

Staff Draft Clarksburg Limited Master Plan for the Ten Mile Creek Watershed



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Description

The County Council directed the Planning Board to prepare an amendment to the 1994 Clarksburg Master Plan by October 11, 2013. On July 25, 2013, the Planning staff will present the Staff Draft Clarksburg Limited Master Plan for the Ten Mile Creek Watershed to the Planning Board. The Planning Board approved the Scope of Work for the Limited Amendment on November 1, 2012. Community outreach has been conducted via a series of community meetings held over the last eight months. In addition, a web page with a comment board has been maintained. The preliminary recommendations were presented to the Planning Board on June 20, 2013.

Summary

Staff recommends the Planning Board approve the Staff Draft Clarksburg Limited Master Plan for the Ten Mile Creek Watershed as the Public Hearing Draft Clarksburg Limited Master Plan for the Ten Mile Creek Watershed and set a date for the public hearing on September 10, 2013.

Next Steps

September 10, 2013	Planning Board Public Hearing
September – October	Planning Board Worksessions
October 3, 2013	Planning Board approval and transmission of Planning Board Draft Master Plan to the County Council and Executive
November, 2013	County Council Public Hearing
December – February	County Council Worksessions, Council approval
March – May, 2014	Commission Adoption, Sectional Map Amendment

Attachment

Staff Draft Clarksburg Limited Master Plan for the Ten Mile Creek Watershed



Staff Draft

July 2013

10 Mile Creek Area Limited Amendment

Clarksburg Master Plan and Hyattstown Special Study Area



Montgomery County Planning Department
M-NCPPC

MontgomeryPlanning.org

Abstract

This document is a limited Amendment to the 1994 *Clarksburg Master Plan and Hyattstown Special Study Area* for the Ten Mile Creek Watershed. It retains the 1994 Master Plan vision but refines 1994 Plan recommendations to better achieve two important objectives: the creation of a well-defined corridor town that provides jobs, homes, and commercial activities; and the preservation of natural resources critical to the County's well-being. The Amendment contains land use, zoning, transportation, parks, and historic resources recommendations for the portions of the Planning Area in the Ten Mile Creek watershed.

Source of copies

The Maryland-National Capital Park and Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910

and online at:

www.MontgomeryPlanning.org/community/plan_areas/I270_corridor/clarksburg/clarksburg_lim_amendment.shtm



Staff Draft

July 2013

10 Mile Creek Area Limited Amendment

Clarksburg Master Plan and Hyattstown Special Study Area

MontgomeryPlanning.org

Prepared by
The Montgomery County Planning Department
July 2013

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Introduction

In October 2012, the Montgomery County Council directed the Planning Board to undertake a limited amendment of the 1994 Clarksburg Master Plan. This amendment includes the watershed of Ten Mile Creek, which is a high quality stream within the master plan area boundaries. Ten Mile Creek drains portions of Clarksburg west of I-270, as well as part of the Town Center, approximately between I-270 and MD 355, which is now the main route through Clarksburg (see Map 1).

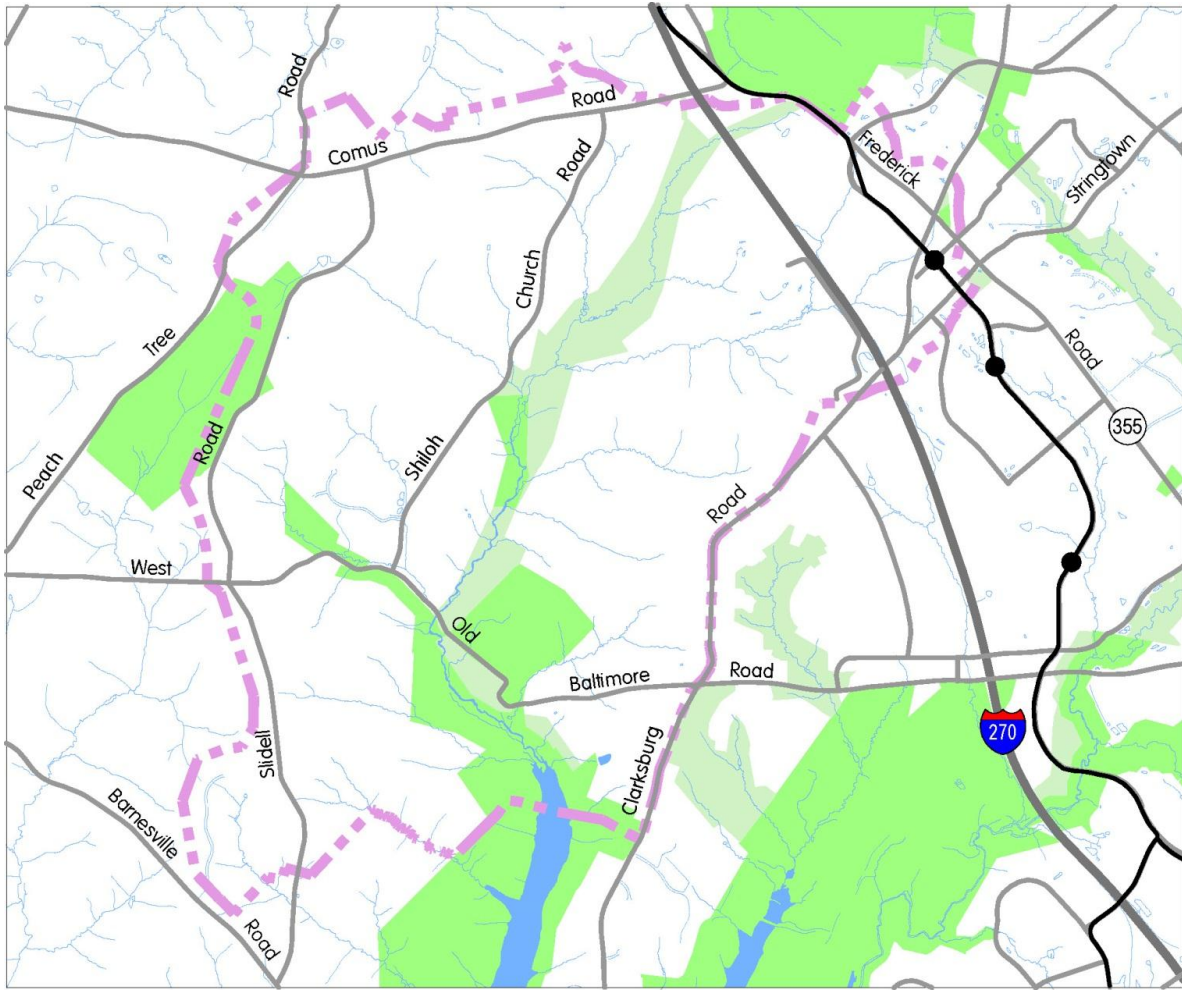
This amendment includes recommendations for achieving the desired community elements envisioned for Clarksburg in the 1994 plan, while protecting the quality of Ten Mile Creek. These objectives required studying the extent to which land use could help protect natural resources and environmental site design could combine to maintain high water quality in the watershed. Various transportation and land use alternatives were also examined for their effect on traffic and transit services and the balance of jobs and housing.

While this amendment retains the 1994 Plan's vision, it refines recommendations to better achieve two important objectives: the creation of a well-defined corridor town that provides jobs, homes, and commercial activities; and the preservation of natural resources critical to the County's well-being.

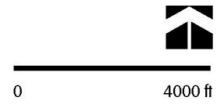
The amendment further draws on the expertise of independent environmental consultants who studied the effects of several development scenarios on Ten Mile Creek's water quality and transportation consultants who evaluated land use changes on Clarksburg's existing and planned road network and plans for transit service.

The recommendations in this Amendment are designed to further the completion of Clarksburg, following the tenets of the 1994 Plan, while taking advantage of innovations in environmental mitigation procedures and zoning changes, which have been significantly enhanced since approval of the 1994 Plan.

Map 1 Plan Area Boundary



- Master Plan Boundary
- CCT
- CCT Station
- Existing Parks
- Proposed Parks (1994 Master Plan)



Planning Context

1994 Plan Vision

The Clarksburg Master Plan manages Clarksburg's evolution from a rural crossroads to a vibrant corridor town surrounded by open space (see Appendix 1 for relevant excerpts from the 1994 Plan). A number of policies guide that process.

Policy 1, *Town Scale of Development*, proposes that Clarksburg develop at "a larger scale than proposed in the 1968 Clarksburg Master Plan but smaller than a corridor city such as Germantown" (page 16). The Plan implements this policy by:

- including the Clarksburg Historic District as an important component of the Town Center
- making land use recommendations that balance the need to protect sensitive environmental resources with the desirability of somewhat higher densities that can support transit service
- keeping intact the concept of a technology corridor centered on I-270, while reducing its scale
- organizing future development into defined neighborhoods that include broad mixes of housing.

From these four components, the Plan derives other important guiding policies. The *Town Center* (Policy 6) describes a mixed-use, transit-oriented central area that concentrates Clarksburg's civic resources to define it clearly as the focus of public life in Clarksburg and creates a "Main Street" on MD 355 through the historic district.

Plan recommendations also recognize the importance of environmental protection (Policy 2, *Natural Environment*) by:

- recognizing the Countywide significance of the Ten Mile Creek watershed
- recommending public acquisition of stream valleys that in turn can support a *Greenway Network* (Policy 3)
- offering development guidelines for stream systems likely to experience substantial impacts, including refinements to the water quality review process required for Clarksburg's existing Special Protection Area (SPA) prior to development in Ten Mile Creek.

At the same time, Plan recommendations are premised on a comprehensive *Transit System* (Policy 4) that reduces auto dependence and targets higher densities to areas near the proposed transit line. In the Town Center, these recommendations include high technology *Employment* centers (Policy 8) at the interstate interchange and higher residential densities near transit stations.

The Plan proposes creating seven neighborhoods in Clarksburg that would be oriented toward *pedestrians* and would maintain *connections to the transit network* (Policy 7). These neighborhoods would contain a mix of uses and a diversity of housing types. They would also incorporate a *Hierarchy of Roads and Streets* (Policy 5) that would allow through traffic to bypass the developed areas in the Town Center's historic district, connect streets within neighborhoods for improved local movements, and include pedestrian-friendly designs for streets that link neighborhoods to through routes.

The thrust of these policies is to create a clearly defined community that would include land uses ranging from agriculture, which would contribute to *Farmland Preservation* (Policy 9) in the western parts of Clarksburg, to employment along the proposed Corridor Cities Transitway. Civic activities in the Town Center would draw residents from the neighborhoods, whose retail nodes would include grocery

shopping and other routine retail needs. Community building would be managed by a *Staging* plan (Policy 10) that would balance the provision of needed civic infrastructure with the pace of development, with a particular focus on early development of the Town Center and the need to undertake significant environmental monitoring before allowing development in the Ten Mile Creek watershed.

1994 Plan Recommendations for Ten Mile Creek

The 1994 Master Plan's recommendations for Ten Mile Creek are based on the Plan's policy for protecting the natural environment. The Plan takes a balanced approach, relying on agricultural activities and low-density residential development—with environmental best management practices—to limit impacts to water quality in the western part of the watershed. Elsewhere, the Plan recommends a series of mitigation strategies, including expanded green buffers, impervious caps on key properties, and park dedication to reduce environmental impacts. These protections allowed the Plan to recommend a broad array of land uses, including relatively high-density uses in the headwaters and medium-density residential uses between the creek and MD 121 (see Map 2).

