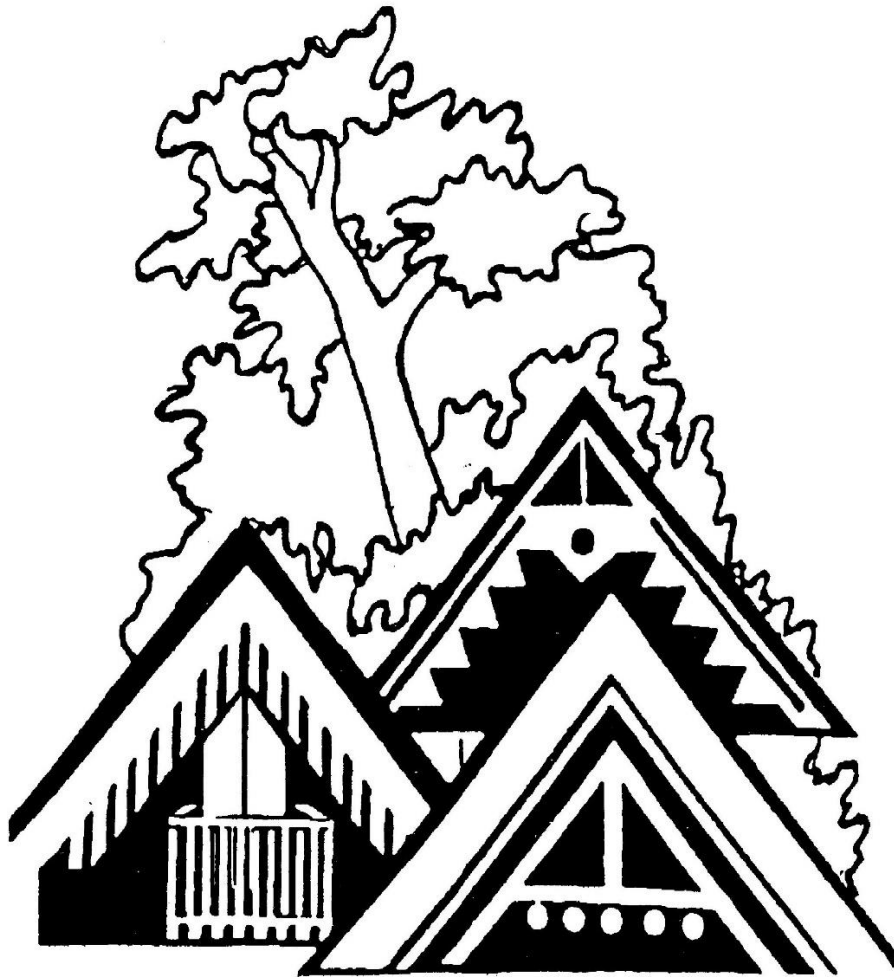


COMPREHENSIVE PLAN 2021



TOWN OF WASHINGTON GROVE
MARYLAND

WASHINGTON GROVE PLANNING COMMISSION 2020-2021

Peter Nagrod, Chairman
Charlie Challstrom, Council Liaison
Georgette Cole
Jonathan Cohen
Christine Dibble, Council Liaison
Robert Johnson, Alternate
Deborah Mehlferber

Additional Comprehensive Plan Contributors

Many Town Committees worked on input for the Comprehensive Plan. Between the Historic Preservation Commission and the various Committees, at least 60 different residents were involved in the process, and many volunteered on more than one group.

Historic Preservation Commission: Chair: Bob Booher; Wendy Harris, Gail Littlefield, David Stopak, Mimi Styles, also Kirk Greenway and Jeff McCrehan

Bike Path Working Group: Jay Everhart, Barbara Raimondo

Border Committee: Chair: Peter Nagrod; Bob Booher, Dick Cavicchi, Sung Chang, Jon Cohen, Jonathan Dail, Pat Klein, Joan Mahaffey, Barbara Raimondo, Bruce Rothrock, David Stopak, Mary Warfield, David Lutter, Krista Zanetti

Emergency Preparedness and Safety Committee: Chair: Mark Frederickson; Sat Amagai, Charlie Challstrom, David Cosson, Larry French, Pat Klein, Barbara Raimondo, Mary Warfield

Forestry and Beautification: Chair: Georgette Cole; Jay Everhart, Joan Mahaffey, Audrey Maskery, Deborah Mehlferber. Paula Puglisi, Cynthia Werts

