TOWN OF POOLESVILLE

COMPREHENSIVE MASTER PLAN

December 5, 2011

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INTRODUCTION

A primary responsibility and formal role of the Poolesville Planning Commission is to review and update the Town of Poolesville's Master Plan (Plan) for consideration and adoption by the Town Commissioners. The State of Maryland requires such action at least every six years to reflect any social, economic and physical changes in a community's circumstances and goals over time. All Comprehensive Plan Elements required by Montgomery County and the State of Maryland are included in the Plan, as appropriate.

The Plan is a reflection of the Town's efforts to help the community achieve its full potential, as outlined by the overall vision of the Plan, and is the instrument that enables residents, businesses, and property owners to develop and implement a vision for how the community is to look and function in the future. The Plan includes some of the important implementation tools necessary for its proper execution.

Important features of the 2011 Plan, based on various sources, are to ensure that the characteristics that make Poolesville unique are preserved and strengthened in future years, and that efforts to encourage and sustain economic growth within the Town are greatly expanded. Such efforts must complement Poolesville's unique placement in and adjacent to the County's Agricultural Reserve.

VISION STATEMENT - A statement of Goals, Objectives, Principles, Policies & Standards

The Vision Statement is a collaborative effort of the Poolesville Commissioners; Planning Commission; Parks, Recreation, and Streets Board; Community and Economic Development Committee; local Chamber of Commerce; and community input through a focus group, electronic survey of local residents, and public hearings. The previous Master Plan, dated February 22, 2005, served as the foundation for this plan. The Vision Statement is the cornerstone of the Master Plan and contains a summary of the goals of the Poolesville community and specific objectives to support those goals.

The Town of Poolesville prides itself on being a caring community with small town values and character that endeavors to ensure that present and future residents are able to enjoy this lifestyle. Residents have stated that Poolesville is a wonderful place to live and raise a family and have expressed a strong desire that Poolesville's small-town character be protected and enhanced.

The goal of this Master Plan is to establish a guide to ensure that the characteristics that make Poolesville unique are preserved and strengthened in future years.

A number of objectives are key to realizing this vision:

(1) ***Small Town Character*** - Citizen input attests to their strong desire to maintain the small town or village characteristics that are the essence of Poolesville. A small town or village can be described as a clustered community with homes in close proximity to a town center with commercial businesses, public facilities, and pedestrian traffic. In concert with the objectives of ensuring some growth and protecting Poolesville's small town image, this Master Plan outlines steps toward incremental and limited growth and a town population of approximately 6,500 in the foreseeable future (see the Municipal Growth Element Section).

(2) ***Town Center*** - Much of what gives Poolesville its small town character is the Town's Old Town Center and associated historic structures. To enhance and maintain the Town, a Streetscape Concept Plan has been developed, approved, and begun (see Appendix D). When completed, this plan will strengthen and improve the appearance and safety of Poolesville's core downtown and business district and may encourage renovation. The aim of any future development in the Commercial District should be to enhance these desirable features and incorporate them into the design of new construction in an aesthetically consistent manner. Additionally, the restoration of old structures is encouraged (See Appendix C) and guidelines are included in this plan to promote construction and upgrades of buildings in the Central Business and Commercial Districts that are in harmony with existing older architecture.

(3) ***Schools*** - Maintaining schools in Poolesville and ensuring these schools have opportunities and resources at least equal to other schools in the County is a high priority for Town residents. The Town of Poolesville needs to continue to inform the Board of Education and local legislators of Poolesville's unique location within the Agricultural Reserve and the impact of our unique

location on school population. Given the stabilization of the Poolesville High School enrollment through the creation of the Poolesville High School magnet curriculum programs, consideration should be given to creating magnet programs at John Poole Middle School if student enrollment declines.

(4***) Business Community/Economic Development*** - The linchpin to a Town's identity and existence is a strong and vibrant business community. Local businesses contribute to the economic and social fabric of the community by providing basic goods and services, local job opportunities and non-profit organization support. In order to maintain Poolesville's small town character, it is imperative to encourage, sustain and promote the economic viability of Poolesville's businesses. The Town's Community and Economic Development Committee (CEDC) needs to continue and expand its efforts to encourage support of existing businesses and seek creative efforts to encourage viable businesses to locate in Poolesville.

(5) ***Streetscape/Parks & Recreation*** - The Town of Poolesville should continue to be improved consistent with the current *Plan for Park and Recreation Facilities* and current Streetscape Plan. Under these plans, the continued implementation of the Park and Recreation Plan will create a more pedestrian friendly community by connecting neighborhoods to community recreational facilities and the Town Central Business District. The continued implementation of the Streetscape Plan along Fisher Avenue will enhance the appearance and appeal of the downtown area while contributing to the integration of the business, residential, park, and recreation resources in Town. In addition to providing facilities for active recreation, it is also important to preserve green space within the Town by encouraging land uses and densities compatible with the adjacent agricultural preserve and by conserving sensitive natural resource areas.

(6) ***Water/Sewer Quality*** - Ensuring safe, adequate water and wastewater capacity is essential for the health and safety of Town residents and the preservation of Poolesville as a desirable place to live. The Maryland Department of the Environment (MDE) is responsible for monitoring and managing the State's aquifers. MDE and the Town work together to ensure that the aquifer continues to be a source of high quality water and that groundwater withdrawal rates are less than recharge. This partnership has been successful and Poolesville is fortunate to have an adequate supply of high quality water that requires very little treatment. Poolesville is taking pro-active measures to reduce naturally occurring radon and alpha emitters in the groundwater to an extent that surpasses State and Federal guidelines and standards.

This Plan is designed to ensure that development within and adjacent to the Town's boundaries is compatible with its rural setting in an agricultural preserve and that the resources, health and safety of the Town are not adversely impacted. Consistent with this goal, the Town has enacted stringent requirements for petroleum products storage and a Wellhead Protection Ordinance that recognizes areas of influence external to the Town's limits. Protection of the wellhead area to minimize the risk of ground water contamination is a continuing concern to the Town and State. The Town must remain vigilant to ensure that existing Town Codes and Regulations limiting potentially detrimental activity in the wellhead areas are enforced. Continued monitoring of the wellhead protection area within the Town and in adjacent areas is of critical concern.

The Town and State are also concerned with wastewater discharge. During the past six years, the Town has made major improvements to its wastewater treatment plant and reduced the level of contaminants entering Dry Seneca Creek; however, efforts need to continue to reduce the amount of inflow and infiltration (I&I) of groundwater into the wastewater system. The reduction of I&I increases treatment efficiency and reduces the cost of processing input that is not wastewater.

(7) ***Historical Heritage/Tourism*** - Poolesville has a long history and roots that run deep, including local families whose ancestors lived in and settled the Town and its surrounding areas. The Town was a key crossroads during the Civil War and large encampments of soldiers bivouacked in and around Poolesville. While Poolesville can never become a major Civil War destination like Gettysburg, its location in beautiful rural surroundings, its location on the way to other nearby points of interest such as Sugarloaf and White's Ferry and its historical legacy does offer an opportunity for visitors. This Plan provides support for initiatives to promote Poolesville as a place to visit or live.

In support of these efforts to build on the Town's historic assets, Poolesville has adopted and should maintain designation as a heritage area, making it eligible for State assistance and support. Volunteer groups in Poolesville have developed initiatives to help support the Town's heritage area status and there should be plenty of assistance in the form of time and energy from Town volunteers to take advantage of available grants and programs.

TRANSPORTATION

Poolesville's current street pattern is based upon the outward expansion from a rural town center located primarily between the intersection of Fisher Avenue (MD Rt. 107) and Elgin Road (MD Rt.109) and the intersection of Fisher Avenue and Cattail Road. The Town's current street system is comprised of approximately 21.5 miles of roads, the majority of which serve residential homes. Approximately 18 miles of streets are owned and maintained by the Town with the remaining roads being owned and maintained by the County and State. The State currently owns and maintains Routes 107 and 109. The County owns and maintains West Willard Road, Budd Road, Hughes Road south of Westerly Avenue, Westerly Avenue from Fisher Avenue to Hughes Road, Westerly Road, Jerusalem Road, Whites Ferry Road west of MD Route 109, and Cattail Road from the intersection of Kohlhoss Road north to MD Route 28.

The Town should consider requesting the County to transfer ownership of their part of Westerly Avenue. This would allow the integration of sidewalks, curb and gutter and provide uniformity throughout the Town.

Appendix E, Map 4 illustrates the Town's existing streets. Elgin Road and Fisher Avenue function as the Town's major highway arteries linking Poolesville with other communities. Wootton Avenue, West Willard Road, Hughes Road, Westerly Avenue, Hoskinson Road, Spates Hill Road, Cissel Manor Way, Cattail Road, Jerusalem Road and part of Tom Fox Avenue function as collector / distributor streets, with the remaining road network being local streets.

All traffic control in Poolesville is currently accomplished with signage. All of the Town's streets are paved with asphalt and are generally in good to excellent condition. Most of the Town's roads and residential areas are illuminated at night. The posted speed limit for the Town's roads is 25 mph with the exception of several segments of Fisher Avenue, which is posted as high as 40 mph.

With the exception of two streets (Beall Street, and part of Westerly Avenue), all of the Town's roads adhere to current American Association of State Highway and Transportation Official's (AASHTO) planning and design guidelines. The Town's roads consist of both open section (no curb and gutter) and closed section (curb and gutter). It is the Town's current policy to require all new roads to be closed section and have concrete curb and gutter, which comply with the Americans With Disabilities Act (ADA).

Transportation Issues

Moving people and vehicles around and through the Town efficiently is important to the future of Poolesville. Three principal objectives should be addressed in coming years:

1. Pedestrian movement: Completion of the major sidewalk construction initiative with priority given to sidewalks along major arteries and high traffic areas, and continued support for the Streetscape Plans for Fisher Avenue.

2. Regional Transportation issues: Continued and determined lobbying of County and State officials to make needed improvements to the transportation infrastructure outside the Town. Also, to the extent possible, support telecommuting, public transportation (bus and train service) and car-pooling.

3. Public transportation: Seek expansion of the existing bus routes to include stops for each of the major subdivisions.

4. Local Transportation issues: Employ engineering techniques and strategic traffic law enforcement to improve the safe and efficient movement of vehicular traffic within and through Town.

Pedestrian Movement

Poolesville is committed to maintaining a "Town Center" to benefit residents and foster a greater sense of community. To achieve this goal and to enhance the safety of its residents and visitors, the Town should continue to implement a multi-year construction program so pedestrians can comfortably and safely walk to schools and parks, to visit friends, shop, and attend cultural events. A change should be made to the Streetscape Plan to include a raised crosswalk across Norris Road.

All proposed sidewalks are to be constructed of concrete and should include the installation of concrete curb and gutter where practical and road widths support their inclusion. Curb and gutter provide a safety barrier between the proposed sidewalk and roadway in accordance with the ADA. Appendix E, Map 12 also identifies streets that currently have sidewalks on at least one side of the road. Most of the sidewalk projects recommended in the Sidewalk Master Plan are identified in the Town's long term Capital Improvements Plan.

Town Planners recommend that the pedestrian plan for sidewalks be reviewed for reprioritization to address the specific pedestrian needs of the High School attendee's and the residents' needs from Brightwell Crossing using Elgin Road to reach the Central Business District. CIP funding for the reconstruction of these sidewalks to bring them into conformance with ADA guidelines should be in cooperation with the State Highway Administration.

Future construction of the Sidewalk Retrofit Program should take public safety, emergency vehicular access, and drainage concerns into consideration during the design planning process.

Bicycling

Bicycling is a supported form of transportation in Poolesville, and we should strive to promote a bicycle-friendly message to our community. Our goal is to support the safe co-existence among bicycle, vehicular and pedestrian traffic. Support efforts should include:

- Courtesy/Safety reminder signage on County and State roads in the Poolesville vicinity and on the Town's multi-purpose trail system.

- Bike racks strategically located in the commercial area.
- Safety/Courtesy messages in the Town Newsletter and through Chamber of Commerce sources.

Traffic Volume and Distribution

The most recent comprehensive traffic studies were conducted during 1995 and 1997. Forty-eight (48) hour continuous traffic counts were taken at twenty-six (26) locations within Poolesville. Automated traffic counters measured the volume of traffic in hourly intervals. In addition, four (4) intersections were identified as critical to traffic flow in Poolesville and were subsequently selected for evaluation. The intersections selected were: Elgin Road and Fisher Avenue; Wootton Avenue and Fisher Avenue; West Willard Road and Fisher Avenue; and Spates Hill Road and Fisher Avenue. Turning movement traffic count data was manually collected at each intersection. The study indicated that the majority of the Town's local streets currently experience low to moderate (under AASHTO guidelines) traffic volumes. As expected, most of the Town's collector, distributor and arterial streets experience moderate to heavy traffic volumes for a rural area. The highest traffic volumes in Poolesville occur on the eastern portion of Fisher Avenue, on Elgin Road North and MD Route 107 West (Whites Ferry Road). The existing Town Center (Fisher Avenue & Elgin Road) experiences the highest volume of traffic and it is relatively continuous throughout the daylight hours. The Wootton Avenue and Fisher Avenue intersection had traffic count rates that are only slightly less than the Town Center traffic count rate. This initial study has been added to by the Maryland State Highway Administration (MSHA) in 2005, 2006, 2008 and developer's funded studies.

Since the last master plan, discussions regarding various improvements ranging from converting the Wootton Avenue and Fisher Avenue intersection to a four-way stop or a traffic circle have been proposed. Also reviewed were acceleration-deceleration lanes, addressing pedestrian crossings on Fisher Avenue, and parking in the area of the Town Center. In February of 2008, MSHA conducted intersection studies via a visual count of the turning movements made at Wootton Avenue and Fisher Avenue. MSHA maintains that improvements are not required under the MSHA design criteria.

Existing Roadway Capacity

According to AASHTO, the theoretical capacity of a street to handle vehicles is generally considered to be between 1,200 to 2,000 vehicles per hour per lane. All of the Town's roads currently have adequate capacity. Only one road in Town (Fisher Avenue between its intersection with Elgin Road and Cattail Road) appears to be nearing full capacity as currently constructed. The multiple commercial entrance lanes and the narrow portion of road adjacent to the Old Town Hall reduce the capacity of this section of road.

Critical Intersections Capacity & Safety

The capacity of the Town's four critical intersections was analyzed by the State Highway Administration (SHA) utilizing a standardized level of service evaluation technique. Six levels of service are defined with "A" representing the best condition and "F" representing the worst condition. The results indicate that in general, all four critical intersections currently operate at level of service "A" in both AM and PM peak hours. However, certain turning movements associated with the Fisher Avenue and Elgin Road, Wootton Avenue and Fisher Avenue, and Spates Hill Road and Fisher Avenue intersections operate at level of service "B" and "C". In addition, application of standardized techniques indicates that none of the four intersections warrant the installation of a traffic signal at this time. This latter conclusion is consistent with a 1994 study conducted by the Maryland State Highway Administration.

In 2003, the Town's request to the SHA for a four-way stop at the intersection of Fisher Avenue and Wootton Avenue was rejected. This intersection represents the location of greatest contact between pedestrian and vehicular movement. Town Planners believe that an added measure of safety to enhance the pedestrian movements of our Elementary school attendee's is needed. The Town should continue its efforts to lobby the SHA to analyze and develop improvements at this intersection.

The Town also sought from Montgomery County Department of Transportation, in 2006, a four-way stop at the intersection of Tom Fox Avenue and Hughes Road. Due to a rise in Hughes Road south of the intersection, northbound cars cannot be seen by drivers on Tom Fox Avenue. As a result, several vehicular accidents have occurred at this intersection. Likewise, pedestrians using Tom Fox Avenue to cross Hughes Road are confronted with the same inability to see on-coming vehicles. Now that there is a sidewalk on Fisher Avenue connecting Hunter's Run to the Town center, there will likely be increased pedestrian traffic across Hughes Road. Accordingly, the Town should fervently continue its efforts to obtain signage for a four-way stop at both of these precarious intersections.

Future Traffic Management Recommendations

Because limited residential and commercial development could exist during the next six years, some changes in traffic conditions or patterns are expected. Although all roads within the Town have sufficient capacity for limited growth, there are some safety and congestion issues, which will need to be addressed in this Master Plan's timeframe. There is also the need for improving subdivision access and new proposed roadway extensions that are detailed in Appendix E, Map 4. It is realized that any new connections and extensions for Cattail Road, West Willard Road and Fisher Avenue may additionally warrant intersection design changes and new traffic management strategies.

Future Road Extensions and Improvements

Road extensions and major improvements could be implemented in the future to improve the Town's vehicular transportation system. Recommended road extensions are generally proposed

for areas with poor traffic circulation and / or limited access. Residential areas with only one point of access risk being cut-off from emergency vehicles should the single access point become blocked or closed. All road extensions should be design to discourage through traffic. Major road improvements are also recommended for areas with existing safety hazards and / or chronic drainage problems.

The Town has long had the goal of removing unsightly telephone and electric cables and poles from Town Center, thereby reducing the risk of accidents and injury with adjacent vehicle traffic. Although not always economically feasible, underground placement of utility lines are still recommended and included in the Streetscape Plans for Fisher Avenue.

Vehicular Speed

Excessive speed on the roads and streets in Town is a potential threat to Poolesville's citizens. In addition to Town residents leaving and entering residential areas, Fisher Avenue has an ever-increasing number of through travelers from the north and west of Town, including ferry traffic from Virginia. In working with State and County officials to establish reasonable and safe speed limits on Fisher Avenue, the perspectives of both residents and through travelers should be considered.

A variety of methods should be utilized to control vehicular speeds such as; installing additional signage, rumble strips, engineered speed humps, raised brick crosswalks, or traffic circles. In addition, new developments should avoid the use of straight roads that encourage speeding. New methods recommended by highway engineers to control speed, such as lane narrowing and trees on medians, should be studied for possible adoption in the Town.

To enhance the Town traffic flow, the Town should apply the design standards of the "Poolesville Vicinity Master Plan" recommendations for right-of-way and pavement widths within Town boundaries, to the extent that the environment and character of the Town are not negatively impacted. Streetscape plans are also to be integrated in planning.

Safe and Efficient Traffic

For safer and more efficient movement through Town:

- Recommend redesign of Tom Fox Avenue (roadway and sidewalks) from Hoskinson Road to the Middle School.
- Recommend redesign of Tom Fox Avenue and Hughes Roads at Halmos Park to improve line of sight and support the recommendation of a four-way stop sign.

For improved access to subdivisions, particularly for emergency vehicles:

- Extend Bodmer Avenue to West Willard Road when the remainder of the Westerly Subdivision is completed.
- Seek to extend Cissel Manor Way to Cattail Road.

- Where practical, future residential subdivisions shall have multiple access roads. However, this should be done in a manner that will not encourage through traffic.

To enhance public health and safety by protecting Poolesville's wellhead areas from possible chemical and fuel contamination, reducing excessive noise pollution, and safeguarding Town roads from damage:

- Encourage State transportation officials to limit overweight or hazardous chemical vehicles on Fisher Avenue and Elgin Road as through roads. Such vehicles should bypass Poolesville on Route 28.

To beautify the road systems:

- Landscape the roads, sidewalks, and bikeways with trees in conformance Streetscape/Street Tree Plans.
- Implement Streetscape recommendations and plans. Review the Streetscape Committee's recommendations and plans and develop a phased approach to implementation that will make the completion of the project more feasible and within a reasonable time frame.

Relationship to County Roads

The Town should vigorously lobby County and State authorities for improvements to the commuter roads on which the Town's residents depend. Further complications for safe vehicular travel on western county roads are the extensive use of roads in and around Poolesville by local and visiting bicyclists, those transporting horses, and travelers utilizing Whites Ferry coming from or going to Virginia. These factors, combined with the historic heavy use by agricultural equipment, also suggest that that County roads surrounding Poolesville require additional improvements to be reasonably safe. Typically, the improvements that may be required are wider lanes (including bike lanes), adequate shoulders and appropriate sight distances. In particular, the section of Whites Ferry Road between downtown Poolesville and White's Ferry, while designated as Rustic, needs milling, paving and shoulder widening (in places) in recognition of its use as a commuter route as well as a bicyclist favorite. With the pending Streetscape improvements set to take place within Town limits, all of the roadways, from White's Ferry to Route 28, should be given priority when evaluated for possible improvements such as those previously mentioned. Any decisions between rustic road standards and safety should be biased towards the consistent goal of providing reasonable safety for all users.

Safety Concerns

The Town has identified drainage concerns along Fisher Avenue between Spates Hill Road and Hersperger Lane, specifically on the south side of the roadway. This drainage problem exists when significant steady rainfall occurs.

There are two segments of MD Route 107 just east of the Town limits, which currently experience chronic accident problems. The first location is at a sharp horizontal curve located approximately ½ mile east of the Town limits. Drainage improvement to this curve, conducted

by the State in 2001, helped with wet weather safety; but, a significant number of vehicles still misjudge the severity of the curve. Poolesville thereby supports a request to the SHA to redesign this portion of MD Route 107.

Another problematic area in proximity to Poolesville is the Partnership Road and Sugarland Road intersection. This intersection has very limited sight distance for drivers in all directions and has an extreme elevation change. These problems pose a major safety hazard given the relatively high volume of traffic that utilizes Partnership Road. The Town should encourage the County to modify this intersection to improve its sight distance characteristics.

Farther east, is the intersection of MD Routes 28 and 107. Reconfiguration is needed to improve visibility and safety. The Town should jointly request that these safety enhancement projects be added to the State's Capital Improvements list of projects.

These safety improvements should continue to be emphasized and properly balanced with the constraints imposed by the County's Rural and Rustic Roads program.

The Town should continue to request the State and County to make improvements to these areas.

Water Resource Element

Introduction

The Water Resource Element (WRE) is a detailed and quantitative analysis of the impact of anticipated growth on water and wastewater resources. The purpose of the WRE is to ensure that the Town contributes to the promotion of smart growth policies and principles by protecting State land and water resources, and the public health, safety and welfare of our citizens. The Town has taken a number of steps to protect its water resources such as well redundancy and the Wellhead Protection and Emergency Response Plans.

The WRE provides a link between the Land Use Plan and plans for the provision of drinking water supplies, wastewater discharge/treatment capacity and stormwater management. This section was developed utilizing supporting documentation already adopted by the Town, which is intended to protect and to detail how these water resources will support the growth in population and housing based on an approved allocation plan and the nearly 400 homes under site plan review.

Poolesville currently relies entirely upon eleven groundwater wells to supply the needs of its 4,883 residents and multiple businesses. The Town, with assistance of the Maryland Department of the Environment (MDE), reviewed and calculated the potential water supply from existing and proposed future well sources. A theoretical water availability assessment utilizing rainfall and acreage within the corporate boundaries was conducted by the MDE. It was determined that the groundwater availability was more than adequate to meet the Town's population projections of approximately 6,500.

The same population projections used to calculate water supply requirements were used to calculate the generation of wastewater and test the initial assimilative capacities of the receiving stream. These capacities were found to be within reasonable limits and the MDE determined that the stream could handle the increased wastewater discharge permit from 625,000 to 750,000 gallons per day. The expansion and upgrade of the wastewater facility, which was part of the permitting approval process, provided the capacity for the planned development to proceed.

Drinking Water

All of Poolesville's wells are equipped with flow regulating valves and have been set to specific pumping rates to ensure that each wells' major water bearings zones are not dewatered. These rates were determined by continuous 30-day pumping of individual wells during drought conditions and do not take into account any interference that may occur between wells if they were pumped simultaneously for 30 days. The overall current peak day capacity is 843 gallons per minute (gpm) or 1,213,920 gallons per day (gpd). The actual annual average Town usage is between 450,000 and 500,000 gallons per day (gpd). Current wells are identified in Table 1.

The MDE has determined that the yearly average water usage shall be 100 gpd/person; and has further determined that the maximum monthly average usage shall be 140 gpd/person. The current peak day capacity suggests that the Town has an adequate water supply for its current residents and most of the planned growth. The Commissioners have evaluated the Town's historical water usage, system vulnerabilities and the absence of alternate water sources and have determined, for the health and safety of the community, that the well field shall be capable of producing 140 gpd/person with the best-producing well not in operation. This results in the adopted policy that wells currently in operation are for existing residents; and for new connections, the system shall have additional capability to produce a peak day demand of 600 gpd/household.

Future Water Demand

In order to meet the MDE's requirements and accomplish the capacity goals established by the Town, owners of large subdivisions are required to permit, construct and deed municipal wells to the Town. Accordingly, in December 2009, two of the developers constructed and deeded two additional municipal wells to the Town. Table 1 identifies specific information on each well.
Table 1.

Well Number	Aquifer	Depth (Feet)	Diameter (Inches)	Sustainable Yield (gpm)	Status
2	New Oxford Formation	453	6	100	Online for existing residents
3		285	6	60	Online for existing residents
4		600	6.5	40	Online for existing residents
5		500	6	100	Online for existing residents
6		500	8	110	Online for existing residents
7		700	8	45	Online for existing residents
8		500	8	65	Online for existing residents
9		800	8	125	Online for existing residents
10		762	8	75	Online for existing residents
11		1,200	8	100	Permitted, not constructed, for redundancy (Rabanales)
12		500	8	72	Online for existing residents and future residents (Stoney Springs)
13		500	8	51	Online for existing residents and future residents (Brightwell Crossing)
14			8	34	Drilled only, for future residents (Jamison-Westerly)
15			8	48	Drilled only, for future residents (Jamison-Cattail)

Watersheds

The Town is divided into four watersheds. Withdrawal permits from each of these watersheds are based on data from a MDE Water Supply Program study completed in 2000. The estimated annual average base flow (effective recharge) in the nearest representative Triassic basin (Monocacy River @ Bridgeport) is 461 gpd/avg/ac (6.2 in/yr), with an estimated drought year (1-in-10) baseflow of 290 gpd/ac (3.9 in/yr). When amounts are deducted for maintenance of a seasonal low stream flow (7 gpd/avg) and a 10% reduction for impervious surfaces is made, the amount of theoretical ground water available in each watershed is calculated.

Wells are strategically located throughout Town to reduce drawdown interference between sites. The total of the four watershed appropriation permits are 650,000 gpd for an annual daily average and 910,000 gpd for the daily average of the month of maximum use. These permit amounts were derived in anticipation of the projected growth detailed in the Land Use Plan. Two additional wells, not yet permitted, will be brought online to supply the additional capacity required by Town policy. Table 2 details watershed withdrawal and capacity information.

Table 2.

Watershed	Area (acres)	"Theoretically" Available groundwater (gpd)	Permitted Average Daily Allocation on a yearly basis (gpd)	Permitted Average Daily Allocation for Max. Month (gpd)	Well Capacity (gpd)	Permittable Average Daily Groundwater Remaining (gpd)
Horsepen Branch (wells 2, 4, 6, 8 & 11)	588	149,000	293,000	388,000	597,600	0
Broad Run (well 12)	551	140,000	47,500	66,600	66,600	92,500
Dry Seneca Creek (wells 3, 5 &13)	973	247,000	194,500	273,400	303,400	52,500
Russell Branch (wells 7, 9 & 10)	450	115,000	115,000	182,000	359,000	0
Totals	2562	651,000	650,000	910,000	1,326,600	145,000

Water Resource Protection

Poolesville's groundwater is generally of high quality. It meets all current drinking water standards and requires minimal treatment before it reaches the tap. In recent years, the Town has developed protective legislation to reduce the threat to groundwater from contamination arising from stationary sources. A threat from mobile sources of contamination will always remain from tank trucks carrying such products as gasoline, home heating fuel and pesticides. Appropriate contingency plans for this occurrence has been developed as part of the Wellhead Protection Plan and Emergency Response Plan. The Town should continue to develop one or more additional well fields as far removed from potential sources of contamination as possible. Further, the

Town should pursue abandonment of In-Town private well and septic systems to limit this as a potential source of groundwater contamination. The Town views their Wellhead Protection Area as all land within the corporate boundaries and, in some cases, extending beyond the corporate limits. The Wellhead Protection Plan ensures a degree of certainty that the present planning process that reviews new development applications and changes in use provides protection for the Town's water supply.

Water System Improvements

The Town, in conjunction with the MDE continuously monitors Poolesville's water quality to ensure it is in compliance with State and Federal regulations. In 2006, the MDE requested quarterly alpha emitters sampling of Wells 7, 9 & 10. At the conclusion of the sampling schedule in 2009, MDE determined that although the analysis indicated elevated levels of uranium in Wells 7 and 10, they were both in compliance with State and Federal regulations. In order to maintain the current level of confidence, the Commissioners decided to take Wells 7 and 10 offline and to embark on the design of a treatment process to reduce uranium levels, with construction to begin in 2011.

Wastewater

The Town of Poolesville owns and operates a 750,000 gallon per day Wastewater Treatment Plant (WWTP). This sequence batch reactor type facility was upgraded in 2010 to a biologically enhanced nutrient removal (ENR) system. In addition, the WWTP utilizes multimedia pressure filters and ultra violet disinfection prior to the discharge into Dry Seneca Creek.
Table 3 details the permitted discharge effluent limitations.

Table 3.

	Loading Rate, lbs/day			**Concentration, mg/l**		
Effluent Characteristics	**Monthly Average**	**Weekly Average**	**Daily Average**	**Monthly Average**	**Weekly Average**	**Daily Average**
BOD:						
(5/1 to 10/31)	63	94	N/A	12	18	N/A
(11/1 to 4/30)	156	235	N/A	30	45	N/A
TSS:	156	235	N/A	30	45	N/A
TKN:						
(5/1 to 10/31)	20.9	31.3	N/A	4.0	6.0	N/A
Total Ammonia as N:						
(5/1 to 10/31)	4.4	N/A	22.5	0.7	N/A	3.6
(11/1 to 4/30)	10.6	N/A	28.2	1.7	N/A	4.5
Total Phosphorus as P:	10.4	15.6	N/A	2.0	3.0	N/A

	Total Monthly Loading Rate Pounds/Month	**Annual Maximum Loading Rate, Pounds/Year**	**Monthly Average Concentration, mg/l**
Total Phosphorus-P	Report	685	Report
Total Nitrogen-N	Report	9,137	Report

A flow of 0.75 million gallons per day was used in determining waste calculations.