West of I-270 the 1994 Plan recommends:

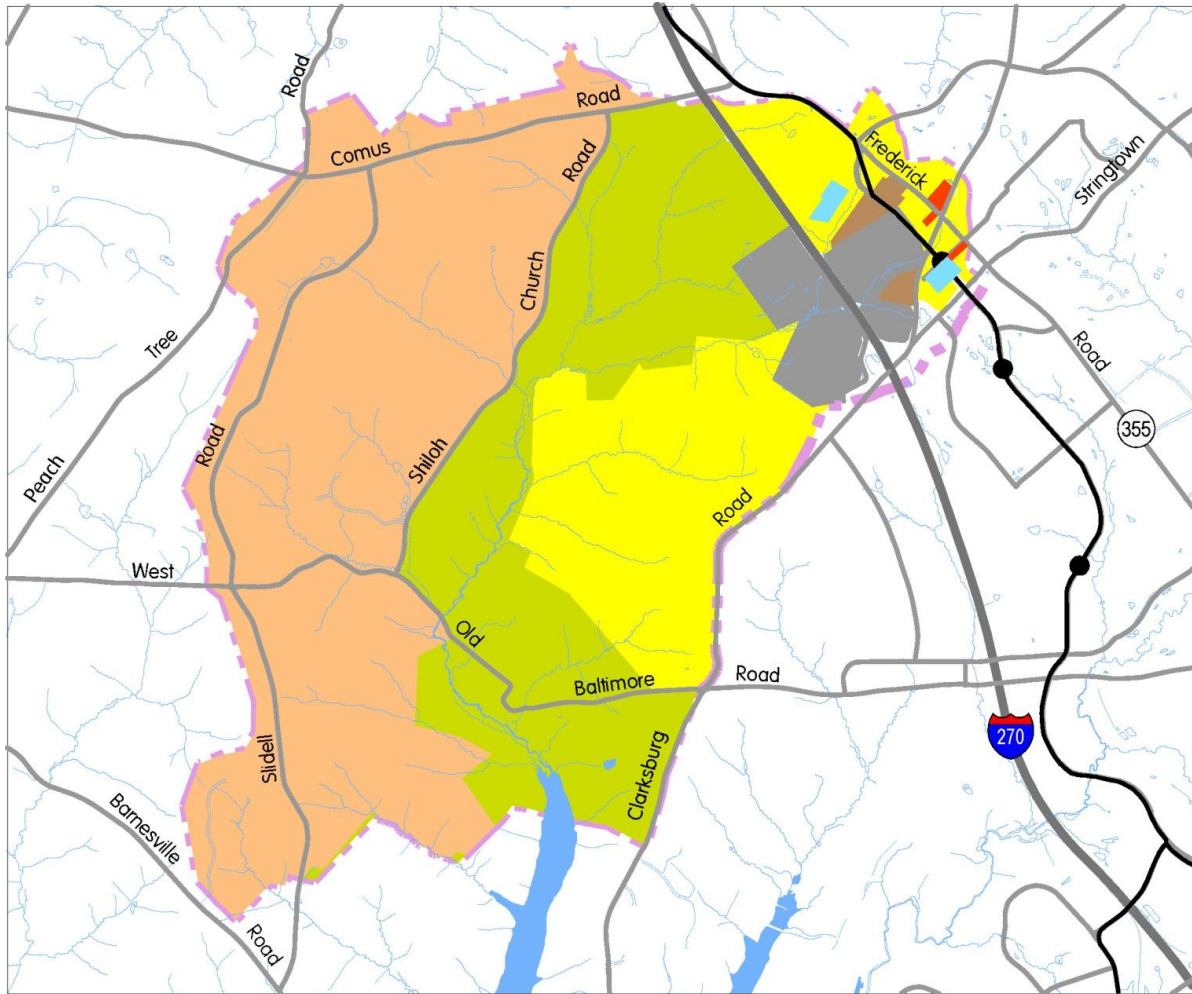
- adding 1,800 acres west of the main stem of Ten Mile Creek to the Agricultural Reserve, creating a transition from more intense uses in the corridor town of Clarksburg to the productive agricultural lands in the western county
- residential development east of the creek, between Shiloh Church and Clarksburg Roads, fulfilling a longer-term countywide need for single-family housing and incorporating significant amounts of parkland and open space to preserve resources:
 - rural development (one unit per five acres) on about 800 acres between the creek's mainstem and Shiloh Church Road
 - two units per acre on about 600 acres between the creek's mainstem and MD 121, including lands currently owned or controlled by the Pulte Corporation, with up to 900 of those units possible with the purchase of transferable development rights possible when environmental and housing mix guidelines are met
- employment, including institutional uses, along I-270, with maximum allowable imperviousness of 15 percent and no more than 400,000 square feet of floor area on each of the two County sites to preserve natural resources. (One site has since been used for the Montgomery County Detention Center.)

East of I-270 the Plan recommends:

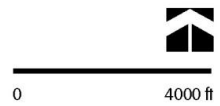
- floating zones—the Planned Development and Mixed-Use Planned Development Zones—to encourage joint development of residential and employment uses and allow detailed analysis of proposals for conformance with Plan policies:
 - residential development at two to four units per acre in the Planned Development Zone on the Egan property near Comus Road
 - approximately 470,000 square feet of employment activities on the Miles-Coppola properties at I-270.

The property owners have not applied for the recommended floating zones.

Map 2 1994 Land Use Plan



- | | | |
|--|--|---|
|  Master Plan Boundary |  Commercial |  Light Industrial |
|  CCT |  Residential (2-4 Units/Acre) |  Institutional |
|  CCT Station |  Residential (7-9 Units/Acre) |  Agriculture |
| |  Rural Residential | |



1994 Plan Staging and Implementation

Staging, matching the pace of development with the provision of infrastructure needed to support it, is the Plan's primary implementation strategy, which includes the Ten Mile Creek watershed in the last stage—Stage 4. To reflect the Plan's emphasis on community building, Stage 4 required approval of 2,000 building permits in the Newcut Road and Town Center districts prior to any development in the Ten Mile Creek watershed.

It also acknowledged the importance of resource protection by requiring a biological evaluation of stream conditions after the 2,000th building permit and before Stage 4 development could occur. The Montgomery County Department of Environmental Protection has been monitoring conditions in the Clarksburg Special Protection Area (SPA), which includes the Stage 4 portion of Ten Mile Creek, since 1994. Once the biological assessment was made, and based on its results, the County Council could decide whether to allow Stage 4 development or whether additional land use actions were necessary.

The 2009 publication of the County's annual report on Special Protection Area monitoring for the year 2007 constituted the required evaluation. The report documented deteriorating stream conditions in the Clarksburg SPA and offered recommendations for remedial efforts.

The report concluded that new development in the Town Center district, west of MD 121 and north of MD 355, as well as ongoing construction activity at the correctional facility, had resulted in a decline in Ten Mile Creek's stream conditions from good to fair between 1998 and 2007. Conditions in the Little Seneca watershed portion of the SPA also declined during the period, from good/excellent to fair.

Several factors contributed to declining water quality. External events, such as the unexpected housing crisis, resulted in construction delays during which only sediment and erosion control structures were in place to protect water quality. This, in conjunction with large areas of disturbed land and with a delay in implementing full stormwater management, resulted in altered stream hydrology and impacts to stream biology.

The 2007 report recommended stormwater management improvements in the SPA and proposed that environmental site design (ESD) be integrated into overall project design for new development. It also recommended improvements to sediment and erosion controls and limits to the amount of land being graded at any given time during construction. The report recognized, however, that stormwater management structures and facilities could not completely offset inevitable increases in impervious surfaces that accompany development.

Subsequent annual monitoring reports showed continued improvement in Little Seneca Creek subwatersheds as development in Clarksburg stabilized and full stormwater controls were implemented. However, the portions of the Ten Mile Creek subwatershed that have been affected by development remain in fair condition and none of the monitored streams have returned to pre-development conditions. Consequently, in 2012, the County Council determined that a limited plan amendment was necessary to refine 1994 Plan recommendations to achieve the original stated goals given stream monitoring findings, changes to environmental regulations, and the need for further safeguards to protect Ten Mile Creek that are balanced with community building goals.

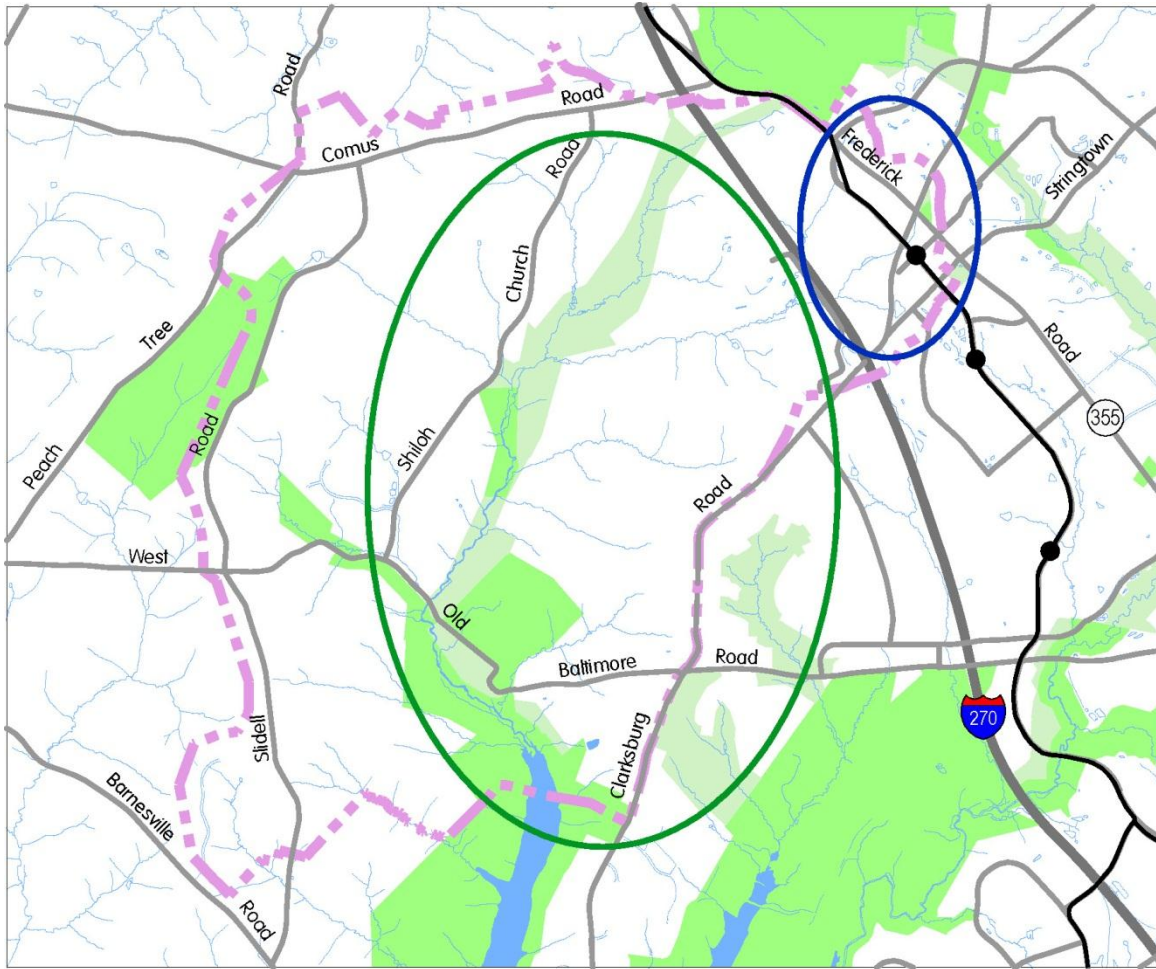
Limited Amendment Plan Concept

This limited amendment retains the overall vision of the 1994 Plan, but recognizes that additional environmental protection is needed to allow development to move ahead. It emphasizes environmental protection west of I-270 and provides more flexibility in achieving the community building goals east of I-270.

