

# Infrastructure Elements





# Transportation Systems

## Goals

- To provide an efficient multimodal transportation system that reduces dependency on the automobile.
- To provide safe and convenient vehicular and nonvehicular circulation and access by separating commercial and noncommercial traffic and providing direct pedestrian connections to the Metro station and the residential, commercial, and industrial areas.
- To develop a system of trails, sidewalks, and bikeways that connect to the surrounding regional trail systems and the Anacostia Heritage Trail.

## Background

The sector plan area's transportation network includes a primary residential street (Cheverly Avenue), industrial road (Tuxedo Road/Arbor Street), collector street (Columbia Park Road), arterial highway (Kenilworth Avenue [MD 201]), freeway (Baltimore-Washington Parkway [I-295] and John Hanson Highway [US 50]), fragmented sidewalks, and the Metrorail Orange Line (Cheverly Station).

The 2001 average annual daily traffic (AADT) volumes along major highways serving the area are shown in Table 2 of the Sector Area Profile chapter.

The Washington Metropolitan Area Transit Authority (WMATA) and the Prince George's County Department of Public Works and Transportation provide bus service to the area. The WMATA Metro bus routes that serve the area along with Route 23 on the county's (The Bus) bus route are F1, F2, F8, F12, and F13. Although Maryland Railroad Commuter System (MARC) tracks pass through the area, there is no direct access to MARC service from the sector plan area.

## Issues

1. Overall road condition and road width in the industrial area does not provide sufficient space for either truck or car parking, passing, or turnaround. The predominance of large, visible outdoor storage facilities and on-street truck storage in the industrial area contributes to its unsightliness and the sense of chaos, particularly along Tuxedo Road.
2. Pedestrian access to the Metro station from the surrounding Cheverly community is poor. It is viewed as indirect and unsafe and does not relate to the surrounding community. This is in contrast to other areas within the Town of Cheverly, which is a walkable community with sidewalks along most roads and traffic-calming measures.



*A dangerous intersection of Arbor Street and Tuxedo Road.*

3. Arbor Street access and visibility is hindered by poor road design at the intersection of Arbor Street, Columbia Park Road, and Cheverly Avenue.
4. Ramps to and from westbound US 50 to MD 201 and Tuxedo Road and the overall complex geometric configurations of ramps between US 50, Baltimore-Washington Parkway, and Kenilworth Avenue create highly undesirable and potentially unsafe conditions. Although recent traffic accident data reflect very few reported accidents at this complex and congested location, the potential for accidents exists.
5. There is a need for hiker/biker trail connections between Cheverly and the existing Anacostia Tributary Trails Network, Prince George's Hospital, the Metro station, and a stream valley trail along Beaverdam Creek.

## **Objectives**

1. Improve Arbor Street and realign Beecher Street to improve circulation and to allow assemblage of properties to encourage larger-scale development.
2. Maintain Level-of-Service (LOS) E at major intersections in the area. This service level is

consistent with the 2002 General Plan policy for LOS E at Centers and Corridors within the Developed Tier.

## **Recommendations**

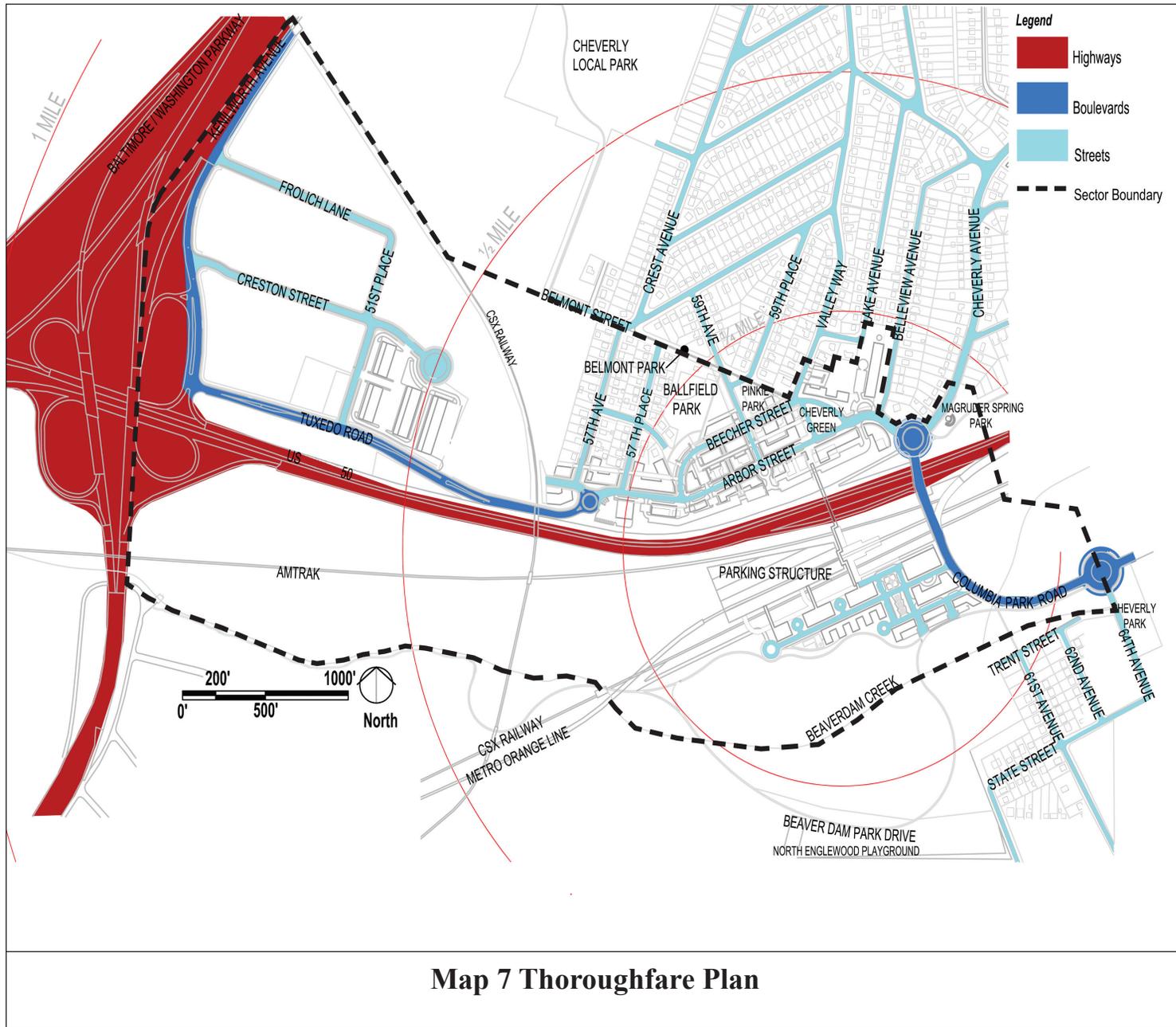
Make the necessary changes that will eliminate known operational problem areas and result in a safe and balanced use of all existing transportation modes shown in Map 7: Thoroughfare Plan.