Housing Element Working Group: Chair: Charlie Challstrom; Mimi Bolotin, Ann Phillips, Paula Puglisi

Interjurisdictional Working Group: Darrell Anderson, Bob Booher, Charlie Challstrom, John Compton

Lake Committee: Chair: John Hutchinson; Bruce Crise, Nancy Haskett, Pat Klein, Bruce Rothrock, Al Taylor, Betty Taylor

Lighting Committee: Chair: Virginia Quesada; Darrell Anderson, Bob Booher, Bruce Crise, Robert Johnson, Betsy Klinger, Gail Littlefield, Joan Mahaffey

Racial and Social Equity Committee: Mary Blake, Mimi Bolotin, Dick Cavicchi, Julia Cavicci, Sylvie Favret, Gretchen Horlacher, Betsy Klinger, Jane Klinger, Joan Mahaffey, Eva Patrone, Andy Peck-McClaine, Paula Puglisi, Tad Stahnke, Emma Strother, Sita Strother

Stormwater Management Committee: Chair: Robert Johnson; David Cosson, Bruce Crise, Sylvie Favret, John Hutchinson, Pat Klein, Betsy Klinger, Joan Mahaffey, Virginia Quesada, Bruce Rothrock, Steve Werts

Sustainability Committee: Chair: Bob Booher; Peggy Booher, Margo Cavenagh, Ned Helme, Ernie Kawasaki, Tom Land, Paul Patrone, David Stopak, Freda Temple, Gary Temple

Woods Committee: Co-Chairs: Pat Klein and Joan Mahaffey; Joli McCathran, Deb Mehlferber, Virginia Quesada

Special thanks go to Kirk Eby of Gaithersburg, who volunteered his GIS mapping expertise to work on our new Zoning Map. We also thank former resident Doris Gordon who gave us permission to use her original artwork and the Woman's Club of Washington Grove for their permission to use an original artwork by former resident Alice Mahaffey.

TOWN OF WASHINGTON GROVE COMPREHENSIVE PLAN

INTRODUCTION; PURPOSES OF THE PLAN	7
EXHIBIT A – Current Zoning and Growth Areas.....	10
EXHIBIT B – Town Buildings, Parks, Community Facilities	11
1 LAND USE AND ZONING/RECOMMENDED IMPLEMENTATION.....	12
1.1 Residential Zones	12
1.2 Commercial Zone	13
1.3 Forests, Parks, and Other Town-Owned Land	14
1.4 Creation of New “Employment/Office” Zone, “Service Zone”, and “Mixed Use Zone” upon Expansion of Municipal Boundary in Growth Area 3 or 4 or 5.....	15
2 MUNICIPAL GROWTH AND BOUNDARY	16
2.1 Growth within Town	16
2.2 Municipal Growth Areas	21
2.3 Town Boundary	26
2.4 Historical Concerns	27
3 TRANSPORTATION.....	28
3.1 Walkways	29
3.2 Parking Policy	30
3.3 Walkway/Bikeway Connection.....	32
3.4 Railroad Corridor	33
3.5 Washington Grove Lane.....	34
3.6 Humpback Bridge/Railroad Street	35
3.7 Ridge Road	38
3.8 McCauley Street and Maple Road.....	39
3.9 Center Street	39
3.10 Cherry Avenue	39
3.11 Brown Street.....	40
3.12 Historical Concerns	40
4 COMMUNITY FACILITIES	41
4.1 McCathran Hall	41
4.2 Town Maintenance Shop.....	44
4.3 Gazebo.....	44

4.4	Recreation Shed.....	44
4.5	Street and Walkway Lighting.....	44
4.6	Avenue, Street, and Road Name Signage.....	47
4.7	Incidental Structures.....	47
4.8	Historical Concerns	48
5	PARKS AND FOREST PRESERVE.....	49
5.1	Designated Parks and Green Space	50
5.2	The Forest Preserve (East and West Woods)	54
5.3	Maple Lake, Maple Spring, Whetstone Spring	56
5.4	Washington Grove Conservation Park	58
5.5	Historical Concerns	58
6	SENSITIVE AREAS AND ENVIRONMENTAL CONCERNS.....	59
6.1	Forest Conservation.....	59
6.2	Residential Forest	63
6.3	Additional Sensitive Areas	65
6.4	Historical Concerns	70
7	WATER RESOURCES ELEMENT.....	71
7.1	Water Supply System	71
7.2	Wastewater System	72
7.3	Stormwater Management and Pollution Reduction.....	73
7.4	Historical Concerns	78
8	COMMERCIAL CORNER	80
8.1	Long-term Vision for Commercial Corner.....	81
8.2	Zoning Use Issues	83
8.3	Parking Issues.....	84
8.4	Beautification and Safety Issues.....	85
8.5	Historical Concerns	86
9	PRESERVATION AND DEVELOPMENT STRATEGIES	87
9.1	Historic Character.....	87
9.2	Landscapes and Streetscapes.....	89
9.3	Character and Scale of Homes	90
9.4	Protecting and Preserving Washington Grove’s Historic Character	92
9.5	Washington Grove Historic Preservation Commission.....	94

