Preliminary Consultation
MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	Various Addresses, Brookeville	**Meeting Date:**	3/11/2020
Resource:	**Brookeville Historic District**	**Report Date:**	3/4/2020
Applicant:	Town of Brookeville **(William Gaskill, Agent)**	**Public Notice:**	2/26/2020
Review:	Preliminary Consultation	**Tax Credit:**	No
Case Number:	N/A	**Staff:**	Michael Kyne
PROPOSAL:	Street paving		

STAFF RECOMMENDATION:

Staff recommends that the applicant make revisions based upon the HPC's comments and return with a HAWP application.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Brookeville Historic District
DATE: N/A

Statement of historic significance, as summarized by staff:

> The Town of Brookeville is a rural town in northeastern Montgomery County, approximately 18 miles from Washington, D.C. The Town was founded by Richard Thomas in 1794 and by the early 19th century had become a center of commerce. With the advent of the automobile in the early 20th century, the Town's commercial success declined. Despite the encroachment of later suburban development, the Town remains a unique collection of structures, which exhibit a variety of architectural styles. The houses within the Brookeville Historic District retain their historic relationship to one another and to the roadways. The historic district is accessed via Georgia Avenue (High Street) from the south and northwest and via Market Street from the east. The Brookeville Historic District was designated in 1985, with its boundaries coinciding with the Town's boundaries.

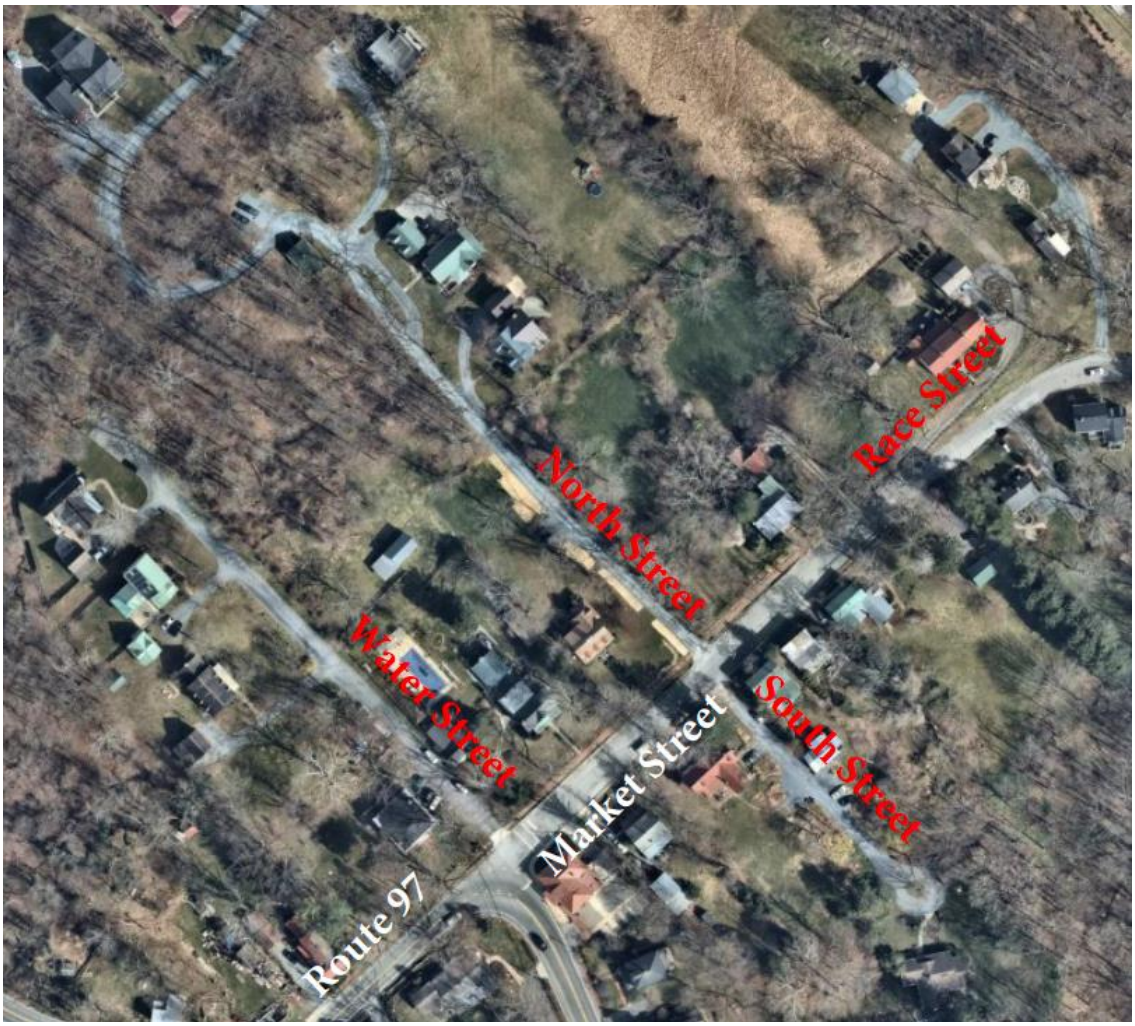


Fig. 1: Project map, as provided by the applicant.

PROPOSAL

The applicant proposes to resurface four (4) side streets within the historic district.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Brookeville Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the *Brookeville Historic District Master Plan Amendment,* the *Town of Brookeville Updated Comprehensive Plan*, the *Montgomery County Code Chapter 24A (Chapter 24A*), and *the Secretary of the Interior's Standards for Rehabilitation (Standards)*. The pertinent information in these documents is outlined below.

Town of Brookeville Updated Comprehensive Plan (see attached).

Sec. 24A-8. Same-Criteria for issuance.

(a) The commission shall instruct the director to deny a permit if it finds, based on the evidence and information presented to or before the commission that the alteration for which the permit is

sought would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic site or historic resource within an historic district, and to the purposes of this chapter.

(b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

(1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or

(2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or

(3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or

(4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or

(5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; [emphasis added] or

(6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.

(b) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.

(d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (*Ord. No. 9-4, § 1; Ord. No. 11-59.*)

Secretary of Interior's Standards for Rehabilitation

The Secretary of the Interior defines rehabilitation as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values." *Standards #2* and *#9* most directly apply to the application before the commission:

#2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

#9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

STAFF DISCUSSION

The applicant proposes to resurface four (4) side streets – North Street, South Street, Water Street, and Race Street - within the Brookeville Historic District (the boundaries of which coincide with the boundaries of the Town of Brookeville). The side streets in the Town were originally unimproved rights-of-way, which provided views of the side and rear yards of houses fronting on the primary streets. Recently, however, infill construction has occurred on North Street and Water Street.

Currently, the streets in the Town are surfaced with the following:

Gravel

North Street (side street)
South Street (side street)
Water Street (side street)

Asphalt

Race Street (side street)
Georgia Avenue (primary street)
Market Street (primary street)
Church Street (side street)

The applicant is considering two options for the proposed side street resurfacing:

- Asphalt (hereafter Option A)
- Tar and Chip/Double Chip Seal (Option B).

Regarding street surfacing, the *Town of Brookeville Updated Comprehensive Plan*, which was last updated in October 2010, states the following:

> With regards to the treatments for the actual travel surfaces, the primary streets will remain in asphalt paving, but the recommended surface for the balance of the Town's secondary streets and lanes should be dependent on the number of units served and the primary (vehicular or pedestrian) use. Because of the limited range of travel anticipated, the Town should establish appropriate cross sections and explore more environmentally friendly options such as permeable paving materials, gravel or other porous materials for vehicular travel ways on a case-by-case basis at the time improvement is needed.

Although the Comprehensive Plan recommends permeable paving materials or gravel for side streets, the applicant has provided the following justification for the proposed new surfacing materials (cited verbatim from the applicant's proposal):

- Safety is compromised for pedestrians walking due to constant uneven/slippery street surfaces. There is a walking trail that connects North Street and Water Street and many residents use this loop to walk (dogs, strollers, children, etc.) and have complained of tripping hazards.

- Increased vehicular traffic over the years due to new homes/residents and surge of truck/heavy service vehicles (i.e. FedEx, UPS, trash, recycle, home maintenance, etc.) exceeds the designed limitations of gravel.

- The years of constant re-grading/re-surfacing coupled with the high rate of compaction due to

traffic has left a substrate this is no longer pervious to water causing accelerated erosion and deterioration of the gravel top layer.

- The maintenance requirements of the gravel streets have become excessive to keep up with the necessary repairs. The gravel top surface is generally washed out within weeks following resurfacing and large potholes form continuously throughout the year. The town has spent nearly $100K over the last 9 years to maintain these streets: however, they are in worse condition now than 9 years ago.
- The nearly continuous resurgence of potholes (even just weeks following resurfacing) causes traffic to divert around them creating the streets to widen into residents' properties and town easements.

- Climate change has created a situation where unusually heavy and frequent rains cause erosion of the surface throughout the year. The eroded surface often ends up in neighbors' properties, sidewalks and Market Street.

- Snow removal is not practical with the gravel streets. The town's snow removal contractor cannot plow the street clear without destroying the surface and creating piles of gravel on the sides.

- Residents complain about the high levels of mud (due to the gravel surface being continuously washed out with standing water), dust (during dry periods), and damage to vehicles from the potholes.

In 2015-16, the applicant worked with PSI Engineering, Consulting, and Testing (PSI) to conduct an evaluation of the existing pavement for Market Street as well the surfaces for North Street, South Street, and Water Street. The evaluation concluded that South Street and Water Street were in generally fair condition, while North Street showed significant distress. PSI recommended that North Street, South Street, and Water Street be repaired, graded, compacted, and surfaced with a double chip seal (see Page 33 for full recommendations). PSI's recommendation is consistent with the applicant's proposed Option B.

Staff is generally supportive of the applicant's proposal. Specifically, staff finds the proposed Option B for North Street, South Street, and Water Street to be compatible with the character of the streetscape and historic district as a whole. Staff also supports the proposal to replace the deteriorated asphalt paving on Race Street to be consistent with the proposed surfacing on the other side streets.

Staff previously recommended that the applicant evaluate tar and chip surfacing with a high aggregate content at other historically designated properties in Montgomery County, including Woodlawn (Master Plan Site #28/14). Per the information provided in the proposal, staff understands that the example at Woodlawn would not be satisfactory to the applicant, due to the steep slopes of the side streets. The applicant has stated that, opposed to the loose exposed aggregate on solid tar at Woodlawn, the exposed aggregate proposed for the side streets would need to be compacted into the tar to minimize washing out during heavy rains.

Staff asks the Commission to consider the information provided in the applicant's proposal, including the recommendation of PSI, and to provide further guidance to minimize any potential for the proposal to detract from the character-defining features of the Brookeville Historic District, in accordance with *Standards #2* and *#9.*

STAFF RECOMMENDATIONS

Staff recommends that the applicant make revisions based upon the HPC's comments and return with a HAWP application.

[redacted]

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Email: william.gaskill@gmail.com Contact Person: William Gaskill

Daytime Phone No.: 202-257-0232

Tax Account No.: 30119193

Name of Property Owner: Town of Brookeville Daytime Phone No.: _____

Address: P.O. Box 67 Brookeville MD 20833

Contractor: _____ Phone No.: _____

Contractor Registration No.: _____

Agent for Owner: _____ Daytime Phone No.: _____

LOCATION OF BUILDING/PREMISE

House Number: _____ Street: Water St, North St, South St, Race St

Town/City: Town of Brookevile Nearest Cross Street: _____

Lot: _____ Block: _____ Subdivision: _____

Liber: _____ Folio: _____ Parcel: _____

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

CHECK ALL APPLICABLE:

☐ Construct ☐ Extend ☒ Alter/Renovate ☐ A/C ☐ Slab ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed

☐ Move ☐ Install ☐ Wreck/Raze ☐ Solar ☐ Fireplace ☐ Woodburning Stove ☐ Single Family

☐ Revision ☐ Repair ☐ Revocable ☐ Fence/Wall (complete Section 4) ☒ Other: Road Resurfacing

1B. Construction cost estimate: $ $100,000

1C. If this is a revision of a previously approved active permit, see Permit # _____

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENSIONS/ADDITIONS

2A. Type of sewage disposal: 01 ☐ WSSC 02 ☐ Septic 03 ☐ Other: _____

2B. Type of water supply: 01 ☐ WSSC 02 ■ Well 03 ☐ Other: _____

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height ___ ___ ___ feet ___ ___ ___ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

☐ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of owner or authorized agent 2/20/2020 *Date*

Approved: _____ *For Chairperson, Historic Preservation Commission*

Disapproved: _____ Signature: _____ Date: _____

Application/Permit No.: _____ Date Filed: _____ Date Issued: _____

Edit 6/21/99

SEE REVERSE SIDE FOR INSTRUCTIONS

First Name	Last Name	Business Name	Address
Jennier	Roy		108 Water St
Nicholas	Roy		108 Water St
Marti	Andress		106 Water St
Jeffrey	Johnson		106 Water St
Beth	Anderson		104 Water St
Garrett	Anderson		104 Water St
Iris	Stratton		1 South St
Donald	De Wall		1 South St
Allison	Moffett		1 North St
Bryan	Moffett		1 North St
Bill	Gaskill		2 North St
Patience	Gaskill		2 North St
Teresa	Pollock		4 North St
Matt	Pollock		4 North St
Teresa	Meeks		9 North St
Fred	Teal		9 North St
Mark	Davis		13 North St
Nathalie	Davis		13 North St
Suzanne	Friis		17 North St
Mark	Friis		17 North St
			198 Market St
Connie	Angiuli		200 Market St
Scott	Penland		200 Market St
Phyllis	Millard		202 Market St
Andrea	Scanlon		203 Market St
Chris	Scanlon		203 Market St
Bruce	Evans		204 Market St
Toni	Evans		204 Market St
Duane	Heiler		205 Market St
Sandra	Heiler		205 Market St
Daniel	Heyman		206 Market St
Kim	Heyman		206 Market St
Warren	Ferris		207 Market St
Renee	Moneyhun		207 Market St
Miche	Booz		208 Market St
Diane	Teague		208 Market St
Michael	Acierno		209 Market St
Harper	Pryor		209 Market St
Brooke	Curley		210 Market St
Patrick	Curley		210 Market St
Harry	Montgomery		211 Market St
Karen	Montgomery		211 Market St
Todd	Van Gelder		212 Market St
Chris	Haris		301 Market St
Micole	Haris		301 Market St

Arun	Deonarain		306 Market St
Stephanie	Deonarain		306 Market St
Dee	Heritage		307 Market St
Mike	Oestreich		308 Market St
Sara	Oestreich		308 Market St
Deeds	Wells		309 Market St
Hannah	Kerr		310 Market St
Steff	Kerr		310 Market St
Deeds	Wells		311 Market St
Barbara	Achstettes		312 Market St
Jeff	Issokson		313 Market St
Margaret	Kay		313 Market St
Joanne	Keister		314 Market St
Anne	Ennes		316 Market St
Mark	Ennes		316 Market St
William	Kiniry		318 Market St
Suzanna	Moreau		318 Market St
Harry	Kass	Kass Design & Build	1 High St
Gabriela	Van Sickle		2 High St
Matt	Van Sickle		2 High St
Robert	Johnson		3 High St
		Brookeville Academy	5 High St
Barbara	Ray		6 High St
Sue	Shorb-Sterling		8 High St
Charles	Sterling		8 High St
Michael	Murphy		9 High St
		Orndorff Hall	10 High St
		Salem United Methodist Church	12 High St
Mary Kay	Spagnolo		14 High St
Andrew	Spagnolo		14 High St
Tim	Hussman		15 High St
Julie	Hussman		15 High St
Lori	Laughlin		16 High St
Daniel	Laughlin		16 High St
Taddeo	Kintu		18 High St
Tiona	Kintu		18 High St
Cate	McDonald		20 High St
Roland	Bowker		22 High St
Shirley	Bowker		22 High St
Kathy	Hawkins		24 High St
Carmen	Harding		26 High St
Wayne	Harding		26 High St
Stefan	Syski		28 High St
Valerie	Syski		28 High St
Janet	Taylor		19801 Georgia Ave
David	Yinger		19801 Georgia Ave

Becky	Jackson		1 Church St
Mary Ellen	Eaton		1 Church St
John	Seibel		3 Church St
Buck	Bartley		5 Church St
Susan	Bartley		5 Church St
Jane	Bartley		5 Church St
Patricia	Thompson		7 Church St
Donald	Thompson		7 Church St

TOWN OF BROOKEVILLE

REQUEST FOR PRELIMINARY REVIEW FOR PAVING GRAVEL ROADS
North, South, Water and Race Streets

TO: Montgomery County Historic Preservation Commission (HPC)

Michael Kyne,
Planner Coordinator / Historic Preservation Section
Montgomery County Planning Department

From: Town Commissioners

William Gaskill, President of Commissioners
Mark Davis, Town Commissioner
Garrett Anderson, Town Commissioner

February 19, 2020

TABLE OF CONTENTS

Table of Contents

Introduction:

The Brookeville Commissioners are reviewing potential alternatives to resurfacing the streets the town currently maintains. The gravel streets under consideration include North Street, South Street, and Water Street. The Commissioners are also considering to resurface the asphalt paved Race Street, which is severely degraded, to match the new surfaces for North, South, and Water Streets. Figure 1 below shows a map of the town highlighting these streets (Red Text on Street earth view).