### ***Bus Service***

Provide commuter bus service connecting the Cheverly Metro Station to the Prince George's Hospital Center, the Cabin Branch and Columbia employment centers as part of the ongoing update to the Countywide Master Plan of Transportation.

### ***Roadways***

1. Study alternative ways to address the traffic operational and safety concerns including C-404 improvements recommended in the 1990 Landover and vicinity master plan, possible ramp reconfiguration, closing or relocating ramps or median openings, limiting cut-through traffic into Cheverly Avenue, and installing appropriate traffic control measures in the vicinity of MD 201, US 50, Baltimore-Washington Parkway, and Tuxedo Road junction.
2. Secure Maryland State Highway Administration and National Park Services authorization for project planning, engineering, and constructing
3. Provide operational improvements, landscaping, and appropriate sidewalk enhancements along Tuxedo Road, Arbor Street, and Kenilworth Avenue and construct a linear park/buffer along Tuxedo Road and Kenilworth Avenue edges. These improvements should be designed to safely and effectively accommodate the existing and projected vehicular and pedestrian traffic between adjoining regional highways and the existing and planned uses. (See Figure 3: Model for Entry Boulevard into Tuxedo Road.)



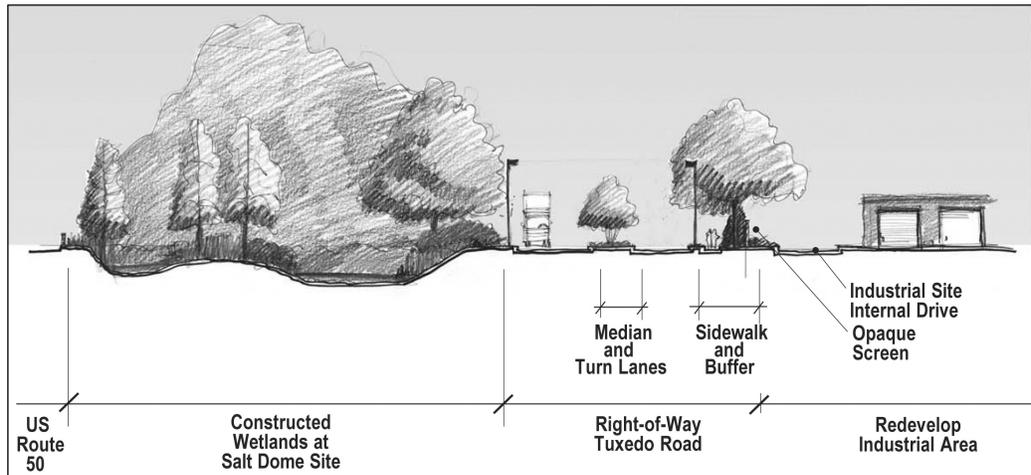
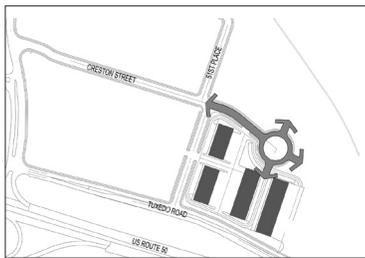
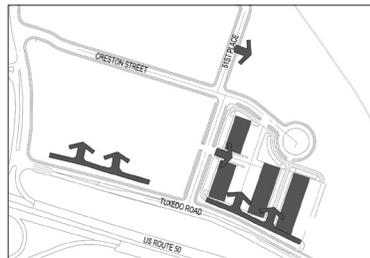


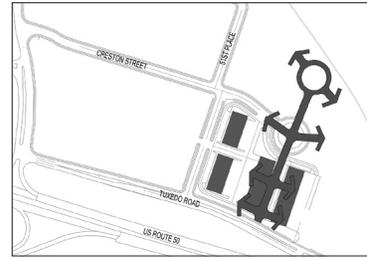
Figure 3 Model for Entry Boulevard into Tuxedo Road.



Option A



Option B



Option C

Figure 4 Heavy Industrial Area Internal Circulation Options A, B, C.

These are illustrative concepts that may be considered as future development occurs. However, any circulation improvements should consider the effects on existing as well as new businesses.

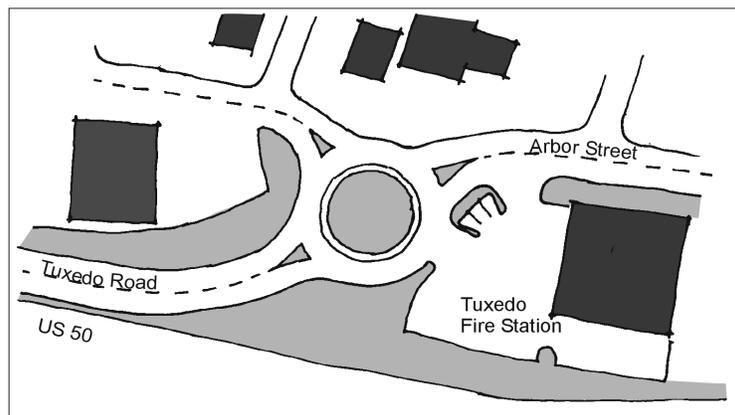


Figure 5 Proposed Traffic Circles.