9.6	Town Neighborhoods	96
9.7	Infill Development and Redevelopment.....	98
9.8	Financial Incentives.....	100
9.9	Connections with Neighbors and Viewsheds	101
10	INTERJURISDICTIONAL ISSUES	104
11	EMERGENCY PREPAREDNESS WITH RISK MANAGEMENT AND HAZARD MITIGATION.....	106
11.1	Town Critical Functions.....	106
11.2	Chain of Command and Continuity of Operations.....	106
11.3	Town Infrastructure Use.....	107
11.4	Town Communications Systems	107
11.5	Risk Management and Safety Procedures	108
11.6	Coordination with External Emergency Entities.....	108
11.7	Volunteer Efforts	109
11.8	Outreach and Expertise Development	110
11.9	Preparing for Extended Emergency Event	110
11.10	Historical Concerns	111
12	HOUSING.....	112
12.1	Evolving the Foundation of Washington Grove.....	112
12.2	Characterization of Housing in Washington Grove	115
12.3	Expanding the Diversity of Residents	117
12.4	Historic Homes and Support for Rentals.....	117
12.5	Infill Development	118
12.6	Reformed Parking Requirements	119
12.7	Residential Use in Commercial Zone.....	119
13	SUSTAINABILITY.....	121
13.1	Global Climate Challenge – Key Building Blocks for Action by Washington Grove..	121
13.2	Sustainable Energy Strategies for Washington Grove	122
13.3	Sustainability Opportunities for Town Buildings, Infrastructure, Natural Resources and Operations	124
13.4	Sustainability Options for Individual Residential Properties	127

INTRODUCTION; PURPOSES OF THE PLAN

Washington Grove is an incomparable town -- unique in its roots, in its initial land use plan, in the design of its dwellings, in its determination to retain more land in a natural state as forests and parks than developed property, and in its history.

Recognizing that most of the Town's privately-owned parcels are already developed, the goals and objectives of this plan are:

- Preserve the integrity of the Town by providing guidance for protection of the land use pattern as reflected by the historic character of the community (as defined in the National Register Designation) and as influenced by the evolving culture of the community.
- Preserve historic resources through thoughtful adaptation of housing stock and conservation of the natural landscape.
- Protect and improve the economic and intrinsic value of both the privately-owned property and the property and resources held in common.
- Expand awareness of Washington Grove in adjacent jurisdictions and provide opportunities for discourse and exchange.
- Support planning requirements throughout the State.

Integral to the value of the commons is the “sense of place” described in the nomination form for inclusion on the National Register of Historic Places. That character is a unique composite of setting, historic legacy, and community life that is strong yet vulnerable to gradual erosion on many fronts. The threats are both from without, in the form of ever encroaching urbanization, and internal in the form of diminished communal contribution and physical integrity. The Town recently updated the nomination to better define the landscape elements and more recent historic periods as a means of strengthening the document as a basis and guide to preserving its historic integrity. The Development and Preservation Strategies element of the Plan, Section 9, contains descriptions of the character-defining features identified in the nomination, the roles they play in the Town's heritage and recommendations for their preservation.

The most striking element of the layout of the Town is the relative proportion of developed and natural spaces. Even the developed areas are integrated into the natural environment to achieve “A Town within a Forest.”