Figure 1: Brookeville Gravel Streets Requiring Resurfacing

The primary reason for changing surfaces revolves around the need to move to a more durable and longer lasting material. Other requirements for the consideration in choosing an alternative surface include cost, maintenance, aesthetics, applicability to grading/substrate, and performance with anticipated use. Another

consideration is that the Town is currently working on updating its' Comprehensive Plan that includes goals to improve safety, walkability, and traffic calming measures that are all impacted by the town roads and streets.

The following report details the conditions of the streets as well as the justification for the Commissioner's choices in alternative materials. The town of Brookeville is seeking the preliminary review and recommendation of the Montgomery County Historic Preservation Commission (HPC) in choosing such a material.

Background:

The main reason for changing to a more durable surface centers on the inability of the gravel streets to withstand the changes in the town use and environment that is now reality. Several supporting reasons for these changes are as follows:

- Safety is compromised for pedestrians walking due to constant uneven/slippery street surfaces. There is a walking trail that connects North Street and Water Street and many residents use this loop to walk (dogs, strollers, children, etc.) and have complained of tripping hazards.
- Increased vehicular traffic over the years due to new homes/residents and surge of truck/heavy service vehicles (i.e. FedEx, UPS, trash, recycle, home maintenance, etc.) exceeds the designed limitations of gravel.
- The years of constant re-grading/re-surfacing coupled with the high-rate of compaction due to traffic has left a substrate this is no longer pervious to water causing accelerated erosion and deterioration of the gravel top layer.
- The maintenance requirements of the gravel streets have become excessive to keep up with the necessary repairs. The gravel top surface is generally washed out within weeks following resurfacing and large potholes form continuously throughout the year. The town has spent nearly $100K over the last 9 years to maintain these streets however; they are in worse condition now than 9 years ago.
- The nearly continuous resurgence of potholes (even just weeks following resurfacing) causes traffic to divert around them creating the streets to widen into residents properties and town easements.
- Climate change has created a situation where unusually heavy and frequent rains cause erosion of the surface throughout the year. The eroded surface often ends up in neighbors' properties, sidewalks and Market Street.
- Snow removal is not practical with the gravel streets. The town's snow removal contractor cannot plow the street clear without destroying the surface and creating piles of gravel on the sides.
- Residents complain about the high levels of mud (due to the gravel surface being continuously washed out with standing water), dust (during dry periods), and damage to vehicles from the potholes.

The photographs provided in Attachment (1) support the facts listed above.

Cost:

The current rate of necessary repairs (approximately every 2 months) and resurfacing of the streets (approximately 2 times per year) to mitigate the issues discussed above is not cost effective over the long term. The Town currently budgets $20,000 per year on street maintenance to include Market, North, South and Water Streets[1]. Additionally, as shown in Figure 2, the town expenditures for maintenance of just North, South, and Water Streets (i.e. gravel) over the last 9 years shows the trend in growing repair costs without any improvement being realized.

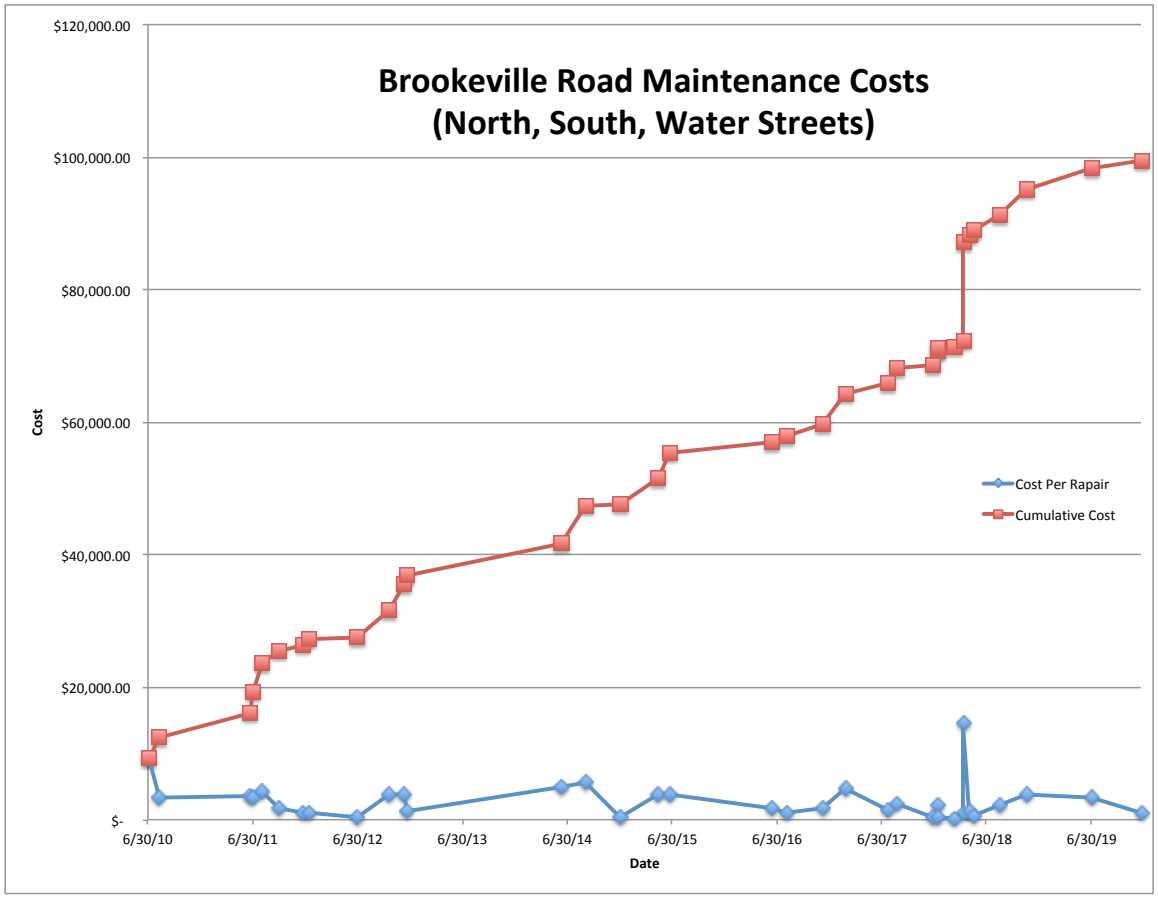


Figure 2: Brookeville Maintenance Costs for North, South, and Water Streets

The town has been making continuous short-term repairs that are not improving the condition of its streets. As discussed in the following section, the need to make investments that make lasting, long-term improvements to our streets and roads is imperative to support the community.

[1] Based on Town of Brookeville Annual Budget FY 2019-2020

Current Condition of Streets:

Photos provided in Attachment (1), of the current condition of the subject streets depict a state of poor repair causing both pedestrian and vehicular safety risks. This is after the town recently paid $4,320 on July 3rd and December 20, 2019 for repairs. Clearly, the gravel surfaces are not appropriate for the town's use. In addition to the gravel streets, the town is also looking to resurface Race Street. As shown in Attachment (1), Race Street is currently an asphalt-paved street that is severely degraded. It provided access to two homes and the town would like to resurface it to match the other streets when completed.

Arguments in keeping with the gravel surface have involved concerns in maintaining the Town's historic character. However, the town of Brookeville does not currently have a consistent street surface material utilized throughout with a mix of concrete, asphalt pavement and gravel. For example, Market Street, Church Street, Race Street, and the apron areas of North and South Streets, shown in Figures A-1 and A-7 of Attachment (1), are paved, along with several private driveways. Additionally, concrete is also utilized throughout the town.

Recommended Surfaces:

As a result of the towns deteriorating streets and roads, CPH Engineers, Inc. (CPH) was procured in 2015 to conduct an evaluation to remediate Market Street. The work to remediate Market Street will be conducted under a State of Maryland Board of Public Works Grant with design work beginning in 2020. As part of their survey efforts, CPH initiated a sub-consultant, PSI Engineering, Consulting and Testing (PSI), to conduct an evaluation of the existing pavement for Market Street, as well the surfaces for North, South, and Water Streets. The report detailing PSI's findings is provided in Attachment (2). A few items to note about this report are that one; the photographs of the roads from 2015/2016 are very similar to those taken recently in Attachment (1). Clearly the Town's work to continuously resurface, re-grate, and repair the gravel is not working. Secondly, as detailed in *Option 3* of the report, with respect to North, South and Water Streets, a more robust surface is necessary. PSI recommended the town consider installing a "Double Chip Seal" Tar and Chip street surface.

At this time, given the points discussed above, the Commissioners are considering the following surfaces for North, South, Water, and Race Streets:

1. Asphalt – Asphalt would be an attractive, long lasting solution with potentially 12+ years service life given regular maintenance to include isolated patching and bi-annual seal coating. Asphalt also has increased durability to support heavy loads over tar and chip.

2. Tar and Chip (Double Chip Seal) – Tar and Chip can have up to 10 year service life, has the natural look of a gravel street, is approximately 40% less costly than asphalt to install, requires less maintenance than asphalt (no need for regular sealing), offers improved traction (rough surface), and can be driven on immediately following application (unlike asphalt). Tar and Chip includes many options, to include Exposed Aggregate and other surface layers/appearances.

Regardless of the option of surface selected, no tree removal will be required given the work would just involve resurfacing the existing roads.

One example the town has evaluated in consideration for Tar and Chip options is the road surface found at Woodlawn Manor Barn road and parking lot in nearby Sandy Spring, MD. Figure 3 provides some photos of the current installation. The one issue with this surface is that the chip surface is very loose (with solid tar underneath) which will not work on the steep inclines on North, South and Race Streets. Should Tar and Chip be selected as the new surface, the chip/exposed aggregate will need to be compacted firm into the tar to minimize washout during heavy rain.

Figure 3: Woodlawn Manor Barn Road and Parking Lot – Tar and Chip Options

Pending recommendations from the HPC if the above options would be acceptable, the Town of Brookeville will obtain estimates to identify the potential options that meet the referenced requirements. The final estimate choices will be provided for review and approval.

Conclusion:

To conclude, the Commissioners of Brookeville feel strongly that the need to upgrade the gravel streets the town currently maintains to a more durable pavement material in necessary. As such, the town is seeking a preliminary review and recommendation of a surface type from the HPC before we embark in obtaining formal proposals/estimates.

Attachment (1): Photographs of North, South, and Water Streets (As of 2/16/20)

North Street Photographs

Figure A-1: Approx. 8 ft. of North Street Apron is Asphalt Pavement (Deteriorated)

Figure A-2: Entrance of North Street showing Significant Erosion and Ruts

Figure A-3: Significant North Street Potholes and Ruts Along Street

Water Street Photographs

Figure A-4: Approximately 10 ft. of Water Street Apron is Concrete

Figure A-5: Entrance of Water Street showing Significant Erosion and Potholes

Figure A-6: Significant Water Street Erosion Along Street

South Street Photographs

Figure A-7: Approx. 18 ft. of South Street Entrance is Asphalt Pavement (Deteriorated) with Approx. 4 ft. of Concrete Apron

Figure A-8: Significant South Street Erosion Washing Into Wooded Area

Race Street Photographs

Figure A-9: Significant Cracking and Uneven Pavement/Asphalt of Race Street

Attachment (2): PSI Pavement Evaluation Report Dated March 3, 2016

Information To Build On
Engineering • Consulting • Testing
Celebrating 40 Years in the D.C. Metro Area

PAVEMENT EVALUATION REPORT

TOWN OF BROOKEVILLE STREET REPAIR
Market Street, North Street, South Street, & Water Street
Brookeville, Maryland 20833

PSI Project No: 0426120

Prepared For:
Mr. Joshua Bryant, P.E., LEED AP, Vice President/Associate
CPH Engineers, Inc.
4321 Forbes Boulevard
Lanham, MD 20706

March 3, 2016

Information To Build On
Engineering • Consulting • Testing
Celebrating 40 Years in the D.C. Metro Area

March 3, 2016

Mr. Joshua Bryant, P.E., LEED AP, Vice President/Associate
CPH Engineer, Inc.
4321 Forbes Boulevard
Lanham, MD 20706

Re: Pavement Evaluation Report
Town of Brookeville Street Repair
Pavement Testing and Subgrade Observations
Market Street, North Street, South Street, & Water Street
Brookeville, MD 20833
PSI Project No: 0426120

Dear Mr. Bryant:

As requested, PSI has conducted an evaluation of the existing pavement for Market Street and intersecting neighborhood roads, North Street, South Street, and Water Street, in the Town of Brookeville, Maryland. This report presents the results of the exploration, as well as opinions and recommendations.

Mr. Joshua Bryant of CPH Engineers, Inc. (CPH) authorized our services on January 12, 2016, by means of a signed CPH Subconsultant Agreement dated December 15, 2015, referencing PSI Proposal 0426161997, dated December 15, 2015.

PSI was provided with a site plan indicating the existing building and roadway locations, and approximate locations of the total area to be examined (no title block or date).

PROJECT DESCRIPTION

We understand that CPH Engineers, Inc. plans to remediate an approximately 2,000 linear foot span of roadway located at North Street, Water Street, and Market Street in the Town of Brookeville, Maryland. North Street and Water Street are currently paved with gravel, and Market Street is currently paved but with considerable patching and a need for repaving. New pavement shall be with tar and chip.

Based on site reconnaissance, we understand that the asphalt within the roadway areas associated with the above referenced site is showing signs of distress and/or failure. It is also apparent that some previously distressed areas have been repaired by patching. We understand that several patching efforts have been performed along Market Street over the last few decades, leaving an inconsistent pattern of asphalt, concrete, and brick. The neighborhood roads are not paved or patched, but contain similar inconsistent patterns of gravel and concrete.

The information presented in this section was utilized in this engineering analysis. Therefore, if any of the noted information is incorrect or has changed, please inform PSI so that we may amend the recommendations presented in this report, if appropriate or necessary.

PURPOSE AND SCOPE OF SERVICES

The purpose of this evaluation was to document pertinent information regarding asphalt, base course stone and subgrade conditions at the site in order to provide opinions and recommendations regarding the existing parking and roadway conditions. For this project, the following scope of services was performed:

- Made a site reconnaissance to observe and document the existing pavement conditions at the site.
- Performed a total of 5 asphalt cores within the existing roadway areas (two on Market Street, one each on other streets).
- Measured and recorded the existing asphalt and base course thicknesses.
- Performed dynamic cone penetrometer (DCP) testing at each of the core locations using a DCP to check the general stability of the existing subgrade.
    - *The test involves first seating the conical point of the penetrometer 2 inches into the bearing materials to assure that the point is completely embedded. The conical point is then driven an additional 1¾ inches. The penetrometer reading is the number of blows required to drive the conical point 1¾ inches. The point is typically driven two 1¾-inch increments after being seated, and the readings are recorded. The average of the two readings is the DCP resistance. When properly evaluated, the penetrometer test results can provide an index for estimating soil strength and relative density.*
- Patched the core locations with asphalt "cold patch" after the necessary information was collected.
- Prepared a test log for each test location and a test location diagram indicating the approximate location of the testing.
- Conducted an engineering evaluation of the available data to provide opinions and recommendations regarding probable causes for the observed distress, existing pavement thickness, typical pavement sections for the provided traffic loading, and repair options.
- Prepared this engineering report presenting the collected data, test logs, observations and recommendations.