On the east, proximity to the interstate and the Town Center commercial area, as well as the impact of previous development in the headwaters, offer opportunities to accommodate development that is complementary to the Town Center district, while enabling it to support enhanced transit and roadway improvements.

In the western portion of the Plan area the presence of significant, sensitive tributaries requires substantially larger conservation areas, with more residential clustering and a greater range of housing types. A large new conservation park will create a focus for a new green neighborhood, connecting Clarksburg residents to this important natural resource and providing opportunities to incorporate substantial community gardens.

Map 3 Limited Amendment Concept



Master Plan Boundary

CCT

CCT Station

Existing Parks

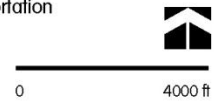
Proposed Parks
(1994 Master Plan)

Emphasize Environmental Protection

- Preserve Natural Resources
- Maximize Undeveloped Open Space
- Minimize Imperviousness
- Retain Housing Resource

Emphasize Community Building

- Complement Approved Town Center
- Strengthen Historic District
- Balance Mixed Use
- Improve Transportation



Environment

Ten Mile Creek originates just north of MD 335 (Frederick Road) and flows into Little Seneca Lake, which then flows into the Potomac River. Little Seneca Lake serves as a reservoir that provides additional water flow to the Potomac River, a public water supply, during drought periods. The portion of the watershed east of the Ten Mile Creek mainstem and north of West Old Baltimore Road is located within the Clarksburg Master Plan SPA. The Ten Mile Creek watershed within the Plan area includes approximately 3,000 acres, 11 subwatersheds, and 22 miles of streams (see Map 4).

Ten Mile Creek and its tributaries are designated as a Use I-P stream—protection of water contact recreation, aquatic life, and drinking water supply. Except for the headwater area subwatersheds (LSTM206 and LSTM202 on Map 4), which have already been affected by development, Ten Mile Creek is in good to excellent condition based on stream biology (see Appendix 2 for a full report on existing conditions and environmental analyses). This is primarily due to existing conditions, which include a combination of agricultural and low-density residential development balanced by a very high proportion of dense forests and a wealth of springs and wetlands.

Ten Mile Creek is a reference stream in Montgomery County, serving as high quality benchmark against which other streams are compared. Long-term monitoring indicates overall biological conditions to be healthy and diverse. Sensitive indicator organisms that occur in few other areas within the County are found here. Ten Mile Creek is part of a small group of high quality watersheds still remaining within the County (e.g., many Patuxent River tributaries, Bennett Creek, and Little Bennett Creek).

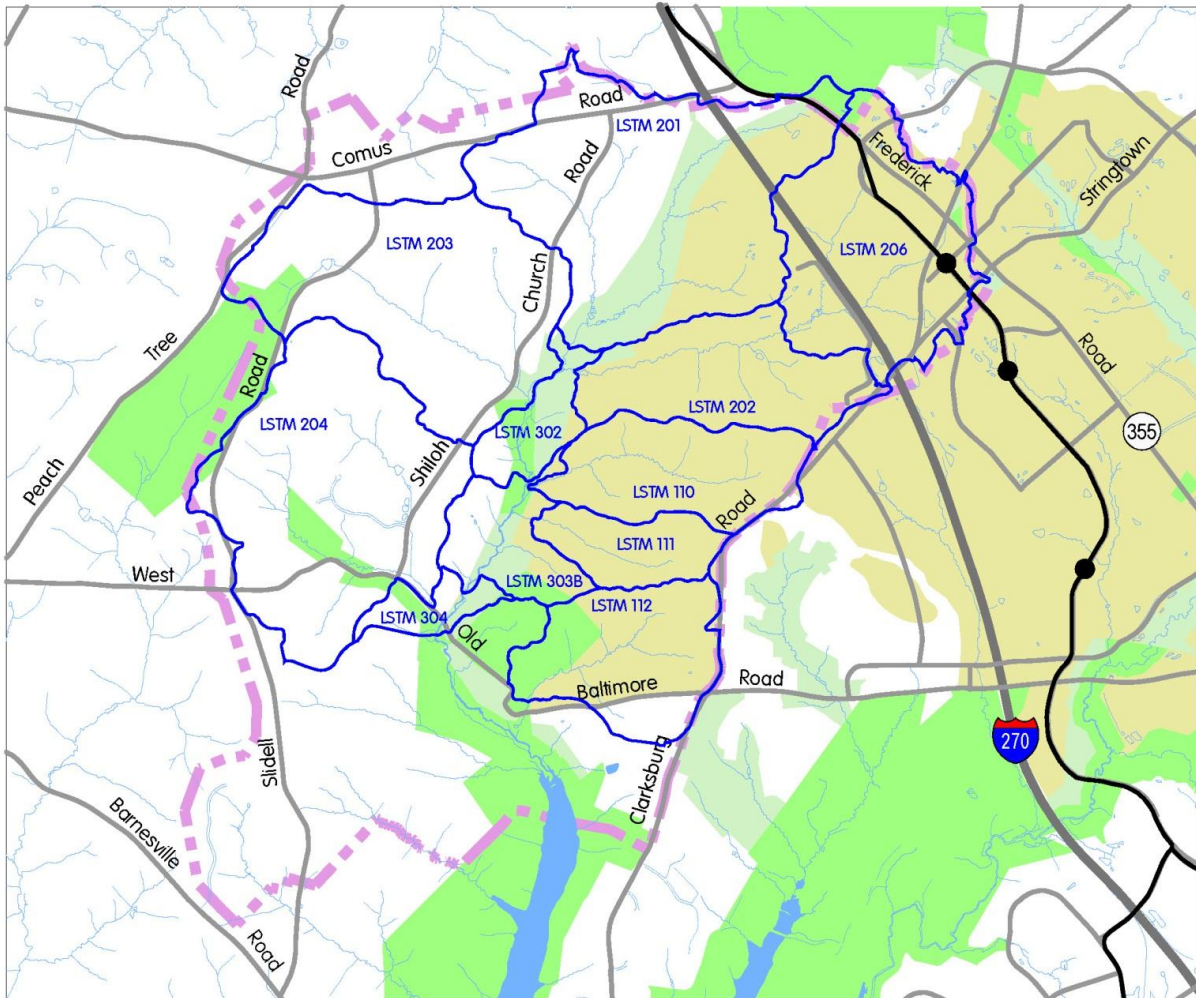
The majority of the streams within the Ten Mile Creek watershed are small and spring fed with cool, clean groundwater. The mainstem is characterized by high concentrations of interior forest and wetlands. There is no evidence of widespread and long-term channel instability. In addition, the stream bed material is ideal to support a benthic macroinvertebrate community.









The dominant land use/land cover is forest (48 percent), followed by agriculture (38 percent), with the remainder in institutional, residential, and commercial uses. Existing imperviousness is approximately 4.1 percent. Slopes are steep and soils are generally rocky, with shallow to moderate depth to bedrock.

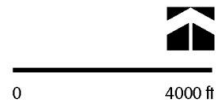
To help sustain Ten Mile Creek's ecological health and water quality requires a combination of efforts: protecting the largest possible area of undisturbed natural vegetation, improving conditions in areas already developed or that are to remain in agricultural use, and instituting the highest standards of protection for future development areas.

Environmental Site Design (ESD) represents the state of the practice for site planning and post-construction stormwater runoff management and is required in Montgomery County. However, rigorous and comprehensive implementation of ESD across or within watersheds has not occurred, nor has been monitored either in the County or elsewhere to establish likely expectations of post-development stream conditions. While gaining watershed-based knowledge on the efficacy of ESD will be valuable, it is still be prudent to include safeguards that will help ensure that this high quality watershed will continue to be able to sustain sensitive species.

Map 4 Ten Mile Creek Subwatersheds



- | | |
|---|---|
|  Master Plan Boundary |  Subwatershed Boundaries |
|  CCT |  LSTM 112 Subwatershed Identification (Little Seneca Ten Mile) |
|  CCT Station |  Special Protection Areas |
|  Existing Parks | |
|  Proposed Parks (1994 Master Plan) | |



Imperviousness is an important factor in watershed health and affects both the water quality and many other factors. This plan is designed to achieve an overall imperviousness goal of around seven percent for the Ten Mile Creek watershed. Limiting imperviousness within the development footprint is important to achieve this overall goal while still allowing flexibility in the numbers, types and sizes of structures and accompanying roads and parking areas. Two imperviousness levels are set for major properties on each side of I-270 that accommodate the proposed land use recommendations.

Recommendations

- Retain the Special Protection Area for the Stage 4 area of Ten Mile Creek and establish an environmental overlay zone to limit imperviousness associated with new development. Limit impervious levels on new development in excess of five acres in subwatersheds LSTM206 and LSTM201 to 25 percent. In LSTM202, LSTM110, LSTM111, and LSTM112 limit imperviousness on new development in excess of five acres to eight percent imperviousness.
- Reduce the development footprint and impervious cover west of I-270, emphasizing reduced impacts to upland forested areas and steep slopes. In particular, protect existing stream conditions in the high quality headwater subwatersheds LSTM 110 (King Spring) and LSTM 111. In LSTM 202, reduce the extent of development on County-owned property so that existing forest is not disturbed. The recommended conservation area is shown on the land use plan (see Map 4).
- Require development of the Pulte properties to include a conservation management plan for areas outside the limits of disturbance (but that are not dedicated to the Department of Parks). This plan should be coordinated with the Planning Department and Department of Parks to determine the optimal mix of meadow and forest habitat and to guarantee perpetual management of rural open space not dedicated to parks. It would be approved as part of a preliminary plan.
- Require at least 175-foot wide buffers on both sides of streams. They should be expanded as required by the Planning Board's most recently amended *Environmental Guidelines for Development* to protect floodplains, wetlands, and steep slopes that extend beyond the 175 feet and to maintain natural topography and vegetation within 50 feet of "zero order" or ephemeral streams not currently regulated.
- Minimize disturbance of natural resources throughout the Ten Mile Creek watershed, especially forests in the headwater areas.
- Establish a forest banking program that would give additional credit for rural or RDT zoned properties in Ten Mile Creek to voluntarily establish banks for forest planting in unforested stream buffers.
- All off-site forest planting for Stage 4 development should be achieved within the Ten Mile Creek watershed as a first priority.
- Work with the Maryland State Highway Administration to provide stormwater retrofits for any expansion or modification of I-270.

Although additional development in Ten Mile Creek will adversely affect stream biology, the desire is to retain as much stream biodiversity and overall health as possible. Because of the unusual quality and

sensitivity of Ten Mile Creek, a higher level of protection than that already provided under SPA regulations is recommended to help achieve this goal.

Water Quality Plans for development in the Ten Mile Creek watershed should comply with the most current water quality regulations that include ESD outfall and overflow management strategies such as:

- avoiding overflow discharges onto steep slopes
- ensuring that any overflow occurs as sheet flow
- managing discharges from stormwater outfalls using step-pool storm drainage conveyance systems or comparable designs, as appropriate
- minimizing environmental buffer impacts associated with ESD overflow outfalls
- minimizing the need to convey stormwater across steep slopes and forested areas.

