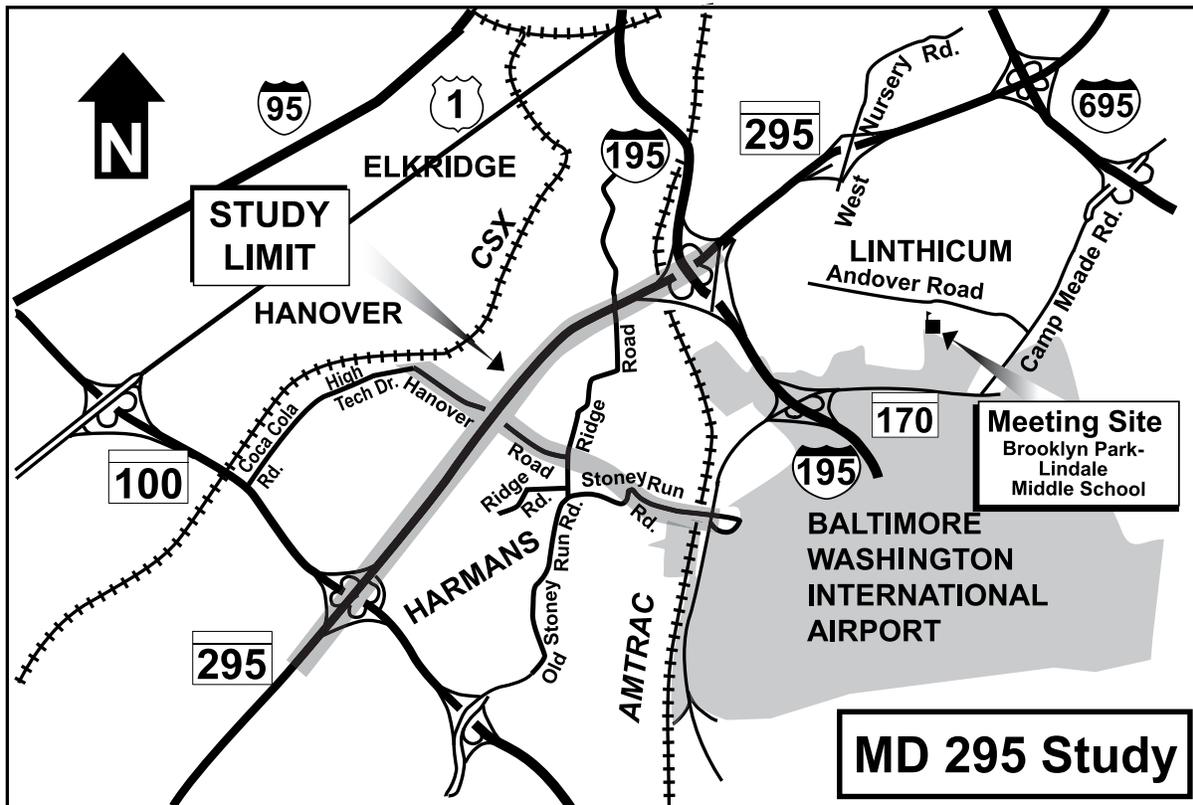


# MD 295 Project Planning Study

## ALTERNATES Public Workshop



**When:**

**Thursday  
December 15, 2005  
Displays Available  
4:30 P.M. - 8:30 P.M.**

**Where:**

**Lindale Middle School  
(Cafeteria)  
415 Andover Road  
Linthicum, MD 21090**

**Snow Date:**

**Wednesday  
January 11, 2006  
(snow/inclement weather)**

**Project No. AA372A11**



**Maryland Department of Transportation  
STATE HIGHWAY ADMINISTRATION**



**FEDERAL HIGHWAY ADMINISTRATION  
US DEPARTMENT OF TRANSPORTATION**

## ***INTRODUCTION***

The Maryland State Highway Administration (SHA) and the Federal Highway Administration (FHWA) are conducting a Project Planning study on MD 295 (the Baltimore-Washington Parkway), from MD 100 to I-195. Also included are improvements at MD 295 and Hanover Road, with local improvements along Hanover Road from High Tech Drive in Howard County to MD 170 (Aviation Boulevard), in Anne Arundel County.

## ***PURPOSE OF THE STUDY***

The purpose of this project is to improve the existing capacity, safety and operations on MD 295 from MD 100 to I-195 and to enhance Hanover Road as a secondary access to Baltimore-Washington International Thurgood Marshall Airport (BWI) and the BWI business services. These improvements would also provide sufficient capacity to serve existing development and planned economic development near BWI and improve connectivity between the Baltimore and Washington Metropolitan regions as it relates to BWI. Currently, I-195 serves as the primary access to BWI and BWI business services.

## ***PURPOSE OF THE WORKSHOP***

The purpose of the Alternates Public Workshop is to familiarize interested citizens with the MD 295 Project Planning Study. Each attendee can conduct a self-paced review of important project information. You will also have the opportunity to visit project information displays, which include maps depicting alternatives currently under consideration, traffic data, and environmental impacts. Project team members will be available to receive comments and answer your questions. Please note that there will be no formal presentation given by SHA.

The Project Team will use the comments to help determine which alternatives will be carried to the next phase of this study.

## ***HOW TO PROVIDE COMMENTS ON THE PROJECT***

The public is encouraged to participate in the workshop to ensure citizen input during the project planning process. These studies are preliminary and appropriate changes can be made after comments are received and evaluated. You may choose to provide verbal or written comments to SHA representatives at the workshop or submit your comments by filling out the pre-addressed, postage-paid comment form included in this brochure. Additional copies of the questionnaire will be available at the workshop.

## ***PROJECT MAILING LIST***

If you wish to have your name placed on the project mailing list, you may do so by completing the enclosed mailer or by giving your information to the receptionist at the workshop. If you have submitted your name and address previously by postcard or other means, or you have already received this brochure in the mail, then you have already been included in the project mailing list and do not need to resubmit.

## ***PROGRAM STATUS***

The MD 295 Project Planning study is included in the Development and Evaluation Program of the fiscal year 2005-2010 Consolidated Transportation Program (CTP) for Project Planning funding only.

If a build alternative is selected and the project's location and design are approved, the project may become eligible for future funding for Final Design, Right-of-Way Acquisition and Construction.

## ***PROJECT NEED***

The area around BWI is one of the fastest growing areas of Anne Arundel County. Numerous developments, such as Arundel Mills Mall, and the BWI Business District, home to more than 60,000 employees, have contributed to increased traffic in the area. The BWI Business District is expected to continue to grow dramatically. Employment is expected to increase with recent and future development. According to the Anne Arundel

Economic Development Corporation, since 2003 nearly 500,000 square feet of office space is under construction, with another 1.3 million square feet proposed to be built over the next two years. It is expected that this growth will continue into the future with a number of major new developments. Current projections call for a 20 percent increase in employment in the immediate vicinity of BWI.

The BWI Airport plays a major role in generating economic growth, not only in the immediate area, but in the entire Baltimore – Washington Metropolitan area. In 2004, the airport accommodated 20.3 million passengers, or an average of 57,000 passengers per day, with approximately 85 percent of these passengers originating or terminating their trips at BWI. Passenger volumes at BWI are expected to continue growing to nearly 35 million passengers by the year 2020. Without continued expansion, the future traffic demand may exceed the terminal area and access roadway capacities during peak travel times. Without improvements, by 2020 many of these regional facilities will operate at unacceptable levels of delay and congestion.

Anne Arundel County has rezoned most of the area surrounding BWI from residential and agricultural to commercial or industrial uses due to the airport-related noise impacts. The existing area road network is not equipped to handle the ultimate effects of these changes and is not compatible with the proposed and new zoning.

Traffic volumes along the MD 295 corridor are predicted to increase by over 30 percent by the design year 2030. The current lane configuration will not be able to support the growth. Traffic volumes at the eastern end of Hanover Road at Stoney Run Road are forecasted to increase to over 160 percent by 2030 due to airport and airport facility growth. This project is needed to provide sufficient level of access and mobility in this heavily utilized area.

## **TRAFFIC OPERATIONS AND CONGESTION**

The year 2004 traffic volumes were determined based on existing intersection turning movements and roadway segment volume counts along MD 295 and Hanover Road in the study area. Projected 2030 “No-Build” volumes assume no improvements to MD 295 and Hanover Road. MD 295 currently has a 2004 Average Daily Traffic (ADT) volume of 96,000 vehicles per day (VPD) south of the

MD 100 interchange, 84,850 VPD between MD 100 and I-195, and 90,250 VPD north of the I-195 interchange. Under the 2030 “No-Build” conditions, these volumes are expected to increase to 122,800 VPD, 115,400 VPD, and 118,700 VPD, respectively.

The 2004 ADT along Hanover Road ranged from 1,400 VPD on the west end of the project to 12,250 VPD on the east side of the project along Stoney Run Road. Under the 2030 “No-Build” conditions, these volumes are expected to increase to 5,700 VPD and 32,600 VPD respectively. There are heavier traffic volumes on Stoney Run Road because it serves as the main entrance to the Consolidated Rental Car Facility, the new Maryland Department of Transportation (MDOT) headquarters and the BWI employee parking lot.

Level of Service (LOS) analyses for 2004 and 2030 were performed. LOS is a measure of the congestion experienced by drivers, and ranges from LOS A (free flow with little or no congestion) to LOS F (failure with stop and go conditions). LOS is normally computed for the peak periods of a typical day, with LOS D (approaching unstable flow) or better generally considered acceptable for highways in urban and suburban areas. At LOS E, volumes are near the capacity of the highway. LOS F represents conditions in which there are operational breakdowns with stop and go traffic and extremely long delays at signalized intersections.

Currently, mainline MD 295 operates between LOS C to LOS E during peak hours. By 2030, with the increase in traffic volumes, most segments along MD 295 will operate at LOS F if no improvements are made. Under 2004 existing conditions, all intersections along Hanover Road, Old Stoney Run Road and Stoney Run Road operate at LOS A. Under 2030 “No Build Conditions”, all intersections will continue to operate acceptably with the exception of the Stoney Run Road at New Ridge Road intersection, which will operate at LOS F.

## **OTHER TRANSPORTATION PROJECTS**

There is one other transportation project located in the study area listed in the Construction Program of the 2005-2010 CTP. The plan for this project is to widen MD 295 from just north of I-195 to I-695 from four to six lanes. The southern portion of this project will be located

adjacent to the Project Planning study area and both projects are being coordinated. This project is funded for Final Design, Right-of-Way Acquisition and Construction.

## **STAKEHOLDERS GROUP**

A Stakeholders Group, comprised of local residents, community leaders and business representatives has met with the Project Team to assist and provide feedback in the development of the proposed improvements. Comments and suggestions received from the Stakeholders members have been evaluated and incorporated into the alternatives, where possible.

## **CONTEXT SENSITIVE SOLUTIONS**

As part of this project, the Project Team will incorporate ideas from public comments received as a result of tonight's meeting. Coordination will continue with Howard County and Anne Arundel County and the project Stakeholders Group to develop alternatives that incorporate "Context Sensitive Solutions" (CSS) concepts, wherever possible, to preserve and enhance the community's character while improving transportation in the study area.

The MD 295 portion of the project area is a designated scenic byway. Coordination is ongoing with the Maryland Scenic Byways Program to determine potential effects of the proposed improvements on the scenic byway. CSS concepts address the following:

- Pedestrian circulation and safety
- Local traffic circulation in and out of the neighborhoods and businesses
- Disturbance to traffic circulation during construction
- Access to mass transit
- Right-of-way impacts
- Neighborhood traffic cut-through challenges
- Effects on police, fire, and emergency rescue response time
- Aesthetics/landscape/streetscape opportunities
- Other specific community issues

Your comments will help assure that the proposed alternatives developed to improve the study area reflect the local character and the aesthetic desires of the community. We encourage you to comment on CSS issues using the comment card at the back of this brochure.