The preparation of a comprehensive plan is the legal responsibility of the Washington Grove Planning Commission under the Annotated Code of Maryland, Land Use Article. It states that “a planning commission shall make and approve a plan which the commission shall recommend to the local legislative body for adoption” and that the plan shall “serve as a guide to public and private actions and decisions to insure the development of public and private property in appropriate relationships.” The plan must include the following elements:

1. Statement of goals, objectives, principles, policies, and standards
2. Land use element
3. Transportation element
4. Community facilities element
5. Mineral resources element (if appropriate)

6. Water resources element reviewed by the Maryland Department of the Environment
7. Identification of areas of critical State concern (if appropriate)
8. Sensitive area element reviewed by the Maryland Departments of Natural Resources and Environment
9. Recommendations of the planning commission for land development regulations to implement the plan and which encourage the following:
 - (a) Streamlined review of applications for development, including permit review and subdivision review within the areas designated for growth in the plan;
 - (b) The use of flexible development regulations to promote innovative and cost-saving site design and protect the environment; and
 - (c) Economic development in areas designated for growth in the plan through the use of innovative techniques.
10. Municipal growth element
11. Housing element

In addition to those mandatory items, the Town of Washington Grove Comprehensive Plan includes the following specific subject areas:

- Parks and Forest Preserve
- Commercial Corner
- Preservation and Development Strategies
- Interjurisdictional Issues
- Emergency Preparedness with Risk Management and Hazard Mitigation
- Sustainability

The State's Land Use Article also mandates that a community's comprehensive plan implement the following twelve visions:

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 these centers, or strategically selected new centers.
4. Community Design: Compact, mixed-use, walkable design consistent with existing community character and located near available or planned 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 sustainable 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 provides residential options for citizens of all ages and incomes.
8. Economic Development: Economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are 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, forests, agricultural areas, open space, natural systems, and scenic 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.

This comprehensive plan is a guide to public and private actions and decisions adopted by the Town. The plan formulation process involved work sessions of the Planning Commission, with input from the Historic Preservation Commission, Forestry and Beautification Committee, Woods Committee, Lake Committee, Border Committee, Dog Park Committee, Bicycle Path Committee, Emergency Preparedness and Safety Committee, Stormwater Management Committee, Town Lighting Committee, Sustainability Committee, and Racial and Social Equity Committee followed by public hearings before the Commission, the Mayor and Town Council. The plan addresses areas outside of Town as these relate to the preservation and enhancement of the boundaries and gateways of the Town. Notification and participation by Town residents and by other jurisdictions and interests have been encouraged to insure the common good as development of public and private properties occurs.

We who live in Washington Grove enjoy the fruits of those who planned for us. It is our intention and our legal responsibility to do the same for future residents.

