only along the curve on the outer loop of I-495 approaching the George Washington Memorial Parkway in Maryland. This will result in a minimum of disruption to the existing vegetation in the right-of-way.

d. Both safety and traffic operations should improve on the Cabin John Bridge after construction of an additional lane in each direction, as well as auxiliary lanes between the two GWM Parkways in Maryland and Virginia.

2) <u>Jacqueline Jaffe, Thornley Court Neighborhood</u> <u>Association</u>

- a. Concerned that quality of life and property values
 will be lowered as a result of increased noise.
- b. Concerned about construction noise, air pollution, and roadway runoff.
- c. Concerned about cost guidelines for deciding which NSA's receive noise barriers; suggestion that more than just front row houses be used in costeffectiveness analysis.
- d. Suggested comparing noise barrier costs with
 Virginia's costs.

RESPONSE:

a. The project should not have an adverse impact on the quality of life or property values since it is the widening of an existing facility within the existing right-of-way. There will be no residential property taken. There will not be a substantial increase in noise levels as a result of this project. In the design year, there is only a 1-2 dBA difference between the No-Build and Build noise levels.

b. The contractor will be required to keep construction equipment in good working order to reduce noise impacts.

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Construction will only take place during the daylight hours.

No violations of either of the 1-hour or 8-hour State and National Ambient Air Quality Standards for carbon monoxide will occur as a result of the selected alternate. Strict enforcement of approved stormwater management procedures will minimize any roadway runoff impacts.

c. The State Highway Administration currently includes all impacted residences which receive a 5 dBA reduction from a barrier in the cost-effectiveness analysis. The noise barrier cost estimates presented in the Environmental Assessment were based on recent costs experienced by the Maryland State Highway Administration in 1984 and included the cost of panels, footings, drainage, landscaping, and overhead.

d. The cost estimates for noise barriers are in line with recent costs of comparable barriers in other States, including Virginia (see Comparison Table in the Appendix).

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3) <u>Henry Ritter, Riverway Homeowners Association</u> (Pepperell Court)

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Noise abatement measures should be built to protect property values and quality of life. <u>RESPONSE</u>:

There is not a significant difference between the Build and No-Build noise levels in the design year. In accordance with the State Highway Administration noise policy, noise barriers were considered.

4) <u>Charles Markell, West Bradley Citizens Association</u>

- a. Noise abatement measures should be built even without expansion of the Beltway.
- b. What are the exact northern project limits?
- c. Will 5 lanes be constructed between north of River Road and Weber (Drive)? There are already 4 lanes there.
- d. Questioned the cost figures for noise barriers relative to the total project cost.
- e. Use all houses that are impacted by noise in the cost-effectiveness study instead of just front row houses.

f. What are ambient levels? How long is the time that is averaged?

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g. Ambient levels don't show at peak times.

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- h. Residential noise levels standards are 45-55 dBA rather than the 60-70 dBA as shown in the environ-mental document.
- i. Explain the 24-foot recovery area. How will it impact vegetation buffer? Request leaving most of that buffer.
- j. What kinds of noise barriers might be built? Request picture, heights, substances of barriers.
- k. Why did air analysis address only CO, not nitrogen and other "things"?
- 1. Will there be an increase in truck traffic?
- m. Traffic estimates are questionable, especially 170,000 vehicles per day by 2010. This may be underestimated.

RESPONSE:

- a. See the Noise Summary which begins on page III-13.
- b. The northern project limit is approximately .8
 mile north of River Road and is close to Dwight
 Drive.
- c. Currently, north of the project limits there are four through lanes which tie into three lanes south of the River Road (Maryland Route 190)

interchange. The proposed project will add one through lane within the project limits, as well as two deceleration lanes at the River Road interchange.

d. Noise barriers are not recommended for all noise sensitive areas as part of this project.

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- e. Impacted residences receiving a 5dBA reduction as the result of a noise barrier are included in the cost-effectiveness analysis for noise abatement. See the Noise Summary which begins on page III-13.
- f. Ambient levels are existing noise levels for a period of ten minutes.
- g. Ambient levels are measured at off-peak hours because the noise levels are higher than at-peak hours when the traffic flow may be very slow.
- h. The Federal Highway Administration Noise Abatement Criteria states that, for the existing land use categories in the project area (residential and educational), the design hour Leq sound level is 67 dBA.
- i. A twenty-four foot recovery area on both sides of the roadway is ordinarily recommended for all interstate highways by the American Association of State Highway and Transportation Officials. The purpose of this "safety grading" is to provide a clear recovery area for any vehicle that leaves the roadway. Inclusion of safety grading that is

recommended on major reconstruction or new construction projects.

- j. Noise barriers are discussed in the Noise Summary which begins on page III-13.
- k. Ozone, hydrocarbon, and nitrogen oxide air quality concerns are regional in nature and, as such, must be evaluated on a system-wide basis, rather than a project by project basis. Such analysis has been completed as part of the regional planning process and the results were included in the State Air Quality Implementation Plan. Carbon monoxide impacts, on the other hand, are more localized. Project level analysis provides important information in judging the air quality effects of highway improvements.

The air quality analysis for this project has been reviewed and approved by the U.S. Environmental Protection Agency and by the Maryland Department of Environment's Office of Environmental Programs, Air Management Administration.

- About 7% of the total average daily traffic on this section of the Beltway in 1983 was truck traffic. Roughly this proportion of trucks can be expected to continue.
- m. The maximum capacity of I-495 when expanded to eight lanes will be 170,000 vehicles per day.

Although a higher number of vehicles may attempt to use the Beltway, the result will be slower speeds and more congestion, not more vehicles.

- 5) <u>A. K. Bose</u>
 - a. Do noise levels for those homes that are in the Riverway development adjacent to the Beltway, Cabin John Parkway, and River Road reflect the traffic in the latter two roads?
 - b. Noise barriers should be provided.
 - c. Questioned validity of noise barrier costs.

RESPONSE:

- a. Noise levels at Cabin John Parkway and River Road are independent of noise impacts of the selected alternate.
- b. Noise barriers are not being recommended as a part of this project. See discussion which begins on page III-13.
- c. See Response 2)c.
- 6) <u>Wayne Peters</u>
 - a. Why weren't L10 noise levels used?
 - b. What input data were used in noise analysis?
 - c. Site 11 is listed with different addressed on pages IV-8 and IV-19.
 - d. Why are No-Build Leq levels lower than ambient (existing) Leq levels at Site 11?
 - e. HUD requires 24-hour monitoring for 5-7 days.

- f. Even the No-Build should warrant abatement consideration. Fifteen out of twenty-three sites under the No-Build exceed abatement criteria and should have noise barriers.
- g. What type of dimension of noise barriers are under consideration?
- h. Noise analysis should include more than front row houses.

RESPONSE:

- a. Leq levels are used because they provide a more accurate representation of the noise environment.
- b. Input data for the noise analysis include:
 - Coordination and elevation of each roadway segment;
 - Number of vehicles of each type (cars, medium trucks, heavy trucks) per roadway segment;
 - Average speed for each vehicle type;
 - Location and elevation of any ground cover material such as trees and/or shrubs; and
 - Location and elevation of each receptor.
 The complete Noise Analysis Report is available for examination at Maryland State Highway Administration, 707 North Calvert Street, Baltimore, Maryland 21202.

c. Noise monitoring sites and air quality receptor sites are not necessarily the same sites in the <u>Environmental Assessment</u>. Site 11 on page IV-8 is a noise site and Site 11 on page IV-19 is an air quality receptor site.

- d. No-Build Leq levels are lower than existing levels because traffic would be traveling at a slower speed due to congestion under the No-Build Alternate. Noise levels are lower when traveling speeds are lower.
- e. Housing and Urban Development noise criteria do not apply to highway projects.
- f. See Response 2)a.
- g. Noise barriers are not being recommended at all noise sensitive areas as part of this project.
- h. See Response 4)e.

7) Jim Angell, Carderock Springs Citizens Association

- a. This Association feels that the State Highway Administration noise study is based on inadequate noise data, and requests that further noise studies and testing should include: more twentyfour hour monitoring, monitoring on Sundays, at higher sites, at more sites, and use seasonal adjustments.
- Present level of noise pollution is already unacceptable. Noise barriers should be erected before construction.

c. The cost of the barrier should be divided by 400 homes and the elementary school, rather than 30 homes, since the whole community is impacted.

The methodology used in the noise analysis for this project has been approved by the Federal Highway Administration. The sampling techniques and the technical report itself were completed in accordance with procedures and guidelines set forth in the Federal Highway Program Manual,

Volume 7, Chapter 7, Section 3.

- b. This area is being studied under the State Highway
 Administration Type II Program. See Response 4)a.
- c. The cost of the barriers is discussed in the Noise Summary which begins on page III-13.

8) <u>Ira Loss</u>

RESPONSE:

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- a. Agrees with most of the other speakers and is angry that the study area maps don't show his street (Cypress Grove Lane) and another street (Thornley Court).
- b. The State is not considering the citizens'
 concerns. The No-Build is not really an option.
- c. There is a major stormwater runoff problem from the Beltway into his backyard; will this be corrected when the Beltway is widened?
- d. Noise study should use more than front row houses.

e. Determine cost-effectiveness based on number of cars using the Beltway rather than the number of houses.

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RESPONSE:

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- Study area maps have been corrected to reflect newer houses built in the study area.
- b. The Alternates Public Meeting (held October 4, 1984) and the Public Hearing (January 23, 1985) are integral components of the Project Planning study. These are opportunities for the public to comment and question the study and for the planning team to incorporate this feedback into the study. These comments are considered in making the final selection. The No-Build Alternate is carefully considered throughout the planning study.
- c. The widening of the Beltway will require the implementation of an approved stormwater management plan. In the meantime, the State Highway Administration District Office in Greenbelt has been contacted for more immediate attention and will investigate the problem.
- d. See Response 4)e.
- e. The number of cars using the Beltway is factored in as part of the noise analysis. However, our Statewide responsibilities require that the State Highway Administration consider the number of houses that would be impacted by this highway

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improvement and that we weigh the total cost of mitigation of impacts per residence.

9) <u>William Anderson</u>

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- Agrees with previous speakers and is concerned about effects of noise on quality of life and property values in Carderock Springs.
- b. National Airport noise aggravates the noise the community receives from the Beltway.
- c. Noise barriers should be built before the roadway construction begins.

RESPONSE:

- The noise resulting from the construction of this project will not be substantially different from No-Build levels in the design year of the project.
- b. The State Highway Administration has no control over the air traffic from National Airport.
- c. See discussion which begins on page III-13.
- 10) <u>Jamie Barton (minor), Carderock Springs Elementary</u> <u>School</u>

Concerned about noise levels outside the school. RESPONSE:

The noise levels at Carderock Springs Elementary School will be very similar for the Build and No-Build conditions in the design year of the project.

11) <u>Ben Barton (minor)</u>

Wants noise barriers constructed at the school.

RESPONSE:

See noise discussion on page III-13.

12) Inga Enzinger, Carderock Springs Citizens Association

- a. Who did the noise report?
- b. At the Alternates Public Meeting in October, the majority of the crowd indicated that they would reluctantly accept Alternate 2 and the main concern was noise barriers. The Environmental Assessment should have emphasized the concern regarding noise barriers more.
- c. Strongly support noise barriers in all NSAs and hope costs can be reduced.
- d. Concerned about 24-foot clear recovery area because it could mean removing the important vegetative buffer.
- e. Consideration should be made of the effects on existing neighborhoods of new construction. <u>RESPONSE</u>:
- A consultant firm (Greiner Engineering Company),
 under contract to the Maryland State Highway
 Administration, completed the noise analysis.
- b. The State Highway Administration was aware of the community concerns and took them into consideration. The noise analysis was prepared in accordance with the current state-of-the-art procedures.
- c. See noise discussion which begins on page III-13.
- d. See Response 1)c.

IV-14

e. The purpose of the Public Alternates Meeting, Public Hearing, and the Environmental Assessment is to consider the impact of the proposed project on existing communities and the natural environment.

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- 13) Lois Cohen
 - a. Thornley Court is not shown on the map.
 - b. Opposes any construction without noise barriers and states that barriers should be built even if the Beltway is not improved.

RESPONSE:

- a. Thornley Court is shown on Plate 1.
- Noise barriers are not recommended for all noise sensitive areas part of this project. See discussion which begins on page III-13.

14) <u>Robert Dennis</u>

Concern about hearing damage, especially to school children.

RESPONSE:

The noise levels projected are not high enough to cause hearing damage.

- 15) Estelle Vernon
 - Problems in schools, such as short attention spans and hyperactivity, may result from Beltway noise outside the classrooms.

IV-15

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 Federal OSHA standards require employers to provide ear protection if noise exceeds 85 dBA at the work place.

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c. Concern about lead content in soil along Beltway. <u>RESPONSE</u>:

- a. The windows in the school are normally closed when school is in session.
- DSHA standards do not apply to highway traffic noise. Noise levels emanating from the Beltway are well below 85 dBA.
- c. The State Highway Administration makes every effort to contain any lead contaminants that result from the highway within its right-of-way and to slowly dilute it. This is accomplished through placing vegetation/grass and other plantings that will absorb the contaminants as close as possible to the roadway.
- 16) <u>Robert Enger</u>
 - a. Suggest maintaining all six lanes from River Road to I-270.
 - b. The Beltway should be widened. If conflict over noise barriers is going to hold up the project, the money should be found to build the barriers.

RESPONSE:

a. There is currently a project planning study underway to examine this portion of the Beltway.

- b. This project is scheduled to begin construction in fiscal year 1989. See discussion which begins on page III-13.
- 17) <u>Richard Drevo</u>
 - a. Noise from the Beltway has gotten worse since
 1977. Would like to see study of different kinds
 of noise barriers and their effectiveness.
 - b. How was \$10.5 million figure for noise barriers derived?
 - c. Has low frequency noise that is generated from trucks been considered in the study?
 - d. How can Beltway traffic increase by only 30,000 cars per day by 2010?
 - e. Does the State Highway Administration only have to meet carbon monoxide standards or are there other pollutant standards it has to consider?

RESPONSE:

- a. See Noise Summary discussion which begins on page III-13.
- b. See Response 2)c.
- c. The noise analysis uses the "A" scale which includes full range of sound to which the human ear responds.
- d. The maximum capacity of the Beltway when expanded will be 170,000 vehicles per day (30,000 more than

IV-17

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were counted in 1983). If more than 170,000 vehicles try to use the Beltway, the result will be slow speeds and more congestion, not more vehicles. See Response 4)k.

18) Carlos Garcia Tinon

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Asked who to contact for more information.

RESPONSE:

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Mr. Tinon was provided the Project Manager's name at the meeting.

19) John Crews

Suggests studying an interchange at Maryland Route 191 (Persimmon Tree Road) and better access in Virginia to the Beltway.

RESPONSE:

An interchange is not recommended at Persimmon Tree Road because the distance between the interchange and the River Road (Maryland Route 190) and George Washington Parkway interchanges would be less than the minimum desirable distance for acceleration and deceleration movements.

20) <u>Karl Kessler</u>

a. Did the noise study include the 25-40 houses that have been built near Eggert Drive in the past year?

b. Cost estimates for noise barriers are exaggerated.RESPONSE:

a. NSA "F" includes the five houses on Eggert Drive which are located closest to the Beltway.

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b. See Response 2)c.

21) <u>Peggy Dennis</u>

- a. How were cost estimates for the noise barriers estimated?
- b. Why were cost estimates in square feet instead of linear feet?

RESPONSE:

- a. See Response 2)c.
- Square foot estimates are more accurate because heights of barriers vary depending on design, terrain, and other factors.
- 22) Gus Hoemack
 - a. Noise barriers should have been built long ago.
 There should be a study of types of barriers for different areas.
 - b. When the Beltway is expanded, it will just be congested again in a few years. Why not build another road and bridge to handle the traffic?

<u>RESPONSE</u>:

- a. The Noise Summary begins on page III-13.
- b. An outer Beltway and a second bridge across the Potomac River were part of State Highway Administration's plans until the late 1970's. Currently, State Highway Administration is studying an eastern bypass of Washington, D.C. and the Capital Beltway. This bypass would provide an alternative route for through travelers and those traveling

between the southern Washington, D.C. suburbs in Maryland and Virginia and would relieve traffic congestion on the Capital Beltway and the Woodrow Wilson Bridge. I-495 and the American Legion Bridge over the Potomac River will continue to be the major facility for circumferential traffic in the future.

23) Mr. Saunders

Build noise barriers before roadway construction begins.

RESPONSE:

See Response 22)a.

24) Patricia Sollock

Why aren't questions being answered at the Public Hearing?

RESPONSE:

The Public Hearing is an opportunity to express opinions and ask questions. These comments become part of the public record and help guide the project planning team throughout the completion of the study. All questions are carefully considered and researched. The responses are an important component of the final environmental document (in this case, the Finding of No Significant Impact).

25) Frank Moritz

Noise from the Beltway in Carderock Springs already lowers the property values.

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RESPONSE:

No response required.

- 26) Frank McKinny, Gibson Grove Zion Church
 - Supports noise barriers and they should be built before roadway construction.

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b. Will the I-495 bridge over Seven Locks Road be
 widened to the outside? If so, the Gibson Grove
 Church will be underneath the bridge.

RESPONSE:

- a. Noise barriers are not recommended for all Noise Sensitive Areas as part of this project. However, the area is being studied under the Type II or Retrofit Program.
- b. The bridge will be widened to the inside and the church will not be underneath the bridge.

27) Peg Hoemack speaking for Alston Guttersen

The State Highway Administration should consider an outer beltway and another crossing of the Potomac River as an alternative to widening I-495.

RESPONSE:

See Response 22)b.

28) <u>Marilyn Maysfield</u>

An outer beltway and second bridge should be built.

RESPONSE:

See Response 22)b.

Why can't the noise barriers be built now, whether the Beltway is widened or not?

RESPONSE:

See the Noise Summary discussion in this document which begins on page III-13.

30) <u>Alice Mehrer</u>

Requested another public meeting to get the answers to all the questions asked at this public hearing.

RESPONSE:

All questions asked at the hearing are answered in this document. State Highway Administration representatives met with community groups subsequent to the Public Hearing to answer questions.