During the latest WWTP upgrade and expansion, the MDE required an increased design capacity of 2,000,000 gpd in order to accommodate inflow and infiltration (I&I) peak flows. In conjunction with the expansion, the Town embarked on a comprehensive sewer relining campaign in the Wesmond subdivision which was completed in the later portion of 2007. Flow monitoring results show a significant decrease in flows. However, I & I exists and is developing in aging infrastructure in other parts of Town and these reduction efforts should continue.

Poolesville utilizes a three-year rolling average to determine available wastewater capacity The annual average daily flow was 584,133 gpd in 2008, 678,524 gpd in 2009 and 621,586 gpd in 2010. The current three-year rolling average of 628,081 gpd equates to an available capacity 121,919 gpd. Five thousand gpd of this available capacity is set aside for municipal use.

The majority of the flow received at the WWTP originates from residents and businesses within the corporate boundaries. However a small portion, up to 20,000 gallons per day, is attributable to the Jonesville/Jerusalem Community via an agreement with the Washington Suburban Sanitary Commission.

By January 31st of each year, the Town Manager will develop an annual Municipal Sewage Capacity Report for submission to the Commissioners of Poolesville and the MDE (Attachment A, page 20) to ensure adequate capacity exists.

Stormwater

Introduction

The Town of Poolesville currently has a population of 4,883 and the corporate limits encompass 2,641 acres. There is no intention to annex additional property into the Town limits at this time. It is anticipated that the population may increase to a maximum of 6,500 over the next 15 years.

The anticipated growth is mostly planned in residential zones with a majority of the construction being single family homes. With this development, it is anticipated that there will be an increase of 403 homes as indicated on Table 1 of the Municipal Growth Element. This growth may have a negative effect on the stormwater treatment process due to the addition of impervious surface coverage and the diminishment of vegetative cover. The Town recognizes this and has adopted zoning with higher density at the Town center and lower densities outwards near the surrounding agricultural preserve.

Stormwater Management Program

Montgomery County is the regulatory authority for stormwater management and responsible for monitoring stream conditions. The Town is responsible for providing input on stormwater practices to Montgomery County.

The Town is located in the piedmont geophysical region of the State of Maryland. The topography is relatively flat with no significant steep slopes and drains toward the Dry Seneca Creek basin, Russell Branch of Dry Seneca Creek, Horsepen Branch, and branches of Broad Run. Based upon topography and the storm water management system of the Town, the majority of the storm water flow will enter either the Dry Seneca Creek Basin or the Russell Branch of Dry Seneca Creek with lesser contributions to the Horsepen Branch and branches of Broad Run.

The Town is actively implementing treatment processes for stormwater management such as the pervious concrete parking area at Town Hall and pervious concrete walkways at Poolesville High School.

The Town's drinking water is supplied by a well system. The Town is aware of the need for recharging the aquifer and promotes this through the planning process and the Town's Well Head Protection Plan.

Protection of streams and banks is a major consideration in the Planning Process both by the Planning Commission and the Parks Board.

Approach

The Montgomery County Department of Permitting Services (DPS) is the regulatory authority and is a strong proponent in the use of the 2000 Maryland Stormwater Design Manual, Volume I & II. The Town has an ongoing process of evaluating each proposed development to ensure compliance with DPS approvals.

Non-point Source Loading Analysis

Based upon the Municipal Growth Element, the projected population growth is near 1,289 persons with a consumption of 632.61 acres (Table 2 of the Municipal Growth Element). Attachment B, page 24, depicts the location of the proposed subdivisions.

Currently, the Town has opted not to develop a GIS Infrastructure data base and relies on the existing paper plans or gathers information as needed.

Currently, a total of 24 septic systems remain in operation. The Town is connecting systems existing near new construction and has planned infrastructure expansions where possible. The existing septic systems are over 15 years of age and by Code, no additional septic systems are permitted. All new development must be connected to the waste water treatment plant. The Town's Wastewater Treatment Discharge Permit, effective July 2010, sets Total Nitrogen limits at 9,137 lbs. and Total Phosphorous at 685 lbs. Table 4 indicates the new loads.

Table 4.

	Nitrogen Loading (Lbs/yr)		Phosphorus Loading (Lbs/yr)	
	Current	Proposed	Current	Proposed
Sewer	15,064	9,137	125	685
Septic	304	304	0	0
Stormwater	102,827	112,130	102,828	111,454
Total	**118,159**	**121,571**	**102,953**	**112,139**

All Calculations based upon Maryland Chesapeake and Atlantic Critical Area 10% Rule Guidance Manual. Provided by the State of Maryland

The removal of the septic systems would provide a reduction of less than 1% of the total loading based upon the data in this report.

A summary of the nonpoint source loading analysis indicates that proposed development will increase the Nitrogen Loading by 8.8% and the Phosphorus Loading by 8.2%. The proposed loadings are based upon the completion of the ENR upgrades to the Waste Water Plant.

Based upon the loading analysis Priority Funding Area (PFA), the Town should concentrate on removing septic systems and limiting the increase of impervious areas.

Non-point source loading impacts

The Town is a proponent of improved growth policies, which is evident through subdivision regulations. Poolesville's Planning Commission has coordinated with Montgomery County's policies to achieve responsible and practical policy advancement. Through the coordination of Stormwater Management and the Land Use Elements, the Town continues to act in a responsible manner.

During the Town's development plan review process, the Town mandates that critical and sensitive areas be retained in a natural condition. The Town identifies those areas and places them into a conservation easement so as to limit construction and encourage bio-diversity. Within the Town limits is a parcel of approximately 264 acres that has been placed in a reserve program. Additionally, there are parcels of land that will not be developed in the foreseeable future due to lack of availability of sewer and water taps, which the Town controls.

The Town should encourage the use of drainage swales for quality and quantity control. The Town believes that this configuration encourages the filtration and absorption of surface flows and maintains the rural character of the Town.

The Town establishes and follows subdivision regulations, which are reviewed from time to time. The Town strictly monitors and enforces the regulations. An appeals process is available to petitioners.

The Town maintains a maintenance budget for the stormwater system and allocates funds and resources as required.

The Town of Poolesville has coordinated with Montgomery County Government, and supplied the land cover and other information needed for the County to include the Town within the overall County Nutrient Loading Analysis.

Review Criteria for Stormwater Management

The criteria for stormwater management are established by Montgomery County DPS (MCDPS). By law, Montgomery County must use the 2000 Maryland Stormwater Design Manual Volume I and II. MCDPS may modify these standards only if the modified criteria are greater than the standards of the design manual. The Town acts in concert with MCDPS in the review process. When review questions arise, the County reviewer is contacted and made aware of the Town's concerns.

Sensitive Areas

Introduction

Article 66B requires jurisdictions to protect streams and their buffers; the 100 year floodplain; habitats of threatened and endangered species; and steep slopes, wetlands and agricultural and forest lands intended for resource protection or conservation. Jurisdictions may at their discretion, identify and protect other sensitive areas relevant to their particular circumstance.

Poolesville is located in the piedmont geophysical region of the State of Maryland and positioned within the 93 thousand acre Montgomery County Agriculture Reserve, the largest percentage of preserved agricultural land in the United States. Land use has been primarily dedicated to farming and grain production since the late seventeen hundreds. The topography is relatively flat with no significant steep slopes and drains toward the Dry Seneca Creek basin, Russell Branch of Dry Seneca Creek, Horsepen Branch, and branches of Broad Run. There are no known threatened or endangered species living within Town limits, and no steep slopes that would require sensitive area attention at this time. This section is concerned with streams and their buffers, floodplains, wetlands and agricultural and forest lands, and states the goals, objectives, principles, policies and standards established to protect these areas from the adverse effects of development.
Goals:

- To protect the quality of the air, water, and land from the adverse effects of development and growth;
- Enhance the quality of the air, water, and land where feasible and practical;
- Protect the diversity of natural resources, with special attention to potential habitats of threatened and endangered species;
- Adhere to the Chesapeake Bay Watershed Implementation Plans, if applicable.

Objectives:

- Identify and protect sensitive and other environmentally significant areas as part of the comprehensive planning and zoning process;
- Direct growth away from sensitive areas so that impacts are avoided or at least minimized to the greatest extent possible;
- Integrate and coordinate sensitive areas protection with other locally adopted environmental and growth management programs such as stream valley protection, forest conservation, Chesapeake Bay Critical Area protection, watershed management and protection, open space and recreation, water and sewerage, transportation, and community design;
- Promote a positive stewardship ethic for land and water through outreach and education efforts.

Principles and Policies:

- Development should avoid impacts on sensitive areas;
- Impact to habitats of threatened and endangered species, or natural systems that are otherwise important and unique, should be avoided altogether.

Standards:

- As a general rule, all areas should meet Federal or State environmental standards, developers should strive to make the post-development quality of air, land and water as good as pre-development levels;
- The quality of stormwater runoff associated with developing or redeveloping should be in compliance with Federal and State regulations.

Strategies set forth in this section will be accomplished through existing Town Ordinances, reviewing plans to ensure that all County, State and Federal regulatory program compliances have been obtained and by proposing new or modified ordinances from time-to-time as needed. The Town also relies on Montgomery County, (Stormwater Plan approval authority) State of Maryland and U.S. Army Corps of Engineers (permits within designated wetlands), the Federal Emergency Management Administration (delineates 100-year floodplain) and other agencies review when evaluating the submittal of preliminary plans for development.

During the initial preliminary review process, plans are examined for existing features including, but not limited to, significant tree groves, scenic or historic areas, streams, drainage areas, outstanding natural topographic features, wells, wetlands, and 100-year flood plains, as stated in the existing Town Subdivision Regulations.
Environmentally sensitive areas are depicted in Appendix E, Map 13. They generally consist of wetlands, flood plains, forested areas, and the wellhead protection areas. Sensitive areas depicted in Map 10 are for planning purposes only. Neither the scale depicted nor the methods employed to identify the resources are sufficiently accurate for final determinations. Future development plans must identify each of these resources at a level of detail consistent with applicable Town, County, State and Federal regulations prior to submittal to the Town for approval.

Proposed Development Impact

The current Town limits incorporate approximately 2,641 acres, 209 of which are impervious surfaces, and it is projected that an additional 39 acres of impervious surface shall be added to the Town when the current and proposed development is complete. Currently 8.6% of the Town acreage consists of impervious material. Upon completion of submitted construction projects, the percentage will rise to approximately 9.4%.

Streams and Buffers

As part of the planning process, the Town considers and recognizes the importance of streams and seasonal streams and it considers the various impacts that may occur if these stream systems are disturbed without proper remediation. The Town understands that these stream systems serve as a purification system for the waters that eventually enter the Chesapeake Bay and thus these stream systems are an integral part of a clean and safe environment. Areas around these stream systems also serve as wildlife refuge areas that are essential to the ecological diversity of the area. The Town identifies these areas by using existing FEMA maps and through site observation. The Town has taken the position that wetlands, the 100 year flood plain, and the 25 foot buffer to the flood plain are to be placed into a conservation easement. This process serves two purposes:

1) To aid the Town in creating ecological niches for diverse species growth;

2) To provide the Town with the ability to enforce no construction or extremely limited construction within conservation easements.

The Town recommends that intermittent and perennial streams be regarded as environmental features and surrounded with a 100 foot buffer. Similarly, a 25 foot buffer should be designated around wetlands as is the practice within parts of Montgomery County.
The 2000 Maryland Stormwater Design Manual allows the following processes to be applied :

- The use of standard design computations.
- The use of bio-retention in the design.
- Controlled release of stormwater flows into the existing streams.

Habitats of Threatened and Endangered Species

The State of Maryland and Federal government are responsible for identifying threatened and endangered species. When new development is planned, the State of Maryland Department of Natural Resources (DNR) supplies a letter identifying possible threatened and endangered species present in the general area to the developer. A natural resource inventory statement will inform the developer if any action is needed in this regard, and of any action relating to forest conservation.

Forest Conservation

The forest canopy and its supporting system is the starting point for filtration of precipitation and control of runoff and further more is an integral part of the environment. Forest Conservation and afforestation efforts are critically important components to protecting and promoting healthy water.

To this end, the Town plans to continue implementation of its Forest Conservation Ordinance (Chapter 7-1 – 7-30, Poolesville Code), which is in full compliance with the Maryland Forest Conservation Act (Natural Resources Article, Sections 5-1601 – 5-1612, Annotated Code of

Maryland). All plans submitted for development must have a Forest Conservation Plan consistent with the Town Code.

Sensitive Area Protection and Improvements

Poolesville's responsibility is to be a steward of the land. This stewardship responsibility can be summarized as: "to protect, where possible, and to enhance the existing natural environment of the area within the Town Limits of Poolesville, in coordination with County, State, and Federal Government programs". This process provides the Town a coordinated regulatory program and an understanding of its responsibility with regards to sensitive areas.

Sensitive Area Element

It is the goal of this plan to ensure that all future development is planned, designed and constructed in a manner, which will conserve sensitive natural resources and promote a healthy and sustainable environment for present and future residents.

Mineral Resources

Water is the only mineral resource that has been identified within the boundaries of the Town. The aquifer from which the Town's water is supplied is discussed in Appendix A.

Water provided by the Town wells is of very high quality. The blanket of soils that overlies the aquifer under Poolesville acts as a purifying filter. There is only a thin mantle of overlying soils in the vicinity of Poolesville and the threat of groundwater contamination is very real.

Annually, the Maryland Department of the Environment in conjunction with the Town sample and analyze Poolesville's Water Supply. They have also worked with the Town to develop a Wellhead Protection Plan and a wellhead protection area (all areas within the Town boundaries and some overlapping into the county). These efforts help ensure that Poolesville will continue to have a safe and adequate water supply .

LAND USE

INTRODUCTION

Poolesville is an independent, State of Maryland, Charter Municipality, that has a long history dating to colonial days. It has developed a supportive economic and cultural life that makes it unique in character from many other suburban areas ringing Washington, D.C.

In 1950, Poolesville was a rural town with a strong agricultural base, and only 58 single family homes. By 1970, the number of homes increased to 128, but during the post-1970 period, the Town experienced its greatest expansion, growing by more than 900 homes to 1,086 in 1977.

Poolesville residents are blessed with excellent schools, diverse and desirable housing, locally owned businesses, and a rich, traditional historical heritage. There are also many active church-based and secular organizations that provide strong support for the community.

Perhaps most unique is Poolesville's geographical location within the 93,000 acre Montgomery County, Maryland Agricultural Reserve - the largest percentage of preserved agricultural land in the United States and a hard backdrop to any land use decisions contemplated, planned or projected into the knowable future.

Land Use Today

The Town has continued to grow steadily since 1977 with the addition of the Seneca Chase, Tama, Woods at Tama, Elizabeth's Delight and Hunter's Run subdivisions. These developments have given the Town a suburban quality. Two large development projects, Brightwell Crossing and Stoney Springs, scheduled for completion within the next 3-5 years, will raise the total number of homes in Town to about 1,924. Such expansion has been made possible by the increased availability of public sewerage and water. Construction design since the 1980's has been more uniform in size, style and lot size, in part, due to Town planning and zoning guidelines. Densities reflect requirements in the Town's Residential Zones for⅓, ½, and ¾ acre minimum lot sizes for single-family homes. Poolesville's housing will continue to be dominated by single family, detached units, with one townhome development.

Poolesville's housing was built incrementally over a period of many years and thus styles, lot sizes and densities vary considerably. This long development process has resulted in a mixing of commercial and residential uses in some parts of Town, particularly along Fisher Avenue (Maryland Route 107). In addition, a few dwelling units are located in some of the commercial structures.

Despite development of additional housing subdivisions, the Town maintains a substantial attachment to its farming and agricultural roots. There is evidence of this along the Town's central artery (Fisher Avenue) where parcels of farmland, horse meadows and various open spaces can still be found.

A Village

Residents want to maintain Poolesville's small town or village character. It is important to describe what that concept means to ensure that local residents, businesses and community leaders know what to expect when they become part of the community. For the purposes of this Master Plan a small town or village:

- Is predominantly residential and has supporting commercial and public facilities at or near its center;
- Is compact compared to its surroundings, and to traditional suburban tract development;
- Is easily distinguishable from surrounding land which is usually farmland or forests, and is usually located in the midst of rural or only slightly developed areas;
- Encourages personal interaction and pedestrian movement among local origins and destinations through mixed land uses.

This description of a "village" reflects the rural, small town environment that Town residents value and is intended to help guide the development and planning activities of the Town going forward.

Poolesville's current mixed use zoning and land use designations in the business districts were initially established to help expand the village idea. However, land owners, the marketplace, economic conditions and other factors have hindered the commercial growth and development necessary to achieve this goal.

Town Center Emphasis

The Town's goal is to create a dynamic commercial area in Poolesville that blends the existing strip malls into a core downtown area that is visually appealing, has buildings of the right style, size and scale that face each other, and that encourages personal interaction and pedestrian movement. Such a core downtown area creates a street character and sense of place that functions as a social magnet, makes walking interesting, and stimulates economic growth and vitality.

There are four shopping centers located along the Town's central artery, two of which serve as "bookends" to the Town's commercial corridor. Most other businesses are operated from stand-alone buildings that are not uniform in their physical appearance, the way they are arrayed along this corridor, or their relationship to each other. This circumstance was noted in a 2008 Market Study commissioned by the Community Economic Development Committee (CEDC) to assess the Town's economic situation. The study report stated that businesses were spread too thin within the Commercial and Central Business Districts. The absence of a definable more compressed town center suppresses a more robust and sustainable marketplace.

A Citizens Survey conducted in 2010 reflected the strong desire of Town residents to protect and maintain Poolesville's historic heritage and small town character by a large margin over many other Town traits. These sentiments were also stated in the 2003 Citizens Survey. Some 2010 survey responses expressed the desire for an attractive downtown or town center such as that found in neighboring Leesburg or Old Town Gaithersburg, and economic development to sustain businesses through greater focus and cohesion of commercial interests within that Town center.

The following representative list of comments from residents participating in the 2010 Citizens Survey provides additional input that may be relevant to how and whether the Town prioritizes its goals and objectives concerning development in the future:

- Businesses and shops are spread too far apart;
- Businesses need to be moved closer together to form a town center;
- The downtown area needs major aesthetic improvement;
- The Town needs to grow "smartly" to increase business options;
- Improve shopping alternatives;
- Support and create a healthier attitude toward small businesses, and;
- Help fill vacant storefronts.

This convergence of ideas is telling and timely. While some businesses in Town are struggling to survive, the Poolesville community's commitment and desire to support local businesses has never been stronger.

The Town is legally and fiscally limited in its ability to make direct changes to achieve this goal; however, there are a number of short term and long term initiatives the Town should consider to support development and redevelopment in the Central Business and General Commercial Districts.

Short Term:

- Inform property owners in the business districts that financial assistance is available (grants, low-interest loans, etc.) for those wishing to make improvements to their property, i.e. TIZ, Heritage Montgomery, and other Federal, State or local sources;
- Establish financial incentives to support existing or new businesses;
- Exploit all opportunities to accelerate Poolesville's Streetscape implementation;
- Refine and strengthen the Architectural Guidelines for the CBD and GC Districts (Appendix C);
- Emphasize Poolesville's farming and trading history as another focal point for day trip visitors;
- Explore alternatives to expand the Thrift Store into larger commercial retail space within the business districts;
- Explore alternate uses for the Old Methodist Church, possibly by organizations associated with local tourism, historic heritage, etc.;

- Determine the viability of senior resident housing in the business districts;
- Maintain season or holiday related banners along Fisher Avenue and work with owners of historic structures to introduce lighting designs to enhance the Town's visibility and appeal.

Long Term:

- Conduct a comprehensive review of existing zoning prior to any additional water and sewer allocations;
- Evaluate whether Form-based Zoning (i.e. design over function) would be appropriate in achieving desired changes to Poolesville's commercial districts;
- Establish a mechanism to actively pursue and promote new businesses for the CBD and GC districts;
- Give super-priority status to development or re-development projects proposed within the CBD and GC districts, to include water and sewer allocation.

Housing Needs

Poolesville's housing stock is predominantly detached single-family homes with a substantial number of townhomes. Poolesville citizens are generally content with this mix of housing. Some residents have expressed an interest in more affordable housing for young adults entering the workforce as well as for the elderly. Each are important and are somewhat addressed by the current townhome communities in Town. However, housing built specifically for the elderly would likely include single story, compact units, preferably within the downtown area with easy access to shopping, transportation, and other resources and facilities.

Relative to a Town Center emphasis in the business district, the Town will need to address ways to include a significant increase in housing in the Town Center through its short and long term planning. Emphasis on the Town Center may result in smaller residential zoning such as zero-line lots or other small lots to encourage the type of street character, density and scale necessary to meet the vision outlined in this Plan. A mix of affordable housing types for young adults and the elderly should be emphasized as well, and as appropriate.

Land Use and Zoning Actions

The Town must take a number of actions if it is to achieve the land use objectives outlined in this plan. These actions are categorized as either: zoning, implementation guidance, or other related actions. All are described in the following sections.

Zoning

The Town has proceeded through an orderly process to revise and update the Town Zoning Ordinance and Code, review and adopt a new water allocation plan, and complete a comprehensive review of the Master Plan. Land uses and associated zoning are identified in Appendix E. They represent an attempt to achieve the following guiding principles:

- Support an ultimate Town population of approximately 6,500 for the life of this Plan;
- Encourage commercial uses in Poolesville – including retail, service, and office uses – within the CBD and GC districts;
- Discourage any further strip mall development within the Town;
- Encourage infill development within the commercial corridor;
- Remain vigilant in management and stewardship of Cluster Zoning in order to ensure that housing units are confined in a manner that preserves as much green space as possible.

Implementation Guidance

In addition to the land use and zoning designations provided in Appendix E, the following principles are provided as guidance when making future land use, site plan, construction and building remodeling decisions:

- Any new development or re-development must comply with the Town's architectural guidelines and any new public facilities, such as a community center, should be located within the business/commercial districts;
- The architectural and streetscape guidelines shown in Appendices C and D should apply to all new construction or major renovations within the CBD and GC Districts.
- All utilities associated with new or renovated commercial structures or major residential developments should be placed underground.

Historic Preservation

The Town of Poolesville has historical roots that are long and rich. Construction of contemporary housing subdivisions in recent years has served to heighten the significance of the many historical buildings within the Town limits.

The Town should continue to emphasize the importance of protecting its historic structures. Such actions as requiring the developments of Tama, Hunter's Run, and Elizabeth's Delight to preserve and integrate existing structures into the development plans are good examples of historic preservation. Likewise, actions such as the restoration of the old Town Hall are in keeping with this philosophy.

Additionally, future developers are encouraged to review the report by the Historic Medley District showing various architectural themes prevalent and appropriate for Poolesville. That report is available in the Town library.

Properties of particular historic significance are shown in Appendix E, Map 3. Proposed impacts to these properties should be given careful consideration during the site plan review process.

Heritage Program

The Maryland Heritage Areas Program is designed to promote the economic potential of the State's many historic, cultural, and natural resources. This is accomplished through grants, loans, and State tax credits provided to individual property owners within a designated area (Target Investment Zone). Unlike some historical designation programs that use long term covenants to ensure continued participation in a program, properties in the heritage program are not so encumbered. Additionally, there is no requirement for property owners within the Target Investment Zone (TIZ) to participate in the program. Recipients are held to the terms of individual grant agreements, which vary from project to project. If a property owner disagrees with the terms of a grant agreement, the grant can be declined.

The Poolesville Master Plan adopts, by reference, the approved Montgomery County Heritage Area Management Plan, November 2002, including all the recommendations and implementation strategies. As previously referenced, the Town should actively participate in the pursuit of TIZ opportunities and promote and maximize other opportunities that capitalize on Poolesville's historic heritage presence. Poolesville's designated TIZ is identified in Appendix E, Map 3.

COMMUNITY FACILITIES

The Town of Poolesville places a high priority on quality community facilities, both those under direct control of the Town and those overseen by the County. Community facilities consist of schools and park / recreation venues. The following sections describe the current inventory and future needs for public school facilities and park / recreation sites.

Schools

The Town of Poolesville is served by four public school facilities:

Poolesville Elementary School,
Monocacy Elementary School,
John Poole Middle School, and
Poolesville High School.

These schools comprise the Poolesville Cluster of the Montgomery County Public School System (MCPS). Except for Poolesville High School, the majority of the students reside within Poolesville or the surrounding Western Montgomery County area.

Since the adoption of the Master Plan in February 2005, a number of changes have occurred, particularly at the high school level. The Poolesville High School (PHS) curriculum expanded from offering a Global Ecology Studies Program to a Whole School Magnet Program in August 2006. Rigorous and challenging courses are taught by small teams of inspired teachers from multiple disciplines and organized around instructional "houses" focused on:

Global Ecology,
Humanities,
Science, Math,
Computer Science, and
Independent Studies.

Newsweek Magazine's June 27, 2011, edition ranked Poolesville High School the #1 school in the State of Maryland and DC Metropolitan area and #64 in the US on their list of 100 top high schools in the nation. High schools are selected based on their ability to provide all students with access to Advanced Placement and/or International Baccalaureate classes.

Poolesville High School was established in 1911. The current facility was built in 1953 and was expanded and partially modernized in 1978. A new two story science wing was added in 2008 to support the magnet program. The school reflects its age and needs to be modernized. MCPS policy requires schools to be evaluated and ranked every 30 years for modernization. In 2000, a Facilities Assessment with Criteria and Testing (FACT) evaluated the school's physical condition, compliance with current educational standards, and long term enrollment projections; however, no modernization date has been assigned. Although MCPS conducted site evaluation with the community for the construction of a new high school, MCPS's modernization schedule for Poolesville High School currently reflects "to be determined"; and no planning/construction

funds are contained in the Superintendent's Recommended FY2013 Capital Budget and the FY 2013 - 2018 Capital Improvement Program (CIP).

Based on the 1988 Poolesville Cluster Task Force's recommendation and intensive Poolesville and Western Montgomery County lobbying efforts, John Poole Middle School opened in September 1997. The effort continued and resulted in the school receiving a full size gymnasium. Restroom renovations are scheduled for John Poole Middle School in 2015 - 2016.

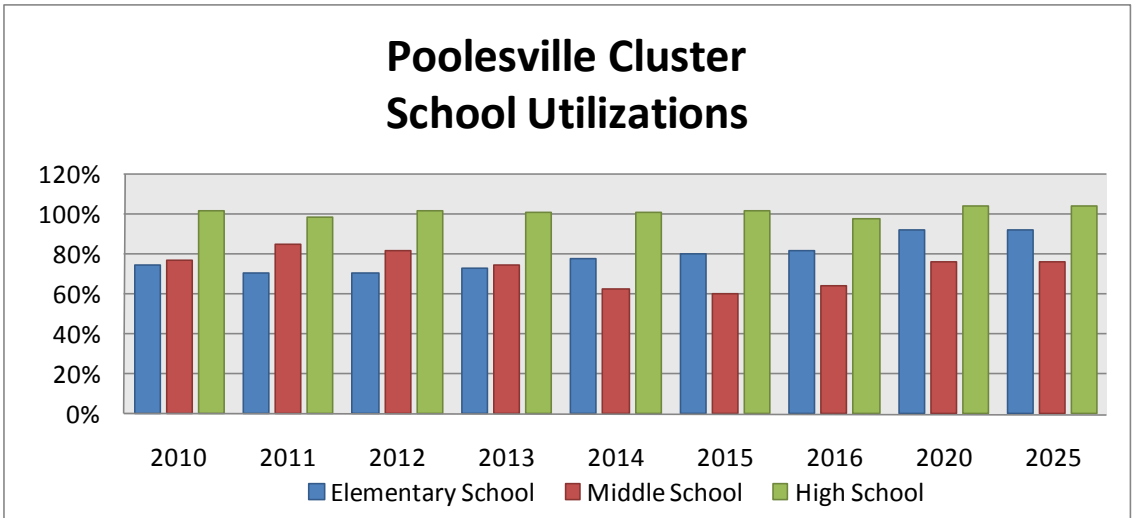
Poolesville Elementary School was constructed in 1960 and it too only received a partial modernization in 1978. Recently, its heating, ventilation, and air conditioning system, bus/student drop-off and parking area was reconfigured and its flooring was replaced. In 2011, a Facilities Assessment with Criteria and Testing (FACT) was performed and the school was ranked 10th out of 34 schools evaluated.

Due to the small size of the Poolesville Cluster and its rural location, distant from large population centers, Poolesville's schools have faced challenges in sustaining an adequate student population to support diverse program offerings and extracurricular activities.

In 2009, the Superintendent of Montgomery County Public Schools recommended closing Monocacy Elementary School and consolidating it with Poolesville Elementary School because enrollments were projected to decline at both schools. The Montgomery County Board of Education rejected this recommendation and unanimously voted to convene a roundtable discussion group to further consider the situation. On October 15, 2010, the Superintendent recommended to keep Monocacy Elementary School for the foreseeable future. The decision was based on the roundtable's recommendation and inputs from the Town of Poolesville concerning the potential enrollment increase from two housing developments under construction within Town. The Board of Education endorsed the Superintendent's recommendation in November 2010.

