
TRANSPORTATION

INTRODUCTION

This chapter presents the overall transportation objective, a history of the Intercounty Connector, the general transportation conclusions with overall strategies for improving the transportation system and specific recommendations for Aspen Hill. Technical Appendix C includes sections discussing the traffic forecasting and analysis process applied to the planning area, the results of analyzing the highway and street system, existing transit service, future transit service, regulatory standards, the bikeway network and green corridors recommendations.

TRANSPORTATION OBJECTIVE

- o Ensures a circulation system that minimizes the impact of traffic growth on residential communities in Aspen Hill, provides travel choices among modes, provides sufficient transportation capacity for the land use recommendations proposed in the Master Plan and achieves consistency with regional plans and policies.

HISTORY OF THE INTERCOUNTY CONNECTOR

In the mid-1950's the M-NCPPC adopted the first Master Plan of Highways (1953) and General Plan (1957) covering the bi-county area. These plans included proposals for an outer circumferential freeway, located in part, on what are current Intercounty Connector and Rockville Facility rights-of-way. Neither road was included in the 1953 Plan in what is now the Aspen Hill Planning Area. In a 1955 amendment to the Highway Master Plan, the outer circumferential freeway was moved to the current Rockville Facility right-of way. The 1970 Aspen Hill Master Plan redesignated this as the Rockville Freeway and designated the Aspen Hill portion of the current ICC right-of-way to be the Outer Beltway.

In the late 1960's, the M-NCPPC and State Roadway Commission, separately and jointly, considered proposals to move the "outer beltway" alignment further out, or north, between Rockville and Gaithersburg. There was also a protracted environmental debate over the appropriate location to provide a new crossing of the Potomac River. In 1973 the final approvals were completed which relocated the planned alignment for the outer beltway proposal to north of Rockville, the Potomac crossing north to Tinfoot Island and deleted the original planned alignment from Falls Road west. These actions also kept the original eastern section of the outer beltway and redesignated it as the Rockville Freeway.

In the late 1970's the State Highway Administration began detailed project planning studies of the combined Rockville Facility and the I-270/I-95 section of the Outer Beltway, which became known as the Intercounty Connector (ICC). The section of the Outer Beltway from Great Seneca Highway to the Potomac River was deleted from the County's master plans in 1980 as part of the updating of the Potomac Subregion plans. This, in essence, eliminated the Outer Beltway as a concept in the overall road network; however, the need for an improved lateral or east-west transportation connector between the corridors continued to be recognized. The State study process resulted in the recommendation of the Master Plan alignment (modified) as the preferred location for the ICC.

The State Highway Administration studied and conducted public meetings for this facility in the early 1980's. A draft environmental document was prepared in 1983. A final document was prepared in the late 1980's. It did not receive approval due to concerns raised regarding environmental issues. In 1990, the federal regulatory agency suggested alignment options further to the north for the ICC right-of-way location to minimize environmental disturbances. Because the alignment options had not been studied in detail, the State proposed an entirely new study process, to develop the necessary detail to make comparative evaluations. That restudy process has begun and will result in the preparation of a new Environmental Impact Statement and then to the determination of a preferred alternative.

In the course of this new process, alternatives for the ICC will be defined and evaluated. These alternatives will include reconsideration of both the design concept and where the ICC is located. This study will also consider alternative transportation design concepts, including transitway (such as light rail or busway), usage or access management (such as

truck restrictions or high-occupancy vehicle lanes), multi-use recreational trails and other parkway-like design characteristics. Distinct alternatives will be defined and evaluated in the Environmental Impact Study to develop information for the decision making process at the conclusion of the study. It is generally recognized that the set of geographic alternatives studied will include the Master Plan alignment, one or more northerly alignments and defined widening/realignments of existing roads, as well as a "no build" scenario. Totally new alternatives may be developed in this process. Retaining the existing Master Plan alignment in this Plan ensures that it will be available as a right-of-way should it be selected at the conclusion of the evaluation process. If the existing alignment is not selected, this Master Plan and other master plans will need to be amended.

TRANSPORTATION GENERAL CONCLUSIONS

This Plan assumes that the Intercounty Connector (ICC) will be constructed within the alignment of the right-of-way for the ICC shown in the 1970 Approved and Adopted Master Plan for Aspen Hill. However, the Maryland Department of Transportation is currently preparing an environmental impact study of both the existing alignment and alternative alignments. If, as a consequence of the study, a policy decision is made not to construct the ICC in the existing alignment, the transportation system of Aspen Hill and recommendations of this Plan should be re-examined. A different set of transportation recommendations could result if plans for construction of the ICC are changed.

Traffic congestion on the roads and streets in Aspen Hill is primarily the result of traffic generated outside the area. About 77 percent of the vehicles entering Aspen Hill during the morning peak hour pass through the area to reach some other location. This through traffic is projected to increase 100 percent in the future and will constitute about 83 percent of the total vehicles entering Aspen Hill during the morning peak hour. The trips entering and terminating in Aspen Hill are projected to increase about 43 percent. With respect to outbound traffic in the morning peak hour, the trips leaving Aspen Hill are projected to increase 22 percent and internally generated trips staying within the area are projected to increase about 50 percent. Without improvements to the transportation system, the result will be more congestion on local roads and streets and a greater demand for roadway capacity in the major direction of travel during the peak hours. This Plan recommends improvement of the transit system to accommodate future travel demands and to limit the widening of highways and streets in Aspen Hill.

Additional transit services will provide increased person-moving capabilities through and within Aspen Hill. The recommendations in this Plan improve the ability of the transit network to serve as a viable alternate travel mode for residents of the area and people living outside Aspen Hill. It is important to the system that rights-of-way (ROW) be retained for future transitways. They are critical in providing for long-term implementation of the County-wide transit network.

Highway improvements are also needed in addition to the transit improvements proposed in this Plan. Although the transit and transitway recommendations provide for some long-term needs, the vehicle trips generated outside the area will continue to affect major and arterial roads in Aspen Hill. This Plan recommends improvements to accommodate the growth. Some intersections in Aspen Hill will continue to operate at poor levels of service during the peak hours, even with the recommended improvements. The proposed intersection improvements will be sufficient to accommodate most, if not all, of the projected traffic growth, but they will not be extensive enough to significantly improve levels of service. More extensive improvements could require additional rights-of-way, which would have negative effects on pedestrians and on adjacent properties.

Normally, a master plan does not address the location of secondary streets. However, there are a number of individual parcels along Bel Pre Road for which the construction of a common driveway would result in less hazardous traffic conditions. A combined driveway can be achieved if consolidation of the parcels, for purposes of development, occurs in the future. Consolidation is discussed in the Land Use chapter. This Plan also recommends that major access to any future residential development of the Argyle Country Club be provided by a primary street extended into the property from Longmead Crossing Drive.

The bikeway network within Aspen Hill should be improved to provide an alternative mode of travel to and from the area, as well as within the area. Aspen Hill does not have an extensive network of bikeways. There is a shortage of bikeways that can be used for reaching the transit network, the commercial and recreational areas or for commuting. This Plan proposes a bikeway network of commuter and recreational routes interrelated with a system of neighborhood routes that connect communities to many public facilities, shopping centers and employment sites.

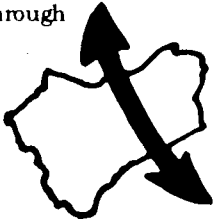
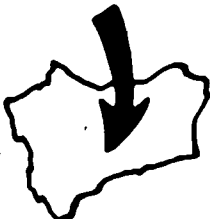
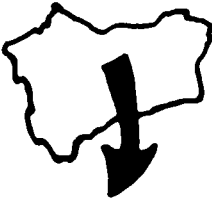
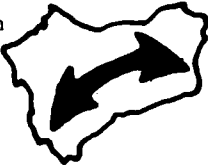
Commuter park-and-ride lots are needed to facilitate the transfer of auto users to other modes of travel before they enter the area. The through traffic on Georgia Avenue, north of Norbeck Road, is projected to be greater than 90 percent of the traffic volume entering Aspen Hill at this point during the morning peak hour and about 55 percent of the total traffic on all of the roads entering the area from the north. The conversion of commuters driving alone to transit and carpools should be encouraged through the construction of commuter parking lots with easy access and good transit service.