31) Wayne Peters

Will Greiner have an opportunity to bid on road building for this project?

RESPONSE:

Greiner has an equal opportunity to bid on the contract that other firms have.

32) Jacqueline Jaffe

Why isn't the I-495 Air Quality Analysis Report available in Bethesda? Requests that it be mailed to all interested citizens.

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IV-22

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RESPONSE:

The Air Quality Analysis Report is available for review in Baltimore and at the State Highway Administration District Office in Greenbelt.

33) Betsy Lawrence, Cabin John Citizens Association

At a development in Cabin John off Tomlinson Avenue, the developer was required to condemn two acres for a noise barrier and to build a concrete noise barrier for five houses.

RESPONSE:

No response.

34) Jeffrey King

Comment same as Comment 29.

RESPONSE:

See Response 29.

35) Jimmy Bates (minor)

Build noise barriers before attempting to add another lane.

RESPONSE:

See Response 29.

36) John Kurtz

Noise barriers are higher priority than widening the Beltway. Noise barriers are a long-term investment in quality of life. But the community needs to know what choices and information is available concerning noise barriers.

RESPONSE:

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See Response 29.

- 37) <u>Charles Markell</u>
 - a. Request a second hearing.
 - b. What is a recovery area and why does it have to be 24 feet?

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- c. How were cost estimates for noise barriers derived?
- d. Circulate the final draft environmental document to citizens.

RESPONSE:

- a. The Public Hearing held satisfied all Federal and State legal requirements. All questions presented at the hearing have been answered in this document. Another public hearing will not be held.
- b. See Response 1)c. and 4)i.
- c. See Response 2)c.
- d. The Finding of No Significant Impact will be circulated to community groups, individuals, and agencies which made substantive comments on the Environmental Assessment or requested a copy.

V. CORRESPONDENCE

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V. <u>CORRESPONDENCE</u>

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 Written comments received subsequent to the Public Hearing and responses.

Many of the comments received demonstrated concern about noise barriers.

que que STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 DATE 1/29/85 NAME NICHOLAS CLEMENTS ADDRESS 7805 HAMILTON SPRING RD. PLEASE PRINT ZIP CODE 20817 CITY/TOWN BETHESDA STATE MD I/We wish to comment or inquire about the following aspects of this project: the reld Hway understand idening 2 he accept H: . 🖌 🤅 15 UNALLEPTABLE : e covern area 9 al +~221 ا م r 4 52 It. rrie**た**の ノヘヘ $\mathbf{\omega}$ Ł 1000 le ock pin attractinenell to preserve + 0 dense 5 N. 10013 be. ha one -s 'fs burriers 2a ~~ 0~9 Jone (144) 5 1001 2JPONSE **w** *A i* i am currently on the Mailing List. Please add my/our name(s) to the Mailing List. V-2

1) <u>Nicholas Clements</u>

RESPONSE:

- A 24 foot recovery area along interstate highways a. is recommended for safety reasons by the American Association of State Highway and Transportation Officials. However, as a result of public concern at the Public Hearing, the State Highway Administration undertook an analysis of fixed object accidents in the study area. The study showed that a 24 foot recovery area would have significant impact on reducing injuries along the curve on the outerloop of I-495 approaching the George Washington Memorial Parkway in Maryland. Consequently, a 24 foot recovery area will be constructed in this area only. This will result in a minimum of disruption to the existing vegetation in the rightof-way.
- b. Considering the limited right-of-way available along the roadway, using trees as a noise abatement would not be effective. Trees do provide positive aesthetic and psychological benefits, and vegetation along the selected alternate will be preserved as much as possible.

V-3

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			HWAY ADMINISTR S AND/OR COMM		l	•
		Contract	No. M 355-101-372	N		
-		I-495	(Capital Beltway)			
			AD Rte. 190 (River 193 (Georgetown P:		to	
		COMBINED LOCAT	TION/DESIGN PUBLIC	HEARIN	IG .	
			Springs Elementary anuary 23, 1985	School		
	NAME	Ira S. Loss			DATE March 4, 1985	<u>i</u>
PLEASE	ADDRE	ss 7913 Cypress	Grove Lane			
	CITY/1	OWN Cabin John	STATE_Maryla	ind	ZIP CODE_20818	
i/We wis	sh to co	omment or inquire	about the following	aspect	ts of this project:	
1. I to	tally a	support the writt	en comments submit	ted by	the coalition	
of neig	ghborhod	od associations k	nown as Citizens A	gainst	Beltway Noise.	
2. As I	mentio	oned at the publi	c hearing, there i	<u>s a se</u>	rious_water	
problem	n each t	time it rains. H	eavy rains, partic	ularly	during summer thun	der
showers	s, produ	uce significant r	un off from the be	ltway.	The resulting	
river c	cascade	s through my yard	creating a signif	icant	hazard. I urge	
you to	take co	orrective action	as soon as possibl	.e, and	in no event later	
than wh	ien you	widen the highwa	у.			
<u>3. The</u>	propose	ed noise barriers	that were on the	displa	y maps at the publi	£
hearing	g should	d be built. I am	particularly conc	erned	that the propsed	
<u>barrier</u>	on the	<u>e display stopped</u>	before it reached	<u>the</u> i	ntersection of	
the bel	tway an	nd Seven Lock Roa	d. I am referring	to th	<u>e inner loop moving</u>	j
west fr	om Seve	en Locks. The ba	rrier should be ex	tended	to fully block	
all of	the Eve	ergreen Developme	nt which is locate	d on C	ypress Grove Lane.	<u></u>
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Please add my/our name(s) to the Mailing List.

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2) <u>Ira S. Loss</u>

RESPONSE:

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a. Stormwater management procedures, approved by the Maryland Department of the Environment, will be strictly followed during construction of the selected alternate. The State Highway Administration District Engineer in Greenbelt is currently investigating flooding problems on this property.

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 Noise barriers are not recommended as part of this project.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 urraci NAME DATE PLEASE AVE WESTERN 6422 ADDRESS_ PRINT ZIP CODE 208 STATE CITY/TOWN i/We wish to comment or inquire about the following aspects of this project: um] i am currently on the Mailing List. Piease add my/our name(s) to the Mailing List. V-6

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3) Frank P. Murray and Sons

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RESPONSE:

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The project is programmed for construction in fiscal year 1989.

		STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS				
		Contract No. M 355-101-372 N				
		I-495 (Capital Beltway)				
	From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING					
		Carderock Springs Elementary School January 23, 1985				
	NAME	Bob Strohm DATE Feb. 14, 1985				
PLEASE Print	ADDRE	SS7611 Hamilton Spring Road				
	CITY/T	OWNSTATEZIP CODE20817				
i/We wis	sh to co	mment or inquire about the following aspects of this project:				
The need for expanding the Beltway is clear.						
	However, adequate noise reduction design and construction must					
	be a part of this project. And noise attenuation walls should					
		n place before the widening activity begins				
		as very disappointing that the format of the public hearings				
		not allow for a two-way discussion of the noise abatement				
		ibilities.				
	poss	IDILICIES.				
	I Ce	rtainly hope that the plans, when they are announced, are				
	sati	sfactory to the people in neighborhoods along the road and				
	<u>that</u>	we can avoid expensive, protracted litigation with the				
	State	e Highway Administration over adequacy of noise attenuation				
		s and the schedule for constructing them before widening				
		truction begins.				
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4) <u>Bob Strohm</u>

RESPONSE:

Noise barriers are not recommended as part of this project. The Noise Summary begins on page III-13.

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STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 DATE_2-7-85 Wiese NAME Stone PLEASE 8229 Ircul Drive ADDRESS. PRINT Bethesder________ ZIP CODE 20817 MD CITY/TOWN i/We wish to comment or inquire about the following aspects of this project: I wild amary not attend the 23 mechin Wa the about mireared to reen great when noise polla the beltway Re borhood beltway. If <u>wall</u> nei wich while worse \mathbf{C} wil surel. uther in weased ler Beltway will be widened There the. 110000 an Keen the woise abro in order Ь h 0.1 Print よ to GUCELE. Communities i am currently on the Mailing List. Please add my/our name(s) to the Mailing List. V-10

5) <u>W. L. Wiese</u>

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<u>RESPONSE</u>:

Noise barriers are not recommended as part of this project.

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que STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 tat+Kenl 3 85 N DATE 2 NAME . ADDRESS 6805 CAPRI PLACE PLEASE PRINT CITY/TOWN BERHESDA ZIP CODE 20817 _STATE_MD . I/We wish to comment or inquire about the following aspects of this project: ress will 60 0 lh I 1985 6120 151000 Placene eru CONCOS tural FON added 2/14, I am currently on the Malling List. Please add my/our name(s) to the Malling List. V-12

6) <u>Pat and Ken Love</u>

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<u>RESPONSE</u>:

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Noise barriers are not recommended as part of this project.

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STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 i chards 82 BACU DATE. PLEASE Tuckerman 821 Lare ADDRESS_ PRINT ZIP CODE 2085 __STATE_md VoTomac CITY/TOWN I/We wish to comment or inquire about the following aspects of this project: DUISE am concerned 2500 26 and Req 501 163 morease rriea \mathcal{L} þ 20,00 Dec 512 . added H I am currently on the Mailing List. Please add my/our name(s) to the Mailing List. V-14

7) <u>Nancy S. Richards</u>

RESPONSE:

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Noise barriers are not recommended as part of this project.

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8) <u>Raymond W. Muthan</u>

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RESPONSE:

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- a. See Response 1)a. on page V-3 for discussion of the 24 foot recovery area.
- b. Noise barriers are not recommended as part of this project.

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STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 Kichard 85 24 EMENT DATE NAME 7805 -Dad PLEASE Orinc ADDRESS PRINT Bethes 2081 ZIP CODE. STATE CITY/TOWN I/We wish to comment or inquire about the following aspects of this project: Deltway (') The level the Sound area noise in - whether the _ allead Dr DIODOSCO macceptabl not high 95 Should be. sound 6 arriers 4646 ah the rum sh ort studu Ø mediate 9 'a ~ â studu the schedule the and 1. or established Should and mdin Fain 27.41720 event proposed should Droject Droceer In ND numbi/ e Cecteo the. been and ballierr Ô. have thoroughly aspects clan (eviewed and inc 1 (a) the ađ 0 Dro . equaly radid Growing Trat (SDale 4 vano aðð and Inbler Fe/m - (a (6) Ħ yt Durdose need and O, the their environmen NO COV CA Dn anes Im A ar." added 2/14 i am currently on the Mailing List. 🔀 Please add my/our name(s) to the Mailing List. V-18

9) <u>Richard Clements</u>

RESPONSE:

- Noise barriers are not recommended as part of this project.
- This project is proposed to address capacity problems now being experienced along I-495.
- c. Recovery areas are normally recommended for interstate roadways to provide a clear recovery area for any vehicle that leaves the roadway. As the result of the State Highway Administration fixed object accident studies, safety grading is only recommended for the outer loop of I-495 approaching the George Washington Parkway in Maryland. This will minimize environmental impacts along the project alignment.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. M 355-101-372 N

I-495 (Capital Beltway)

From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike)

COMBINED LOCATION/DESIGN PUBLIC HEARING

Carderock Springs Elementary School January 23, 1985

LAWRENCE PHD. DATE JAN 2 NAME PRESIDENT, CABIN JOHN CITIZENS ASSOCIATION PLEASE ADDRESS BOX 31 PRINT

CITY/TOWN CABIN JOHN STATE MARYLAND _ ZIP CODE 208/8 I/We wish to comment or inquire about the following aspects of this project: $\mathsf{T}\mathsf{H}arepsilon$ CABIN JOHN CITIZENS ASSOCIATION MOVED TO GO ON RECORD AS FAUDRING WIDENING OF THE BELTWAY. TO THE MIDDE PROVISION S WE ARE CONCERNED THAT THERE BE MADE RESIDENCES SOUND FOR STRONG DIVERSION FOR ALL BELTWAY. OF PARTICULAR CONCERN ADJACENT To THE 15 SOUND DIVERSION AT THE SEVEN LOCKS OVERPASS 20 πE AREA 0F CIBSON GROVE CHURCH AND OVERPASS JE NHCH HOUSES ARE THE IT IS LINDER. POSSIBLE FOR THE HIGHWAY ADMINISTRATION NOT STATE $[\cap$ #10,7 MILLION FOP SOUND BARRIERS FOR COUNTER BE BUNGETED いど ΤO THIS AREA PROPOSAL THE 500 THAT ₩, 000 BE BUDGETEN _10N DOLLAKS SED ANN SEVERELY FOR THE MOST AFFECTED AREAS ALSO PROVIDES DEGETATION NATURAL ATION FROM J<11 MUCH OF THIS AREAS NATURAL NOISE. ABSORBER SOUND BE ω_{LL} IMINATED RECOVERY ド・ W HFN THE 24-FOOT AREA 13 CREATED. 15 THIS WIDE RECOVERY AREA NECESSERY A THFRE WE REQUEST THAT BE HEANY REVEGETATION AFFECTED AREAS FOR NATURAL OFALL SOUND ABSORPTION] i am currently on the Mailing List., -Beta Pha aurence President Piease add my/our name(s) to the Mailing List. Calin John Citizens ass

V-20

10) <u>Betsy Lawrence, Cabin John Creek Association</u> <u>RESPONSE</u>:

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a. Noise barriers are not recommended as part of this project.

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b. A 24 foot recovery area is recommended for only one area within the project limits. See Response 1)a.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 DATE 1/25 NAME _ PLEASE Drive 20 ADDRESS PRINT o thesda _ZIP CODE 2081 CITY/TOWN STATE_ I/We wish to comment or inquire about the following aspects of this project: 495 withou e widening barrier SP na. m MUNIT TO ava barriers th 10 cancelled. PA PUSIM Ä 5.<u>c.</u>s heen mad 01 I am currently on the Mailing List. Please add my/our name(s) to the Mailing I' V-22

11) <u>R. J. Bosnak</u>

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RESPONSE:

Noise barriers are not recommended as part of this project.

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138 ÷¢, STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 en NAME D DATE //22/85 PLEASE SD. ADDRESS oress PRINT. crove 41e CITY/TOWN Labin John ry land ZIP CODE 20818 STATE I/We wish to comment or inquire about the following aspects of this project: hime Be/tway abr +s between River ωr d the 6. John Lasin pride he. NUL levels RIC tr Ilrable even İ٨ horse MU home 12 WL. ヘシ ៷៰ homes development ML have been on The Mark ADPro4 Month s. These Properties んり K L SIX have dul orim fri wi 10 KIMI to. ·umors **|X** th why 111 WAJ rv c hongo 0 redu NJILl burness 41 Π. ri rier clear have ÚĽ pressi valves. Filhar 11 0035 domain RALLCAN るひと vld have 2vv burriers KENNETH A. MAX ATTORNEY AT LAW MAX & LONDON, P.A. 8555 SIXTEENTH STREET SILVER SPRING, MD. 20910 (301) 588-4900 i am currently on the Malling List.] Piease add my/our name(s) to the Mailing List. V-24

12) <u>Kenneth A. Max</u>

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RESPONSE:

Noise barriers are not recommended as part of this project.

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j]D STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 28/85 IEEN ANDER DATE NAME LACE (829)4DE i PLEASE ADDRESS PRINT ZIP CODE 20817 MD $\in \mathcal{H}$ ESDA STATE CITY/TOW I/We wish to comment or inquire about the following aspects of this project: ROAD $\mathcal{O}^{\mathrm{ff}}$ of Eage ρ 15 SINCE STREET OUR Stra MAD INSCO 10UR the Show ON 15 AND Not こと NOT Δι 1S らやめ FA A CURR C S Prbl 12 211 F nro An 22hn . • . . I am currently on the Mailing List. Please add my/our name(s) to the Mailing List. V-26

13) <u>H. J. Vander Veen</u>

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RESPONSE:

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The current alternates mapping has been updated and now shows Capri Place.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 PLEASE ADDRESS. PRINT ZIP CODE 208 CITY/TOWN BE STATE I/We wish to comment or inquire about the following aspects of this project: NWA DR 3 D 11 . 🗹 I am currentiy on the Mailing List. Please add my/our name(s) to the Mailing List. V-28

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14) Chris and Patrick Brandon

RESPONSE:

Noise barriers are not recommended as part of this project.

STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS

Contract No. M 355-101-372 N

I-495 (Capital Beltway)

From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike)

COMBINED LOCATION/DESIGN PUBLIC HEARING

Carderock Springs Elementary School January 23, 1985

NAME __David A. & Lorraine C. Fegan _____DATE ____1/23/85_

PLEASE ADDRESS 8709 Seven Locks Road

CITY/TOWN Bethesda STATE Maryland ZIP CODE 20817

I/We wish to comment or inquire about the following aspects of this project:

Our home is situated along the Beltway on the west side at the extreme northern end of your survey. Even now the noise from traffic is most severe, and we would expect it to become worse with additional lanes. However, noise barriers are most unsightly and we consider the increased noise as preferable to the erection of sound barriers that would make our property look like a prison compound.

We note that sound barriers for 4.07 miles (21,500 ft.) would cost \$10,700,000.00. On both sides this would be 43,000 feet, but since about one-half would be at intersections, bridges and parkland, it appears that the cost would be about \$497.00 per foot for the sound barriers. Why not give adjoining property owners \$400 per foot as consequential damages to their property? - or erect barriers in lieu thereof for those who want the barriers?

V-30

I am currently on the Mailing List.

Please add my/our name(s) to the Mailing List.

15) David and Lorraine Fegan

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RESPONSE:

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Noise barriers are not recommended as part of this project. It is not the policy of the State Highway Administration to provide cash payments in lieu of constructing a noise barrier.

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		Contract No	о. M 355-10	1-372 N		£.	
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		Carderock Spi Janu	rings Eleme ary 23, 19	ntary Schoo 85	1		
	NAME	Scott Kozel			_DATE1	-25-85	
PLEASE Print	ADDRESS_	1701 Montice	llo St.				, , ,
		Petersburg	STATE_	Va.	_ZIP COD	E_23805	
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Please add my/our name(s) to the Mailing List.

V-32

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16) <u>Scott Kozel</u>

RESPONSE:

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 Emergency shoulders varying from 10-14 feet in width will be constructed along the roadways.