This most recent challenge to the Poolesville Cluster and the chart showing current and predicted future usage of Poolesville Cluster schools illustrate the continuing challenge the Poolesville Cluster will face in years to come. These school usage predictions show why the population of Poolesville is a key to the success of our schools as well as our community. Protecting and enhancing the schools in the Poolesville Cluster is a major goal of the Town leadership. It will require continuous, dedicated effort to ensure adequate enrollments and a quality academic curriculum. Good schools are a major factor in the Town's prosperity and protecting them from losing student enrollment is a major goal of this Master Plan. To this end, the Town, with other Western Montgomery County communities and civic/professional organizations should vigorously continue to lobby the Montgomery County Board of Education to adopt the following policies that:

1. Recognizes and accepts lower student enrollments for schools located in the Agricultural Reserve which includes Poolesville Cluster Schools,
2. Allows a liberal student transfer policy allowing students from adjacent clusters to enroll in Poolesville Cluster elementary and middle schools.
3. Create special programs at Poolesville Cluster elementary and middle schools, related to Agricultural Science and Global Ecology.
4. Create a math/science theme at Poolesville Cluster elementary and middle schools.



Source: FY11-16 CIP Budget, Montgomery County Schools Desired Range-80%-100%

Parks and Recreation

The goals listed below have been established by the Parks, Recreation and Streets Board. They form a framework upon which the general guidelines in this plan were developed.

- Provide park facilities and open space adequate in both location and size to serve the needs of Town residents.
- Provide diverse recreational opportunities within a reasonable distance for all Town residents.
- Preserve adequate open space within the Town.

A number of residents have expressed a desire for a public facility that would provide various opportunities for additional recreation activities and programs. The availability of property in the commercial zone (Dr. Dillingham Park) provides an adequate location that is in concert with the Land Use implementation guidance and Parks and Recreation goals.

The Town should consider appointing a citizen steering committee to undertake a feasibility analysis of the need for a community center. This study would include a detailed examination of construction costs, operational costs, programming, partnering, and similar due diligence activities prior to any action by the Town. The development of this Feasibility Study is one of the first steps in a process that, if deemed to proceed, will require much more need for community input and assurances that adverse impacts do not occur to existing programs and/or businesses within the community.

An inventory of Town park facilities begins on page 39.

County Facilities

There are also a number of County public facilities and parks located within Poolesville and the surrounding area.

- Western Montgomery County Swimming Pool - Lap pool, recreation pool, kiddie pool, and bathhouse / snack bar
- Owens Park in Beallsville - softball field, 3 tennis courts, tot lot, and multi-purpose building
- Poolesville Public Golf Course - 18 hole course, pro-shop, driving range, picnic pavilion, and soccer field
- Poolesville Elementary/Middle/High Schools - 5 softball/baseball fields, 3 soccer fields, 8 tennis courts, and a football/soccer/lacrosse/track stadium
- Equestrian Park in Beallsville - bridle trails and jumps

Multi-purpose Trail System

A comprehensive multi-purpose recreational trail system was first proposed in the Town's 1990 Master Plan. Because the Master Plan guides development in Poolesville, subdivisions have included dedicated land and/or right-of-ways for the trail system. Currently, there are approximately 7 miles of trails located in Hunter's Run, Tama, Woods of Tama, Elizabeth's Delight and on Fisher Avenue. Several segments such as Collier Circle Pond to L.M. Stevens Park, Whalen Commons to Tama, and Tama to the Woods of Tama include a pedestrian bridge and a section of raised boardwalk across wetlands.

A multi-purpose trail system provides Town residents with:

- healthy transportation alternatives independent of the automobile
- safe off-road transportation for pedestrians and bicyclists to access community schools, facilities, and businesses
- wide-ranging active and passive recreational opportunities for residents of all ages and abilities

The Town should continue to pursue grant funding currently available for transportation alternatives, such as trails, through the Maryland State Highway Administration. A map of the existing and proposed trail system is included in Appendix E, Map 11.

Priority Areas for Community Facilities

The areas identified below should remain major community facility priorities for the foreseeable future:

- Continue to nurture a partnership with Montgomery County Public Schools (MCPS) system representatives, elected officials, and residents to engage them in maintaining or enhancing schools in the Poolesville cluster.
- Pursue the accelerated construction and completion of the new Poolesville High School in the MCPS modernization program to support the whole school magnet program.
- Work with MCPS to establish a whole school magnet program for John Poole Middle School.

- Work with MCPS to develop a timetable for expanding and modernizing Poolesville Elementary School.
- Finalize the alignment, design, and phase-in schedule for the multi-purpose trail system and prioritize its funding and completion.
- Monitor recreational and other community activities to determine if additional programs, partnerships, and/or buildings are needed.
- Evaluate the disposition of small parcels of open parkland in Town.
- Continue to develop and maintain small play areas (tot lots) within a reasonable distance of all Poolesville residents.
- Continue an active program of tree planting along all major thoroughfares.

Park Facilities Inventory

Name	Location/Acres	Amenities
Beaver Pond	Hoskinson Rd across from Halmos Park 2 acres	Fishing and open space
Bodmer Park	Bodmer Ave and Chiswell Rd 1 acre	Playground Picnic area Small multi-purpose field
Brooks Park	Wootton Ave south of townhomes 1 acre	Playground Open space
Campbell Park	Wootton Ave and Kohlhoss Rd 2 acres	Small multi-purpose field Open space
Collier Circle Park	Wootton Ave between Collier Circle and Dowden Circle 4 acres	Recreation trail Fishing Open space
Dr. Dillingham Park	Wootton Ave and Hoskinson Rd 4 acres	Skatepark Playground Pavilion Picnic tables
Dry Seneca Creek Park	Between Tama and Woods of Tama 24 acres	Recreation trail Open space Forested stream buffer
Elgin Park	Elgin Rd and Jerusalem Rd 4.3 Acres	Soccer/lacrosse field Recreation trail Basketball Court Restrooms Playground Pavilion Picnic tables

Name	**Location/Acres**	**Amenities**
Halmos Park	Between Hoskinson Rd and Hughes Rd 15 acres	Softball field 2 baseball fields Soccer field Playground Restrooms Basketball court (Lighted) Tennis courts (lighted) Recreation trail Pavilion Picnic tables Concession stand
L.M. Stevens Park	Seneca Chase Park Rd 7.5 acres	Baseball field Soccer field Tennis court Basketball court Recreation trail Restrooms Pavilion Picnic tables Playground Concession stand Fishing
Lori Gore Park	McKernon Way .5 acres	Small Playground
Old Methodist Church Property	West Willard Rd .65 acres	Civil War Memorial Cemetery
Perkins Park	McNamara Rd 4 acres	Multi use field Playground Recreation trail
Westerly Ave	North corner of Westerly Ave and West Willard Rd .5 acres	Open space
Whalen Commons	Fisher Ave 3.76 acres	Bandshell Restrooms Pathways Open space
Willard Practice Field	South corner of Westerly Ave and West Willard Rd 2 acres	Practice soccer field
Wootton Heights	Lilli St .5 acres	Small playground

MUNICIPAL GROWTH ELEMENT

The Municipal Growth Element is a detailed analysis of population growth, land development and infrastructure impacts in order to adequately prepare for future development and its affects.

This section focuses on the next 10 to 15 years and the potential impacts that may be expected from a population number of approximately 6,500. A discussion of growth beyond this time frame or of a larger population is not possible at this time due to existing wastewater capacity constraints.

Introduction

Poolesville has proceeded through an orderly process to revise and update the Town Zoning Ordinance and Code, review and adopt a new water allocation plan, and finish a comprehensive review of the Master Plan. This process represents an attempt to:

- Support incremental, limited growth from the current population of 4,883 to approximately 6,500 in the foreseeable future;
- Provide for a Rural Zone with the restrictions of the current Rural Density Transfer (RDT) Zone;
- Encourage the commercial uses in Poolesville –including retail, service, and office uses – within a central Commercial Zone, to reinforce the Town Center concept and to avoid strip mall development along main roads within the Town; and
- Encourage decreasing residential density as development moves farther out from the center of Town and as available land gets closer to the surrounding Agricultural Reserve.

Residents want to maintain Poolesville's small town or village character. It is important to describe what that concept means to ensure that local residents, businesses and community leaders know what to expect when they become part of the community. For the purposes of this Master Plan a small town or village:

- Is predominantly residential and has supporting commercial and public facilities at or near its center;
- Is compact compared to its surroundings, and to traditional suburban tract development;
- Is easily distinguishable from surrounding land which is usually farmland or forests, and is usually located in the midst of rural or only slightly developed areas;
- Encourages personal interaction and pedestrian movement among local origins and destinations through mixed land uses.

This description of a "village" reflects the rural, small town environment that Town residents value and is intended to help guide the development and planning activities of the Town going forward.

Growth History

Past Growth Trends

Poolesville is not a suburb that sprouted around the outskirts of a major city. Instead, it is a true, independent community with a long history. Since the Town's beginnings as a settlement in colonial days, it has developed a supportive economic and cultural life that has made it unique in character from many of the other suburban areas ringing Washington, D.C.

Poolesville was settled in 1760 and incorporated in 1867; however, in 1950, it was still a rural town with a strong agricultural base and only 58 single-family dwelling units. Residential development increased only slightly by 1970, totaling 128 single-family units. During the post-1970 period, the Town experienced its greatest expansion, growing by more than 900 housing units to 1,086 in 1977. Subsequent to 1977, the Town has grown gradually and steadily. The current residential development, made possible by the increased availability of public sewerage and water, stands at 1,660 housing units.

Land Impacts

Residential Zoning

Table 1 indicates the amount of developed and undeveloped/unimproved acreage existing within the Town's boundaries. In 1998, the Planning Commission completed a comprehensive re-zoning of the Town. The main objective of the re-zoning was to support the concept of increasing residential housing density near the Town Center and decreasing density as the distance from the Town Center increases. The Planning Commission is considering the creation of some limited transition zoning between the existing ¾ acre residential and 25 acre rural density categories. Such parcels would, in the future, help fill a niche currently being addressed by developmental incursion in the surrounding Agricultural Reserve. The Planning Commission also recommends changing in the Town Code the nomenclature of Rural Density Transfer Zone to the more accurate Rural Density Zone.

Table 1 (*Existing Zoning In Acres)*

	Developed	**Undeveloped**	**Total**	**Percent**
RDT		818.94	818.94	32%
Residential (3/4 Acre)		238.1	238.1	9%
Residential (1/2 Acre)	326.76	103.48	430.24	17%
Residential (1/3 Acre)	217.77	103.25	321.02	12%
General Commercial	39.97	7.78	47.75	2%
CBD	14.87	1.57	16.44	1%
Townhouses	31.80	2.11	33.91	1%
Misc. parcels, Pool,	655.71		655.71	26%
Total	**1,286.88**	**1,275.23**	**2,562.11**	

Residential Growth

As discussed previously, the Town anticipates adding nearly 1,300 residents/400 homes to the existing stock within the foreseeable future. Ever increasing congestion in Washington D.C. and throughout surrounding suburbs makes Poolesville an attractive place to raise a family and experience the "small town character" way of life. Water and sewer allocation approval occurred in December 2009 and includes a sunset provision for properties that do not timely submit a site plan or request an extension. The projected dwelling unit figures are based on actual development proposals submitted during the allocation planning process. All of the planned growth will be fulfilled by utilizing existing undeveloped/zoned acreage within the corporate limits without the annexation of additional land.

The future development within the Town boundaries will consist of single-family detached homes, a 17-unit townhome site, and some commercial space.

Table 2 depicts the amount of land consumed due to the construction of over 400 homes.

Table 2 (*Land Consumed (In Acres)*

	New Dwelling Units	Population **Increase** (DU X 3.2)	**Acreage Consumed***
RDT	11	35.20	290.44
Residential (3/4 Acre)	182	582.40	203.79
Residential (1/2 Acre)	33	105.60	32.1
Residential (1/3 Acre)	160	512	97.94
General Commercial			6.23
Townhouses	17	54.4	2.11
Total	**403**	**1,289.60**	**632.61**

***** "Acreage Consumed" includes land constrained by natural features and includes 83 acres open space and parkland that will be dedicated to the Town and not available for future development.

Growth Impacts on Public Services and Facilities

This section projects the potential impacts that the roughly 1,300 new resident increase will have on services and facilities in Poolesville and the surrounding area. It should be noted that important related material also appears in the Water Resource Element and that both growth elements should be reviewed in order to obtain a clear and complete picture.

Public Schools

The Community Facilities chapter of this Master Plan identifies the Poolesville Cluster schools, programs and future challenges. In October, 2009, the Montgomery County School Superintendent recommended the closure of Monocacy Elementary School effective August 2010, and the consolidation of the enrollments of Monocacy and Poolesville Elementary schools at Poolesville Elementary School due to projected declining enrollments. The Poolesville

Cluster, with Poolesville Government support, rallied together in a roundtable process during the spring of 2010. The group introduced several suggestions to boost enrollment and submitted updated housing projections. In October 2010, the superintendent released new recommendations for Monocacy and Poolesville Elementary Schools. In light of increased enrollment at Poolesville Elementary School and the planned construction of 400 additional homes, Montgomery County Public Schools amended the projected enrollments and space availability for the Poolesville Cluster. The following table details the amended projected enrollment and space availability.

Schools		Actual 10-11	Projections							
			11-12	12-13	13-14	14-15	15-16	16-17	2020	2025
Poolesville HS	Program Capacity	1152	1152	1152	1152	1152	1152	1152	1152	1152
	Enrollment	**1170**	**1145**	**1172**	**1167**	**1163**	**1170**	**1133**	**1200**	**1200**
	Available Space	(18)	7	(20)	(15)	(11)	(18)	19	(48)	(48)
John Poole MS	Program Capacity	459	459	459	459	459	459	459	459	459
	Enrollment	**355**	**392**	**376**	**346**	**287**	**277**	**294**	**350**	**350**
	Available Space	104	67	83	113	172	182	165	109	109
Poolesville ES	Program Capacity	539	539	539	539	539	539	539		
	Enrollment	**399**	**385**	**401**	**412**	**447**	**460**	**470**		
	Available Space	140	154	138	127	92	79	69		
Monocacy ES	Program Capacity	219	219	219	219	219	219	219		
	Enrollment	**169**	**152**	**139**	**141**	**145**	**150**	**150**		
	Available Space	50	67	80	78	74	69	69		

Libraries

Montgomery County provides library services for the Town. In 2001, a store front location on Fisher Avenue in the Poolesville Towne Center was renovated and became the home of the existing 6,000 sq.ft. public library. The American Library Association recommends 1,000 sqft of library space for each 10,000 population. There are no current plans to expand the library at this time.

Public Safety

The Montgomery County Police Department provides police services for Poolesville. With Poolesville's anticipated growth of approximately 1,300 individuals during the next 6 years, Montgomery County should plan for the addition of two officers based on the commonly used ratio of 1.6 sworn officers per 1,000 residents.

Fire and emergency medical services are provided by the Upper Montgomery County Volunteer Fire Department in Beallsville, MD, which is approximately three miles from the center of Poolesville. The planned addition of 400 residential units is included in the County's Master Plan and addressed through their planning process.

The Town follows Washington Suburban Sanitary Commission and Montgomery County guidelines for fire protection. All new roads will be designed for adequate emergency access and fire hydrant placement. Water pressures in Poolesville are in compliance with established

standards. The Town has 1.5M gallons of water storage capacity for fire fighting, which was designed and constructed in accordance with the Master Plan population target.

Recreation

The Community Facilities chapter of the Master Plan has a section devoted to Parks and Recreation. It lists all of the existing parkland (active and passive) within the Town and future needs. The Town consists of 2,374 total acres of which 98 acres are parkland and/or stream valleys.

The State of Maryland uses a standard ratio of 30 acres of parkland per 1,000 residents, meaning that the 1,300 new residents will generate the need for 39 additional acres of parkland. A minimum of 50% should be owned by the jurisdiction. The two larger sub-divisions, under construction in the western and northern segments of Town, will provide an additional 83 acres of parkland/conservation stream valleys and multi-use parks with baseball and lacrosse/soccer fields, tot lots (playgrounds), and trails sufficient to accommodate build-out requirements. These additions will provide 44 acres over the State recommended ratio.

With the growing number of local youths in sports organizations, overuse of athletic fields and requests for alternative recreation, the Town should actively seek parkland acquisition. The Town should also continue to evaluate the need for recreation/community facilities.

Water and Sewer Facilities

A detailed description of the existing water and sewer facilities, plus various other descriptive materials pertaining to each, is contained in the Water Resource Element.

Stormwater

Each major development presents challenges to the protection of water quality in Poolesville and the surrounding area. In order to mitigate the runoff, sand filtration and other control structures are constructed onsite. Prior to preliminary plan approval, developers must have a conceptual stormwater management plan approved by Montgomery County. Prior to final record plat, full analysis and approval by the County is required. The County has full jurisdiction over quality and quantity control for stormwater runoff, issues permits, and performs inspections.

The Town works in partnership with the County for the maintenance of the existing stormwater ponds. The Town provides grass cutting and trash pick-up, while the County performs structural maintenance. The stormwater conveyance system is owned and maintained solely by the Town.

Additional detailed information on stormwater management can be found in the Water Resource Element.

Financing Necessary Facility Expansions

Poolesville funds capital costs directly related to new development through impact fees. The calculation used to determine the impact fee is contained in Appendix F of the current Master Plan. The use of these funds is specifically designated to items in the fee breakdown. This model was developed using a calculation of thirty homes per year, which originated from an overall average from previous development.

Rural Buffers and Transition Areas

The Town's current zoning was created to provide transition by increasing residential housing density near the Town Center and decreasing density as the distance from the Town Center increases. Once past the Town boundaries, the County zoning is RDT or 1 house per 25 acres. Poolesville is nestled within the Montgomery County Agricultural Reserve, which provides a unique buffer helpful in maintaining open space and wellhead protection zones.

Burdens on Municipally Provided Services and Infrastructure Lying Beyond Proposed Municipal Growth Areas

Poolesville does not have or plan to have infrastructure extending out of the Town boundaries. All stormwater and related water quality potential impacts are mitigated within the Town boundaries and no impacts are expected beyond the growth areas.

Protection of Sensitive Areas

It is the goal of this Growth Element to ensure that all future development is planned, designed and constructed in a manner, which will conserve sensitive natural resources and promote a healthy and sustainable environment for present and future residents. This will be accomplished by application of existing Town Ordinances, reviewing plans to ensure that all County, State and Federal regulatory program compliances have been obtained and by proposing new or modified ordinances from time-to-time as needed.

Sensitive areas generally consist of wetlands, flood plains, forested areas, and the wellhead protection areas. The protection of these areas and additional information can be found in the Water Resource Element.

The Relationship of Long-Term Development Policy to a Vision of The Municipal Corporation's Future Character

In the coming decade, Poolesville's vision is moderate growth of primarily residential development in keeping with the small town and town center concepts. In concert with this vision, of ensuring some growth while protecting Poolesville's small town image, this plan outlines steps that move toward incremental and limited growth while protecting our infrastructure and small town character.

BUSINESS COMMUNITY

Introduction

Poolesville is a small town that will increase to approximately 6,500 residents during the next 10 years. It is located in the 93,000 acre Montgomery County Agricultural Reserve which makes it an island surrounded by sparsely populated agricultural acreage. The majority of the Town residents commute to work to more densely populated areas in Rockville, Germantown, Frederick, Washington, DC, and northern Virginia. This situation provides both benefits and challenges for the local business community.

Business Community Today

The business community in the Town of Poolesville is comprised of businesses that provide goods and services, primarily for the benefit of Town residents and surrounding area. Some of these businesses are medical offices, banks, day care facilities, a grocery store, a drug store, a hardware store, automobile service and gas stations, HVAC, plumbing, electrical services, restaurants, and retail shopping. Other businesses located in Town and the immediate surrounding area provide services on a regional level and provide employment and other benefits to Town residents.

In addition to Poolesville's store-front establishments and corporate offices, there are a significant number of home-based businesses. Both are vibrant and integral parts of the business community in particular and the larger Poolesville community in general.

The current customer base for local businesses consists of:

- Local residents
- Students and employees who commute to Poolesville and reside outside the local area
- Commuters who regularly pass through Town
- Visitors to Town and the surrounding area

Role of the Business Community

The small town or village character is a critical component of what makes Poolesville different than many other locations in the county. The key attribute of a small town or village is the harmonious interaction of the residential, commercial, educational and governmental components of the Town. If any one of these three components falters, the entire small town concept is put in jeopardy.

Within the business community as a whole, there are a set of core businesses that serve as anchors for the healthy business interaction. If some of these core businesses fail or otherwise leave Town, there is strong concern that people will take more and more of their shopping activities outside of Town, therefore negatively impacting yet more local

businesses. In some cases, the loss of certain businesses, such as a grocery store or pharmacy could lead to a permanent loss of those types of businesses within Town.

Importance of the Business Community

The business community is vital to the Town, both as a source of basic goods and services and to maintaining Poolesville's quality of life. Without a functioning, attractive, safe and accessible business community residents would be forced to travel some distance for these goods and services.

A vibrant business community provides employment opportunities to residents, builds the Town's tax base, contributes to Poolesville's small town character, provides a place for interaction among residents, and supports local charities, youth athletics and myriad other activities that are the very fabric of the community.

The Town understands the vital role the business community plays and understands that Town residents have expressed their desire to improve the quality of life in Town by having more restaurants and shops. It is necessary for the Town to have a strong business community in order to meet the needs and expectations of its residents. It is important for the Town to work with the business community to ensure that these needs and expectations are met. To this end, the Community and Economic Development Committee (CEDC) was founded as a part of the Town government as recommended in the 2005 Master Plan. The CEDC is composed of a cross-section of Town residents, Town government staff/officials, and members of the business community. The Committee's role is to promote a greater sense of community and generate support for existing businesses while promoting the establishment of new compatible businesses.

Conversely, the businesses in the Town and surrounding area need to remain aware of its responsibility to the community. To maximize success, it's important for businesses to work together (e.g., through the Chamber of Commerce) with other businesses, the Town, and the residents. Joint marketing efforts, standard operating hours, and special promotions keying off of Town, school, and athletic events can all contribute to business success and enhanced experiences for Town residents and visitors.

Goals and Initiatives

The business vision for this Master Plan proposes a number of specific goals identified through data-gathering activities conducted over the past five years. These activities included surveys of businesses and residents, a market study, and focus group meetings. The prevailing message to come from these activities was that every effort should be made to preserve Poolesville's small town character while expanding and supporting the business community.

The following initiatives are recommended by the Town in recognition of this positive community dialogue:

1. **Support a town center and town gateway concept**
    - Try to blend the existing strip malls into a core town center area
    - Create a town center that serves as a social magnet for residents and visitors to walk, shop, dine, and interact
    - Create gateways at the east and west entrances to the town center with a roundabout at the east and an architectural structure at the west
    - Encourage multi-use in-fill development in the town center with on street or rear parking
    - Incorporate pedestrian and bike friendly designs into any changes to the town center area
    - Budget each year for the incremental relocation of overhead utility lines to underground

2. **Continue to implement the Town's streetscape plan**

3. **Work with the County and State to provide incentives to specialty and unique businesses to locate in Poolesville**

4. **Pursue, to locate in Poolesville, non-retail businesses that will maintain a workforce in Town during the business day. This workforce will provide a new and expanded customer base for other retail businesses, restaurants, and service businesses in Town.**

APPENDIX A:
WATER SUPPLY

Poolesville's Water Supply

Introduction

Poolesville currently relies entirely upon groundwater to supply the needs of its residents and businesses. Generally, unless it has been contaminated by some type of human activity such as industrial contaminants or by water-borne pathogens, groundwater provides a higher quality source of potable water than surface water, such as that from a river or lake. This is because the water is purified as it passes through the soil on its way to the subsurface aquifer or water-bearing region below the surface. Poolesville's groundwater supply has been studied and reviewed at frequent intervals. Because of the fractured bedrock aquifer underlying Poolesville, a perfect understanding of groundwater flow and availability may never be reached irrespective of the level of additional studies.

The Hydrologic Cycle

All groundwater has its source from precipitation. It is therefore helpful to explain the path -- or hydrologic cycle -- that water takes before it reaches consumers. .

The term hydrologic cycle refers to the constant, never-ending movement of water above, on and below the earth's surface (Figure 1). It begins with evaporation from exposed moist surfaces, lakes, rivers, streams, the ocean and the active transport by plants from the soil to the air -- a process known as evapotranspiration. The moisture forms clouds, which return the water to the earth as precipitation.

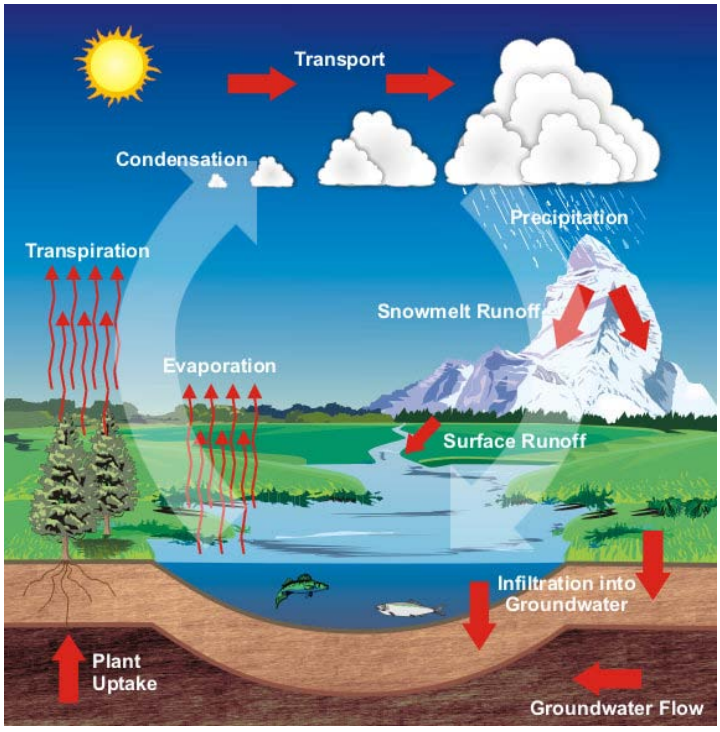


Figure 1. The hydrologic cycle

Precipitation—rain, melted snow, and hail--wets the land and begins to infiltrate into the ground. Infiltration rates are greatest in forests, growing on sandy soils and least in open land with clayey and silty loam soils. In Poolesville, the soils are generally silty and have a low permeability. During low to moderate rainfalls much of the water infiltrates; however, when the rate of precipitation exceeds the rate of infiltration, such as during heavy thunderstorms, overland flow or runoff begins.

The first infiltration provides soil moisture. After the soil becomes moist, the excess percolates slowly down through the layers of unsaturated soil to the saturation zone. In

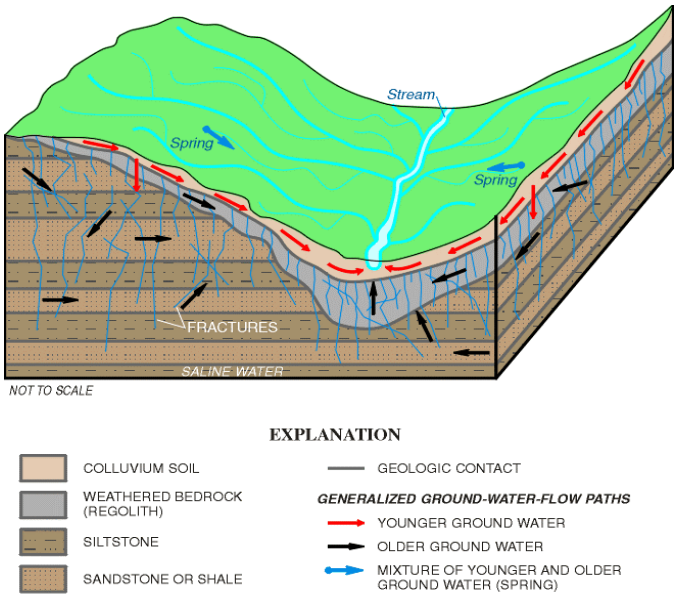


Figure 2.
Diagram of ground water occurrence in jointed and creviced consolidated sedimentary rocks.

discharge (Figure 3). In the Poolesville area, discharge sites are generally seeps in the bottoms of streams and particularly into the Potomac River. The orientation of fractures and the movement of groundwater beneath Poolesville is generally in a northwest to southeast direction [5].

Water reaching streams and rivers, both by overland flow and from groundwater discharge, moves to the sea (down the Potomac River) where it is evaporated and begins the cycle anew.

Poolesville's case, there is a very thin layer of soil overlying a thick mantle of sandstone, shale and/or siltstone (Figure 2) deposited on the earth millions of years ago during the Triassic geologic period (known to geologists as the New Oxford Formation of the Newark Group) [5]. Because of this thin layer of soil, Poolesville's groundwater is highly susceptible to contamination from events that occur on the land surface.

Below the water table, the soil will be saturated until some type of confining layer stops the downward flow of water. Most of the groundwater available to Poolesville is located in crevices, fissures and fracture lines that run through the underlying bedrock (Figure 2). Groundwater-underlying Poolesville moves downward and sideways to sites of

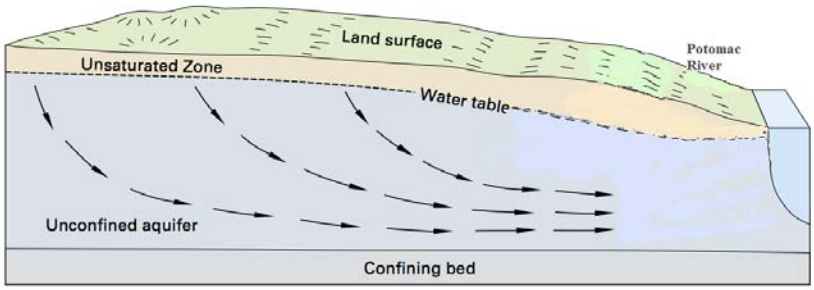


Figure 3. Stylized movement of ground water towards the Potomac River. Groundwater normally flows as a muted image of the land's surface. Poolesville's water movement primarily occurs in cracks and fractures. *(source:1)

Geology

The underlying geology effects Poolesville's water supply in many ways. To the north and northeast of Town, the land is predominantly underlain by phyllite. Phyllite is ancient, gray-green crystalline rock that has a slaty appearance with lustrous bands of mica.