Summary of Transportation Strategies

Table 2 presents a summary of strategies for improved transportation in Aspen Hill. It shows four basic trip orientations that differentiate the strategies: people traveling through, to, from and within the area. The summary is also organized by the trip path of the travelers based upon the start of their trips, the predominant means of travel and the destination of their trips. The strategies proposed in this Plan are oriented to meeting the transportation needs of the different types

Table 2

IDENTIFICATION OF MASTER PLAN STRATEGIES FOR IMPROVED TRANSPORTATION IN ASPEN HILL

Trip Orientation	Components of Travel Through, To, From, and Within Aspen Hill					
	Start of the Trip	Predominant Means of Travel for the Trip				End of the Trip
		Auto/Highway	Transit	Biking	Walking	
Through 	<ul style="list-style-type: none"> o Locate housing close to transit lines passing through Aspen Hill o Establish regional transitway network with good accessibility 	<ul style="list-style-type: none"> o Widen Veirs Mill Road 	<ul style="list-style-type: none"> o Construct transitway on Georgia Avenue o Add transitway/HOV lanes to ICC o Express buses to Glenmont Metro Station 	<p>—</p>	<p>—</p>	
To 	<ul style="list-style-type: none"> o Locate more housing close to transit lines that come to Aspen Hill o Improve pedestrian accessibility to transit lines that come to Aspen Hill 	<ul style="list-style-type: none"> o Intersection improvements o Norbeck Road extended to New Hampshire Avenue o Layhill Road improved to Norbeck Road 	<ul style="list-style-type: none"> o Provide frequent local transit service from Glenmont Metro Station and commuter parking lots 	<ul style="list-style-type: none"> o Expand bikeway network to employment and shopping centers o Add bike lockers to employment locations and shopping centers 	<p>—</p>	<ul style="list-style-type: none"> o Locate jobs close to transit routes o Incentives from employers to use transit, vanpools, and ridesharing
From 	<ul style="list-style-type: none"> o Improve pedestrian and bike accessibility to regional transit service leaving the area o Use employee incentives for transit and other high occupancy travel modes 	<ul style="list-style-type: none"> o Intersection improvements o Norbeck Road extended to New Hampshire Avenue o Layhill Road improved to Norbeck Road 	<ul style="list-style-type: none"> o Interface regional transit service and local transit service at commuter parking lots o Provide local transit service to Glenmont Metro Station o Add transit service to Arctic Avenue and Hewitt Avenue/Rippling Brook Drive 	<ul style="list-style-type: none"> o Bike lockers at commuter parking lots o Add bikeways to major roads and streets leading from the area 	<p>—</p>	
Within 	<ul style="list-style-type: none"> o Improve sidewalks and access to transit routes 	<ul style="list-style-type: none"> o Intersection improvements o Reduce through traffic on residential streets 	<ul style="list-style-type: none"> o Joint effort between communities to improve local circulation 	<ul style="list-style-type: none"> o Provide bikeways to employment and shopping centers, community and recreational facilities 	<ul style="list-style-type: none"> o Improve sidewalk network at shopping centers and bus stops o Reduce pedestrian/vehicle conflicts 	

of travelers. The overall summary is not meant to describe all the strategies for reducing auto travel, but as a tool for comparing and interrelating the strategies discussed below.

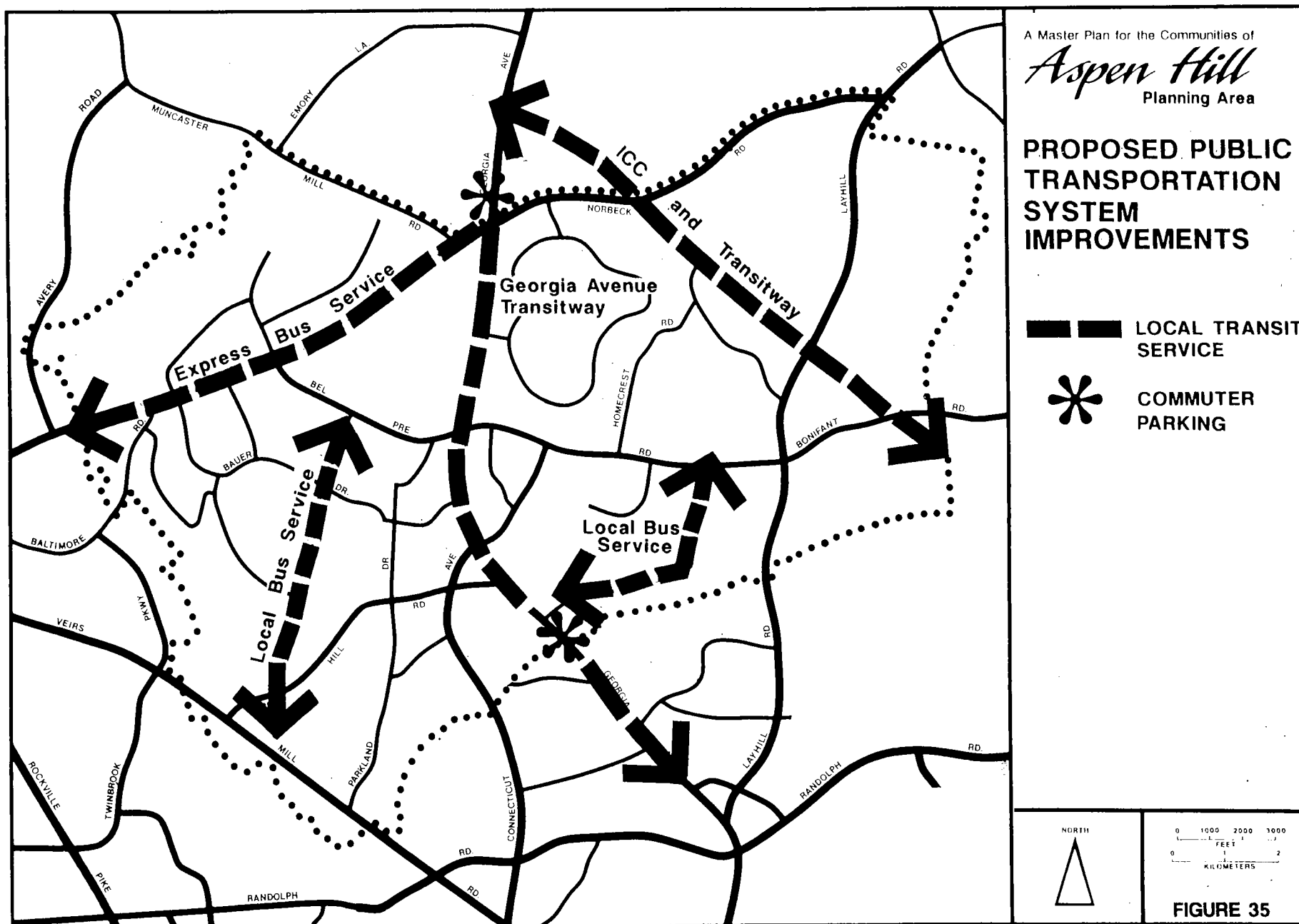
TRANSPORTATION RECOMMENDATIONS

The following presents a brief description of the Plan's key transportation recommendations. Each of these is described in more detail in subsequent sections with supporting findings and other information.

Public Transportation System

Proposed improvements to the public transportation system are indicated on Figure 35.

- o Transit service should be considered for expansion in Aspen Hill to provide coverage for neighborhoods where residents must walk more than a quarter-mile to the nearest bus line. The County-operated Ride-On transit system could be used for possible extensions into communities where street widths and designs cannot accommodate larger buses with larger turning radii. When direct Metrorail service is extended to Glenmont in late 1998, bus routes in Aspen Hill should be reoriented to provide feeder service to the Metrorail station. The Plan recommends that local service be retained along Georgia Avenue to serve various local destinations. Additional local bus service along Arctic Avenue and Hewitt Avenue/Rippling Brook Drive should be strongly considered for additional local transit coverage. Express bus service between the station and areas outside Aspen Hill, like Olney, must be initiated to reduce auto trips to the station. Olney and other areas to the north generate a significant portion of the traffic passing through Aspen Hill.
- o This Plan recommends a future transitway on Georgia Avenue to provide transit service between Norbeck Road and the future Glenmont Metro station. A design study will be necessary to determine design details and operating features. One option to be considered is the construction of the transitway in the median area between the northern and southern ends of the planning area. The studies should include measures to: 1) minimize impacts of the transitway on local circulation, 2) provide access for both local and express buses and 3) design the transitway within the "green corridor" concept for Georgia Avenue and other elements that are important to efficient operation. Initially, the transitway should be used for express buses only in the southbound direction during the morning rush period and only in the northbound direction during the evening peak period. The use of the transitway as a reversible bus lane would allow more of the median to be landscaped. Ultimately, the busway could be upgraded to accommodate a higher capacity system when warranted by ridership levels. When the Olney Master Plan is re-evaluated, consideration should be given to extending the transitway through Olney.



- o Plan for future expansion of the commuter parking lot located in the northeast quadrant of the intersection at Georgia Avenue and Norbeck Road and provide direct access from both roads. While the lot is currently underutilized, its use should increase when the transitway is constructed and carries buses between the lot and the Glenmont Metro station. Also, express bus service should be considered for operation between the commuter parking lot and downtown Rockville.
- o Provide another commuter parking facility in the Olney Planning Area to complement the Norbeck Road lot if additional parking space is required, or if the transitway is ultimately extended to the Olney Town Center or beyond.
- o Include a transitway within the Intercounty Connector right-of-way when the ICC is constructed. Access to the commuter parking lot at Georgia Avenue and Norbeck Road would permit transfers to the Georgia Avenue transitway as well as to other bus lines. Residents of Aspen Hill could also board here to reach jobs in other parts of the County.
- o Provide space for a potential commuter parking lot on the east side of Georgia Avenue in the right-of-way of the former Rockville Facility. The construction of a commuter parking lot, or the shared use of the existing adjacent church's parking lot, is recommended if the proposed east-west transitway is constructed.
- o The use of carpools, vanpools and transit should accompany any office development or redevelopment of the former Vitro site or Lee Development Group site.
- o Develop land use patterns with transit accessibility as a consideration, because the layout and orientation of development can influence workers and residents to use transit. The land use guidelines in this Plan are consistent with transit accessibility goals.
- o Where possible, allow buses to enter shopping centers for boarding and alighting, especially during morning and evening peak hours, instead of picking up and discharging passengers at remote street locations. Where it is not possible, shopping centers should have pedestrian walkways between transit stops and appropriate locations along the frontage of the stores.
- o Provide more bus shelters in Aspen Hill and maximize their use with adequate access and lighting, all-weather surfaces, appropriate protection from inclement weather and appropriate public information.
- o Support the use of public transportation and encourage walking through the provision of pedestrian walk lights and wheelchair curb cuts.