4. Provide a signalized left turn from Kenilworth Avenue to Tuxedo Road. The internal industrial streets, including Frolich Lane, Creston Street and 51<sup>st</sup> Place, need to be improved to meet county standards for industrial roadway entrance spacing and on-street parking. Explore options (Figure 4: Heavy Industrial Area Internal Circulations-Options A, B, C) for improving access to the industrial area and improving internal circulation with controlled access to Tuxedo Road.
5. Construct the roundabout that discourages commercial and industrial truck traffic on Arbor Street in the vicinity of the fire station and CSX Railroad overpass. The roundabout would provide safer access for the town center and allow safe and easy access to the Tuxedo Industrial Park. (Figure 5: Proposed Traffic Circles).
6. Realign and redesign Beecher Street and Arbor Street (Figure 6: Street Function Models) to function as local and main streets, respectively, to achieve the street functions envisioned for the area, provide a safe and improved traffic flow, and encourage pedestrian activities. More detailed guidelines and standards are provided in the Development District Standards section.
7. Provide well-designed and pedestrian-friendly roundabouts in order to provide continuity and better circulation between the Arbor Street area and the Metro station area developments. The roundabout at the intersection of Columbia Park Road and 64<sup>th</sup> Avenue would efficiently direct traffic into and from these areas and would provide an opportunity for an attractive gateway to the area from the south.
8. Provide a large freestanding parking structure north of the CSX and Metrorail lines. This location will provide much-needed additional direct-access parking for Metro users, as well

as parking for the new commercial development proposed for the site. In addition, the parking structure could allow for ease of construction phasing, and its distance from habitable structures could result in much lower construction costs.

9. Construct a new grade-separated pedestrian bridge extending over US 50 that connects Arbor Street to the Metro station and the planned parking structure in order to improve the existing pedestrian movements between revitalized Arbor Street and the Cheverly Metro Station.

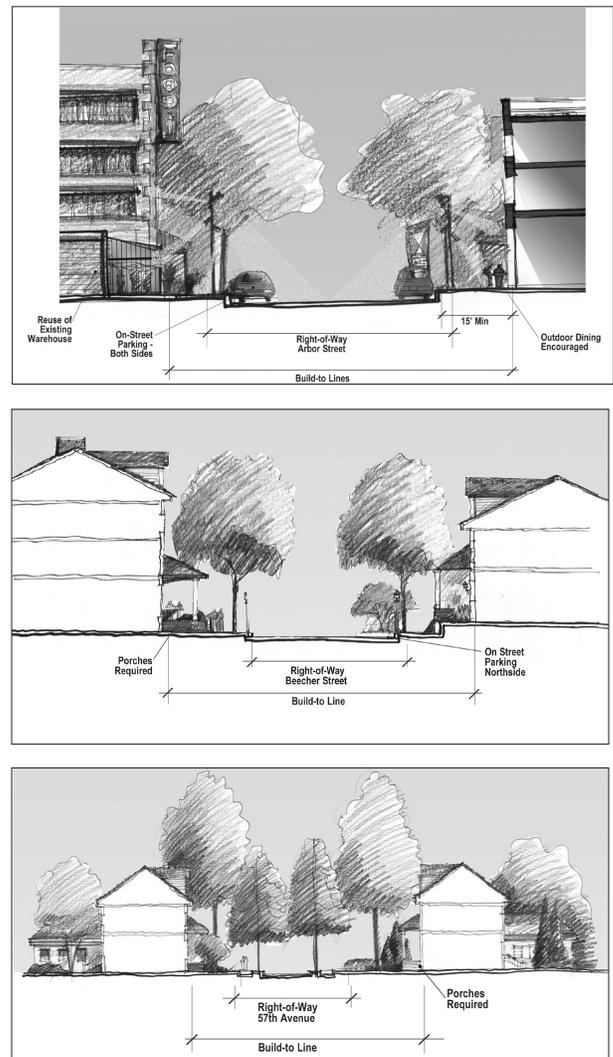
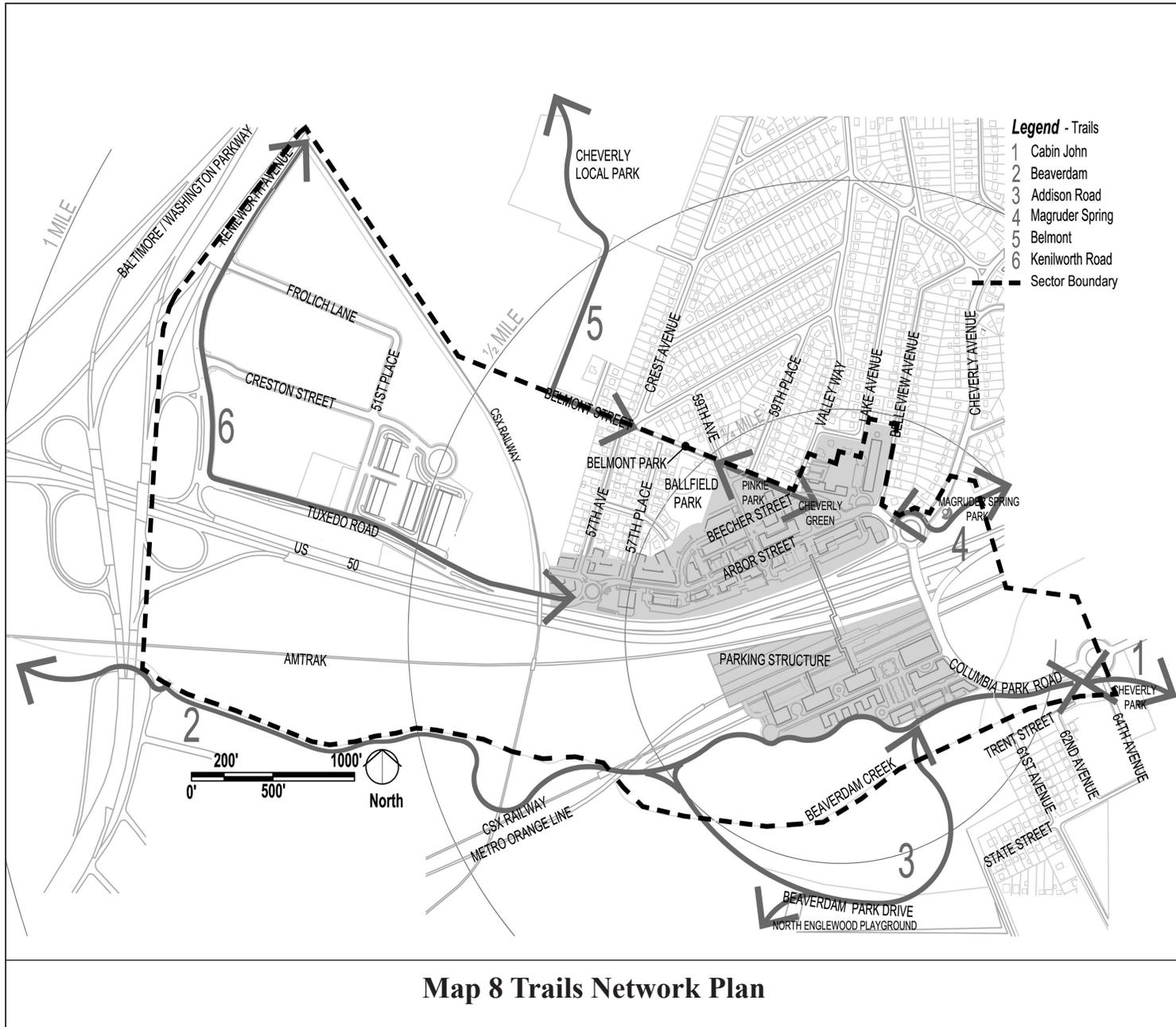