In addition to SPA requirements, Water Quality Plans for development in the Ten Mile Creek watershed should demonstrate the application of the following principles and strategies:

- Minimize disturbance of natural resources throughout the Ten Mile Creek watershed, especially forest cover in the headwater areas.
- Minimize direct impacts associated with new infrastructure, such as the MD 355 Bypass and the sanitary sewer extension on natural resources.
- Minimize grading the thin and rocky soils in Ten Mile Creek, which help sustain groundwater flows to the many springs and seeps and indicate the importance of limiting grading and soil compaction as much as possible through creative site design and development staging.
- New development should employ planning and zoning options and design techniques, which minimize impervious cover, including:
 - cluster development with smaller building footprints on smaller lots with shorter driveways
 - place houses near the front of a building envelope to reduce driveway length, and provide shared driveways, where feasible
 - design narrower streets with limited sidewalks
 - use vegetated swales to guide runoff toward ESD facilities or pervious areas instead of curbs and gutters on secondary streets
 - limit impervious cover for cul-de-sacs by reducing curve radii and having a green space in the turn-around area
 - preserve land with a high infiltration capacity to be used for storm water infiltration or natural recharge area.
- Maintain natural drainage patterns, especially around ephemeral (zero order) streams by:
 - preserving and designing around ephemeral streams within the limits of disturbance, as much as possible
 - maintaining existing natural topography and vegetation within 50 feet of ephemeral streams.
 - decompacting and amending soils within the limits of disturbance (LODs) with organic matter to a greater depth than currently required (this would be determined by the Department of Permitting Services as part of development plan approvals).

- Environmental Site Design (ESD).
 - As a first step, apply appropriate ESD site planning techniques within proposed development areas to maximize environmental benefits.
 - Site planning and design should be guided by and integrated with the selection and appropriate location of ESD facilities to achieve the greatest watershed benefits based on an evaluation of specific site and subwatershed considerations.
 - To the extent feasible, ESD practices should minimize the need for clearing conveyances across steep slopes and through forested areas or stream buffers.

- Require restoration of streams and wetlands adversely affected by existing uses.

Transportation

Transportation is an ongoing issue in Clarksburg primarily because the transit network proposed in the 1994 Plan to reduce auto dependence has not yet been implemented. Recommendations included a transitway along the MD 355 Bypass (Observation Drive) and a number of bikeways. Interconnected neighborhood bus loops and Park and Ride lots were further proposed as part of this system.

The 1994 Master Plan also contained recommendations for roadway classifications and rights-of-way. Changes to these are not recommended in this Plan. However, the completion of many key arterials will depend on completing various development projects. Furthermore, some key links will require expensive bridges, which are waiting for funding through the County's Capital Improvement Program.

Area-wide analysis using the Transportation Policy Area Review (TPAR) method indicates most of the Clarksburg Policy Area's major roads currently operate at an A or B level of service. MD 27 (Ridge Road) operates at a "D" level, bringing down the average for the Policy Area to a "C" level of service. However, most roads are currently underused and provide a high level of service (see Appendix X for additional transportation modeling information).

All of the intersections in the Plan area also function at adequate levels of service under existing conditions. Although the intersection of Clarksburg Road (MD 121) and Frederick Road (MD 355) has the lowest level of service, LOS "C" in both the morning and evening peak hours, traffic volumes are similar to those at Stringtown Road and Frederick Road (MD 355). Stringtown Road has more lanes, which results in greater intersection capacity (LOS "A" and "B").

The following describe current transportation conditions:

- Transit service is limited to two routes and the Clarksburg Policy Area does not yet have adequate transit service in terms of coverage and peak headways. Current transit is just adequate in terms of the span of service (the total number of hours/day that transit service is provided).
- Most travel in the area is north-south, with the east-west movements generally providing access to north-south travel routes.
- I-270 is heavily used and the directional split (the percent of traffic going either northbound or southbound) during peak hours reflects this. Typically 60 percent of the traffic goes in the peak direction, while 40 percent goes in the non-peak direction.
- MD 355 has a much higher peak to daily traffic ratio, an indication that morning trips are commuters and evening peak hour trips are a combination of commuter and local trips.

Table 1 Clarksburg Critical Lane Volumes

Intersection	Existing			
	AM		PM	
MD 121 and I-270 western intersection	A	365	A	250
I-270 and MD 121 eastern intersection	A	609	A	480
MD 355 and MD 121	C	1225	C	1,150
MD 355 and Shawnee Lane	A	750	A	875
MD 355 and Stringtown Road	A	914	B	1,068
Gateway Center Drive and Stringtown Road	A	667	A	846

The 1994 Master Plan recommended a bypass to avoid a significant widening of MD 355 through the Clarksburg Historic District. This bypass further provides an alternate route when emergencies cause full or partial closures on I-270 or MD 355. It also provides future access to the Miles-Coppola properties. In addition, the Corridor Cities Transitway is planned for Observation Drive and it continues onto the bypass. A transit station is proposed at its intersection with Redgrave Place.

While pedestrian and bicycle connectivity is essential to promote community cohesion and provide access to both transit and community amenities the difficult topography, numerous stream crossings, and major roadways in the area hinder the integration of land uses.

Map 5 Proposed Roads and Transit

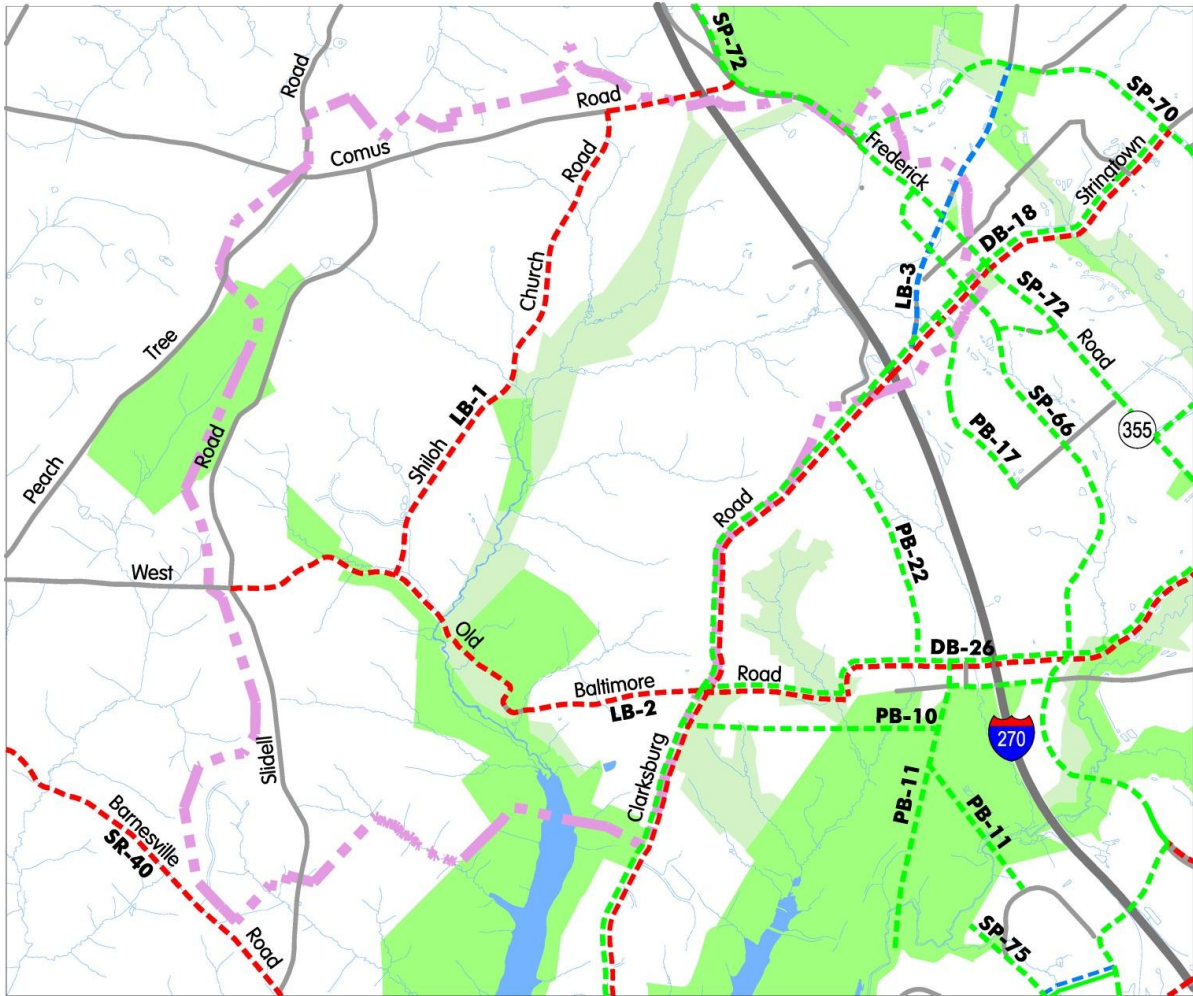


- - - Master Plan Boundary
- CCT
- CCT Station
- Existing Parks
- Proposed Parks (1994 Master Plan)

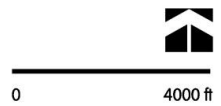
- Proposed Alignment options for CCT & 355 ByPass
- Proposed BRT Service
- Proposed BRT Station



Map 6 Bikeways



- | | | | | | | | |
|---|--------------------------------------|---|---|---|-----------------|--|-----------------------|
|  | Master Plan Boundary |  | Existing |  | Proposed |  | Signal Shared Roadway |
|  | Existing Parks |  |  |  | Shared Use Path |  | Bike lanes |
|  | Proposed Parks
(1994 Master Plan) | | | | | | |



Recommendations

All transportation recommendations in the 1994 Master Plan are continued, except as indicated by the following refinements to improve the transportation system (see Maps 5 and 6):

- Retain the bypass, but realign it as a T-intersection with MD 355 near the proposed fire station. This will avoid significant wetland impacts, while still providing access to the fire station and the Miles-Coppola properties. Two alternative alignments should also be studied as part of a facility plan when the Miles-Coppola properties develop (see Map 5).
- Provide additional turn lanes to achieve acceptable conditions at key intersections.
- Consider relocating the proposed transit station to encourage the redevelopment of an already disturbed site in the vicinity of MD 355 and Clarksburg Road. Such a location will further help support a revitalized Clarksburg historic district.
- Accommodate bus rapid transit in mixed traffic along MD 355, south from the Town Center Transit station within the Clarksburg Policy Area, and retain the CCT designation for the MD 355 Bypass.
- Provide facilities for peak period, frequent (20 minutes or less) express non-stop bus service from the Clarksburg Town Center to:
 - Shady Grove Red Line Metrorail Station via I-270 (estimated 30-35 minute travel time).
 - Germantown Town Center/Germantown MARC via I-270 (estimated 15-20 minute one-way travel time).
- Provide facilities for peak period, limited stop, Ride On service from the Clarksburg Town Center to:
 - Milestone (and future CCT stop) via MD 355 (estimated 15-20 minute travel time).
 - Lakeforest/Gaithersburg MARC via MD 355 (estimated 30-35 minute travel time).
- Provide an internal Clarksburg bus circulator, which connects activity centers east and west of I-270 with the Town Center and the CCT COMSAT station until such time that the CCT is extended to the Town Center area.