Roadway System Improvements

Proposed improvements to the highway system are indicated on Figure 36 and in Table 3.

- o Reconstruct Norbeck Road, east of Georgia Avenue, as a four-lane divided highway and extend it to New Hampshire Avenue (MD 650). The extension of Norbeck Road will provide a less circuitous east-west route through the area and relieve the traffic demand on other parallel roads. The project should be designed as a “green corridor” with control of access maintained by the use of service roads where feasible.
- o A comprehensive study of intersection improvements at Veirs Mill Road and Aspen Hill Road should be conducted with a public hearing by the County Council before any improvement is programmed.
- o Reconstruct Layhill Road (MD 182) as a four-lane divided highway between Norbeck Road and the present four-lane divided section south of the Intercounty Connector right-of-way. This improvement is necessary to accommodate the future growth of traffic on Layhill Road.
- o Widen Veirs Mill Road (MD 586) to six lanes between Twinbrook Parkway and Randolph Road within the context of a “green corridor.” These improvements are needed to provide additional capacity for projected traffic growth with the additional street trees and other aspects to enhance its appearance. The widening of Veirs Mill Road between Twinbrook Parkway and Montrose Parkway may not be needed if, ultimately, Montrose Parkway is constructed and Veirs Mill Road is widened to the east.
- o This Plan supports the recommendations of the Approved and Adopted North Bethesda Master Plan for the construction and extension of Montrose Parkway to Veirs Mill Road via the Gaynor Road Alignment. This Plan recommends that a study be initiated at the appropriate time to determine the design of the intersection at Veirs Mill Road, using the criteria described in the section on intersection improvements. An interchange with overhead ramps between Montrose Parkway and Veirs Mill Road must be avoided because of its incompatibility with the adjacent communities.
- o The design of the area intersection improvement should provide a buffer for the benefit of the residential community to the south of the proposed Montrose Parkway.
- o Increase capacity at the intersections shown on Figure 36. These intersections should be given emphasis for improvement and possible configurations are summarized in Table 3. The table gives the location and a brief description of the suggested changes. A detailed description of the improvements may be found in Appendix C.

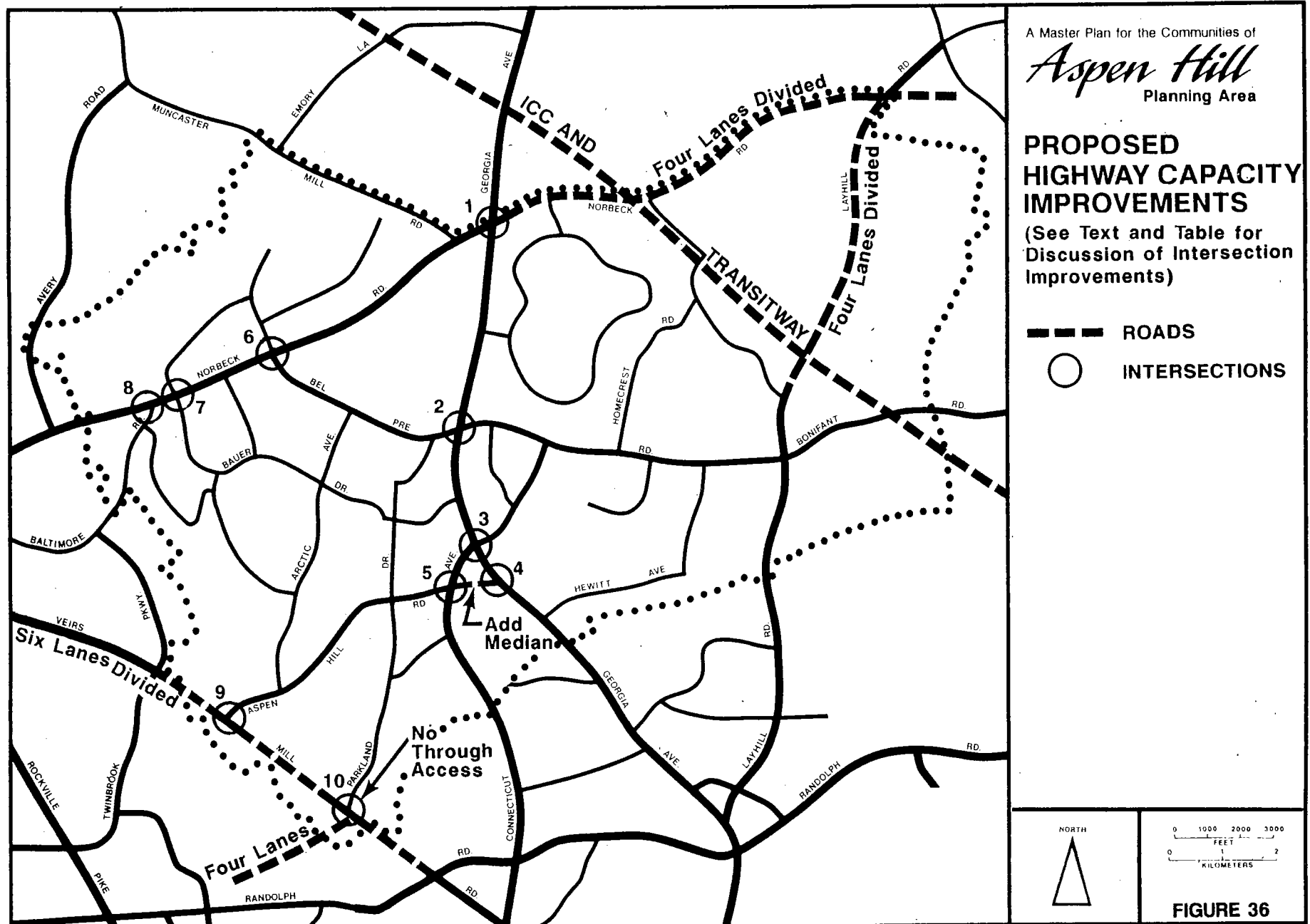


Table 3

**KEY INTERSECTIONS AND POSSIBLE FUTURE IMPROVEMENTS
ASPEN HILL PLANNING AREA**

INTERSECTION	IMPROVEMENT
1. Georgia Avenue/Norbeck Road	
Georgia Avenue Southbound	Right-Turn Lane
Northbound	Right-Turn Lane
Norbeck Road Westbound	Approach Lane
2. Georgia Avenue/Bel Pre Road	
Georgia Avenue Southbound	Left-Turn Lane
Northbound	Left-Turn Lane
Bel Pre Road Westbound	Revise Lane Use
Eastbound	Revise Lane Use
3. Georgia Avenue/Connecticut Avenue	
Georgia Avenue Northbound	Right-Turn Lane
4. Georgia Avenue/Aspen Hill Road	
Georgia Avenue Northbound	Left-Turn Lane

Table 3 (Cont'd.)

INTERSECTION	IMPROVEMENT
5. Connecticut Avenue/Aspen Hill Road	
Connecticut Avenue Southbound	Left-Turn Lane
Northbound	Right-Turn Lane
Aspen Hill Road Westbound	Right-Turn Lane
Eastbound	Right-Turn Lane
6. Norbeck Road/Bel Pre Road/Emory Lane	
Norbeck Road Westbound	Approach Lane
Eastbound	Approach Lane
Bel Pre Road Northbound	Left-Turn Lane
Emory Lane Southbound	Left-Turn Lane
7. Norbeck Road/Bauer Drive	
Norbeck Road Westbound	Approach Lane
Eastbound	Approach Lane
Bauer Drive Southbound	Left-Turn Lane
Northbound	Revise Lane Use

Table 3 (Cont'd.)

INTERSECTION	IMPROVEMENT
8. Norbeck Road/Baltimore Road	
Norbeck Road Eastbound	Approach Lane
9. Veirs Mill Road/Aspen Hill Road	
Veirs Mill Road Eastbound	Left-Turn Lane ¹
10. Veirs Mill Road/Parkland Drive/ Montrose Parkway	
Veirs Mill Road Eastbound Westbound	Approach Lane Approach Lane & Left-Turn Lane
Montrose Parkway Eastbound	Two Right-Turn Lanes & Relocation of Service Road Entrance to Dewey Road
Parkland Drive Southbound	Revise Lane Use Configuration and Access

1 See page 91. A comprehensive study of intersection improvements at Veirs Mill Road and Aspen Hill Road should be conducted with a public hearing by the County Council before any improvement is programmed.

Most of these intersections are currently at poor levels of service during the peak hours and most have critical lane volumes higher than desirable. While solutions are suggested that will mitigate the impact of future traffic growth, the actual design of the intersection improvement projects should be based on traffic studies at the appropriate time. Also, some of the improvements have already been tied to approved preliminary plans.

- o Maintain safe travel conditions on Bel Pre Road, between Connecticut Avenue and Layhill Road, by encouraging combined development of adjacent properties by utilizing only one point of ingress and egress along the arterial road where possible.
- o Reconstruct and add a median to Aspen Hill Road between Connecticut Avenue and Georgia Avenue to improve pedestrian safety and vehicle circulation between shopping centers.
- o The grassy buffer between the sidewalk and the street should be retained where possible. The grassy buffer between the pedestrians and automobiles is important to maintain the division between the two; however, this strip should not prevent road improvements from being done, where necessary.
- o Major access for Argyle Country Club, if redeveloped as a residential subdivision in the future, should be provided by a primary street extended from Longmead Crossing Road at the location of the existing access. Secondary and tertiary streets should be used to provide minor access at other locations.