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b. Mr. Kozel was provided the brochures requested.

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STATE HIGHWAY ADMINISTRATION QUESTIONS AND/OR COMMENTS Contract No. M 355-101-372 N I-495 (Capital Beltway) From North of MD Rte. 190 (River Road) to Va. Rte. 193 (Georgetown Pike) COMBINED LOCATION/DESIGN PUBLIC HEARING Carderock Springs Elementary School January 23, 1985 DATE _____ January26, 1984 Marie V. Timm NAME PLEASE ADDRESS 8612 Carlynn Drive PRINT CITY/TOWN____Bethesda STATE Maryland _ZIP CODE 20817 i/We wish to comment or invaring about the following aspects of this project: 24hr. sound readings over a minimum periode of a week. ter) when Juring the Il critical designated 12 all hid elevale to at (A) min ha Пал. 20us alleviate noise r m N desimate la colo ma milas growing loliques les den mohli shu s tot mande 1 τı, Increditolo תח Ø MIIM **1** am currentiy on the Maiiing List. Piease add my/our name(s) to the Mailing List. . ₩-34 2 , pone 10 1

8612 CARLYNN MARIE 12 THESDA m Ø COMMENT CONTRACT NO. 5-101-372 N M 7 instim Pγ 8. instead of a Hilly swered. 5 scu term 1 111 an Te nut ia nnio niu Lin Man (men Tun] I am currently on the Mailing List.] Please add my/our name(s) to the Mailing List.

pg. 2 of 2

V-35

17) Margie V. Timm

RESPONSE:

- a. The methodology (including the choice of monitoring sites and times) used in the noise analysis for this project has been approved by the Federal Highway Administration. The sampling techniques and the technical report itself were completed in accordance with procedures and guidelines set forth in 23 CFR 771.
- Noise barriers are not recommended as part of this project.
- c. Landscaping will be incorporated into the final design plan.
- d. Enforcement of speed limits by the State Police is outside the responsibility of the State Highway Administration.

Community meetings were held subsequent to the Public Hearing in order to provide a more informal setting for questions and answers concerning the project.



Citizens Against Beltway Noise, a coalition of citizens associations, submitted these comments dated February 27, 1985.

 The State Highway Administration did not recommend that noise barriers be constructed.

RESPONSE:

Barriers are not recommended as part of this project. See the discussion which begins on page III-13.

 The cost of noise barriers provided in the Environmental Assessment was excessive.

RESPONSE:

The noise barrier cost estimates are based on recent costs experienced by the Maryland State Highway Administration and includes the costs of panels, footings, drainage, landscaping, and overhead. The original aware foot cost of \$25.00 was used in the <u>Environmental Assessment</u>. However, based on a close examination of recent bids, a square foot cost of \$27.00 is now being used.

3) The cost of noise barriers per house was inflated because only "frontage" houses selected by the State Highway Administration were considered.

RESPONSE:

The cost-effectiveness analysis, as discussed in the Noise Summary which begins on page III-13, includes impacted residences which receive a 5dBA reduction as the result of noise abatement.

4) The State Highway Administration relied upon low estimates of projected daily traffic levels in assessing the future environmental impacts of the proposed project.

RESPONSE:

Projected daily traffic levels are based upon land use and zoning within the region. The traffic projections for this project take into account other State Highway Administration improvements within the region (such as I-270 and I-495 widenings) and are reasonable projections of the expected traffic growth.

The maximum capacity of the Beltway when expanded will be 170,000 vehicles per day (30,000 more than were counted in 1983). If more than 170,000 vehicles try to use the Beltway, the result will be slow speeds and more congestion, not more vehicles.

- 5) The noise study was inadequate because it evaluated only the hourly-averaged noise, ignoring other types of noise. For example, the study did not consider:
 - Peak noises such as those caused by trucks changing gears on inclines.
 - Noises emitted during peak traffic hours or at night.
 - c. Seasonal variations in the noise level. RESPONSE:

The methodology used in the noise analysis for this project has been approved by the Federal Highway Administration. The sampling techniques and the technical report itself were completed in accordance with procedures and guidelines set forth in 23 CFR 771.

This methodology takes into account the amount and type of trucks found in the traffic flow as well as the distance and elevation of the receptor in relation to the roadway. Ambient measurements were taken for use with this model were performed at off-peak hours because noise levels are higher than at peak hours when traffic flow may be very slow. This methodology does not take into account seasonal variation which are considered to be minimal.

6) The Environmental Assessment did not report the L10 noise levels measured during the noise study. The State Highway Administration gave no reason for its failure to project this data.

RESPONSE:

The methodology set forth in the Federal Highway Program Manual, Volume 7, Chapter 7, Section 3, allows the states to use either the L10 or Leq measurement scales with different maximum levels for each. The Maryland State Highway Administration uses Leq levels (as do many other states) because they provide a more accurate representation of the noise environment.

7) The noise study evaluated the expected noise levels only for the year 2010, not future years after the amount of traffic has been allowed to increase due to the additional lanes.

RESPONSE:

The Maryland State Highway Administration policy is to examine projects under development in the Project Planning phase for a period of twenty years beyond the estimated year of construction. Further, land use data for this region (which is essential to the development of traffic projections) is only available up through the year 2010.



8) The State Highway Administration failed to evaluate the effect of noise on the quality of life of the residents in the "noise sensitive areas". The State Highway Administration evaluated only the statistical criteria. <u>RESPONSE</u>:

> There is only a 1 to 2 dBA difference between the No-Build and Build noise levels in the design year. A 1 to 2 dBA increase is barely discernible to the human ear and should not affect the quality of life of adjacent property owners.

9) The State Highway Administration evaluated the benefits of noise barriers to only frontage houses and did not evaluate the benefits to the quality of life of <u>all</u> residents in the "noise sensitive areas".

RESPONSE:

The cost-effectiveness of the barriers is discussed in the Noise Summary which begins on page III-13. 10) The Study of the effect of additional traffic upon air quality failed to evaluate the effect of pollutants other than carbon monoxide, such as oxides of nitrogen and lead.

RESPONSE:

Ozone, hydrocarbon, and nitrogen oxide air quality concerns are regional in nature and as such must be evaluated on a system-wide basis, rather than a project by project basis. Such analysis has been completed as part of the regional planning process and the results were included in the State Air Quality Implementation Plan. Carbon monoxide impacts, on the other hand, are more localized. Project level analysis provides important information in judging the air quality effects of highway improvements.

The air quality analysis for this project has been reviewed and approved by the U.S. Environmental Protection Agency and by the Maryland Department of Health and Mental Hygiene, Office of Environmental Programs, Air Management Administration.

11) The State Highway Administration failed to evaluate the cumulative environmental impacts caused by this project along with other factors. Such factors include, but are not limited to, the proposed expansion of I-270, additional growth in Northern Virginia, and in Montgomery County.

RESPONSE:

Projected daily traffic levels are based upon existing and proposed zoning within the region. Development growth improvements to other roadways within the area are factored into these projected traffic levels. These traffic levels are then used in the analysis of potential air and noise impacts.

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* * . .

Furthermore, this project is consistent with County and regional land use and transportation goals as set forth in the Comprehensive Planning Policy Report by the Maryland-National Capital Park and Planning Commission.

In Virginia, the project is also consistent with land use and transportation goals of Northern Virginia Planning District Commission and the Virginia Department of Highways.

12) The procedures followed by the State Highway Administration do not provide opportunity for meaningful public comment.

RESPONSE:

The Alternates Public Meeting (held October 4, 1984) and the Public Hearing (January 23, 1985) are integral components of the Project Planning study. In addition, several evening meetings were

held with area civic leaders and representatives of elected officials to discuss the potential impacts of this project more fully. These meetings provide an opportunity for the public to express opinions and ask questions. These comments become part of the public records and help guide the project planning team throughout the completion of the study. All questions are carefully considered and researched. The responses are an important component of the final environmental document (in this case, the <u>Finding</u> of No Significant Impact).

1 7 41

13) The State Highway Administration failed to provide the data underlying both its noise studies and its air pollution studies.

RESPONSE:

The Environmental Assessment and full technical air quality and noise studies are available for review at the State Highway Administration Headquarters in Baltimore and at the District Office in Greenbelt, Maryland.

14) The State Highway Administration has improperly imposed upon the citizens the burden of proving the necessity for, and feasibility of, noise barriers.

RESPONSE:

The State Highway Administration has objectively evaluated the potential noise impacts of the proposed project in accordance with its noise policy that has been developed since the public hearing held for the subject project. Based on that policy, noise barriers are not considered reasonable. See the noise section of this document, page III-13, for additional information.

- 15) The State Highway Administration failed to consider the effects of the 24 foot recovery area upon the residents near the Beltway. Such effects include, but are not limited to, the loss of a natural barrier to noise, as well as the reduction in privacy and safety.
- 16) The State Highway Administration failed to cite any regulation or statute requiring, or any need compelling, the construction of the 24 foot recovery area. RESPONSE:

The 24 foot recovery area on both sides of the roadway is ordinarily recommended for all interstate highways by the American Association of State Highway and Transportation Officials. The purpose of this "safety grading" is to provide a clear recovery area for any vehicle that leaves

the roadway. Inclusion of safety grading is recommended on major reconstruction or new construction projects.

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An analysis of fixed object accidents resulted in a recommendation that safety grading be a part of this project <u>only</u> along the curve on the outer loop of I-495 approaching the George Washington Memorial Parkway in Maryland. This will result in a minimum of disruption to the existing vegetation in the right-of-way.



MONTGOMERY COUNTY COUNCIL ROCKVILLE, MARYLAND

February 12, 1985

131

Harold Kassoff State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Dear Hal:

I agree with the point made by the Carderock Springs Citizen's Association, that noise barriers are much needed on I-495, and should be installed in connection with the widening project.

Other areas need them as well--the Beltway is a terrible noise source.

COUNCIL OFFICE BUILDING, ROCKVILLE,

251-7900 - TT

V-47

AND 20550

Sincerely,

Neal Potter

NP:mh

cc: Inge Enzinger, President CSCA Lloyd A. Potter

STATE HWY ADM



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DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING



# Maryland Department of Transportation

State Highway Administration

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William K. Hellmann Secretary

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TO FILE

Hal Kassoff Administrator

Contract No. M 355-101-372 N I-495 Widening Study from

to Virginia Route 193

PDMS No. 151087

North of Maryland Route 190 1495

ြ Mr. Neal Potter Montgomery County Council Executive Office Building 100 Maryland Avenue Rockville, Maryland 20850

Dear Mr. Potter:

This is in response to your note of February 12, 1985 UATE a expressing your support for the inclusion of noise barriers in the Interstate 495 widening project. We recognize that noise is a critical issue surrounding our proposal to widen this segment of Interstate 495. An evaluation of noise attenuation measures is being made at this time.

THE 0 5 1989

Re:

As a direct result of input received at the Public Hearing, we are gathering additional data concerning potential noise impacts, the cost of providing barriers, and expected levels of attenuation. We have also attended various civic association meetings after the Public Hearing (including Carderock Springs residents) to discuss this matter more fully.

After this information is compiled, a decision will be made regarding the construction of noise barriers. However, I must acknowledge that the cost to construct barriers along this section of the beltway is of concern to us at this time.

Thank you for your comments on this issue.

Sincerely,

HK:tn

Her ZSSOR Hal Kassoff Administrator

Mr. Neil J. Pedersen Mr. Michael Snyder V-48 cc: Mr. Louis H. Ege, Jr. Mr. Edward Loskot

Ms. Cynthia Simpson Mr. John Contestabile

<u>659-1111</u> My telephone number is\_\_\_\_

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

INT MAJORITY WHIP

ATON OFFICE OUSE OFFICE BUILDING INGTON, D.C. 20515 (202) 225-5341

SOMERY COUNTY OFFICE SUITE 302 41 GEORGIA AVENUE ON, MARYLAND 20902 (301) 946-6801 Y-(301) 946-0108

MICHAEL D. BARNES 8TH DISTRICT, MARYLAND

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Congress of the United States

House of Representatives Washington, D.C. 20515

February 22, 1985

COMMITTEE ON FOREIGN AFFAIRS

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CHAIRMAN, INTER-AMERICAN AFFAIRS MEMBER, HUMAN RIGHTS AND INTERNATIONAL ORGANIZATIONS

COMMITTEE ON THE DISTRICT OF COLUMBIA

MEMBER, GOVERNMENT OPERATIONS AND METROPOLITAN AFFAIRS MEMBER, JUDICIARY ANO EDUCATION

CHAIRMAN. FEDERAL GOVERNMENT SERVICE TASK FORCE

RECEIVED

MAR 1 1985

DIRECTOR OFFICE OF PLANNING & PPELINIHARY ENGINEERING

#552

B-113

Mr. Hal Kassoff Administrator State Highway Administration P.O. Box 717 707 North Calvert Street Baltimore, Maryland 21203

Dear Mr. Kassoff:

I have previously corresponded with you regarding the Interstate 495 widening project.

Recently, I have been contacted by individuals and representatives of civic associations in the Bethesda area who are very concerned about proposals which do not include adequate sound barriers and which might result in the removal of trees and natural sound barriers.

For your information, I am enclosing copies of letters I have received from the Carderock Springs Citizens Association and from Weldon H. Latham, an attorney who resides in the affected area. In addition to this project, I am sure you are aware that this area is also greatly affected by aircraft noise.

I am hopeful that the concerns expressed by these citizens and others who have written and testified at public meetings will be carefully considered before final decisions are made on this project.

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Thank you for your attention to this matter.

Sincerely,

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v-49 

Michael D. Barnes

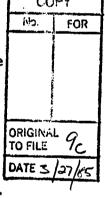
9:50 MDB/cn

WY ADM

Inge L. Enzinger, President cc: Carderock Springs Citizens Assn. Weldon H. Latham

Enclosures

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## Maryland Department of Transportation

State Highway Administration

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William K. Hellmann Secretary

Hal Kassoff Administrator

RE: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193

The Honorable Michael D. Barnes Room 401, Cannon House Office Building Congress of the United States Washington, D.C. 20515

Dear Congressman Barnes:

This is in response to your letter dated February 22, 1985 on behalf of your constituents concerning the potential noise impacts associated with our proposed Interstate Route 495 widening project.

Please find attached copies of our correspondence to Mr. Latham and Ms. Enzinger whom you reference in your letter.

As a result of their inquiries and testimony received at the Public Hearing, we are gathering additional data concerning the potential noise impacts of the proposed project. We have also met with Ms. Enzinger and members of the Carderock Springs Civic Association to more fully discuss this issue.

The concerns addressed by these citizens are being carefully considered in the decision making process.

> Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:mm Attachment cc: Mr. Ne

cc: Mr. Neil J. Pedersen My. Michael Snyder

bcc: Mr. Louis H. Ege, Jr. Mr. John M. Contestabile

V-50



My telephone number is 659-1111

Teletypewriter for Impalred 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 Mr. Hal Kassoff Administrator State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Mr. Neil J. Pedersen Director State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Gentlemen:

We want noise barriers! We are tormented by noise from the cars and trucks and airplanes and cannot tolerate • more. Your own Greiner Study says that you are violating Federal standards if you add two more lanes to the Capital Beltway and don't build noise barriers.

We pay high Maryland taxes.

Give us barriers now:

Sincerely,

January 7, 1985

Gentlemen:

In addition, as officials of the State of Maryland, you need to seriously consider the fact that in eastern Montgomery County, along the north side of the Beltway, there are barriers erected to provide a buffer to the noise of the traffic. Yet, west of Georgia Avenue, with similar density of the population and their proximity to the Beltway, no such buffers have been erected.

Moreover, observation of numerous miles along the Virginia side of the Beltway indicate that the Commonwealth of Virginia has taken steps to ensure the peace and serenity of surrounding communities.

It stands to reason that if the state and local municipalities are willing to issue building permits for property along the Beltway, the State of Maryland and its municipalities should be eager to implement the recommendations of its commissioned studies to provide noise abatement to homeowners in the area.

I invite you to study the noise as it affects my property which is located along the Beltway.

Sincerely,

The Somes

John J. Staczek 7504 Glennon Drive Betheoda, MD 2081\_ 1



V-51

DIRECTOR GITT'E UF

Contestabile



## Maryland Department of Transportation

State Highway Administration

February 22, 1985

William K. Heilmann Secretary

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DATE 2

Hai Kassoff Administrator

RE: Contract No. M 355-101-372 N I-495 Widening from Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. John J. Staczek 7504 Glennon Drive Bethesda, Maryland 20817

Dear Mr. Staczek:

This is in response to your letter requesting noise barriers along I-495 from Maryland Route 190 to the American Legion Memorial Bridge. The State Highway Administration recognizes that noise is a critical issue surrounding our proposal to widen this segment of I-495. An evaluation of noise attenuation measures is being made at this time.

As a direct result of citizen input at the Public Hearing, we are gathering additional data concerning potential noise impacts, costs of providing barriers, and expected levels of attenuation. State Highway Administration representatives have also attended various civic association meetings to discuss this matter more fully.

It is anticipated that a recommendation on this project will be made to the State Highway Administrator in March. We appreciate your input concerning this project.

Very truly yours,

Tedusen neil y

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

NJP:mm

cc: Mr. Hal Kassoff Mr. Michael Snyder Mr. Louis H. Ege, Jr. Ms. Cynthia Simpson Mr. John Contestabile

V-52

My telephone number is 659-1110

Teletypewriter for impaired Hearing or Speech 383-7555 Baltimor - etro - 565-0451 D.C. Metro - 1-800-492-5062 ( ) wide Toil Free P.O. Box - 1 707 North Caivert St., Baltimore, Maryland 21203 - 0717 8401 Seven Locks Road, Bethesda, Md. 20817

January 22, 1095

Neil J. Pederson, Director Office of Planning & Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202 Re: C

Re: Contract No. M-355-101-372-N I-495 Proj. Planning Study

Dear Mr. Pederson:

During the original planning of the Beltway (I-495), there was considerable discussion of a second - outer beltway and second bridge across the Potomacto better serve through traffic, particularly trucks. With the increasing pressure on State Highway Departments to reduce truck speeds and load sizes and by the Trucking Industry to do the opposite, will the ultimate solution to these problems - and that of I-495 as it is presently used - be a second bridge and outer beltway? Could that be a better solution than that of increasing the width and amount of traffic in the present location?