To the west and northwest of Town, there is a diabase dike. Diabase is molten rock that welled-up from the earth's core millions of years ago. In this case, the molten rock filled a long, wide fracture in the sedimentary rock that runs between Dickerson and Beallsville, then west of

Poolesville to the Potomac River. Because the diabase is essentially impermeable, groundwater to the west of the dike is separated from that to the east of it. This fact has positive ramifications for Poolesville. One benefit of this dike's existence is that any groundwater contamination that might arise from leaks in the Dickerson landfill liner will most likely move west and south towards the Potomac River and much less likely contaminate Poolesville's water supply.

Unfortunately, the dike also limits the recharge area of the groundwater aquifer underlying Poolesville. The groundwater supplying Poolesville's wells is fed from a relatively small watershed. In fact, most of the recharge of the aquifer beneath Poolesville comes from precipitation that falls directly within the boundaries of Town or immediately to the northwest of it. Thus, if one pictures a layer of approximately 10 inches of water covering the surface of land in Town (1,940 undeveloped acres), it will provide an idea of the amount of groundwater theoretically available to the community through Town wells. The volume is approximately equivalent to 1.5 million gallons per day (GPD) or 1000 gallons per minute (GPM).

The rock immediately beneath the surface soils in the area of the Town contains numerous fissures, cracks and crevices (Figure 2). Unlike some areas of the country that are underlain with relatively homogeneous, unconfined deposits of course sands and gravels that form relatively uniform aquifers, the groundwater generally is channelized in these cracks and crevices. While the cracks and fractures may be several thousand feet long, they are generally no wider than a person’s small finger and may be only one to two feet high or less.

In a fractured rock aquifer, almost all of the groundwater flow is through a few open joints with the bulk of the aquifer contributing very little water. Transmissivity is defined as the rate that the aquifer can deliver water to a well through its entire thickness [1, 3, 5]. The rate of movement of water through the fractures is very high, but averaging this over the entire, largely non-producing, thickness of the aquifer gives a low value [2]. Thus, Poolesville’s water is more or less confined to small cracks and the yield of a well generally depends upon the number of fractures that it intercepts: the greater the number of fractures, the higher the yield.

While the water can be transmitted to the wells in the fractures fairly fast, the fact that most of the aquifer is composed of rock means that the ability of the aquifer to store water is limited primarily to that in the fractures themselves. Once water is drawn out of a fracture (in other words - sucked dry), there is little water within the "pores" of the rock to replace it. Replacing the water in the fractures depends upon recharge from precipitation.

While yields from the New Oxford Formation are relatively low compared to unconsolidated rock aquifers found in other parts of the country, yields from phyllite are even lower. Otton reported yields from such wells rated at 0.5 to 25 GPM [5]. The median yield for 9 of these wells was 7 GPM.

Drawdown

As water is pumped from a well, it decreases the water pressure in the fractures near it. As long as the rate of pumping does not exceed the transmissivity, the level of water in the well should remain relatively constant. During winter and spring months when groundwater is being recharged from above, recharge is greater than pumpage and Poolesville's well levels increase. During the summer months, however, when there is little recharge and the rock itself cannot give up much stored water, the levels in the wells typically decrease.

Well Yield and Usage

Well yields shown in Table 1 are the sustainable yield that is expected during a drought period, with yields potentially higher during periods of average or greater rainfall. These rates should allow the wells to run continuously without stressing the aquifer. The average daily usage of water for the Town for the last 2 years (2009-2010) was 409,000gpd and 409,320gpd respectively.

Table 1
(Characteristics of Poolesville's Eleven Wells)

Well Number	Aquifer	Depth (Feet)	Diameter (Inches)	Sustainable Yield (gpm)
2		453	6	100
3		285	6	60
4		600	6.5	40
5		500	6	100
6		500	8	110
7		700	8	45
8		500	8	65
9		800	8	125
10		762	8	75
12		500	8	72
13		500	8	51

The Water System

Presently, Poolesville has eleven wells in production and permanently connected to our water system. All water is treated with chlorine to protect against bacteriological contamination. Well # 2 has a filtration unit, which was installed in 2004 due to water bearing fractures located close to the surface. Wells 7, 9 & 10 are being equipped with radon and alpha emitter treatment systems.

A telemetry system in each well house operates the wells dependent on the level of the elevated storage tank. All of the wells in service are equipped with flow regulating valves, which allow operators to set the pumping rate and prevent it from exceeding drought-pumping

conditions. This added protection ensures that each well's major water bearings zones are not dewatered. All wells, the 500,000-gallon elevated storage tank, and the 1 million gallon standpipe storage tank are protected with a security system.

Permitting

The Maryland Department of the Environment issues all Water Appropriation Permits for municipal systems. Permits are issued for each watershed and the available withdrawal is based upon the recharge area of the watershed within the Town boundaries. Poolesville consists of four watersheds: Horsepen Branch, Broad Run, Dry Seneca Creek and Russell Branch.

The following table shows the "theoretically" available groundwater based upon each watershed's area using a recharge of 254 gallons per day per acre. The Broad Run and Dry Seneca Creek Watersheds, have remaining groundwater capacity, while the Russell Branch and Horsepen Branch Watersheds are fully allocated. As the table indicates, the Town is allowed to withdraw more water from the Horsepen Branch watershed than is theoretically recharged because the withdrawal permit and the establishment of these wells occurred prior to the existing allocation methodology.

Watershed	Area (acres)	"Theoretically" Available groundwater (gpd)	Average Daily Allocation on a yearly basis (gpd)	Average Daily Allocation for Max. Month (gpd)	Potential Well capacity (gpd)	Remaining Available Groundwater (gpd)
Horsepen Branch (wells 2, 4, 6, 8 & 11)	588	149,000	293,000	388,000	597,600	0
Broad Run (well 12)	551	140,000	47,500	66,600	66,600	92,500
Dry Seneca Creek (wells 3,5 & 13)	973	247,000	194,500	273,400	303,400	52,500
Russell Branch (wells 7, 9 & 10)	450	115,000	115,000	182,000	359,000	0
Totals	2,562	651,000	650,000	909,600	1,326,600	145,000

Once the Jamison-Cattail well is placed on-line, it will effectively "tap-out" the Dry Seneca Creek watershed. Future well explorations should focus in the Broad Run watershed area as this area has approximately 92,500 gpd (64 gpm) of available groundwater supply.

Threats to Our Groundwater

Poolesville's groundwater is generally of high quality. It meets all current drinking water standards and only needs minimal treatment before it reaches the tap. In 2006 the Town adopted a Wellhead Protection Ordinance that reduces the threat to groundwater from contamination arising from stationary sources. A threat from mobile sources of contamination will always remain from tank trucks carrying such products as gasoline, home heating fuel and pesticides. Appropriate contingency plans for this occurrence have also been developed. The Town should continue to develop additional well fields as far removed from potential sources of contamination as possible. Further, the Town should pursue abandonment of in-Town private well and septic systems to limit this as a potential source of groundwater contamination. The Wellhead Protection Area is delineated as the corporate limits and in some areas, extends beyond Town boundaries (see Appendix E, Map 9). The Town believes the present planning process that reviews new development applications and changes in use provides a degree of protection for the Town's water supply.

As far back as 1981, however, the limited purification capabilities of Poolesville's thin soils were recognized [5]. It was estimated that if a chemical contaminant of the same viscosity as water was spilled at the intersection of Routes 109 and 107 (1,300 ft. from the nearest well), it would take anywhere from 9.5 months to four years to reach the well. At the faster rate of movement, a spill 100 feet from a well would contaminate it in approximately 22 days. The estimates made in 1981 recognized that the actual rates of movement through the aquifer might be much faster due to the fracturing and crevicing of the rock [5].

In 1991, Maryland Department of the Environment's Water Supply Program conducted a wellhead protection demonstration project for Poolesville [4]. Using various methods, MDE produced maps depicting the areas that needed to be protected from contamination to ensure that the Town's water supply remained safe. The study concluded:

> Since the wells are located throughout the Town, most of the Town is part of the WHPA. The impact of current land use can be assessed through groundwater monitoring and further protection of the supply can be achieved through land use controls.
>
> Groundwater in the Poolesville area appears to be particularly susceptible to contamination because of the thin soil cover and extensive fracturing of the underlying shale and sandstone. The recent detection of VOC's in the groundwater, albeit well below levels of health concern, demonstrates that this is in fact true.

Drought

On July 14, 1999, the COG Board of Directors established a "Task Force on Water Supply Issues" to review the region's water supply systems, drought emergency plans, and long-term water supply plans and needs. The "Water Supply and Drought Awareness and Response Plan" contains four stages and is currently designed primarily for those customers who use the

Potomac River for water supply. The Task Force will continue to focus its efforts on the expansion of this plan to incorporate other water supply systems (i.e., small public utilities, groundwater and agriculture), and development of a year-round wise water use campaign. The Task Force will also continue to address the relationships between water supply and the environment.

Looking Ahead to the Future

The well exploration efforts in 2001-2002 identified wells to meet the present and future needs of the Town's residents. All of these wells have been either constructed or funded in the Town's Capital Planning Process or through future Impact Fees. Any additional well exploration should be conducted in the Broad Run watershed. This would allow the Town to exceed its water supply demands and provide water if a contamination event occurred which permanently disabled one or more of our wells.

Finally, the owners of the vast majority of land south of Poolesville have sold-off their Transfer Development Rights and can never be developed in densities higher than one house per 25 acres. Thus, the land will remain primarily undeveloped and at low risk from chemical contamination. The Town will need to work with MDE to secure the necessary water rights for lands outside of Town.

Other Sources of Water

Alternatives to groundwater that have been previously explored, include developing a treatment plant on the Potomac River and connecting to the Washington Sanitary Sewer Commission (WSSC), which obtains its water from the Potomac River.

While both of these options are viable, neither is preferable to continued reliance upon groundwater to serve the needs of the Town. Not only would the Town be required to make a very large financial commitment to either option, but also the quality of potable water delivered to Town residents would decrease. While WSSC provides high quality, safe drinking water, treated surface water cannot compare with uncontaminated groundwater of the quality currently delivered to Town residents.

Conclusions

A great deal is known about Poolesville's water supply, far more than most small communities in Maryland. The water is generally located only within the fractures in the rock that underlay the Town. Wells that intercept these fractures are productive. Tapping into fractures that are not interconnected with others is essentially the same as tapping into a new aquifer. Because of the thin layer of soil overlying consolidated rock, the Town's groundwater supply is very susceptible to contamination.

While there will be an adequate supply of potable water to meet the Town's present and future needs under normal conditions, prudence dictates that additional yield be incorporated into the system to safeguard against unforeseen well operation problems or groundwater contamination.

The Town is limited by both physical and administrative considerations in where it can seek new groundwater sources. Well sites within the Town proper, except for the Broad Run watershed on the west side of Town (MDE permitting limitations), have been nearly exhausted. Additional wells within the boundaries (except for the northwest corner) will probably intersect the zones of influence of existing wells.

If the Town considers expanding its water supply outside of its corporate boundaries, they will need to pursue the use water rights with individual properties. MDE should be part of this pursuit since that agency will ultimately issue any appropriation permit to the Town for expansion of its water use. Alternatives of treating and piping Potomac River water to Town or connecting to WSSC will be very costly and provide a lower quality water than the Town now enjoys from its well fields.

Literature Cited

The following numbered sources of information represent the factual basis for this report. Copies of each are available for inspection at Town Hall.

1. Heath, R. C. 1982. Basic groundwater hydrology. USGS Water Supply Paper 2220. 81 pp.

2. Jones, W. K. 1991. Availability of groundwater at Poolesville, Maryland. Environmental Data. 5 pp.

3. Jones, W. K. 1994. Hydrogeologic evaluation of Well 8, Poolesville, Maryland. Environmental Data. 4 pp.

4. Jones, W. K. 1994. Letter to the Commissioners. Environmental Data. 4 pp.

5. Otten, E. G. 1981. The availability of groundwater in Western Montgomery County, Maryland. MD Geological survey Report of Investigation. No. 34. 76 pp. + encl.

APPENDIX B:
CITIZEN'S SURVEY

Overview

Reason For Survey

The Poolesville Planning Commission initiated a survey of the Town's citizens in September 2010. The Survey was intended to take a "snap shot" look at the opinions of residents regarding the future of Poolesville and was envisioned as one of the "many" inputs available to help determine the priorities laid out in the Master Plan. The survey was designed to help "quantify" citizens insights on "likes and dislikes" regarding the Town, its character and amenities.

The Commission utilized the professionally designed 2002 survey questions as a base for this survey. It was intended to be short and not be a 100% accurate representation of all of the Town citizens' views. In order to accomplish that, a more in depth questionnaire, completed by a larger number of individuals, would be necessary.

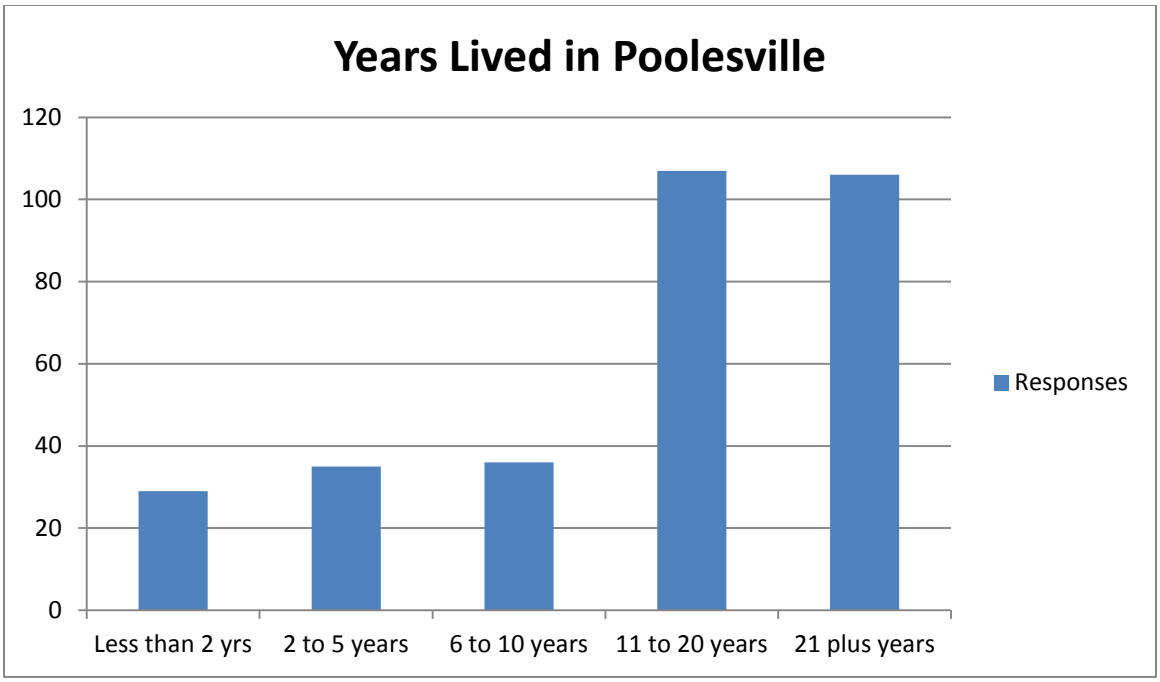
Survey Method

The survey was conducted online and reached out to all households in Poolesville. Over 310 individuals participated in the survey. Their candid thoughts and opinions on a variety of issues and priorities facing the Town are detailed in the following survey results. The survey covered a variety of questions, some of which asked for "rating" or "score", and some of which asked for "top of mind" thoughts, suggestions or comments.

Q1. Our first question relates to how long you have lived in Poolesville.

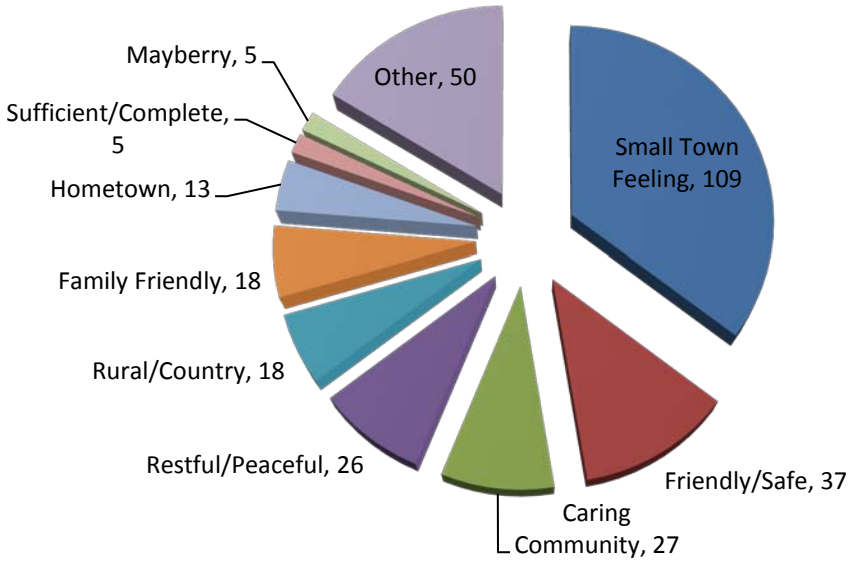
(313 respondents to this question)

	# of Responses	% of Total
Less than 2 yrs	29	9%
2 to 5 years	35	11%
6 to 10 years	36	12%
11 to 20 years	107	34%
21 plus years	106	34%



Q2. **What "one word or phrase" best describes what makes Poolesville your kind of place to live?**
(308 unaided responses)

The top ten responses are listed below:



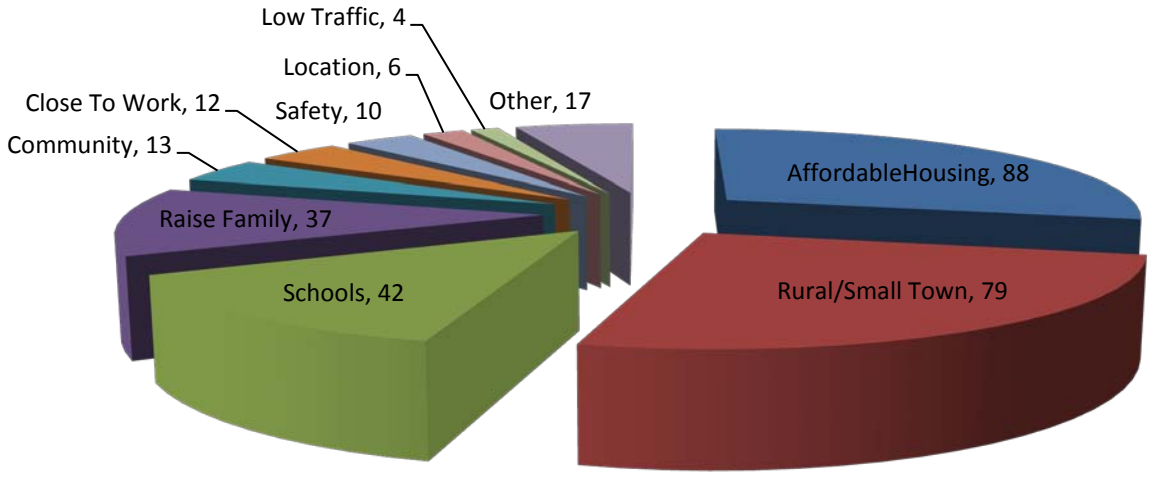
Q3. **If you had to choose "one word or phrase" that best describes what makes Poolesville your kind of place to live, what would it be? (***309 responses)*

Choices	Count	Percent %
Small Town Feeling	128	41%
Rural Atmosphere/Country Feeling	56	18%
Less Hectic	50	16%
Community Oriented	41	13%
Safe	26	9%
Friendly	7	2%
Clean	1	1%

Q4. Thinking about your original decision to move to Poolesville, what would you say was the most important factor that influenced your decision to come here?

(308 unaided responses)

The top ten responses are listed below:



Q5. Thinking about all of the factors listed below, please rate each in terms of the influence they had on your decision to come to Poolesville. Use a range from 5 for "very strong influence" to 1 for "no influence at all". *(303 Responses)*

Very Strong ----------Influence----------Not at All

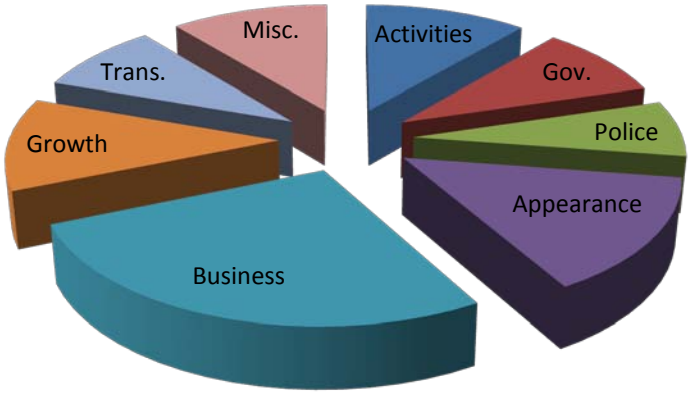
Open Country/Green Space		**53.9%**		**29.5%**		**10.3%**		**3.7%**	**2.6%**
Less Traffic Congestion		**38.4%**		**25.8%**		**19.9%**		**10.3%**	**5.6%**
Close To Family Members		**11.2%**		**5.6%**		**9.3%**		**6.7%**	**67.2%**
Close To Work		**10.5%**		**7.1%**		**23.2%**		**21.3%**	**37.9%**
Parks and Recreation Facilities		**7.0%**		**17.3%**		**31.0%**		**22.1%**	**22.6%**
Small Town Atmosphere		**65.2%**		**20.7%**		**9.3%**		**1.8%**	**3.0%**
Local Schools/Magnet Program		**33.8%**		**17.8%**		**12.6%**		**8.9%**	**26.9%**
Lower Cost of Housing		**37.6%**		**18.1%**		**20.3%**		**12.5%**	**11.5%**
Less Crime/Drugs		**46.3%**		**25.2%**		**15.6%**		**7.8%**	**5.1%**
Good Place to Raise Family		**69.5%**		**16.0%**		**5.9%**		**3.0%**	**5.6%**

Q6. Please name the one thing that you would like to see changed to improve the quality of life in Poolesville. (*285 Total responses)*

Responses were categorized into 9 separate themes. Within each theme, comments were summarized by the most frequently mentioned.

Activities *32 Responses*

Have a community center
More youth activities
Indoor swim center



Local Government Issues *26 Responses*

Remove speed cameras
Reduce real property tax

Police Issues *20 Responses*

More police presence
Less petty crime (theft, vandalism)

Town Appearance/Improvements *41 Responses*

Keep it small (like it is)
Improve downtown (4-way stop area)
Improve property maintenance

Business Related *77 Responses*

More business/restaurants
Improve grocery store
Healthier business community/less vacancies
More support for small businesses in Town

Miscellaneous *31 Responses*

Improve storm water ponds
More senior services
Re-open beauty spot for yard waste

Growth Issues *33 Responses*

Reduce/limit new home construction
Keep population growth to a minimum
More homes/people to support businesses

Transportation Issues *25 Responses*

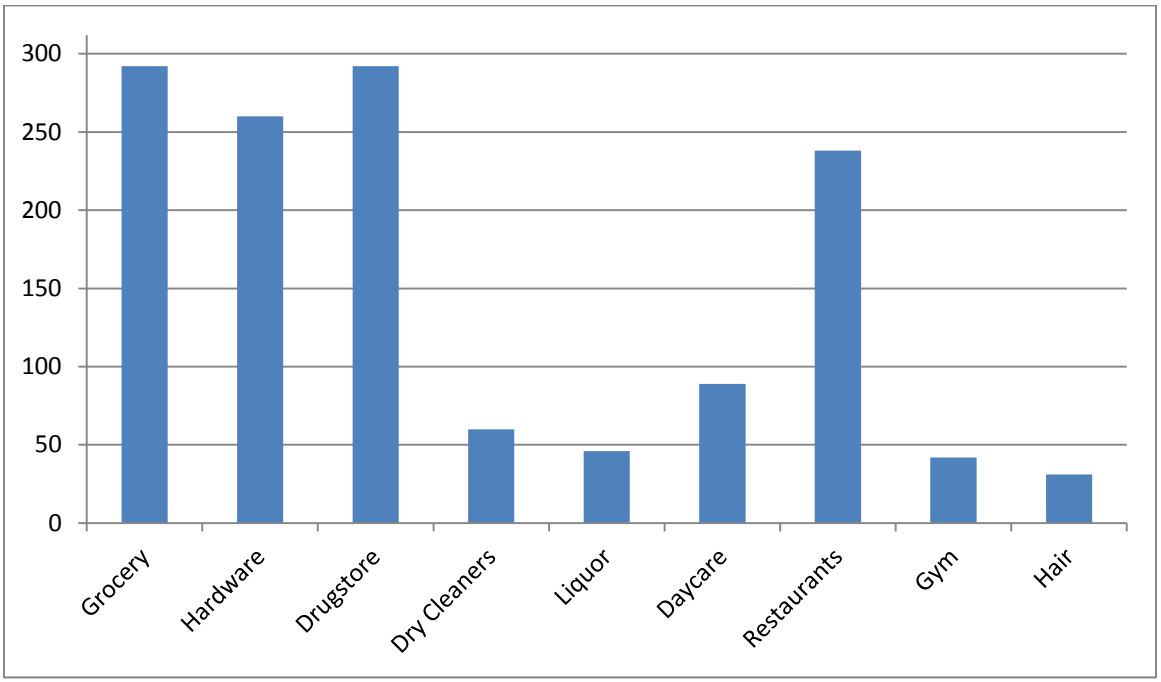
Continue bike/walking path around Town
Improve Tom Fox Avenue

Q7. **Thinking about all of the factors that impact life in Poolesville, please rate each of these factors as to how important they are to the quality of life in Poolesville.**
(304 Responses)

Most----------Importance----------Least

Nearby Medical Facilities		**22.7%**		**28.5%**		**32.0%**		**9.9%**	**6.9%**
Basic Shopping Needs		**47.4%**		**28.5%**		**18.6%**		**3.3%**	**2.2%**
Rental Housing		**2.6%**		**5.9%**		**17.4%**		**18.5%**	**55.6%**
Parks and Recreation Facilities		**21.5%**		**36.9%**		**30.7%**		**7.3%**	**3.6%**
Local schools that have all the opportunities available at larger County schools		**57.9%**		**22.7%**		**9.5%**		**4.0%**	**5.9%**
Downtown Streetscape		**17.2%**		**30.7%**		**30.7%**		**11.7%**	**9.7%**
Lower Crime/Safety		**77.0%**		**15.7%**		**6.2%**		**1.1%**	**0.0%**
Housing for Seniors		**12.5%**		**16.5%**		**23.4%**		**17.2%**	**30.4%**
Community Activities		**29.7%**		**33.7%**		**22.0%**		**8.1%**	**6.5%**

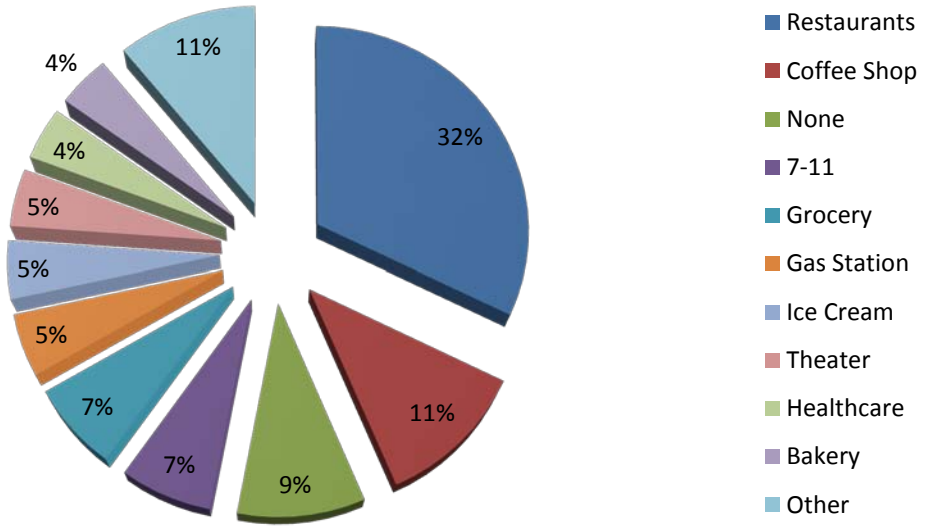
Q8. **What type of shopping or business services do you feel the town CANNOT afford to lose? Please choose up to 5.** *(312 Responses)*



Q9. What new types of businesses would you like to see in Town?