OBSERVATIONS AND FINDINGS

The subject site considered in this geotechnical evaluation encompasses the asphalt and gravel roadway areas associated with Market Street, North Street, South Street, and Water Street. The evaluation and observations were made by Mr. Nicholas Mansourimoaied, EIT of PSI on February 1 and 2, 2016.

The majority of the car traffic was observed to be accommodated by private driveways, with very few vehicles parked along the roadways. No parking accommodations appeared necessary for larger vehicular traffic, such as delivery trucks, tractor trailers, trash trucks, etc.

Market Street (Cores C-1 and C-2) is paved with asphalt and shows significant distress. Market Street has several patches and variance in pavement thickness due to patches. Patched and non-patched areas all show frequent signs of moderate to high severity alligator cracking. High severity longitudinal and transverse cracking were observed along the vehicle lanes of Market Street. High severity fatigue cracking was seen atop a marked utility line. Severe rutting was observed along the eastbound lane, with the depression exposing the concrete curb with a thin layer of asphalt on top.

South Street (Core C-3) is a gravel roadway in generally fair condition. The 1-lane roadway has low severity rutting in the wheel paths. However, this was likely caused by snow removal efforts the previous week. There was minimal washboarding observed, creating isolated areas of drainage issues, but the roadway primarily had a stable, compact surface. Auger refusal was encountered at an approximate 1.0’ depth, due to either rock or a previous layer of pavement.

Water Street (Core C-4) is also a gravel roadway in generally fair condition as well. More rutting than that of South Street was observed in the wheel paths, and a similar amount of washboarding was observed. Drainage issues resulting in pooled water exist in one of the wheel paths, although this was amplified due to previous snowfall. Auger refusal was encountered at an approximate 1.5’ depth, due to either rock or a previous layer of pavement.

North Street (Core C-5) is a gravel roadway that shows significant distress. High severity rutting and potholes were observed along both wheel paths. A large rut exists along the centerline of the roadway that may in part be a result of erosion. Despite auger refusal at an approximate 2.5’ depth, the subgrade soils immediately beneath the surface appear to be causing significant distress issues. Moderate severity alligator cracking exists in an asphalt pavement apron at the transition from Market Street to North Street.

PSI performed a total of 5 asphalt cores with Dynamic Cone Penetrometer testing at the subject site in February 2016. Cores were made through the asphalt pavement on Market Street, but cores were also made through the compacted aggregate of the gravel roads. The average asphalt and base course thicknesses and types of failures observed at each location are shown in the following table. In general, the gravel roads had two different gradations of material with a finer graded surface material overlying a very coarse graded base material.

Table 1: Core Locations and Descriptions

Location	Average Asphalt Thickness (inches)	Average Base Course Thickness (inches)	Type(s) of Failure
Core C-1	6.0	6.0**	Severe Alligator, Transverse, Longitudinal, Fatigue Cracking; Severe Rutting
Core C-2	9.0	6.0**	Severe Alligator, Transverse, Longitudinal, Fatigue Cracking; Severe Rutting
Location	**Average Surface Gravel Thickness (inches)**	**Average Base Course Thickness (inches)**	**Type(s) of Failure**
Core C-3	2.0*	6.0 (Concrete)	Low Severity Rutting; Washboarding
Core C-4	3.0*	15.0**	Low Severity Rutting; Washboarding
Core C-5	2.0*	10.0**	High Severity Rutting; Potholes: Moderate Severity Alligator Cracks

Table 2: Core Locations and Dynamic Cone Penetrometer (DCP) Testing

**Surface gravel was approximately 1" or smaller in diameter*
***Base course was consisted of poorly graded stone, as large as 4" in diameter*

Location	Test Depth (inches)	Average Blow Counts	Material Description
Core C-1	12	16.5	Brownish Yellow Silty SAND (SM)
	36	11.5	Light Brown Sandy SILT (ML)
	48	11.0	Light Brown Sandy SILT (ML)
Core C-2	12	12.0	Yellowish Brown Sandy SILT (ML)
	36	10.0	Olive Yellow Sandy SILT (ML)
	48	10.0	Olive Yellow Sandy SILT (ML)
Core C-3	12	30+	Yellowish Brown Silty SAND with Gravel (SM)
Core C-4	12	30+	Clayey GRAVEL with Sand (GC)
Core C-5	24	15.5	Grayish Brown Sandy Lean CLAY (CL)

Hand auger refusal was encountered on an unidentified object (possibly rock within the fill material) at core locations C-3, C-4, and C-5 performed at the subject site. Core C-3 at South Street contained 6" of concrete beneath the surface gravel layer.

LABORATORY TESTING PROGRAM

The soil samples obtained during the field work were placed in labeled containers and transported to our soils laboratory. Representative samples were selected and tested in the laboratory to establish material properties for this evaluation. Sieve analysis including washed #200 (ASTM D422) and moisture-plasticity relationship (Atterberg Limits, ASTM D4318) tests were performed. The results of these tests are presented in Table 2 below.

Table 3: Soil Properties

Core Location No.	Sample Depth (inches)	Material Description	% Passing No. 200 Sieve	Liquid Limit	Plasticity Index
C-1A	12-30	Brownish Yellow Silty SAND (SM)	36	29	3
C-1B	48-60	Light Brown Sandy SILT (ML)	51	N/A	N/A
C-2A	15-36	Yellowish Brown Sandy SILT (ML)	53	41	2
C-2B	36-60	Olive Yellow Sandy SILT (ML)	57	40	0
C-3A	8-12	Yellowish Brown Silty SAND with Gravel (SM)	49	34	10
C-4A	3-18	Clayey GRAVEL with Sand (GC)	31	30	9
C-5A	12-30	Grayish Brown Sandy Lean CLAY (CL)	54	34	11

EVALUATION

The evaluation and recommendations presented in this report are based on the data obtained from the field exploration, information provided to us regarding the existing pavement conditions and our knowledge of construction material properties and pavement performance.

Based on the field observations, the measured average asphalt and base course thicknesses, the dynamic cone penetrometer test results, and the laboratory test results it is PSI's opinion that the observed pavement distresses on Market Street are primarily due to age and inconsistent repair work over several years, where isolated patchwork and crack sealing have proven as insufficient means of long-term repair.

During the field testing, Silty SAND (SM) and Sandy SILTS (ML) were generally observed at the test locations, with Clayey GRAVEL (GC) and Sandy Lean CLAY (CL) at isolated locations. These observations were later confirmed by laboratory testing. The SM soils are generally more favorable subgrade materials and the fine grained ML and CL soils are generally considered less favorable subgrade soils due to their moisture sensitivity and potential decrease in strength when wet.

There are two distinct conditions evaluated in this study. Market Street has existing asphalt pavement, whereas the other three streets are presently gravel-paved streets. The current plan for the gravel-paved streets is to place a surface wearing course consisting of chip seal. The plan for Market Street is less certain, however, any repair is intended to provide improved service and ride quality for a relatively short period of time of 1 to 2 years. Two different alternatives have been provided for Market Street reflecting different repair costs and ride quality.

REPAIR RECOMMENDATIONS

We are providing the following three pavement repair options for your consideration. One alternative is provided for the existing gravel-paved roads and two alternatives are provided for Market Street. All materials and procedures used to repair the existing paved areas should be in accordance with the requirements of the Maryland Department of Transportation and the local municipality.

Option 1 – Temporary Repair of Market Street via Patching and Crack Sealing – The objective of this option is to repair the worst areas of existing pavement with patches and to seal the larger cracks to reduce surface water infiltration. There will be little improvement in ride quality, but the patches should limit the potential for potholes forming over the short time period before a future major rehabilitation. Patch the severely distressed areas such as the alligator/longitudinal/transverse cracking, and rutting. Patch areas should generally be rectangular and large enough to accommodate compaction equipment for asphalt placement. The repairs will consist of saw cutting and removing the existing failed asphaltic pavement materials. The existing aggregate base course and underlying soils should be undercut accordingly to provide for the minimum pavement component thicknesses stated below. Where unsuitable support soils are encountered during repairs, they should be undercut from within the upper 2 feet of the subgrade. The undercut void should be filled with compacted dense graded aggregate road base material CR-6. Fill soils should be compacted to at least 98% of the material's standard effort maximum dry density (Standard Proctor test, ASTM D698).

Once the subgrade has been prepared, the aggregate base course (ABC) stone should be placed and compacted to at least 98% of the standard effort maximum dry density. For the subject site, a minimum aggregate base course thickness of 6 inches is recommended within all areas. Once the aggregate base course is prepared, the saw-cut areas should be repaved with a minimum 4-inch asphaltic concrete intermediate (binder) course and then a 2-inch asphaltic concrete surface course for a total of 6 inches of asphalt to match the existing pavement. Surface areas with depressions that are holding water should be replaced to reduce ponding and provide positive surface drainage.

In addition to patching severely distressed areas and depressions, crack sealing should be performed for the existing cracks. Seal cracks of less severely damaged areas. This method involves using a hot air lance or compressed air to blow out the debris in the crack, then filling with a sealant. Following completion of these repairs, the entire pavement can be seal coated to give a more uniform appearance.

Replacing only portions of the pavement/subgrade is likely to lead to future differential wear. Distressed pavement conditions such as those described within this report are likely to occur in unrepaired areas due to the age and condition of the existing pavement sections encountered at the site. This option is intended to last 1-2 years as a temporary repair plan.

Option 2 – Temporary Repair of Market Street via Paving – As recommended in Option I, patch the severely distressed areas such as the alligator/longitudinal/transverse cracking, and rutting, using the same techniques in regards to subgrade preparation. Following completion of these repairs, the entire pavement can be milled 1.5 inches, with tack coat applied to the milled pavement surface and repaved with a 1.5-inch surface course of MDOT approved HMA Mix 9.5 mm PG 64S-22 Level 2.

This approach will provide a new uniform wearing surface. It will not change the fact that the underlying pavement is quite variable and it won't prevent the larger underlying longitudinal and transverse cracks from reflecting up through the new surface. However, for the limited intended life, this will significantly improve ride quality. This option is intended to last 1-2 years as a temporary repair plan.

Option 3 - Tar and Chip Seal of Water, North, and South Streets – Repair all damaged areas as described in Option I (no patching) and then overlay the roadways entirely, each with a new tar and chip seal.

With this repair, it is recommended that the unsuitable pavement support soils be removed and replaced as stated in Option I. Based on our observations, South and Water streets were in relatively good condition and North Street had significant rutting and potholes. Consequently the need for repairs prior to fine grading and paving are expected to be primarily required on North Street. Once the potholes and unsuitable subgrade soils have been removed and prior to placement of any aggregate base course material, it is recommended that the exposed subgrade be evaluated by PSI to confirm that yielding or unsuitable soils are densified or removed. During this evaluation, those areas that are to receive aggregate base course material should be probed, and if possible proofrolled with a loaded tandem-axle dump truck or similar pneumatic-tired equipment with a minimum weight of 15 tons and a maximum weight of 25 tons. Proofrolling will help reveal the presence of any unstable materials, which were not identified during our field evaluation.

Once the distressed areas are repaired, the loose surface gravel should be removed and the road surface graded to meet the design grades with a dense graded aggregate road base material such as CR-6. Once the surface has been graded and compacted, we recommend application of a double chip seal to seal and protect the pavement surface with a more durable wearing surface.

REPORT LIMITATIONS

The recommendations submitted are based on the available asphalt and soil information obtained by PSI and design details and other information furnished by CPH Engineers, Inc. for the project. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, PSI should be notified immediately to determine if changes in the proposed construction or additional recommendations are required. If PSI is not retained to perform these functions, PSI cannot be responsible for the impact of those conditions on the performance of the project.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area at the time of this report. No other warranties are implied or expressed.

The scope of study was intended to evaluate the conditions of the existing pavement and underlying subgrade. The analyses and recommendations submitted in this report are based upon PSI's filed observations, laboratory test results and data obtained from the pavement cores and dynamic cone penetrometer test results performed at the locations indicated. If any subsoil variations become evident during the course of this project, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. The applicability of the report should also be reviewed in the event significant changes occur in the design, nature or location of the proposed repairs.

This report has been prepared for the exclusive use of CPH Engineers, Inc. for the specific application to the aforementioned roadways located in the Town of Brookeville, Maryland.

The scope of our services does not include any environmental assessment or investigation for the presence or absence of hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

Thank you for the opportunity to be of service on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to contact our office.

Sincerely,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Nicholas Mansourimoaied, EIT
Branch Manager
Construction Services

Naseer Nayeem, P.E.
District Manager

Reviewed by: Karl E. Suter, P.E. – Chief Engineer

APPENDIX:

I. CORE LOCATION MAP
II. VISUAL SITE ASSESSMENT PHOTOS

APPENDIX I.
CORE LOCATION MAP

okeville, MD 20833
C-1
C-2
C-3
C-4
C-5
50' BACK OF SIDEWALK
TO BACK OF SIDEWALK
50' BACK OF SIDEWALK
TO BACK OF SIDEWALK
100'
50'
100'
50'
50'
50'
50'
50'
50'
50'
50'
50'
50'
50'
WATER STREET
NORTH STREET
SOUTH STREET
MARKET STREET

APPENDIX II.
VISUAL SITE ASSESSMENT PHOTOS

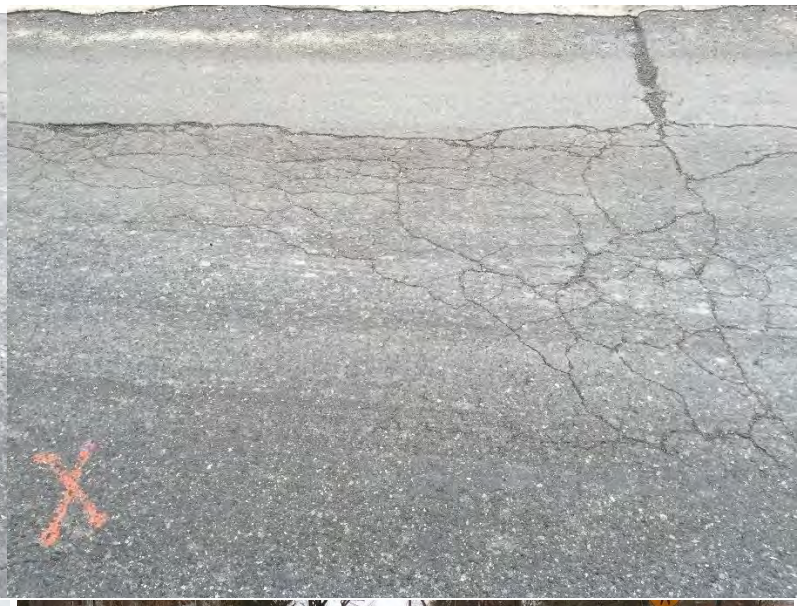
Market Street

Market Street

Market Street

Market Street

Market Street



Market Street

Market Street

Market Street

South Street

South Street

Water Street

North Street

North Street

North Street

The Town of Brookevillle
Resolution

On this day, September 17, 2010, The Town of Brookeville Commissioners resolves to adopt the 2010 Town of Brookeville Updated Comprehensive Plan.

Whereas, the Commissioners of the Town of Brookeville have determined that the updated Comprehensive Plan complies with the laws and requirements of the State of Maryland and that the Comprehensive Plan was prepared with the assistance of the Town of Brookeville's Planning Commission and the residents of the Town of Brookeville.