## **EXISTING CONDITIONS**

The existing roadway on MD 295 includes a four-lane divided highway with two twelve-foot lanes in each direction, four-foot inside shoulders, ten-foot outside shoulders and a variable (90'-110') grass/wooded median. Hanover Road is a two-lane undivided roadway with one ten-foot lane in each direction and no shoulders. (Refer to Figures 1 and 2)

## **ALTERNATIVES CURRENTLY UNDER CONSIDERATION**

### **ALTERNATIVE 1 – No-Build**

No major improvements are proposed under Alternative 1, the No Build Alternative. Minor short term improvements would occur as part of normal maintenance and safety projects. This alternative does not address the Purpose and Need for the project. However, it serves as a baseline for judging the impacts and benefits associated with the other alternatives.

### **BUILD ALTERNATIVES – Common Features**

Each of the build alternatives would widen MD 295. A third twelve-foot lane and a ten-foot shoulder would be added from south of the MD 100 interchange to just north of the I-195 interchange. All the widening would occur in the median of MD 295. (Refer to Figures 1, 3, and 4)

Each of the build alternatives would also provide a new interchange at MD 295 and Hanover Road and would upgrade Hanover Road from a two-lane undivided roadway to a four-lane divided roadway from High Tech Drive to Old Stoney Run Road. Hanover Road, which currently ends at Ridge Road, would be extended to Old Stoney Run Road. Hanover Road would include sixteen-foot outside lanes to accommodate on-road bicyclists, as well as five-foot sidewalks and a twenty-foot median.

There are two options for the proposed Hanover Road.

The only difference between the two is the location of the Hanover Road and Ridge Road intersection. The North Option would follow the existing roadway alignment and keep the intersection at its current location while the South Option proposes to minimize the number of curves and relocates the Hanover Road and Ridge Road intersection 300 feet to the south of the existing intersection. (Refer to Figure 2)

### **ALTERNATIVE 2**

This alternative proposes a partial cloverleaf interchange at MD 295 and Hanover Road. The interchange uses two loop ramps to accommodate access onto MD 295. Ramps to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. (Refer to Figure 5)

### **ALTERNATIVE 3**

Alternative 3 proposes a compressed diamond interchange at MD 295 and Hanover Road. Ramps to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. (Refer to Figure 6)

### **ALTERNATIVE 4**

This alternative proposes a Single Point Urban Interchange (SPUI). While similar to traditional diamond interchanges, SPUI ramps curve inward and meet at a single traffic signal below the bridge, allowing opposing left turning movements to occur simultaneously. (Refer to Figure 7)

### **ALTERNATIVE 5**

This alternative relocates Hanover Road to the north in order to keep a continuous traffic movement along Hanover Road during construction. A compressed diamond interchange is proposed at MD 295 and Relocated Hanover Road to the north. Ramps to and from MD 295 would meet Hanover Road at proposed signalized intersections on either side of MD 295. (Refer to Figure 8)

### **ALTERNATIVE 6**

Alternative 6 avoids impacts on the northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized intersection on Hanover Road. (Refer to Figure 9)

### **ALTERNATIVE 7**

This alternative relocates Hanover Road to the south to eliminate curves on Hanover Road and to keep a continuous traffic movement along Hanover Road during construction. Alternative 7 avoids impacts to the

northwest quadrant of the interchange by providing a loop ramp from southbound MD 295 to Hanover Road. The ramps to the east of MD 295 would meet at a proposed signalized intersection on Hanover Road. (Refer to Figure 10)

## **ENVIRONMENTAL RESOURCE SUMMARY**

An environmental inventory was conducted to identify the socioeconomic, cultural and natural environmental resources within the study area. A preliminary assessment of impacts, which could result from the alternatives under consideration, is included in the Environmental Summary of Impacts and Costs (Table 1). A more detailed evaluation of environmental impacts will be developed as part of the detailed study stage, which is the next step of the Project Planning process.

### **SOCIOECONOMIC RESOURCES**

The existing land use in the study area is dominated by commercial and industrial land uses. There are ten commercial business parks located within the study area specifically along US 1 (Baltimore-Washington Boulevard), MD 100, MD 295, MD 176 (Dorsey Road), New Ridge Road, and MD 170. Industrial land use is concentrated on US 1, along Hanover Road and Amberton Drive. Residential land use is concentrated in the western and southeastern portion of the study area, although additional residential communities are scattered throughout the study area. The entire study area for the MD 295 Planning Study is located within a Priority Funding Area (PFA) as designated by the Maryland Department of Planning.

The study area is primarily served by two modes of public transportation: rail and bus. The Maryland Transit Administration (MTA) bus service and the Commuter Bus Route are available throughout the day and evening, seven days a week. The MTA bus route 17 operates within the study area. Maryland Area Regional Commuter (MARC) transit railway stations and transit railway lines in the study area include: Dorsey MARC, located in the southern portion of the study area; BWI MARC, located in the eastern portion of the study area; and the Camden Line MARC in the northwest portion of the study area. In addition, Amtrak also operates out of BWI Airport. Depending upon the alternative chosen, between 34 to 56 acres of additional right-of-way will be required. In addition, both residential and commercial/industrial

property displacements are anticipated. The proposed project is consistent with the Anne Arundel County BWI/Linthicum Small Area Plan.

In compliance with Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in the Minority and Low-Income Populations," SHA is taking steps to identify and avoid disproportionately high and adverse effects on minority and low-income communities throughout the study area. To date, no low-income populations have been identified along the corridor. Census data indicates that a higher than average percentage of minorities reside within the study area. SHA will continue to address Environmental Justice requirements through the mailing list notifications, public meetings and presentations about the project to interested parties.

There are two publicly-owned public parks or public recreational facilities located within the study area. The Patapsco Valley State Park covers a large portion of the central study area. The BWI Hiker/Biker Trail is located along the perimeter of BWI Airport. Proposed improvements to the study area may impact portions of the Patapsco Valley State Park in the vicinity of Hanover Road. No impacts are anticipated for the BWI Hiker/Biker Trail.

Noise and air quality analyses will be conducted once alternatives retained for detailed study have been identified.

## **CULTURAL RESOURCES**

A field investigation of the project area was conducted to determine the presence of potentially significant historic standing structures. None of the resources surveyed are recommended as eligible for the National Register of Historic Places.

In consultation with the Maryland Historical Trust (MHT), SHA has assessed the potential for archeological resources along the corridor. While there is low archeological potential for the MD 295 portion of the project area, high archeological potential exists for undisturbed areas in the vicinity of Hanover Road. Further archeological investigations will be initiated once alternatives are retained for detailed study. SHA will continue coordination with the MHT to determine the effect of the various alternatives on significant cultural resources.

## **NATURAL ENVIRONMENTAL RESOURCES**

The study area is located within the Deep Run and Stony Run watersheds, which are part of the larger Patapsco River watershed. Deep Run, Stony Run and their tributaries flow north through the study area and enter the Patapsco River just outside of the study area. These streams are considered Use I Waters (water contact recreation and protection of aquatic life) and have a work prohibition period of March 1 to June 15. There are between six and eight stream crossings depending on the alternative chosen. According to FEMA Flood Insurance Rate Maps, portions of this study area are within the Stony Run and Deep Run 100-year floodplains. Additional floodplain analysis will be required in these areas where the floodplains are present.

There are twenty- eight potential wetland systems identified in the study area including open water, emergent, scrub/shrub and forested communities. Depending on the alternative chosen, from 2.3 to 5.2 acres of wetland impact may occur. A wetland in the vicinity of Stony Run is designated by state regulations as a Nontidal Wetland of Special State Concern and is regulated by the Maryland Department of the Environment (MDE). Nontidal wetlands are valuable areas for fish and wildlife habitat, are vital to the maintenance of water quality, and provide flood control benefits.

Permits would be required from the U.S. Army Corps of Engineers and the MDE for aquatic resource impacts. Stormwater management and sediment and erosion control plans to minimize impacts to water quality would be prepared and implemented in accordance with the MDE regulations.

Coordination with the US Fish and Wildlife Service (USFWS) indicates that the federally threatened swamp pink (*Helonias bullata*), has been documented to occur in the vicinity of the project area. Further coordination with USFWS will occur once alternatives are selected for detailed study to identify and determine the potential for impacts to this species.

Coordination completed with the Maryland Department of Natural Resources (DNR) indicated that fish species including white perch, yellow perch and herring have been documented spawning near the mouths of Deep Run and Stony Run. These streams also support many resident fish species. DNR's Wildlife and Heritage Service has determined that threatened plants such as the bog fern (*Thelypteris simulata*), rare plants such as butternut

(*Juglans cinerea*) and giant cane (*Arundinaria gigantea*), and endangered plants such as clammyweed (*Polanisia dodecandra*) could potentially occur within the project area. DNR has also noted that forested areas within the study corridor may provide habitat for Forest Interior Dwelling bird species (FIDS) which have been declining in Maryland and throughout the eastern United States. Most forest impacts (between 39 to 48 acres) will occur along the existing Hanover Road alignment and in the area proposed for completing the new Hanover Road alignment.

## **REMAINING STEPS IN THE PROJECT PLANNING PROCESS**

The following steps are required to complete the Project Planning Process:

- Evaluate and address public and agency comments resulting from studies to date and from the Alternates Public Workshop
- Identify alternatives for detailed study and complete detailed engineering/environmental studies (Spring 2006 )
- Complete Draft Environmental Document/Hold Location-Design Public Hearing ( Winter 2007)
- Address Public Hearing Comments
- Coordinate with federal and state environmental resource agencies throughout the process
- Identify a Preferred Alternative (Spring 2007 )
- Prepare Final Environmental Document
- Obtain Location/Design Approval ( Summer 2007)

## **NON-DISCRIMINATION IN FEDERALLY ASSISTED AND STATE-AID PROGRAMS**

Should you have any questions concerning non-discrimination in federally assisted and State-Aid programs, please contact:

Ms. Jennifer Jenkins, Director  
Office of Equal Opportunity  
State Highway Administration  
707 North Calvert Street  
Baltimore, MD 21202  
(410)-545-0315

## **RIGHT-OF-WAY AND RELOCATION ASSISTANCE**

The proposed project may require additional right-of-way. Residential and commercial relocations may be required. For information regarding right-of-way and relocation assistance, please contact:

Ms. Susan K. Bauer  
District 5, Office of Real Estate  
Maryland State Highway Administration  
138 Defense Highway  
Annapolis, MD 21401  
Telephone: (410)-841-1000

Mr. Patrick Minnick  
District 7, Office of Real Estate  
Maryland State Highway Administration  
5111 Buckeystown Pike  
Frederick, MD 21704  
Telephone: (301) 624-8100

## **MEDIA USED FOR MEETING NOTIFICATION**

An advertisement appeared in the following newspapers to announce this Alternates Public Workshop:

The Maryland Gazette  
The Capital  
The Howard County Times  
The Sunpapers

## **YOUR OPINION MATTERS**

These workshops are intended to provide an opportunity for the public to discuss with the Project Team its thoughts and concerns about the project and to provide written comments to us. The Project Team will carefully review and consider the concerns and preferences expressed by the public during these public meetings. To assist you in providing comments, we have provided a pre-paid postage mailer as well as team member addresses and telephone numbers.