Previously Planned Roads and Streets

The following recommendations propose changes to roadways which were previously master planned.

- o The 1970 Aspen Hill Master Plan recommended that Muncaster Mill Road (MD 115) be relocated and widened to four lanes. This Plan recommends that it be improved as a two-lane road along the existing alignment except at intersections, where additional widening may be necessary.
- o The proposed grade-separated interchange at Georgia Avenue (MD 97) and Norbeck Road (MD 28) shown in the 1970 Master Plan was effectively deleted as a result of it not being included in the 1980 Olney Master Plan. This Plan reconfirms that deletion.
- o The extension of Oriental Street across Rock Creek, as proposed in the 1970 Master Plan, should be deleted.
- o The extension of Aspen Hill Road across Rock Creek, as proposed in the 1970 Master Plan, should be deleted.

- o The extension of Sunflower Drive to existing Muncaster Mill Road, as proposed in the 1970 Master Plan, should be deleted to prevent the movement of through traffic between Muncaster Mill Road and Norbeck Road.
- o The extension of Palmira Lane from Wendy Lane to Connecticut Avenue, the extension of Beaverwood Lane from Strathmore Park to Connecticut Avenue and the extension of Emory Lane to the proposed relocated Muncaster Mill Road should be deleted. The extension of these roads was prohibited by past County Council action amending the 1970 Master Plan.
- o The relocation of the Georgia Avenue/Hewitt Avenue intersection, as proposed in the 1970 Master Plan, is deleted in this Plan. This project was proposed to provide adequate separation from the Rockville Freeway/Georgia Avenue grade-separated interchange proposed in the 1970 Master Plan.
- o The right-of-way for an Intercounty Connector/Layhill Road interchange should be reserved for future consideration.
- o This Plan deletes the 1970 designation of "Rockville Freeway" for the section of right-of-way between Georgia Avenue and Veirs Mill Road. This section is now the Matthew Henson State Park. Also, the remainder of the former "Rockville Freeway" (Georgia Avenue to the ICC right-of-way alignment) is deleted as a general purpose traffic facility and redesignated as a greenway/park.
- o The unbuilt portion of Connecticut Avenue (between Bel Pre Road and South Leisure World Boulevard) should be built.

Other Master Planned Roads and Streets Crossing The Former Rockville Facility

The following recommendations are for the roads and streets which are common to the Aspen Hill and Kensington-Wheaton Planning Areas, but are separated by the right-of-way for the former Rockville Facility. As a result of the separation, the outcome of these roads and streets should be re-evaluated when the future use of the former Rockville Facility and the ICC rights-of-way are determined.

- o This Plan recommends against the connection of the unbuilt portion of Rippling Brook Drive at this time. Should the need arise to improve circulation for neighborhood traffic and facilitate school boundary changes, the unbuilt section may be completed. The unbuilt section may not be completed without approval by the County Council of an individual Capital Improvements Program project.

- o The former Atwood Road is still being used for access to Layhill Road. Access across the former Rockville Facility is to be terminated when the section to the east is abandoned.
- o The extension of Alderton Lane across the former Rockville Facility will be reconsidered if the ICC alignment is changed.

Roadway Classification and Rights-of-Way

Figure 37 identifies the recommended Master Plan of Highways and Streets and Table 4 identifies their classification with minimum rights-of-way. These are used in the regulatory process as a guide to right-of-way dedication and other actions. The major recommendations are summarized below.

- o Muncaster Mill Road (MD 115) could be designated as an arterial after a comprehensive study and public hearing by the County Council. This designation as an arterial could also be made from Gaithersburg/Laytonsville Road (MD 124) to Norbeck Road (MD 28). This designation would amend the Master Plan of Highways, the 1985 Upper Rock Creek Plan, the 1980 Olney and Vicinity Master Plan and the 1985 Gaithersburg Vicinity Master Plan. The road is recommended to remain a two-lane road with a proposed minimum right-of-way width of 80 feet in the Aspen Hill Planning Area, except at intersections where turning lanes may be required and where the additional right-of-way would be required. The classification and alignment of Muncaster Road can be amended in the 1985 Upper Rock Creek Master Plan after review and approval of the comprehensive study and a public hearing, as noted above. These decisions would be followed by formal amendments to the relevant master plans.
- o The section of Avery Road within the Aspen Hill Planning Area should be reclassified from an arterial road to a primary residential road.
- o Emory Lane should be reclassified from a primary residential street to a secondary residential street between its cul-de-sac and Bauer Drive.
- o Gaynor Road, from Veirs Mill Road to Dewey Road, is deleted as a primary residential street as proposed in the 1970 Master Plan. The Gaynor Road alignment, however, is now incorporated as part of the proposed Montrose Parkway and, therefore, reclassified as an arterial road.
- o Dewey Road should be reclassified from a primary residential street to a secondary residential street and not extended across Turkey Branch.

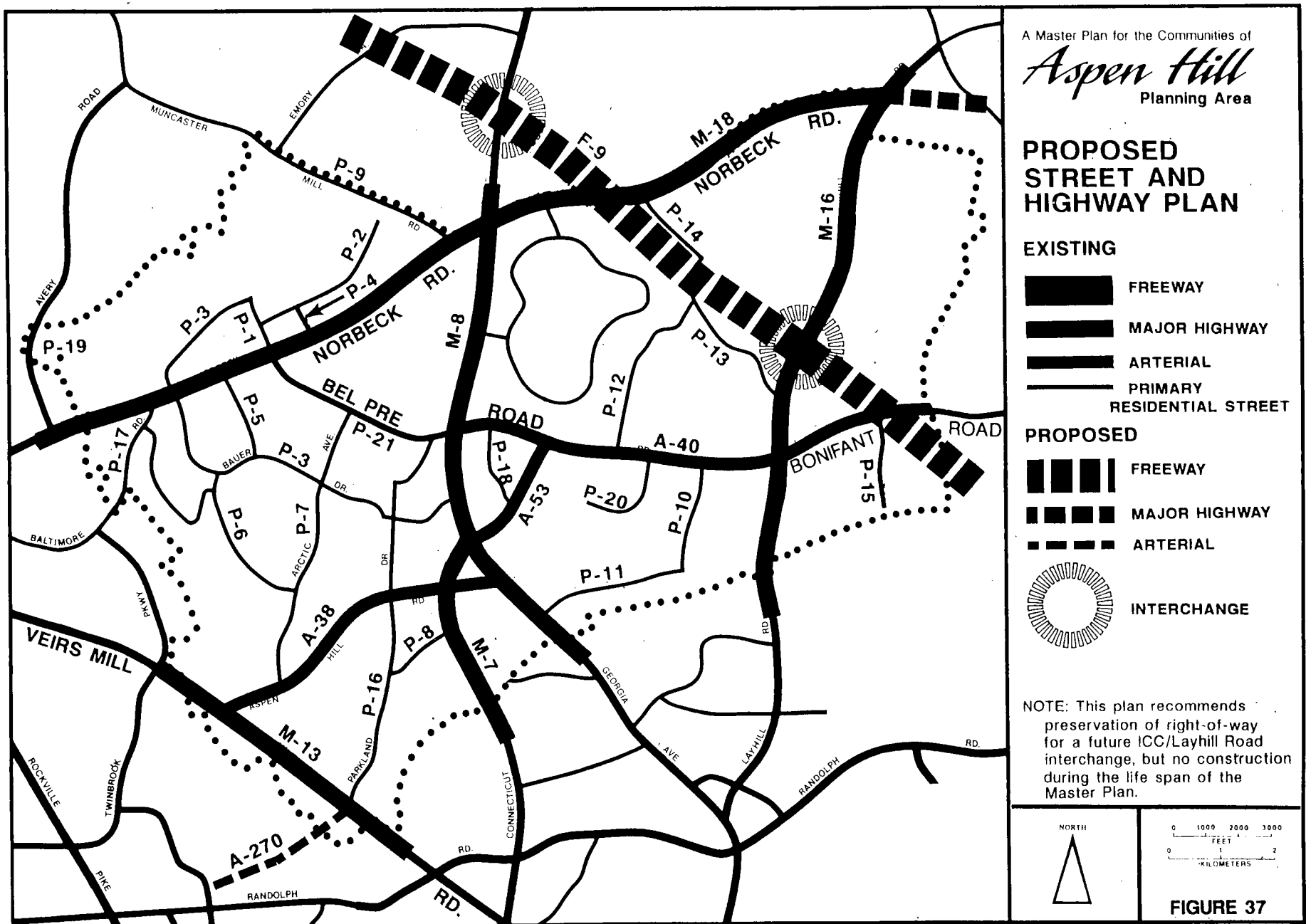


Table 4

**STREET AND HIGHWAY CLASSIFICATIONS
ASPEN HILL PLANNING AREA**

Master Plan Roadway Designation	Roadway	Limits	Recommended ¹ Minimum Right- of-Way Width	Recommended ² Number of Lanes or Paving Width
FREEWAYS				
F-9	Intercounty Connector ³ (ICC)	Northern Boundary Line to Eastern Boundary Line	300'	6 Lanes Divided Plus Transitway Facility
MAJOR HIGHWAYS				
M-7	Connecticut Avenue (MD 185)	Georgia Avenue (MD 97) to Southern Boundary Line	150'	6 Lanes Divided
M-8	Georgia Avenue (MD 97)	Northern Boundary Line to Southern Boundary Line	150'	6 Lanes Divided Plus Transitway Facility
M-13	Veirs Mill Road (MD 586)	Western Boundary Line to Southern Boundary Line	150'	6 Lanes Divided
M-16	Layhill Road (MD 182)	Norbeck Road (MD 28) to Southern Boundary Line	150' ⁴	4 Lanes Divided
M-18	Norbeck Road (MD 28)	Western Boundary Line to Layhill Road (MD 182)	150'	4 Lanes Divided
ARTERIAL				
A-38	Aspen Hill Road	Georgia Avenue (MD 97) to Veirs Mill Road (MD 586)	80'	2 to 4 Lanes; see text for discussion of right-of-way needs between Con- necticut Avenue and Georgia Avenue

Table 4 (Cont'd.)