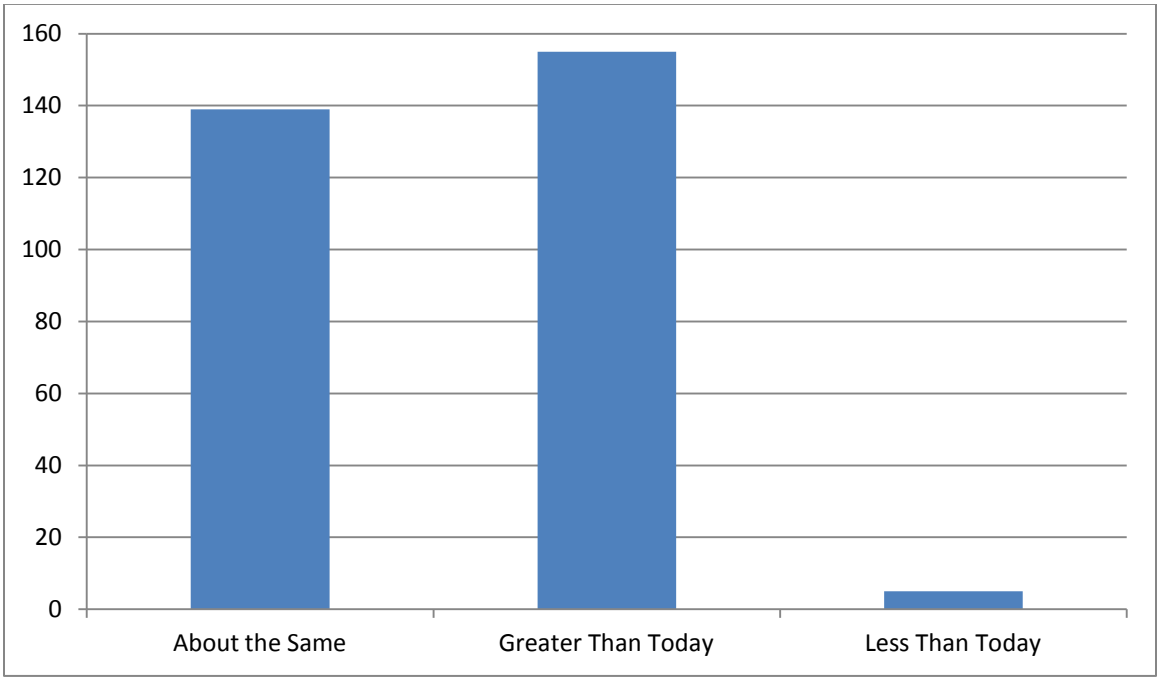
(264 unaided responses)

The top ten responses are listed below:



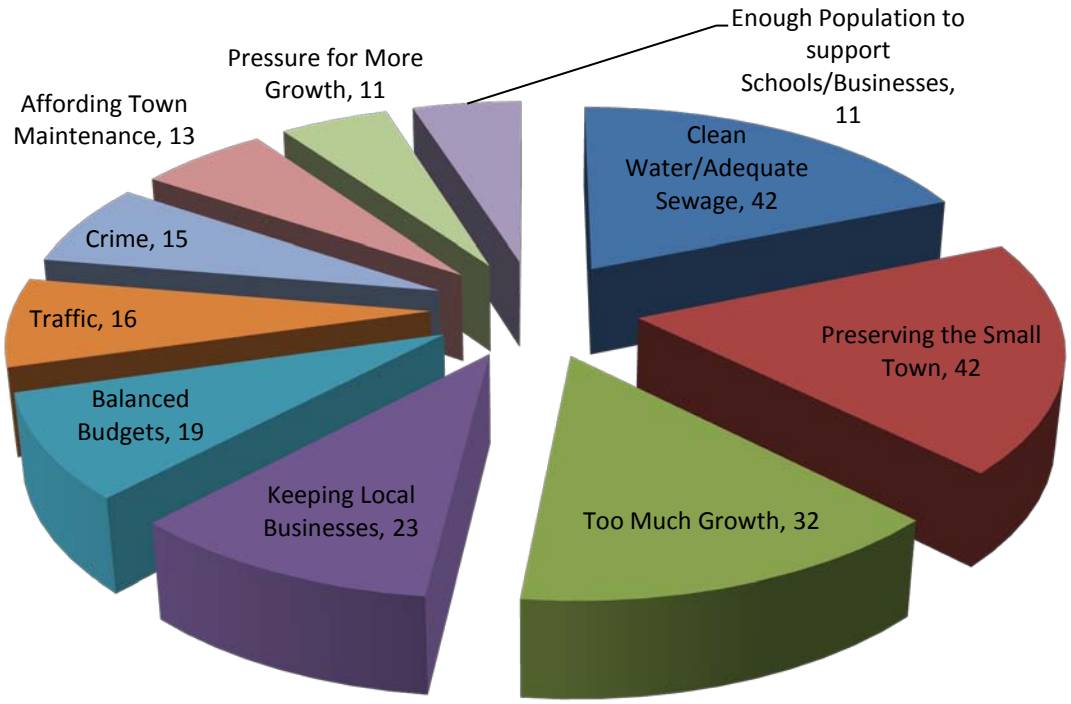
Q10. Looking ahead five years, do you feel the challenges the Town faces will be:

(299 Responses)



Q11. Looking ahead five years, what do you feel will be the one "single most important" challenge facing Poolesville? *(287 unaided responses)*

The top ten responses are listed below:



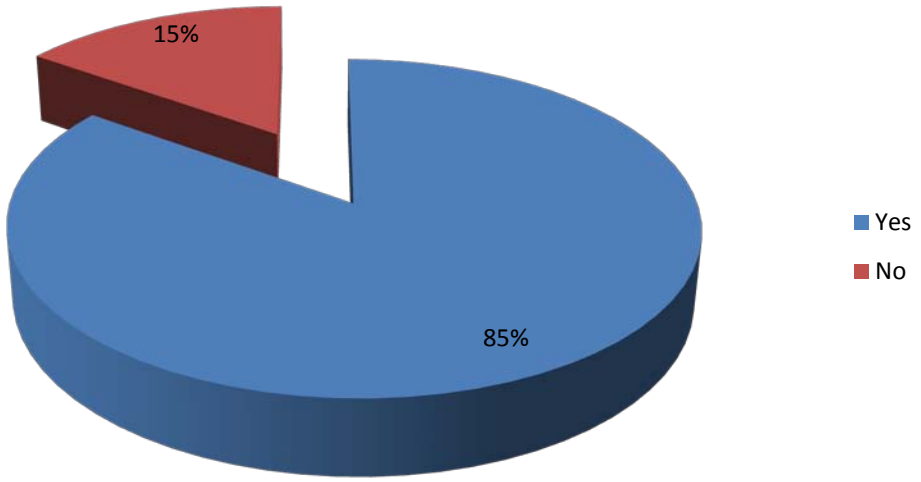
Q12. What do you feel should be the greatest priorities for the Town? Use a range from 5 for the highest priority ("want very much") to 1 for the lowest ("do not want or need").

(296 Responses)

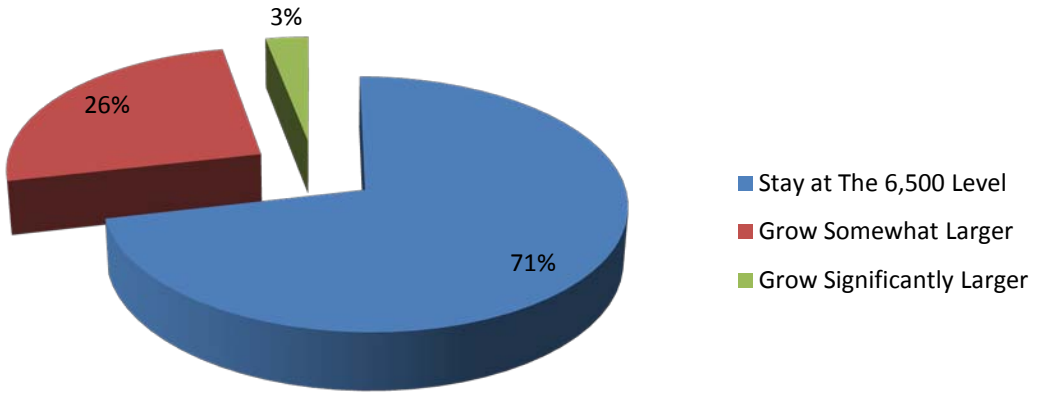
Want Very Much----------Do Not Want

Develop More Programs for Teens	**22.1%**	**28.7%**	**26.1%**	**12.5%**	**10.6%**
Build a Community Center	**15.9%**	**15.9%**	**27.0%**	**13.7%**	**27.5%**
Ensure Adequate Water and Sewer	**79.4%**	**12.5%**	**6.3%**	**1.1%**	**0.7%**
Expand Parks and Recreation Facilities	**5.2%**	**16.4%**	**30.5%**	**24.2%**	**23.7%**
Complete the Jogging/Biker Trail	**19.3%**	**21.5%**	**27.4%**	**13.3%**	**18.5%**
Work to Attract Businesses for Existing Commercial Spaces	**44.4%**	**25.6%**	**21.5%**	**3.7%**	**4.8%**
Increase Police Presence	**25.9%**	**29.3%**	**30.4%**	**10.7%**	**3.7%**
Complete Fisher Avenue Streetscape	**17.8%**	**24.8%**	**30.4%**	**14.8%**	**12.2%**
Protect and Maintain Schools	**70.6%**	**17.1%**	**9.3%**	**1.9%**	**1.1%**
Finish Sidewalks in Residential Areas	**21.9%**	**28.1%**	**25.6%**	**14.8%**	**9.6%**
Add Speed Humps	**8.9%**	**8.5%**	**21.4%**	**27.7%**	**33.5%**
Protect the Historic Heritage and Small Town Character	**58.7%**	**22.5%**	**12.9%**	**4.4%**	**1.5%**

Q13. Do you, or does any other adult member of the household, work outside of Poolesville on a daily or regular basis? (*297 Responses)*

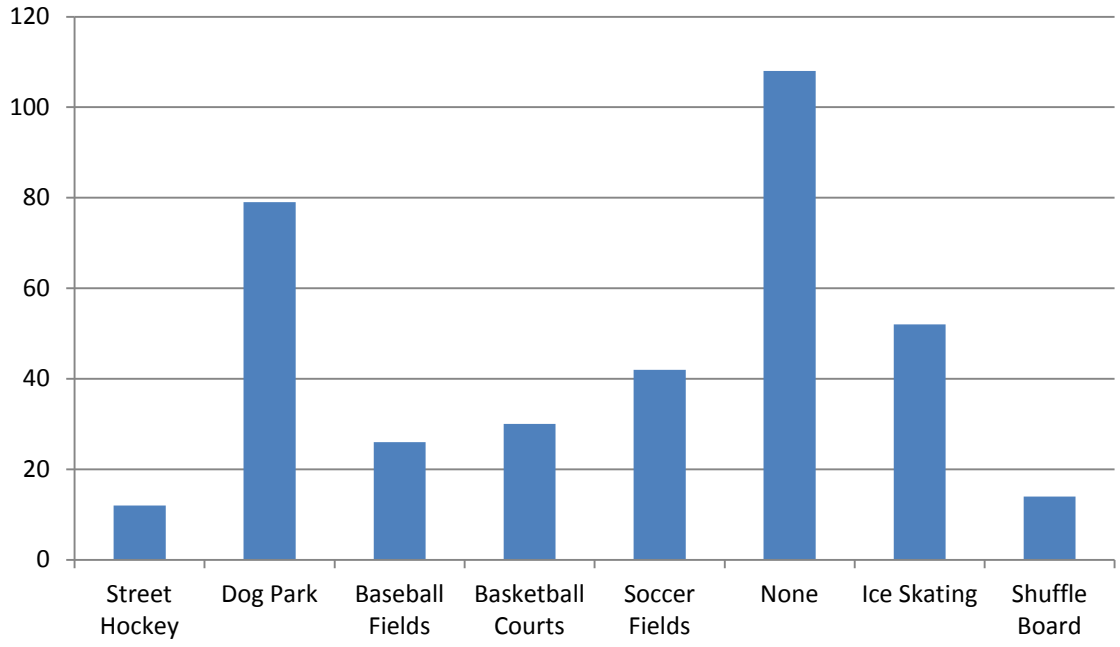


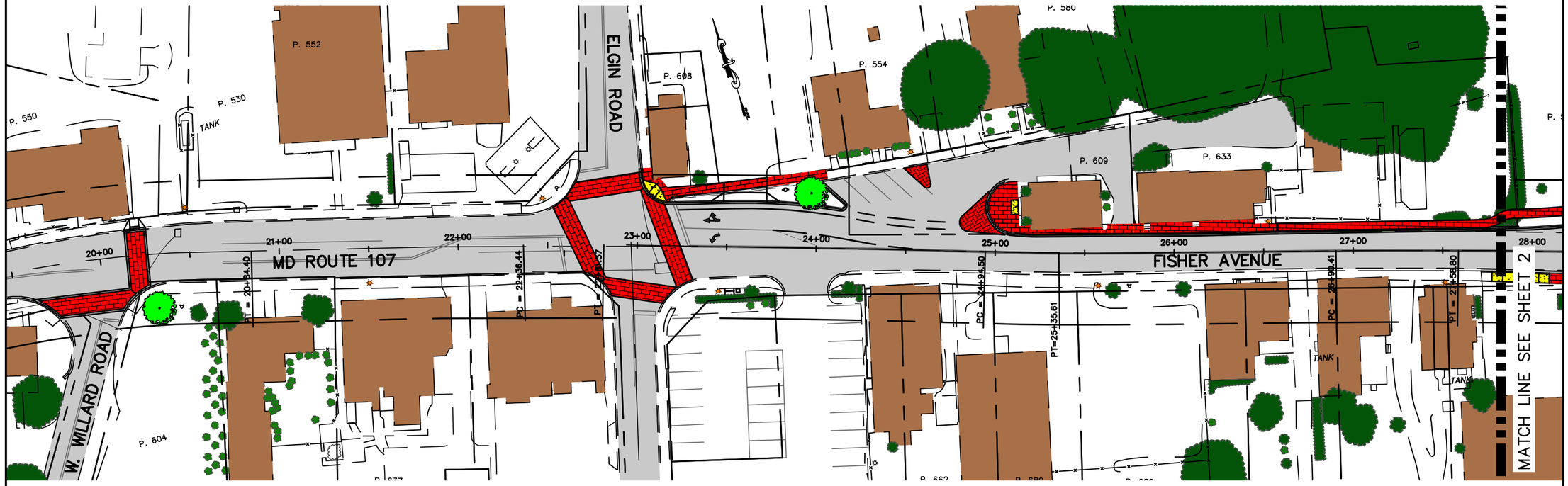
Q14. Presently, the Town population is just over 5,250 citizens. Over the next 5 years the Town population will increase to 6,500 citizens. We have discussed in this questionnaire the challenges facing the Town and the opportunities, as well as why you live in Poolesville. Considering all these factors, over the next 10 to 15 years, do you believe the Town should:
(294 Responses)



Q15. Considering the existing park facilities, what additional facilities are needed?

(285 Responses)





STREETSCAPE PLAN – PART A

SCALE: 1" = 60'

GRAPHIC SCALE

60 0 60 120

SCALE: 1" = 60'

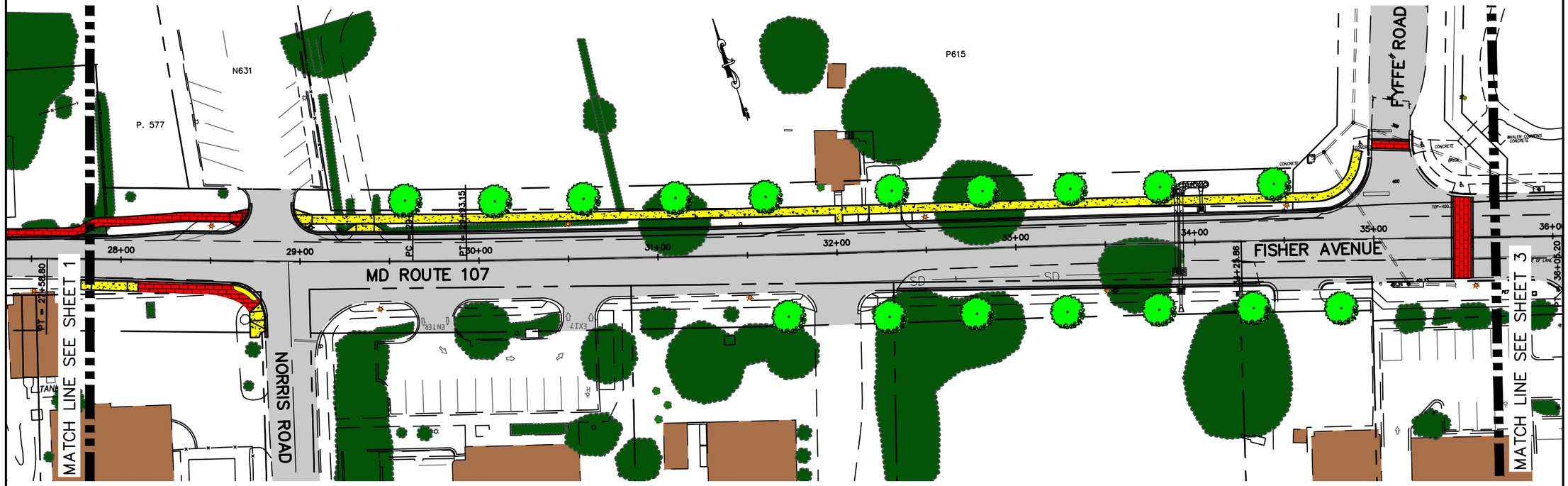
DRW BY:	SL
CHK BY:	JS
APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 60'

FISHER AVENUE STREETSCAPE

TOWN OF POOLESVILLE
MONTGOMERY COUNTY, MARYLAND

HURON CONSULTING
20410 CENTURY BOULEVARD
SUITE 230
GERMANTOWN, MARYLAND 20874
PHONE: (301) 528-2010

STREETSCAPE
Sheet: 1



STREETSCAPE PLAN – PART B

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GRAPHIC SCALE

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SCALE: 1" = 60'

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CHK BY:	JS
APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 60'

FISHER AVENUE STREETSCAPE

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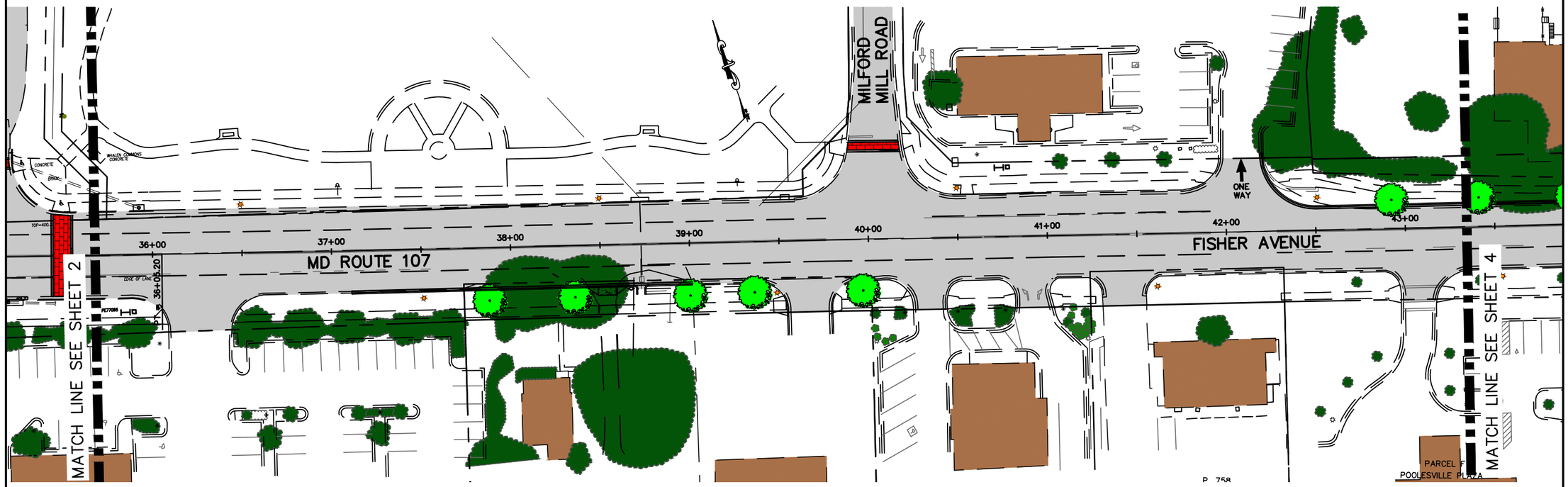
STREETSCAPE
Sheet: 2



STREETSCAPE PLAN – PART C

SCALE: 1" = 60'

GRAPHIC SCALE

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SCALE: 1" = 60'

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APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 60'

FISHER AVENUE STREETSCAPE

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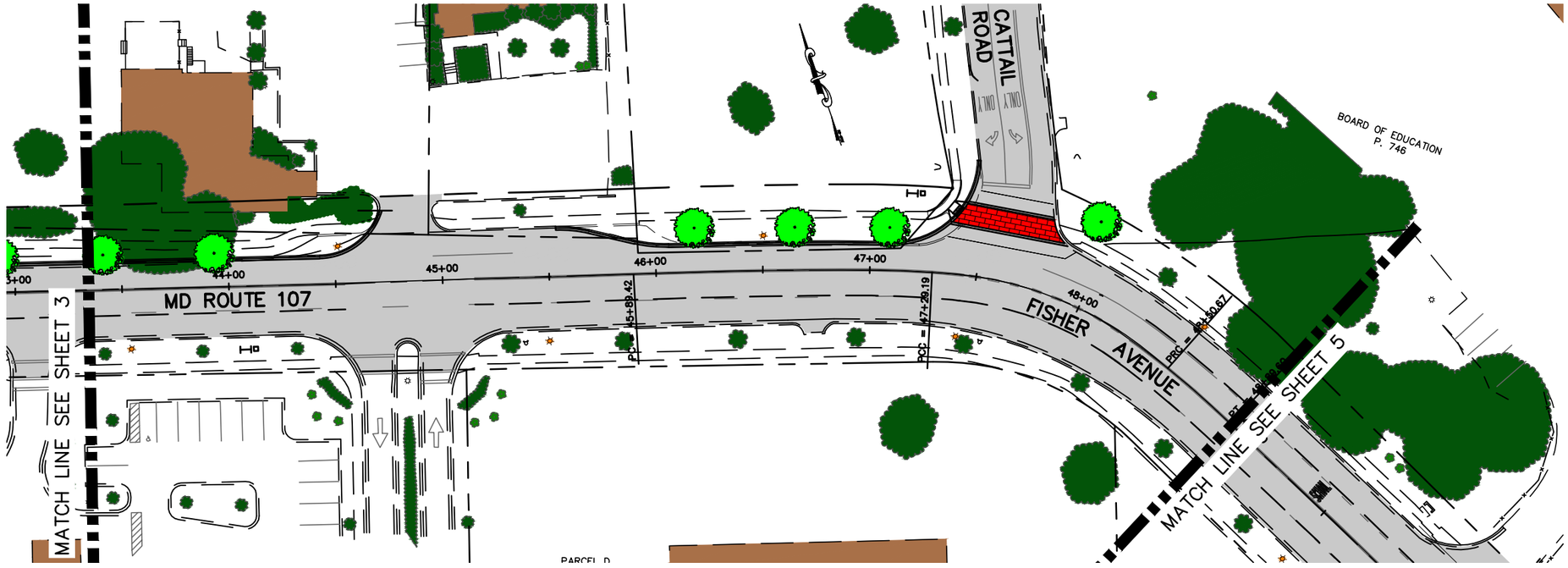
STREETSCAPE
Sheet: 3



STREETSCAPE PLAN – PART D

SCALE: 1" = 60'

GRAPHIC SCALE

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SCALE: 1" = 60'

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APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 60'

FISHER AVENUE STREETSCAPE

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MONTGOMERY COUNTY, MARYLAND

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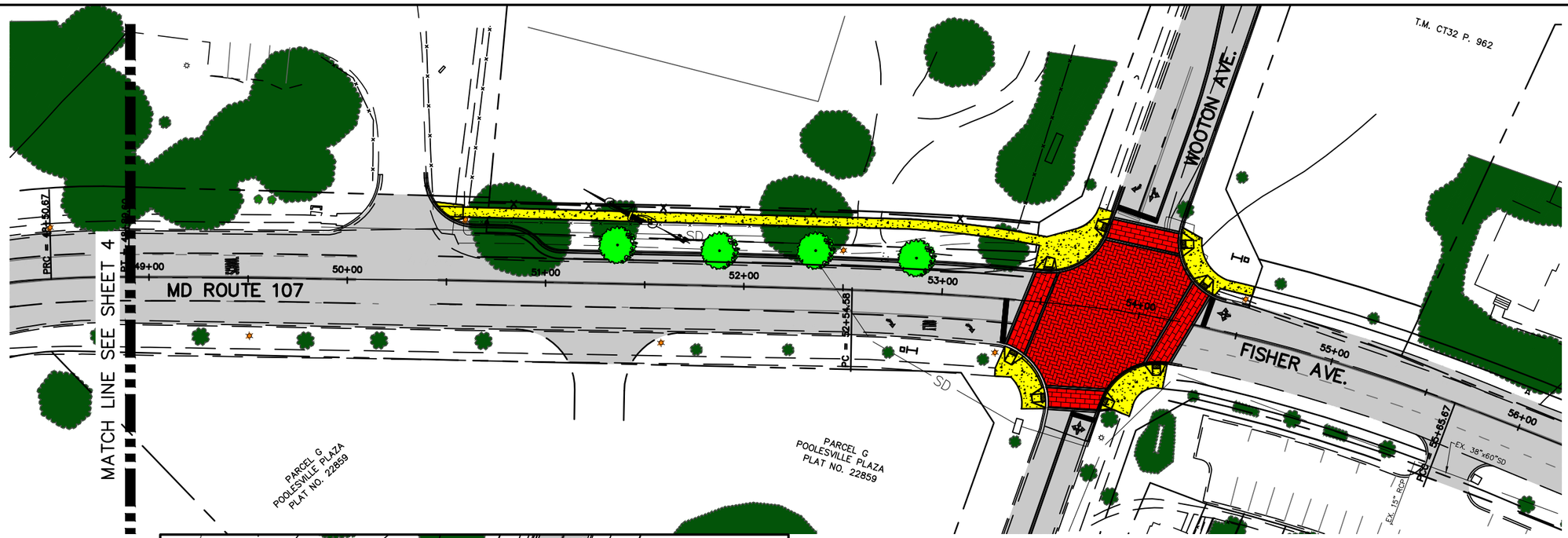
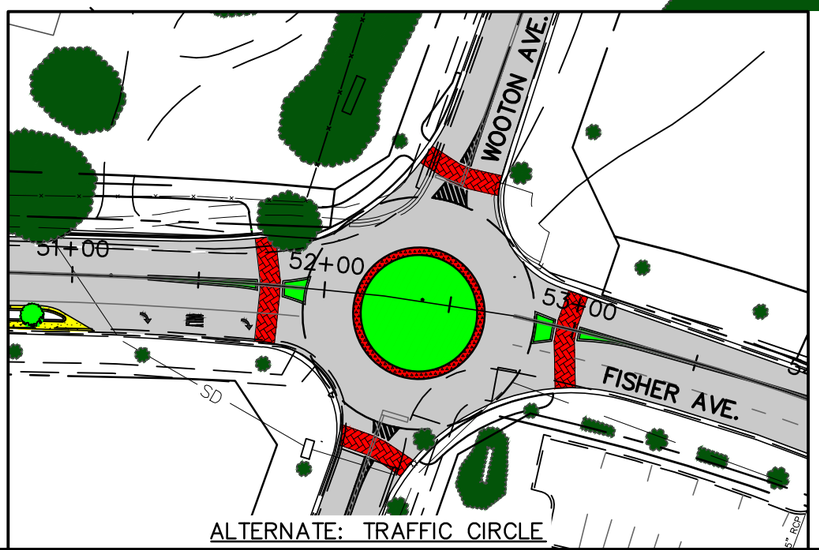
STREETSCAPE
Sheet: 4





ALTERNATE: TRAFFIC CIRCLE

STREETSCAPE PLAN – PART E

SCALE: 1" = 60'

GRAPHIC SCALE

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SCALE: 1" = 60'

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CHK BY:	JS
APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 60'

FISHER AVENUE STREETSCAPE

TOWN OF POOLESVILLE
MONTGOMERY COUNTY, MARYLAND

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STREETSCAPE
Sheet: 5

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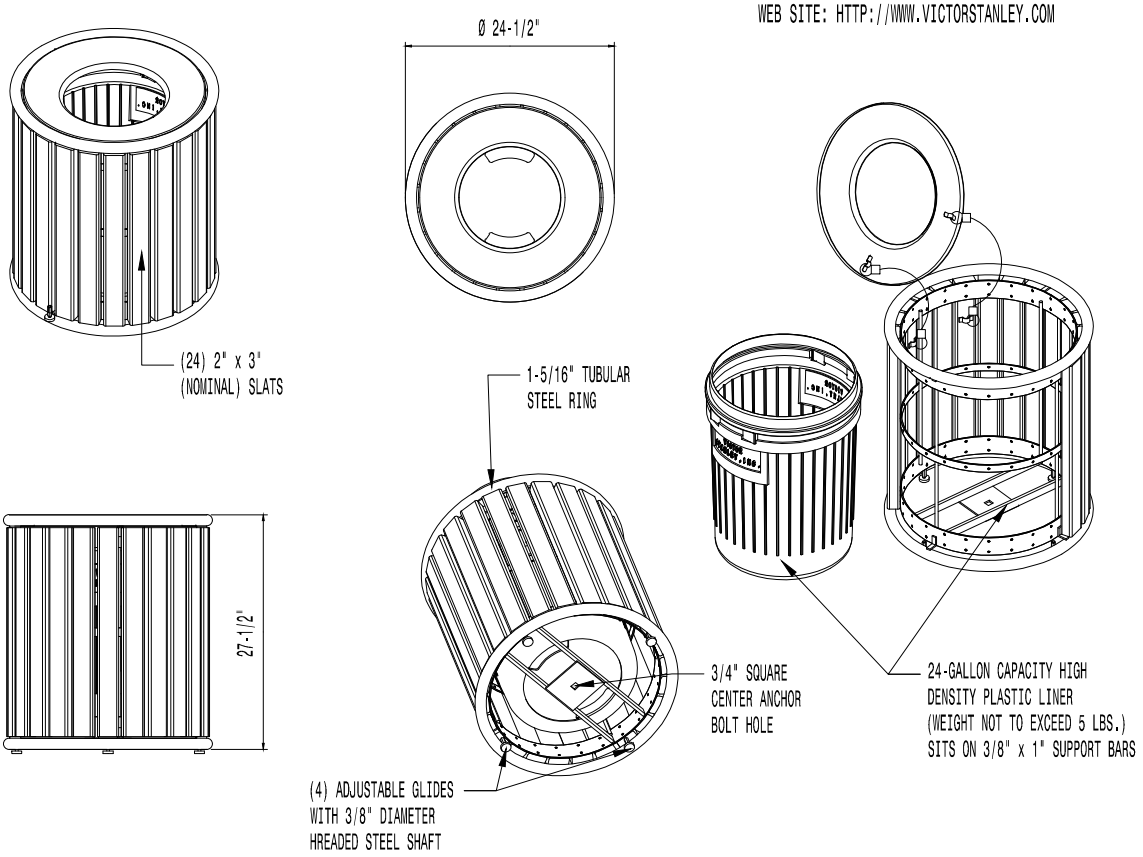

LIDS

SHOWN WITH STANDARD TAPERED FORMED LID. AVAILABLE WITH OPTIONAL DOMED LID, OPTIONAL DOMED LID WITH STAINLESS STEEL ASHTRAY,CONVEX LID, CONVEX LID WITH WITH SELF CLOSING DOOR. RAIN BONNET LID, AND RAINBONNET LID WITH STAINLESS STEEL ASHTRAY.