Land Use and Zoning

The most appropriate way to protect environmental resources in the Ten Mile Creek watershed is to combine the advanced stormwater management techniques of Environmental Site Design with efforts to significantly reduce the amount of land disturbed by development.

East of I-270, the relationship between development in the headwaters areas and overall stream quality magnifies the tension among three important elements of the 1994 Plan's vision for Clarksburg: timely development at an appropriate scale in the Town Center, provision of employment land uses, and resource protection. The elements are not exclusive—some development can occur while reasonably protecting natural resources, but shifting development toward uses that reduce imperviousness and have less disturbance in the part of the Town Center district that drains to Ten Mile Creek would provide additional safeguards.

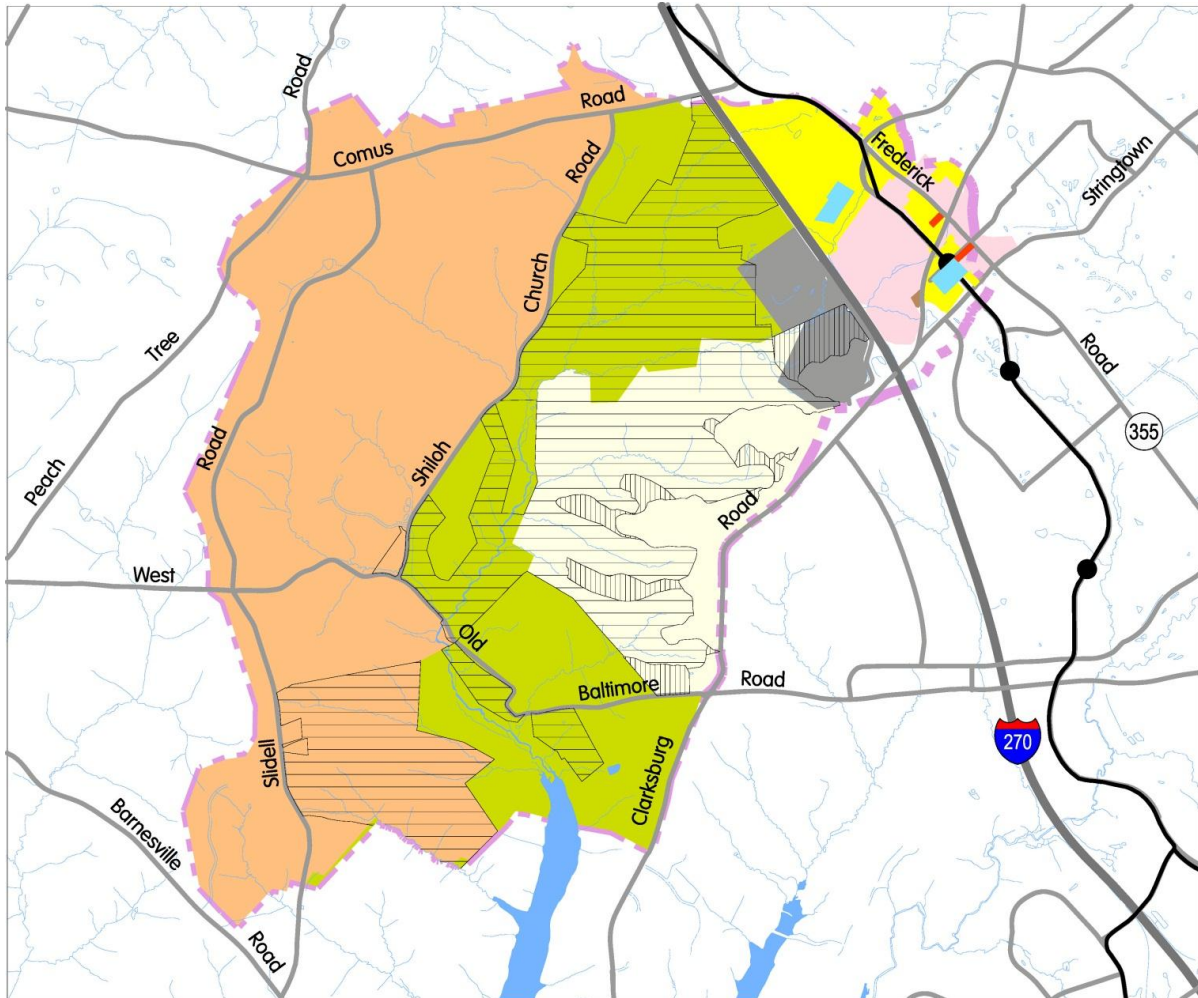
West of I-270, keeping more undeveloped and forested land means reducing the development footprint—the amount of land that is disturbed by development. This means a series of potential choices that include:















- reducing the development footprint while maintaining development densities recommended by the 1994 Plan. This would require changes to the dwelling unit mix and higher net densities to accommodate a similar number of units, but on less land.
- retaining the generally single-family housing emphasis, while reducing the development footprint, which will reduce overall development density and the number of units.

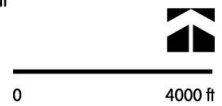
Recommendations for the three large, privately owned undeveloped properties in the watershed have two objectives:

- for the properties that fall within the portion of the Town Center in the Ten Mile Creek headwaters, determining their roles in fulfilling master plan objectives
- determining the size and location of protection and open space areas that would remain undeveloped and managed for conservation purposes and to reduce impervious areas devoted to development in the watershed, thereby reducing impacts to overall stream quality.

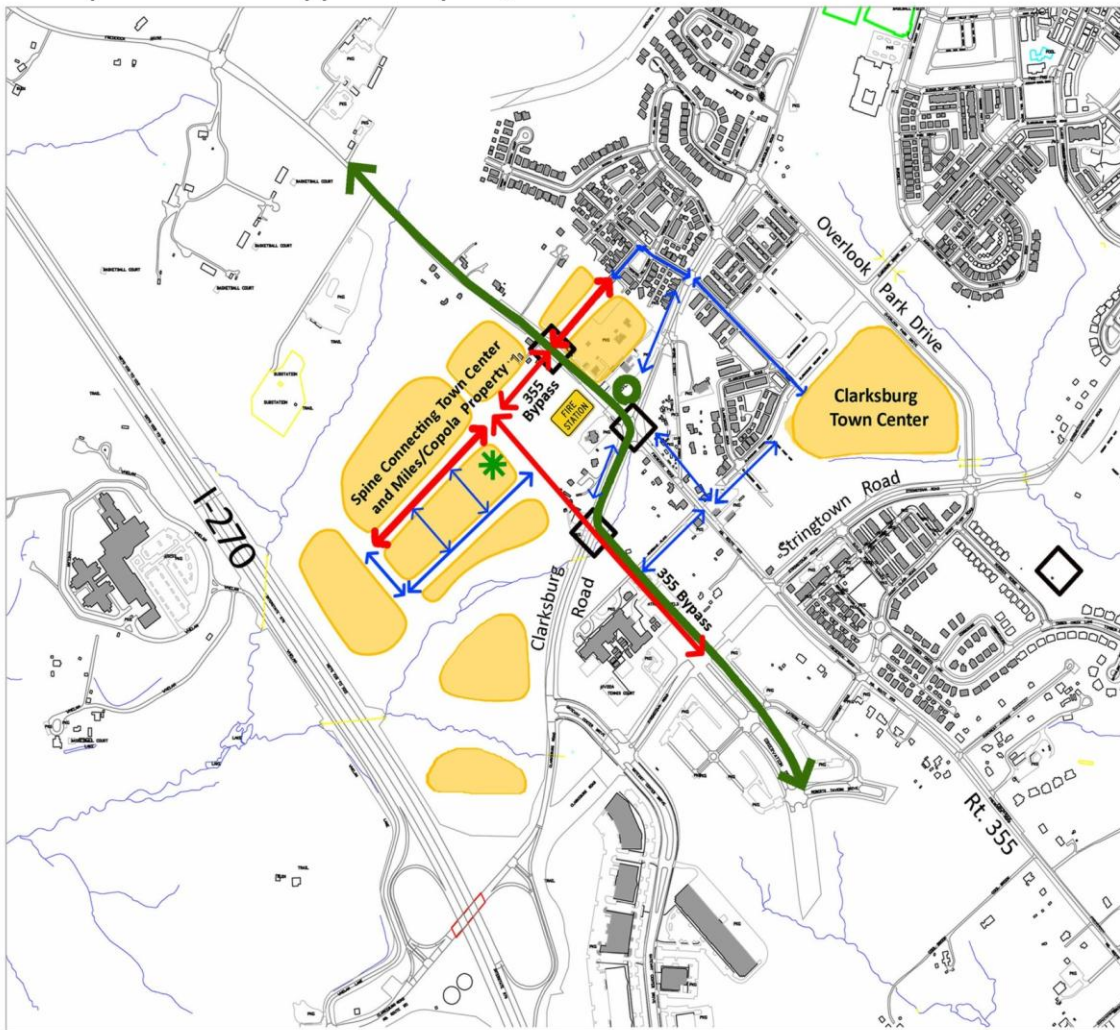
Map 7 Proposed Land Use



- | | | | | | |
|---|----------------------|---|------------------------------|--|------------------|
|  | Master Plan Boundary |  | Residential (1 Unit/2 Acres) |  | Commercial |
|  | CCT |  | Residential (2-4 Units/Acre) |  | Mixed Use |
|  | CCT Station |  | Residential (7-9 Units/Acre) |  | Institutional |
|  | Agriculture |  | Rural Residential |  | Light Industrial |
|  | Legacy Open Space |  | Other Conservation Areas | | |