## **PROJECT PLANNING TEAM**

If you should have any questions following tonight's Alternates Public Workshop, please feel free to contact one of the Team Members listed below:

Mr. Raja Veeramachaneni, Director  
Office of Planning and Preliminary Engineering  
Maryland State Highway Administration  
707 North Calvert Street  
Mailstop C-411  
Baltimore, MD 21202  
Telephone: (410) 545-0412  
e-mail: rveeramachaneni@sha.state.md.us

Ms. Carmeletta T. Harris, Project Manager  
Project Planning Division  
Maryland State Highway Administration  
707 North Calvert Street  
Mailstop C-301  
Baltimore, MD 21202  
Telephone: (410) 545-8522 or  
Toll Free within Maryland  
1-800-548-5026  
e-mail: charris@sha.state.md.us

Mr. Greg Welker, District Engineer  
District 5 (Anne Arundel County)  
Maryland State Highway Administration  
138 Defense Highway  
Annapolis, MD 21401  
Telephone: (410)-841-1000  
e-mail: gwelker@sha.state.md.us

Mr. David J. Coyne, District Engineer  
District 7 (Howard County)  
Maryland State Highway Administration  
5111 Buckeystown Pike  
Frederick, MD 21704  
Telephone: (301)-624-8100  
e-mail: dcoyne@sha.state.md.us



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OFFICE OF PLANNING AND

PRELIMINARY ENGINEERING

**ATTN: Ms. Carmeletta Harris**

**Project Manager**

MAIL STOP C-301

BOX 717

BALTIMORE, MD 21203-0717



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To help us improve our public involvement program, we would appreciate your thoughts on this **project brochure**.

*Please circle the most appropriate number.*

Poor

Excellent

Overall, was the brochure useful and informative?

1

2

3

4

Was each part of the brochure easy to understand?

Purpose of the Study

1

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3

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Purpose of the Meeting

1

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Public Comments

1

2

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Project Status

1

2

3

4

Project Need

1

2

3

4

Project History

1

2

3

4

Description of Alternatives

1

2

3

4

Maps of Alternatives

1

2

3

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Tables and Charts

1

2

3

4

Environmental Summary

1

2

3

4

Remaining Steps in Planning Process

1

2

3

4

**Which part of the brochure was most valuable?**

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**Which part of the brochure was least valuable?**

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**How can we improve the brochure?**

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Thank you for answering this questionnaire. Please return it to us by mail or bring it with you to the meeting.

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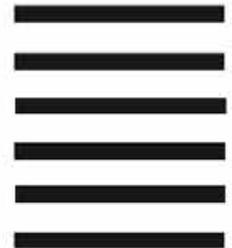
**ATTN: Public Involvement Section**

**Project Planning Division**

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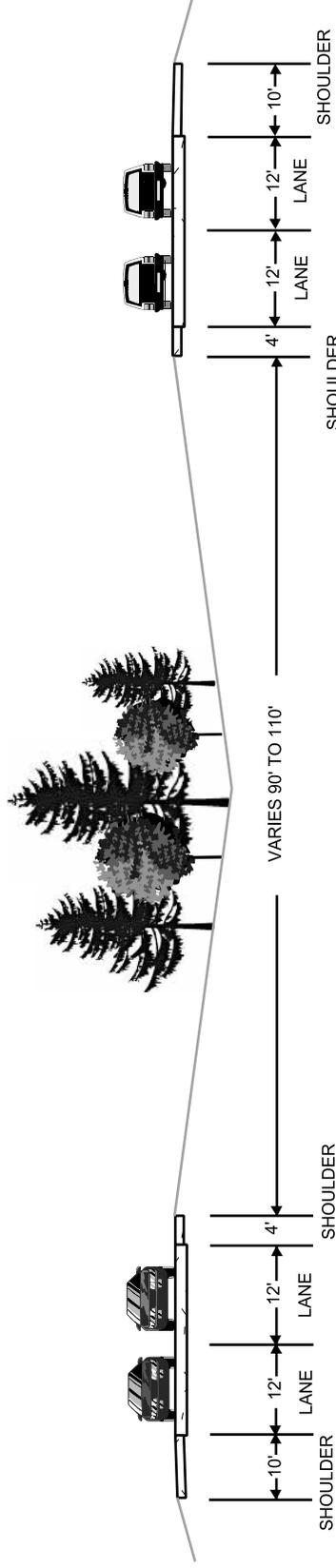
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**MD 295 Project Planning Study**  
**Summary of Potential Environmental Impacts and Costs**

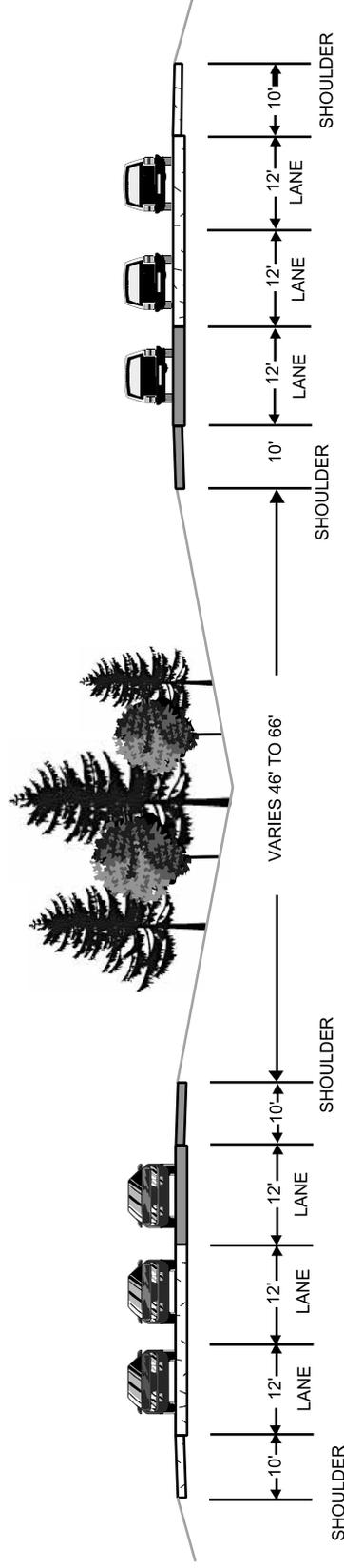
Category	Alternatives						
	1 No-Build	2	3	4	5	6	7
<b>Number of Properties Affected / (Number of Potential Displacements)</b>							
Residential	0	11 / (5)	11 / (2)	11 / (2)	11 / (3)	12 / (3)	8 / (3)
Business / Industrial	0	38 / (0)	37 / (0)	37 / (0)	35 / (0)	37 / (0)	28 / (0)
<b>Total</b>	<b>0</b>	<b>49 / (5)</b>	<b>48 / (2)</b>	<b>48 / (2)</b>	<b>46 / (3)</b>	<b>49 / (3)</b>	<b>36 / (3)</b>
<b>Right-of-Way Required (acres)</b>							
Residential	0	5	2	2	2	4	4
Business / Industrial	0	47	32	32	33	53	47
<b>Total</b>	<b>0</b>	<b>52</b>	<b>34</b>	<b>34</b>	<b>35</b>	<b>57</b>	<b>51</b>
<b>Natural Environment</b>							
100-year Floodplain Impacts (acres)	0	5	3	3	3	3	4
Wetlands Impacted (acres)	0	5	4	4	4	3	2
Stream Crossings (each)	0	7	6	6	8	8	8
Stream Impacts (linear feet)	0	894	1070	1070	1141	1188	1183
Forest Impacts (acres)	0	48	39	40	42	43	48
Park impacts (acres)	0	7	4	4	4	4	3
<b>Preliminary Cost Estimate (millions)</b>	<b>\$0</b>	<b>\$172 - \$182</b>	<b>\$155 - \$165</b>	<b>\$165 - \$175</b>	<b>\$155 - \$165</b>	<b>\$177 - \$187</b>	<b>\$174 - \$184</b>

\*\* Due to a printing error this table was inadvertently omitted from the brochure

**Table 1**



### EXISTING CONDITIONS



### PROPOSED CONDITIONS

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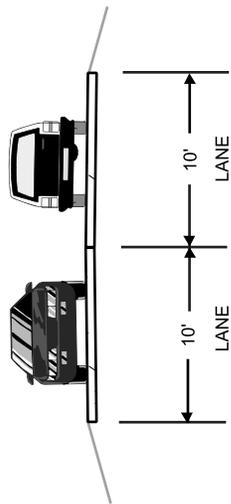


## MD 295 PROJECT PLANNING STUDY MD 295 TYPICAL SECTION

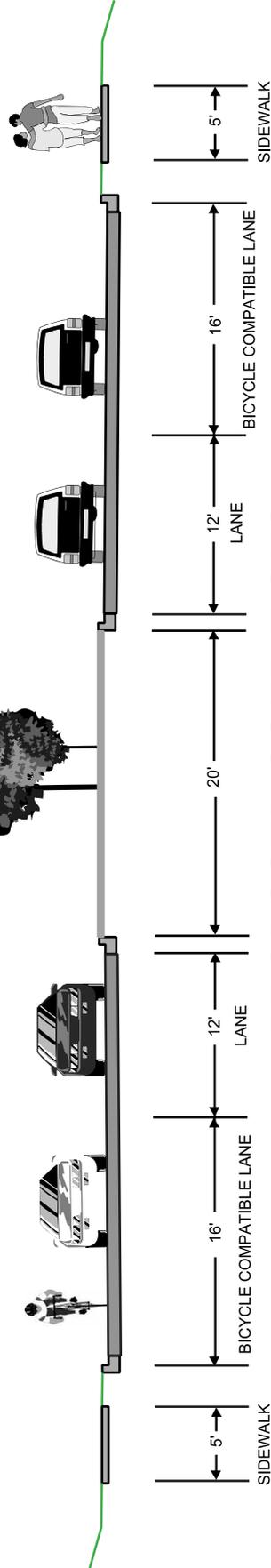
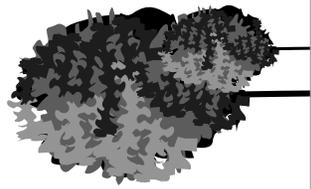
#### LEGEND