The program of Montgomery County to interest industry in locating facilities in the County has, on some occasions, lost out to Northern Virginia, for the stated reason that there would be inadequate transportation services additional pressure for a second bridge.

Should not the citizens of the area be informed at this time and before further considering addition to I-495, of the possibility - the inevitability - of a second bridge and outer roadway?

Sincerely,



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## Maryland Department of Transportation

State Highway Administration

FFB 2.8 1985

#### William K. Hellmann Secretary

Hal Kassoff Administrator

Re: Contract No. M 355-101-372 N 1995 I-495 Widening Study North of Maryland 190 to Virginia Route 193

PDMS No. 151087

Mr. Alston G. Guttersen 8401 Seven Locks Road Bethesda, Maryland 20817

Dear Mr. Guttersen:

Thank you for your letter of January 22, 1985 concerning an outer beltway and a second bridge across the Potomac. These concepts were part of the State Highway Administration plans until the late 1970's. All but the "Intercounty Connector" whose western terminus is Interstate Route 270 were dropped, partially as a result of traffic analyses which determined that the majority of trips in this region would continue to utilize Interstate Route 495. As a result, it is our expec-tation that Interstate Route 495 (and the American Legion Memorial Bridge) will continue to be the major facility for circumferential traffic for the foreseeable future.

Thank you for your interest and concern.

Very truly yours, ORIGINAL SIGNED BY: NEIL J. PEDERSEN

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

NJP:tn

cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. Mr. John M. Contestabile

v-54

My telephone number is <u>659-1110</u>

Teletypewriter for Impaired Hearing or Speech 383-7555 Baltimn Metro - 565-0451 D.C. Metro - 1-800-492-5062 tewide Toll Free P.O. Bon i7 / 707 North Calvert St., Baltimore, Maryland 3 · 0717 .

يردما الله المتار فالمحاد الموادية المار المعاد

March 5, 1985

Mr. Neil J. Pedersen Director, Office of Planning and Preliminary Engineering State Highway Administration P.O. Box 717 Baltimore, Maryland 21203

Re: Improvement of Interstate 495

Dear Mr. Pedersen:

Pursuant to the authorization vote taken February 11, 1985 by the Board of Directors of Riverway Homeowners Association of Bethesda, Maryland, the original testimony submitted by the undersigned at your public hearing on January 30, 1985 has been ratified.

Concurrently with the ratification, the Board of Directors wishes to emphasize a summary of the issues and submit such summarization as supplemental testimony on the record. We believe that the key issues are as follows:

- Our homeowners are not willing to sacrifice their own wellbeing without compensation for the benefit of transient traffic.
- o The State Highway Administration is willing to pursue actions detrimental to state residents, actions which are in violation of the Federal Highway Administration guidelines.
- The studies performed upon which the actions are based appear to be flawed from both a scientific and a cost basis. Insufficient data has been provided to properly challenge them at this time.
- o Assuming the cost computations are correct, sufficient funding does exist to construct sound barriers, even if such action results in insufficient funds for highway construction. If an either/or scenario is the only one available, we shall be forced to act by using whatever legal means available to ensure that our well-being is protected.

V-55

Very truly yours,

Henry D. Retter/KgC

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Henry D. Ritter President, Riverway Homeowners Association

HDR:kgc

Contento



# Maryland Department of Transportation

Slate Highway Administration

William K. Hellmann Secretary

I495

FOR

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No.

ORIGINAL TO FILE

Hal Kassoff Administrator

March 21, 1985

RE: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. Henry D. Ritter, President Riverway Homeowners Association 29 Pepperell Court Bethesda, Maryland 20817

Dear Mr. Ritter:

This is to acknowledge receipt of your supplemental CATE 3 comments on the Interstate 495 widening study dated March 5, 1985. As you requested, these comments will be incorporated into the Public Hearing Transcript which is currently being prepared.

Thank you for your comments. I can assure you that they will receive the fullest consideration in the decision making process.

Very truly yours,

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

NJP:mm

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

V-56

My telephone number is 659-1110

Teletypewriter for Impalred 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

Exh. bit 2 (J. JAffee)

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RECEIVED #57.4

March 5, 1985

MAR 5 1985

DIRECTOR, OFFICE OF PLANNING & PRELIMINARY ENGINEERING

Director Office of Planning and Preliminary Engineering Maryland Department of Transportation 707 North Calvert Street Baltimore, Maryland 21203

. . . . . . . . .

Re: Contract No. M 355-101-372 N PDMS No. 151087 I-495 widening from north of Maryland Route 190 to Virginia Route 193

Dear Mr. Pedersen:

Mr. Neil J. Pedersen

CITIZENS AGAINST BELTWAY NOISE are very concerned about the severe environmental harm that would occur if noise barriers are not provided prior to any widening of I-495. As a sampling of that concern we attach petition signatures from among our member associations. It is vital to the quality of our lives that noise barriers be included as a part of the above-noted I-495 project.

These petitions are in addition to our comments filed with your office by our attorneys on February 27, 1985.

Sincerely,

AGAINST BE NOISE

By Jacqueline S. Jaffe on behalf of CITIZENS

JSJ/vf Attachments - Petitions

#### APPENDIX A

MEMBER ASSOCIATES OF CITIZENS AGAINST BELTWAY NOISE Arrowood Concerned Citizens Association Burning Tree Estates Citizens Association Cabin John Citizens Association Carderock Springs Citizens Association Eggert Neighborhood Association Evergreen Citizens Association Persimmon Tree Homeowners Association Riverway Homeowners Association Thornley Court Neighborhood Association West Bradley Citizens Association

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No.

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TO FILE

DATE



## Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary

Hai Kassoff Administrator

March 21, 1985

RE: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Ms. Jacqueline S. Jaffe 8016 Thornley Court Bethesda, Maryland 20817

Dear Ms. Jaffe:

This is to acknowledge receipt of several petitions from community groups within the study area which you forwarded to this office with a cover letter dated March 5, 1985.

These petitions were received prior to the closing of the comment period for the Public Hearing and hence, will be included in the final transcript of the hearing.

Very truly yours,

Yelessen neil

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

NJP:mm

cc: Mr. Michael Snyder

Mr. Louis H. Ege, Jr. Mr. John Contestabile

- Ms. Cynthia Simpson

V-59

659-1110 My telephone number is\_\_\_\_

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## Maryland Department of Transportation

State Highway Administration

William K. Hellmann Secretary

Hal Kassoff Administrator

> 1995 COFY NO FOR OFIGINAL OFIGINAL TO FILE DATE 3/18/85

March 15, 1985

RE: Contract No. M 355-101-372-N I-495 Widening Study from North of MD Route 190 to Virginia Route 193 PDMS No. 151087

Mrs. Jacqueline Jaffe 8016 Thornley Court Bethesda, Maryland 20817

Dear Mrs. Jaffe:

This is in response to your telephone call of March 11, 1985 in which you requested information concerning noise regulations, and current State Highway Administration noise abatement projects.

Please find.attached a copy of the Federal Highway Program Manual (FHPM) 7-7-3, "Procedures for Abatement of Highway Traffic Noise and Construction Noise". Also attached is a copy of the Maryland State Highway Administration's guidelines for our Type II Noise Abatement Program and a priority listing of current noise abatement projects within the State.

Very truly yours,

neil ) Pederson

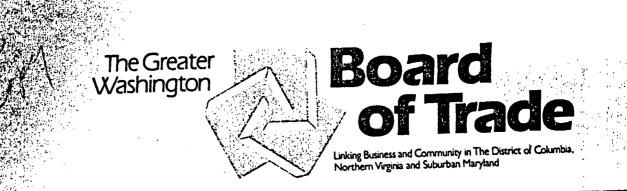
Neil J. Pedersen, Director Office of Planning and Preliminary Engineering

NJP:as Attachment

cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. Mr. John M. Contestabile Ms. Cynthia Simpson

My telephone number is 659-1110

Teletypewriter for Impalred 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



x and

## Community Development Bureau

Chairman Robert Gladstone President Quadrangle Development Corporation

> Manager Carol D. Barrett

# February 11, 1985

Mr. Neil J. Pedersen, Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, MD 21202

Dear Mr. Pedersen:

The Transportation Coordinating Committee strongly endorses the proposed improvement to the Capital Beltway from River Road to Georgetown Pike. The project alternative we support would add two lanes in the median.

Improvements to the Beltway are vital. Circumferential trips have become increasingly important as suburban growth in general and employemnt growth in particular has mushroomed. The Beltway is one of the few facilities in the region which meets this growing need.

From growth forecasts developed by the Metropolitan Washington Council of Governments, there is a clear need to look beyond the Beltway in meeting travel demands. We urge your office to move forward expeditiously with planning for an outer Beltway and to create additional Potomac River crossings. Such facilities would help to handle the increasing interstate traffic moving up and down the East Coast which must now rely on the Beltway.

FEB 14 1985

DIRECTOR UTTOC PEANNING & PRELIMINARY ENGINEERINE

Board of Trade Building • 1129 20th Street, N.W., Washington, D.C. 20036 • 202-857-599

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Mr. Neil J. Pedersen February 11, 1985 Page Two

The Transportation Coordinating Committee represents, through the Board of Trade, employers of approximately two-thirds of the private sector work force in the greater Washington region. Addressing the transportation problems caused by inadequate road capacity is of primary concern to these employers.

Thank you for the opportunity to comment on the matter of Beltway improvements.

Sincerely,

Elunar Malay up

Edward Colodny, Chairman Transportation Coordinating Committee

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DATE -



# Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

### February 26, 1985

RE: Contract No. M 355-101-372 N I-495 Widening Study North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. Edward Colodny Chairman, Transportation Coordinating Committee The Greater Washington Board of Trade 1129 20th Street N.W. Washington, D.C. 20036

Dear Mr. Colodny:

This is to acknowledge receipt of your letter of February 11, 1985 in which you expressed your support of the I-495 widening project. In addition, you suggested that the State Highway Administration (SHA) move ahead with plans for an "outer beltway" and an additional Potomac River crossing.

As you may be aware, these concepts were part of SHA plans until the late 1970's. All but the "Intercounty Connector" whose western terminus is Interstate Route 270 were dropped, partially as a result of traffic analyses which determined that the majority of trips in this region would continue to utilize I-495. As a result, it is our expectation that I-495 (and the American Legion Memorial Bridge) will continue to be the major facility for circumferential traffic for the forseeable future.

Thank you for your input and you can be assured that your comments will be considered in selecting a project alternative.

Very truly yours,

neil & tedeser

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

NJP:mm

cc: Mr. Mike Snyder Mr. Louis H. Ege, Jr. Mr. John Contestabile

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My telephone number is <u>659-1110</u> Teletypewriter for impaired Hearing or Speech 383-7555 Baitime f Tetro — 565-0451 D.C. Metro — 1-800-492-5062 ( wide Toil Free P.O. Box 7 / 7 1707 North Caivert St., Baltimore, Maryland 2, Va. 0717

West Jernwood Citizens Association

BETHESDA, MARYLAND

9914 Brixton Lane Bethesda, Maryland 20817 ~14

February 11, 1985

Mr. Louis H. Ege, Jr., Acting Chief Bureau of Project Planning State Highway Administration 707 North Calvert Street - Room 310 Baltimore, Maryland 21202

> Subject: Contract No. M-355-101-372 N I-495 Capital Beltway Montgomery County, Maryland Fairfax County, Vieginia

> > Environmental Assessment

Reference: Maryland Department of Transportation letter of January 4, 1985 from Hal Kassoff, Administrator, signed by Neil J. Pedersen, Director, Office of Planning and Preliminary Engineering

Dear Mr. Ege:

In accordance with your request, I personally have reviewed the subject document and submit herewith the following comments:

As a native of the Washington Metropolitan area and traveler for 30 years of the counties herein involved for private and public interests, I conclude at this point that Alternatives 1 and 2 have no foreseeable impact on the area presently within the defined boundaries of the West Fernwood Citizens Association.

If there is a change in the Contract or any addition, kindly keep us informed. Thank you.

Sincerely yours, sersh & - Werth

Joseph G. Keyhoe, President West Fernwood Citizens Association

ECEIVROnderock Springs Citizens Association. Inc.

FEB 7 1985

P. O. Box 34831 Bethesda, MD 20817

DIRECTOR. OFFICE OF WHING & PRELIMINARY ENGINEERING

February 4, 1985

Maryland Department of Transportation State Highway Administration Office of Planning and Preliminary Engineering Box 717 Baltimore, MD 21203-0717

Re: Contract No. M 355-101-372 N - Widening of I-495 from North of MD Rte. 190 to VA Rte. 193

Gentlemen:

The Carderock Springs Citizens Association, representing the 409 households in our community, would like to add and re-emphasize a number of points for the public record concerning the proposed widening of I-495. After having participated actively in both the October 4, 1984 Alternates Public Meeting and the January 23, 1985 Location/Design Public Hearing on the project, we remain very concerned that: (a) the State Highway Administration (SHA) officials dealing with this project have failed to hear, or have misinterpreted, the principal concerns espressed by the citizens most affected by the project; and (b) the SHA (as reflected in its Environmental Assessment document) seems to be guided by a set of technical criteria so narrow as to ensure that our state officials will be obliged to provide only the most minimal response to our most critical concern - - that is, the present and projected levels of noise emanating from this section of I-495.

Let us, first of all, leave no doubt about our community's basic position on this project: THE CARDEROCK SPRINGS CITIZENS ASSOCIATION OPPOSES ANY BUILD ALTERNATE FOR THIS SECTION OF I-495 THAT DOES NOT INCLUDE NOISE BARRIERS (equivalent to those proposed in SHA materials at the January 23 public hearing) IN THE FINAL DESIGN AND ACTUAL CONSTRUCTION OF THE PROPOSED PROJECT. We were puzzled, in fact offended, by the SHA's official characterization of the October 4 Alternates Public Meeting. The Environmental Assessment (p.V-1) states that "The majority of comments from this meeting expressed support for Alternate 2. Citizens also expressed concern about the potential noise increase which may result from the proposed project." We beg to differ. The preponderance of public comment, both at that meeting and at the more recent hearing, focused most directly on

the issue of noise levels on the Beltway - - not only in the future, but right now. The support expressed for the "inside-build" alternate was clearly premised on the condition that noise barriers would be part of any widening project, and arose from a widely shared perception that the state has never honestly considered the "no-build" route as a serious option.

We also wish to re-state our objection to the SHA's plan, as part of this proposed project, to create a 24-foot, clear-cut "recovery area" beyond the outside shoulders of this part of I-495. The trees and other vegetation in this right-of-way area now provide at least a minimal buffer to mitigate the visual and audible intrusion of the Beltway on our community. Any proposal by state officials to remove even this natural screening without a specific commitment to replace it with a man-made barrier strikes us as thoughtless, if not negligent. We believe, in fact, that the removal of this vegetation would fundamentally alter the baseline conditions under which the SHA's noise readings and other environmental measurements have been performed to obtain first-stage approvals for this project. We would challenge the validity and sufficiency of any design proposal that used data gathered under present conditions to model and forecast the impact of a project that would knowingly degrade those basic conditions.

In addition to the specific comments and questions already placed on the public record concerning the SHA's Environmental Assessment ( see attached copy of the Carderock Springs Citizens Association statement at the Public Hearing on January 23), we are struck by what appears to be a fundamental contradiction within that document. In discussing the No-Build Alternate, the Environmental Assessment (EA) states (p.IV-10):

"Receptors within all six of the sensitive areas will experience noise levels which exceed the FHWA Leq67 noise abatement criteria. The maximum noise level would be 73dBA within Area A, with the maximum increase ... occurring within Area E. As these noise levels are expected to occur without any improvements in the existing interstate, abatement considerations are not warranted."

And yet, one of the EA's conclusions (p.IV-16) is that:

"Noise abatement measures for all six noise sensitive areas are warranted based on the FHWA noise abatement criteria of 67dBA Leq for the Build situation."

What are we to make of this, when federal standards are exceeded in both cases, but our state officials are required to consider the citizens' needs in only the latter case? We are disturbed by

the implication that, when dealing with the SHA, "nothing succeeds like excess." The state's own EA data for our area show that noise levels at 10 of their 23 monitoring sites (43%) already exceed federal criteria; and they project that 15 (65%) will exceed it even without widening, and 19 (83%) will exceed it with the expansion. To our community, these figures indicate that there should be no debate over the need for active noise abatement - - with or without any widening of I-495 - - in fact, noise barriers should be built right now.

We have special concerns over the EA findings for the noise-sensitive area E. This section along the outer loop of I-495 most directly adjoins the Carderock Springs community and, more significantly, is immediately adjacent to the Carderock Springs Elementary School and its playgrounds. One of the highest <u>current</u> noise level readings in the EA (69 Leq) was taken at site #2 at this school and, as quoted above, the EA projects that the maximum Leq increase in any future scenario will occur in this area. We are concerned in addition, about the potential effects of lead deposits on the school grounds from the nearby stream of vehicles. The EA states (p.IV-4):

1.,

"Deposition of roadway contaminants would increase proportionately with increased traffic volumes. Pollutant levels would increase by approximately 31.9% with the Build Alternate by 2010. This represents a 25% increase in pollutants by the Build Alternate over the No-Build for 2010."

The existing grading and topography along this part of the Beltway's outer loop already feeds the runoff of roadway contaminants onto the western side of the school grounds during periods of precipitation. It is essential that this combination of noise and runoff pollution of the elementary school be remedied, regardless of whether the proposed subject is pursued.

We take strong exception to the manner in which the EA study has developed the groundwork for an argument that construction of noise barriers is prohibitively expensive, based either on the total cost or on the cost per house affected. In this document the SHA has simply posited its cost estimates for the barriers without any explanation of how the figures were derived or any consideration of options for different types of barriers. Within our own community (areas D and E), we find incredible the SHA's declaration that only 30 residences would be favorably enough affected by the installation of noise barriers to merit inclusion in the cost calculations. Our own experience is quite different, and we shall not permit these gratuitous costing formulas to go unexamined. Most outrageous of all, however, is the absence of any attempt to calculate or assign a

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V-67

cost value to reducing the Beltway's impact on the students at Carderock Springs Elementary School or on the many others who use its grounds and facilities.