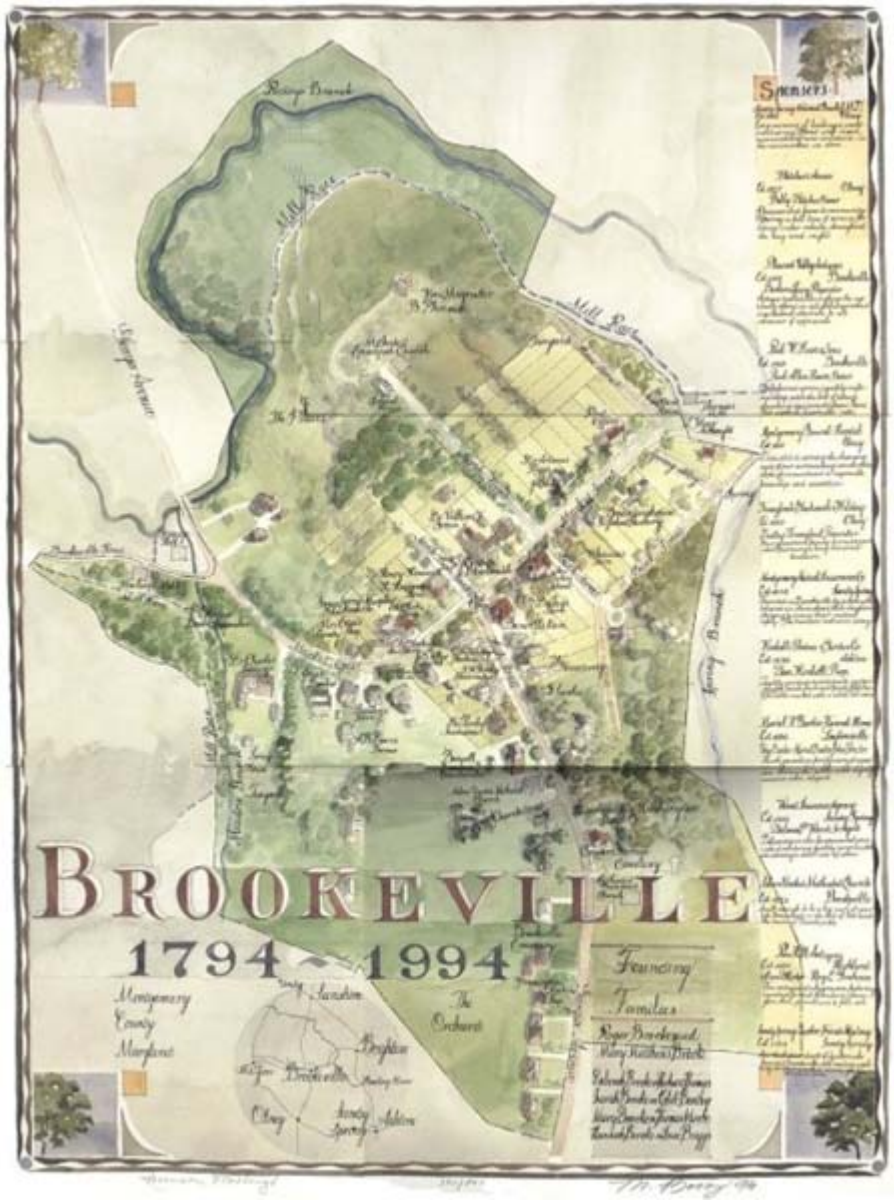
Mr. Michael Acierno, President

Cate McDonald, Town Clerk

The Town of Brookeville Commissioners
Michael Acierno, President
Robert Heritage
Katherine Farquhar

The Town of Brookeville Planning Commission Members
Chris Scanlon, Chair
Mark Friis
Bruce Evans
Miche Booz
Debbie Wagner
Fred Teal

The
Town of Brookeville,
Maryland



Comprehensive Plan
October 2010

TABLE OF CONTENTS

The Comprehensive Plan – Brookeville's Vision

Brookeville's comprehensive plan endeavors to provide a policy context and parameters for addressing issues related to development that will affect the Town of Brookeville for the foreseeable future. The plan intends to provide an overarching framework within which residents, through their governing bodies – the Brookeville Town Commissioners and the Brookeville Planning Commission – can base decisions concerning both the Town's development and the Town's response to changes outside of its borders. The Town encourages community participation and input during the Comprehensive Plan process and the Subdivision Development process. Mindful of preserving the Town's historic integrity, livability and environmental impacts, the Plan implements and is consistent with the Twelve Visions as enacted by the 2009 Maryland General Assembly.

The Twelve Visions are:

1. **Quality of Life and Sustainability** - A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.

2. **Public Participation** - Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals.

3. **Growth Areas** - Growth is concentrated in existing population and business centers, growth areas adjacent to those centers, or strategically selected new centers.

4. **Community Design** - Compact, mixed-use, walkable design consistent with existing community character and located near transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources.

5. **Infrastructure** - Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sound manner.

6. **Transportation** - A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods and services within and between population and business centers.

7. **Housing** - A range of housing densities, types, and sizes provide residential options for citizens of all ages and incomes.

8. **Economic Development** - Economic development and natural resource based businesses that promotes employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities is encouraged.

9. **Environmental Protection** - Land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems and living resources.

10. **Resource Conservation** - Waterways, open space, natural systems, scenic areas, forests, and agricultural areas are conserved.

11. **Stewardship** - Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection.

12. **Implementation** - Strategies, policies, programs and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, State, and interstate levels to achieve these visions.

Brookeville's Past

Brookeville is a historically significant 19th century rural town located in northeastern Montgomery County, Maryland. Approximately 18 miles north of the District of Columbia, the Town was founded in 1794 by Richard Thomas on land inherited by his wife Deborah Brooke from her father Roger Brooke IV, son of James Brooke, an influential Quaker settler and the largest land holder in what was to become Montgomery County. The community originally consisted of 3 houses: the Caleb Bentley House, now known as the "Madison House", the "Blue House," and the "Valley House." To this core, Thomas laid out an additional 56 quarter-acre lots sited along two major streets (Market and High) and two side streets (North and South). Brookeville was initially incorporated in 1808 by an Act of the General Assembly.

By 1813 the community had a constable and had grown to fourteen houses, two mills, a tanning yard, two stores, a blacksmith, a post office, and a private boys' school - the Brookeville Academy. The Town continued to flourish in the ensuing years as shops and services expanded to include a girls' school - Mrs. Porter's School for Young Ladies, two physicians, two shoemakers, a seamstress, a carpenter, and a watchmaker. Brookeville had become a center of commerce and education in an area which played an important role in the development of the science of agriculture. Several of its citizens, including Thomas Moore, were part of a network of progressive agronomists who initiated a number of improvements in farming methods that were practiced both locally and nationally. Moore, whose

farm Longwood was immediately adjacent to the Town, was responsible for a number of technical advances in commercial agriculture, most notably the development of refrigeration for the transportation of produce. The Town itself was an important way station on the Westminster Pike (Georgia Avenue), a major route for the transporting of agricultural products to the District of Columbia.

It was in the home of one of these progressive farmers, Brookeville Postmaster Caleb Bentley, that President James Madison and his staff sought refuge following the British invasion of Washington during the War of 1812. Bentley's wife, Henrietta, was a friend of Dolly Madison. Over two days during the British burning of the White House and occupation of the Capital in 1814, President Madison conducted the business of the government from the Bentley home, joined by Attorney General Richard Rush and Secretary of State and Secretary of War James Monroe.

Following its historic role as the nation's "Capital for a Day," Brookeville continued to prosper. By 1880 the Town's population had reached 250. With the advent of the automobile in the early 20th century, however, changed mobility patterns and markets led to the demise of the Town's commercial businesses. Despite their loss and the encroachment of the 20th century suburban development and sprawl encouraged by the automobile, the Town today remains a unique collection of a variety of period structures existing in the same relationship to one another and to the roadways as they were when they were originally constructed in the 18th, 19th, and early 20th centuries.

Addressing the Present and Future

As Brookeville has entered the 21st century, the potential for unregulated change both from within and around the Town has been deemed to represent a threat that could ultimately compromise the Town's historic character and quality of life. The dramatic increase in commuter and truck traffic on the Town's major artery, State Highway Route 97 (Georgia Avenue), has clearly become one such threat. Similarly, increased intensity of land use in Montgomery County's Olney Planning Area coupled with the land use plans and development of neighboring counties currently present potentially negative impacts on the Town. Within the Town itself, the pressure for in-fill development has presented an increased likelihood for congestion and the possibility of compromising the Town's historic character. Concern over these issues led the Town Commissioners to exercise Charter-authorized planning and zoning authority to develop its first comprehensive plan and continue to motivate the Town to address these concerns. In an initial key step in preparing the Town's first comprehensive plan, the Town developed a series of goals and objectives in a public process.

Identifying Community Goals

In December, 1986, the Town of Brookeville was designated as a Historic District and subject to the protections afforded under the provisions of the Historic Preservation Ordinance, Chapter 24A of the Montgomery County Code, adopted in 1985 by the Town Commissioners. In having the Town designated as a Historic District, Brookeville was acting by ordinance to protect its integrity as a relatively unaltered 19th century rural town by providing enforceable historic preservation requirements for property owners. This action also supplemented and enhanced the Town's inclusion on the National Register of Historic Places in 1979. The Brookeville Comprehensive Plan was established by the Town in the year celebrating the Bicentennial of its founding, 1994, and as subsequently revised, proactively seeks through the planning process to preserve Brookeville's existing buildings, natural features, open space and density.

The importance to the community of preserving its heritage is evident in the Town's initially adopted goals and objectives. Although these goals address a number of social and community issues, they reflect an overriding concern that the community response be appropriate and sensitive to its stewardship of this historic town.

Goal # 1

Preserve and enhance Brookeville's historic rural village character

Objectives

- Protect Brookeville's integrity as a designated historic district through the administration of the Town's Historic Preservation Ordinance.

- Continue, in collaboration with the Montgomery County Historical Society and Sandy Spring Museum, to document and preserve archival materials of Brookeville's historical, architectural and archaeological resources to increase knowledge and understanding of the Town's history and prehistory.

- Apply cultural conservation objectives and design criteria in the execution of Town capital improvements such as "streetscaping." Coordinate with the State and County to develop a transportation plan that will implement the planned bypass while retaining the Town's accessibility to local traffic.

- Work with the State and County to identify and implement appropriate road improvements that would ease current traffic conditions.

Goal # 2

Direct land use in a manner that will reinforce Brookeville's historic, rural village character

Objectives

- Provide for the integration of residential uses with present and future home occupations, agricultural use and social/civic uses.

- Enforce zoning and development standards that reflect the Town's built environment as it has evolved over time, with appropriate consideration for modern health and safety concerns.

- Utilize natural and man-made buffers to reinforce the Town's boundaries and help to distinguish its village settlement pattern from the more contemporary suburban development patterns of the surrounding area.

Goal # 3

Protect Brookeville's natural environment

Objectives

- Identify environmentally sensitive areas and emphasize this sensitivity in establishing the appropriate kind, density, and design of land use.

- Enforce regulatory measures such as a tree preservation ordinance, steep slope and stream buffer restrictions to protect air and water quality.

- Identify and adopt regulations that protect critical habitat of rare, endangered or threatened species of flora and fauna.

- Preserve a sense of green space within the community by retaining those environmentally sensitive areas that have historically been undeveloped as public and private open space.

- Establish a program to acquire or protect open space through easements or other means on the Meadow Branch and Spring Branch tributaries of Reddy Branch to augment the M-NCPPC's stream valley protection program for this portion of the Patuxent watershed.

Goal # 4

Identify and provide for the Town's long-range public facility, capital improvements and service needs and to meet those needs in a manner sensitive to the historic nature of the community

Objectives

- Survey the community to determine unmet facility and service needs.

- Participate in Montgomery County's Capital Improvements Program (CIP) to budget and plan for needed facilities and improvements.

- Explore State and County funding sources for capital improvements.

Goal #5

Provide and implement mechanisms and programs that will assist the Town in preserving its historic, rural village character

Objectives

- Encourage fulfillment of the Town's stated goals and objectives by providing appropriate incentives such as tax credits and adopting necessary ordinances and regulations.

- Monitor effectiveness of adopted regulations in achieving stated goals.

- Explore and implement where possible memoranda of understanding with State and County agencies and with academic resources such as the University of Maryland and other institutions to secure technical assistance for implementing conservation and preservation strategies.

Achieving these goals is a significant challenge to a town the size of Brookeville, particularly as traffic, one of the adverse effects of growth most

directly threatening to the historic character of the community is largely beyond the Town's ability to control. Utilizing the framework provided by these goals and objectives and the Twelve Visions, the balance of the Comprehensive Plan presents strategies for directing development and formulating Town policy on those issues within the Town's jurisdiction and ability to control.

Developing the Comprehensive Plan

The Town of Brookeville has been aggressive and effective in preserving its wide range of period architecture and original rural settings as well as documenting its history. In this regard, the Town has undertaken a number of important initiatives and measures to ensure the protection of its historic assets. These measures have included achieving inclusion of Brookeville on the National Register of Historic Places in 1979; publication of Brookeville, Maryland: A Future for the Past, a planning report based on an independent study by the University of Maryland School of Architecture in 1982; establishment of a Citizen's Planning Committee and its subsequent Planning Report to the Town Commissioners in 1984; the adoption of the Montgomery County Historic Preservation Ordinance (Chapter 24A of the Montgomery County Code) in 1985; and the Town's subsequent designation in 1986 as a Master Plan Historic District to be protected under that Ordinance.

In 1989, in response to the increasingly adverse impact of vehicular traffic through its core, the Town requested that Montgomery County and the State Highway Administration conduct a feasibility study for the construction of a Georgia Avenue Bypass of the Town, a road project as recommended and identified in the transportation element of the Olney Master Plan. The resulting Bypass Study identified a number of serious and complex planning issues that had both immediate and long-term implications for the Town's future. The Town Commissioners recognized the need to deal with these issues and to anticipate and responsibly respond to the more general development pressures both from both within and outside the community.

The Town Commissioners selected Preservation Resources Group (PRG), a multi-disciplinary consulting firm specializing in historic preservation planning, to organize and assist in the development of a comprehensive plan. PRG undertook a two-phase process in order to achieve this goal. The first phase involved baseline data collection, an archaeological pre-survey and assessment of the Town, a survey of environmentally sensitive areas, and an inventory of existing land use and zoning within the Town.

The second phase of the planning process, funded by a grant from the Montgomery County Historic Preservation Commission (HPC), consisted of an identification and analysis of issues facing the community. Further, a set of goals and objectives were developed in order to address those issues. In-depth discussions

with the Town Commissioners as well as a series of informal community meetings were held in the spring of 1990 to further refine the goals and objectives that had been identified. Building on these open community dialogues, the Town Commissioners established and appointed a Brookeville Planning Commission in 1991. The new Planning Commission further reviewed and refined the document through additional public work sessions. Based on comments received during the public hearings and from written submissions from outside governmental agencies and its own review of the plan, the Planning Commission asked PRG to prepare a Final Draft Plan that could be recommended to the Brookeville Town Commissioners for adoption. The preparation of the Final Draft Plan was assisted by additional grant funds from the Montgomery County HPC.

The Final Draft was transmitted by the Brookeville Planning Commission to the Town Commissioners in late 1991 for consideration and adoption. The document was subsequently adopted by the Brookeville Town Commissioners in 1994 as amended and revised to provide for consistency with the statutory requirements of the Maryland Planning Act of 1992 with respect to local planning and growth management and the Visions (§1.01) of Article 66B of the Annotated Code of Maryland. This document (2009) reflects the work and actions of the Planning Commission and Town Commissioners in 1999 and 2000, primarily the adoption of Subdivision and Zoning Ordinances and a Zoning Map in 2000. Additionally, it acknowledges the action by the Montgomery County Planning Board that terminated, at the request of the Town Commissioners, a 1959 agreement between the Town and the M-NCPPC regarding land use jurisdiction and authorities, thereby restoring to the Town Commissioners zoning and subdivision rights. Editorial revisions from the original plan also reflect changed conditions and facts and text reorganizing.

Implementing the Plan

This Comprehensive Plan presents permissible types and densities of land use and a zoning plan for the Town. Zoning is implemented by the Town Commissioners through the adoption of a Zoning Ordinance and a Sectional Map Amendment. The Ordinance defines the standards of development permitted in the Town and the Sectional Map Amendment indicates where the zoning will physically be applied to the land. The Ordinance and Sectional Map Amendment undergo the same formal hearing and adoption process as the Comprehensive Plan. A Zoning Ordinance and Sectional Map Amendment have been developed and enacted.