EXHIBIT A – Current Zoning and Growth Areas

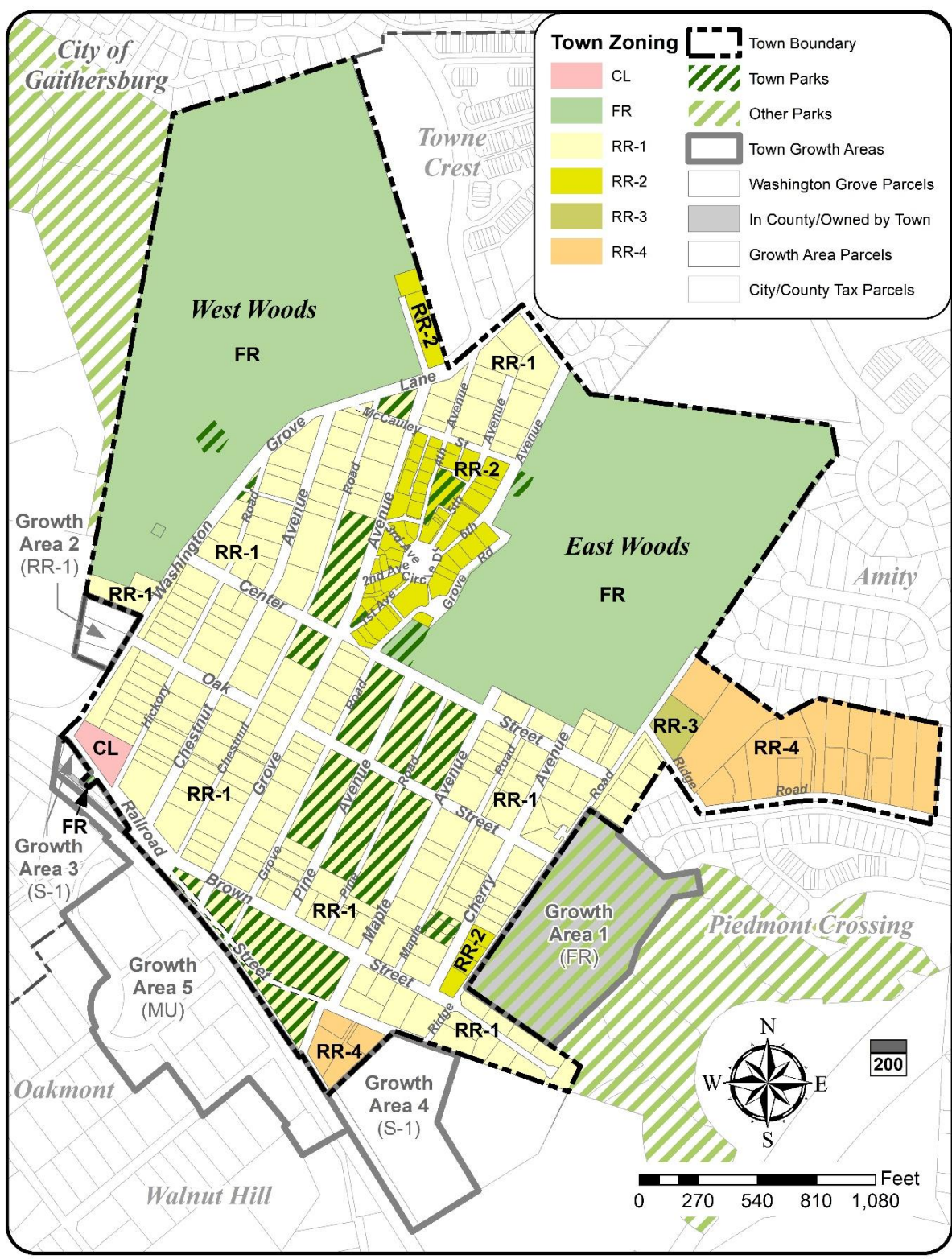
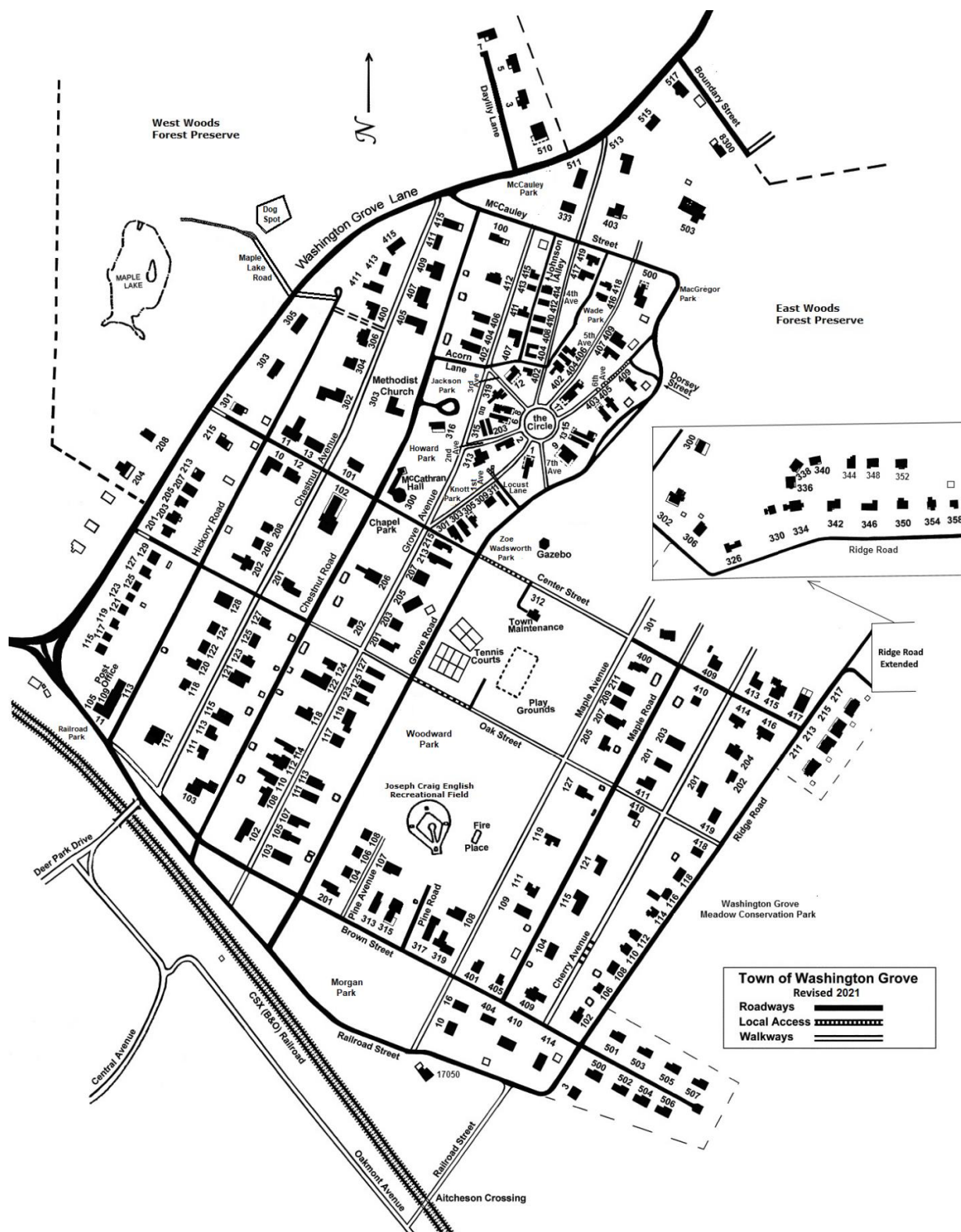