We reject emphatically this apparent attempt to dismiss the legitimate interests of our community in this proposed project through simple-minded financial calculations. The state obviously must try to calculate a reasonable distribution of benefits achieved through the use of public funds; but counting houses and occupants in a case such as this can be only <u>part</u> of the equation. Public officials cannot tax our low-density community as heavily as they do, and then proceed to use that low residential density as justification for using those revenues to knowingly aggravate one of our most serious problems.

Finally, we believe that the Combined Location/Design Public Hearing on January 23 was conducted under conditions which precluded an adequate or satisfactory discussion of the public's concerns, and most certainly elicited no response from the presiding state officials to the many questions posed by speakers. The record of that evening's testimony will indicate clearly that the public came to the hearing with as many questions as opinions, and with an expectation that the SHA officials were prepared to respond to any reasonable requests for information. We believe that the people in our community, when confronted with a tedious and technical document such as the EA study, have the right to demand that the responsible public employees explain and defend their study rather than present it in a take-it-or-leave-it manner. WE THEREFORE MUST INSIST (A) THAT AT LEAST ONE MORE PUBLIC HEARING BE HELD BEFORE THE S.H.A.STAFF RECOMMENDS ANY ALTERNATE ON THIS PROPOSED PROJECT FOR THE STATE HIGHWAY ADMINISTRATOR'S SELECTION AND (B) THAT THE DEADLINE FOR SUBMISSIONS FOR THE PUBLIC RECORD BE EXTENDED TO NO LESS THAN 21 DAYS FOLLOWING THAT HEARING. The SHA officials at that hearing must come prepared, at a minimum, to respond to all questions that were placed on the record at the January 23 hearing. We recognize and appreciate that Mr. Pedersen and other SHA officials have met recently with individual community groups in our area on this proposed project, but we feel that this action in no way satisfies the public's right to have these questions addressed openly before the entire community.

Sinçerely,

Ening Inge L. Enzinger, President Carderock Springs Citizens Association

Attachment

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Senator Charles Mathias Senator Paul Sarbanes Congressman Michael Barnes Congresswoman Beverly Byron State Senator Howard Denis State Delegate Marilyn Goldwater State Delegate Nancy Kopp State Delegate Constance Morella Mr. Michael Gudis, President, Montgomery County Council Mr. Neal Potter, Chairman, T&E, Montg. County Council Mr. Norman Christeller, Chairman, MNPPC Ms. Patricia Willard, Highway Coordinator, MNPPC Mr. Neil Pedersen, Director, Office of Planning, SHA Mr. Michael Snyder, SHA Mr. Charles Markell, President, West Bradley CA Ms. Jackie Jaffee, President, Thornley Ct. CA Washington Post Washington Times Montgomery Journal Montgomery County Sentinel Potomac Almanac

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Maryland Department of Transportation

State Highway Administration

William K. Helimann Secretary ·

March 1, 1985

Hal Kassoff Administrator

RE: Contract No. M 355-101-372 N I-495 Widening Study From North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Ms. Inge L. Enzinger President Carderock Springs Citizens Association P.O. Box 34831 Bethesda, Maryland 20817

Dear Ms. Enzinger:

This is to acknowledge receipt of your letter of February 4, 1985 in which you reiterated a number of points for inclusion in the Public Hearing Transcript.

The State Highway Administration recognizes that the noise levels are a critical issue concerning our proposal to widen this segment of I-495. As a direct result of citizen input at the Public Hearing, we are gathering additional data concerning potential noise impacts, cost of providing barriers, and expected levels of attenuation. As you have noted, State Highway Administration representatives have attended various civic association meetings to discuss this matter more fully.

Also, as a result of requests that we have received since the Public Hearing, we have extended the closing date for receipt of comments from February 13, 1985 to March 6, 1985.

You can be assured that your comments will be given full consideration in developing our recommendation for the State Highway Administrator. We appreciate your input concerning this project.

> Very truly yours, Meil & Podesen

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

NJP:mm

cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. Ms Cynthis D. Simpson Mr. John Contestabile

V-70

My telephone number Is <u>659–1110</u>. 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

## CAPRI PLACE ASSOCIATION February 6, 1985

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Mr. Neil J. Pedersen, Director Office of Planning and Preliminary Engineering State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Mr. Michael Snyder District Engineer-District #3 State Highway Administration Greenbelt District Office 9300 Kenilworth Avenue Greenbelt, Maryland 20770

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Mr. John M. Contestabile Project Manager Bureau of Project Planning State Highway Administration 707 North Calvert Street Baltimore Maryland 21202

## Re: State Highway State Contract No. M 355 101 372 N

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Dear Messrs. Pederson, Snyder and Contestabile:

This letter is sent for inclusion in the public record of the Combined Location/Design Public Hearing in the abovereferenced matter (I-495 (Capital Beltway) from MD. Rte. 190 (River Rd.) to Va. Rte. 193 (Georgetown Pike)) (hereafter the "Beltway project") held at Carderock Springs Elementary School on January 23, 1985.

## Description of Association and Purpose Of Letter

Capri Place Association is, at present, an informal association of the homeowners on Capri Place, Bethesda, Maryland. The Beltway project was discussed at the last meeting of the homeowners; this letter is pursuant to a vote taken at that meeting. The purpose of this letter is to express our concerns regarding that project.

## Failure to Include Affected Areas

We object to the failure of the project study to include all affected housing in determining the detrimental costs associated with the project. Messrs. Pedersen, Snyder and Contestabile February 6, 1985 Page Two

We understand that the environmental study only included homes which are directly adjacent to the Beltway. We object to that criterion; noise does not end at the front row of houses, but travels. ALL affected homes must be considered and the costs associated with necessary sound barriers significantly decreased on a per house basis to reflect the inclusion of <u>all</u> affected homes.

In that regard, we believe that the barrier costs for affected homes should be adjusted downward to reflect homes for which sound levels will be reduced even though such levels may not be excessive, as such reduction will improve the quality of life for those homes as well. Noise should not have to be considered dangerous before it is reduced.

Specifically, our street and our homes appear on none of the maps we have seen assessing the Beltway project. Yet, our street and homes are presently affected by the noise and air pollution of the Beltway and will be affected by the Beltway project should it proceed.

Although perhaps not readily apparent from a cursory view of the area, Beltway noise travels from the overpass on MacArthur Boulevard up Eggert and the Rock Run Park into our neighborhood as well as from the Beltway where it runs behind Eggert. Depending upon the weather, the season of the year, the time of day and other conditions, the impact on our street varies widely; some days and nights, the noise level <u>as it presently</u> <u>exists</u> is offensive and should be included in considering sound barriers.

Further, we note that the study did not even include the houses on Tammy Court and on Eggert which are part of the Northwoods Overlook development. These houses directly border the Beltway; even within the improperly narrow strictures of the project study, they should have been included. Failure to include those homes shows the blatant inadequacy of the study itself; inclusion of those homes at once demonstrates the inadequacy of the proposed barriers on the adjacent stretch of the Beltway, and the clearly overblown cost per house for barriers used in the project study. We also note that homes on MacArthur exist by the overpass were not considered by the project study.

We also express concern that the proposed "recovery areas" will bring the Beltway too close to homes and will destroy the little currently existing screening.

We object to the methodology of the study; we object to the conclusions of the study; we object to the omission of affected areas by the study, including our own; we object to the costs

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Messrs. Pedersen, Snyder and Contestabile February 6, 1985 Page Three

per house in the study as blatantly excessive when the facts are considered. When the Beltway project proceeds, we demand that appropriate noise barriers are installed and are installed <u>prior</u> to construction so that our children can play outside and we can live in peace rather than racket.

### Carderock Springs Elementary School

The noise and air pollution associated with construction and completion of the Beltway project are frightening to us with regard to Carderock Springs Elementary School where the meeting was held. The tender age children who go to that school congregate outside before and after school as well as play periods, and for athletic events. That school abuts the Beltway; should any area be paramount in consideration in this project, <u>it</u> must be that school which even now receives excessive noise.

Every possible step must be taken for the protection of our children. Barriers <u>must</u> be installed prior to construction around the school to keep down noise and air pollution. Construction around the school should <u>only proceed</u> during times when the children are not scheduled to be at school or at times when all children will be inside. You must protect our children.

### General Observations

We have watched our neighboring state, the Commonwealth of Virginia, considering their citizens by placing miles of protective barriers on their roads, and placing them before commencement of construction. We cannot understand why Maryland is not including similar protection for its citizens as a matter of course. We cannot understand why Maryland proposes to do the <u>least</u> necessary to meet the mandates of law and not the <u>most</u> it can for us.

Barriers should be part and parcel of the entire project. We should not have to wait until construction to find what areas the designers missed. When new developments such as Northwoods Overlook are themselves overlooked, how many other such areas have you missed; how many new areas will be rendered unpleasant because barriers were not installed. We should not have to await the noise from the MacArthur Boulevard overpass, Eggert and other areas to convince our state to protect us.

Moreover, protection should be for all and not just for those with sufficient number or a sufficiently strong homeowners association to force the state to pay attention. Whatever can be done to improve the lives of its citizens, Maryland should do. Messrs. Pedersen, Snyder and Contestabile February 6, 1985 Page Four

### Conclusion

In further considering the Beltway project, you must consider and then implement all possible protections. You must protect our children at Carderock Springs Elementary School and you must protect those of us who live in the vicinity of the Beltway. Noise does not stop at the front row of houses but affects whole neighborhoods, neighborhoods of people who chose to be citizens of Maryland and who deserve the best from their home state.

Respectfully submitted,

Lýnn Goldsworth, President Capri Place Association 6813 Capri Place Bethesda, Maryland 20817 (301) 469-5065



Maryland Department of Transportation

State Highway Administration

### William K. Hellmann Secretary

COPY

FOR

No.

ORIGINAL

Hal Kassoff

March 1, 1985

Administrator

Re: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Ms. Lynn Goldsworth, President Capri Place Association 6813 Capri Place Bethesda, Maryland 20817

Dear Ms. Goldsworth:

TO FILE This is to acknowledge receipt of your letter dated February 6, 1985 expressing your concerns regarding the I-495 DATE 3 widening study. As you have requested, this letter will be included in the Public Hearing Transcript.

As a direct result of citizen input, we are gathering additional data concerning potential noise impacts, costs of providing barriers, expected levels of attenuation, and we are verifying the accuracy of our study mapping. Also, State Highway Administration representatives have attended various civic association meetings since the Public Hearing in order to discuss this project more fully.

You can be assured that your comments will receive full consideration as we develop our recommendation for the State Highway Administrator.

Thank you for your interest and input.

Very truly yours,

neil & Redersen

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

NJP:tn

cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson Mr. John M. Contestabile

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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

Mr. Hal Kassoff Administrator State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Mr. Neil J. Pedersen Director State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Gentlemen:

We want noise barriers! We are tormented by noise from the cars and trucks and airplanes and cannot tolerate more. Your own Greiner Study says that you are violating Federal standards if you add two more lanes to the Capital Beltway and don't build noise barriers.

We pay high Maryland taxes. Give us barriers now! // They have been long overdere. In my house norse is intolerable Sincerely,

Careon Harco Tunon

CARLOS R. GARCIA-TUMON 7502 GLENNON DRIVE DEFHENDA, MD 20817 (301) 469-8887

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Contetabile/W



Maryland Department of Transportation

State Highway Administration

#### William K. Heilmann Secretary

| Hal Kasso<br>March 1, 1985 Administrato                                            |                               |              |  |
|------------------------------------------------------------------------------------|-------------------------------|--------------|--|
| •                                                                                  | CO                            | COPY         |  |
| Contract No. M 355-101-372 N                                                       | No.                           | FOR          |  |
| I-495 Widening from Maryland<br>Route 190 to Virginia Route 193<br>PDMS No. 151087 | ORIGINAL<br>TO FILE<br>DATE 3 | - 7<br>15/85 |  |

Mr. Carlos Garcia-Tunon 7502 Glennon Drive Bethesda, Maryland 20817

Dear Mr. Garcia-Tunon:

This is in response to your letter requesting noise barriers along I-495 from Maryland Route 190 to the American Legion Memorial Bridge. The State Highway Administration recognizes that noise is a critical issue surrounding our proposal to widen this segment of I-495. An evaluation of noise attenuation measures is being made at this time.

RE: Contract

As a direct result of citizen input at the Public Hearing, we are gathering additional data concerning potential noise impacts, costs of providing barriers, and expected levels of attenuation. State Highway Administration representatives have also attended various civic association meetings to discuss this matter more fully.

It is anticipated that a recommendation on this project will be made to the State Highway Administrator in March. We appreciate your input concerning this project.

Very truly yours,

neil & Redersen

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

NJP:mm

- cc: Mr. Hal Kassoff
  - Mr. Michael Snyder
    - Mr. Louis H. Ege, Jr.
    - Ms, Cynthia Simpson
    - Mr. John Contestabile

V-77

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

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WELDON H. LATHAM 7638 Royal Dominion Drive Bethesda, Maryland 20817

February 8, 1985

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DIRECT P. DEFICE OF PLANNING & POTTONS TO FYGINEERING

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Honorable Hal Kassoff Administrator State Highway Administration 707 North Calvert Street Baltimore, MD 21202

Dear Mr. Kassoff:

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As you know, noise barriers are urgently needed in the Bethesda neighborhoods adjacent to the Capital Beltway (U.S. Route 495). Our neighborhood is beseiged by noise from the cars, trucks and airpland  $G_{\rm R}$  and cannot tolerate any more.

The responsibilities of your public agency mandate greater responsiveness to our problem. As substantial taxpayers, active citizens and voters, we should, and expect to, be accorded at least the minimum protections that the Federal standards require.

Your own <u>Grenier Study</u> states that the State of Maryland is presently violating Federal noise standards, even without the addition of two more lanes and the unnecessarily wide additional "recovery areas" proposed for the shoulders of this section of the Capital Beltway. We are advised that the proposed recovery areas are more than double the size that is actually required and will result in the unnecessary and needless destruction of miles of trees and shrubberies presently lining this section of the Beltway.

We recently attended the Department's Public Hearing on January 23. 1985. During that Hearing, numerous questions were raised as to: the basis of your estimates of the high cost of barriers, your stated reluctance to satisfy Federal standards, and your failure to include in your study the vast majority of homes actually affected by the noise. The entire Riverway, Bannockburn West and Burdett Developments of approximately 150 homes is not even included on your maps. The evidence presented at the Hearing suggests that your study was intended to provide you with a "justification," no matter how shallow, to support a decision you had already made not to build barriers.

As a member of a group which pays extremely high Federal, state and local taxes which fund projects as this road construction and salaries of government officials such as yourself, we deserve environmental safeguards which your present plans do not seem to contemplate.

During the public hearing, you heard from us--no one who testified agreed with your apparent decision not to construct noise arriers--but no state official explained the Department's position. I would, therefore, appreciate in your response some explanation as to why representatives of your Department have reportedly been quoted

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as saying, "we will hold hearings, but we have already decided not to build barriers."

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We need noise barriers and a narrower and less expensive recovery area. Our tax dollars fund these projects, and Federal standards require them. Please let me know that the widely circulating information about the arbitrary position of your Department is not true and that barriers will be built.

Sincerely.

Weldon H. Latham Attorney-at-Law

WHL/jmb

cc: Honorable Harry R. Hughes Governor of Maryland

> Honorable Elizabeth Dole Secretary, Department of Transportation

Honorable Michael D. Barnes United States Congressman

Honorable Charles Gilchrist County Executive

Honorable Howard A. Denis Maryland State Senator

Honorable Marilyn Goldwater Maryland State Delegate

Honorable Constance A. Morella Maryland State Delegate

Honorable Nancy K. Kopp Maryland State Delegate

Mr. Neil J. Pedersen Director, State Highway Administration

Mr. Wayne E. Peters, Bethesda Neighbors

Ms. Jackie Jaffee, Bethesda Neighbors

Board of Directors Riverway Homeowners Association

Maryland Department of Transportation

William K. Hellmann Secretary

State Highway Administration

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MAR 6 1985

Hal Kassoff Administrator

Re: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. Weldon H. Latham 7638 Royal Dominion Drive Bethesda, Maryland 20817

Dear Mr. Latham:

This is in response to your letter dated February 8, 1985 commenting on the need for noise barriers for the segment of Interstate 495 from north of Maryland Route 190 to the Potomac River.

The State Highway Administration appreciates your input regarding noise levels adjacent to the beltway. We are continuing our study of the potential noise impacts of the project. The effectiveness and cost of noise barriers are presently being evaluated. A decision will not be made until all required information is available.

This segment of Interstate 495 experiences an accident rate that is 51 percent higher than comparable facilities throughout the State. Our proposal to include safety grading as part of this reconstruction was intended to reduce the accident rates on this section of roadway. We are further analyzing the accident data in order to determine the minimal recovery area required to provide a safe highway to motorists.

I can assure you that your comments will receive the fullest consideration in the decision making process.

Sincerely, ORIGINAL SIGNED BY: HAL KASSOFF

Hal Kassoff Administrator

HK:tn

cc: Mr. Neil J. Pedersen Mr. Michael Snyder Mr. Louis H. Ege, Jr. Ms. Cynthia D. Simpson

Mr. John M. Contestabile

V-80

My telephone number is <u>659–1111</u>

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) LFR 66 11: To Call Writer Direct 202 879-5092

April 25, 1986

Mr. Hal Kassoff Administrator State Highway Administration Maryland Department of Transportation P.O. Box 717 707 North Calvert Street Baltimore, Maryland 21203-0717

> Contract No. M 355-101-372-N Re: I-495 Widening Study

Dear Mr. Kassoff:

والجزارة بي يعرب إلى الجنوعين ال

Our client, the Citizens Against Beltway Noise ("CABN"), has retained Kenneth J. Plotkin of Wyle Laboratories to review the noise impacts of the above-listed project. Enclosed you will find a copy of his current assessment. It indicates that, based on SHA's own data and assumptions, the noise impacts of the project are considerably more significant than SHA has to date considered. This analysis confirms CABN's continuing belief that noise barriers are required in connection with this project. CABN requests that SHA consider this analysis during its upcoming reevaluation of this project pursuant to SHA's new noise policy. In addition, CABN requests the opportunity to meet promptly with SHA to present this analysis, to receive a briefing on SHA's policy deliberations, and to consider resolution of the issues between CABN and SHA.