In addition to the Zoning Ordinance and the Sectional Map Amendment, this Plan provides for the protection of the natural and historically significant built environment. Implementation requires the adoption of subdivision regulations and site plan review procedures. Such regulations and procedures have been developed

and enacted. Used in conjunction with chapter 24A of the Montgomery County Code (the Historic Preservation Ordinance), these measures assist the Town in preserving its historic, rural village character and achieving the goals and objectives of the Planning Act's eight Visions.

Land Use Element

The purpose of the land use plan is to identify an appropriate type and intensity of land use for all land within the Town and thereby implement the eight Visions to the extent relevant to Brookeville in accordance with §1.01, Article 66B. This plan therefore provides direction for those properties that can support additional development under enacted land use controls and zoning for the Town and will determine the status of those uses which do not conform to the Town's land use policy.

Historical Patterns Of Land Use

Land use within the Town of Brookeville has been predominantly residential with the majority of land having historically been zoned R-200 under the Montgomery County Zoning Ordinance. Under Montgomery County Code, the R-200 zone permits single-family detached homes on 20,000 square feet (approximately ½ acre) lots. The balance of the Town was zoned RE-2 which permitted residential development on 2 acre lots.

Historically, Brookeville's downtown contained a number of different commercial enterprises. However, over time, these have largely given way to residential uses. While most houses within Brookeville are primarily residences, a number of dwellings in Town have ancillary uses that are non-residential in nature. Depending on the size of these operations, these would be permitted under the County's R-200 and RE-2 zones either as a "by right" use or as one subject to the County's "special exception" process.

In addition to residential uses, the Town has two commercial buildings – a plumbing company and an accounting firm housed in the former Brookeville Post Office. There are additional buildings with civic/institutional uses – the Brookeville Academy Community Center that houses the Town office, the Salem United Methodist Church (which includes a parsonage and Orndorff Fellowship Hall), and the one-room Brookeville Schoolhouse/museum. These non-residential and ancillary uses suggest that the town has a more diverse land use pattern than is immediately apparent. That pattern is one that integrates home with "cottage industry," agricultural use and social/religious institutions in a manner typical of 19th century rural villages.

Land Use and Zoning Under This Plan

Establishing the appropriate type and intensity of land use requires consideration of a number of factors. A major consideration for Brookeville is the historical importance of the Town's built environment. Environmentally sensitive areas (i.e. suitability of soils, steep slopes, 100-year flood plains, streams and stream buffers, habitats of threatened and endangered species) and potential archaeological resources are other important factors. North-south traffic on Georgia Avenue (High Street) and east-west traffic on Market Street, already seriously compromising the Town's quality of life, are other significant constraints that impact land use. This Plan limits, to the extent possible, further diversification and density of land use in order to minimize deleterious impacts on cultural or environmentally sensitive areas. Land use within the Town under this Plan shall continue to be comprised of single-family detached residences at the less intense density of 1 unit per acre of land. [Exhibit 1]

Areas of extreme environmental sensitivity, that is, those areas of multiple limitations or environmental concern, are identified in [Exhibit 2] as public/private open space. This exhibit illustrates the land use and zoning plan for property within the existing Town limits.

In order to protect its historic village nature, the Town adopted a zoning ordinance instituting the Historic Village Residential (HVR) zone with the goal of requiring all new development to conform to standards meant to preserve the Town's character. Because of the long-term importance of compatible in-fill development and potential advantages to the Town, the HVR zone encourages the clustering of development on smaller lots preserving the remaining area of subdivided tracts as private or public open space parcels as appropriate. While maintaining a density of one dwelling unit per acre for developable properties, clustering under the HVR zone allows flexibility in creating an in-fill plan that can be wholly integrated into the Town's historical pattern of development.

Impact on Existing Lots and Non-Residential Uses

Adoption of the HVR zone brings the majority of residential lots in Town into greater conformity with the development standards of the town's adopted zone as most of the Town's existing lots had been inconsistent with the requirements of the previous County R-200 residential zoning. Those lots in existence prior to the adoption of the HVR zoning and legal or "grandfathered" under the County's previous R-200 zoning would be grandfathered (legal) and therefore buildable under the new regulations. Additionally, the three civic and religious uses in Town would be permitted "by right" under the Town's proposed HVR zoning.

The existing commercial uses – a plumbing concern and an accounting firm, are conforming uses under the Historic Village Commercial zone and shall be

permitted to continue. Should the plumbing or accounting businesses cease to exist, the HVC zone permits other commercial uses to continue in those locations provided the use is of equal or less nuisance with regard to traffic generation, noise, visual impact, and related factors.

With regard to the few ancillary uses in Town that are non-residential in character, their status is more problematic. As noted, depending on the size of these operations, the use may either have been permitted "by right" or by "special exception" under the County's previous R-200 zoning. As there is no record with either the County or Town of any special exception applications, it shall be assumed that those uses began at a scale, which permitted them "by right" under the R-200 zoning. As a practical matter, the Town Commissioners shall take no exception to current ancillary uses at present scales of operation by owners of record providing that such uses are otherwise in accordance with local and State laws. Any future changes of existing uses or any proposals for new ancillary uses shall need to conform to the requirements of the HVR and HVC zoning districts.

Transportation Element

The purpose of the transportation element is to address concerns related to State and County roads within the Town. Further, the transportation element of a comprehensive plan examines the existing transportation infrastructure and any deficiencies that could potentially arise due to additional development. Finally, the relationship between current and future land use and necessary transportation improvements is examined. Since Brookeville has limited capacity for growth over the duration of this plan, existing transportation infrastructure within the town is anticipated to be adequate. However, the Town's main objective resides in the implementation of the Brookeville Bypass. The bypass will allow the Town to preserve its historic character as well as provide opportunities for increased pedestrian and non-automobile links to areas south along Route 97 such as Olney.

Public Transportation

Public transportation in Montgomery County is provided by the WMATA Metro Bus system and the Montgomery County Ride On system. However, neither system extends north to the Town of Brookeville. A Ride on stop is located approximately ½ mile south of the Town limits, at the intersection of Gold Mine Road and Route 97. The Town is not aware of any plans by either system to provide public transportation service to the Town limits.

Georgia Avenue - Brookeville Bypass

With the Town's limited capacity for expansion due to a scarcity of lots eligible for subdivision, the Town's current transportation infrastructure is sufficient to meet its current and future needs. While the existing roadway system is

adequate, it is by no means desirable to the Town's residents. The residents of Brookeville are well aware of the onerous impact of commuter and commercial traffic on the Town's quality of life. The Town's historical pattern of development has resulted in an uncomfortably close relationship between the Town's main road, Route 97 (Georgia Avenue) and residents' houses. The fact that most of the houses along the Town's main roads were constructed long before Georgia Avenue became a heavily traveled thoroughfare makes the Town particularly vulnerable to the adverse effects of contemporary vehicular traffic. This traffic was exacerbated by the lane expansion of Route 97 from 108 to Route 28 in the 1990's and has worsened with the build-out of northern Montgomery County as well as the continued growth of neighboring Frederick, Howard, and Carroll Counties.

While a number of improvements have been made in order to mitigate concerns regarding traffic and safety within the Town, the increase in use of Route 97 has led to a need for a more permanent solution to the negative effects of traffic on the Town. The planned solution for providing relief to the Town as well as for the efficient and safe flow of traffic through this corridor has been the Georgia Avenue Bypass – also referred to as the Brookeville Bypass. The present alignment of the Bypass is outside the Town's limits. The State and Federally-approved Bypass alignment and design (2005) realigns Route 97 to the west of the Town and would eliminate a majority of through commuter north-south traffic and some east-west traffic in Town. [Exhibit 3] This would also allow Route 97 to more effectively function as an emergency evacuation corridor as provided for in the District of Columbia's Homeland Security Plan. The Town would like to express its concern about potential impacts due to the completion of the Inter County Connector and desires that any increase in vehicular traffic be addressed should it arise.

To assure that the Bypass is fully optimized as a community asset, the Plan recommends continued coordination and partnership with the State and County during the design, engineering, and construction of the road improvement to achieve the following objectives:

- Innovative roadway design that while providing a delineating boundary for the Town which reinforces its identity as a distinct "place," presents no barriers to pedestrian, bicycle, and inter-community movement and in fact effectively interfaces with them.

- Landscaping and noise mitigation measures that will continue the sense of green open space and parkland that currently buffer the Town and the adjoining subdivision. The road should be planned as a two-lane "parkway" with integrated "bikeway" and pedestrian ways.
- Adequate and safe access for local traffic that will recognize new intersections and their function as "gateways' into the Town.

- Resolution of the appropriate classification for the bypassed roadway through Town (the "old" Route 97) and the determination of responsibility for its long-term maintenance.

- Minimize the impact on Longwood Recreation Center's parking and ball fields and provisions for at least equivalent replacement at a suitable nearby site.

- The chosen alignment and right-of-way comes close to a number of historic assets – the remains of the Newlin Mill and mill race, the Oakley Cabin, and the Reddy Branch Stream Valley Park. Every effort must be made to mitigate any negative effects and to enhance and protect those assets where possible.

It is appropriate to note that when the Brookeville Bypass is funded and design and construction is projected to commence, it would be timely for the Town to initiate its own review and evaluation of how it might effectively and positively adjust and provide for a dramatic change in the Town's dynamics. The Town has received assurances from the State Highway Administration that the bypass will be designated a through-highway to ensure that no future widening or additional connection to the bypass is possible.

Management of East-West Traffic

Closely related to the significant relief that a Georgia Avenue - Brookeville Bypass would provide for north-south traffic has been the need for the diversion of east-west through traffic entering the Town from Brighton Dam Road on the east and Brookeville Road on the west.

When the Abrams Farm was developed as a subdivision, Bordley Drive was built as its primary road, basically extending Brighton Dam road west toward Route 97 but not connecting to it. The Town Commissioners lobbied the County to build the Bordley Drive connection through to Route 97 to provide traffic relief to Town residents and in support of more east-west options that would enhance public safety. Montgomery County successfully completed that build-out project in 2004.

Impact of the Inter County Connector

The Town is very concerned about any impact the completion and opening of the Inter County Connector will have on traffic conditions within its boundaries. The Town's consultant, Doug Lohmeyer, contacted the State Highway Administration regarding this concern and received the response that can be found in Exhibit 5. The State informed the Town that Brookeville falls outside of the boundaries of any study regarding the impact of the ICC on local traffic. The nearest location included was the MD 97 / MD 108 intersection approximately two

miles south of Brookeville. Accordingly, the State anticipates Average Weekday Daily Traffic (AWDT) to increase by 12.6 percent along southbound MD 97 approaching MD 108 between the years of 2000 and 2030. Without the construction of the ICC, the State anticipates an increase in traffic of 15.2 percent at this same intersection, demonstrating the ICC will have a negligible impact on traffic through the Town over the next twenty years. The ICC is expected to draw approximately 500 vehicles per day away from the portion of MD 97 directly south of the Town. While the ICC is not expected to drastically increase the amount of traffic through Brookeville over the next two decades, it is important to note that projections both with and without the completion of this project expect traffic through the Town to increase by over ten percent. The Town would like to reiterate the importance of a bypass in dealing with this increased traffic as existing levels already compromise the historic character and quality of life within Brookeville.

Interim Traffic Improvements

Diverting through-traffic to the extent possible is crucial for preserving and indeed restoring Brookeville's quality of life. Clearly, uncertainty regarding the timing of the construction of the Georgia Avenue - Brookeville Bypass makes it important to identify and implement any interim measures that can be taken to reduce the negative effects of the through traffic.

This Plan recommends the Town, in collaboration with the State and County, continue to study existing roadways and evaluate all possible interim improvements that could relieve some of the adverse effects of traffic as well as enhance safety. The Plan outlines a list of possible interim improvements as well as demonstrates measures that have been taken in the past to alleviate traffic conditions within Brookeville:

- Installation of speed bumps or other speed reduction or calming techniques with proper signage on east Market Street. The Town installed two speed bumps in 1992 and reduced the speed limit to 10 MPH at those points. The Plan recommends monitoring the impact of these measures.

- Reduction and enhanced enforcement of speed limits through Town to 25 MPH from the current 30 MPH. Enforced speed reduction in small towns has been effective in other states. A speed enforcement camera was installed at the entrance to Town on the northbound lane of Route 97.

- Use of flashing caution lights on Georgia Avenue at the north approach to the Town. Such lights were installed in 1991 by SHA. Use of similar flashing caution lights on Georgia Avenue at the

south approach to Town. A flashing light was installed in 1994 on the southern approach.

- Marking of pedestrian crossings (street striping and caution signs) where appropriate. These improvements were partially initiated by SHA in 1991, but the Town still lacks appropriate demarcated pedestrian crossings at key points along Route 97.

- Improved road delineation through:

    - Use of reflective striping or recessed center reflectors. SHA has installed reflectors.

    - Use of temporary bollards or barriers to restrain vehicles in the right-of- way.

    - Use of road scoring at approaches to the Town and at key intersections within the Town. SHA has scored road surfaces at north and south entrances to Town.

Town Circulation System

In developing a circulation system for both pedestrian and vehicular movement within the Town, it is the intent of the Plan to:

- Affirm the Town's historical system of public right-of-ways not only as a means of circulation, but as a means of maintaining green space and fence rows that will reinforce the Town's rural and historic character.

- Create within the historical public system and its private access extensions, a hierarchy of streets, lanes and pathways that will further define Brookeville as a place.

- Provide adequate access to safely serve future development.

- Create a system of connective trails, bikeways and pedestrian walkways in order to facilitate non-automobile forms of transportation and allow for the safe passage of pedestrians around and through Brookeville. Where applicable, the pedestrian walkways will conform to the ADA requirements.

- Work with the State and County to implement improvements to the town circulation system that will enhance the safety of both motorists and pedestrians.

Because of the historical significance of the Town's existing system of public right-of-ways as well as their importance as public green space and natural buffer, the Town's public roadway rights of way vary in width from 30 feet to 50 feet. Any new construction beyond the Town's street system shall be accessed through the use of private or common driveways extending from existing public ROW.

A public right of way is defined as a tract of land, which is owned by the Town of Brookeville. This excludes Route 97, which is currently owned by the Maryland State Highway Administration. This also excludes private easements recorded among individual property owners. The Town of Brookeville is responsible for maintenance within these rights of way, which includes the roadway vehicular surface and snow removal on these surfaces. The property owners, adjacent to these rights of way, are responsible for mowing the grassed areas within the public right of way and snow removal on the sidewalks in the public right of way. The Planning Commission must review and approve any modifications requested by the adjacent property owners, such as but not limited to, planting and/or removing of trees within the public right of way. The Planning Commission also responds to any community issues relating to these tracts of publicly owned rights of way.

Within this system of public ROW and extended private driveways, the Plan proposes a graduated series of road standards. The graduated standards will create a hierarchy of streets and pathways, provide an adequate road surface to meet the safety and access needs of the units being served and provide a sufficient amount of green space for the Town to maintain historic fence rows or augment existing vegetation to reinforce the rural nature of the community.

At the bottom of the circulation system hierarchy, the Plan encourages the expansion of pedestrian access to both existing sidewalks as well as the parkland that boarders the Town. Establishment of pedestrian paths to access the planned public open space along Reddy Branch and the Thomas Mill Race is encouraged. Limited public access to the park is anticipated with the acquisition by the M-NCPPC of the property surrounding the Washington Suburban Sanitation Commission's pumping station at the east end of Market Street. Access would also be possible eventually at the west end of Town via lots P-381, P-430, and P434 that are ultimately scheduled for acquisition to complete the Reddy Branch Stream Valley Park. An example of the expansion of access to natural areas in Town can be found in the 2007 construction of a small pedestrian walkway covered in wood chips as part of the development of a two-house subdivision – Powers' Wood, and

adjoining and integrated with a small natural park area north of the restored Brookeville Schoolhouse. In order to take advantage of the parklands that boarder the Town, the Plan encourages the development of other pathways in natural settings.