Master Plan Roadway Designation	Roadway	Limits	Recommended Minimum Right- of-Way Width	Recommended Number of Lanes or Paving Width
A-40	Bel Pre Road	Georgia Avenue (MD 97) to Layhill Road (MD 182)	80'	5 Lanes
A-40 (Cont'd.)	Bonifant Road	Layhill Road (MD 182) to Eastern Boundary Line	80'	2 Lanes
A-53	Connecticut Avenue	Georgia Avenue (MD 97) to Bel Pre Road	80'	4 Lanes
A-270	Montrose Parkway	Southern Boundary Line to Veirs Mill Road (MD 586)	80'	4-Lane Divided or 3-lane undivided
PRIMARY STREETS				
P-1	Emory Lane	Norbeck Road (MD 28) to Bauer Drive	70'	24'
P-2	Sunflower Drive	Emory Lane to Hornbeam Drive	70'	24'
P-3	Bauer Drive	Emory Lane to Norbeck Road (MD 28)	70'	24'
P-3	Bauer Drive/ Heathfield Road	Norbeck Road (MD 28) to Georgia Avenue	70'	36'
P-4	Westbury Road	Sunflower Drive to Norbeck Road (MD 28)	70'	24'
P-5	Nadine Drive	Norbeck Road (MD 28) to Bauer Drive	70'	36'

Table 4 (Cont'd.)

Master Plan Roadway Designation	Roadway	Limits	Recommended Minimum Right- of-Way Width	Recommended Number of Lanes or Paving Width
P-6	Russett Road	Bauer Drive to Arctic Avenue	70'	36'
P-7	Arctic Avenue	Bel Pre Road to Aspen Hill Road	80'	36'
P-8	Independence Street	Parkland Drive to Connecticut Avenue (MD 185)	70'	36'
P-9	Muncaster Mill Road ⁵ (MD 115)	Western Boundary Line to Norbeck Road (MD 28)	80'	2 Lanes
P-10	Rippling Brook Drive	Bel Pre Road to Hewitt Avenue	70'	36'
P-11	Hewitt Avenue	Rippling Brook Drive to Georgia Avenue (MD 97)	70'	36'
P-12	Homecrest Road	Longmead Crossing Drive to Bel Pre Road	70'	36'
P-13	Longmead Crossing Drive	Layhill Road (MD 182) to Wintergate Drive	70'	36'
P-14	Wintergate Drive	Longmead Crossing Drive to Norbeck Road (MD 28)	70'	36'
P-15	Alderton Road	Bonifant Road to Rockville Facility Right-of-Way	70'	36'
P-16	Parkland Drive	Heathfield Road to Veirs Mill Road (MD 586)	70'	36'

Table 4 (Cont'd.)

Master Plan Roadway Designation	Roadway	Limits	Recommended Minimum Right- of-Way Width	Recommended Number of Lanes or Paving Width
P-17	Baltimore Road	Southern Boundary Line to Norbeck Road	70'	2 Lanes
P-18	Grand Pre Road	Bel Pre Road to Connecticut Avenue (MD 185)	70'	36'
P-19	Avery Road	Along Western Boundary Line	70'	36'
P-20	Beaverwood Lane	Bel Pre Road to About 150' West of Birchtree Lane	70'	36'
P-21	Bel Pre Road	Norbeck Road (MD 28) to Georgia Avenue (MD 97)	80'	40'

- 1 This minimum may be increased on the basis of more detailed engineering studies.
- 2 These are the number of planned through travel lanes for each segment, not including lanes for turning, parking, acceleration, deceleration or other purposes auxiliary to through travel.
- 3 The configuration assumed is for purposes of estimating transportation capacity; alternative configurations or modifications could be developed in future planning and design studies, yielding similar transportation capacity provisions.
- 4 This right-of-way width in the area around Northwest Branch Golf Course will be determined by subsequent study to reduce potential impacts on the operation of the golf course.
- 5 May be changed to Arterial after comprehensive study and approval by the County Council after a public hearing.

- o Stop signs, rumble strips, striping and other measures will be used as appropriate to address traffic and safety concerns on Bel Pre Road between Georgia Avenue and Norbeck Road. The section of Bel Pre Road between Georgia Avenue and Norbeck Road, has been reclassified from an arterial road to a primary residential street. Maintain and enforce the current posted speed limit of 25 miles per hour.
- o Use rumble strips or striping (or any other traffic control measure appropriate) if necessary to control traffic speed on Aspen Hill Road between Connecticut Avenue and Veirs Mill Road.
- o The rural residential road classification should be studied as part of the Road Code Committee review of road classification standards. Master Plan Amendment could evaluate and reclassify any roads in Aspen Hill that would meet those new standards.

Development Review Regulatory Standards

- o Review the standards used for this planning area in the regulatory process at an appropriate time. The transit and roadway improvements summarized above, or a significant subset of them, may justify a change in the level of service group designation for the Aspen Hill area.
- o This Plan recognizes the importance of rights-of-way and easements being used to provide pedestrian access and circulation for the community, including paths for access for construction and maintenance of public utilities. These paths should be retained if at all possible, and so not be abandoned or blocked without appropriate review. A list of these paths is in Appendix C of this Plan.
- o A review should be made as to whether any of the roads in Aspen Hill should be designated as "Rustic Roads."

The Bikeway Plan

The 1978 Approved and Adopted Master Plan of Bikeways shows that a bikeway existed in Rock Creek Park between Veirs Mill Road (MD 586) and Norbeck Road (MD 28), and that an undesignated bikeway existed on Connecticut Avenue between Georgia Avenue (MD 97) and Matthew Henson State Park (formerly the Rockville Facility Right-of-Way). The Bikeway Master Plan recommended bikeways on Norbeck Road (MD 28), Georgia Avenue, Bel Pre Road, Bonifant Road, Layhill Road (MD 182), Northwest Branch Park and in the Former Rockville Facility to have a connection between the Rock Creek and Northwest Branch Parks.

The Rock Creek Park bikeway now extends to Lake Needwood with connections to Lake Bernard Frank and nearby residential communities. In addition, a shared eight-foot-wide pedestrian/bikeway has been constructed on the south side of Bel Pre Road between Georgia Avenue and Layhill Road. This bikeway extends to New Hampshire Avenue (MD 650) as a Class II bikeway on Bonifant Road. The widening of Layhill Road to a four-lane divided highway also included a Class II bike lane on each side of the road; however, they are not currently signed as bikeways.

This Plan recommends a number of additions to the bicycle route network in Aspen Hill as part of an overall effort to enhance its use for recreation and commuting. Also, there are several sites within Aspen Hill that should be provided with good bicycle access to encourage the use of bikes as an alternate travel mode. These sites are the commuter park-and-ride lot in the northeast corner of the intersection of Norbeck Road and Georgia Avenue, the future Glenmont Metro station, Vitro Corporation site near the intersection of Georgia Avenue and Connecticut Avenue and the shopping centers, especially the Northgate and Aspen Hill Shopping Centers. The bikeway system in Aspen Hill has a dual purpose: (1) to meet the needs of the bikers within the area and those passing through and to encourage new ridership and (2) to meet the needs of hikers and other people traveling on foot.

The recommended bikeway plan is shown on Figure 38. Table 5 shows the class of bikeway, its limit and its approximate length. Key recommendations are summarized below:

- o Develop and implement a bikeway signage program for bikeways within State rights-of-way similar to the County program.
- o Construct a Class I bikeway in Northwest Branch.
- o Construct a Class I bikeway in the former Rockville Facility right-of-way to connect the Northwest Branch trail with the Rock Creek Park Trail.
- o Develop a north-south bikeway in the Georgia Avenue corridor. A Class I or Class II bikeway is recommended for Georgia Avenue, but a Class III bikeway is acceptable for parallel side streets with low traffic volumes.
- o Develop a bikeway along Norbeck Road that uses the parallel service roads as much as possible.
- o Develop a community bikeway system connected to public facilities, large employment sites, shopping centers and recreational resources.
- o Consider additional hiker/biker trails to Lake Frank, as well as within the Lake Frank area, during development of the Rock Creek Regional Park Master Plan currently scheduled for completion in 1993.