Figure 6 Street Function Models.



**Map 8 Trails Network Plan**

### ***Sidewalks, Trails, and Bikeways***

The recommendations set forth emphasize pedestrian mobility as a key to achieving transit-oriented development. The recommendations also maximize local and regional multiuse trail connections utilizing stream corridors, railroad rights-of-way, “paper” streets (recorded right-of-way that is not improved or constructed), public parks, utility or drainage easements, and other linear corridors (Map 8: Trails Network Plan).

1. Implement the SHA neighborhood conservation plan for Kenilworth Avenue, Tuxedo Road and Arbor Street. The plan provides the area with the short-term streetscape improvements (including pedestrian facilities) that are critically needed.
2. Provide sidewalks with high-quality materials throughout the area as road improvements or streetscape improvements are made. Improve Arbor Street with sidewalks wide enough (12-15 feet) to provide safe and comfortable pedestrian access, sidewalk dining and adequate landscaping.
3. Develop new roads and retrofit existing facilities in accordance with the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, where feasible.
4. Implement pedestrian safety measures at road crossings and trail intersections. These measures can include curb extensions, in-pavement lighting at crosswalks, raised crosswalks, pavement markings, additional signage and lighting, and contrasting surface materials.
5. Provide a master plan trail along the entire length of the Cabin Branch within the study area, building upon the recently completed feasibility study by the University of Maryland. This trail will largely be to the south of the study area and will ultimately extend to MD 214 in Seat Pleasant. This trail will be located on land owned by or dedicated to the M-NCPPC Department of Parks and Recreation, or within a public use easement offered through willing private-property owners. This trail will provide access to a green corridor in a heavily developed and industrial area and will also provide pedestrian and bicycle access to the Cheverly and Addison Road Metro Stations.
6. Conduct a feasibility study for a stream valley trail along Beaverdam Creek. The feasibility study for the trail should be part of a larger, comprehensive study for the restoration of the Beaverdam Creek stream valley. Issues such as pollution, erosion, water quality, and incompatible land uses may need to be addressed as part of this study. A trail along Beaverdam Creek would ultimately link the Cheverly Metro area with the Anacostia Tributary Trails Network and the planned Anacostia River Trail in the District of Columbia.
7. Provide a pedestrian trail along the north side of Tuxedo Road and the east side of Kenilworth Avenue to connect to Prince George’s Hospital to the north and to provide a slight buffer between the industrial area and the street edge. These trails will also facilitate pedestrian movement around the industrial area and from the industrial area to Arbor Street and the Cheverly Metro area.
8. Provide the Magruder Spring Trail between Arbor Street and Cheverly Community Park. This trail would provide access to the Arbor Street and Cheverly Metro areas from the eastern portion of the Town of Cheverly.
9. Provide a trail within the linear park along the undeveloped portions of the Belmont Street corridor. This trail would provide a pedestrian

connection along a paper street through a largely residential neighborhood to Arbor Street.

10. Implement the Planning Area 69 master plan recommendation for a Class III bikeway on Cheverly Avenue and Crest Avenue. These roads are recognized as important bicycle and pedestrian corridors through the Town of Cheverly.
11. Provide a Class III bikeway (designated AASHTO bicycle lanes are preferred) with wide sidewalks that continue along the entire length of Columbia Park Road and Cabin Branch Drive within the sector plan area.
12. Provide a trail connection north from Trent Street to the proposed Beaverdam Creek stream valley trail. This trail will provide convenient pedestrian access to the stream valley trail from the south.
13. Provide a trail connection from the proposed Beaverdam Creek stream valley trail to Addison Road. This trail will link residents of the Addison Road corridor with the Cheverly Metro Station. The trail could be accommodated in the paper street connecting to Addison Road.
14. Connect a trail through Cheverly-Euclid Park and to the vacant land or paper street running from the park property to the Prince George's Hospital Center. This would provide a pedestrian connection from south Cheverly and the Cheverly Metro area to the hospital site.
15. Provide a pedestrian bridge connecting the Cheverly Metro Station to the Arbor Street mixed-use area. This is a long-term recommendation and will provide safe and convenient pedestrian access between a revitalized Arbor Street and the Cheverly Metro Station.

## Public Facilities

### Goal

- To provide adequate public facilities at appropriate locations and in a timely manner to meet the educational, recreational, safety, and health needs of residents and workers within the sector plan area.

### Objective

1. Provide public facilities that serve the anticipated growth in population and employment in accordance with the standards and guidelines for those facilities.
2. Provide public facilities that function as community focal point, a gathering place, and a source of community identity and civic pride.