-  EXISTING ROADWAY
-  PROPOSED ROADWAY

FIGURE 1



### EXISTING CONDITIONS



### PROPOSED CONDITIONS

NOT TO SCALE

#### LEGEND



EXISTING ROADWAY

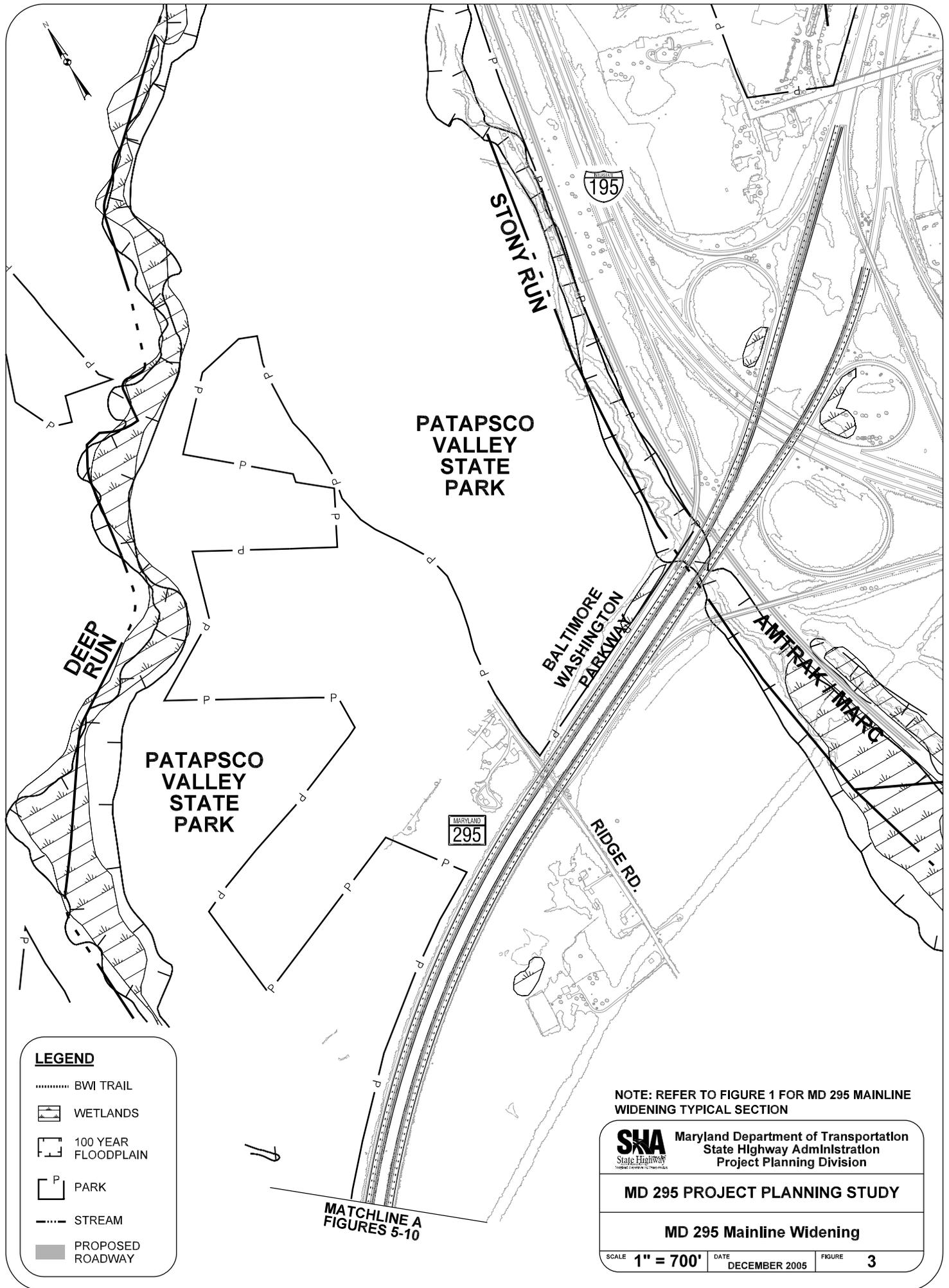


PROPOSED ROADWAY

## MD 295 PROJECT PLANNING STUDY HANOVER ROAD TYPICAL SECTION



FIGURE 2



**LEGEND**

- ..... BWI TRAIL
- WETLANDS
- 100 YEAR FLOODPLAIN
- PARK
- STREAM
- PROPOSED ROADWAY

NOTE: REFER TO FIGURE 1 FOR MD 295 MAINLINE WIDENING TYPICAL SECTION

**SHA** Maryland Department of Transportation  
 State Highway Administration  
 Project Planning Division

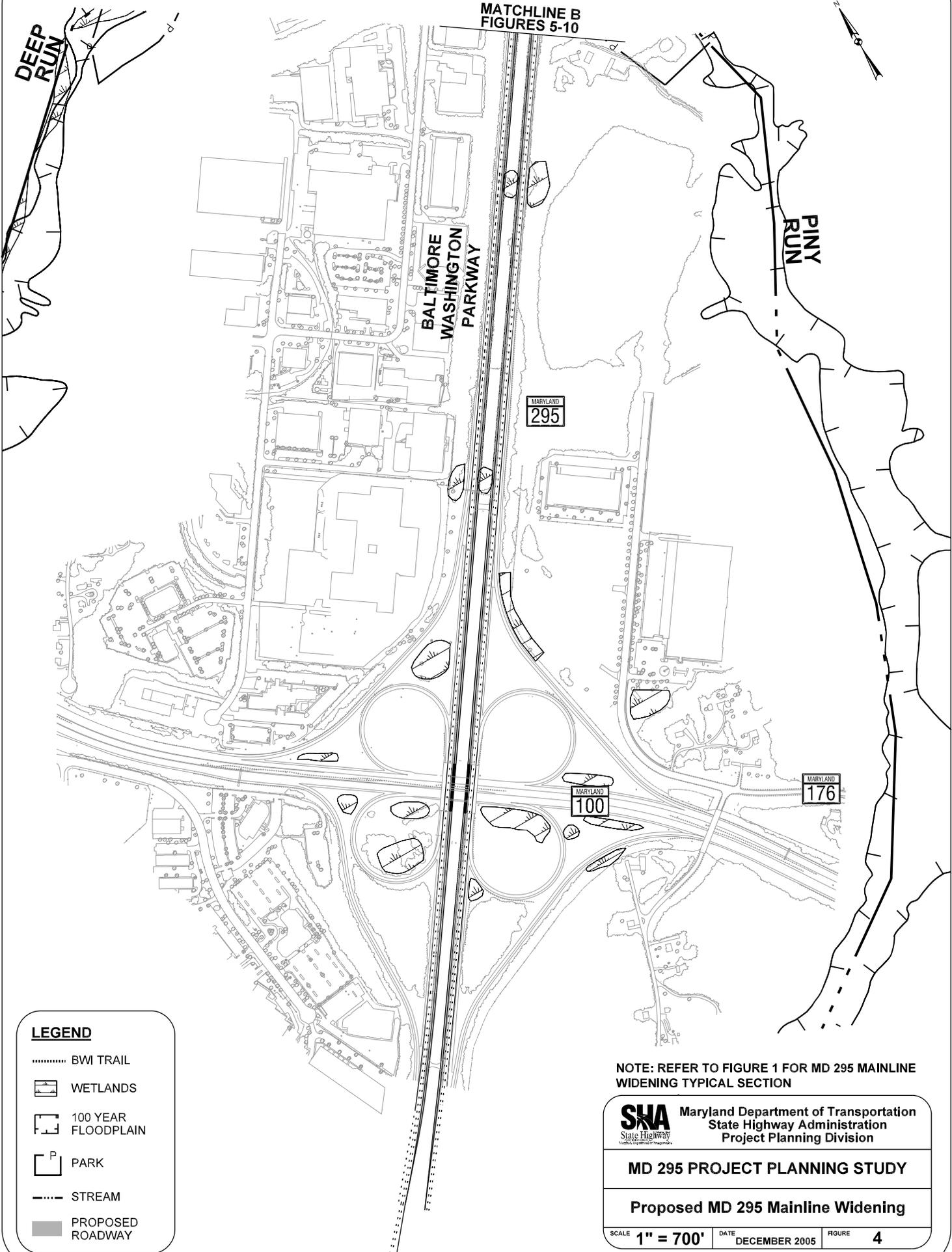
**MD 295 PROJECT PLANNING STUDY**

**MD 295 Mainline Widening**

SCALE	1" = 700'	DATE	DECEMBER 2005	FIGURE	3
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MATCHLINE A  
 FIGURES 5-10





MATCHLINE B  
FIGURES 5-10

DEEP  
RUN

BALTIMORE  
WASHINGTON  
PARKWAY

PINY  
RUN

MARYLAND  
295

MARYLAND  
100

MARYLAND  
176

**LEGEND**

- ..... BWI TRAIL
- [Symbol] WETLANDS
- [Symbol] 100 YEAR FLOODPLAIN
- [Symbol] PARK
- STREAM
- [Symbol] PROPOSED ROADWAY