Map 8 Proposed Concept East of I-270

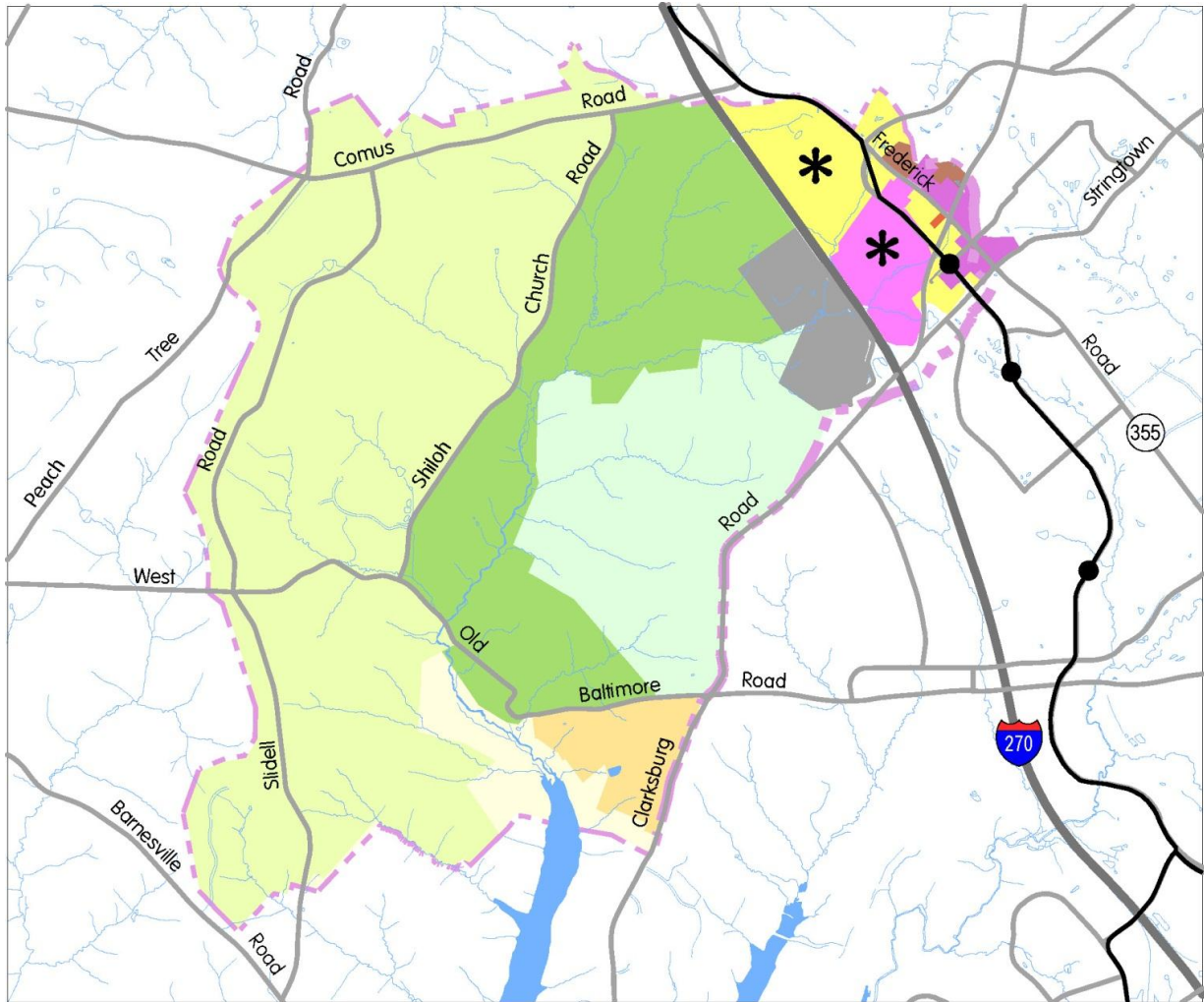




Legend

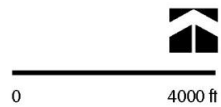
- Improved Intersection
- * Civic Green Space
- New Development
- CCT/BRT Station
- Major Road/Pedestrian Connections
- Minor Road/Pedestrian Connections
- CCT Line



Map 9 Proposed Zoning



- | | | | |
|--|--|---|---|
|  Master Plan Boundary |  RDT |  R-200 |  CR |
|  CCT |  RNC |  C-2 |  CRN |
|  CCT Station |  RE-2 |  I-3 | |
|  Rural |  RE-1 |  RMX-2 | |
|  See Text. Plan provides floating zone option for these properties. | | | |



East of I-270

The Egan/Mattlyn Enterprises and Miles-Coppola properties lie in the headwaters of Ten Mile Creek, between I-270 and MD 355. The properties total nearly 200 acres and both are zoned R-200. The 1994 Master Plan recommended planned development floating zones for the properties—Planned development (PD) for the Egan/Mattlyn Enterprises property and Mixed-use planned development (MXPD) for the Miles-Coppola properties.

The Plan did not discuss the Egan/Mattlyn property in detail, but the Land Use Plan does show the property with a density of two to four units per acre. The Plan made no explicit density recommendation for the Miles-Coppola properties, stating instead that the property be designated an employment site suitable for as much as 470,000 square feet of space. This reflects its location along I-270 and proximity to a future stop along the Corridor Cities Transitway. The Land Use Plan showed approximately equal parts of the property as residential (at seven to nine units to the acre) and research and development (R&D) uses.

Egan/Mattlyn Enterprises LLC Property

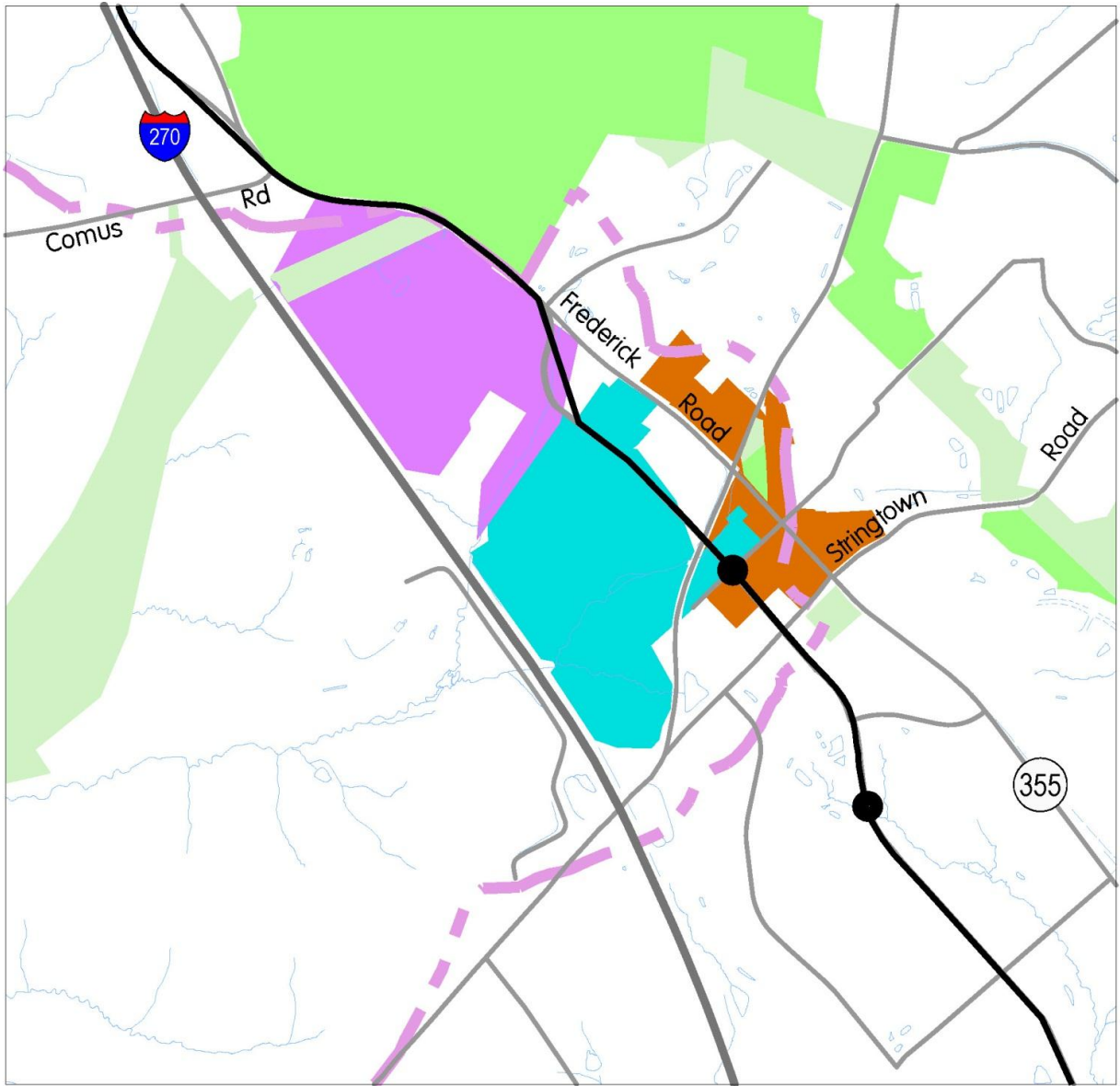
The northernmost headwaters tributary of Ten Mile Creek runs through the approximately 100-acre Egan/Mattlyn property. A second tributary traverses the eastern portion of the property. The two tributaries are in different subwatersheds of Ten Mile Creek. The property is largely open, with sparsely wooded areas in the stream valleys and most of the property is in turf or meadow. Its owners currently operate a catering and entertainment venue for outings and other special events. Main and support buildings are located along the ridge that separates the two subwatersheds. Topography slopes to the northwest and southeast, toward I-270. Removing the floating zone option could reduce the imperviousness that would have resulted from implementing the 1994 Plan recommendations. Map 7 shows the approximate outline of the site's developable area.






The 1994 Plan recommends residential development for the property largely because of its distance from the Town Center and the transit station. Retaining that recommendation while limiting development to two units per acres could reduce water quality impacts by reducing imperviousness and providing substantial open space, either through master plan guidelines for a floating zone development plan or as a recommendation for cluster development in the R-200 Zone. Such development could also permit a broader array of housing types, while including Environmental Site Design. Design techniques that reduce lot sizes or cluster development could reduce imperviousness as well.

Recommendations

- Retain current recommendations for residential uses by applying residential cluster development used in the R-200 Zone or by applying a floating zone.
- Establish an environmental overlay zone to limit imperviousness of new development greater than five acres to 25 percent.
- Require the developer to prepare a conservation management plan (including a perpetual maintenance program) to restore natural vegetation outside of the disturbed area.

Map 10 Properties East of I-270



-  Master Plan Boundary
-  CCT
-  CCT Station
-  Existing Parks
-  Proposed Parks (1994 Master Plan)

-  Miles-Coppola Properties
-  Mattlyn (Egan) Property
-  Historic District



Miles-Coppola Property

Two branches of a headwaters tributary run through the Miles-Coppola properties and the western part drains to a second tributary. The heavily wooded stream valleys are steep and there is a significant drop in elevation across the properties from MD 355 to I-270. Topography, forest, and steep slopes create three separate developable areas that constitute about 50 percent—50 acres—of the properties, which total about 98 acres (see Map 10). This assumes that the MD 355 Bypass would consume a portion of the property along the northeastern edge.

These environmental and man-made constraints make it difficult to achieve the 1994 Plan’s goal of promoting “a better relationship between this property and portions of the Town Center east of MD 355.” The most direct route from the largest development area to the transit station location proposed in the 1994 Plan requires both a stream crossing and one of MD 121. The distance from the center of that development area to the core of the Town Center is more than three quarters of a mile. While the central development area may be close to Redgrave Place, topography on both sides of MD 121 will make the walk challenging for pedestrians.

Physical constraints, combined with the future roadway and transit network, suggest that the area should function independently, but in a way that supports the Town Center. While an employment focus is desirable to achieve the goal of increasing opportunities to live and work in Clarksburg, there are significant amounts of available and yet to be developed space to the south in Germantown and the Life Sciences Center. This, combined with a weakened regional office market and more attractive and available locations elsewhere, suggests that retaining the employment recommendation for the Miles-Coppola properties would mean significantly delaying development of these properties. Moreover, the recommended level of development and market conditions may not be able to support tall buildings with smaller footprints and parking structures that would reduce imperviousness and enhance the effect of Environmental Site Design.

Recommendations

- Option 1—Balanced mixed-use development
Earlier development of these properties could help support neighborhood commercial activity in the Town Center, provided it is complementary. A mix of commercial and residential uses could further provide the types of services that today require travel outside Clarksburg. They could also provide more variety in shopping, restaurant, and other business opportunities desired by Clarksburg residents. This option considers a flexible, but integrated mix of retail, office, and housing uses on the Miles-Coppola properties. This amendment recommends:
 - commercial uses that complement not compete with or encroach on the neighborhood orientation of the core Town Center. Specialty retail, requiring a broader market than just Clarksburg, and other types of commercial activities, like restaurants and entertainment venues, could help create a separate attraction on these properties for Clarksburg residents to enjoy
 - orienting development toward the MD 355 Bypass to take advantage of proximity to future transit and to enable residents to reach neighborhood services in the Town Center using an integrated network of roads, trails, and sidewalks
 - concentrating and integrating development to allow more of the existing forest and natural terrain to remain undisturbed, reducing imperviousness and contributing to improved water quality
 - establishing an imperviousness cap of 25 percent of the net tract area.