SECURITY

LID IS SECURED WITH VINYL COATED GALVANIZED STEEL AIRCRAFT CABLE. CABLE IS LOOPED AROUND WELDED IN PLACE ATTACHMENT BRACKETS AND CRIMPED IN PLACE.

RTH-24

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REV. 7/20/09 DRAWN L.D.L. 2009-88

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  - 11 STANDARD COLORS, CUSTOM COLORS (INCLUDING THE RAL RANGE)
- SLAT TYPES
  - RECYCLED PLASTIC SLATS (NOT 2nd SITE SYSTEMS®)
    - COLORS: GRAY, MAPLE, CHERRY, AND WALNUT
  - SEE STREETSITES SERIES™ FOR ALTERNATIVE OPTIONS

NOTES:

1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD FILM COATING. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. VICTOR STANLEY, INC., PLASTIC INNER LINERS ARE MOLDED ON TOOLING DESIGNED FOR AND OWNED BY VICTOR STANLEY, INC. THEY OFFER MAXIMUM CAPACITY AND STRENGTH WITH LIGHTWEIGHT CONSTRUCTION USING CRITICAL MOLDED RIBS, INTEGRAL HANDHOLDS, AND HIGH-STRENGTH MATERIALS. THIS MINIMIZES HANDLING DIFFICULTY AND FACILITATES EASY EMPTYING AND STORAGE WHILE AFFORDING LONG SERVICE LIFE.
5. ANCHOR BOLT(S) NOT PROVIDED BY VICTOR STANLEY, INC.
6. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
7. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
8. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.

DATE: MAY 2011

FISHER AVENUE STREETSCAPE

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

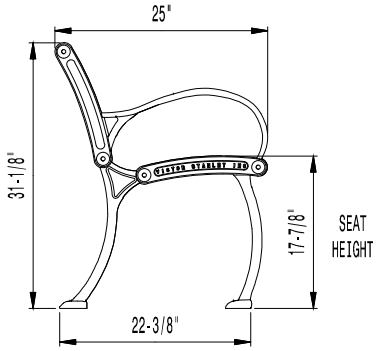
SHEET 6

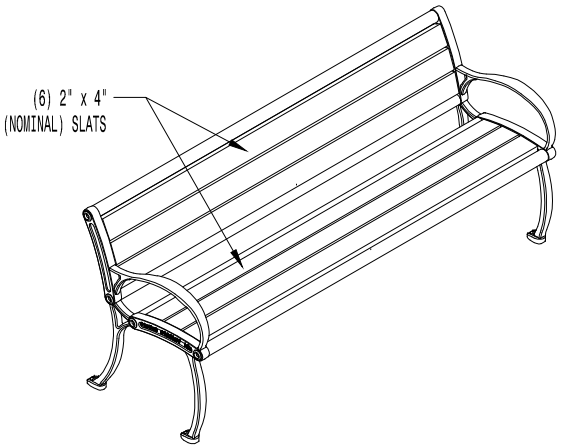
HURON CONSULTING

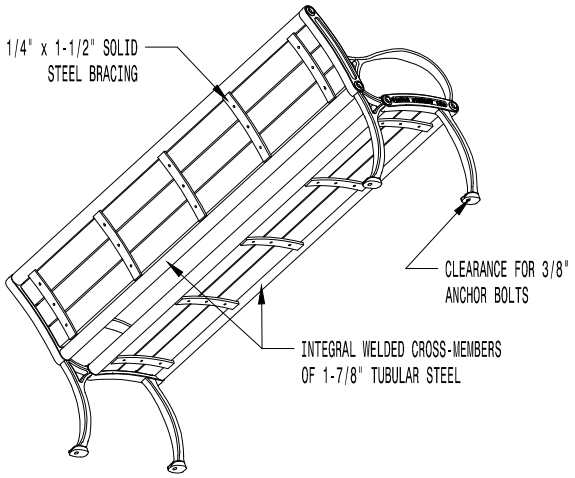
VICTOR STANLEY, INC.®
-Manufacturers of Quality Site Furnishings since 1962-

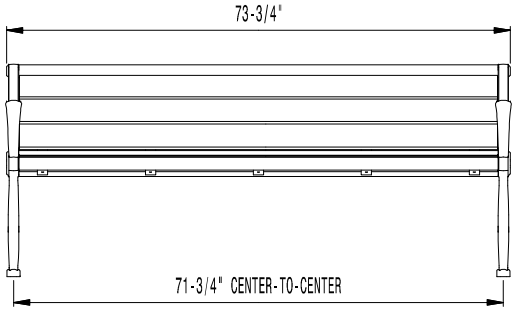
P.O. DRAWER 330 - DUNKIRK, MD 20754 USA
TOLL FREE: (800) 368-2573 (USA & CANADA)
TEL (301) 855-8300 - FAX (410) 257-7579
WEB SITE: HTTP://WWW.VICTORSTANLEY.COM

* ALL DIMENSIONS ARE IN INCHES *









CENTER-TO-CENTER DISTANCES ARE APPROXIMATE
(VARIATIONS IN CASTINGS ARISE FROM DIFFERENT RATES OF COOLING)

STANDARD BENCH WITH DUCTILE IRON END FRAMES
SHOWN: STANDARD 6-FOOT LENGTH

AVAILABLE OPTIONS:
- POWDER COATING
  - 10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS, CUSTOM COLORS (INCLUDING THE RAL RANGE)
- SLAT TYPES
  - RECYCLED PLASTIC SLATS (NOT 2nd SITE SYSTEMS®)
    - COLORS: GRAY, MAPLE, CHERRY, AND WALNUT
  - SEE FRAMERS MODERN™ SERIES FOR ALTERNATIVE SLAT OPTIONS

INTERMEDIATE & CENTER ARMRESTS
- 4', 6', & 8' AVAILABLE WITH OPTIONAL ARMRESTS

LENGTHS
- STANDARD 4'
- STANDARD 6' LENGTH SHOWN
- STANDARD 8'

CM-324
GREENSITES SERIES™

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
5. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
7. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.

REV. 5/3/11 DRAWN R.G.O. 2011-325

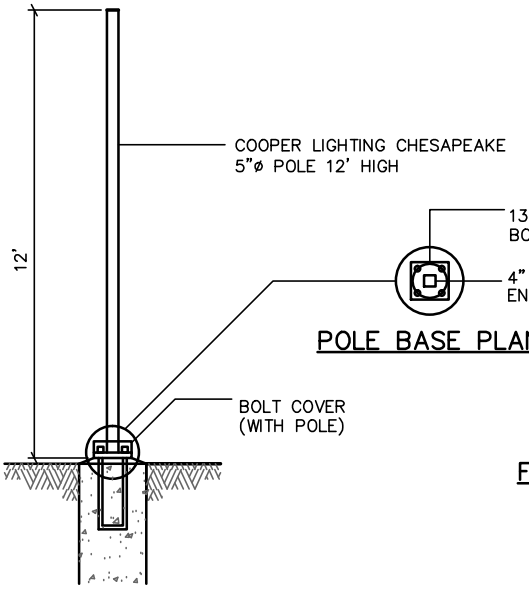
DATE: MAY 2011

FISHER AVENUE STREETSCAPE

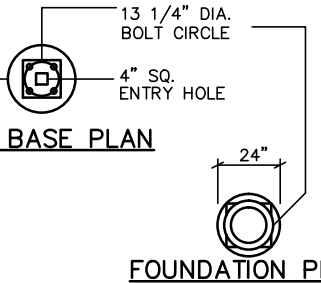
TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

SHEET 7

HURON CONSULTING

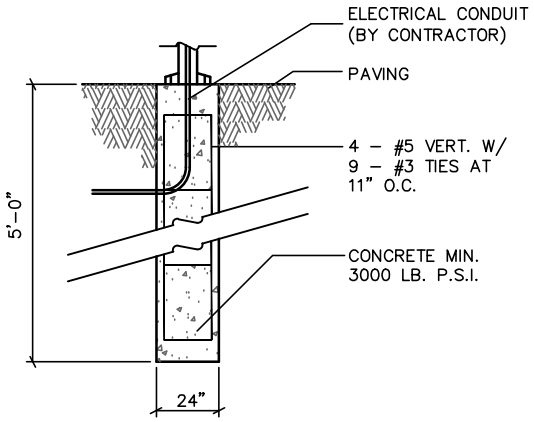


ELEVATION LIGHT POLE

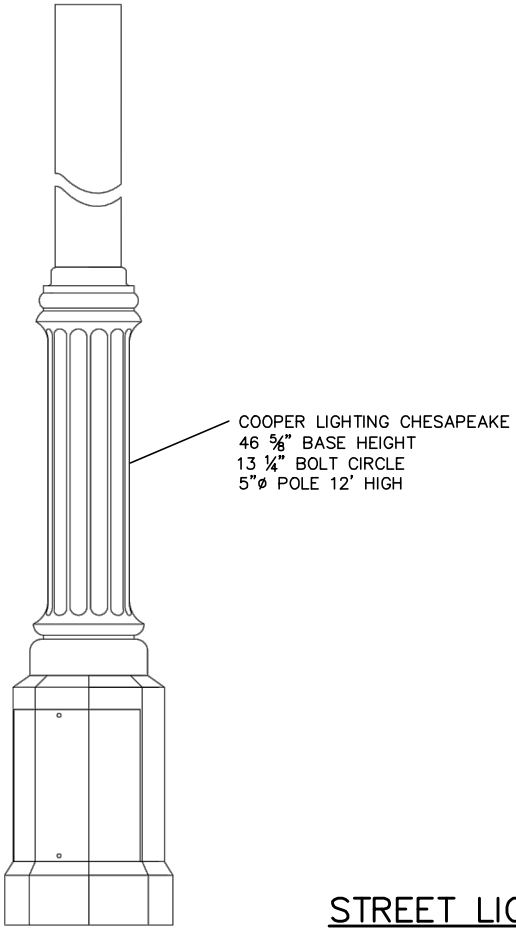


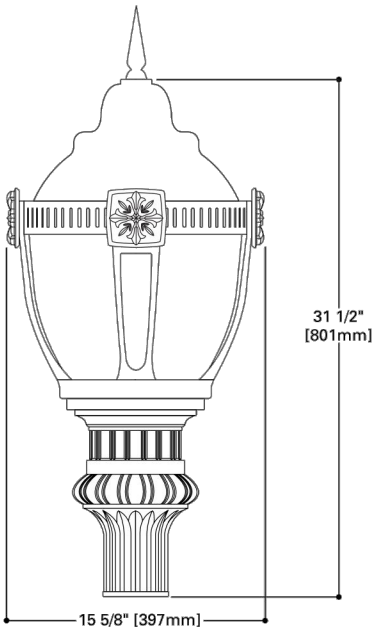
POLE BASE PLAN

FOUNDATION PLAN



FOUNDATION SECTION





COOPER LIGHTING STREETWORKS MANCHESTER–ANG
100W, METAL HALIDE
CLASSICAL BAND CAGE WITH MODERN FINIAL

CONFIGURATION

STREET LIGHT DETAILS

NOT TO SCALE

DATE: MAY 2011

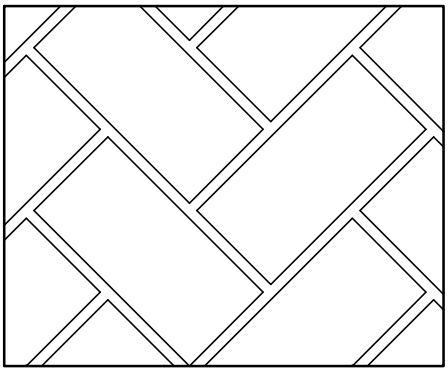
FISHER AVENUE STREETSCAPE

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

SHEET 8

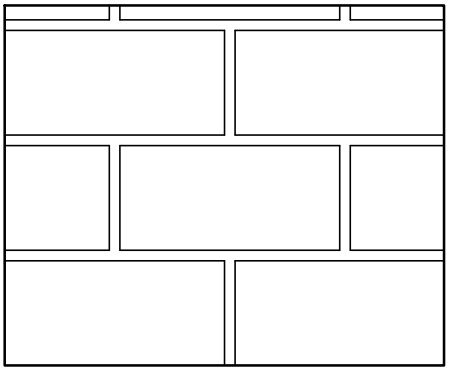
HURON CONSULTING

OPEN PAVING AREAS



BRICK SIZE 3–5/8"x 7"–3/4" WITH 3/8" MORTAR JOINTS ARRANGED IN HERRINGBONE PATTERN

CROSSWALKS

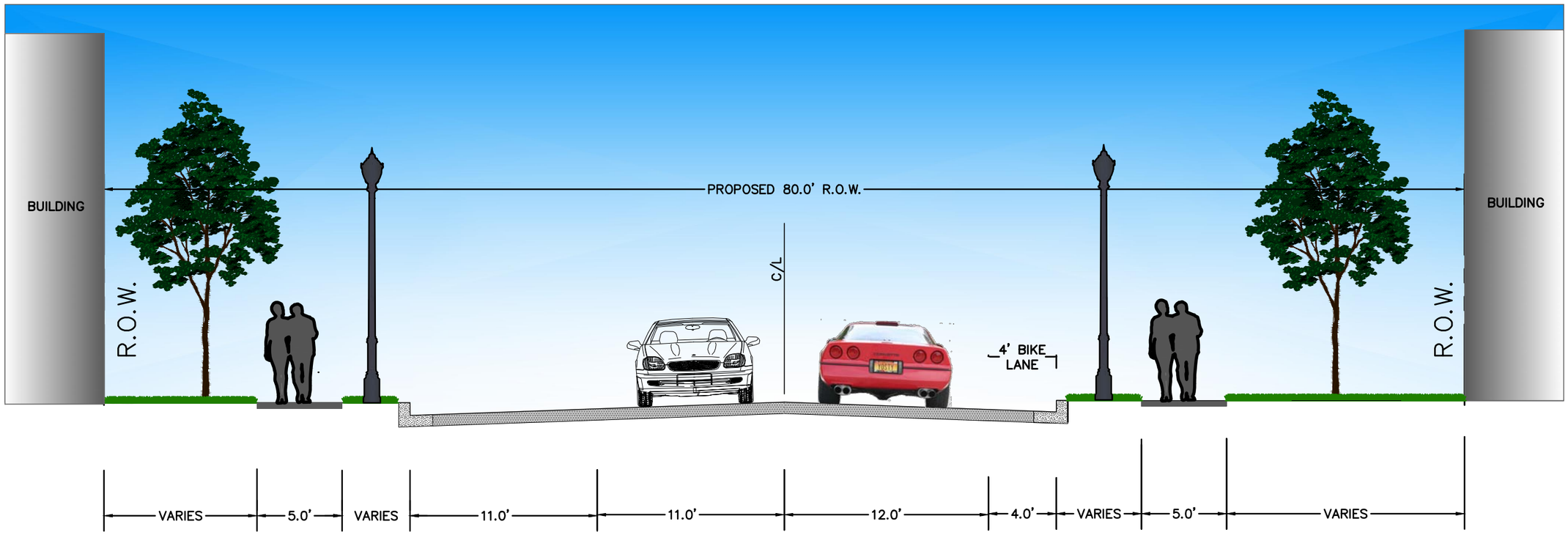


BRICK SIZE 4" X 7–3/4" WITH 3/8" MORTAR JOINTS ARRANGED IN RUNNING BOND PATTERN

STAMPED ASPHALT DETAIL

NOT TO SCALE

DATE: MAY 2011	FISHER AVENUE STREETSCAPE TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011	SHEET 9 HURON CONSULTING



TYPICAL CROSS-SECTION
FISHER AVENUE (MD ROUTE 107)

DRW BY: SL CHK BY: JS APP BY: REH DATE: MAY 2011 SCALE:		FISHER AVENUE STREETSCAPE TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND	HURON CONSULTING 20410 CENTURY BOULEVARD SUITE 230 GERMANTOWN, MARYLAND 20874 PHONE: (301) 528-2010 STREETSCAPE Sheet: 10

Design Guidelines for New and Remodeling Construction Within the Commercial and Central Business District

This section provides general guidance for the architectural styles for the Commercial and Central Business District (CBD). These structures should comport with the character and integrity of the surrounding area and embody the historical nature of the Commercial and CBD. The construction should recall the architecture styles of Federalist, Georgian, Victorian and Greek revival periods of architecture. These guidelines should be read in their entirety for the overall vision of the architecture to be built in the Commercial and CBD.

Consideration should be given to the height alignment of existing and future structures, and the building skyline should be within 10 % of the height of the neighboring buildings. The scale should be considered as the structure size relates to surrounding properties, the size of the appurtenances on the structure, and the materials chosen for the structure. This may require relational concept drawing to ascertain if doors, windows and outdoor fixtures aesthetically co-exist with adjoining buildings.

Building frontages currently vary within the zone. If new structures are created, the Town should encourage owners to maximize the frontage usage of the building lots with the use of the structures.

The samples of architecture provided in theses guidelines are typical of the front elevation, the width, and the height of the existing structures within the Commercial and CBD. The proportion of the front façade should follow the standards recognized in previously referenced architectural types.

The portions within the building façade should be complimentary to the spacing of the door and window openings. This will be dependent upon the style of the structure chosen but should be harmonious with adjacent buildings.

The spacing along the frontage of the building area on the lot should be uniform, with minimal staggering of the building frontages so as to create a contiguous village appearance that is friendly to pedestrian traffic. This will require minimal setback from the front building restriction line.

Side building lots should be situated to promote parking at the rear of the building. Large side lot parking areas break up the visual aesthetic lines of the village appearance.

Front entrances should be situated to promote easy access through the use of doorways and porches.

Materials for the building exterior should be brick, wood siding and rough finished stucco. The colors that are seen on the exterior of the buildings are generally red brick, white siding, beige stucco and painted white brick.

The Town uses various architectural themes on its structures to represent a time period or style in which the building was constructed. Some of these themes are shown below.

Dentil details

Jack arch framed by brick

Three and five light transoms

Chimney shapes

Stone foundations

Eyebrow, lancet windows and fan lights

Roof styles in the zone are below.

Pitched

Mansard

Hipped

Flat

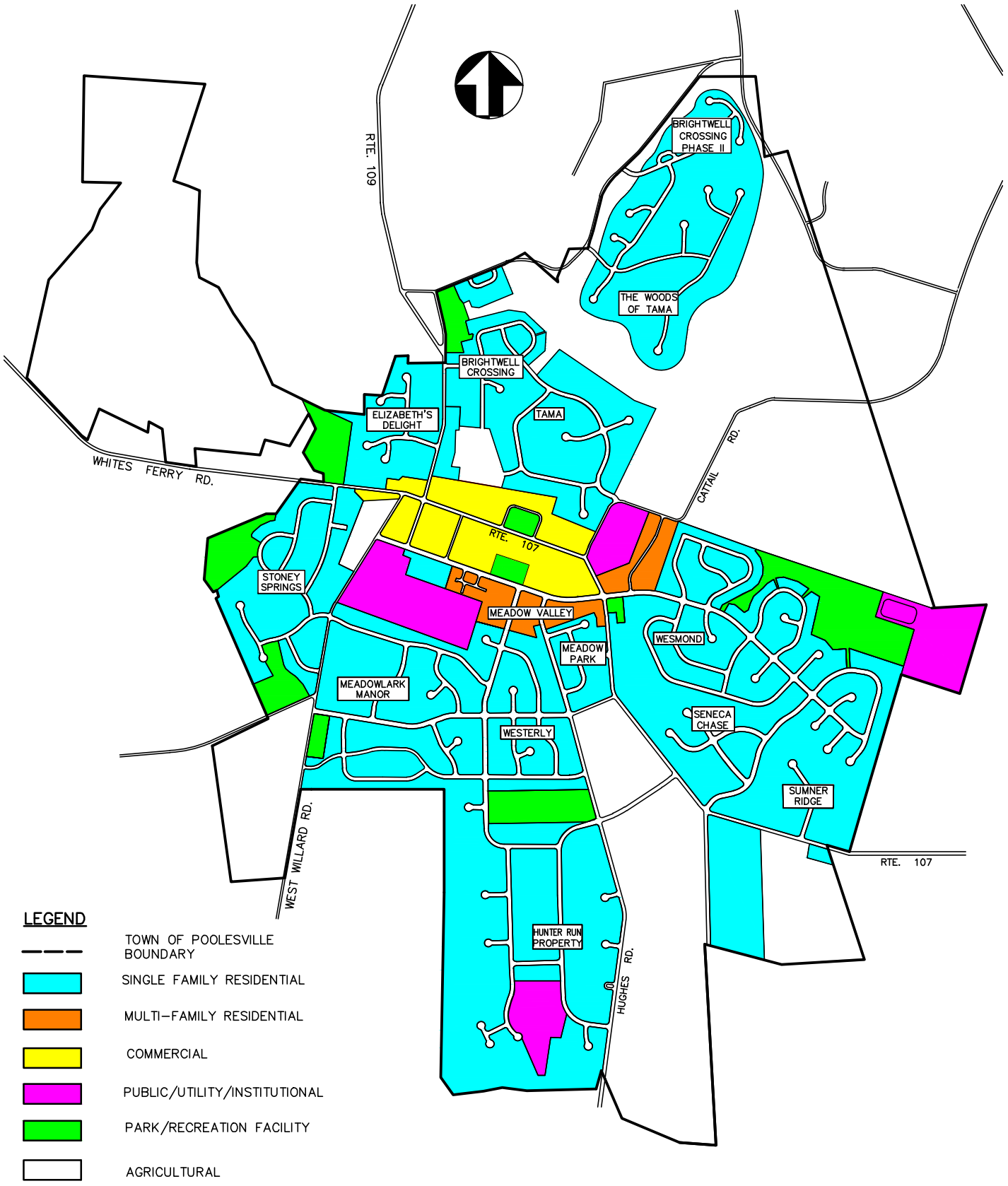
Per adopted streetscape plans, the sidewalks should be a patterned red brick. The paving will add to the enhancement of the existing zone and place a perspective of place and time. This type of sidewalk paving will also delineate the zone from other sections of the Town.

If the properties are delineated by fencing, an appropriate style of fence should be chosen such as wrought iron or a standard picket fence. The height of the fence should not detract from the front of the building façade.

Planting and landscaping should be used to provide an open visual appearance to the building frontage and consider issues of line of site for pedestrian and vehicular traffic. The current streetscape plan specifies the additional plantings that are to take place in the public right-of-way.

Summary

Understanding the Town's architecture in the Commercial and CBD helps the prospective developer understand the vision of the Planning Commission, the ideals of the elected officials, the aspirations of residents with regards to place and time, and future desires of the Town to meet an American Village Concept.



DATE: MAY 2011

SCALE: 1"=2000'

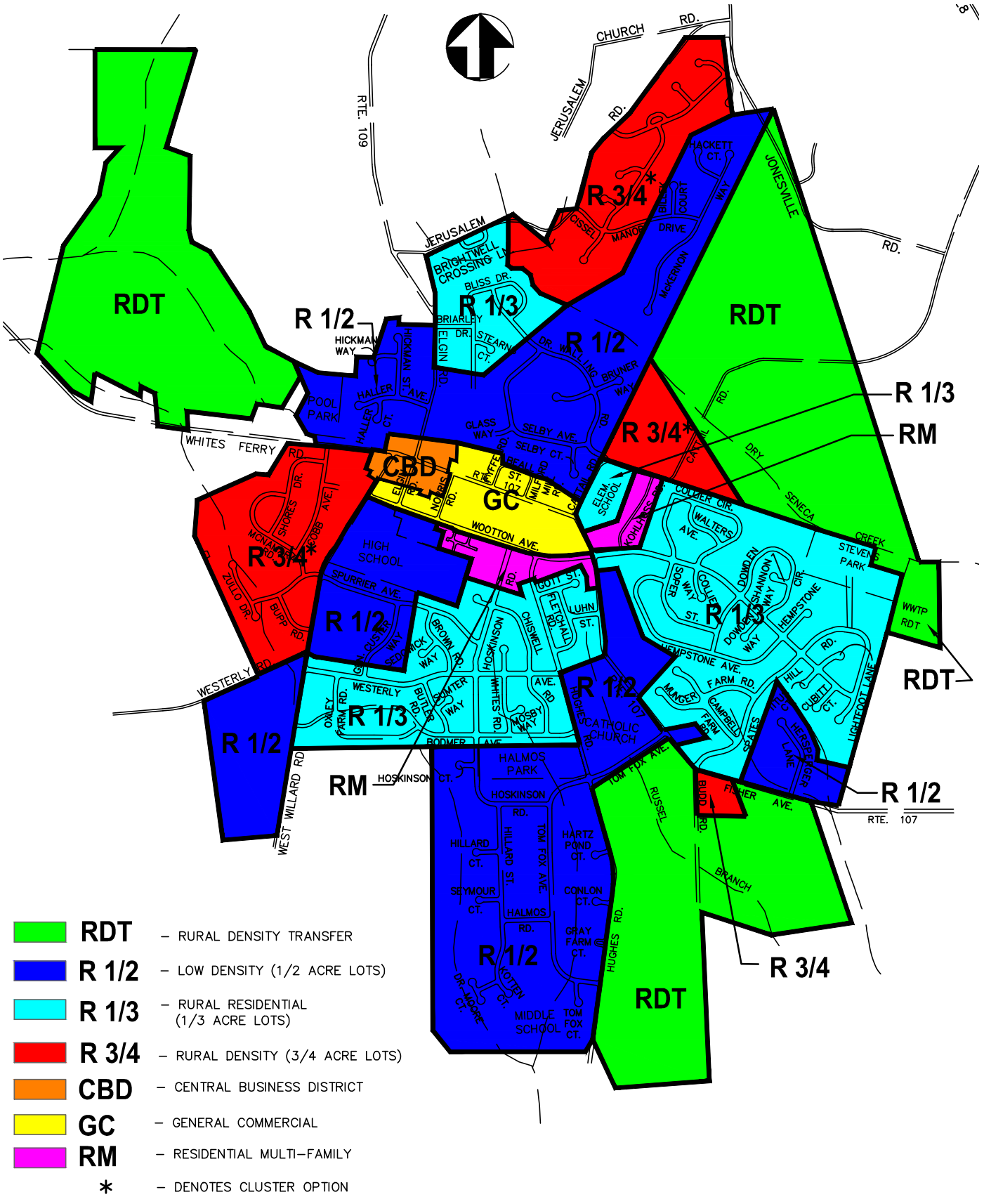
0' 1000' 2000'

EXISTING LAND USE

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 1

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

0' 1000' 2000'