NOTE: REFER TO FIGURE 1 FOR MD 295 MAINLINE WIDENING TYPICAL SECTION

**SHA** Maryland Department of Transportation  
State Highway Administration  
Project Planning Division

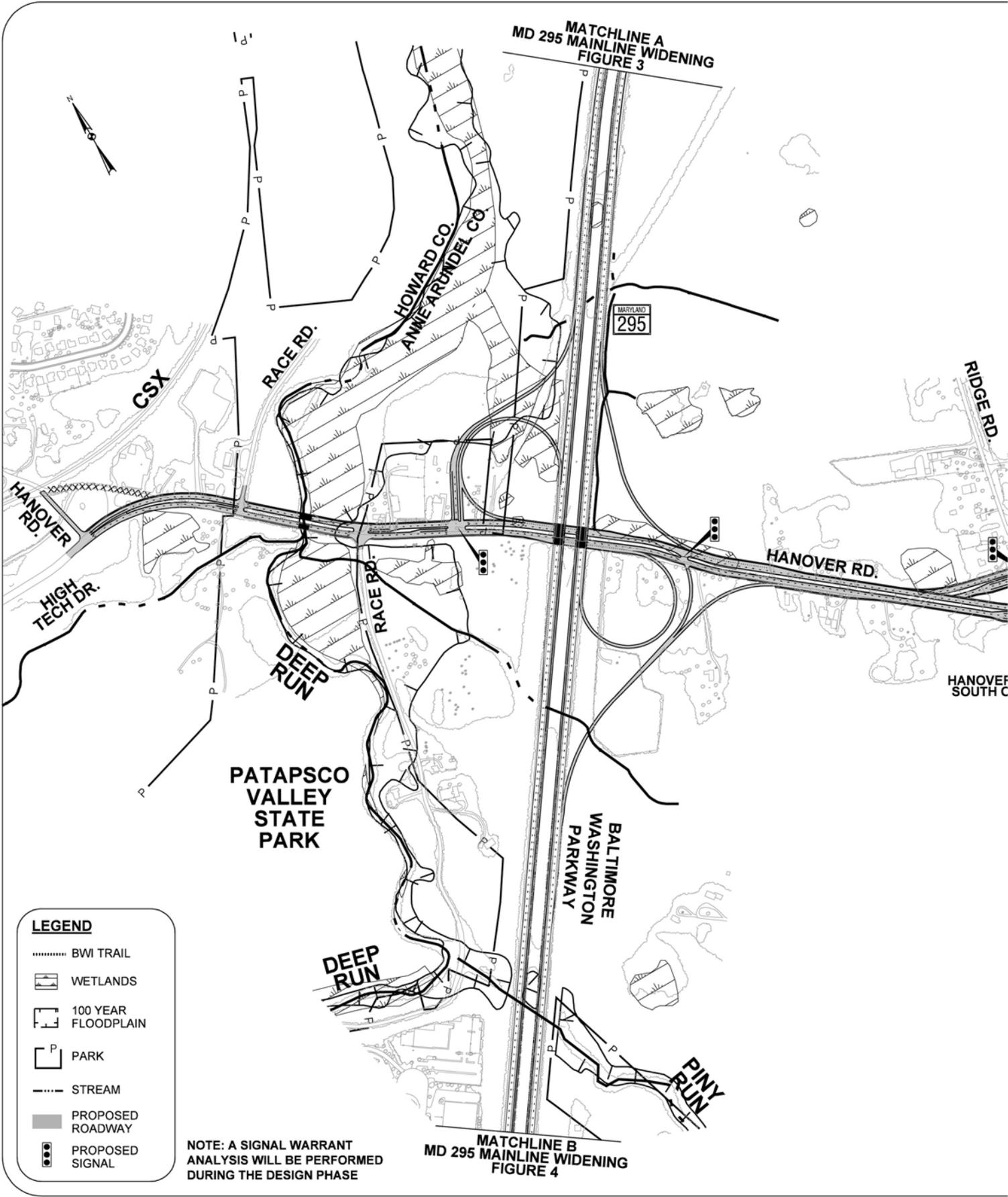
**MD 295 PROJECT PLANNING STUDY**

**Proposed MD 295 Mainline Widening**

SCALE **1" = 700'** DATE DECEMBER 2005 FIGURE **4**

MATCHLINE A  
MD 295 MAINLINE WIDENING  
FIGURE 3

MATCHLINE B  
MD 295 MAINLINE WIDENING  
FIGURE 4



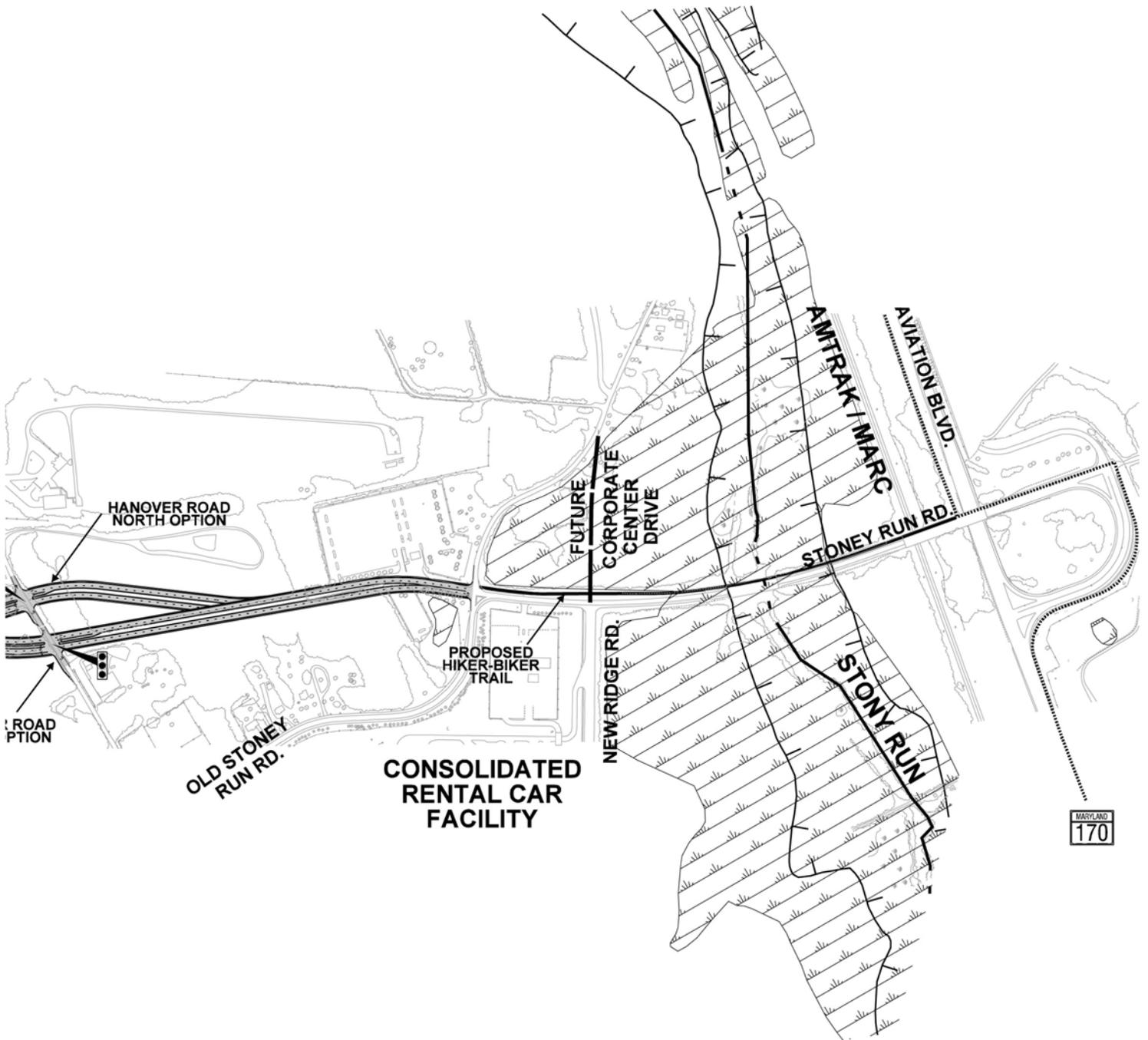
MARYLAND  
295

HANOVER SOUTH C

**LEGEND**

- ..... BWI TRAIL
- WETLANDS
- 100 YEAR FLOODPLAIN
- PARK
- STREAM
- PROPOSED ROADWAY
- PROPOSED SIGNAL

NOTE: A SIGNAL WARRANT ANALYSIS WILL BE PERFORMED DURING THE DESIGN PHASE



NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295 MAINLINE WIDENING AND HANOVER ROAD TYPICAL SECTION

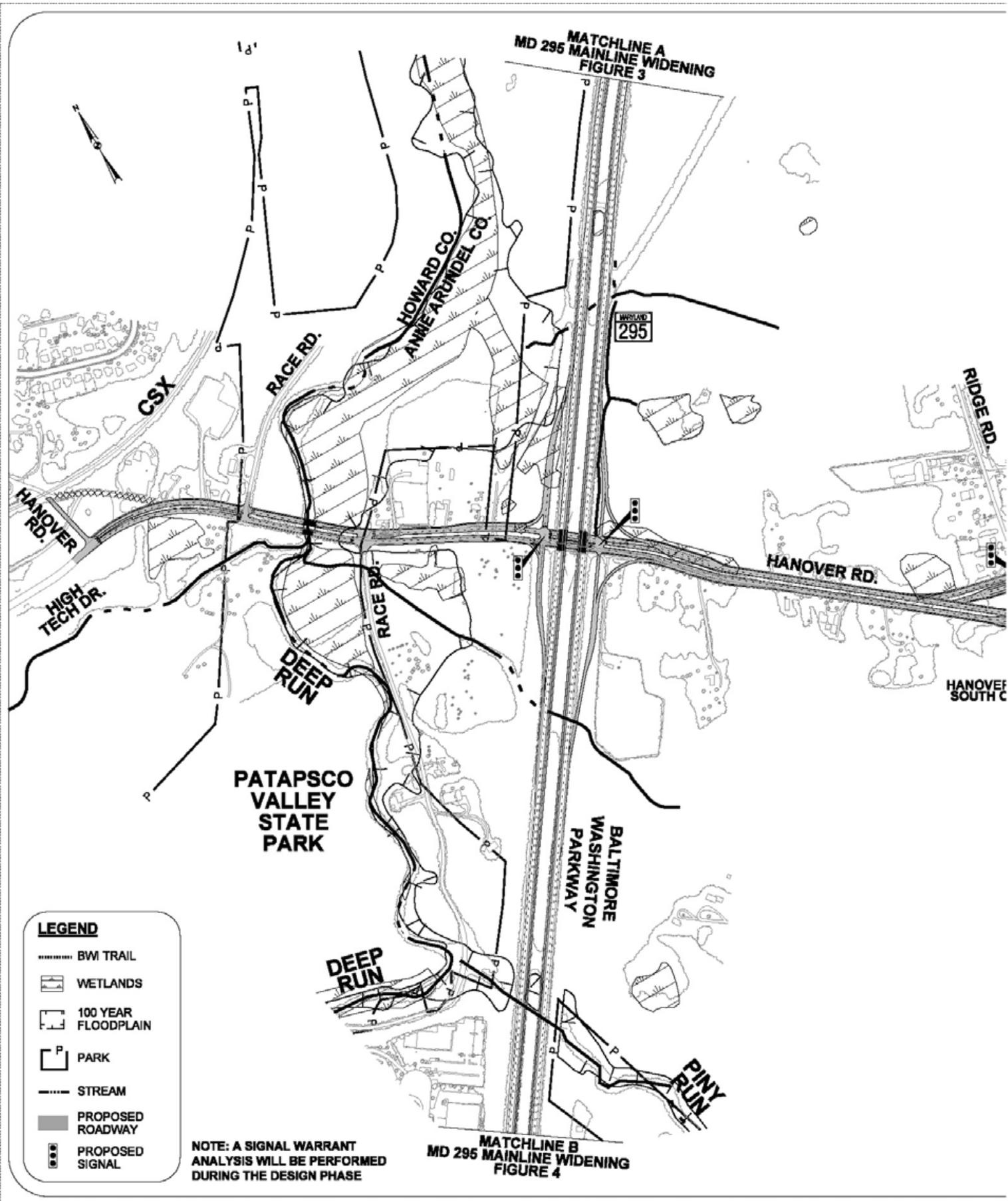


Maryland Department of Transportation  
State Highway Administration  
Project Planning Division

**MD 295 PROJECT PLANNING STUDY**

**Proposed Alternative 2**

SCALE	1"=700'	DATE	DECEMBER 2005	FIGURE	5
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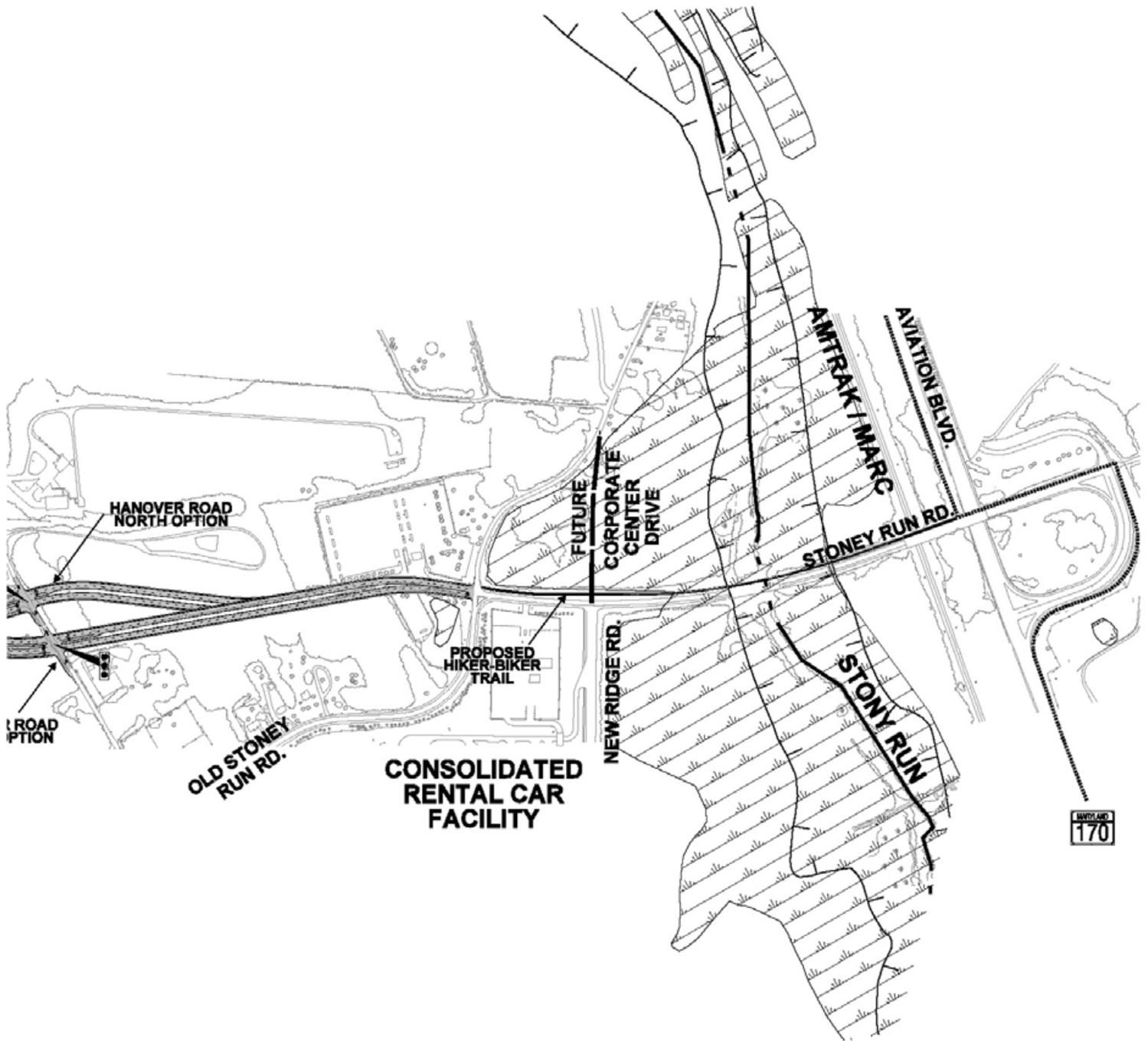
MATCHLINE A  
MD 295 MAINLINE WIDENING  
FIGURE 3