The Commercial Residential Zones offer an opportunity to balance a mix of uses for each development area, while providing significant amounts of housing and commercial uses that would help implement the Plan’s vision for a complete corridor town. Because the Miles-Coppola property is relatively large and can generate large amounts of space while keeping floor area ratios low, development in the CR Zones is likely to use the standard method. Any development on the properties should nonetheless employ Environmental Site Design techniques and preserve undeveloped open space to reduce imperviousness. Should optional method development occur, construction of the MD 355 Bypass should be considered a major public benefit. The bypass should in any case be constructed as part of any development of this property and include a substantial contribution from the developer.

Under this option, this Plan recommends the CR 0.5, C 0.25, R 0.25 H 75 for these properties.

- **Option 2—Mixed-use development with a residential focus**
Modifying the land use mix to provide more housing on the Miles-Coppola properties would bring additional households and potential core Town Center shoppers and business customers. Some specialty retail or office/employment uses complementary to Town Center could also be established nearest I-270. Shifting the land use focus on the Miles-Coppola properties could further reduce the amount of disturbed area and imperviousness, especially if attached housing and apartments make up a substantial fraction of the overall development. This amendment recommends:
 - a floating zone to allow a broad mix of housing types on the properties and enable up to 25 percent of the property to be nonresidential
 - development concentrated near the MD 355 Bypass to take advantage of the transit system, and including defined pedestrian and bike routes to the core of the Town Center area
 - detailed design guidelines to help define and guide development
 - an environmental overlay zone to limit imperviousness of new development in excess of five acres to 25 percent.

Under this option, the Townhouse Floating Zone (as proposed in the Planning Board Draft of the Zoning Rewrite), at a density of 12 units to the acre on the portion of the properties used for residential development, is appropriate. Should the floating zone undergo significant revision, this recommendation could be reevaluated.

Clarksburg Historic District

The majority of Clarksburg’s Historic District lies within the Ten Mile Creek watershed. The district straddles MD 355 from its intersection with Stringtown Road to west of its intersection with MD 121. The 1994 Plan identified the historic district as a focal point of the Town Center, encouraging sensitive and appropriate infill development in the district as an important component of the Plan’s objective for the Town Center. The Plan includes a series of design guidelines that are designed to retain the identity of the historic district by reinforcing building scale and historic building patterns—structures close to the road, deep back yards, and expanses of nearby green space—that characterized the original settlement. The Plan recommended renovations of existing buildings that would allow both residential and smaller scale commercial activities, like shops and offices. To protect the district, the Plan recommended reduced building heights and residential zones in the immediately adjacent areas, and recommended relocation of MD 355 to accommodate through trips.

The existing zones in the district—convenience and general commercial (C-1 and C-2) and one-family residential (R-200)—are not adequate to accomplish the Plan’s historic preservation goals, particularly the idea of accommodating residential and light commercial uses across the entire district. The Commercial Residential Neighborhood (CRN) Zone allows densities and building heights tailored more precisely to the Plan’s land use objectives for the district while supporting the Plan’s recommendation to protect the scale and character of the historic district. It also allows property owners the flexibility to rehabilitate properties for a variety of potential uses, making renovation more attractive.

Recommendations

- This Plan recommends CRN 0.25, C 0.25, R 0.25 H 35 for the historic district. It should be noted that the proposed revision of the Zoning Ordinance includes language exempting from density calculations those historic resources that are recommended for preservation and reuse in the applicable master plan. Contributing resources in the Clarksburg Historic District shown on the Master Plan for Historic Resources would be eligible for the exemption.
- Design guidelines set out for the Historic District in the 1994 Plan remain in place and should be used to direct infill development.

Transit Station

The 1994 Plan shows a transit station where the MD 355 Bypass intersects Redgrave Place. The Plan recommends residential uses near the station at a scale sympathetic to the adjacent historic district, enabling local residents to walk to the transit stop. Clarksburg Elementary School is currently located in the area proposed for the station and the Plan recognizes that the school would remain for a number of years before its eventual relocation or replacement. In addition, the State is not currently considering a transitway north of the proposed station at Comsat.

Recommendations

- Maintain the transitway to Clarksburg and in the vicinity of the Miles-Coppola properties, where it could serve primarily residential and employment uses, as well as development north of MD 355 and west of MD 121.
- Move the transit station near the intersection of existing MD 355 and Clarksburg Road to serve both future CCT and BRT service on MD 355. Such a move could benefit future redevelopment of nearby properties, support modest infill development in this part of the historic district, and help anchor this important intersection and public park. The transitway could be routed along existing MD 355 and Observation Drive to form a terminal loop that could serve the Miles-Coppola properties and any new development in the historic district. This would accommodate a future extension of transit farther north along MD 355.

West of I-270

Pulte and King Properties

The Pulte Corporation owns or controls almost 540 acres west of I-270 and between Shiloh Church and Clarksburg Roads. Three major Ten Mile Creek tributaries originate on the properties and two are contained almost entirely within them. The properties are a mix of woodlands and farm fields with forest covering much of the stream valleys. The 1994 Plan recommended the properties (and two other parcels to the north of the Pulte holdings) for residential development with a number of guidelines for

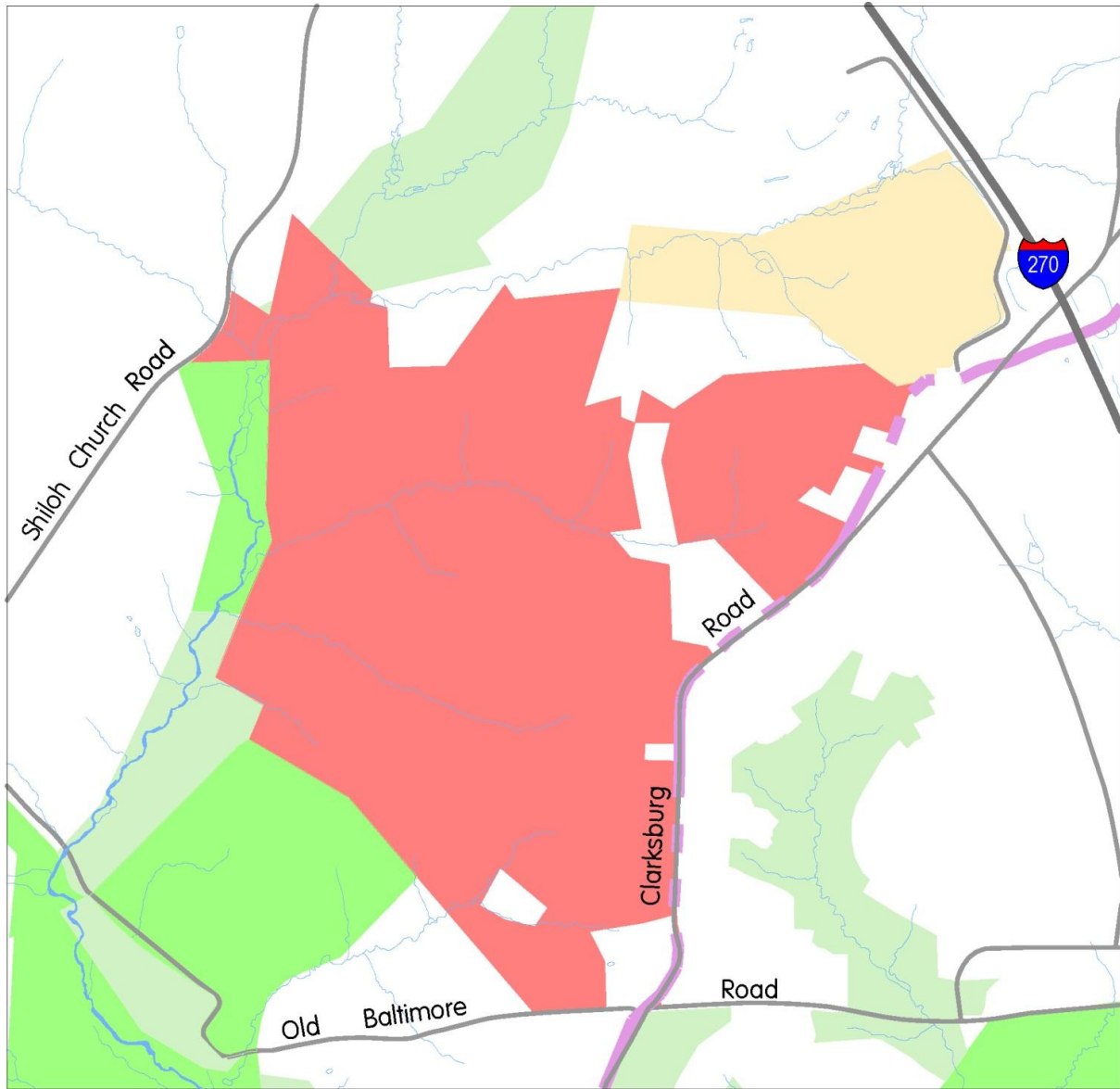
environmental protection and housing unit mix. The Plan designated the 600 acres as a receiving area for Transferable Development Rights, with a maximum of up to 900 units. The entire area is in the RE-1/TDR Zone.

The subwatersheds that would be affected by building out these properties are largely undeveloped, have high overall stream quality, and support many sensitive species. Any development of these properties will have a negative impact on stream quality. It is on these properties that preserving more undeveloped and forested open space can, along with Environmental Site Design, limit the impact of development on water quality.

The stream impacts will be minimized by making preservation and protection of natural resources a clear priority; maintaining natural drainage routes and patterns; minimizing imperviousness; clustering development; and minimizing grading, soil disturbance, and soil compaction.

The combination of reduced densities and cluster development could increase undeveloped open space using privately owned conservation areas in addition to parkland. The Rural Neighborhood Cluster (RNC) Zone would allow a more precise percentage of open space—as much as 85 percent of the gross acreage—to be required on the properties. The RNC Zone requires a significant portion of the open space to be undisturbed and contiguous. It provides an optional method of development on public water and sewer service with a range of allowable development densities up to a maximum of one dwelling unit to the acre, and allows master plans to make density recommendations, enabling a more precise density designation appropriate to the properties. It also provides a standard method of development without sewer service at one dwelling unit for every five acres, should that be determined more appropriate. The RNC Zone can be used with TDRs, retaining an important policy in support of agriculture.

Map 11 Properties West of I-270



- Master Plan Boundary
- Existing Parks
- Proposed Parks
- Pulte Property
- Montgomery County Property



Recommendations

- Allow optional method development on public sewer in the RNC/TDR Zone for these properties, with a recommended density of 0.4 units to the acre, if recommended amounts of open space are provided. Moderately priced dwelling units beyond the minimum 12.5 percent can be added to the recommended density.
- Designate the area shown on Map 9 as rural open space, a minimum of 80 percent of the net tract area.
- Apply a limit of eight percent imperviousness on the entire property.
- Dedicate most of the rural open space as parkland (see recommendations for Legacy Open Space).