Beyond creating pathways to make the Town's natural areas more accessible, the plan emphasizes the importance of linking the Town to existing pedestrian and public transportation infrastructure. The Town would like to encourage pedestrian and bicycle transportation links to nearby areas such as Olney by creating a safe and accessible network of demarcated crossings and paths. These pedestrian and cyclist access ways will allow Brookeville's residents to better utilize the County's public transportation network which extends only to the intersection of Route 97 and Gold Mine Road, approximately ½ mile south of Brookeville. In order to encourage non-automobile transportation and allow Town residents to utilize such modes of transportation, the Town encourages the construction of a crosswalk across Route 97 in front of the Salem United Methodist Church to connect the existing sidewalk with the pedestrian path that parallels Route 97's east side. Further, the Town will require the construction of a pedestrian path / sidewalk along the Sheahin tract paralleling George Avenue in order to link the existing sidewalk by the Brookeville Academy with other pedestrian paths within and outside of Town when this tract is subdivided for development.

The Town presently does not have a formal pedestrian pathway system. Pedestrians and bicyclists use the shoulders of the two State roads traversing the Town. Many of the nature pedestrian pathways follow old trails wandering through the woods. The Town plans on preparing a formal pathway system plan, once the proposed Intercounty Connector is constructed and when the two State roadways, which traverse the Town, become local roadways.

At the top of the system's hierarchy are the village primary or main streets - Market and South High (Route 97) Streets. Because of the importance and variability of the historic streetscape along the Town's main arteries, the Plan does not identify an ultimate cross section or set a uniform road standard for Market and South High Streets. Should any road improvement be considered, there would need to be flexibility in its actual design in order to create a cross section sensitive to the existing historical patterns.

With regards to the treatments for the actual travel surfaces, the primary streets will remain in asphalt paving, but the recommended surface for the balance of the Town's secondary streets and lanes should be dependent on the number of units served and the primary (vehicular or pedestrian) use. Because of the limited range of travel anticipated, the Town should establish appropriate cross sections and explore more environmentally friendly options such as permeable paving materials, gravel or other porous materials for vehicular travel ways on a case-by-case basis at the time improvement is needed.

The Town does not currently envision a vehicular connection between the north end of Water Street and North Street.

Brookeville is committed to its vision of non-automobile transportation networks and will work with the County and State to guarantee its implementation both in anticipation of and in conjunction with the completion of the Brookeville Bypass.

Environmental Preservation and Sustainability – The Protection of Sensitive Areas

The major objective of the Town and this Plan is to develop a comprehensive policy that encompasses both the cultural and built environments as well as the natural environment in a way that incorporates and implements the Town's goals of environmental protection to the degree possible. The Plan integrates these goals in the following sections that discuss the measures taken by the Town to preserve its cultural heritage and identify ways in which the Town can similarly protect its natural resources and other sensitive areas.

Architectural Heritage

Brookeville has demonstrated a clear commitment to preserving its architectural character by adopting Montgomery County's Historic Preservation Ordinance (Chapter 24A of the County Code) and the subsequent designation of the entire Town as a Historic District under that ordinance. This action followed Brookeville's designation to the National Register of Historic Places in 1979. As part of Brookeville's designation as a Historic District, an inventory of the Town's built environment was completed in 1985. that shows all historic Town buildings and their ages. This document is on file with the Town and serves to demonstrate the importance of maintaining Brookeville's historic character.

As a Montgomery County Master Plan Historic District, any changes (as defined in the ordinance) within the Town must be reviewed by the Montgomery County Historic Preservation Commission (HPC) and a Historic Area Work Permit (HAWP) issued under Sections 24A-6, 7 and 8 of the Historic Preservation Ordinance. The HPC may be assisted in its review of HAWPs by a Local Advisory Panel (LAP). The Town Commissioners have designated the Brookeville Planning Commission to act in this capacity. Both State and Montgomery County property tax credits are available for eligible work performed within the District.

Under the HPC's adopted Guidelines, Historic Districts are living and working areas where special attention is paid to protecting those qualities that make them significant resources to the larger community. The intent of Historic Area

Work Permit review is to maintain that balance so these areas continue to function in a contemporary setting while retaining their ability to convey a sense of the past.

As an enhancement to the inventory of historical/architectural resources completed in 1985, a pre-survey and assessment of archaeological resources within the Town was completed in November 1989 during the data collection phase of the Comprehensive Plan. The archaeological pre-survey, a copy of which is on file with the Town, identifies potential areas of both historical and pre-historical archaeological interest.

One means of protecting these areas of potential archaeological interest, as well as architectural facades/streetscapes and areas of environmental sensitivity, is to establish a conservation easement program. Working with an entity such as the Maryland Historical Trust or Montgomery County or by establishing its own program, the Town can encourage the private donation of, or through development regulation, require dedication of conservation easements capable of preserving resources, both cultural and natural, in perpetuity.

The Town is also part of the Heritage Tourism Alliance and is within the Montgomery County Heritage Quaker and the Underground Railroad Cluster. The Management Plan for Montgomery County's Heritage Area was approved by the State in 2003. The Montgomery County Heritage Area has important environmental, recreational, and cultural resources as well as significant historical sites and districts. The Management Plan presents strategies for enhancing these resources, improving linkages, advancing economic development strategies, and providing for stewardship and preservation. The Management Plan will compliment other State and County initiatives in the Certified Heritage Area and is consistent with the approved and adopted master plans for the portions of Montgomery County included in the Heritage Area. The Brookeville Comprehensive Plan reflects a vision of land use and development fully encompassing the principles and practices of historic preservation, environmental stewardship, and good planning. Therefore, the Town of Brookeville ratifies the recommendations and strategies in the Montgomery County Heritage Master Plan and incorporates them herein the Brookeville Comprehensive Plan.

Cultural Landscape

Closely related in historical importance to the actual structures that embody the Town's architectural heritage is the relationship of those buildings, village streets/lanes, natural and planted vegetation, and open space that defines the Town's "cultural landscape." In the face of rapid suburbanization, conservation of the rural landscape has become increasingly important and is one of the most challenging and elusive areas of cultural preservation.

An important step in this conservation effort is to identify the characteristics and elements that help to define the cultural landscape. As a period rural village, some of the elements of Brookeville's cultural landscape are derived from the original 1794 plan that was conceived by its founder, Richard Thomas. Brookeville as it has developed, however, bears only minimal resemblance to that plan. Although still shown on the Maryland Department of Taxation's parcel map, of the 56 quarter-acre lots originally laid out by Thomas, only 20 were sold. Of that 20, only 6, or roughly 10% of the total lots, appear to have actually been developed as single family detached homes. The balance of the 20 lots was either combined with adjoining lots to provide larger settings for residences or was incorporated into larger subdivided holdings.

While the Town did not develop in the manner envisioned by Thomas, a distinct pattern of settlement did emerge during the 19th century that is clearly distinguishable from the Town's later 20th century development. During the balance of the 19th century, the Town experienced its greatest growth, and it is this pattern of settlement that defines the Town's character as a period rural village. Brookeville's 19th century development is concentrated on Market Street and the intersection of Market with High Street (Georgia Avenue). Although there is variability in this period's development, it exhibits the following characteristics:

- There is a range of lot/homestead size from "manor" to "cottage" scale.

- The majority of lots are proportionally deeper than they are wide.

- Most historical structures directly face the main street with minimal setbacks that average less than 26 feet.

- The combination of deep lots with minimal setbacks from the roadway results in shallow front yards and deep rear or backyards that historically served to accommodate everything from the kitchen garden to the household privy.

- Town secondary streets, North, South, and north High (now Water Street) originally had no homes directly facing them but served to access mostly later 20th century development rear properties. Literally side streets, they were for the most part "unimproved" rights-of-way that provided views of side and rear yards for the various scale of homesteads in Town. As of this Plan (2009), there have been houses built on North Street and on a new street - Water Street.

- Depending on their scale, period homesteads incorporate a number of features including ancillary buildings such as barns, hen houses

and privies, kitchen/herb gardens and related meadows and pastures that are visual elements of the landscape.

Conservation Goals and Objectives

To conserve and enhance Brookeville's cultural landscape, the Plan establishes the following goals and objectives with regard to permitted in-fill development and new construction. The goals and objectives also serve to implement the goals of focusing development in suitable areas, protecting sensitive resource areas, providing for responsible stewardship for the land, and conserving resources. The Plan's objectives are, accordingly:

- Access to future development and public access to planned public open space should be appropriate in scale for the number of units served and type of use (vehicular or pedestrian).

- Where appropriate, common driveway extensions from the public right-of-way should continue the fence rows and vegetation screening of the adjoining village street or lane.

- An appropriate setting should be maintained around the Town's historically significant one-room schoolhouse, and the structure should be stabilized and preserved, through public acquisition if necessary. The Town has acquired the building and has fully restored it. The settings have been landscaped and integrated into a small natural park.

- Appropriate settings should be maintained for existing architectural resources and compatibly sized lots created for any adjoining new development.

- New construction and landscaping both on newly subdivided lots or on previously existing parcels should respect elements of the landscape that contribute to the rural village character of Brookeville.

Site Plan and Historic Area Work Permit Activities

To fully implement these objectives will require the following additional site planning considerations:

- Setbacks from the roadway for new homes will need to be comparable to adjoining development and should be compatible with the rhythm of the streetscape: shallow for period development, deeper for 20th century development.

- Vistas provided from the roadways need to be evaluated for their contribution to the overall rural character of the Town and measures taken to conserve them not only during development but in perpetuity.

- Building coverage/footprint should be appropriately scaled to the size of the lot.

- Landscaping should be understated and seek to utilize species appropriate to the period and rural character of the adjoining development.

These considerations should also guide the Historic Area Work Permit (HAWP) review process required by the Historic Preservation Ordinance for all significant changes within the Brookeville Historic District. In addition, the following architectural concerns should be addressed during that permit review:

- The Montgomery County Historic Preservation Commission has the responsibility for review and approval of all new building construction and renovations applications within the Town's limits. The Brookeville Planning Commission also reviews the new building construction and renovation applications and offer recommendations to the Historical Commission prior to their action.

- Scale of new construction, both the principal and any ancillary structures proposed, should be appropriate both to the size of the lot and to creating a mix of housing scales (in a manner similar to the Town's existing development) along newly created streetscapes.

- New homes should be designed with a definite front door with a formality to the front entrance that is appropriate to the scale of the home.

- The front elevation should be oriented toward and run parallel to the Town street or common drive serving as access for the lot.

- Depending on the scale of the home, it may be appropriate for elevations on corner lots to provide for a secondary, or side, as well as a primary or front entrance. Where there is a choice of access, homes should be sited with front elevations facing the larger right-of-way.

Natural Environment

The environmentally sensitive areas shown in Exhibit 2 represent the remaining information collected concerning the Town's natural environment,

including areas falling within the 100-year floodplain of Reddy Branch and the M-NCPPC park taking lines as well as floodplains for adjoining tributaries, soils with severe to moderate building limitations and slopes of 15% or greater. With the exception of the former mill sites and their races that by definition needed to be constructed near environmental features, areas of highest environmental sensitivity have historically been bypassed by development due to their relatively unsuitable location for building.

While this was perhaps largely due to the technical limitations of the 19th century, the fortuitous result is that much of the Town's environmentally sensitive land has been retained in an open and natural state. These areas, in addition to conserving natural resources and providing habitats for wildlife, serve to buffer the Town from the surrounding contemporary "suburban" development and are essential in helping reinforce the Town's distinctive 19th century rural settlement pattern.

To preserve these sensitive areas, they are identified for use as public and private open space. Should development be pursued in these areas, the Town's Subdivision Regulations include flood plain and steep slope restrictions to protect these critical areas in addition to restrictions mandated by State of Maryland. It is noted that the Town has already adopted a model flood plain ordinance in conjunction with the Federal Emergency Management Agency (FEMA). The Town's development review process shall require the following as part of its sensitive areas Plan element:

- Compliance with State stream valley protection guidelines which seek to reduce much of the negative effect of development in a natural non-invasive manner.

- Compliance with State and Federal Wetland Protection Statutes.

- Preparation of a tree survey and tree preservation and replanting plan in consultation with the Maryland State Forest, Park and Wildlife Service. The Plan notes that the Town has enacted a model tree conservation ordinance in accordance with the Maryland Forest Conservation Act.

- Compliance with the findings and recommendations of the Patuxent Functional Plan for erosion, storm water management and flood control. The Plan notes that the Town works in compliance with

Montgomery County Stormwater management requirements in all development activities.

- Detailed studies by soil engineers to assess through actual field investigation the limitations of constraining soils with proposals for mitigation or avoidance.

- Archaeological survey requirements with proposals for mitigating impacts or avoidance of field archaeological resources.

Mineral Resources Element

Article 66B of the Annotated Code of Maryland requires each Comprehensive Plan to contain a mineral resource element. Based on available geological information, the Plan must show how minerals will be extracted or reserved for future use. The geological review completed as part of the archaeological pre-survey did not identify any significant commercial quality mineral resources within the Town. In the absence of significant resources, and given the size and historic importance of Brookeville, the Plan concludes reservation of land for mineral extraction is inappropriate for the community.

Community Facilities Element

One function of a Comprehensive Plan is to identify and make provisions for the long-range service and facility needs of a community. Vital services and facilities such as police, fire and rescue, schools and libraries are located two miles south of Brookeville in Olney. These services as well as other community facilities such as parks, recreation and civic uses are provided by either Montgomery County or the Town within Town boundaries or in nearby areas. As the Town's major facility and service provider, the Town should participate to the extent appropriate in the County's annual Capital Improvements Program (CIP) and the County's annual budget process to influence facility adequacy. The following section also discusses several areas in which the Town can identify and plan for appropriately scaled facility and amenity projects within the community.

Civic or Community Use – Brookeville Academy

The Town acquired the historic Brookeville Academy in 1989 as a community center to serve both the Town's government as well as a variety of social, service, and cultural organizations. The Academy was fully restored and preserved by the Town and opened in 1998 as an important historic building, made accessible to all, and enhanced as a significant community facility designed to serve

the greater Brookeville area. The Academy forms a “civic core” in the heart of the community near the intersection of Market Street and High Street (Georgia Avenue) and provides a substantial public green space.

Pedestrian Networks

The Plan encourages the expansion of pedestrian access to existing community facilities such as the Brookeville Academy as well as nearby parks and natural paths. Expansion of the pedestrian networks and crosswalk system along Georgia Avenue (Maryland State Highway – Route 97) will link the Town’s existing pedestrian infrastructure with areas south of Town such as Olney. In addition, it provides access to all Town facilities to those who live in the southern and western portions of Brookeville and currently lack the pedestrian network that can be found on the eastern portion of Market and High streets. Finally, with the future construction of the Brookeville Bypass, the Town will work with the State Highway Administration and strongly encourages an expansion of pedestrian networks and natural paths along this route as well as efforts to ensure the safety of users. In the future, the Town will also consider, when possible, the construction of new pedestrian walkways within the present Maryland State Highway Administration rights of way.

Streetscaping and Gateways

The Town has undertaken streetscaping along Market, High, North, and Water Streets as an ongoing capital improvement project. Within the difficult constraints of a variable right-of-way, a coordinated brick sidewalk, curbing, and decorative “period” street-lighting project was completed in 1989.

The plan recommends continuing this effort consistent with the hierarchy of streets outlined in the Town’s circulation system. Under the proposed system, sidewalks would be appropriate on the Town’s primary or main streets, with the village secondary streets sharing vehicular and pedestrian traffic. Lighting should be period appropriate and spaced at the current intervals on the primary streets (Market and High) and at the intersection of village secondary streets and lanes, as well as at the ends of the streets. Any appropriate signage should also be considered.

Currently there are three formal entrances or gateways into the Town. These gateways offer an opportunity for the Town to further establish its identity as a place through permanent markers such as those placed on South High Street or through seasonal plantings or greetings. There is a public space at Georgia Avenue and Brookeville Road, which is maintained by the Town. This space should be kept in an appropriate state as a Town gateway.