MATCHLINE B  
MD 295 MAINLINE WIDENING  
FIGURE 4

**LEGEND**

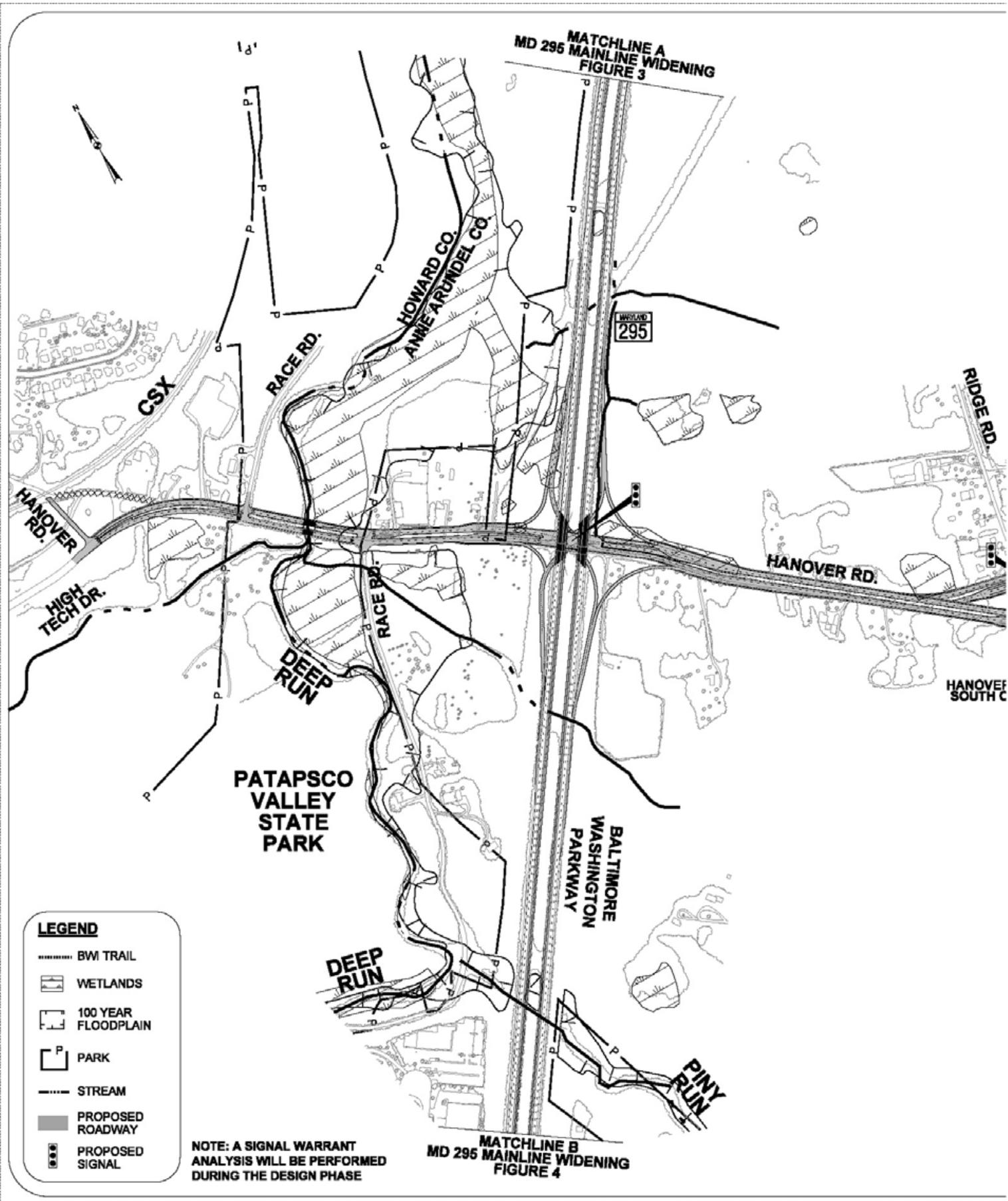
- ..... BWI TRAIL
- [Hatched Box] WETLANDS
- [Dashed Box] 100 YEAR FLOODPLAIN
- [Square with P] PARK
- STREAM
- [Thick Line] PROPOSED ROADWAY
- [Dotted Circle] PROPOSED SIGNAL

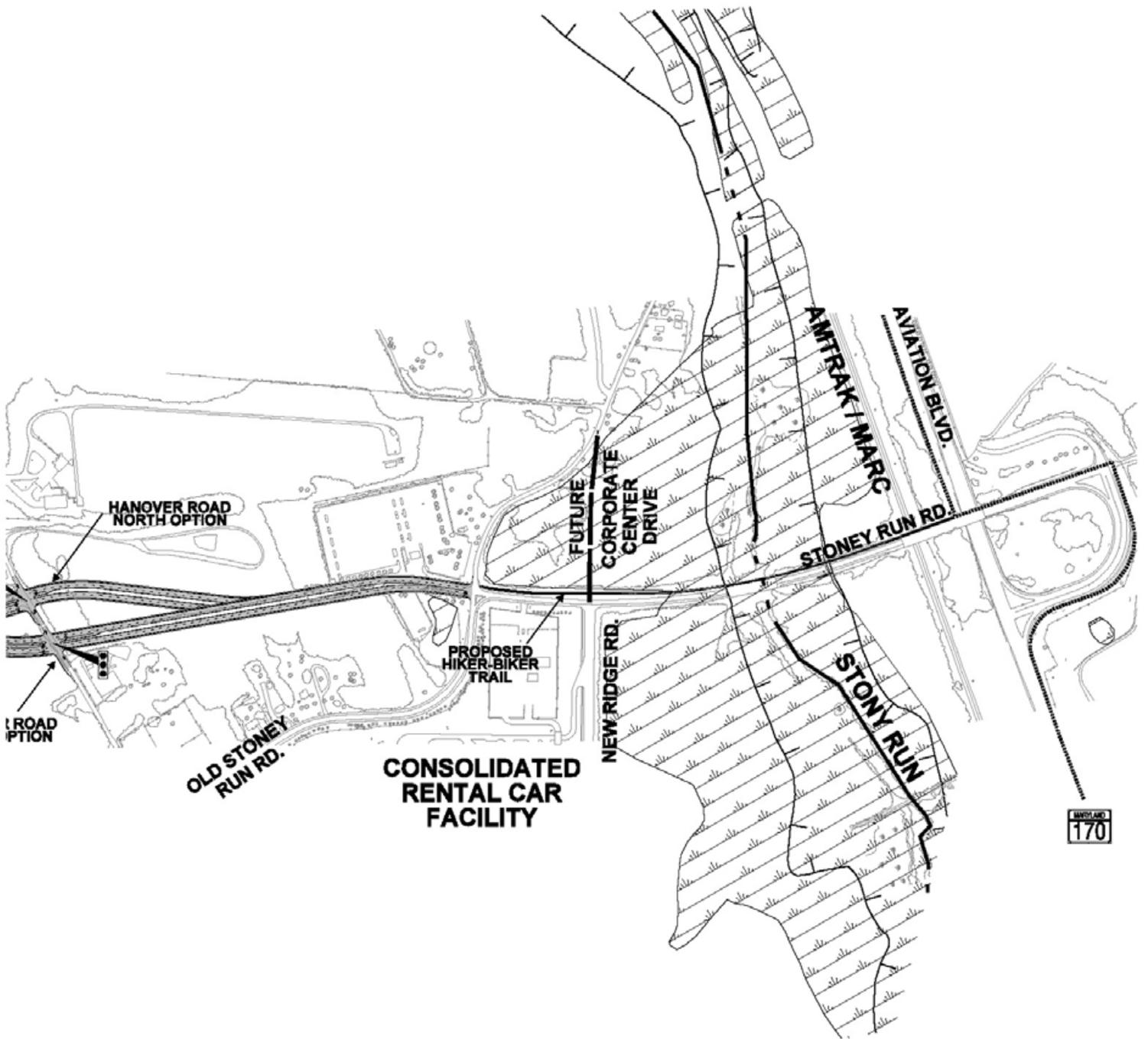
NOTE: A SIGNAL WARRANT ANALYSIS WILL BE PERFORMED DURING THE DESIGN PHASE



NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295 MAINLINE WIDENING AND HANOVER ROAD TYPICAL SECTION

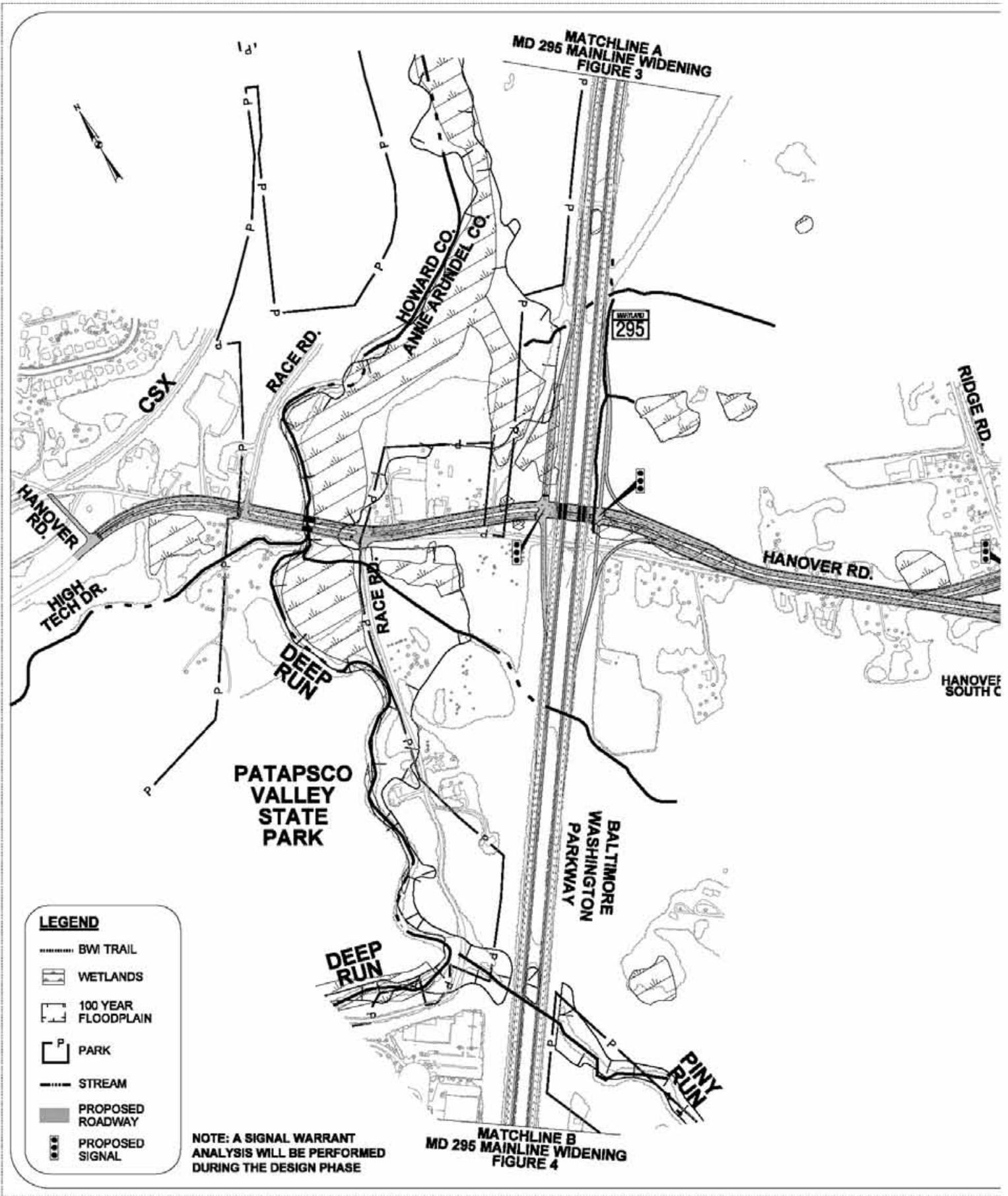
	Maryland Department of Transportation State Highway Administration Project Planning Division		
	<b>MD 295 PROJECT PLANNING STUDY</b>		
<b>Proposed Alternative 3</b>			
SCALE	1"=700'	DATE	DECEMBER 2005
		FIGURE	6





NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295 MAINLINE WIDENING AND HANOVER ROAD TYPICAL SECTION

	Maryland Department of Transportation State Highway Administration Project Planning Division	
	<b>MD 295 PROJECT PLANNING STUDY</b>	
<b>Proposed Alternative 4</b>		
SCALE 1"=700'	DATE DECEMBER 2008	FIGURE 7



MATCHLINE A  
MD 295 MAINLINE WIDENING  
FIGURE 3

MATCHLINE B  
MD 295 MAINLINE WIDENING  
FIGURE 4

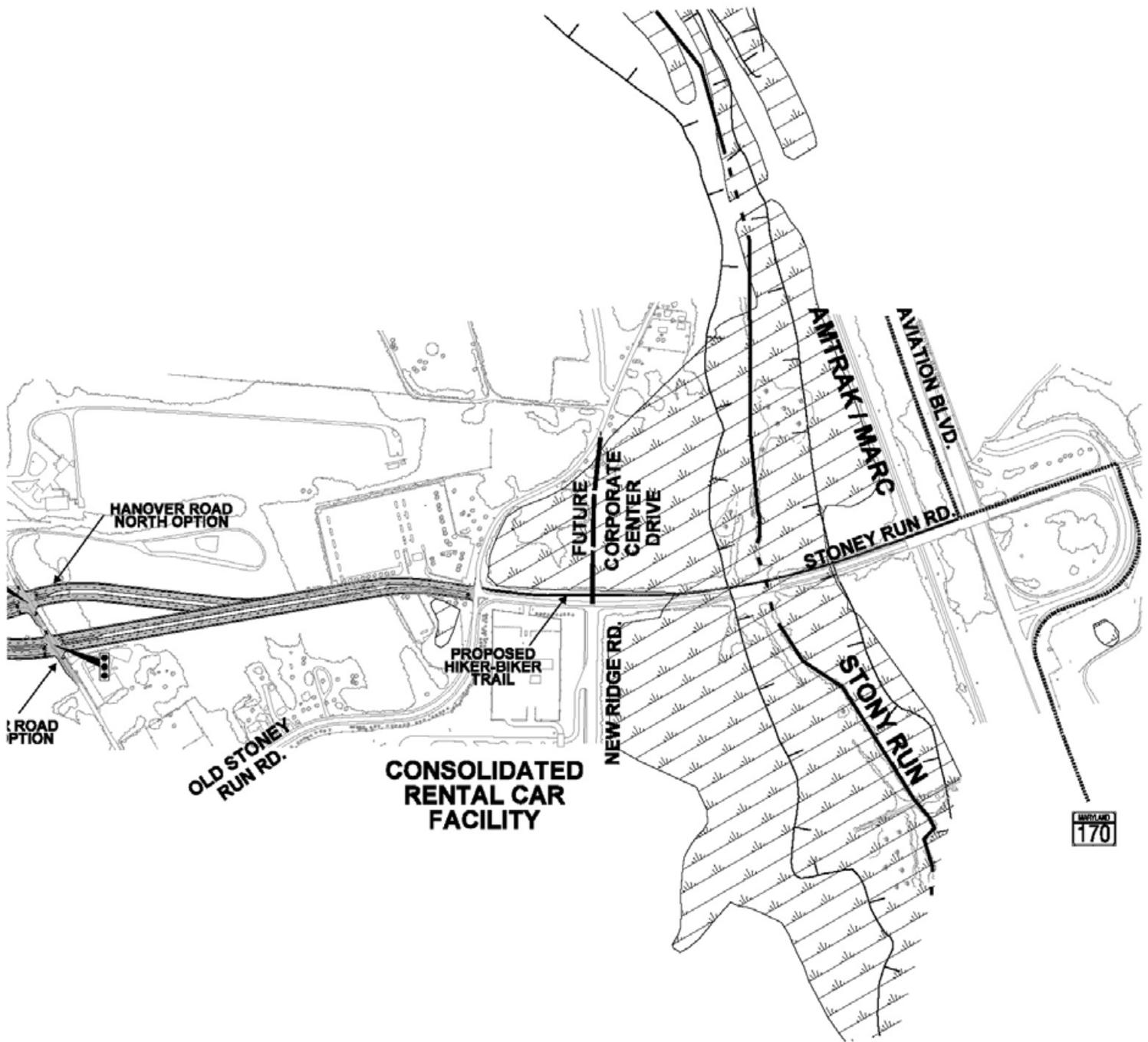
MD 295

HANOVER SOUTH C

**LEGEND**

- ..... BWI TRAIL
- [Hatched Box] WETLANDS
- [Dashed Box] 100 YEAR FLOODPLAIN
- [P in Box] PARK
- STREAM
- [Thick Line] PROPOSED ROADWAY
- [Signal Symbol] PROPOSED SIGNAL

NOTE: A SIGNAL WARRANT ANALYSIS WILL BE PERFORMED DURING THE DESIGN PHASE



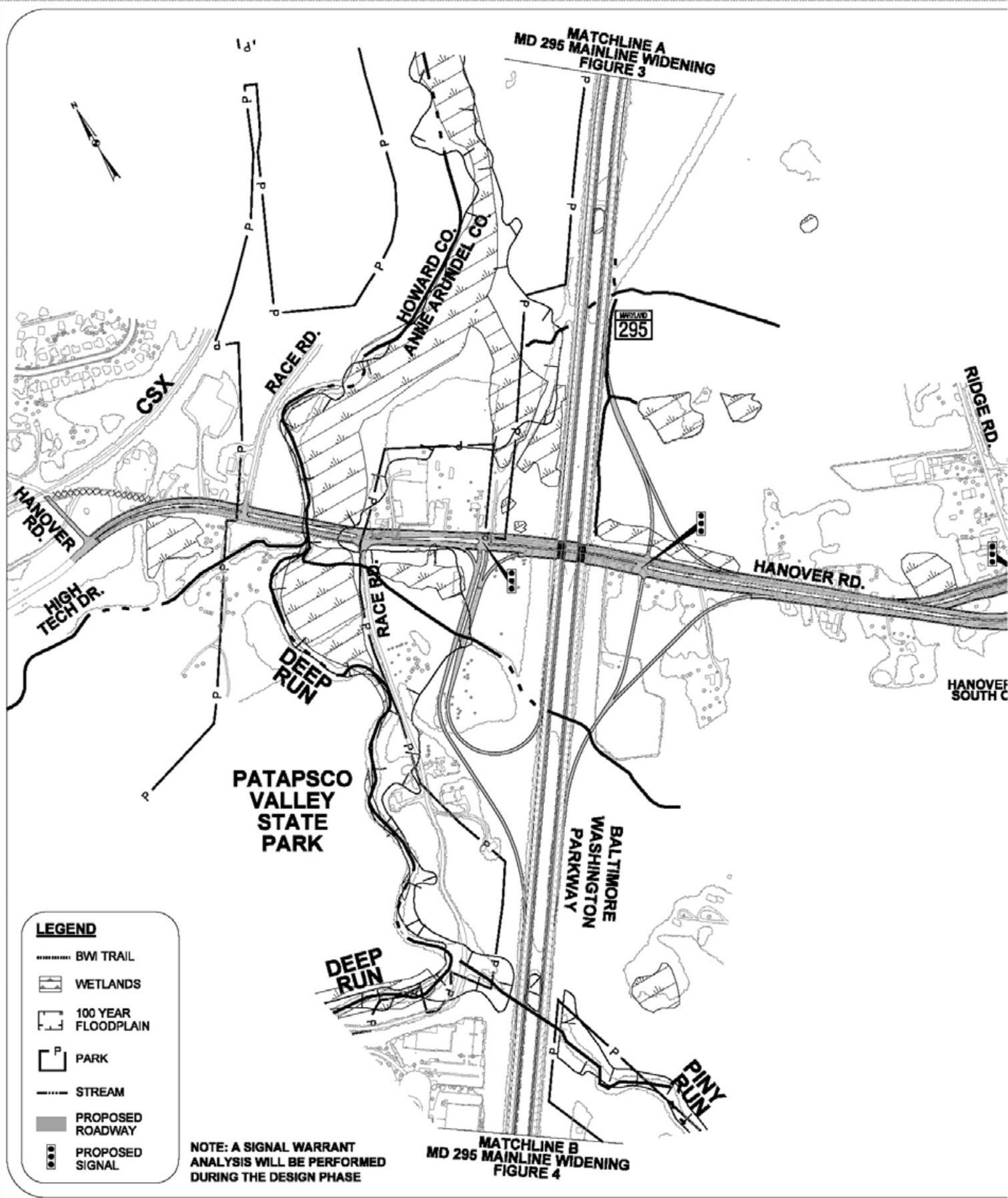
NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295 MAINLINE WIDENING AND HANOVER ROAD TYPICAL SECTION