To assist CABN in reviewing the data and information SHA had provided over the course of our several meetings, CABN retained Mr. Plotkin and sought his opinion regarding SHA's noise evaluation. Mr. Plotkin and Wyle Laboratories have broad experience in evaluating highway and vehicle noise. For example, Mr. Plotkin independently developed traffic noise models for the Environmental Protection Agency and

Mr. Hal Kassoff April 25, 1986 Page 2

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others that are comparable to those subsequently developed and still used by the Federal Highway Administration. As you can see from the attached, he has performed an initial analysis of this project's noise impacts using Federal Highway Administration analytical methods and the data and assumptions relied upon by your office in developing its analysis. Mr. Plotkin expanded SHA's analysis by performing a 24-hour distribution of the anticipated noise impacts.

The results of Mr. Plotkin's analysis are very informative. Based on the differences in speeds and congestion SHA expects under the build and no-build scenarios, Mr. Plotkin has determined that for long periods during the day, particularly the daytime hours, anticipated "build" noise greatly exceeds anticipated "no-build" noise. During these periods, the noise difference is expected to be 6 to 7 dBA, at both 180 and 360 feet from the roadway. The new lanes are expected to cause noise levels continuously to exceed the Federal 67 dBA criteria, whereas under no-build conditions, there would be several significant periods during the day when this level is not expected to be exceeded. Mr. Plotkin's analysis thus confirms SHA's determination that the peak noise under build and no-build scenarios differs by about 1 dBA, but adds the significant conclusion that under the build scenario, this peak noise will be present for much longer periods, resulting in longer time periods during which the 67 dBA limit is exceeded.

CABN considers these conclusions highly significant for SHA's project review for two separate reasons. First, they remove any rationale SHA may have had for treating this project under Type II standards. Second, they demonstrate that the project may have a significant environmental impact, belying SHA's prior conclusions that no environmental impact statement is necessary.

CABN continues to believe that there can be no justification, under any circumstances, for treating this project as a Type II project. The Federal-Aid Highway Act precludes expenditure of federal money unless "adequate measures to implement the appropriate noise levels standards" are included

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Mr. Hal Kassoff April 25, 1986 Page 3

in the project. 23 U.S.C. § 109(i). Existing regulations require SHA to take reasonable and feasible measures to mitigate "noise impacts" (<u>i.e.</u> predicted noise levels approaching or exceeding 67 dBA/Leq for residences) where projects involve lane additions. 23 C.F.R. §§ 772.11(g), 772.5(h), 772.9(g). SHA's own analysis shows that the 67 dBA limit is expected to be exceeded in the design year on this project. The Wyle analysis adds that this project will cause that limit to be exceeded for longer time periods than without the construction. Clearly, these provisions require full implementation of noise mitigation measures.

Thus, there appears to be no way for the State to avoid its obligations to install barriers in connection with this project. But, to the extent SHA would consider <u>all</u> projects with small <u>peak</u> noise differences Type II projects, or as inappropriate candidates for mitigation under the "reasonable and feasible" criterion, the Wyle analysis forecloses that option. SHA's proposed lane additions, in the circumstances here and under SHA's assumptions, will increase noise levels 6 to 7 dBA for significant portions of the day, making it totally unreasonable for SHA to treat this as a Type II project based on unsupportable claims of "minimal impact."

Likewise, the more thorough analysis suggested by Wyle amply demonstrates that this project may cause significant impacts on the environment. Whatever one might argue about the significance of a 1 dBA or even a 3 dBA difference, it seems indisputable that a 6 to 7 dBA difference for the majority of waking hours will be considered a significant impact. Under FHA's own regulations, draft environmental impact statements must be prepared whenever a highway project "may cause significant impacts on the environment." 23 C.F.R. § 771.123. In light of Wyle's analysis, SHA will have great difficulty avoiding the requirement to conduct and draft an environmental impact statement.

Indeed, Wyle's analysis identifies several other errors and inaccuracies that undercut the reliance that appropriately can be accorded SHA's noise analysis and environmental assessment. Some of these problems are similar to issues raised

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Mr. Hal Kassoff April 25, 1986 Page 4

long ago by CABN and CABN members. For example, on June 27, 1985 the West Bradley Citizens Association (associated with SHA's Area A) identified serious concerns regarding the appropriate number of houses to consider in evaluating noise barrier cost-effectiveness for that area. Wyle's analysis adds detail to that concern. Likewise, Wyle's analysis suggests that SHA's noise measurement program was inadequate, undercutting the reliability of SHA's determination that noise in Area D does not currently exceed 67 dBA. This was SHA's ostensible reason for not agreeing to barriers for that area. All of these errors and problems with SHA's analysis remain to be resolved, and undercut the reliance which should be placed on it and the conclusions that flow from it.

The attached Wyle analysis, along with past analyses from CABN and CABN group members, raise serious questions requiring further discussions between our respective representatives. We would propose that a prompt meeting be convened at which these issues can be discussed and prospects for resolution of the basic conflict between SHA and CABN considered. Even if SHA has not completed development of its new noise policy, CABN believes such a meeting would be appropriate. Indeed, CABN would request a briefing on SHA's noise policy and its potential applicability to the subject project.

CABN believes that the significant noise impacts identified in the Wyle analysis remove any remaining question as to SHA's obligations in this case, regardless of the substance of any new noise policy. SHA must provide adequate measures to implement federal noise level standards. Its tentative proposal to erect barriers to protect at most 2 of 6 affected areas, and to potentially erect those two barriers at some

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Mr. Hal Kassoff April 25, 1986 Page 5

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uncertain future time, cannot be considered adequate given the nature of the expected noise impacts.

Sincerely yours,

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L. Mark Wine, P.C. John A. Zackrison

Counsel for Citizens Against Beltway Noise ("CABN")

JAZ:jycs

Enclosure

cc: Emil Elinsky Ms. Jacqueline S. Jaffe

V-85

# Preliminary Assessment of Noise Impact From Interstate 495 Widening

Kenneth J. Plotkin Wyle Laboratories

## 1.0 INTRODUCTION

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We have completed a preliminary assessment of noise impact from the proposed widening of I-495 from the Cabin John Bridge to Maryland Route 190 (River Road). Our analysis consists of three parts:

- 1. Evaluation of noise impact on nearby residences.
- 2. A general review of and comments on the Environmental Assessment prepared by the Maryland State Highway Administration (SHA).
- 3. Examination of the noise analysis data supporting the Environmental Assessment.

These three elements are described below in Sections 2.0, 3.0, and 4.0, respectively.

Our analysis used data from the following documents provided to us by CABN:

- "Environmental Assessment for Contract No. M 355-101-372N Interstate 495 (Capitol Beltway) From North of Maryland Route 190 (River Road) to Virginia Route 193 (Georgetown Pike)", Report No. FHWA-MD-EA-84-07-D, prepared by the U.S. Department of Transportation Federal Highway Administration, and the Maryland Department of Transportation State Highway Administration.
- "Noise Impact Analysis of the Proposed Widening of Interstate Route 495 From River Road to the Potomac River, Montgomery County, Maryland", prepared by Greiner Engineering Sciences, Inc., for Maryland Department of Transportation State Highway Administration.
- Memoranda and letters by Maryland SHA and Greiner Engineering, providing additional description of the project and abatement analysis, and supporting traffic data and for noise calculations.
- Copies of printouts of data from the STAMINA/OPTIMA computer runs performed as part of Greiner and SHA's noise analysis.

# 2.0 NOISE IMPACT OF BELTWAY WIDENING PROJECT

Noise from highway traffic can be calculated via the method presented in "FHWA Highway Noise Prediction Model", FHWA-RD-77-108, December 1978. Federal-aid projects must use this method or one demonstrated to be equivalent. FHWA has published the computer programs STAMINA and OPTIMA which implement this methodology.

The core of the highway noise prediction model is the expression for noise from a single lane of traffic:

Leq<sub>i</sub> = 
$$(\overline{L_{o}})_{E_{i}}$$
 reference energy mean emission level  
+ 10 log<sub>10</sub>  $\left(\frac{N_{i}\pi D_{o}}{S_{i}T}\right)$  traffic flow adjustment  
+ 10 log<sub>10</sub>  $\left(\frac{D_{o}}{D}\right)^{1+\alpha}$  distance adjustment  
+ 10 log<sub>10</sub>  $\left(\frac{\psi_{\alpha}(\phi_{1},\phi_{2})}{\pi}\right)$  finite roadway adjustment  
+  $\Delta_{s}$  shielding adjustment  
Leq<sub>i</sub> is the equivalent sound level of the i'th class of vehicles.  
( $\overline{L_{o}})_{R}$  is the reference energy mean emission level of the i'th class of vehicles.

N,

where

is the number of vehicles in the i'th class passing a specified point during some specified time period, T.

D is the perpendicular distance from the centerline of the traffic lane to the observer.

 $D_0$  is the reference distance at which the emission levels are measured.

S<sub>i</sub> is the average speed of the i'th class of vehicles.

T is the time period over which the equivalent sound level is computed.

 $\alpha$  is a site parameter whose values depend upon site conditions.

 $\psi$  is a symbol representing a function used for segment adjustments, l.e., an adjustment for finite length roadways.

 $\Delta_s$  is the attenuation, in dB, provided by some type of shielding such as barriers, rows of houses, densely wooded areas, etc.



It is customary to compute  $L_{eq_i}$  for hourly periods, using hourly average values of traffic parameters. The FHWA model allows three types of vehicles: automobiles (A), medlum trucks (MT), and heavy trucks (HT). The total noise is the combination of all three:

$$L_{eq} = 10 \log_{10} \left( 10^{L_{eq} A/10} + 10^{L_{eq} MT/10} + 10^{L_{eq} HT/10} \right).$$
(2)

Equation (1) applies to a straight road of arbitrary length. Curved roads are handled by dividing the road into a number of segments, then combining the noise from each by a process similar to Equation (2). Multiple-lane roads are handled by combining the noise calculated separately from each. Multiple lanes can sometimes be treated as a single effective lane with traffic combined and D replaced with an effective distance. The effective distance does not necessarily correspond to the geometric centerline of the road.

Important parameters are speed (which manifests itself strongly in the emission levels), volume of each vehicle class, distance, and the site and shielding parameters. Barriers are calculated as a shielding adjustment.

FHWA guidelines specify that noise impact is to be evaluated in terms of noisiest hour  $L_{eq}$ . For residential areas, impact exists when levels approach or exceed  $L_{eq} =$ 67 dB. This criterion is reasonably consistent with land-use criteria established by FAA, HUD, and other government agencies.<sup>\*</sup> This criterion is based on the highest reasonably acceptable level, and part of its basis can be seen in Figure 1. One type of intrusiveness is interference with speech communication. Major utilization of residential yards includes social interaction, conversation, and the like. Figure 1 illustrates the effect of background noise on speech communication. At levels above 50 dBA, voices must be raised to communicate, but much of this is a normal reflexive reaction. As noise increases above 50 to 55 dBA, it becomes more intrusive. Above 65 to 70 dBA, voices are clearly raised and communication is no longer satisfactory. Accepted criteria fall into this upper limit.

Evaluation of noise impact requires that the noise be quantified in a way meaningful to the affected activity. Use of a single metric  $-L_{dn}$  or peak hour  $L_{eq}$  - is reasonable as an overall planning tool, but does not necessarily provide an accurate description of

<sup>\*</sup> The metric most commonly used to describe environmental impact is  $L_{dn}$ , the day-night average sound level. It is essentially  $L_{eq}$  calculated over a 24-hour period, with nighttime noise levels (10 p.m. to 7 a.m.) penalized by adding 10 dB.  $L_{dn}$  from a highway is typically within 2 dB of peak hour  $L_{eq}$ . Residential criteria of  $L_{dn} = 65$  have been adopted by FAA, HUD, DoD, and other agencies. This is slightly lower than, but comparable to, FHWA's criterion.



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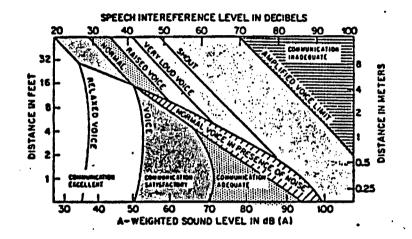


Figure 1.

Permissible Distance Between a Talker and Listener, Not Facing Each Other, for Various Voice Levels. The distance is plotted as a function of the A-weighted sound level (along the lower horizontal axis) and the speech interference level (along the upper horizontal axis). If the talker and listener are facing each other, a background noise level of 5 dB greater than that indicated is permissible. From "Effects of Noise on Speech", by John C. Webster, <u>Handbook of Noise</u> <u>Control</u>, edited by C. M. Harris, 1979.



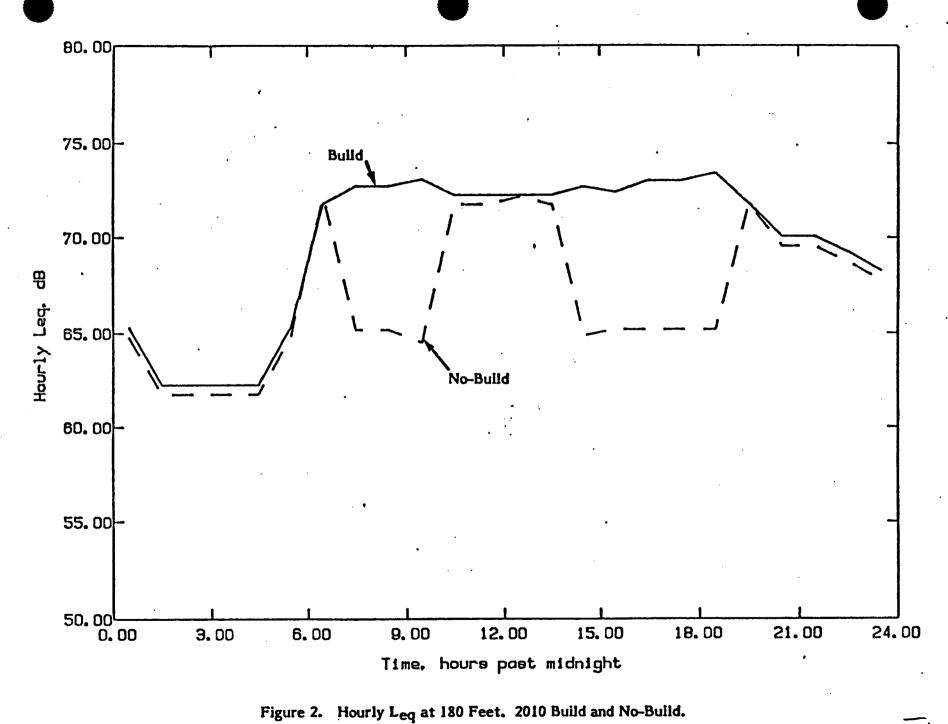
effects. For assessment of impact in particular cases, it is useful to examine the noise in more detail with less general but more specific descriptors.\* The variation in noise level throughout the day is appropriate for this case, because we are interested in what times of a day the yards can reasonably be used. We have therefore calculated hourly Leg for two receptor locations: one 180 feet from the road (similar to receptors 12 and 13), and one at 360 feet (similar to receptors 9, 19, and 23). Lane geometry was taken to be the same as in SHA's STAMINA runs. Traffic volume was taken to be ADT 160,000 (no-build) and 180,000 (build), from Table 3 of the EA. Speeds and hourly traffic volumes were based on the data in the 28 February 1984 memo by John Neukam of SHA. Hourly volumes were obtained by multiplying ADT by the diurnal curves. Speeds were taken to be 55 mph in off-peak hours, and 50 mph (build) or 30 mph (no-build) in peak hours. Off-peak speeds were assumed to exist for hourly volumes through level of service C, 1,380 vehicles per hour per lane. When volumes exceeded 1,400 to 1,500 vehicles per hour per lane, peak speeds were taken. Peak periods corresponded to 0700-0900 and 1500-1800 for the build case, and 0700-1000 and 1400-1900 for the no-build case. Consistent with the discussion in the EA, peak hours in the build case are not congested.

Figures 2 and 3 show the results. Peak hour values differ by only about 1 dB between build and no-build. However, the build and no-build cases have significantly different temporal patterns, with the build case having substantial impact over a much larger portion of the daytime and evening hours than the no-build case. For the build case, levels equivalent to the peak hour level are continuously maintained from about 7 a.m. to about 7 p.m., while for the no-build case there are long periods of time for which levels are about 7 to 8 dB below the peak hour level. This occurs because of the congestion and low speeds which the project would alleviate. Taking the Leq 67 criterion as a measure of whether noise levels would be acceptable for normal use of the yards, the following conclusions can be reached:

• At the 180-foot receptor, for the build case there is no time during the normal daytlme and evening period (7 a.m. to 10 p.m.) where levels are acceptable. For the no-build case, there will be about 8 hours of acceptable time.

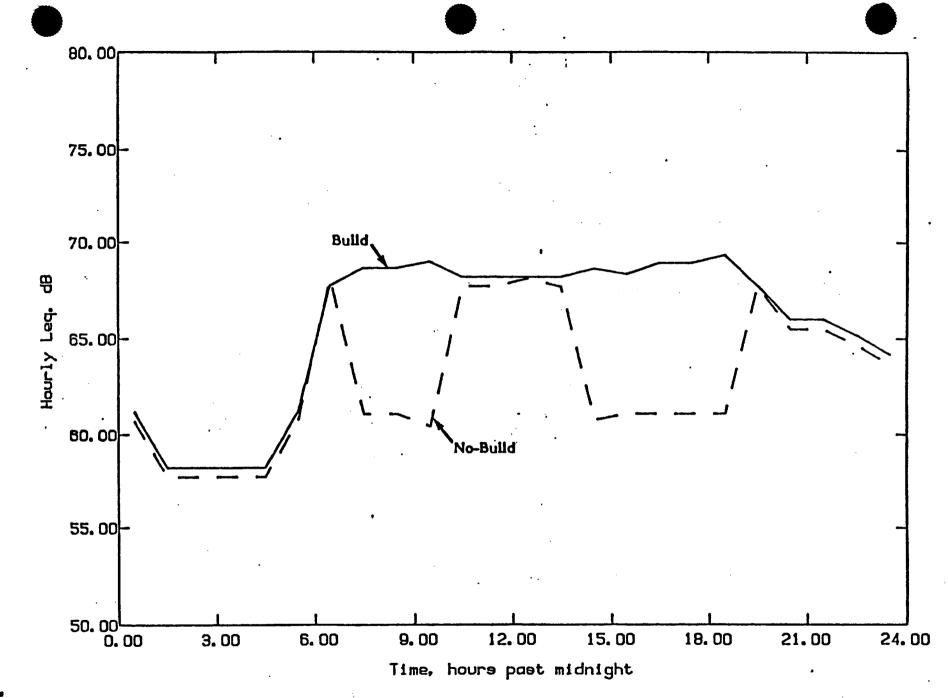
<sup>\*</sup> In a recent project to soundproof schools near airports, for example, candidate schools were selected based on L<sub>dn</sub> values. Noise insulation design was, however, based not on L<sub>dn</sub> but on maximum levels. This was because Intrusiveness manifested itself by maximum levels drowning out the teacher and disrupting the class. L<sub>dn</sub> itself did not adequately describe this.