Brookeville Schoolhouse -Powers' Wood Park

Another of Brookeville's significant cultural resources is the historic public one-room schoolhouse located on North Street. The Brookeville Schoolhouse is a one-room wood frame structure built in the 1860's. One of the few remaining examples of a one-room schoolhouse remaining in Montgomery County, the school was in continuous use from its construction until the 1920's. The building was converted into a residence after it ceased to be used as a school, but was later abandoned. The building had deteriorated significantly until Juanita G. Gardner and Shirley H. Rice deeded the property to the Town in 1997. The Town commenced restoration of the structure in 2003, utilizing funds from both the Town's Capitol Improvements fund and a $17,000 grant from the Maryland Project Open Space Program. The plans for restoration were authored by local architect Miche Booz. The Town holds periodic visitor days where the public is invited to tour the schoolhouse and learn about the history of the Town.

Land adjoining the restored schoolhouse was transferred to Town ownership as a condition of a subdivision development that has been constructed as Powers' Wood Park and enhances the school site while providing pathways, special plantings, and a small stone amphitheater. It is important to note that the restored public schoolhouse on North Street is not the only historic place of education in Brookeville; there are three other existing structures in Brookeville that have been used for formal education: Mrs. Porter's School for Girls, the Brookeville Academy and Orndorff Hall.

Path Walks and Coordination with the Reddy Branch Stream Valley Park

The circulation system encourages public access to planned public open spaces, the most significant of which is the area acquired by the M-NCPPC as part of the Reddy Branch Stream Valley Park. To make this public access more meaningful, the Town should continue to work with the M-NCPPC to develop appropriate, passive recreational features for the park. Possible linking of natural pathways such as historic mill races and other hiker-friendly and natural walkways along the Reddy Branch corridor should be explored. The restored Oakley Cabin and its adjoining area on Brookeville Road suggest one connection that might be identified as part of an area-wide historic resource/nature/pedestrian overlay.

Thomas and Newlin Mills and Mill Races Sites

The two historic mill sites on opposite ends of Town, Newlin Mill on the west and Thomas Mill on the east should be preserved and their architectural remains and artifacts protected. The Thomas Mill foundations on the east end of Town and its mill race should be considered for integration with the Reddy Branch Stream Valley Park setting which could be developed as a passive park site around

the Mill. There are several visible components of the Newlin Mill extant and the site should be protected in context when the Bypass project is constructed.

Water Resource Element

The water resource element requires municipalities to analyze current water supplies, wastewater treatment capacity and point and non-point source pollutants. When examining the potential for future growth, the municipality must take into account any shortcomings of water resources and pollutant levels that may result.

The Town's water and sewer facilities are provided by the Washington Suburban Sanitation Commission. All development must adhere to the conditions and requirements of the WSSC. With the Town's limited capacity for expansion and no desire to annex any additional land for development for the duration of this plan, WSSC finds the available water and sewer capacity to be adequate. In addition, the County has been provided with the existing and proposed land uses for the Town and expected nutrient load levels have been incorporated into Montgomery County's nutrient loading level calculations.

Since the Town drains towards the Patuxent River and the Rocky Gorge Reservoir, the Town acknowledges that all new subdivisions must be planned and designed to protect this valuable source of drinking water and will work with the applicant and the County in order to protect this vital resource.

Stormwater Management Element

The Town of Brookeville is physically located within Montgomery County. However, the Town has adopted its own zoning ordinance and subdivision regulations, independent of Montgomery County. The Montgomery County Department of Permitting Services (MCDPS) reviews, approves, bonds, and permits all Sediment Control Plans and Stormwater Management Plans for all new subdivision plans within the Town. The MCDPS also provides County inspection services during and after site construction.

The applicant's design engineer is required to provide construction observation services and to submit "As-Built" Plans and computations for review and approval to the County, prior to the MCDPS releasing the applicant's performance bond.

The Stormwater Management review and approval process considers minimizing impervious surfaces, in addition to pre-treatment, best management practices, water quality, and water quantity features. The Town's Planning Commission and its consultant also review the applicant's Sediment Control Plans

and Stormwater Management Plans and may make recommendations to the applicant and to the MCDPS.

Stormwater from the Town of Brookeville drains to the Reddy Branch sub-watershed of the Hawlings River, which in turn flows to its confluence with the Upper Patuxent River, not far upstream from the Rocky Gorge (Howard T. Duckett) Reservoir. Although water quality in the Upper Patuxent and in its tributaries is generally good, the Rocky Gorge Reservoir is listed as impaired for phosphorus, and has met its phosphorus Total Maximum Daily Loads (TMDL). In addition, the Rocky Gorge portion of the Upper Patuxent River downstream of the Triadelphia Reservoir, which drains directly to the Rocky Gorge Reservoir, is listed as impaired for stream biology, with a TMDL required.

The suitability of receiving waters is dependent on a number of factors including scale considerations and proximity to the impaired water body. The question of suitability of receiving waters to accommodate stormwater discharge must consider the contribution of that discharge to the overall impairment. Relative to the overall watershed upstream of the existing and required TMDLs mentioned above, the Town of Brookeville represents a very small fraction of the overall stormwater discharge to the Patuxent River and the Rocky Gorge Reservoir.

Moreover, the potential future changes in terms of Brookville's land cover are also minor. The Town does not have any plans for annexation through 2030. As to future growth, the Town has the potential to grow from a current size of 51 homes to a maximum of 58 homes. Therefore, it is evident that future stormwater discharges from Brookville will not increase significantly by 2030.

Because of TMDL modeling uncertainties and the need for adaptive management strategies to attain water quality goals, the issue of suitability of receiving waters to receive stormwater discharges cannot be adequately evaluated in advance of the TMDL implementation process itself. As a result, any potential need to evaluate the existing or future ability of receiving waters to assimilate stormwater discharges from the Town would probably need to be assessed in coordination with the County within the larger context of TMDL watershed implementation plans.

The existing and proposed land use information, through the year 2030, has been provided to the technical staff at the Maryland National Capital Park and Planning Commission (MNCP&PC). The MNCP&PC has incorporated the existing and proposed land use information for the Town of Brookeville, through the year 2030, into their nutrient load analysis for Montgomery County. Mr. Mark Symborski is the technical staff person at the MNCP&PC.

Water and Sewer Element

The Town of Brookeville is located within the Washington Suburban Sanitary Commission (WSSC) District and receives water and sewer services from this entity. Several years ago, the WSSC extended public water and sewer mains to within the Town limits. At that time many of the existing residences and non-residential uses were connected to the WSSC systems. All of the new, recently approved subdivisions have also connected into the WSSC systems. The Town will require that all future subdivisions will be connected to the WSSC water and sewer mains. Presently there are several existing residences that remain on private well and septic systems. The Town is not aware of any problems relating to the efficiency of the existing well and septic systems.

The WSSC technical staff reviews, approves, bonds, and permits all public and private water and sewer extensions, including individual water and sewer house connections and interior plumbing construction. The WSSC provides construction inspection services, and in certain situations, the applicant's design engineer may also provide construction observation services. The applicant's design engineer is required to submit "As-Built" plans and computations for all public and private systems.

The Town of Brookeville is located in two WSSC water pressure zones. The eastern portion of the Town receives its water from the Patuxent River Filtration Plant at the Duckett Reservoir (formerly the Rock Gorge Reservoir). The western portion receives its water from the Potomac River Filtration Plant.

The wastewater from the Town flows by gravity to the Reddy Branch Wastewater Pump Station, which is located within the Town limits. The sewage is then pumped up to the main Rock Creek sewage system, where it flows by gravity to the Blue Plains Sewage Treatment Plant, located in Washington D.C. The Blue Plains Sewage Treatment Plant has a discharge point at the Potomac River. The Blue Plains Treatment Plant discharge point is located in the southern most point of the District of Columbia along the Potomac River.

The following table shows the estimated average existing and anticipated water and wastewater flows:

<u>Estimated Average Existing Water Flows</u>

Residential Flows:	51 homes x 228 gpd/sfdu	=	11628 gpd
Non-Residential Uses:			
Church	110 seats x 4 gpd/seat	=	440 gpd
Social Hall	170 seats x 2 gpd/seat	=	340 gpd
Town's Academy	130 seats x 2 gpd/seat	=	260 gpd

Accounting Office	5 employ x 56 gpd/employ	=	280 gpd
Plumbing Shop	2 employ x 56 gpd/employ	=	112 gpd
	TOTAL	=	13060 gpd

Estimated Average Anticipated Water Flows Through 2030

Residential Flows	59 homes x 228 gpd/sfdu	=	13452 gpd
Non-Residential Uses			
Church	110 seats x 4 gpd/seat	=	440 gpd
Social Hall	170 seats x 2 gpd/seat	=	340 gpd
Town's Academy	130 seats x 2 gpd/seat	=	260 gpd
Accounting Office	5 employ x 56 gpd/employ	=	280 gpd
Plumbing Shop	2 employ x 56 gpd/employ	=	112 gpd
	TOTAL	=	14884 gpd

Estimated Average Existing Wastewater Flows

Residential Flows	51 homes x 255 gpd/sfdu	=	13005 gpd
Non-Residential Uses			
Church	110 seats x 5.76 gpd/seat	=	634 gpd
Social Hall	170 seats x 2.88 gpd/seat	=	490 gpd
Town's Academy	130 seats x 2.88 gpd/seat	=	374 gpd
Accounting Office	5 employ x 40 gpd/employ	=	200 gpd
Plumbing Shop	2 employ x 40 gpd/employ	=	80 gpd
	TOTAL	=	14783 gpd

Estimated Average Anticipated Wastewater Flows Through 2030

Residential Flows	59 homes x 255 gpd/sfdu	=	15045 gpd
Non-Residential Uses			
Church	110 seats x 5.76 gpd/seat	=	634 gpd
Social Hall	170 seats x 2.88 gpd/seat	=	490 gpd
Town's Academy	130 seats x 2.88 gpd/seat	=	374 gpd
Accounting Office	5 employ x 40 gpd/employ	=	200 gpd
Plumbing Shop	2 employ x 40 gpd/employ	=	80 gpd
	TOTAL	=	16823 gpd

Note: The wastewater flows for the different uses shown above were obtained from WSSC and do include an allowance for infiltration and inflow.

The WSSC and the Montgomery County Department of Environmental Protection (MCDEP) have incorporated the estimated average water and wastewater flows, through the year 2030, into their future water flow and wastewater treatment projections. Mr. Roland Steiner is the technical staff person at the WSSC. His telephone number is (301) 206 – 7008. Mr. David Lake is the staff person at MCDEP. His telephone number is (240) 777 – 7733.

Municipal Growth Element

Brookeville has for all intents and purposes been built out. There is some land comprising less than four acres that is available for development and several lot-sized parcels that might be suitable for subdivision and residential construction, however no construction is underway at the time of writing and no land remains for any large-scale development. The Town is buffered on the east and north by the Reddy Branch Stream Valley Park of the M-NCPPC, limiting the area in which the Town could theoretically expand. The Town's western boundary consists of similar parkland as well as land owned by Montgomery County and set aside for Bypass construction. A formal agreement between the County and the State precludes any other development in this area. While annexation could take place to the southeast along Route 97, no such action is contemplated nor has been sought. Annexation is also possible to the east on the south side of Brighton Dam Road but such action was turned down by the Town when initiated in 1999-2000 and no further action in this regard is considered likely or desirable. The Town anticipates maintaining its current boundaries for the duration of this plan.

Comprehensive plans are required to include a municipal growth element by House Bill 1141 of 2006. The plan is required to project the extent of growth within the community. The Town has the ability to expand to a total of 58 homes, from the 51 homes and lots approved for construction currently existing, with zero commercial expansion allowed under current zoning. This small amount of available growth capacity means there will be minimal effect on existing community facilities should the growth actually occur. [Exhibit 4]

Three tracts are of sufficient size to be subdivided. First is the Montgomery Tract located at 211 Market Street. This tract is located on the North side of Route 97 and Brookeville Road. The property contains 2.3 acres, with the Montgomery's living in the existing house on the lot. The property has the potential to be subdivided creating one additional lot.

Second is the Murphy Tract located at 9 High Street. This tract is located on the east side of Route 97 and consists of three parcels totaling over 142,000 square

feet. The Murphy's live in the existing house on the lot and the property could be subdivided into a total of three lots.

Finally, the Sheahin Tract is located on the East of Route 97 just south of the Murphy Tract and just North of the Brookeville Inn. The property contains 4.3 acres and is currently undeveloped, consisting mostly of open field. The property has the potential to be divided into a total of four lots.

In 2005, the Brookeville Planning Commission approved the three-lot subdivision, Powers' Woods, located at the end of North Street. The plan consisted of one existing house and two new lots. As of this writing, one new dwelling has been built while construction on the second lot, the only subdivided lot currently approved for development within the Town, has not begun.

Exhibit 4 shows an aerial view of the Town, with existing built lots demarcated in red and lots that could potentially be created by subdivision marked by a yellow dot.

Implementing Brookeville's Plan

There are a number of ways in which the Town can achieve the goals it has identified for its future. The purpose of this section is to describe the policies and programs needed to implement these goals as stated in the Town's Comprehensive Plan.

Land Use and Zoning

There shall be a minimal number of land use categories within the Town as a means of preserving its primary residential character, retaining and protecting its inventory of historically and architecturally significant buildings, protecting and sustaining its environmentally sensitive areas and reducing the potential for increased congestion on roads.

To achieve the desired land uses, the Town shall utilize the Historic Village Residential (HVR) zoning district and a Historic Village Commercial (HVC) zoning district. These zoning districts restrict permitted land uses to those uses deemed compatible with the existing character and development pattern of the Town. Primary permitted uses in the HVR zone shall be single-family detached residential, civic/institutional and public/private open space. Permitted uses in the HVC zone shall be limited to single-family detached residential and low intensity commercial and professional office uses. HVR and HVC zones will provide for a number of ancillary uses that will allow some flexibility within the Town's zoning.

Subdivision Regulations

To ensure protection of the natural and built environment and the sensitive areas element of the Plan, the following shall be included in subdivision regulations adopted to implement the land use policies and objectives set forth in the Plan:

- Conservation easement requirements for the protection of environmentally sensitive areas.
- Steep slope restrictions and best management practices for erosion, storm water management and flood control.
- Tree survey, preservation and reforestation requirements.
- Grading plan and soil survey submittal prior to ground disturbance.
- Archaeological survey requirements prior to ground disturbance.
- Concurrent submittal of building coverage and location as well as architectural elevations for HAWP review under standard method development.

Site Plan Review

All subdivision applications require the submittal of a site plan under Brookeville's site plan regulations and any modifications or additions the Town may choose to make to provide the maximum information for the Town to assess the implications of the application.

Additional site plan review design considerations are identified in the section of this Plan which discusses conservation of the cultural landscape. In terms of administration, site plan review will need to be carefully coordinated with the Historic Area Work Permit (HAWP) Process required under the Town's Historic Preservation Ordinance.

Historic Area Work Permit

The regulatory review process by the County's Historic Preservation Commission represents a significant regulatory tool for protecting existing historical structures and settings from inappropriate change and ensuring compatible new development. The HAWP process provides an opportunity for design review of proposed architectural changes to individual historic structures as well as requiring the review of architectural elevations, building site/footprints and landscaping for new construction. Additionally HAWPs can protect significant vistas or natural or historical features or a district or individual structure's

environmental setting. Guidelines for administering HAWPs for new construction are presented in the Conservation Goals and Objectives section of the Plan.

Easements Program

Another tool for implementing the cultural and environmental goals of the Plan is the development of a conservation easement program. By utilizing an existing conservancy group or by establishing its own program, the Town can encourage the private donation of easements or require them through regulation of subdivision. Easements provide another means of monitoring and mediating change for anything from architectural facades to scenic landscapes and for retaining areas of environmental sensitivity identified on the land use Plan for public or private open space.

Capital Improvements Program

Development of a Capital Improvements Program (CIP) would provide an additional planning tool for the Town to use in implementing its long-range facility and projects goals. As an adjunct to the Town's Comprehensive Plan, the CIP would establish a priority for the Town's wish list of public improvements and help develop strategies for funding them.