These guidelines should direct development of the properties:

- Concentrate cluster development in unforested upland areas; wooded stream valleys should be left intact, undeveloped, and in their natural states as rural open space.
- Reduce environmental impacts and imperviousness during development by applying ESD techniques.
- Direct new sewers away from Ten Mile Creek utilizing proposed and existing roads; pump stations may be required to make connections to sewer lines in Cabin Branch.
- Provide substantial variations in lot sizes, as required by the RNC Zone's development standards.
- Size and locate lots to preserve rural views from Clarksburg Road and ensure an environmental setting of five acres for the historic Cephas-Summers house. Include restoration of the Cephas-Summers house in the development plan.
- Incorporate open space into the clustered community to provide neighborhood residents with recreational opportunities.
- Provide connections to the proposed Ten Mile Creek Conservation Park's natural surface trail system.

Montgomery County Properties

Montgomery County owns more than 380 acres in the upper reaches of the Ten Mile Creek watershed. The majority of this land, known in the 1994 Plan as Site 30, now houses a County correctional facility. The majority of the property is heavily wooded and the County has no development plans beyond a planned expansion of the correctional facility. The Parks Department has identified almost all of this wooded area as suitable for acquisition through the Legacy Open Space program.

Two parcels totaling about 94 acres are located at the I-270 interchange with MD 121. The headwater branches that originate on the Miles-Coppola properties combine on one of the County properties to form a headwater tributary. Several smaller streams feed the tributary on these properties and the steeply sloped stream valleys are heavily forested.

The 1994 Plan identified these properties as an employment site, recommending them for no more than 400,000 square feet of space and applying a 15 percent imperviousness cap. They are in the Technology and Business Park (I-3) Zone.

The County has considered the site for its North County bus maintenance and storage facility, but has no current plans for the properties. The Parks Department has identified the wooded stream valleys for acquisition under the Legacy Open Space program, which would reduce imperviousness and enhance water quality.

Recommendations

- Minimal development of this property would help contribute to water quality in this portion of the watershed. Forested areas should remain undisturbed and the western portion protected via the Legacy Open Space Program.
- If the County chooses to develop the land, limit imperviousness to eight percent.

Water and Sewer Service

The 1994 Master Plan recommended water and sewer service to the Stage 4 area of Clarksburg if the County Council found that environmental regulations were sufficient to protect water quality in Ten Mile Creek. While this amendment recommends some changes to density and land use, public water and sewer service is recommended for the area identified as “Future Service Area C” in the 1994 Plan (which includes Stage 4) to allow cluster development and reduce the potential for impact of septic systems on the watershed. The provision of public sewer service for Stage 4 was anticipated in the *Clarksburg Stage 3 and 4 Area Facility Plan* prepared for the Washington Suburban Sanitary Commission.

Sewerage facilities in adjacent Stage 3 areas were planned to accept wastewater flows from Stage 4. The historic district is anticipated to be served via gravity sewers to the Miles-Coppola property. All permanent sewer service is anticipated to be provided by development at time of construction. Planning is underway for an interim solution to serve the historic district via gravity service to a small pumping station, which would be removed from service when the Miles-Coppola property develops. Properties within the Plan area not already receiving public service or recommended for public service are expected to use individual, on-site water supply and sewerage systems (wells and septic systems).

Recommendations

- Approve water and sewer service to the Stage 4 area of Ten Mile Creek and require construction of needed facilities as part of the development process by the property owner.
- Locate sewer main alignments and pumping station sites to minimize, as feasible, disturbance of environmental buffers and forested areas.
- Provide sewer service to the Historic District as part of the Stage 4 development, if only to remove interim wastewater pumping facilities in favor of gravity sewer service.

Parks

Legacy Open Space

Montgomery County preserves its most significant undeveloped open space through its Legacy Open Space program. The 2001 *Legacy Open Space Functional Master Plan* identifies natural resources, open space, farmland, and historic places that can then be conserved through a variety of protection tools including easements, protection through the regulatory process and, when appropriate, acquisition. The Plan includes the Special Protection Area of the Ten Mile Creek watershed as a Natural Resource site that meets Legacy Open Space criteria, but needs further study to select specific properties.

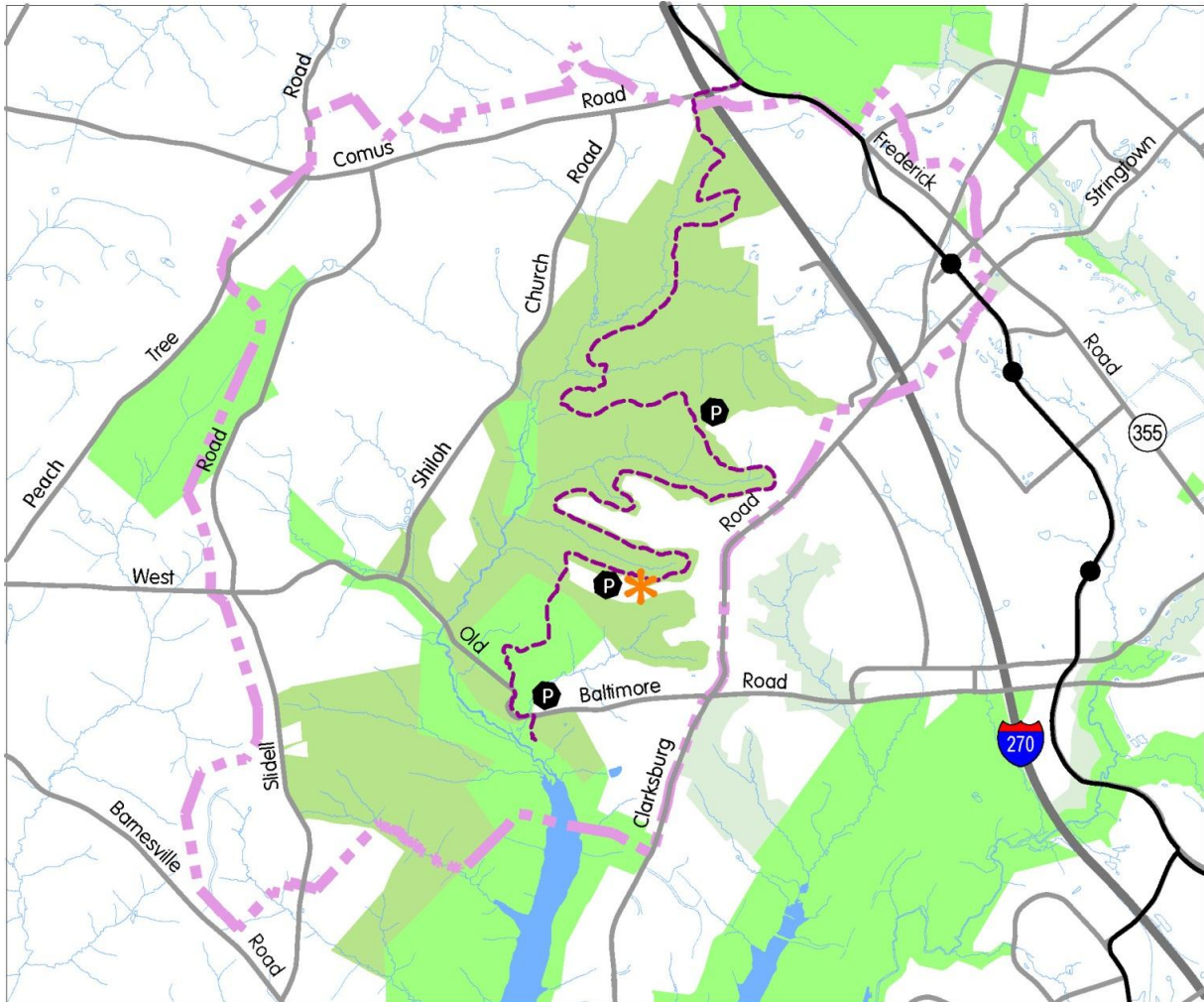
Evaluation of the Ten Mile Creek watershed concluded that the 600 acres of forested headwaters met six of the eight criteria for inclusion in the Legacy Open Space program. The forest:










- “has particular countywide, regional or national significance” for its potential ability to support rare, threatened or endangered species, aquatic communities, and its varied habitats;
- “is critical to the successful implementation of public policy such as protection of the Agricultural Reserve and public water supply;”
- “is part of a ‘critical mass’ of like resources that perform an important environmental or heritage function;”
- “provides human or ecological connectivity between significant park, natural or historic areas and/or corridors;”
- “helps to buffer and thereby protect other significant resources;”
- “represents an opportunity for broadening interpretation and public understanding of natural and heritage resources.”

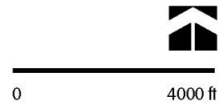
Recommendations

- Designate the high quality, critical forest and open habitats that protect the quality of the Ten Mile Creek headwaters as a Legacy Open Space Natural Resource site (Class II). Approximately 1,230 acres proposed for designation (see Map 12).
- Protect the designated Natural Resource on an individual property basis using a variety of tools including easements, dedication through the development review process, and fee simple acquisition.

Map 12 Proposed Legacy Open Space and Parks



- | | | | |
|---|---|---|---|
|  | Master Plan Boundary |  | Proposed Legacy Open Space |
|  | CCT |  | Proposed Natural Surface Trail |
|  | CCT Station |  | Proposed Trailhead |
|  | Existing Parks |  | Proposed Neighborhood Conservation Park |
|  | Proposed Parks Outside Master Plan Boundary | | |



Parks and Trails

The 1994 Plan created a park and open space system that designated general locations for new local parks serving Clarksburg's developing neighborhoods and were closely integrated with proposed development. Importantly, the Plan also made provisions for connections between these local parks and the greenway network as a prominent component of its overall vision. However, since park planners did not anticipate the significant development west of I-270 that was ultimately approved as part of the 1994 Plan, no local park was included in the Ten Mile Creek watershed.

Since approval of the 1994 Plan, park planners have recognized the emerging importance of natural resource areas as a form of recreation. Bicycling, hiking, and horseback riding, as well as such as wildlife and bird watching or nature photography, all depend on the availability of large amounts of undisturbed forests and other natural areas. The substantial forests, steep stream valleys, and high ridges of the Ten Mile Creek watershed west of I-270 can be used for such purposes and be reached using sensitively located trails through the already proposed conservation park and greenway system (see Map 12).

Recommendations

- Provide a countywide natural surface trail, designed to M-NCPPC Montgomery Parks standards, in the Ten Mile Creek area linking Little Bennett Regional Park and Black Hill Regional Park per the *Countywide Park Trails Plan (2008)* and the 1994 Clarksburg Master Plan.
- Provide five trailheads, designed to M-NCPPC Montgomery Parks standards, to access the Ten Mile Creek natural surface trail and nearby natural areas for park users and operations staff.
- Provide a new natural resource-based Neighborhood Park of at least ten acres for close-to-home recreation for the Ten Mile Creek area, designed to M-NCPPC Montgomery Parks standards.

Appendix 7 includes additional information in support of these recommendations.

Appendix

Appendix 1 1994 Clarksburg Master Plan Excerpts

Appendix 2 Description of Modeling Scenarios and Assumptions

Appendix 3 Ten Mile Creek Watershed Environmental Analysis

Appendix 4 Countywide Stream Protection Strategy Score Change Estimate (CSCE) Model: Description and Results

Appendix 5 Additional Environmental Reference List

Appendix 6 Transportation Modeling

Appendix 7 Department of Parks Analysis and Recommendations

Staff Draft

July 2013

10 Mile Creek Area Limited Amendment

Clarksburg Master Plan and Hyattstown Special Study Area



0713000022



Montgomery County Planning Department
M-NCPPC

MontgomeryPlanning.org