ZONING MAP

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 2

HURON CONSULTING

Historical Building Table

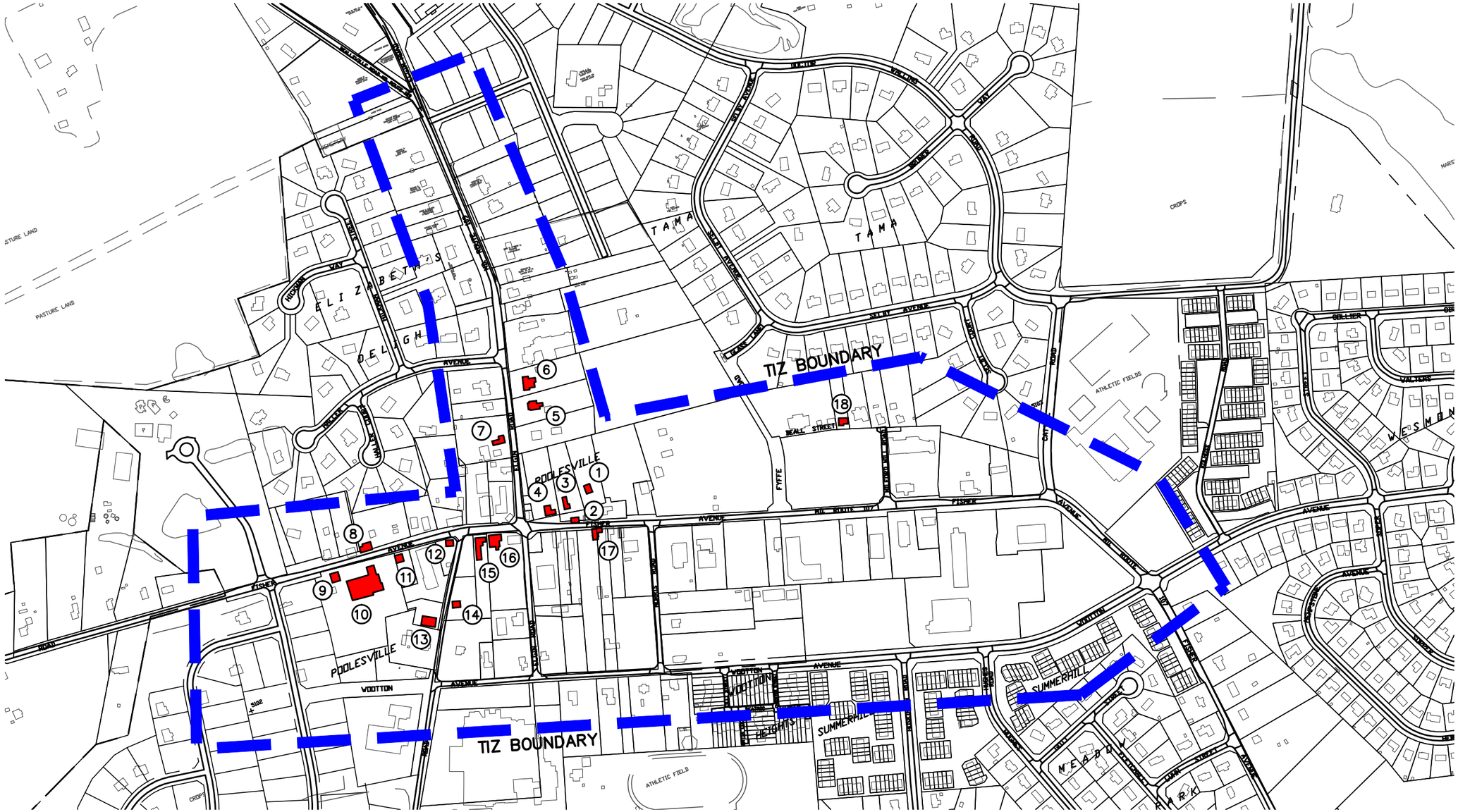
Building #	Address	Building Name
1	19923 Fisher Avenue	John Poole House
2	19933 Fisher Avenue	1910 Bank
3	19929 Fisher Avenue	Stevens House
4	19939 Fisher Avenue	Jamison Real Estate Office
5	17811 Elgin Road	Halmos House
6	17185 Elgin Road	Hillard House
7	17802 Elgin Road	Presbyterian Church
8	20101 Fisher Avenue	John Hall House
9	20110 Fisher Avenue	Bauman House
10	20100 Fisher Avenue	St. Peter's Episcopal Church
11	20020 Fisher Avenue	Hoskinson House
12	20000 Fisher Avenue	1785 House
13	17600 West Willard	Old Baptist Church
14	17617 West Willard	Original Methodist Church
15	19964 Fisher Avenue	Dr. Thomas Poole House
16	19960 Fisher Avenue	Frederick Poole House
17	19914 Fisher Avenue	Watkins House
18	19713 Beall Street	Hersperger House

EXISTING HERITAGE CONSERVATION LEGEND

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 3A

HURON CONSULTING



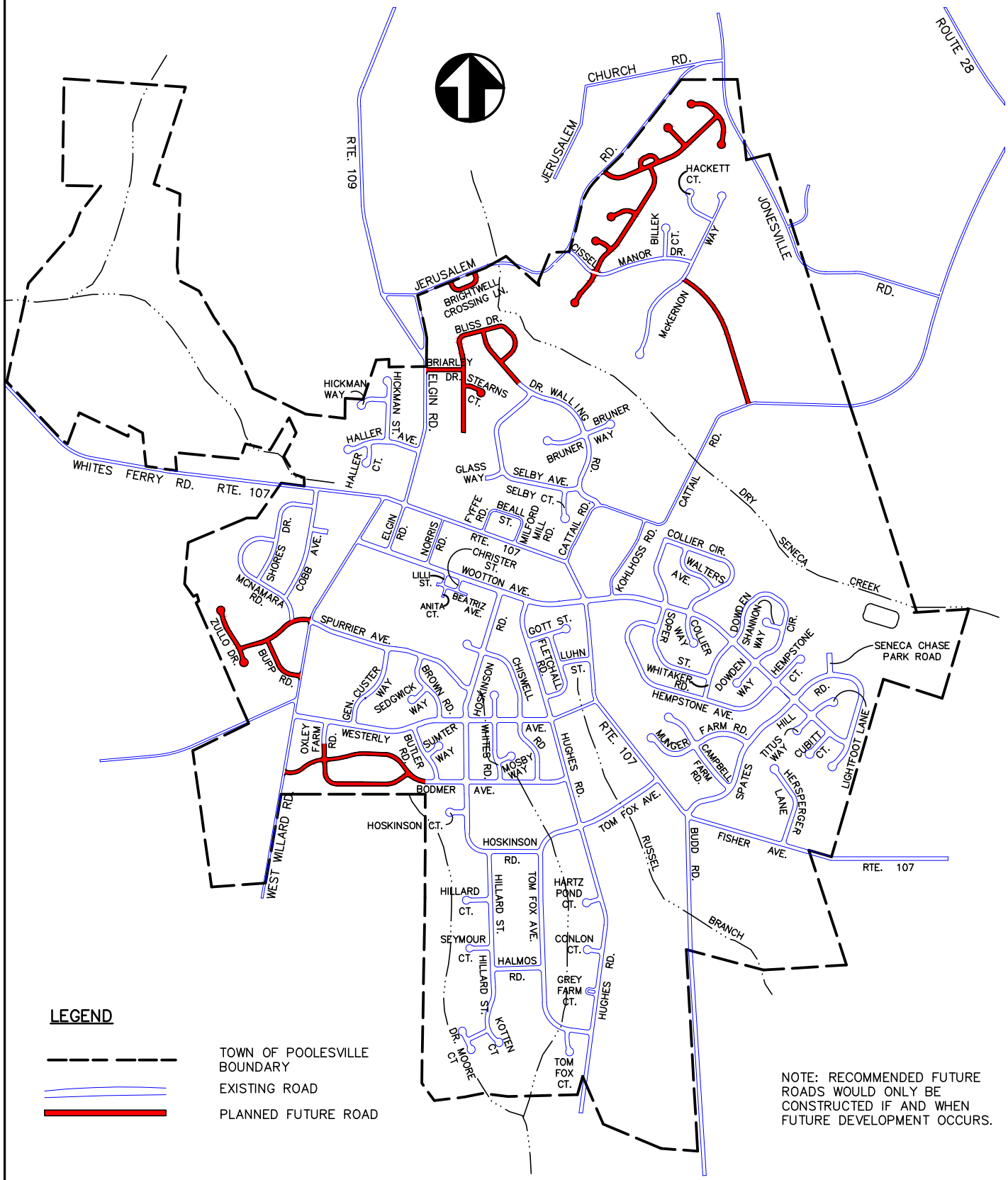
DRW BY:	SL
CHK BY:	JS
APP BY:	REH
DATE:	MAY 2011
SCALE:	1" = 500'

EXISTING HERITAGE CONSERVATION AND TIZ MAP

TOWN OF POOLESVILLE
MONTGOMERY COUNTY, MARYLAND

HURON CONSULTING
20410 CENTURY BOULEVARD
SUITE 230
GERMANTOWN, MARYLAND 20874
PHONE: (301) 528-2010

MASTERPLAN
Map: 3B



LEGEND

TOWN OF POOLESVILLE BOUNDARY

EXISTING ROAD

PLANNED FUTURE ROAD

NOTE: RECOMMENDED FUTURE ROADS WOULD ONLY BE CONSTRUCTED IF AND WHEN FUTURE DEVELOPMENT OCCURS.

DATE: MAY 2011

SCALE: 1"=2000'

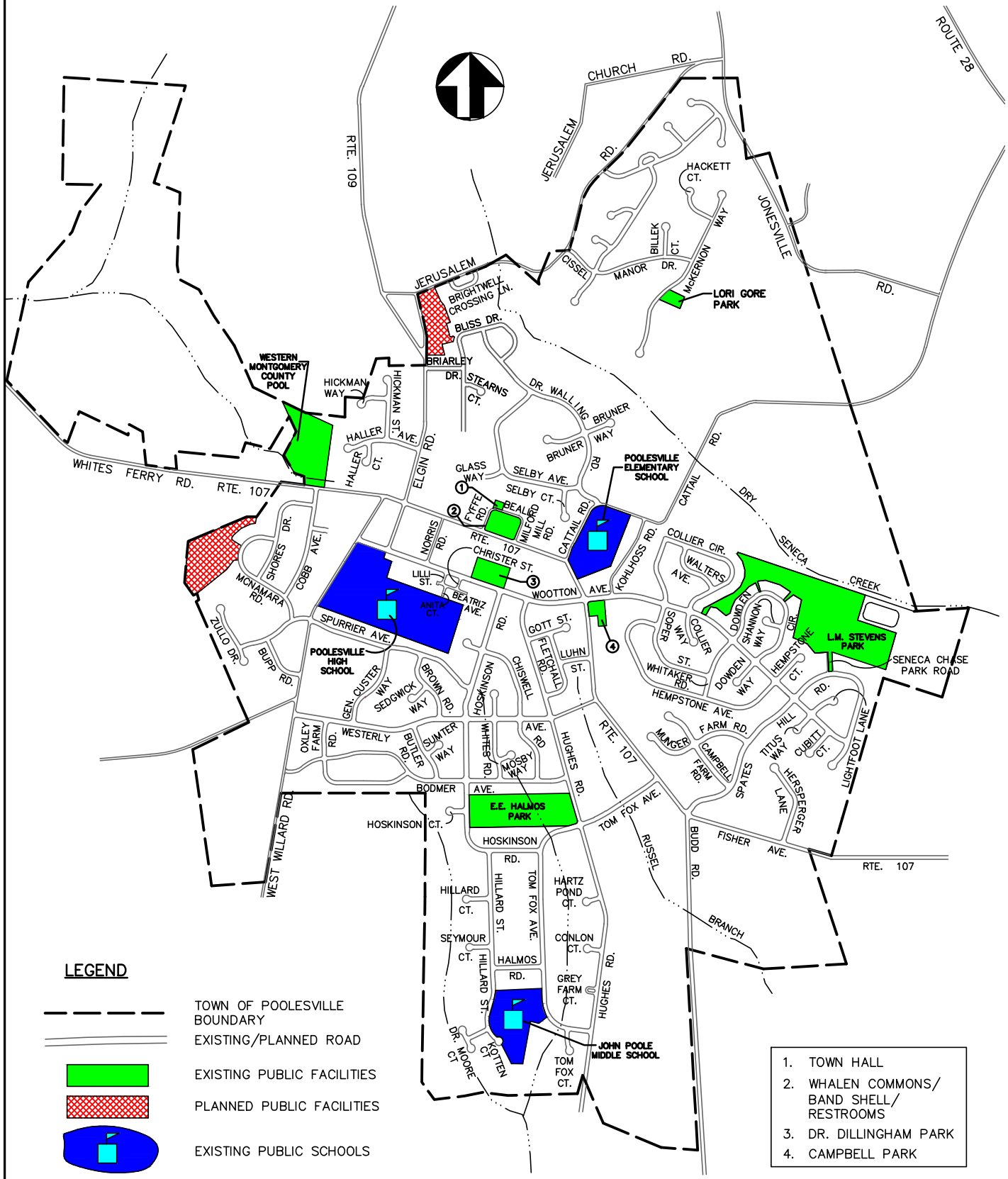
0' 1000' 2000'

EXISTING AND PLANNED ROAD NETWORK

TOWN OF POOLESVILLE
MONTGOMERY COUNTY, MARYLAND

MAP 4

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

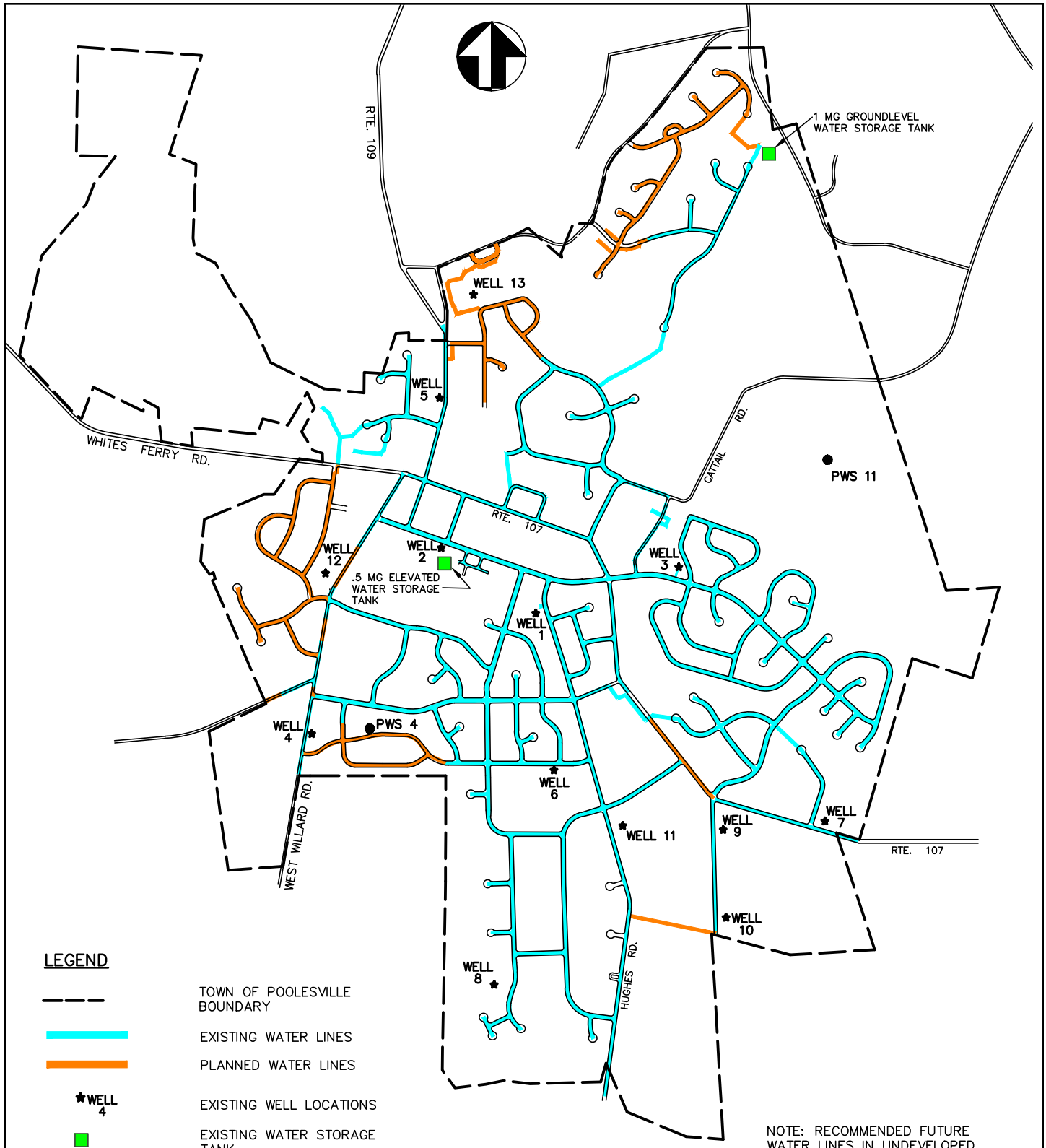
0' 1000' 2000'

EXISTING PUBLIC FACILITIES

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 5

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

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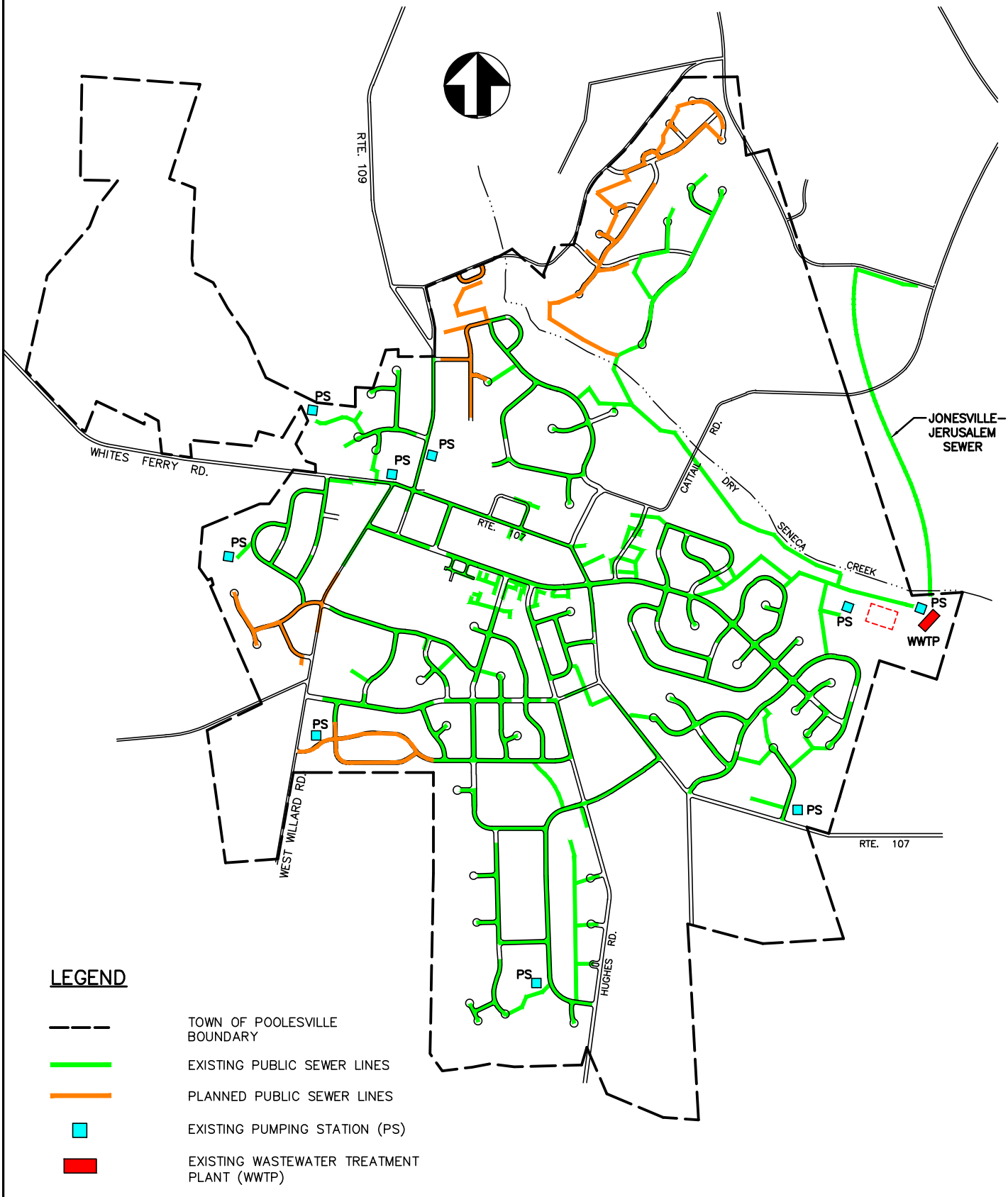
EXISTING AND PLANNED WATER SUPPLY SYSTEM

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 6

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

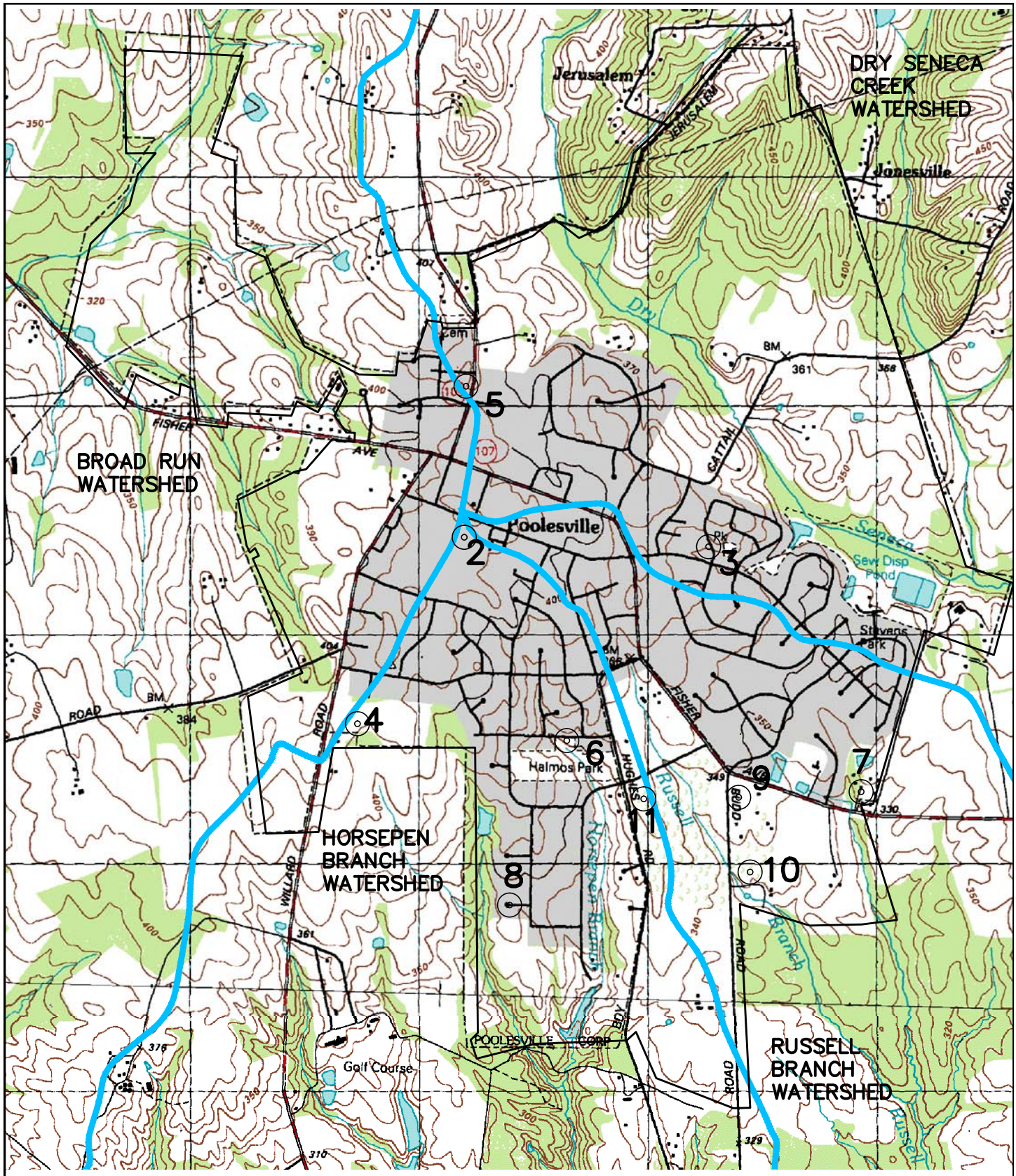
0' 1000' 2000'

EXISTING SANITARY SEWERAGE SYSTEM

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 7

HURON CONSULTING



NOTE: THIS MAP PROVIDES A GENERAL REPRESENTATION OF THE TOWN'S WATERSHEDS

DATE: MAY 2011

SCALE: 1"=2000'

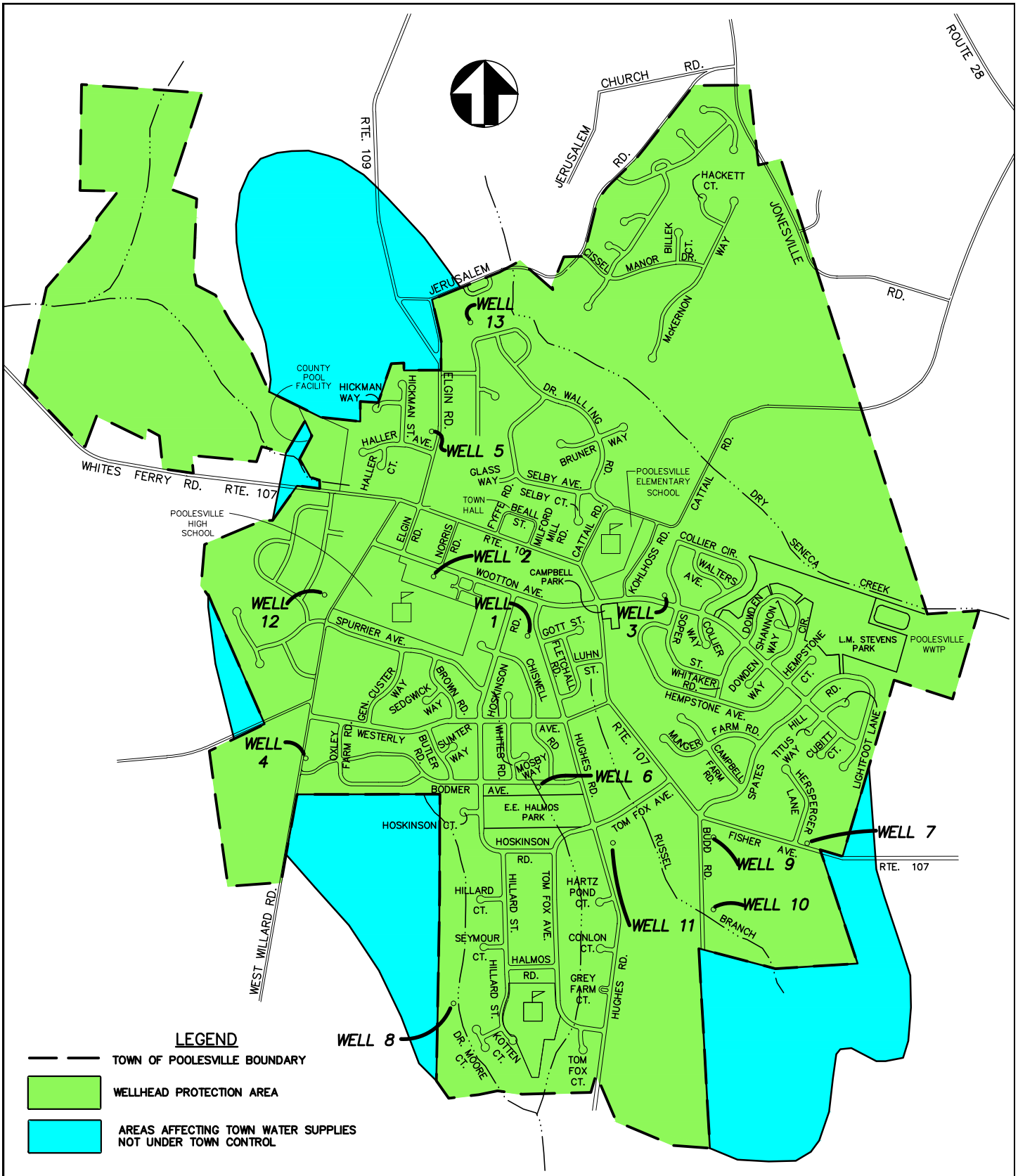
0' 1000' 2000'

WELL WATERSHEDS

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 8

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

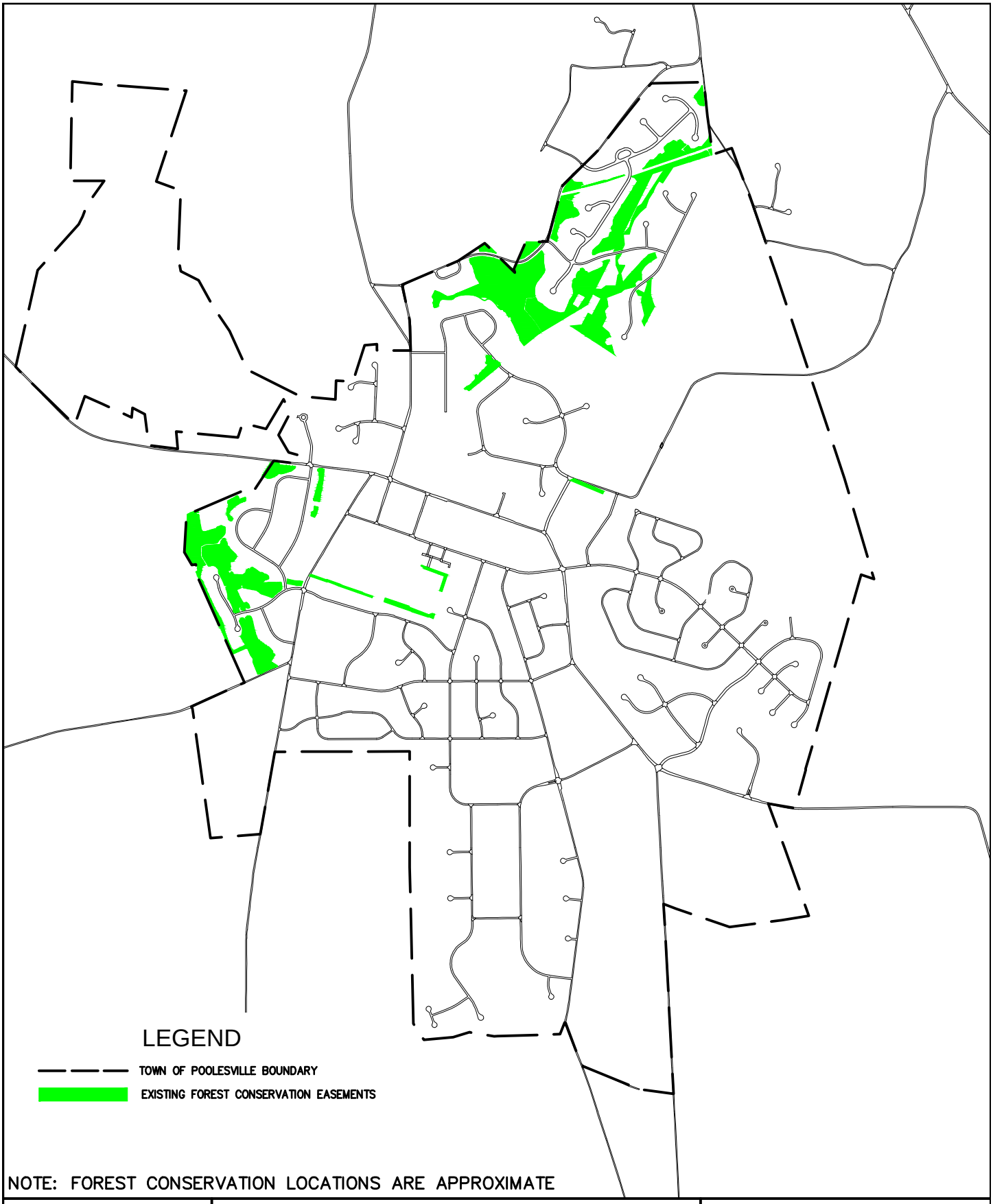
0' 1000' 2000'