### Public Schools

The schools currently assigned to serve the area are Robert Gray and Gladys Spellman Elementary Schools, Charles Carroll and G. James Gholson Middle Schools, Fairmont Heights and Bladensburg High Schools.

Schools that serve the sector plan area will accommodate the potential students as a result of the proposed increase in residential density. Although there are marginal deficits in some of the schools (Table 6), they do not warrant consideration of a new school. Deficits can be addressed through boundary

adjustments and possibly the addition of modular classroom additions. The provision of new schools is normally warranted only when the areawide deficit capacity is severe and sufficient to generate a large enough number of students to support an additional school.

### Recommendation

No new school sites are recommended in the study area. The pupil yield anticipated from development associated with the recommended land uses in the sector plan is less than the threshold number necessary to create a demand for a new school.

### Fire and Rescue Facilities

The Approved 2003-2008 Capital Improvement Program (CIP) contains a project for a new fire station located between Rhode Island Avenue and Bunker Hill Road in Mount Rainier. The Cottage City station is one of three stations being relocated to the new fire station. The combined facility will provide improved emergency medical service (additional vehicles) to the study area that is already served within response time standards. (See Tables 7 and 8)

The provision of fire and emergency medical facilities and services focuses on two major criteria: (1) a service must be provided when demanded and (2) firefighting resources must be available upon potential demand.

<b>School Name</b>	<b>Capacity</b>	<b>Enrollment (Sept. 2002)</b>	<b>Percent of Capacity</b>	<b>Surplus (Deficit)</b>	<b>Proposed Development Yield</b>	<b>Total Surplus or (Deficit)</b>
Robert Gray Elementary	790	595	75	195	48	147
Gladys Spellman Elementary	580	747	129	(167)	45	(212)
Charles Carroll Middle	859	815	95	44	12	32
G. James Gholson Middle	990	1,056	107	(66)	12	(78)
Fairmont Heights High	1,155	1,147	99	8	23	(15)
Bladensburg High	1,942 (800)*	1,462	75	480	22	458

\*Capacity is based upon after-construction capacity

Numbers in parentheses represent deficit or number of pupils over capacity

<b>Station</b>	<b>Location</b>	<b>Address</b>	<b>Equipment</b>
Co. 22	Tuxedo/Cheverly	5711 Tuxedo Road	Engine, ambulance
Co. 2	Cottage City	3840 Bladensburg Road	Ladder truck, engine, ambulance
Co. 30	Landover Hills	68 <sup>th</sup> Street and Annapolis Road	Medic, engine, ambulance, water supply

	<b>Engine</b>	<b>Ladder</b>	<b>Ambulance</b>	<b>Medic</b>
Single-family residential and townhouses	5.25	N/A	6.25	7.25
Apartments, multifamily and commercial	3.25	4.25	4.25	7.25

### ***Recommendation***

The sector plan reaffirms the Approved Capital Improvement Program (FY 2003-2008) (Item LK510043) for the consolidation of the Cottage City, Brentwood, and Mount Rainier fire stations located between Bunker Hill Road and Rhode Island Avenue.

### **Police**

The study area is located in Police Districts I and III, with US 50 as the dividing line. The sector plan area is served by the Town of Cheverly's municipal police department as well as by community-oriented police officers (COPS). These officers are located in satellite offices within each station to provide easier access for the community and to assist with making the police department a more integral part of the community.

The District I (Hyattsville) Station, serving the north side of the sector area, currently meets facility size requirements (assigned staff does not exceed building capacity). The District I station, with its 30,000-foot structure, has the physical capacity to staff 261 officers based upon the standard of 115 square feet per officer. The station currently contains a sworn staff of 179 officers, and, on the basis of staffing, police facilities are deemed adequate.

The District III (Landover) station, serving the south side of the sector area, currently does not meet facility size requirements. The facility has the capacity for 146 staff and currently houses 213 staff. The capacity issue was addressed in the approved sector plan for the Morgan Boulevard area, which contains a recommendation for a substation to provide for adequate facility capacity in Police District III. The proposed 5,000-square-foot substation facility would be located in the vicinity of Hill Road and Central Avenue.

### ***Recommendation***

The recommendation for police services reaffirms the 1990 Adopted and Approved Public Safety Master Plan. It also reaffirms the recommendation in the Morgan Boulevard and Largo Town Center sector plan for a police substation in the vicinity of the intersection of Hill Road and Central Avenue.

### **Libraries**

Library service within the study area is provided at the Fairmount Heights Branch. It is a 25,000-square-foot facility with a collection capacity of 125,000 volumes. This branch is approximately one-half mile southeast of the study area. There are three additional branches, Bladensburg, Glenarden, and Mount Rainier, within the county's standard three-mile radius or a ten-minute drive of portions of the study area.

The adequacy of library facilities is based on several factors. These factors include access (within a three-mile radius or a ten-minute drive), facility circulation rate, number of staff, and collection size. The library system's standard for determining library usage and capacity is a circulation-to-volume ratio (2.43 volumes of circulation per volume of holdings) and a circulation-to-staffing ratio (11,615 volumes of circulation per full time equivalent). The Fairmount Heights Branch is well below this level of usage with a current ratio of .92 volumes of circulation per volume of holdings.

### ***Recommendation***

No new library facilities are proposed as the study area is adequately served.

### **Health Services and Facilities**

The main clinic for the health department is located in Cheverly approximately one-half mile northeast of the study area. The Cheverly clinic is a full-service facility, which provides services from prenatal and baby care to senior citizen services.

The adequacy of health facilities is based on standards for the provision of health-related care to monitor how privately and publicly funded health facilities meet the needs of local residents. These standards are based on facilities and staff needed to serve the residents. The county Health Department assesses conditions and plans the public sector's role to complement private health services in the area.

### ***Recommendation***

No new health care facilities are recommended as the study area is adequately served.