EXHIBIT B – Town Buildings, Parks, Community Facilities



1 LAND USE AND ZONING/RECOMMENDED IMPLEMENTATION

In accordance with State Law, this Plan recognizes the need to encourage the following:

1. Streamlined review of applications for development within the areas designated for growth in the Plan
2. Use of flexible development regulations to promote innovative and cost-saving site design and protect the environment
3. Economic development in areas designated for growth in the Plan through the use of innovative techniques

The existing zones and total acreage of each zone within the Town limits are as follows:

RR-1	Residential – 1	82.0 acres	38.0 %
RR-2	Residential – 2	12.0 acres	5.6 %
RR-3	Residential – 3	1.0 acre	0.5 %
RR-4	Residential – 4	12.6 acres	5.8 %
RR-4 Cluster	Residential	1.8 acres	0.8 %
C-L	Commercial – Local	1.0 acre	0.5 %
FR	Forest Preserve	107.0 acres	49.6 %
TOTAL		215.6 acres	100.0 %

A map (Exhibit A) showing the location of the Town's various zones and the Washington Grove Zoning Ordinance (hereinafter referred to as the Zoning Ordinance and included by reference), are incorporated into this Plan. The layout was first formalized in the Maddox Plat in 1897.

1.1 Residential Zones

RR-1 Zone

The RR-1 zone contains 158 single-family homes and one church. The minimum lot size, specified by the Zoning Ordinance, is 11,250 square feet, and most homes within the zone occupy parcels composed of more than one of the historically designated lots including the area originally known as the Cottage District. This Plan does not recommend any changes to the permitted land uses, or the existing standards for minimum lot size, set-backs, and heights for the RR-1 zone.

RR-2 Zone

The RR-2 zone contains 49 single-family homes. The minimum lot size, specified by the Zoning Ordinance, is 7,500 square feet, reflecting the historic setting of homes in the area of the Circle and its radiating avenues corresponding to the original Tent District. This Plan does not recommend any change to the permitted land uses, or the existing standards for minimum lot size, set-backs, and heights for the RR-2 zone.

RR-3 Zone

The RR-3 zone contains one single-family home. The RR-3 zone was initially established to annex a parcel owned by the Washington Suburban Sanitary Commission (Parcel 360 in 1992, 1.579 acres); that parcel has since been purchased by a developer, subdivided, and re-zoned. The RR-3 zone was used for annexing a second parcel (Parcel 291 in 1995, 0.95 acres) and that parcel remains as the only property in the RR-3 zone. In February 2020, the Town Council modified the RR-3 minimum lot size standards to support subdivision of this property with retention of the existing home. The minimum RR3 lot size, specified by the Zoning Ordinance, is 13,900 square feet. This Plan does not recommend any changes to the permitted land uses, or the existing standards for minimum lot size, building coverage, set-backs, and heights for the RR-3 zone.