TOWN OF POOLESVILLE, MARYLAND
WELL INFLUENCE AREAS

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 9

HURON CONSULTING



NOTE: FOREST CONSERVATION LOCATIONS ARE APPROXIMATE

DATE: MAY 2011

SCALE: 1"=2000'

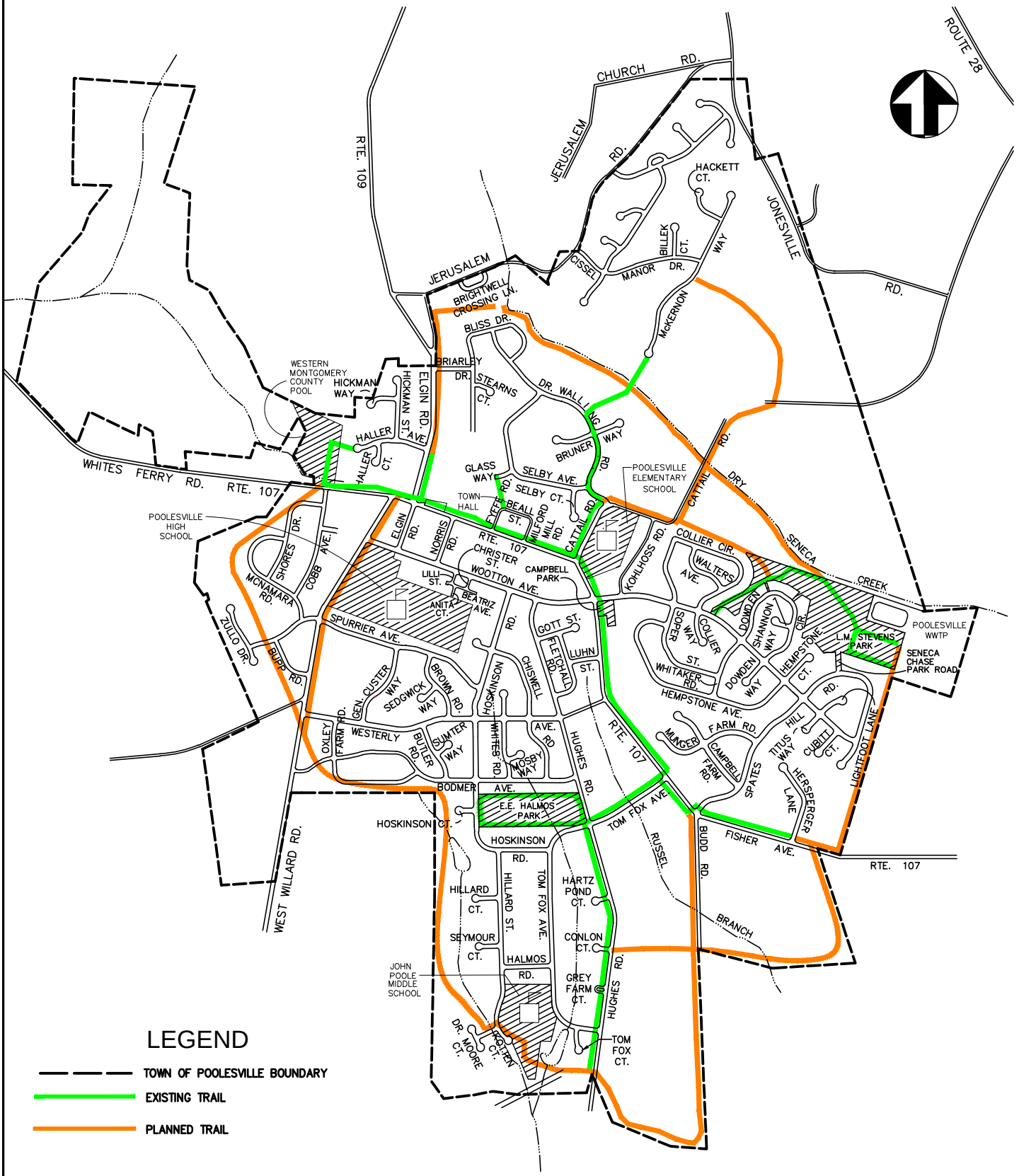
0' 1000' 2000'

APPROXIMATE LOCATION OF FOREST CONSERVATION EASEMENTS

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 10

HURON CONSULTING



NOTE: TRAIL ALIGNMENT ARE CONCEPTUAL ONLY

DATE: MAY 2011

SCALE: 1"=2000'

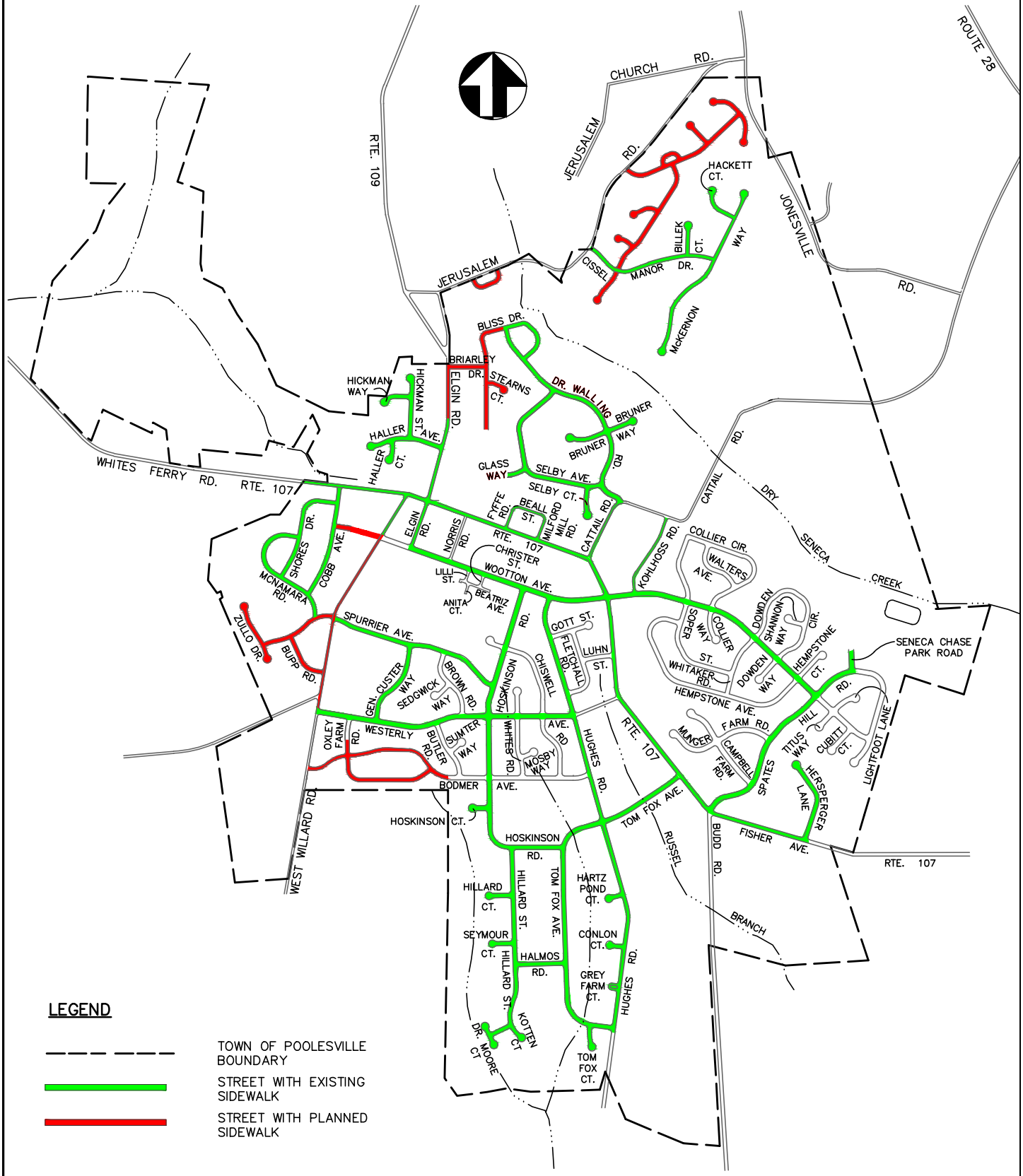
0' 1000' 2000'

PEDESTRIAN AND BICYCLE TRAIL SYSTEM

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 11

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

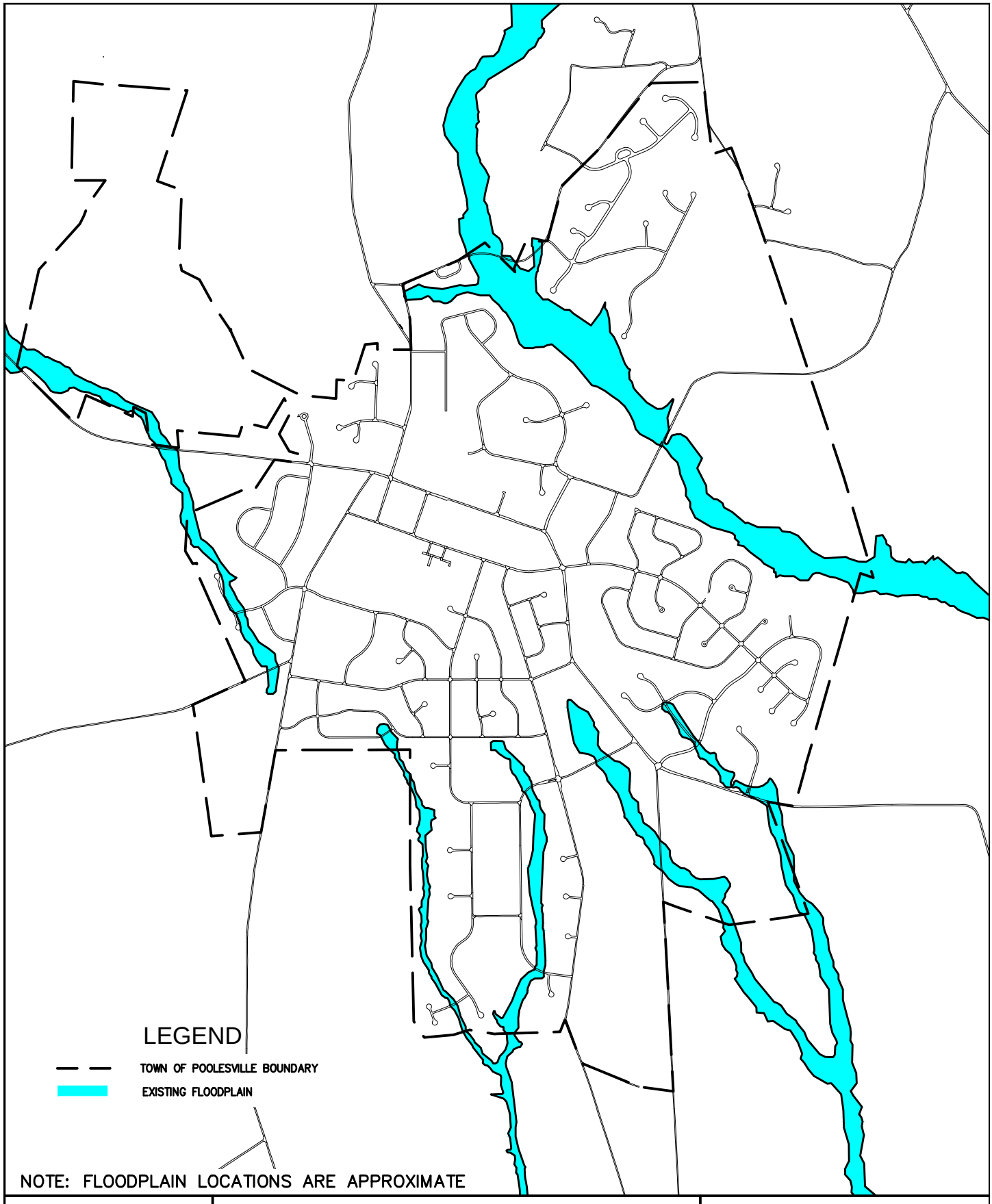
0' 1000' 2000'

EXISTING AND PLANNED SIDEWALK IMPROVEMENTS

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 12

HURON CONSULTING



DATE: MAY 2011

SCALE: 1"=2000'

0' 1000' 2000'

APPROXIMATE LOCATION OF FLOODPLAIN MAP

TOWN OF POOLESVILLE MONTGOMERY COUNTY, MARYLAND MAY, 2011

MAP 13

HURON CONSULTING

Commissioners of Poolesville

Impact Fee Calculations

The impacts fees for the town of Poolesville are calculated based upon well established principles and practices for developing such fees. They are established by first identifying all capital projects that the town plans to execute for the life of the fee determination period – typically the life of the master plan in force at the time. Each project is then examined to determine if there is a rational nexus of the project to planned development. Or in other words, does the development require all or some of the project. Then the share of the project that is attributed to the new development is determined by looking at the benefit provided by the project such as water and sewer capacity or other service, such as the capital portion of recreation or administrative facilities. Benefits are typically analyzed on a capacity measure basis, such as gallons per day for water and sewer, or on a household basis for other services. These benefits are monetized and become part of a net present value calculation that accounts for the time value of money over the life of the plan. It is also important to determine if existing residents benefit from the project and how they are paying for their share of the project to ensure that future residents are not double paying through both impact fees and property tax contributions. The following sections describe how general variables and each category of capital project are handled.

Variables

There are two primary variables that are somewhat exogenous to the model. They are the discount rate and cost escalation. The discount rate is the value the town places on the cost of capital. There are a number of considerations that are taken into account when selecting this variable including the cost of borrowing, opportunity costs, the length of time that the analysis addresses and alternative uses of funds such as tax reduction etc. The federal Office of Management and Budget suggests in their circular A-94 that 4.7% is an appropriate amount for a 20 year analysis period. We use that rate for this analysis.

The second variable – cost escalation – is used to ensure that fees are escalated to reflect the increased construction costs over time and the time value of money. The fees are escalated to ensure that those paying at the end of the period are paying a fair share of the capital improvements relative to those paying in the first years. Since this fee is analogous to a construction cost we use the average annual cost escalation experienced by the Department of Defense for its construction program for the period 2000 through 2007 which is 1.7%.

Poolesville Impact Fee Calculation Model

Developed for and provided to the Commissioners of Poolesville for their use only. Any other disclosure or use must be approved by the author.

Scenario: 30 Houses per Year Beginning 2009 5/12/2009

Variables

Discount Rate	2.0%
Cost Escalation	1.7%

Calculated Impact Fee Beginning In 2003 $10,588

NPV of Benefits =	$4,532,117
NPV of Impact Fees =	$4,532,117
NPV Benefits - NPV Impact Fees =	$0

Summary Statistics

Total Impact Fees Collected	$5,270,937
Legacy Impact Fees & Proffers	$1,679,640
Total Capital Projects Impact Fee Eligible & None Impact Fee Eligible	$11,908,386
Town Required Capital Funding	$4,957,809

Impact Fees by Year

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Residential	$10,588	$10,768	$10,951	$11,137	$11,326	$11,519	$11,715	$11,914	$12,116	$12,322	$12,532	$12,745	$12,962	$13,182	$13,406	$13,634	$13,866	$14,102	$14,341	$14,585	$14,833	$15,085
Commercial per 1,000 Gal.	$25,277	$25,706	$26,143	$26,588	$27,040	$27,499	$27,967	$28,442	$28,926	$29,418	$29,918	$30,426	$30,943	$31,469	$32,004	$32,549	$33,102	$33,665	$34,237	$34,819	$35,411	$36,013

Scenario: 30 Houses per Year Beginning 2009

Project	% New Impact Fee Eligible	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Recreation																									
Trails (1)	0%						$560,000																		
Northern Quad (2)	100%				$100,000	$700,000																			
Community Center/Skate Park (14)	20%	$279,844																							
ADA Parks (3)	0%	$300,000																							
Sub-total Impact Fee Eligible		$56,161	$0	$0	$100,000	$700,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$781,455	17%
Public Facilites																									
Public Meeting Facility (4)	19%	$1,319,546																							
Sub-total Impact Fee Eligible		$251,573	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$246,640	5%
Streetscape (5)	0%				$350,000			$350,000																	
Sub-total Impact Fee Eligible		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0%
Water Supply																									
Wells 9& 10 (6)	0%	$1,073,000																							
Future Well 11 (7)	0%			$750,000																					
Future Well 12 (8) 103,680 GPD	100%		$525,000																						
Future Well 13 (9) 73,440 GPD	100%		$525,000																						
Future Well 14 (10) 48,960 GPD	100%						$525,000																		
Future Well 15 (11) 69,120 GPD	100%								$800,000																
Sub-total Impact Fee Eligible		$0	$1,050,000	$0	$0	$0	$525,000	$0	$800,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,158,204	48%
Sewer/WWTP (12)	100%	$1,286,591																							
I&I Capacity Creation (13)	10%	$846,302																							
Sub-total Impact Fee Eligible		$1,372,733	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,345,817	30%
Roads	0%																								
Sub-total Impact Fee Eligible		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0%
Other																									
Sub-total Impact Fee Eligible		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	0%
Total Impact Fee Eligible		$1,680,467	$1,050,000	$0	$100,000	$700,000	$525,000	$0	$800,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,532,117	

Notes:
1. Trails will benefit residents equally and therefore are part of normal town capital budgets.
2. North Quad park will provide additional capacity to support new town residents.
3. ADA parks will benefit residents equally and therefore are part of normal town capital budgets.
4. Public facility will provide new administration facility and public meeting space. It is the proportion of new households to total households adjusted by 5% to reflect activity to support commercial enterprises.
5. Streetscape will benefit residents equally and therefore are part of normal town capital budgets.
6. For existing residents
7. Redundancy for current residents.
8. All additional capacity would support new growth.
9. All additional capacity would support new growth.
10. All additional capacity would support new growth.
11. Fulfills capacity shortfall of 39,398 GPD needed to support new growth.
12. Expansion/upgrade increased permitted capacity by 125,000 GPD with a shortfall of 25,528 GPD to be met by an outyear project.
13. The pro-rata share of the I&I capacity created above the 2006-2008 average flows credited for proffers.
14. New resident share of the land and initial development funding paid for in total by existing town residents.

Required residential water capacity this plan: 246,000 GPD

Required residential sewer capacity this plan: 133,250 GPD

Required commercial water capacity this plan: 14,678 GPD

Required commercial sewer capacity this plan: 14,678 GPD

2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total New Units
30	30	30	30	30	30	5	0	0	0	0	0	0	0	410
$12,116	$12,322	$12,532	$12,745	$12,962	$13,182	$13,406	$13,634	$13,866	$14,102	$14,341	$14,585	$14,833	$15,085	
$28,926	$29,418	$29,918	$30,426	$30,943	$31,469	$32,004	$32,549	$33,102	$33,665	$34,237	$34,819	$35,411	$36,013	
$363,495	$369,674	$375,959	$382,350	$388,850	$395,460	$67,031	$0	$0	$0	$0	$0	$0	$0	
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
$3,291,613	$3,661,287	$4,037,246	$4,419,596	$4,808,446	$5,203,906	$5,270,937	$5,270,937	$5,270,937	$5,270,937	$5,270,937	$5,270,937	$5,270,937	$5,270,937	
$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	$4,855,467	
-$1,563,853	-$1,194,179	-$818,220	-$435,871	-$47,021	$348,439	$415,470	$415,470	$415,470	$415,470	$415,470	$415,470	$415,470	$415,470	

Scenario: 30 Houses per Year Beginning 2009

Note: Capital projects in the uses of funds section include all project costs not just those that are impact fee eligible.

Estimated Sources of Funds		**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	
Impact Fee Revenues		$158,818	$323,036	$378,854	$673,185	$339,793	$345,569	$351,444	$357,419	$363,495	$369,674	$375,959	$382,350	$388,850	$395,460	$67,031	$0	$0	$0	$0	$0	$0	$0	
Existing W&S Fee Balance	$65,474	$65,474																						
Existing Public Facility Fee Balance	$192,916	$192,916																						
Winchester WWTP Proffer	$750,000	$750,000																						
Winchester Water Proffer	$350,000	$350,000																						
Elgin/Kettler Water or Sewer Proffer	$221,250	$221,250																						
Elgin/Kettler WWTP Proffer	$100,000	$100,000																						
Total	$1,679,640																							
Estimated Uses of Funds																								
Recreation		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Trails (1)		$0	$0	$0	$0	$0	$560,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Northern Quad (2)		$0	$0	$0	$100,000	$700,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Community Center/Skate Park (14)		$279,844	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
ADA Parks (3)		$300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Public Facilites		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Public Meeting Facility (4)		$1,672,175	$0	$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Streetscape (5)		$0	$0	$0	$350,000	$0	$0	$350,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Water Supply		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Wells 9& 10 (6)		$1,073,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Future Well 11 (7)		$0	$0	$750,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Future Well 12 (8) 103,680 GPD		$0	$525,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Future Well 13 (9) 73,440 GPD		$0	$525,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Future Well 14 (10) 48,960 GPD		$0	$0	$0	$0	$0	$525,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Future Well 15 (11) 69,120 GPD		$0	$0	$0	$0	$0	$0	$0	$800,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Sewer/WWTP (12)		$1,352,065	$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
I&I Capacity Creation (13)		$2,046,302	$0		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Estimated Capital Project Costs		$6,723,386	$1,050,000	$750,000	$450,000	$700,000	$1,085,000	$350,000	$800,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Total Capital Projects $11,908,386
Cumulative Estimated Revenues All Sources		$1,838,458	$2,161,495	$2,540,348	$3,213,534	$3,553,327	$3,898,896	$4,250,340	$4,607,759	$4,971,253	$5,340,927	$5,716,886	$6,099,236	$6,488,086	$6,883,546	$6,950,577	$6,950,577	$6,950,577	$6,950,577	$6,950,577	$6,950,577	$6,950,577	$5,340,927	
Cumulative Estimated Expenditures		$6,723,386	$7,773,386	$8,523,386	$8,973,386	$9,673,386	$10,758,386	$11,108,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	$11,908,386	
Net Cumulative Cash Flow All Sources		-$4,884,928	-$5,611,891	-$5,983,038	-$5,759,852	-$6,120,059	-$6,859,490	-$6,858,046	-$7,300,627	-$6,937,133	-$6,567,459	-$6,191,500	-$5,809,150	-$5,420,300	-$5,024,840	-$4,957,809	-$4,957,809	-$4,957,809	-$4,957,809	-$4,957,809	-$4,957,809	-$4,957,809	-$6,567,459	
Additional Required Capital Funding Over the Life of the Plan	$6,567,459																							

Specific Details on Each Impact Fee

Public Facility Impact Fee

The New Town Hall provides administration and public meeting space. It was sized to reflect the expected growth and was paid for by existing funds with no borrowing. The impact fee portion eligible is the proportion of new households to total households reduced by 5% to reflect the administrative capacity that is used for activities in support of commercial enterprises.

The total cost was $1,659,093. Funding consisted of $189,547 of previously collected Impact Fees and a $150,000 Bond Bill. The balance necessary to complete the project, $1,319,546 was collected tax revenue, of which 19% is Impact Fee eligible.

Wastewater Capacity Impact Fee

The funding of the Waste Water Treatment Plant expansion/upgrade was broken into two specific funding streams. The Maryland Department of the Environment determined that 48% of the total cost was attributed towards the expansion. The upgrade, 52%, was funded through a State grant and Poolesville general funds. All plans, grants and the expansion loan approvals were based on the percentage breakdown.
The overall cost for the construction was $2,816,803. The expansion portion of $1,352,065 was funded through $65,474 of previously collected Impact Fees, General funds and a State loan in the amount of $1,250,000. As Impact Fees are collected, they will repay the State loan.

Using 325GPD per household and WSSC standards for commercial use, 150,528 GPD are required to fulfill the 2002 Water and Sewer Allocation Plan. The expansion/upgrade of the Waste Water Treatment Plant increased the permitted capacity by 125,000 GPD leaving a shortfall to support the new development of 25,528 GPD, which was provided through I&I repairs. The impact fee eligible amount is the pro-rata share of the I&I capacity created above the 2006-2008 average flows (911,000 GPD – 660,201 GPD) credited for proffers which offset some costs.

The total I&I repairs required $2,046,302 of funding. $100,000 from the Elgin Family proffer and $1,100,000 from the Winchester Homes proffer was utilized to fund a portion of the project. Of the $846,302 remaining balance, only 10% is impact fee eligible for created capacity.

Water Supply Impact Fee

The Poolesville Commissioners examined the Town's historical water usage, vulnerabilities and lack of alternate source availability. The Town has had several days over the years in which the existing wells were pumped at capacity for 24 hours straight, resulting in a stressed well field. The Town has also experienced the loss of wells from contamination and increasingly stringent requirements from the MDE. With no alternate

sources available, the Commissioners have determined, for the health and safety of the community, that the well field shall be capable of producing a peak day demand of 600 GPD/household. This results in the adopted policy that existing wells, which meet this peak day demand, are for existing residents; and for new connections, the system shall have additional capability to produce the 600 GPD/household peak day demand.

Following the above water policy, the current Water and Sewer Allocation List requires 265,478 GPD. To meet this requirement, four wells have been identified. The wells are located on the largest development properties and based on past expenditures, engineers estimate that the wells, to be fully developed, will cost a total of $2,375,000.

From an allocation perspective, which follows the MDE guidelines, 100 GPD/person or 325 GPD/household will be used. The additional capacity will remain in reserve for peak days, drought conditions, emergencies and/or fire fighting capabilities.

Recreation Impact Fee

The Town has developed an extensive park system for its current residents. Existing facilities include two large parks, 15 acres and 11 acres, containing baseball fields, soccer fields, pavilions, concession stands, restrooms, tennis & basketball courts and playgrounds. In addition to these large parks, several smaller neighborhood parks have been constructed. To maintain the current level of parks for the new developments, the Master Plan calls for another large parcel park. With developer land constraints, the Planning Commission has allowed the one large park to be broken down into smaller parcels and developed within the larger developments. The construction of the new park system for the new residents is estimated to cost $800,000.

As the Town grows, a need for a community center is evolving. To this end the Town has acquired a parcel of land (parcel 840) for this purpose. The purchase price of $507,844 was funded through a State grant of $288,000 and the balance from general revenues. An additional $60,000 of general revenues was also set aside for the construction of a skatepark, which will be an integral part of the community center development plan. 20% of the $279,844 for the initial purchase and development paid for in total by existing residents will be reimbursed through impact fees.

Notes on Benefit Apportionment e.g. Impact Fee Eligibility

1. The proposed trails will benefit residents equally and will be paid for by all residents through tax revenues as a normal part of the town's budgeting and therefore has no component that is eligible for impact fees.
2. The northern quadrant park will provide additional capacity for new residents and sized to provide those residents the same amenities in close proximity to their homes as other residents of the town and is therefore 100% eligible for impact fees.
3. The ADA park will benefit residents equally and will be paid for by all residents through tax revenues as a normal part of the town's budgeting and therefore has no component that is eligible for impact fees.

4. The new town hall provides administration and public meeting space. It was sized to reflect the expected growth and was paid for by existing funds with no borrowing. The portion impact fee eligible is the proportion of new households to total households reduced by 5% to reflect the administrative capacity that is used for activities in support of commercial enterprises.
5. Streetscape improvements will benefit residents equally and therefore are part of normal town capital budgets and not impact fee eligible
6. Wells 9 and 10 are to provide redundancy for existing town residents consistent with the Town's policy and therefore not eligible for impact fees.
7. Well 11 is to provide redundancy for existing town residents consistent with the Town's policy and therefore not eligible for impact fees.
8. The capacity from well 12 (103,680 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
9. The capacity from well 13 (73,440 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
10. The capacity from well 14 (48,960 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
11. The capacity from well 15 (69,120 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
12. The expansion/upgrade of the waste water treatment plant increased permitted capacity by 125,000 GPD leaving a shortfall to support the new development of 25,528 GPD to be met by another project.
13. The 25,528 GPD was provided through I&I repairs. The impact fee eligible amount is the pro-rata share of the I&I capacity created above the 2006-2008 average flows (911,000 GPD – 660,201 GPD) credited for proffers which offset some costs.
14. The new resident share of the land and initial development funding paid for in total by existing town residents is impact fee eligible. That amount is the ratio of new households planned (410) to total existing households (1,633) times the total cost of land less grants ($507,844- $288,000) plus set aside development funds of $60,000.