### **Parks and Open Space**

This plan proposes various types of open space areas that provide facilities and opportunities to gather and recreate to accommodate the anticipated increase in residential density. (Map 9: Open Space Plan)

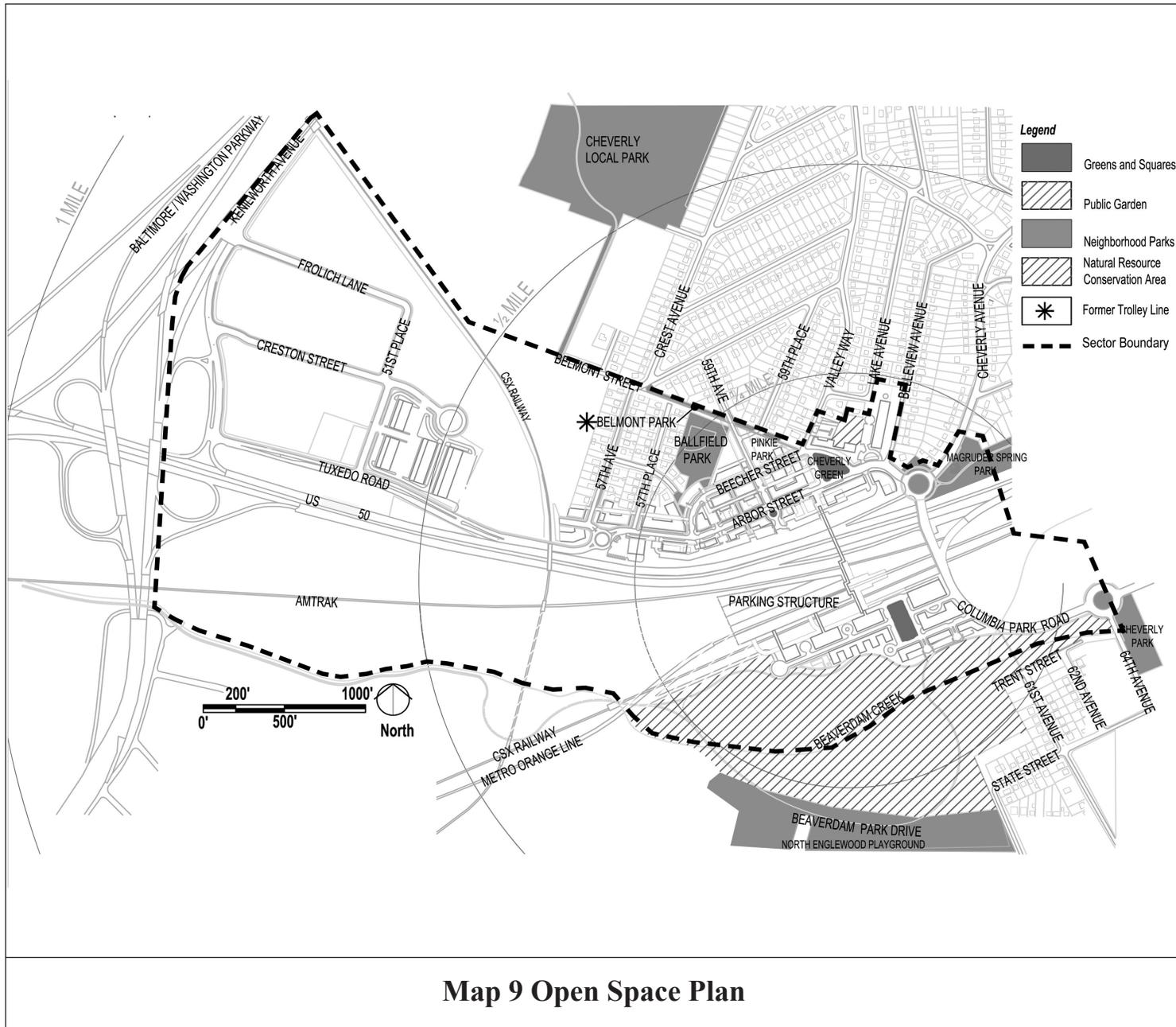
### ***Recommendations***

1. A civic square is proposed as part of the Cheverly Metro redevelopment. Internal streets bound this central square on all four sides. At least 30 percent of their surface area is composed of planted material (turf, groundcover, soil or mulch).
2. A civic green is proposed between Beecher, Arbor, and Valley Way Streets. The character of this green could be a shaded urban lawn. This Cheverly Green will incorporate the existing trees at this location. At least 60 percent of the surface is planted material (turf, groundcover, soil or mulch). Public art and/or monuments are encouraged for both civic squares and greens.
3. Two public walks are recommended in the Arbor Street mixed-use subarea to provide mid-block pedestrian access (Map 10: Parks and Public Walks). They should not be less than 20 feet in width, offering direct and unbroken views along