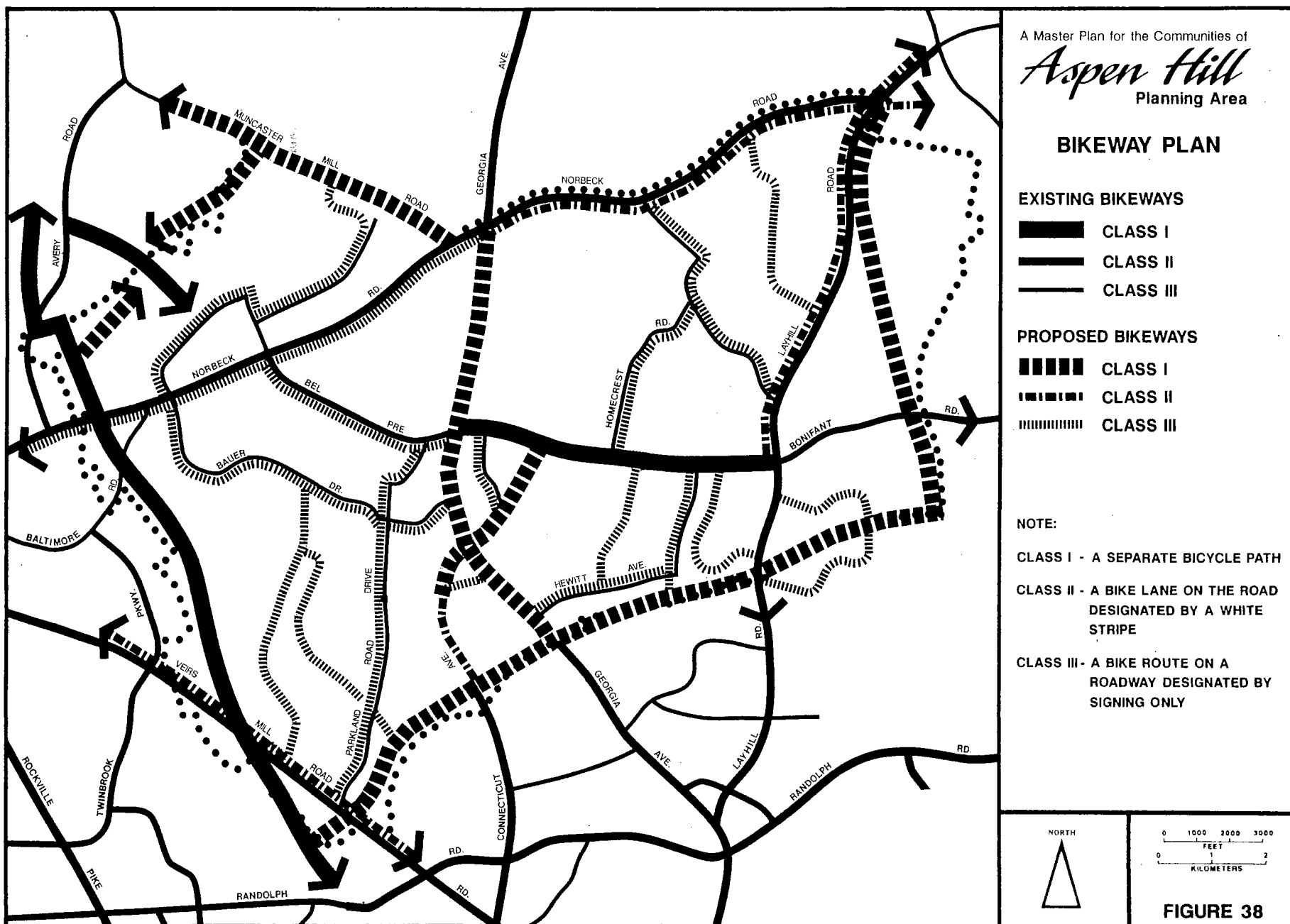


Table 5

**BIKE TRAILS/PATHS
ASPEN HILL PLANNING AREA**

Name of Facility	Limits of Facility	Approximate Length
<u>CLASS I: Existing</u>		
Bel Pre Road	Georgia Avenue to Layhill Road	10,300 feet
Connecticut Avenue	Southern Boundary Line to Aspen Hill Road	4,200 feet
Lake Bernard Frank	Lake Bernard Frank Parking Area to Avery Road	4,300 feet
Rock Creek Park Regional Trail	Planning Area Northern Boundary to Baltic Avenue and Veirs Mill Road to Southern Boundary Line	18,400 feet
<u>CLASS I: Proposed</u>		
Connecticut Avenue	Aspen Hill Road to Bel Pre Road	5,400 feet
Georgia Avenue	Norbeck Road to Matthew Henson State Park	14,100 feet
Matthew Henson State Park/Former Rockville Facility Right-of-Way	Northwest Regional Park to Rock Creek Park	22,500 feet
Muncaster Mill Road	Rock Creek North Branch to Norbeck Road	6,900 feet
North Branch Stream Valley Park	Muncaster Mill Road to Lake Bernard Frank	5,600 feet
Northwest Branch Trail	Planning Area Northern Boundary to Planning Area Eastern Boundary	14,000 feet

Table 5 (Cont'd.)

Name of Facility	Limits of Facility	Approximate Length
<u>CLASS II: Existing</u>		
Bonifant Road	Layhill Road to Planning Area Eastern Boundary	4,700 feet
Layhill Road	Longmead Crossing Drive to Southern Boundary Line	5,600 feet
<u>CLASS II: Proposed</u>		
Layhill Road	Norbeck Road to Longmead Crossing Drive	9,200 feet
Norbeck Road	Georgia Avenue to Layhill Road	12,900 feet
Veirs Mill Road	Rock Creek Park to Matthew Henson State Park	7,300 feet
<u>Class III: Existing</u>		
Baltic Avenue/ Aspen Hill Road	Rock Creek Park to Veirs Mill Road	1,000 feet
<u>CLASS III: Proposed</u>		
Alderton Road	Bonifant Road to Southern Boundary Line	3,000 feet
Arbutus Avenue	Arctic Avenue to Veirs Mill Road	1,300 feet
Arctic Avenue	Bauer Drive to Arbutus Avenue	7,300 feet
Aspen Hill Road	Connecticut Avenue to Georgia Avenue	1,500 feet
Bauer Drive	Emory Lane to Heathfield Road	13,300 feet
Beaverwood Lane/Birchtree Lane/Bluff Point Lane	Bel Pre Road to Hewitt Avenue	4,500 feet

Table 5 (Cont'd.)

Name of Facility	Limits of Facility	Approximate Length
Bel Pre Road	Norbeck Road to Georgia Avenue	6,000 feet
Chesterfield Road	Bel Pre Road to Parkland Drive	4,300 feet
Drury Road/Tiera Drive Baughman Drive	Norbeck Road to Layhill Road	7,900 feet
Emory Lane	Sunflower Drive to Bauer Drive	750 feet
Grand Pre Road	Bel Pre Road to Connecticut Avenue	2,800 feet
Greenspan Road	Bauer Drive to Rock Creek Park	1,500 feet
Grenoble Drive	Iris Street to Turkey Branch Parkway	4,200 feet
Heathfield Road	Bauer Drive to Georgia Avenue	2,100 feet
Hewitt Avenue	Georgia Avenue to Rippling Brook Drive	4,700 feet
Homecrest Road	Longmead Crossing to Bel Pre Road	6,000 feet
Hornbeam Drive	Sunflower Drive to Sycamore Lane	1,800 feet
Iris Street	Loree Lane to Grenoble Drive	1,000 feet
Loree Lane	Renn Street to Grenoble Drive	2,800 feet
Norbeck Road	Rock Creek to Georgia Avenue	13,600 feet
North Gate Drive/Post Lane	Bel Pre Road to Layhill Road	4,500 feet
Oriental Street	Arctic Avenue to Rock Creek Park	1,000 feet

Table 5 (Cont'd.)

Name of Facility	Limits of Facility	Approximate Length
Parkland Drive	Chesterfield Road to Veirs Mill Road	10,700 feet
Queensguard Road/ Woodwell Road	Layhill Road to Alderton Road	3,200 feet
Renn Street	Arctic Avenue to Loree Lane	300 feet
Rippling Brook Drive	Bel Pre Road to Former Rockville Facility	4,300 feet
Sunflower Drive	Hornbeam Drive to Emory Lane	4,400 feet
Sycamore Lane	Muncaster Mill Road to Hornbeam Drive	1,800 feet
Wintergate Drive/ Longmead Crossing	Norbeck Road to Layhill Road	8,100 feet

- o Relocate the Rock Creek Trail bikeway to the northwest side of Aspen Hill Road that presently passes along the southeast side of Aspen Hill Road, Adrian Street and Baltic Avenue. This would allow it to align with a pedestrian signal installed at the intersection of Aspen Hill Road and Veirs Mill Road.

Green Corridors

Green corridors are to be landscaped, scenic roadways that provide for pedestrians and bicyclists as well as vehicles. The green corridors criteria recommended for Aspen Hill are an extension of the principles outlined in the Kensington-Wheaton Master Plan, since the same designated State highways extend into Aspen Hill. Within the Aspen Hill Planning Area, green corridors may be State highways, County roads or residential streets. This policy recommends that well-landscaped roadways with adequate sidewalks, conveniently located transit stops and bicycle lanes be major goals for the Aspen Hill Master Plan and Montgomery County. Both State highways and County roads are designated by this Plan as green corridors on Figure 39.