**SNA** Maryland Department of Transportation  
 State Highway Administration  
 Project Planning Division

**MD 295 PROJECT PLANNING STUDY**

**Proposed Alternative 5**

SCALE 1"=700' DATE DECEMBER 2008 FIGURE 8



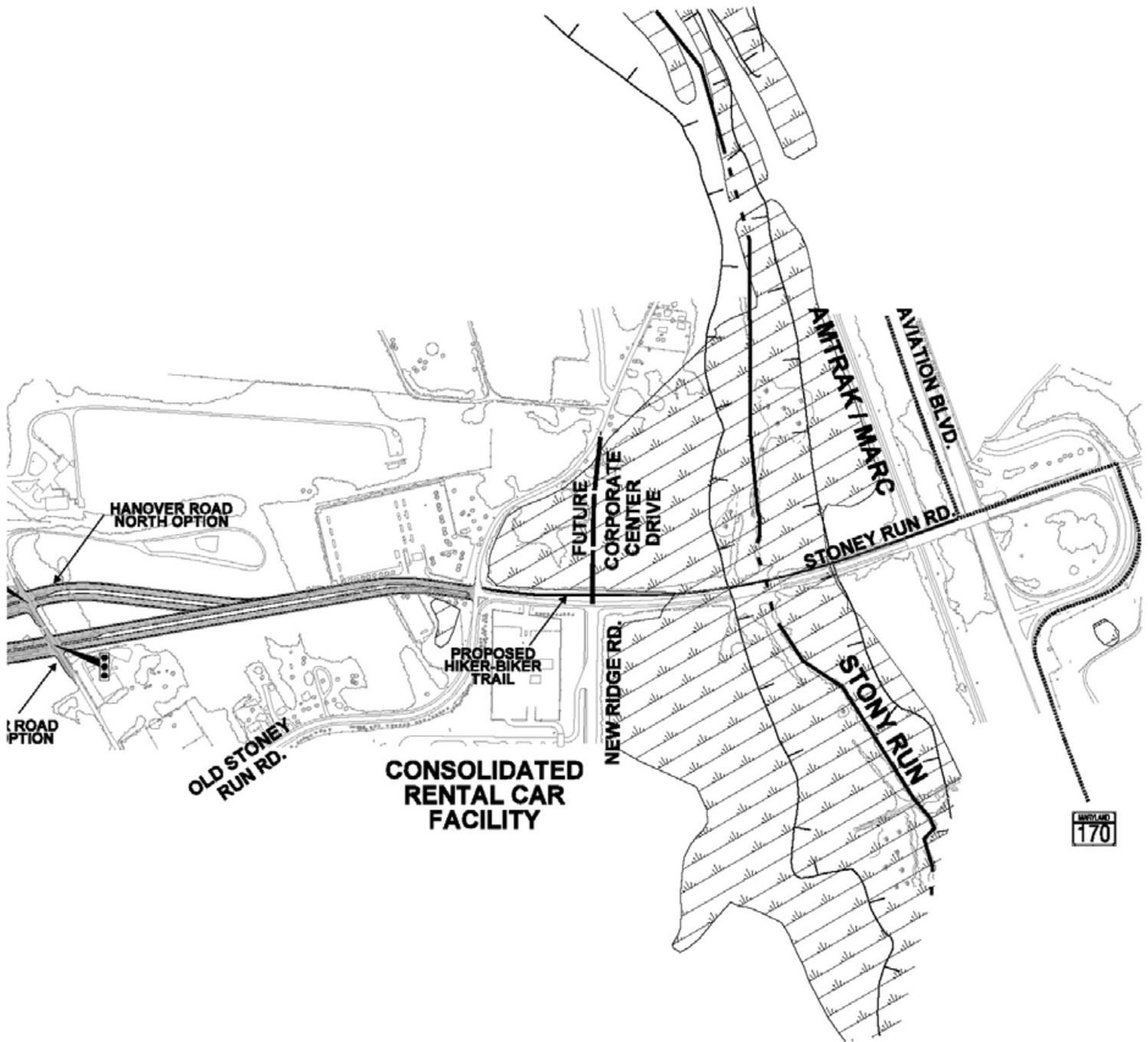
**MATCHLINE A**  
**MD 295 MAINLINE WIDENING**  
**FIGURE 3**

**MATCHLINE B**  
**MD 295 MAINLINE WIDENING**  
**FIGURE 4**

**LEGEND**

- ..... BW TRAIL
- [Hatched Box] WETLANDS
- [Dashed Box] 100 YEAR FLOODPLAIN
- [Square with P] PARK
- STREAM
- [Thick Grey Line] PROPOSED ROADWAY
- [Signal Symbol] PROPOSED SIGNAL

**NOTE: A SIGNAL WARRANT ANALYSIS WILL BE PERFORMED DURING THE DESIGN PHASE**



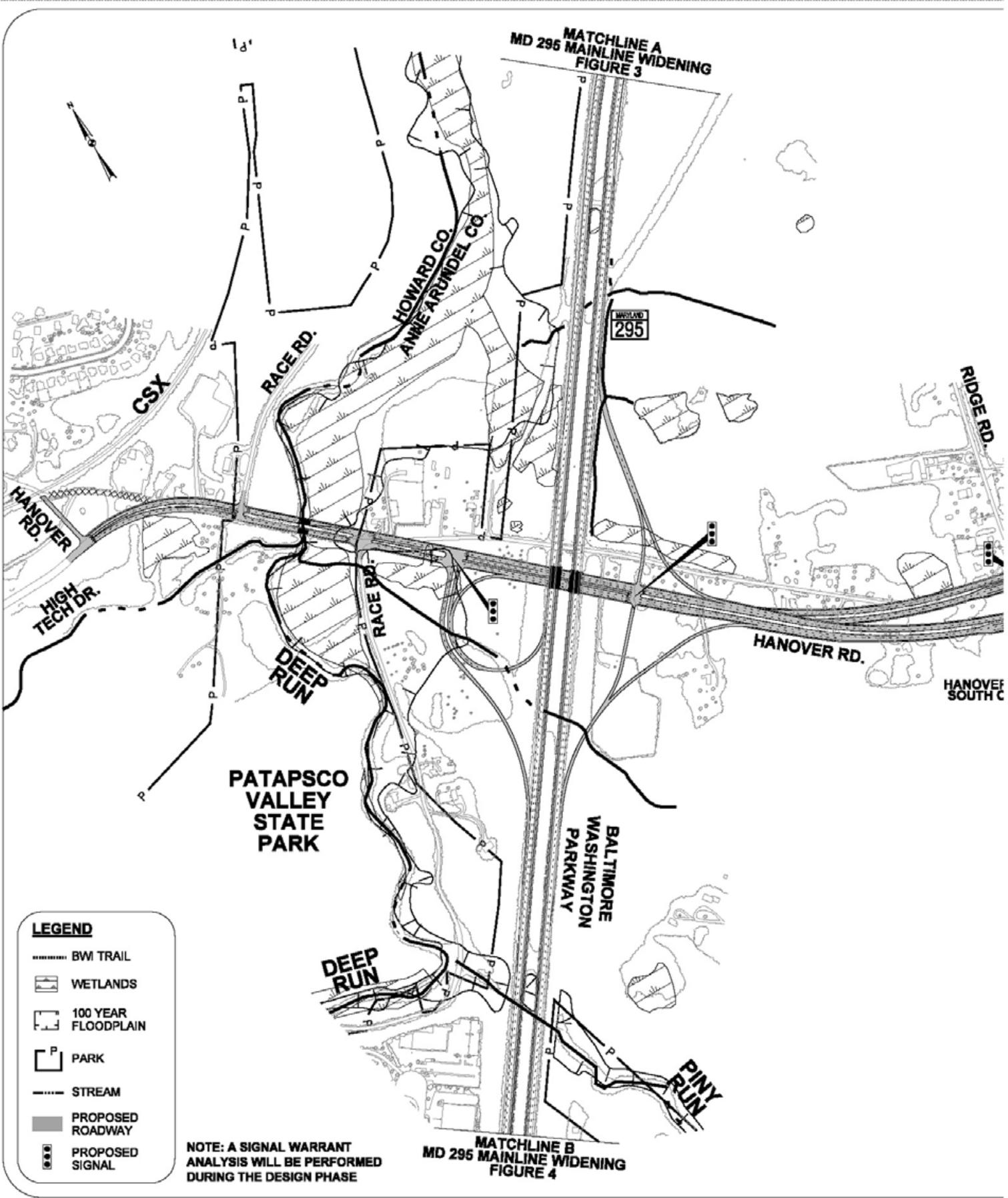
NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295  
 MAINLINE WIDENING AND HANOVER ROAD  
 TYPICAL SECTION

**SNA** Maryland Department of Transportation  
 State Highway Administration  
 Project Planning Division

**MD 295 PROJECT PLANNING STUDY**

**Proposed Alternative 6**

SCALE 1"=700' DATE DECEMBER 2008 FIGURE 9



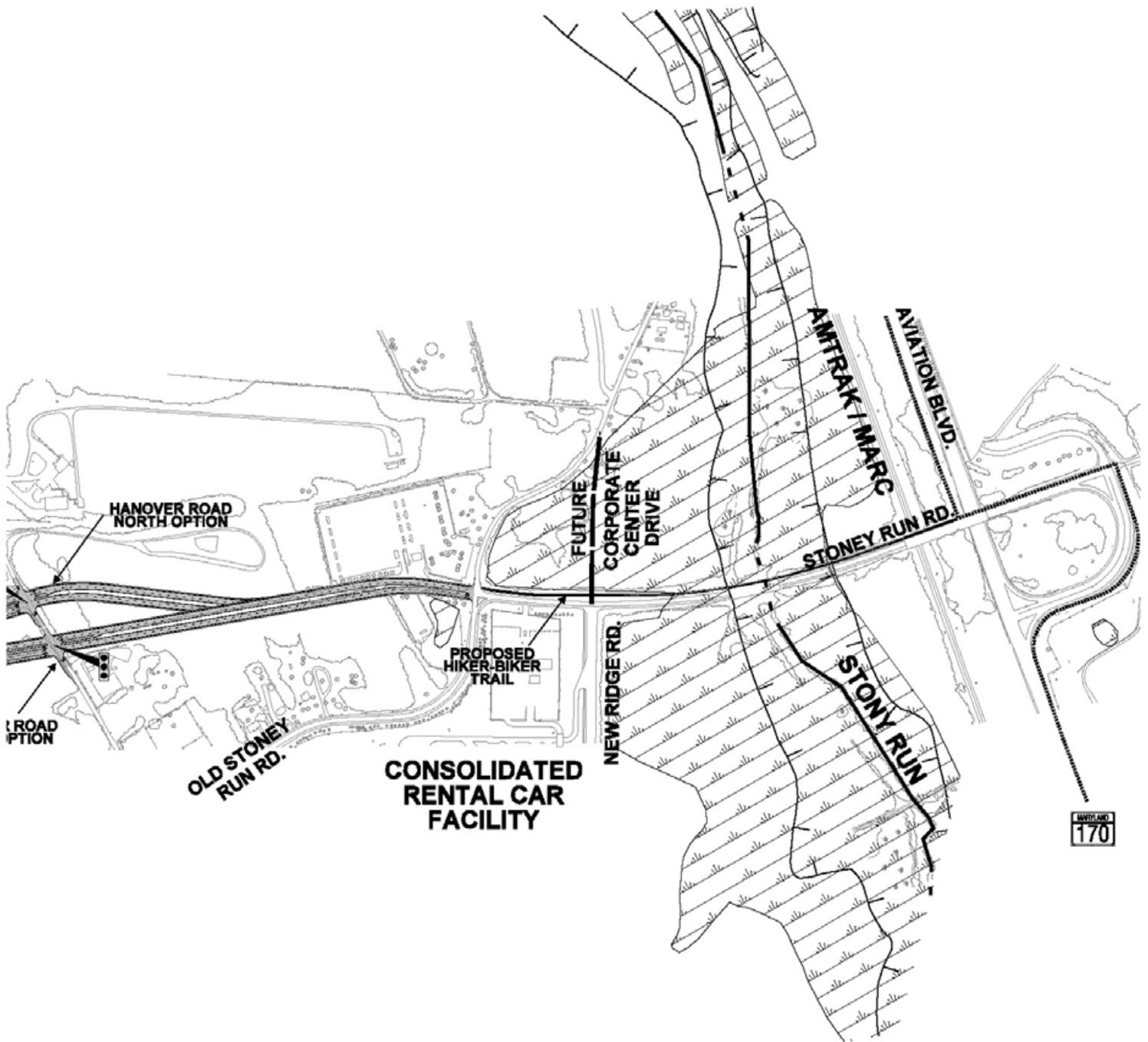
MATCHLINE A  
MD 295 MAINLINE WIDENING  
FIGURE 3

MATCHLINE B  
MD 295 MAINLINE WIDENING  
FIGURE 4

**LEGEND**

- BWI TRAIL
- [Hatched Box] WETLANDS
- [Dashed Box] 100 YEAR FLOODPLAIN
- [Square with P] PARK
- STREAM
- [Thick Line] PROPOSED ROADWAY
- [Circle with Dots] PROPOSED SIGNAL

NOTE: A SIGNAL WARRANT ANALYSIS WILL BE PERFORMED DURING THE DESIGN PHASE



NOTE: REFER TO FIGURE 1 AND 2 FOR MD 295 MAINLINE WIDENING AND HANOVER ROAD TYPICAL SECTION

	Maryland Department of Transportation State Highway Administration Project Planning Division		
	<b>MD 295 PROJECT PLANNING STUDY</b>		
<b>Proposed Alternative 7</b>			
SCALE	DATE	FIGURE	
1"=700'	DECEMBER 2008	10	