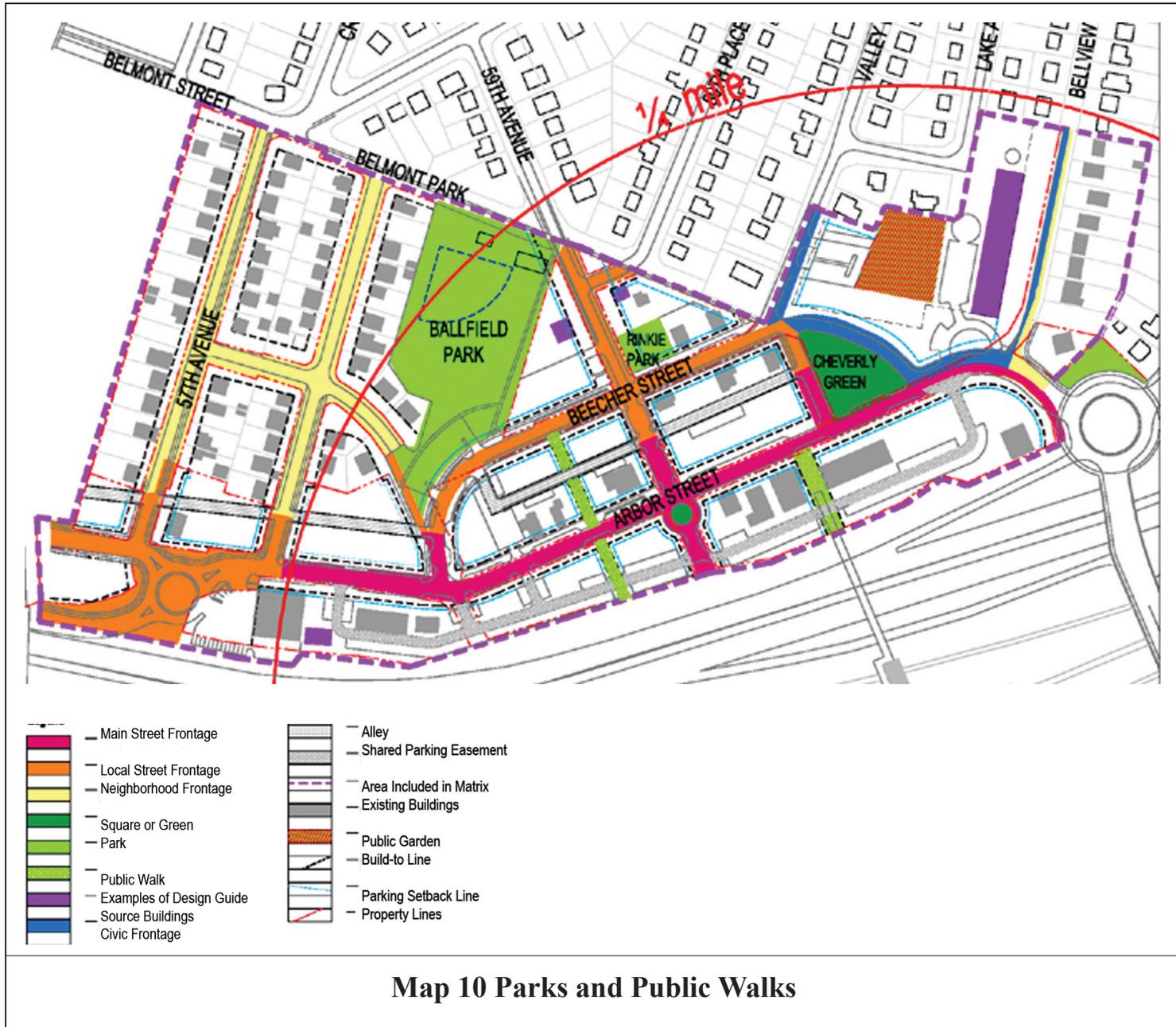
the length of the walk from the public thoroughfare. Unobstructed walkways within the public walk should be a minimum of eight-feet in width to aid visual security.

4. Three parks are proposed in the plan, with tree preservation, trails, seating, and play areas at locations north of US 50.
  - a. The first proposed park lies between the recommended Beecher Street improvements and the old trolley line trail. This land, currently in private ownership, contains a stand of maturing hardwoods. The plan indicates a parking facility and trail for this Beecher Street Park. A ballfield is recommended at the northwest corner of the parcel in an area that is partially cleared and is currently used for open-air storage of vehicles and equipment. The trees in this area are fast-growing red maples that can be removed in order to construct a small field for active recreation.
  - b. The second park lies east of Cheverly Avenue and north of US 50 and incorporates the historic Magruder Spring site and a planned, but undeveloped, paper street. The plan indicates a trail through this area and an interpretive area for the historic spring at the Magruder Spring Park.
  - c. The third proposed park, Belmont Park, would be a new linear park located along the old trolley line corridor, north of the new Town Center, as part of the Cheverly local trail system.

The plan recommends a public garden that features special ornamental plantings and other special features such as gazebos, game tables, fountains and performance areas as part of the Cheverly civic complex within the Arbor Street mixed-use subarea.



Map 9 Open Space Plan



Map 10 Parks and Public Walks

## Environmental

### Goal

- To preserve, restore, and enhance environmentally sensitive features, expand tree cover, and provide appropriate open space.

### Background

The sector plan area is within the Lower Anacostia River and Lower Beaverdam Creek subwatersheds of the Anacostia River basin. The 1993 Landover and vicinity master plan designates large amounts of land to the south of the sector plan area as Natural Reserve Areas. This includes areas within the Beaverdam Creek stream valley, areas within the 100-year floodplain, and delineated wetlands. The sector plan area currently contains 78.76 acres of tree and forest cover resulting in approximately 28 percent tree and forest cover as of 2000. There are 116 acres of impervious surfaces, which is approximately 40 percent of the land area.

### Issues

1. Restoring environmental features that are important to long-term quality of life for people who live and work in the area.
2. Meeting the goals of the 1987 and 1999 Anacostia Restoration Agreements that contain 1999-2000 interim restoration goals and targets that call for the removal of all toxins and pollutants within the watershed, as well as for the restoration of river habitat for the Anacostia River and its tributaries.

3. Meeting the 2002 General Plan environmental objectives for areas within the Developed Tier.
4. Providing environmental buffers and protecting sensitive features that were damaged prior to the existence of environmental regulations.
5. Ensuring that streams that flow through the area are receiving stormwater that is untreated.
6. Eliminating inappropriate or environmentally unfriendly land uses that result in concentrated pollution run-off. A salt dome and the recycling facility are located within, and directly adjacent to, environmentally sensitive features.
7. Reducing noise levels from the railroad and highways.
8. Minimizing high levels of nighttime lighting.
9. Providing energy efficient buildings.