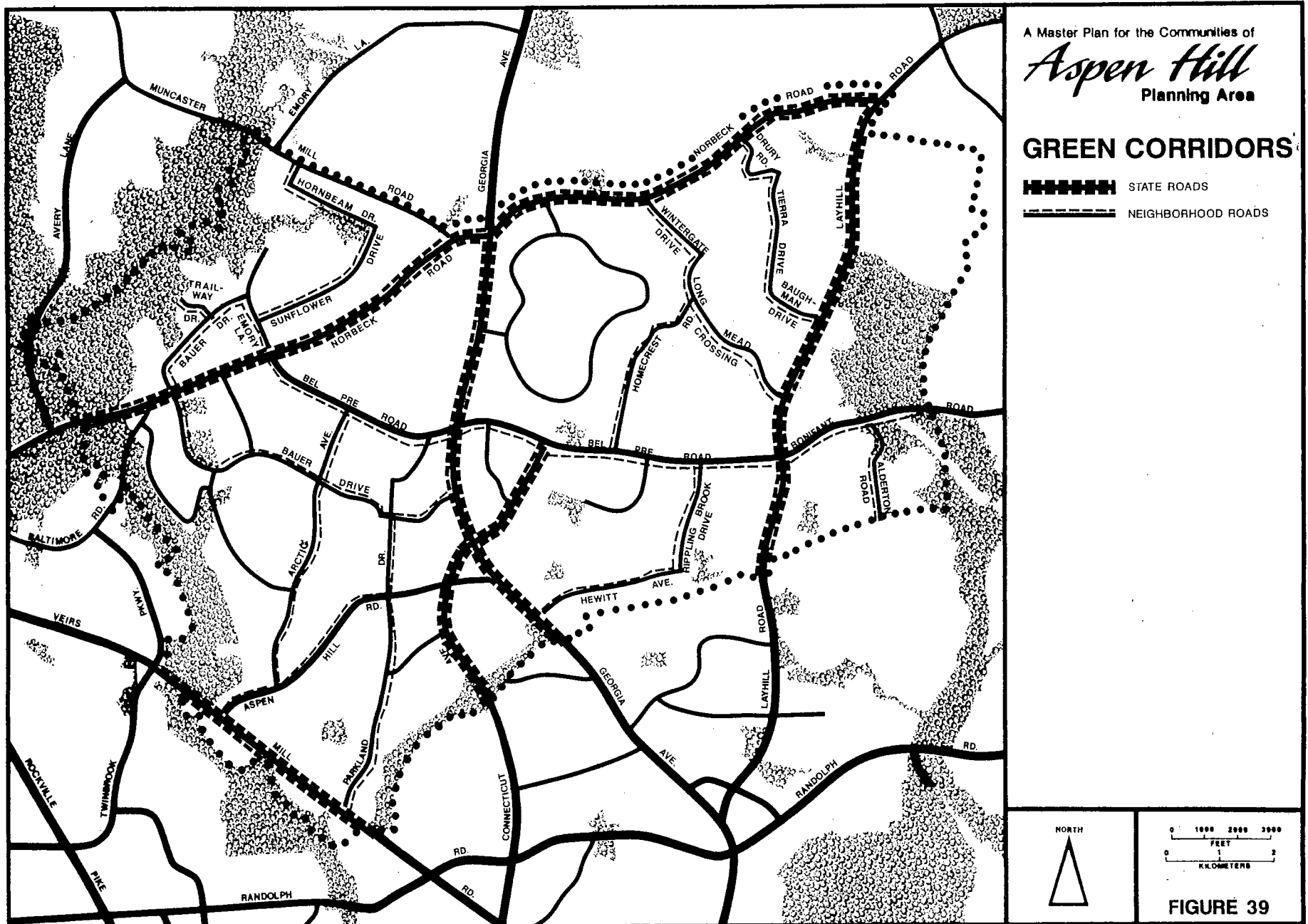
This Plan supports the improvement of Connecticut and Georgia Avenues and Layhill, Norbeck and Veirs Mill Roads with sidewalks where they are lacking, bikeways and street and median trees where possible. The amount of vegetation along these corridors should be maintained and increased to improve visual and environmental quality and buffer adjacent uses and pedestrians from the high speed and noise of the vehicles. As a minimum, sidewalks must be provided where needed to access transit stops from residences, work and shopping, surrounding schools and around shopping centers. The Plan recommends construction of sidewalks along Baltimore Road.

Aspen Hill Road can be redesigned to improve pedestrian and vehicular circulation between Connecticut and Georgia Avenues along the entries to the shopping centers. Figures 40 and 41 show the proposed redesign.

The existing large median strips on Grenoble Drive and Parkland Drive should be preserved to the extent possible as significant community amenities.

When Georgia Avenue is redesigned to include mass transit, improved pedestrian and bicycle access will be included, as shown on Figure 42. The design of the Georgia Avenue Transitway should adhere to the green corridor policies. In the interim, the service drives along Norbeck and Veirs Mill Roads could be connected with paths and curb cuts to create a continuous route for bicyclists and pedestrians.

The amount of tree canopy now present on the through neighborhood roads that are designated as green corridors should be maintained or enhanced. Sidewalks should be provided on the north side of Bel Pre Road between Connecticut Avenue and Rippling Brook Drive and street trees planted to make it a green corridor.



**ASPEN HILL ROAD
PROPOSED CONCEPT FOR
REDESIGN (SECTIONS)**

FEATURES:

- MEDIANS FOR PEDESTRIAN SAFETY AND LANDSCAPING
- 14' CURB LANE ALLOWS FOR A CLASS III BIKEWAY
- MEDIAN BECOMES TURN LANE WHEN NEEDED
- ADDITIONAL RIGHT-OF-WAY REQUIRED