Generally done on a 6-year time frame in larger jurisdictions, the CIP is reviewed and updated on an annual basis, which allows for a public hearing and comment process. It also allows a jurisdiction to judge its progress toward a specific goal or to shift its priority as needed.

As important as establishing its own appropriately scaled CIP, Brookeville will monitor and participate in Montgomery County's CIP process as the County provides many of the Town's necessary services and facilities as well as to facilitate one of the Town's main goals – the construction of the Georgia Avenue – Brookeville Bypass.

Inter-Jurisdictional Mandatory Referral and Coordination

Under the Regional District Act, mandatory referral or intergovernmental and interagency review of planning documents and capital improvement projects is required. This reciprocal review and comment requirement provides opportunity for the Town to receive invaluable input from relevant agencies on its planning proposals as well as comment on proposals or actions of other governments that will affect the Town.

The Plan anticipates State and County referral and coordination efforts will be required or found desirable in the following areas:

- Georgia Avenue - Brookeville Bypass issues

- Study and recommendations for managing related east-west through-traffic, particularly on Brighton Dam Road – Market Street – Brookeville Road

- Language for buffering the Town and conserving the rural and scenic values of the land and the roads to the Town's north, east and west.

- State and County Department of Transportation (DOT) Coordination.

- Determination of the ultimate status of and maintenance responsibility for Georgia Avenue in Town once the Bypass is constructed.

- Continued partnering with the State and County on any appropriate interim improvements to relieve the negative impacts of traffic until the Bypass is constructed.

- Exploration with the M-NCPPC for ways in which mutually agreeable, passive development and stream restoration of the Reddy Branch Stream Valley Park can occur.

- Exploration of the possibility of a minimal, natural material path to parallel the route of the mill race for the Thomas Mill on the northeastern edge of Town west to the Newlin Mill race at least as far as the restored Oakley Cabin.

- Provide M-NCPPC with the archaeological pre-survey and assessment of the Town and encourage future survey efforts of potential archaeological resource areas identified within M-NCPPC's park taking lines.

Local Project Review

In accord with Section 5-7A-02 of the Finance and Procurement Article, Annotated Code of Maryland, Brookeville assures that for any construction project within its boundaries using State funds, grants, loans, loan guarantees, or insurance, it will not approve a building permit unless it has been found to be consistent with the Comprehensive Plan. All such projects will undergo review and evaluation for consistency with the Comprehensive Plan by the Brookeville Planning Commission and the Brookeville Town Commissioners. A report will be written documenting

the findings and determinations and the project applicant notified. In extraordinary circumstances where project approval is warranted despite inconsistencies with the Plan, documentation and appropriate reporting procedures shall be followed and the Project Review Checklist prepared accordingly.

Annexation

Another area of intergovernmental referral and coordination is the potential for annexation. Requests for annexation were discussed during the Town's review of issues that might affect its future. The plan does not anticipate the annexation of any land for the lifetime of this plan. Any property that may be annexed to the Town shall be classified in a separate lower density zoning district consistent with the County's existing Master Plan proposals, zoning densities, and developmental standards.

Ongoing Survey and Documentation

An important means of protecting the Town's historic character is to be prepared with accurate information concerning the Town's historical/architectural resources and its historical and pre-historical archaeological resources. The Town shall continue its efforts to compile and catalog information on its history and prehistory, including carrying on its collaboration with the Montgomery County Historical Society, the Sandy Spring Museum, and the Montgomery County Heritage Tourism Alliance., to help further those efforts and as a matter of policy, the Town should continue to explore the following:

- Seeking research grants for the study of local history.

- Utilizing local and regional universities and organizations to host field schools in archaeology and architectural history.

- Coordinating with State and County agencies when planned projects in the area require environmental and historical/archaeological impact statements.

Exhibit 1: The Town of Brookeville's Zoning Map

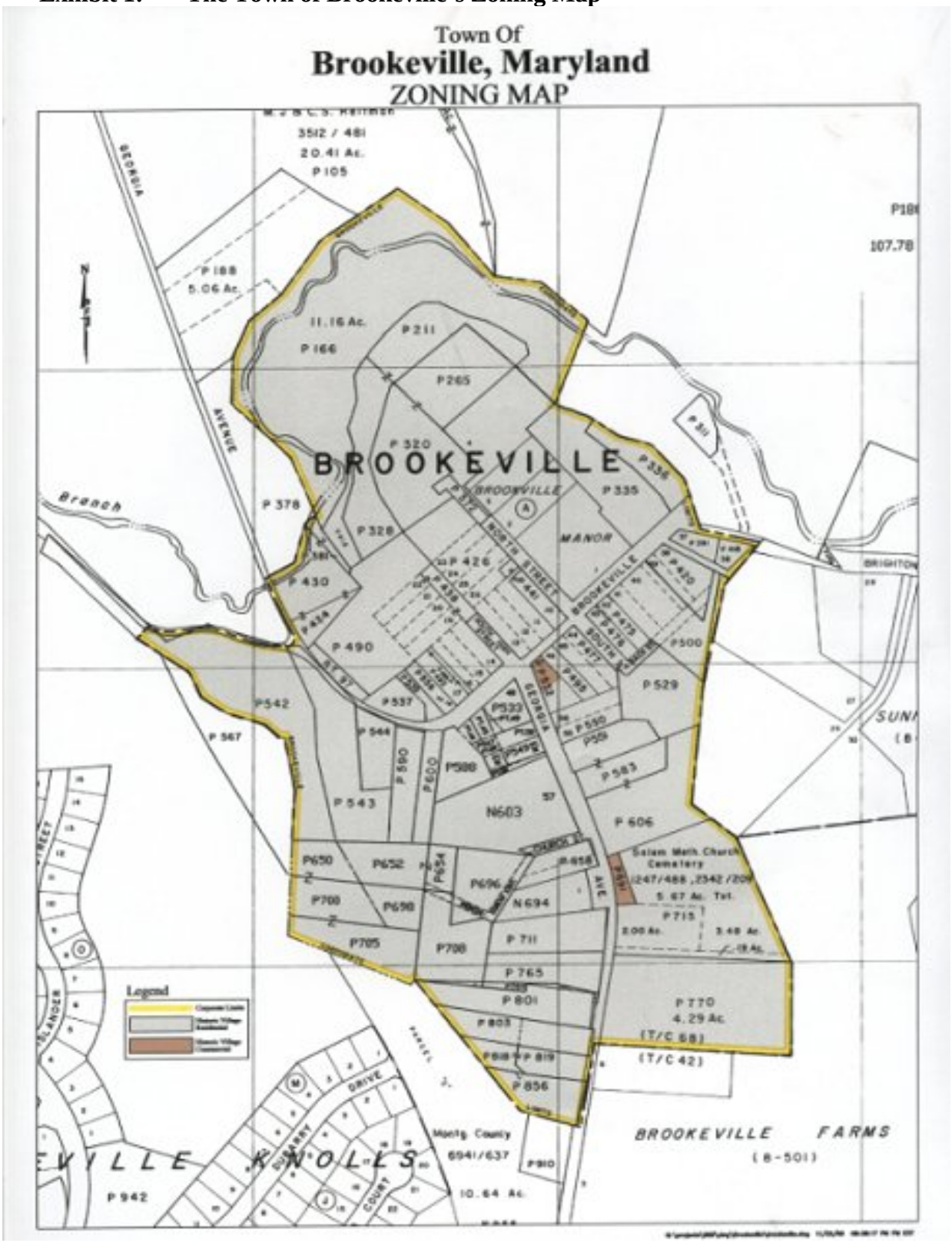


Exhibit 2: Land Use & Environmental Areas

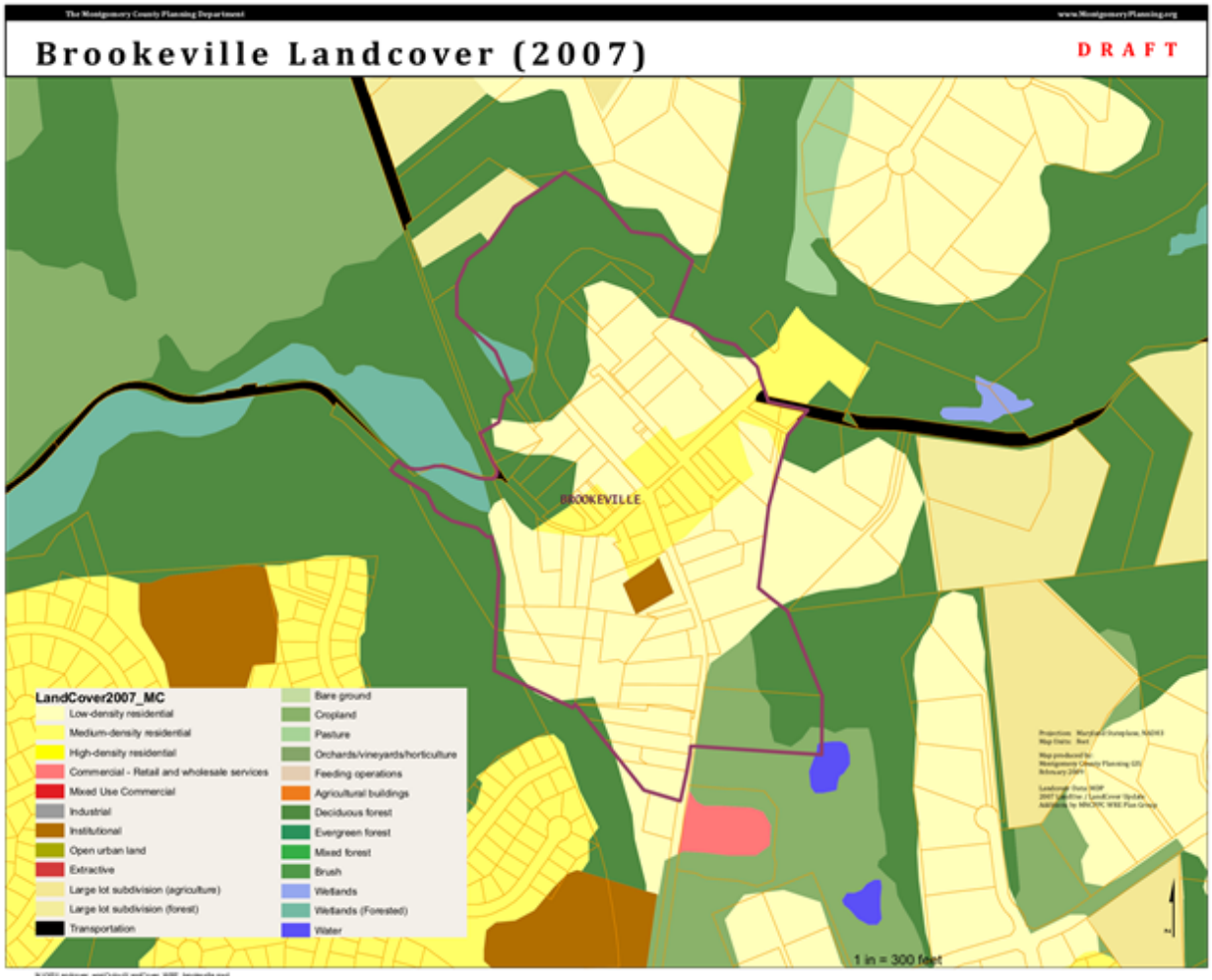


Exhibit 3: Brookeville Bypass Map

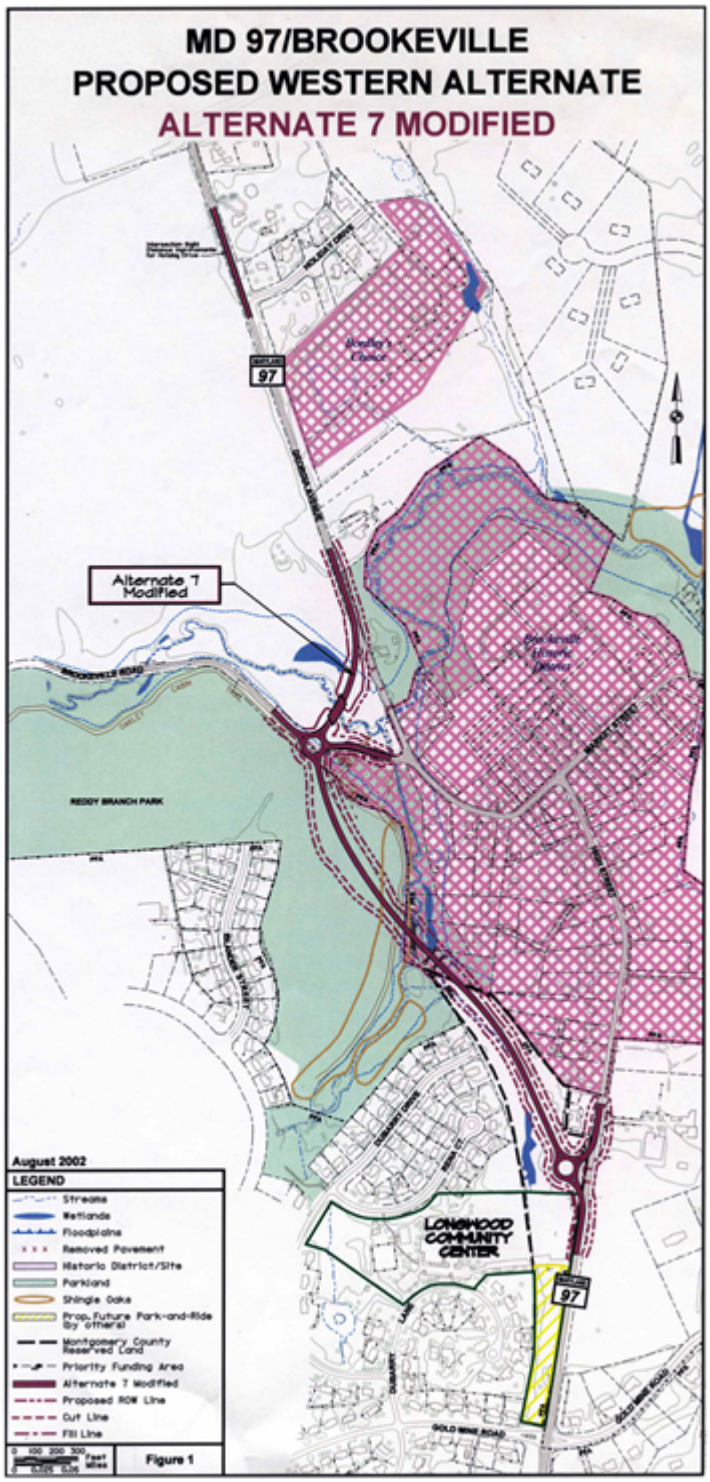


Exhibit 4: Town Residence Count

Current buildings demarcated by red strike, subdividable lots shown in yellow

Exhibit 5: Memo Concerning Impact of ICC

Dear Mr. Lohmeyer:

Thank you for your email and memo on behalf of the Town of Brookeville. The State Highway Administration (SHA) appreciates the Town's interest in the Intercounty Connector (ICC) project.

Since the Town of Brookeville is outside the limits for the ICC's study, the nearest intersection included in the study is the MD 97/MD 108 intersection, approximately two miles south of Brookeville. The study indicates that the Average Weekday Daily Traffic (AWDT) volumes along southbound MD 97, approaching MD 108, are anticipated to increase by about 15.2 percent between the years 2000 and 2030, without the ICC. With the ICC, AWDT volumes along southbound MD 97, approaching MD 108, are anticipated to increase by about 12.6 percent between the years 2000 and 2030. The ICC is expected to draw about 500 vehicles per weekday away from this portion of southbound MD 97, coming from Brookeville. Using a back of the envelope assumption, that could subtract about 50 vehicles from southbound MD 97 during the AM peak hour. For more information on the traffic study, the ICC's Travel Analysis Technical Report is available to be viewed and downloaded at www.iccproject.com/feis-download.php.

In summary, we do not anticipate traffic volumes substantially changing in Brookeville when any portion of the ICC opens. Brookeville is far enough away, about four miles, to not experience impacts from the ICC.

Sincerely,

Melinda B. Peters
Director