### Objectives

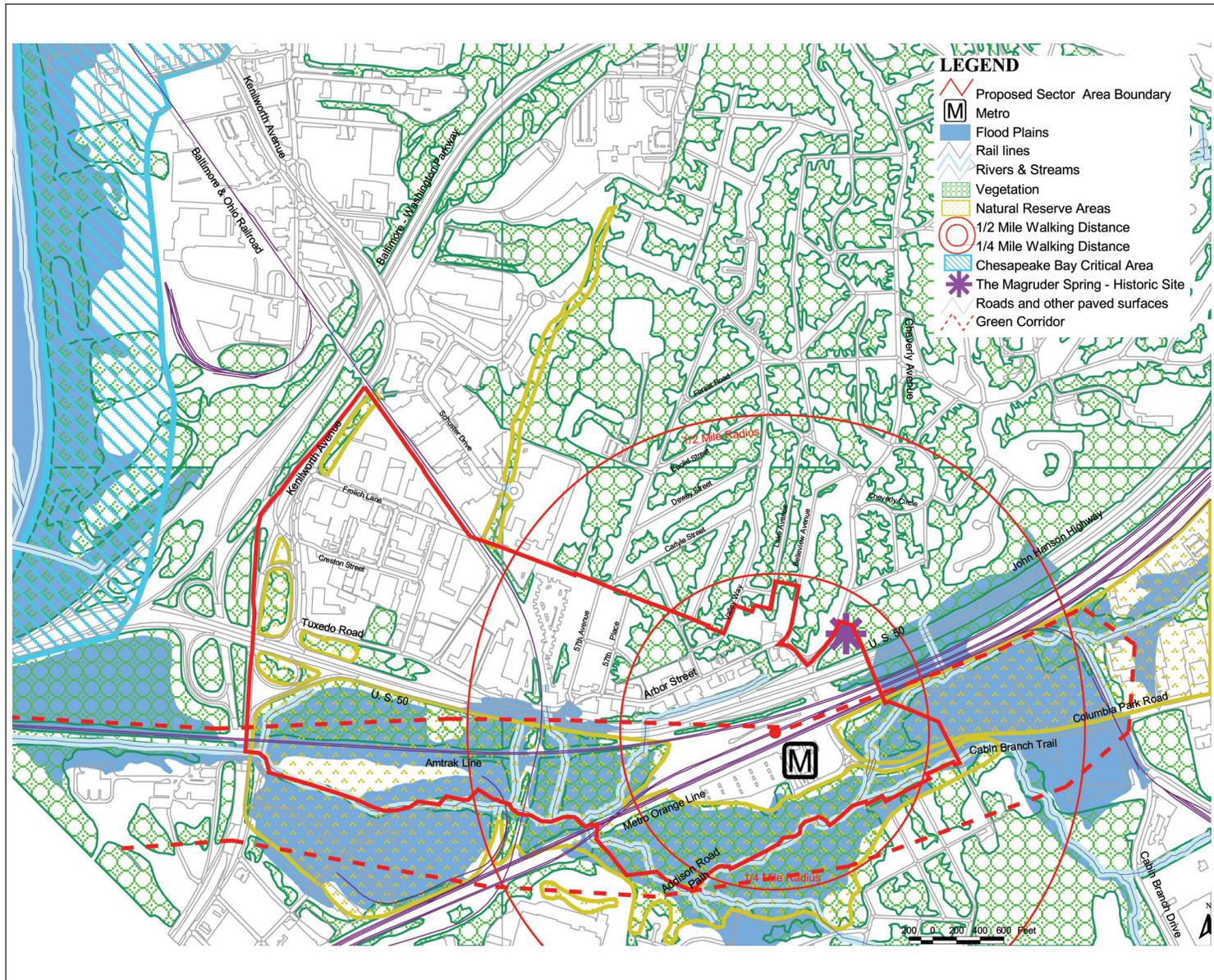
1. Preserve, enhance, and restore the environmental framework of the area while accommodating the sector plan's land use mix and intensity of development. Street trees and landscaping are used to enhance the area's appearance and provide other benefits such as shade, reduced air pollution, and locations for stormwater to penetrate the soil instead of run off.

2. Designate a “green corridor” along Beaverdam Creek to provide environmental protection, green space, a wildlife corridor to the Anacostia River, and access to recreational opportunities.
3. Preserve and restore stream buffers and existing wetlands through the Subdivision Regulations and during subsequent reviews of development proposals. This objective utilizes community involvement through activism and commitment to quality of life and to save the environment.

### **Recommendations**

The following recommendations are to be used as a guide for design, development, and redevelopment. The environmental features are shown on Map 11: Existing Environmental Features. For specific environmental-related requirements for development, refer to the appropriate county ordinances.

1. Preserve and restore natural features within designated green infrastructure corridors and other streams in the sector plan by restoring stream channels and buffers; restoring wetlands and buffers; and limiting development within the 100-year floodplain.
2. Protect and, where necessary, restore wetlands on private and public properties. If wetland mitigation is required, the mitigation shall be within the sector plan area.
3. Provide a minimum of ten percent tree cover, based on the projected tree canopy at ten years, for the gross site area of any proposed redevelopment site. Street trees that are adjacent to the subject properties may be used to meet this requirement.
4. Plant street trees along both sides of all streets and provide on-site landscaping throughout the area, especially during new or redevelopment proposals and in all parking lots.
5. Preserve the heavily treed parcel facing Tuxedo Road just west of 51<sup>st</sup> Place as a conservation area. The Department of Environmental Resources should undertake a determination of wetland status.
6. Preserve priority woodlands through existing regulations. If off-site mitigation is required, the mitigation shall be located in the Anacostia River watershed or within the Developed Tier.
7. Control the quantity of stormwater runoff using stormwater micromanagement techniques, such as bioretention areas and infiltration trenches for storage and reuse of stormwater. These techniques should be considered on every development proposal in order to reduce the need for large stormwater management ponds.
8. Combine planting and stormwater quantity and quality treatments to increase the benefits provided by both methods.
9. Place a high priority on controlling the timing, volume, and quality of stormwater runoff to control downstream degradation and flooding in any new or redevelopment proposal.
10. Relocate or phase out the salt dome in Subarea A and the auto recycling facility in Subarea D in order to reclaim and restore the sensitive features that have been lost. These facilities are located within, and directly adjacent to, environmentally sensitive features.
11. Use green building techniques on new construction and renovations of existing buildings. As redevelopment occurs, the existing buildings



Map 11 Existing Environmental Features

should be reused and redesigned to incorporate energy and building material efficiencies

12. Use building materials for residential construction that are effective at reducing noise levels to the state standards for interior noise, and use innovative site planning to reduce noise impacts from the Baltimore-Washington Parkway, Kenilworth Avenue, US 50, nearby railroad tracks, and the aboveground portions of the Metro station. Outdoor activity areas for residential uses should be placed to take advantage of noise mitigation available from buildings.
13. Ensure that overall lighting systems are compatible with adjacent uses, minimize light spillover and glare, and provide the minimum amount of lighting necessary for the safety of people and the security of property.