RR4 Zone

The RR-4 zone contains 17 single-family homes. The minimum lot size, specified by the Zoning Ordinance is 18,000 square feet. These homes in the RR-4 zone are located along Ridge Road and comprise the properties that were annexed into the Town to protect the historic rustic rural nature of the road and the character of these properties within the Washington Grove community. This Plan does not recommend any changes to the permitted land uses, or the existing standards for minimum lot size, building coverage, set-backs, and heights for the RR-4 zone.

RR-4 Cluster Zone

The RR-4 Cluster zone includes four parcels that were originally part of Parcel 655 annexed into the Town in 2007. Parcel 655, approximately 2.0 acres, was subdivided in 2017 into the four parcels, now designated as Block 37, Lots 1 through 4. There is one single-family home located on Lot 1. Classification of land into the RR-4 Cluster Zone permits clustering of residential lots based on density, and grants the Planning Commission the authority to review and approve architectural drawings, designs, elevation drawings, and similar details if the Planning Commission determines that the development plans are consistent with the criteria specified in the Zoning Ordinance for such reviews and approvals.

Recommendation:

→ **Maintain the RR-1, RR-2, RR-3, and RR-4 zones to foster and encourage owner-occupied, single-family residences; and to promote new and renewed development to be in physical scale with surroundings and neighbors.**

1.2 Commercial Zone

C-L Zone

The C-L zone contains a 1-acre commercial shopping center located in the southwest corner of the Town. Historically, the area served as a nexus for transportation, commercial and agricultural activities. It has contained a variety of commercial uses up to the present. The uses permitted now as a matter of right, or by special exception, reflect the Town's efforts to promote commercial uses more compatible with the historic and residential nature of the Town. The resulting permitted uses are characterized by offices, limited personal services, and other

commercial uses that are intended not to significantly burden the Town with increased noise, litter, or pedestrian or vehicular traffic. It will better serve the interests of the Town if the owner of the Commercial Corner has enough flexibility to improve its revenue stream. Thus it may be desirable to add a residential component to the permitted uses, and a new category of special exception uses to allow eating and drinking establishment with specific criteria for compatibility. The existing standards for minimum lot size, building coverage, set-backs, and heights for the C-L zone remain.

1.3 Forests, Parks, and Other Town-Owned Land

FR Zone

The Town contains 107 acres of forest and park sites, and for the most part, the park sites are scattered throughout the residential areas. The FR (Forest / Recreational) zoning designation is assigned to the two sections of woods that are the remnants of the original forested context of the camp meeting. The East Woods, approximately 41 acres, is located in the northeast corner of the Town. Blocks 28 and 33 contain Town-owned lands adjacent to the East Woods and to residences. The West Woods, approximately 48 acres, is located to the west of Washington Grove Lane, along most of the Town's northwest boundary with the City of Gaithersburg. The latter contains Maple Lake. This Plan does not recommend changes to the permitted land uses for the FR zone. (See Section 6.1 for forest preserve issues.)

Recommendations:

- **Complete a Local Zoning Map Amendment to assign FP (Forest Preserve) zoning to the East Woods parcel delineated on the 2017 East Woods Plat of Survey filed in the Land Records for Montgomery County. This is intended to provide additional protection for our Forest Preserve.**
- **Only one section of privately owned land (lot 22, block 9) intrudes into the East Woods. This property should be purchased by the Town when the owner is willing to sell it.**
- **Complete a Local Zoning Map Amendment to assign FP (Forest Preserve) zoning to the West Woods. This is intended to provide additional protection for our Forest Preserve.**

Other Town-Owned Land

There are some parcels of publicly-owned land in residential areas which might be considered for sale to residents. (see Section 3.4 Internal Streets and Roadways). Any sale of public land would be considered only after analysis and determination that such sale would be consistent with the Town's Policy for Sale of Surplus Parcels and in accordance with the requirements of State law regarding such disposition of surplus property. In those rare cases, such as the sale of public land under the porches of houses constructed prior to incorporation of the Town in 1937, these parcels may be considered for sale. The Town originally passed an Ordinance to grant Permanent Easements; however, after much discussion, it was decided that this was a clear case where all parties benefited from the sale of said surplus property. Owners of such a house can now choose either the easement or sale process.