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• At the 360-foot receptor, for the build case noise levels would be acceptable only after 8 p.m. For the no-build case, there would be an additional 8 hours of acceptable time.

## 3.0 GENERAL COMMENTS ON SHA'S NOISE ANALYSIS

In addition to carrying out the above analysis, we have reviewed SHA's analysis as contained in the documents noted earlier. We agree with the conclusions in the EA and Noise Impact Report that, based on exceedance of FHWA's  $L_{eq}$  67 criterion, noise abatement measures are required. There are, however, a number of deficiencies which prevent their noise analysis from being adequate:

- 1. The noise measurement program was not adequately conducted. While appropriate sites were selected and the measured sound levels are probably correct, no concurrent traffic data were collected. Without classified vehicle counts and speeds simultaneous to the noise measurements, quantitative usefulness of the noise data is seriously limited.
- 2. Noise calculations were not made for the conditions of the noise measurements. This is an important step to validate the analysis, and to ensure that sitespecific propagation parameters have been properly chosen. Due to the inadequate measurement program, as noted above, this calibration step cannot be taken.
- 3. When assessing adversely impacted receptors (e.g., the letter by Mr. Charles B. Adams of Greiner, 6 March 1985, and related correspondence), undue emphasis seems to be placed on first-row houses. This carries an implication that other houses are well shielded by the first row. FHWA noise calculation procedures can account for such shielding. If this shielding is significant, it should be calculated and subsequent discussion be based on noise levels. For the relatively low density of houses in this area, we do not feel that shielding by first-row houses will be significant. Also, it should be noted that all of the calculations included attenuation by either soft ground or a barrier. In such cases, FHWA procedures allow for no additional attenuation by houses.



- 4. There are a number of errors and inconsistencies in the noise and traffic calculations. These are discussed in Section 4.0. While most appear to have minor consequences, collectively they undermine the credibility of the noise abatement calculations.
- 5. There is unreasonable emphasis on comparing build versus no-build levels, even when the noise exceeds FHWA criteria levels. The basic impact criterion is whether the specified level is approached or exceeded. The criterion as to whether noise is significantly increased is intended to prevent degradation of areas where levels are initially well below the specified values.
- 6. The project is clearly Type L. The assertion in related correspondence and documents that noise abatement is Type II is not understandable. At best, it appears to be an extension of the misunderstanding between absolute levels versus increased levels.
- 7. The discussion of construction noise control in the EA is superficial. While the general guidelines given are good practice, they are somewhat vague. Noise emission limits can and should be specified for various types of equipment. It is also inadequate to assume that construction hours correspond to normal working hours. Provision should be made to prohibit construction during particular hours, e.g., no construction allowed between the hours of 9:00 p.m. and 7:00 a.m.

### 4.0 NOISE CALCULATIONS

In addition to our overall review described in the previous sections, we have examined in detail SHA's noise calculations. Calculations In the Environmental Assessment (EA) and Noise Impact Analysis were performed using STAMINA 2.0/OPTIMA. This set of programs is a computer implementation of FHWA-RD-77-108, "FHWA Highway Traffic Noise Model."\* The project was divided into five areas for analysis. Starting from the north end, they were identified as Photo Section, North, Central, South, and River Section. Adjacent sections overlap somewhat. All receptors are associated with the North section (project boundary to Cabin John Parkway; noise-sensitive areas A, B, C)

It should be noted that FHWA-RD-77-108, or any method consistent with this, is the official noise prediction methodology. While STAMINA 2.0/OPTIMA fall into this category, and have become a <u>de facto</u> standard by their wide use, they are not themselves a standard, specification, or regulation.



or the Central section (Cabin John Parkway to MacArthur Boulevard; noise-sensitive areas D, E, F). We have reviewed the STAMINA 2.0/OPTIMA input and output printouts and supporting material provided by the Maryland State Highway Administration (SHA). We have found the following:

- 1. The road was modeled as two equivalent lanes: northbound and southbound. The equivalent lanes appeared to be in the center of each lane group, but were not located according to the equivalent lane procedure in FHWA-RD-77-108. The same lane coordinates were used for the build (four lanes each way) and no-build (three lanes each way) cases. While this may not have led to large errors, there was no supporting documentation showing the reasonableness of these approximations.
- 2. We plotted all roadway and receptor coordinates for the North section and compared them with the points marked on the map. Most were correctly entered. However, a number of roadway coordinates were incorrect, one by about 500 feet. These errors did not appear to significantly affect unabated levels, but certainly reduce the confidence of the analysis.
- 3. Traffic volume in each direction on all segments was 6,900 vehicles per hour and 5,520 vehicles per hour for build and no-build, respectively. These numbers are not consistent with the level of service C calculation of 1,379 vehicles per hour per lane in the supporting material. They are consistent with widening an eight-iane road to ten lanes, which may be the case in places where ramps effectively add more lanes. Appropriate values should have been used on each segment.
- 4. Truck volumes were taken to be 4 percent heavy and 3 percent medium. These are the correct volumes based on average daily traffic, but the truck volumes during the peak hour are given (in the supporting material) as 1.8 and 1.1 percent, respectively. There appear to be data entry errors as well. On some segments the medium and heavy truck volumes were transposed and on one no-build segment the build truck volumes were used.
- 5. Noise level calculations appear to have been performed only for the receptor points indicated in the EA and supporting maps. Leq contours are drawn on the maps. The number of calculated points is not adequate to accurately plot Leq contours. To locate the Leq 67 contour requires calculating levels at several

distances such that the  $L_{eq}$  67 point can be interpolated between higher and lower values. While the  $L_{eq}$  contours shown are probably reasonable estimates, they are not adequately supported for quantitive use.

Most of the errors and inconsistencies individually affect the results by less than 1 dB. Collectively, however, they could lead to larger errors, particularly for barrier calculations which are more sensitive to geometry. This seriously undermines the confidence which can be placed on the final abatement cost/benefit analysis. We do not feel that the calculations have been done with a level of care and quality adequate for a project of this magnitude.

## 5.0 CONCLUSIONS

We have reached the following conclusions:

- This project will cause a substantial noise impact, and noise abatement measures are required.
- The conclusion by the Maryland State Highway Administration that, based on exceedance of the FHWA Leq 67 criterion, a noise impact will occur which requires abatement, is correct. Our analysis shows that noise impact will be more severe than shown in the EA.
- The noise analysis performed by SHA contains a number of errors and inconsistencies. We do not feel that they materially affect the basic conclusions that there will be a noise impact and that abatement is required. We do feel, however, that these errors must be corrected prior to finalizing noise barrier design.





## Maryland Department of Transportation

State Highway Administration

William K. Heilmann Secretary

Hal Kassoff Administrator

July 21, 1986

J-495

Mr. John A. Zackrison Counsel for Citizens Against Beltway Noise Kirkland & Ellis 655 Fifteenth Street, N.W. Washington, D.C. 20005

Dear Mr. Zackrison:

This will confirm our meeting scheduled for Friday, July 25, 1986 in my office at which time we will discuss the "Preliminary Assessment of Noise Impact from Interstate 495 Widening" by Kenneth J. Plotkin of Wyle Laboratories which you previously provided to the State Highway Administration.

As we discussed by telephone on July 18, 1986 and in preparation for that meeting, I am enclosing a copy of a letter from Mr. Charles B. Adams of Greiner Engineering Sciences, Inc. in which Mr. Adams responded to a number of the points raised by Mr. Plotkin.

As you are aware, the State Highway Administration has for some time been in the process of developing a noise policy which is not yet finalized. Our ultimate response to some of the points addressed by Mr. Plotkin will be dependent upon the final outcome of our noise policy deliberations. However, there are several points which I feel warrant response at this time.

- It was incorrect for Mr. Plotkin to assume that speeds on the Capital Beltway would be 30 miles per hour during all hours when Level of Service C volumes were exceeded under the No-Build situation. Practice shows that speeds of 50 miles per hour or greater are maintained for traffic operating at Level of Service D conditions and even for traffic operating in the upper portions of the Level of Service E range. Thus, during much of the time period when Mr. Plotkin projects no-build noise levels to be 7 to 8 dB below build levels, the actual difference would be significantly less.

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. Boltimore Maryland 21203 - 0717 Mr. John A. Zackrison July 21, 1986 Page 2

- The State Highway Administration acknowledges that the Capital Beltway widening project must be analyzed as a Type I project. We previously evaluated the "feasibility and reasonability" of providing noise attenuation as required under Type I procedures. A preliminary determination was made that none of the barriers met the "reasonability" test and therefore none would be constructed as a Type I barrier. Separate from the roadway widening project, each of the barriers was also evaluated under the State Highway Administration's Type II program and under this evaluation, Barriers B and E were preliminarily determined to qualify.
- As I have previously indicated to you following final resolution of the State Highway Administration's noise policy, each of the barriers will be reassessed; first as a Type I barrier associated with the roadway widening project, and as a Type II barrier independent of the roadway widening project.
- Although the final noise policy has not yet been adopted, two criteria which are virtually certain to be included in tests of "reasonability" for Type I barriers will be cost per residence protected and changes in design year noise levels between the build and no-build alternative. A maximum cost per residence protected is used by almost every State in determining "reasonability". Data collected by the Federal Highway Administration indicates Maryland uses the highest cost per residence standard of any State.
- The State Highway Administration is in the process of collecting additional noise and traffic data in anticipation of reevaluating the I-495 barriers. When we reevaluate the barriers, we will also be modelling existing conditions to ensure we have correctly "calibrated" our forecasts for each location.

If you have comments or questions regarding the above points or any of the points raised in Mr. Adams' letter, we can discuss them at the July 25, 1986 meeting.

Prepared by: Mr. Neil J. Pedersen on July 21, 1986

Very truly yours

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

NJP:bh Attachment cc: Mr. Hal Kassoff Mr. Emil Elinsky Mr. Louis H. Ege, Jr. Mr. Charles B. Adams

bcc: Mr. John Contestabile Ms. Cynthia D. Simpson

V-98

## B. Agency Coordination and Responses

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Montgomery County Covernment

January 14, 1984

Mr. Hal Kassoff, Administrator Maryland State Highway Administration 707 North Calvert Street Baltimore, Maryland 21203

Dear Mr. Kassoff:

We are responding to your request for comments on the Environmental Assessment for widening Interstate 495 to eight through lanes between MD 190 (River Road) and Virginia Route 193 (Georgetown Pike).

Extended periods of congestion are experienced daily on this section of the 495 Beltway, due to the narrowing from eight to six through lanes. This congestion results in an increased number of accidents, as well as a significant loss of productive work hours for thousands of Maryland and Virginia commuters.

Comprehensive plans have shown the Beltway as an eight lane facility, and as development is proceeding consistent with adopted plans, the need for this improvement becomes all the more evident. The County supports Alternate 2, the preferred alternate, which provides for two additional lanes in the median area. We also support consideration of noise abatement measures to meet the FHWA noise criteria, with the details to be worked out in final design.

Sincerely.

Robert S. McGarry, Director Department of Transportation

RSM:mjo

cc: Louis H. Ege, Jr., Acting Chief Bureau of Project Planning

TATE HWY ADM:

JAN 85 3: 26

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Office of the Director, Department of Transportation

Exhibit - 1 15

THE

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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> PARK AND PLANNING COMMISSION 8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

February 20, 1985



Mr. Neil Pedersen State Highway Administration 707 N. Calvert Street Baltimore, Maryland 21202 Dear Mr. Pedersen:

DIRECTOR, OFFICE OF PLANHING & PRELIMINARY ENGINEERING

The Montgomery County Planning Board has reviewed the proposed improvements for I-495 (Capital Beltway) from the Potomac River to north of River Road (MD 190).

The Board agrees that the roadway widening is a needed project. We also feel that noise barriers are needed, that those barriers are needed now even if the road were not widened, and that it is government's responsibility to provide those barriers. We also think that further work needs to be done on the design of noise barriers - the costs are too great and the design is uncertain. Ideally, we would like to see additional general research work on noise barriers - work that is not part of specific roadway contracts. Our staff is available to work with you in such an effort. We will be having many noise barriers installed in Montgomery County and are concerned about the visual and aesthetic impact of those barriers upon the roadway entrances to our County and upon the thousands of persons who travel these roads.

Specifically, we make the following comments with respect to the I-495 project:

- We support the preferred alternate (widening to the inside) and agree that the roadway should be widened based upon the need to relieve existing traffic congestion, accommodate future travel needs, and establish a consistent eight-lane cross section for the Beltway.
- 2) Noise attenuation is needed for existing development along the Beltway and should be provided as part of this project. Barriers appear to be the most feasible method of attenuation; design is uncertain at this time but needs careful attention to achieve a result that is visually attractive from both the highway and the adjacent land at a reasonable cost. Planning staff and MdSHA staff should work jointly to design noise barriers for Montgomery County. We feel that we have to have an agreement with SHA as to how SHA will deal with the

noise issues prior to SHA seeking Location and Design approval for this project.

One suggestion made by our staff was for the State to investigate the possibility of placing noise barriers on private property via an easement. We can encourage you to examine this suggestion as a method of reducing the very high cost of noise barriers.

- 3) The proposed 24-foot recovery area should be reevaluated because of the potential loss of screening vegetation. This cleared area does not appear to be essential; landscaping and/or existing vegetation within part of the 24-foot area will offer substantial benefits to both motorists and residents.
- 4) Widening to the inside will remove the existing green area. Consideration should be given to creating a planting area using the concrete barriers somewhat as planting boxes to provide some green area along the median.
- 5) Our staffs should work together to design the retaining walls and noise barriers for this project.
- 6) Work near the Cabin John Stream Valley Park should be coordinated with our Parks Department.

We look forward to working with you to find an acceptable solution to what is undoubtedly a very difficult situation.

V-102

Sincerely,

Norman L. Christeller Chairman, MCPB

NLC:PBW:dlf

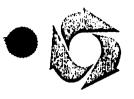
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FOR



## Maryland Department of Transportation

State Highway Administration

#### William K. Heilmann Secretary

Hal Kassoff Administrator

March 21, 1985

RE: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. Norman L. Christeller Chairman Montgomery County Planning Board 8787 Georgia Avenue Silver Spring, Maryland 20910-3760

Dear Mr. Christeller:

This is to acknowledge receipt of your comments dated February 20, 1985 concerning the Interstate 495 widening study from north of Maryland Route 190 to Virginia Route 193.

Ms. Pat Willard of your staff has been invited to participate in the upcoming team recommendation meetings so that she can personally represent your agency's suggestions as we formulate a decision on this project.

Thank you for your input and cooperation.

Very truly yours,

neil J Pedersen

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

NJP:mm cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. -Mr. John M. Contestabile Ms. Cynthia Simpson

V-103

My telephone number is <u>659–1110</u>

Teletypewriter for Impaired Hearing or Speech 383-7555 Baltimore 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 for letate to v Hon. Nancy K. Falck, Chairman Fairfax County Brian Power, Vice-Chairman Loudoun Count Joseph B. Wisniewski, Treasurer Fairfax County John W. Epling **Executive Director** 

COMMISSIONERS:

# Northern Virginia

# **Planning District Commission**

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February 12, 1985

Hon. Thomas M. Davis iil Fairfax County Hon. Albert C. Eisenberg Arlington County Hon, Nancy K. Falck Fairfax County Charies A. Funn Arlington County Hon. Maurice Gerson Manassas Brenda Z. Greene Fairfax County Hon. Guy A. Guiffre Prince William County Hon. John F. Herrity Fairfax County Hon. John D. Jenkins Prince William County Hon. Brian T. Keliey Leesburg John Magnuson Manassas Park Hon. G. Robert Maitiand Manassas Park Hon. Elaine McConnell Fairfax County Wiiiiam C. McLeod Prince William County James J. Miller Alexandria Hon. Audrey Moore Fairfax County Hon. Gene P. Moore Fairfax City Vance Myers Fairfax City Hon. Martha V. Pennino Fairfax County James H. Pickford Fairfax County Brian Power Loudoun County Lonnie C. Rich Alexandria Charles F. Robinson, Jr. Fairfax Count Macon C. Sammons, Jr. Manassas John W. Shanley Arlington County Hon. Steve W. Stockman Loudoun County Joseph R. Stowers Fairfax County Hon. Edward B. Strait Falls Church **Hirst Sutton Falls Church** Hon. Patricia Ticer Alexandria Hon. Donald E. Upchurch Vienna Hon. Douglas D. Walker Herndon Margaret Vanderhye Fairfax County Hon. Mary Margaret Whipple Arlington Coun Joseph B. Wisniewski Fairfax County As of January 22, 1985

Mr. Louis H. Ege, Jr. Acting Chief, Bureau of Project Planning State Highway Administration 707 North Calvert Street, Room 310 Baltimore, MD 21202

Dear Mr. Ege:

The staff of the Northern Virginia Planning District Commission has reviewed the Environmental Assessment for the widening of Interstate 495 (Contract No. M 355-101-372 N) in Maryland and Fairfax County, Virginia.

Based on our review, coordinated with the review of the Fairfax County Department of Transportation, the NVPDC staff has no negative comments regarding the assessment.

Thank you for the opportunity to participate in the review process.