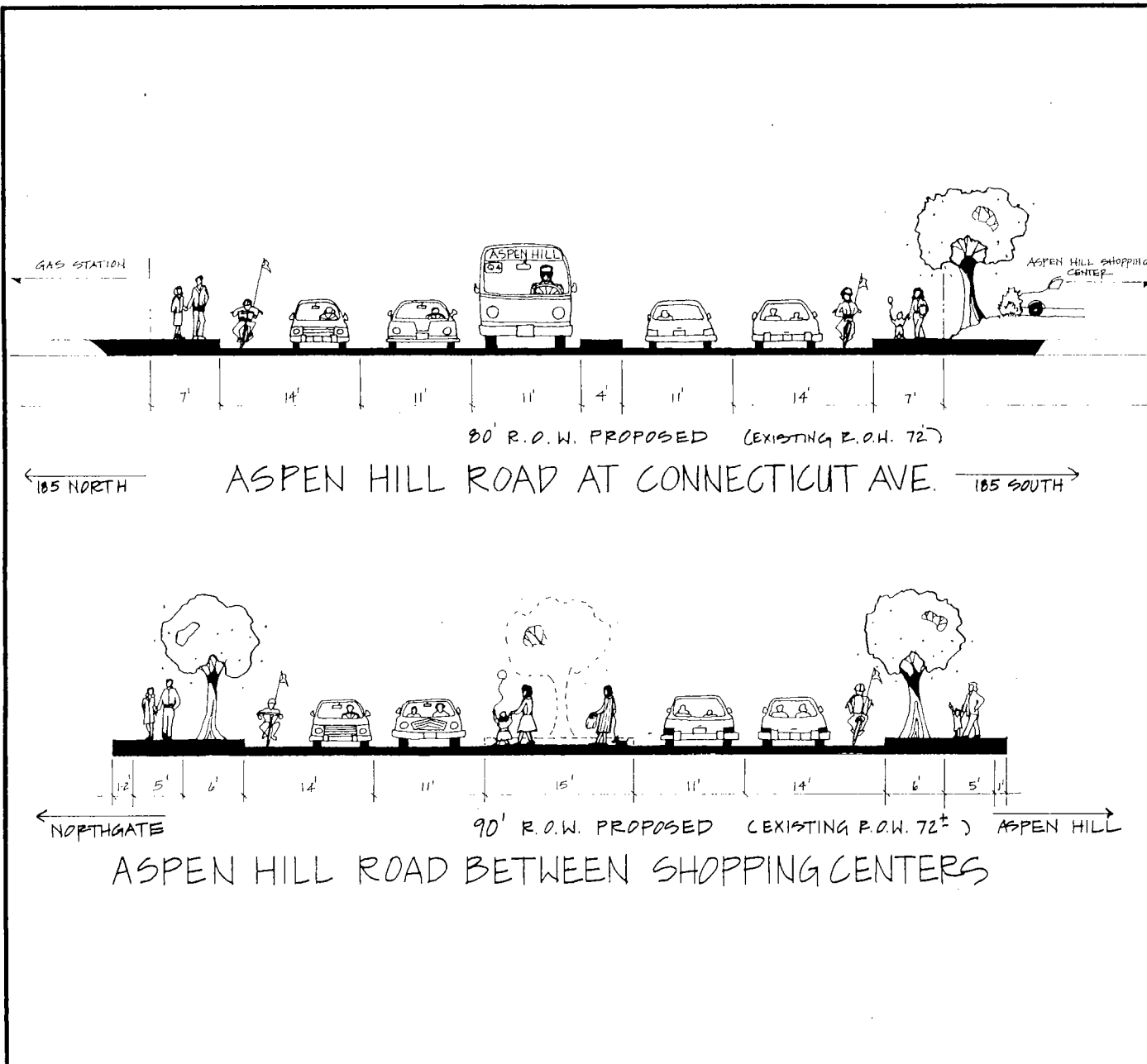


FIGURE 40

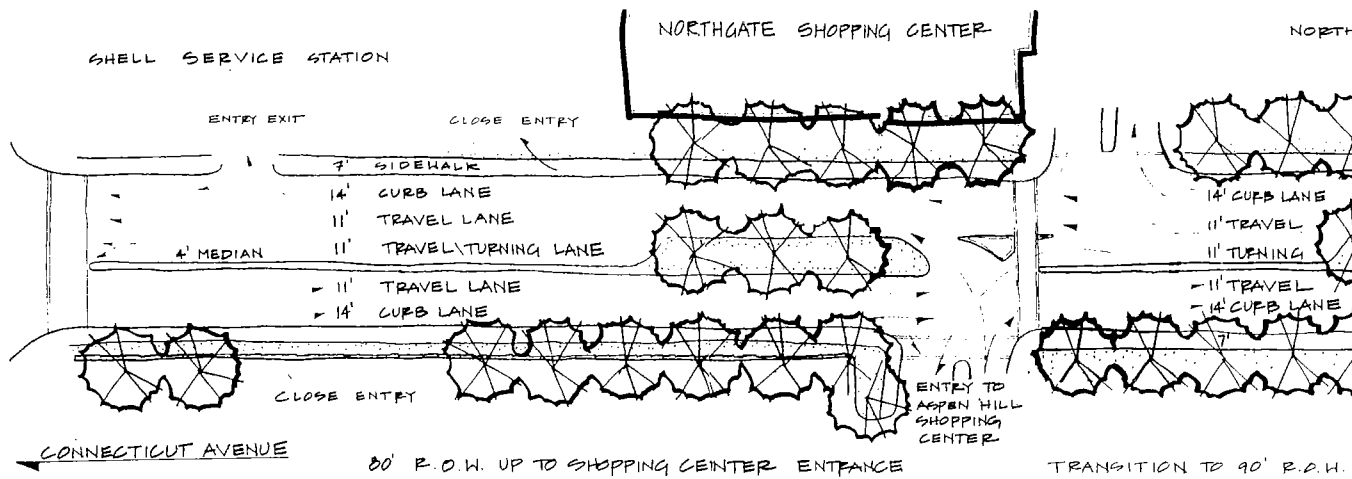
ASPEN HILL ROAD

ILLUSTRATIVE CONCEPT (PLAN VIEW)

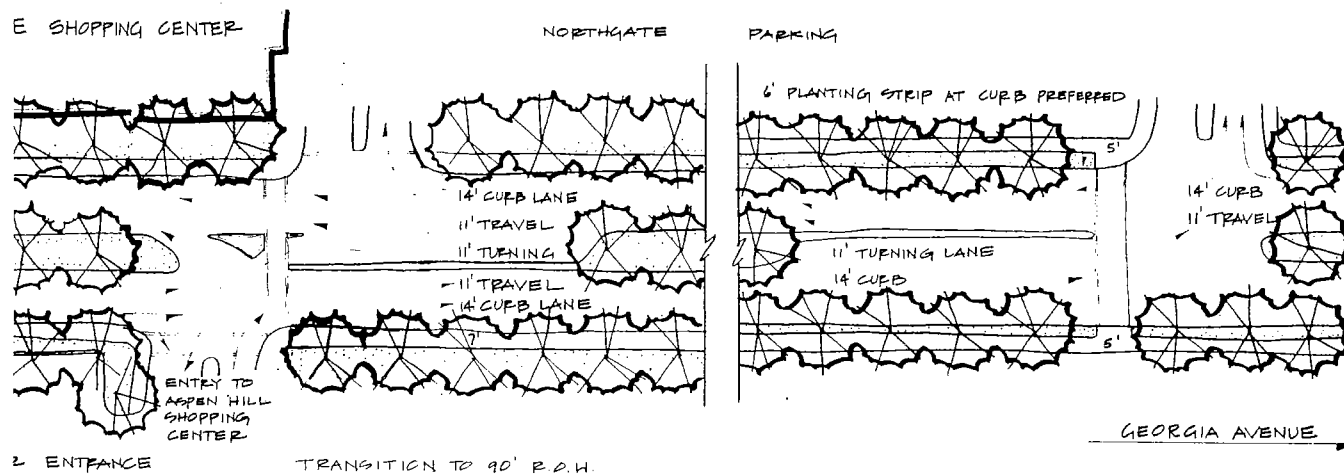
FEATURES:

- MEDIANS FOR PEDESTRIAN SAFETY AND LANDSCAPING
- STRIPED PEDESTRIAN CROSSING BETWEEN CENTERS
- 14' CURB LANE PROVIDES FOR CLASS III BIKEWAY
- RELOCATED EAST BOUND LEFT TURN INTO NORTHGATE SHOPPING CENTER
- WEST BOUND LEFT TURN INTO ASPEN HILL SHOPPING CENTER RETAINED
- POSSIBLE CLOSURE OF SECONDARY ENTRIES TO GAS STATION AND ASPEN HILL SHOPPING CENTER

FIGURE 41



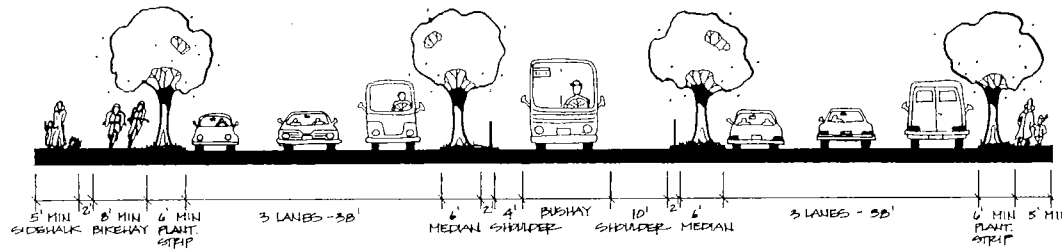
ASPEN HILL ROAD AT CONNECTICUT AVENUE



ASPEN HILL ROAD BETWEEN SHOPPING CENTERS

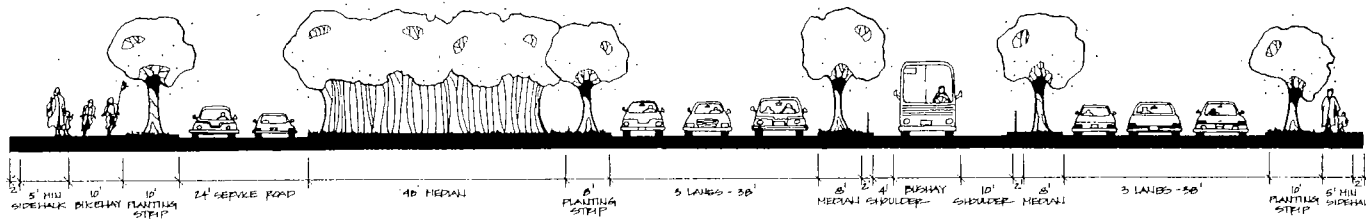
GEORGIA AVENUE SECTIONS

ILLUSTRATIVE CONCEPT



SECTION LOOKING NORTH

GEORGIA AVENUE - 150' R.O.W.
BARRIER SEPARATED REVERSIBLE
BUSWAY



SECTION LOOKING NORTH

GEORGIA AVENUE - 250' R.O.W.
BARRIER SEPARATED REVERSIBLE BUSWAY

FIGURE 42

Local road intersections with the State highways are critical to the green corridors network and to the planning area. Pedestrians should be accommodated with well-marked crosswalks and walk lights timed for their crossing. Specially colored or marked paving, signage and landscaping can help reinforce pedestrian rights and improve the attractiveness of the intersections.

IMPLEMENTATION

Any plans submitted for renovation, rezoning or special exception in the commercial or residential zones adjacent to Connecticut Avenue, Georgia Avenue, Layhill, Norbeck or Veirs Mill Roads should be reviewed for the adequacy of the proposed landscaping and for screening and shading of parking lots; sidewalks should be provided and extended to transit points and street trees be provided along the roads. Some pedestrian and landscape improvements may be made as Capital Improvement Projects by either the State or the County.

This Plan supports The Maryland-National Capital Park and Planning Commission, (M-NCPPC), Montgomery County Department of Transportation (MCDOT), PEPCO and the Maryland State Highway Administration working together to assure there will be sidewalks where needed along all State highways in Aspen Hill and a flexible and adequate street tree and landscaping policy. A way to achieve the implementation of recommendations contained in this section is to incorporate the Aspen Hill Planning Area into the Suburban Taxing District or County-wide tree maintenance program.

Possible changes to existing practices would be as follows:

- o Large, wide-branched shade trees should be planted under utility wires and periodically pruned to open the tree crown to light and utility wires. Large scale trees are greatly needed to shade major highways, to mitigate heat build-up and glare, to provide a comfortable place to walk and to provide a sense of scale. Small flowering trees are inappropriate and inadequate as the primary street tree along major highways but may be used for seasonal color in medians or in massed plantings.
- o Street trees along State highways in Montgomery County should be spaced at a maximum of 40 feet on center, as on Norbeck Road, to create an attractive sense of scale and provide more shade. A wider, taller mass of vegetation and canopy is needed to have an impact on a wide roadway.
- o When turning lanes are added or roads widened, replacement plantings should be considered and appropriate species used for the particular location.
- o Sidewalks should be provided on both sides of all State highways, where possible, to get to transit or neighborhood destinations. They should be given as high a priority as road widenings or intersection

improvements. Sufficient spacing should be provided between curb and sidewalk to allow for the planting of street trees. As an example, future sidewalks could be placed a minimum of seven (7) feet from the face of the curb to allow for the curb and a 6-foot planting strip; or, a minimum 10-foot wide sidewalk could be provided allowing for a 5-foot clearance of tree grates where they occur.

- o Well-marked pedestrian crosswalks should be provided as road widenings or turning lanes are constructed. Medians are needed as safety refuges for pedestrians crossing wide roads. Crosswalks may be of materials other than asphalt.