V-104

Strengthening Local Government

Sincerely yours,

Penny Kay/Grabb, Cordinator Community Assistance Programs

PKG:po



## Maryland Department of Transportation

State Highway Administration

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William K. Helimann Secretary

Hal Kassoff Administrator

March 21, 1985

RE: Contract No. M 355-101-372 N I-495 Widening Study from North of Maryland Route 190 to Virginia Route 193 PDMS No. 151087

Mr. Norman L. Christeller Chairman Montgomery County Planning Board 8787 Georgia Avenue Silver Spring, Maryland 20910-3760

Dear Mr. Christeller:

This is to acknowledge receipt of your comments dated February 20, 1985 concerning the Interstate 495 widening study from north of Maryland Route 190 to Virginia Route 193.

Ms. Pat Willard of your staff has been invited to participate in the upcoming team recommendation meetings so that she can personally represent your agency's suggestions as we formulate a decision on this project.

Thank you for your input and cooperation.

Very truly yours,

neil & Pedersen

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

NJP:mm

cc: Mr. Michael Snyder Mr. Louis H. Ege, Jr. Mr. John M. Contestabile Ms. Cynthia Simpson

V-105

My telephone number is <u>659–1110</u>

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

DEPUTY COMMISSIONER

M. WRAY, JR. CHIEF ENGINEER

T. WARREN DIRECTOR OF ADMINISTRATION

. W. WORRALL DIRECTOR OF FINANCE

JACK HODGE ASSISTANT CHIEF ENGINEER

SALLY H. COOPER DIRECTOR OF RAIL AND PUBLIC TRANSPORTATION

J. G. RIPLEY DIRECTOR OF PLANNING AND PROGRAMMING

COMMONWEALTH of VIRGINIA DEPARTMENT OF HIGHWAYS & TRANSPORTATION 1221 EAST BROAD STREET RICHMOND, 23219 February 4, 1985

> Interstate 495 Project M 355-101-372 N Project 0495-029-120, C-501

Mr. Hal Kassoff, Administrator Maryland Department of Transportation P. O. Box 717 Baltimore, Maryland 21203-0717

Dear Mr. Kassoff:

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EUGENE SMITH MOLEAN ATLANUL LEAN

IERTA L. CHE BLACKSTONE AT LARGE RURAL

- GALAN, SALAN DISTRICT

LYNCHBURG, LYNCHBURG DISTRICT

O. RICHMOND DISTRICT

R , NEEME, FREDERICASEL RU DISTRICT -- FLOIL, CULPEPER, CL'I PEPER, DISTRICT

ERRYVILLE. STALISTUS DISTRICT

FFE: ALERANDRIA, NURTHERN VIRGINIA DISTRICT

A BEACH, SUFFOI & DISTRICT

I have reviewed your public hearing brochure for the widening of 1-495 to eight lanes between the Potomac River and Route 190. Your proposed late 1988 construction date is in line with the Department's current schedule for the completion of the eight lanes in Virginia between the Potomac River and just south of the George Washington Memorial Parkway interchange. Our current schedule provides for the advertisement of this work in the summer of 1988.

Last year we corresponded with each other regarding the shoulder widths that would exist on the American Legion Memorial Bridge once the widening projects in Maryland and Virginia are completed and five lanes are provided in each direction across the bridge between the Parkway interchanges. The 170,000 vehicles per day projection for the year 2010 is going to exert enormous traffic pressure on this vital link between the two states.

I realize widening the bridge to provide ten foot shoulders left and right of traffic is a major undertaking in itself. However, I feel it is a necessity so we will have adequate shoulder widths available for disabled vehicles and to increase the safety of this highly traveled Interstate route.

Virginia is willing to participate in its proportionate share of the bridge widening to provide the wide shoulders along with the eight laning of I-495. I hope that Maryland can include this work in their eight laning project and I would appreciate your advising me of your decision so I will know if we need to program additional funds for construction.

TE HWY ADM

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Sincerely. Hodaé

Assistant Ohief Engineer

V-106



Maryland Department of Transportation

State Highway Administration

#### March 6, 1985

William K. Heilmann

Secretary Hal Kassoff Administrator

Mr. J. S. Hodge Assistant Chief Engineer Commonwealth of Virginia Department of Highways & Transportation 1221 East Broad Street Richmond, Virginia 23219

Dear Mr. Hodge:

Reference is made to your letter of February 4, 1985 in which you suggest serious consideration be given to widening the Cabin John Bridge to provide for 10' shoulders inside and out. As you are aware, the redecking and closing of the median area for this structure is under construction and will be completed by the end of this calendar year.

Your suggestion, therefore, is to initiate a new contract to widen the bridge on the outside for its full length and extending this widened area to service other bridges in Maryland in the immediate vicinity of this structure just to accommodate shoulder breakdown areas. There is no question that a facility such as this, with its magnitude of traffic, would better function with the full shoulders that you are suggesting. If this were an all new project, and in its formative stages, the full shoulders would certainly have been a part of the cross sectional configuration. However, with the tight dollar crunch that is upon all states and the limitation of manpower, etc. to create contracts, we seriously wonder whether or not widening just for shoulder areas, at a cost of \$10,000,000., is a prudent course of action.

Since one of the lanes that you are mentioning, the 5th lane, is an acceleration lane, which terminates before the end of each of the Cabin John Bridges, we wonder if a breakdown vehicle in this area is as serious as if this were a through lane situation. Our suggestion is, rather than get into this huge dollar expenditure and work effort, that we consider modification of lanes within the present roadway width. The 65'-8-1/4" width inside of parapet to inside of parapet could be lined with a 2' offset from the median barrier, 4 - 11'-8" through lanes, 1 - 11' acceleration lane and a 6' breakdown area on the right. However, since four through lanes have not yet been approved for this area, all dialogues concerning shoulder widths are still academic.

#### V-107

#### My telephone number is (301) 659-1111

Teletypewriter for impaired Hearing or Speech

383-7555 Baltimore Metro - 565-0451 D.C. Metro - 1-800-492-5062 Statewide Toll Free

### TATE HIGHWAY ADMINISTRATI(

Mr. H. S. Hodge March 6, 1985 Page 2.

We have taken the liberty of contacting our Federal Highway Administration representatives and their reaction was "if and when four through lanes are approved, the need for shoulders will be assessed at that time".

Since we sincerely believe that the four lanes will become a reality in the near future, we would appreciate your comments on our proposed typical section or any other combination. However, we do not feel that at anytime in the near future, we can become involved in a widening project to only accommodate shoulder areas. I have discussed this matter thoroughly with Hal Kassoff, our Administrator, and he strongly supports this conclusion, He suggested further that if we are unable to reach agreement, it might be well to arrange for a conversation with Hal King or Oscar Mabry in an attempt to arrive at a coordinated position between the two states. Please let me have your thoughts on this.

Very truly yours,

Earle S. Freedman Deputy Chief Engineer Bridge Development

cc - Mr. Emil Elinsky Mr. Hal Kassoff Mr. G. E. Dailey Mr. T. Hicks

ESF/S



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|--------------------------|----------------|-------------------------|
| J. M. WRAY, J<br>CHIEF E | A.<br>INGINEER |                         |

J. T. WARREN DIRECTOR OF ADMINISTRATION

H. W. WORRALL DIRECTOR OF FINANCE

JACK HDDGE ASSISTANT CHIEF ENGINEER

SALLY H. COOPER DIRECTOR OF RAIL AND PUBLIC TRANSPORTATION

J. G. RIPLEY DIRECTOR OF

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HARGLD C. KING, COMMISSIONER EDGAR BACON, JOHENVILLE, BRISTOL DISTRICT T. GEORGE MUGHAN, JR., GALAX, SALEM DISTRICT JAMES L. DAVIDSON, JR., LYNCHBURG, LYNCHBURG DISTRICT WM, M. T. FORRESTER, RICHMOND, RICHMOND DISTRICT RICHARD G. BRYDGES, VIRGINIA BEACH, SUFFOLK DISTRICT R. HUMPHREYS, JR., WEEMS, FREDERICKESBURG DISTRICT CONSTANCE R. KINCHELDE, CULPEPER, CULPEPER DISTRICT JOSERT W. SMALLEY, BERRYVILLE, STAUNTON DISTRICT JOSERT W. SMALLEY, BERRYVILLE, STAUNTON DISTRICT T. EUGENE SMITH, MCLEAN, AT LARGE-URBAN ROBERT A. QUICKE, BLACKSTONE, AT LARGE-RURAL



# **COMMONWEALTH of VIRGINIA**

DEPARTMENT OF HIGHWAYS & TRANSPORTATION 1221 EAST BROAD STREET RICHMOND, 23219

March 25, 1985

Interstate 495 Project M 355-101-372N Project 0495-029-120, C-501 Cabin John

Mr. Earle S. Freedman Deputy Chief Engineer Bridge Development Maryland Department of Transportation P. O. Box 717 Baltimore, Maryland 21203–0717

Dear Mr. Freedman:

Thank you for your letter of March 6 regarding the proposed width of shoulders on the American Legion Memorial Bridge (Cabin John).

When this bridge is opened to four through lanes and one auxiliary lane, as I understand the proposed lane configuration, the auxiliary lane (5th lane) will be continuous from the parkway entrance ramp in Virginia to the parkway exit ramp in Maryland for northbound traffic and vice versa for southbound traffic. The auxiliary lane running across the entire length of the bridge will eliminate any additional shoulder area at each end of the bridge.

The striping of the bridge to provide 11'-8" through lanes and an 11' acceleration lane does provide some additional shoulder width to the right of traffic for breakdowns and would be superior to the previous long term typical section which provided 1.7' to the right of traffic.

l agree the cost of widening this structure to provide full width shoulders left and right of traffic is a major undertaking. However, whenever a major bridge is completely renovated we generally attempt to provide the very latest required geometrics for the structure. Therefore, our comments as a result of your public hearing were to provide these wider shoulders if feasible. We certainly recognize the constraints that each of us have to plan our programs within, and in this light we would be in agreement with whatever bridge width you feel appropriate for the circumstances on this project.

Sincerely,

S. Hodge Assistant Chief Engineer

Copy - Mr. Oscar K. Mabry

V-109

TRANSPORTATION - AMERICA'S LIFELINES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 6TH AND WALNUT STREETS PHILADELPHIA. PENNSYLVANIA 19106

DEC 14 1984

Ms. Cynthia D. Simpson, Acting Chief Environmental Management Bureau of Project Planning (Room 310) Maryland State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

Re: I-495, MD 190 to VA 193, Montgomery County, Maryland and Fairfax County, Virginia (A-FHW-0ØØ12-00) I-70, Mr. Phillip Road to MD 144, Frederick County, Maryland (A-FHW-0ØØ11-MD)

Dear Ms. Simpson:

We reviewed the air quality analyses performed for the above referenced projects. Based upon this review, we have no objection to either of the projects from from an air quality standpoint. As such, we have rated the documents 'LO' in EPA's classification system. Please note that these comments relate only to air quality impacts of the facility, and that we will comment on other impacts of the project when the appropriate documents are submitted for our review.

If you have any questions, or if we can be of further assistance, please contact Mr. William J. Hoffman of my staff at 215-597-7828.

Sincerely,

When J. Aff=

John R. Pomponio, Chief Marine Policy Branch

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STATE OF MARYLAND DEPARTMENT OF NATURAL RESOURCES MARYLAND GEOLOGICAL SURVEY THE ROTUNDA 711 W. 40TH STREET, SUITE 440 BALTIMORE, MARYLAND 21211 NENDETHIN MEAVER Coloring Manifant television tokata EMERSITI CLEAVES COLORING BELTS

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2 June 1953 Division of Archeology

Ms. Rita M. Suffness Environmental Management Office Bureau of Project Planning State Highway Administration Room 314 707 N. Calvert Street Baltimore, MD 21202

Re: I-495 (River Rd to G-W Pkwy) Archeological Potential

Dear Rita:

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TORREY C BROWN M.D. SECRETARY

LOUIS N PHIPPS, JR.

DEPUTY SECRETARY

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Enclosed is a copy of our Site Survey map which encompasses the subject project. The project, as you described to me, is restricted to the north (west) side of the Beltway; therefore, my comments are restricted to only that area.

As you can see, June Evans surveyed a transect along Cabin John Creek at the River Road/I-495 interchange and found no sites. Likewise, M/DOT Transect 12-001 failed to locate any sites near the GW Parkway/I-495 interchange. The intervening area appears to have low archeological potential.

The one area that may have archeological remains in the study area is at the GW Parkway/I-495 interchange where two village sites are reported (18M022 and Quad File #3). Both areas appear to have been heavily impacted by road construction, although if they were in fact villages one might expect intact remains and features on the fringes of the impact areas.

Finally, the Franklin & Gregory (1960) survey does not report any additional archeological material in this area, although the intensity of their survey is difficult to ascertain from the report.

If I can be of further assistance on this matter, please do not hesitate to call me.

Sincerely yours, Dennis C. Curry Archeologist

PS - Map showing the Ritchie Parkway alignment that I surveyed and the location of the cemetery I found is also enclosed.

V-111

#### TELEPHONE 301.338.7066



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Maryland Historical Trust

December 18, 1984

Ms. Cynthia D. Simpson Environmental Management State Highway Administration P.O. Box 717 707 N. Calvert Street Baltimore, Maryland 21203-0717

Re: Contract No. M 355-101-372 I-495 from MD Rt. 190 to VA Rt. 193 P.D.M.S. No. 151087

Dear Ms. Simpson:

Thank you for your letter of November 19, 1984 regarding the above-referenced project.

We concur with your opinion that Stoneyhurst (M 29-41) and the Magruder Blacksmith Shop (M 29-40) may be eligible for the National Register. We further concur that the Gibson Grove A.M.E. Zion Church (M 29-39), the Lynch House (M 35-18) and the Potter House (M 29-35) appear to be inventory-quality sites and not eligible for the Register.

We believe that the proposed improvements as shown on the plans will have no effect on Stoneyhurst or the Magruder Blacksmith Shop.

Sincerely,

Mitto

J. Rodney Little Director State Historic Preservation Officer

JRL/KEK/bjs

cc: Mrs. George Kephart Ms. Roberta Hahn Ms. Rita Suffness

Mr. Mark Walston

Shaw House, 21 State Circle, Annapolis, Maryland 21401 (301)260 2212 269-2438 Department of Economic and Community Development

**V-112** 



COMMONWEALTH OF VIRGINIA

. . . .

COUNTY OF FAIRFAX 4100 CHAIN BRIDGE ROAD FAIRFAX, VIRGINIA 22030



December 18, 1984

Ms. Cynthia D. Simpson, Acting Chief Environmental Management Maryland Department of Transportation State Highway Administration 707 North Calvert Street Baltimore, Maryland 21203

Re: Contract No. M 355-101-372; I-495 north of Maryland Route 190 to Virginia Route 193; PDMS No. 151087.

Dear Ms. Simpson:

Mr. Dennis Curry and I conducted a second reconnaissance of sites 44FX374 and 44FX389 which are adjacent to I-495 on the Virginia side of the Potomac River at Cabin John (report attached). We found that both sites contained a moderate amount of artifacts, some of which were of high information potential, and a high potential for horizontal integrity (light disturbance). As a result, I have recommended that both sites be fenced off and neither site be disturbed without further controlled investigation (Phase II assessment).

Please let me know if you have any questions or need further assistance.

Sincerely,

nike Johnson

MFJ:sg Encl. Mike Johnson, Archaeologist Heritage Resources Branch Office of Comprehensive Planning

cc: Dennis C. Curry, Archaeologist Maryland Geological Survey

> Dr. Stephen R. Potter, Archaeologist National Park Service

Bruce Larson, Archaeologist Virginia Historic Landmarks Commission

State of

aryland

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## OFFICE OF ENVIRONMENTAL PROGRAMS DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 WEST PRESTON STREET . BALTIMORE, MARYLAND 21201 . AREA CODE 301 . 383-3245

TTY FOR DEAF: Balto. Area 383-7555 D.C. Metro 565-0451

Adele Wilzack, R.N., M.S., Secretary

William M. Eichbaum, Assistant Secretary

December 14, 1984

Ms. Cynthia D. Simpson, Acting Chief Environmental Management Bureau of Project Planning (Room 310) State Highway Administration 707 North Calvert Street Baltimore, Maryland 21202

> RE: P.D.M.S. No. 151087 Contract No. M 355-101-372 Interstate Route 495 North of Maryland 190 to Virginia 193

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.

E⊆ DI EY IN CEJ NE:

Sincerely,

v-114

Edward Carts

Edward L. Carter, Chief Division of Air Quality Planning and Data Systems Air Management Administration

ELC:CW

# VI. APPENDIX

|            |                                | TRAFFIC NOISE BARRIE<br>Comparison of costs<br>November, 1986 | RS                         |                         |
|------------|--------------------------------|---------------------------------------------------------------|----------------------------|-------------------------|
| STATE      | COST/S.F.                      | PROGRA<br>TYPE I                                              | M TYPE<br>TYPE II          | COST PER RESIDENCE      |
| CALIFORNIA | \$12-\$15                      | YES                                                           | YES                        | \$30,000/RESIDENCE      |
| FLORIDA    | \$12-\$20<br>Pre-cast<br>metal | YES                                                           | NO                         | \$25,000/RESIDENCE      |
| IOWA       | \$9-\$13                       | YES                                                           | YES                        | \$15-\$18,000/RESIDENCE |
| MARYLAND   | \$27*                          | YES                                                           | YES                        | \$40,000/RESIDENCE      |
| NEW JERSEY | \$15                           | YES                                                           | YES                        | \$37,000/RESIDENCE      |
| NEW YORK   |                                | YES                                                           | NO                         | 50% AVG. HOME VALUE     |
| OREGON     | \$12                           | YES                                                           | NO, LOCAL<br>Share funding | \$3,000/RESIDENCE       |
| TENNESSEE  | \$13                           | YES                                                           | NO                         | \$15-\$20,000/RESIDENCE |
| VIRGINIA   | \$14-\$16                      | YES                                                           | NO                         | \$25,000/RESIDENCE      |
| WASHINGTON | \$12.5+/-                      | YES                                                           | YES                        | \$5-8,000/RESIDENCE     |

ences and includes the costs of panels, footings, drainage, landscaping, and overhead.

August 1986 Data