Recommendation:

- **Review identified lots on a case-by-case basis. Determine their potential need by the Town and whether sale would be consistent with the Town’s Policy and requirements of State law for sale of surplus parcels. Such sales would only be authorized after enactment of an ordinance to ensure public notice and an opportunity for input during a public hearing.**

1.4 Creation of New “Employment/Office” Zone, “Service Zone”, and “Mixed Use Zone” upon Expansion of Municipal Boundary in Growth Area 3 or 4 or 5

The Municipal Growth and Boundary Enhancements element of this Plan, Section 2.2.1 refers to potential expansion of the boundary of the Town to include that property described as “Area 3: Industrial Parcels West of Humpback Bridge.” These are the industrial parcels located east of the grain elevators that are part of the City of Gaithersburg limits and west of the County controlled humpback bridge, along the railroad tracks. Historically these buildings were developed to provide commercial services and siding access to the railroad. Also included in the Municipal Growth and Boundary Enhancements element of this plan, in the same discussion of “Area 3”, are the railroad tracks and Washington Grove passenger shelter that lie east of the humpback bridge. The same element includes a discussion of “Area 4: Roberts Oxygen and Adjacent Storage.” Finally, this same element includes a discussion of “Area 5: Segment of Historic Railroad Corridor and Portions of Oakmont Subdivision.”

Recommendation:

- **In the event of discussion/negotiation toward annexation of any of the parcels identified in Section 2.2.1 as Areas 3 or 4, as discussed in more detail therein, enact new zoning classifications in anticipation of annexation which may include service and/or local/light industrial and/or research uses.**
- **In the event of discussion/negotiation toward annexation of any of the parcels identified in Section 2.2.1 as Area 5, as discussed in more detail therein, enact new zoning classifications in anticipation of annexation which may include mixed uses, e.g. residential, professional offices, and/or commercial uses.**

2 MUNICIPAL GROWTH AND BOUNDARY

2.1 Growth within Town

2.1.1 Historic Growth Patterns

Roy McCathran, the Town's first mayor, referred poetically to Washington Grove as "a town within a forest," an oasis of tranquility and a rustic jewel in the diadem of the great free state of Maryland." Amazingly, this is as true today as it was in 1937 when he spoke these words. Only the dramatic effect has been heightened by the intense urban development now surrounding Washington Grove. The fact that Washington Grove has survived, integrity intact, may bear witness to its origins.

In 1873, the Washington Grove Camp Meeting Association was formed, and a parcel of 267.5 acres was purchased along the new Baltimore and Ohio Railroad Metropolitan Line. The earliest camp meetings lasted 10 days to 2 weeks, and involved more than two hundred fifty campers and 10,000 visitors. Over the decades, religious programs were replaced with secular activities, and community facilities evolved to meet the changing demands. Eventually tent sites became cottages for year-round residents, trees continued to be given priority, and a permanent Town government was established in 1937.

The Town's land use plan for the original portions of the Town is built upon two spatial forms. First is The Circle with its seven radiating avenues which was the focus of the original community, known as the Tent District with each such avenue designated as a walkway. Building upon this is the second form, known as the Cottage District, a regular grid of alternating roads and walkways. The common network of maintained but un-paved walkways provides a unique organizing element for the community. Most of the original cottages are oriented to face a walkway with a welcoming porch. This land use plan has supported a culture of social interaction dating from the original camp meeting and maintained as houses were built into the mid-20th century. There are no sidewalks at the roads that run behind the houses, and five Grove houses do not have direct vehicular access. There have been several areas annexed into the Town that have followed a more common form of houses facing streets.

2.1.2 Capacity for Development

The roads and walkways as designated with the original plats, and subsequently updated, provide the block boundaries for the subdivided land within the Town. These blocks historically were subdivided into lots to accommodate the Camp Meeting activities, and a significant number of homes in Town remain on these earlier lots, though many of these lots have an area or width below the minimum requirements specified in the Town's zoning ordinance. The ordinance provides for these sub-standard situations, allowing continued use and rebuilding of non-complying buildings. However, where land of sufficient area or width is in common ownership on July 1, 1964, or at any subsequent time, the ordinance provides that no construction shall take place on any parcel or tract of land of less area or width than otherwise specified in the ordinance. The Town's Planning Commission works with property owners in Town to understand the development capacities and subdivision opportunities. For the newer portions of the Town, a more typical suburban subdivision scheme has been permitted.

In order to plan for growth within Town, the potential for additional homes was analyzed based on current zoning and the established block boundaries. The first analysis (“Infill Development”) is based on current subdivisions and structures within the blocks but allows for further subdivision of existing properties. It provides the most likely capacity potential, given the placement and ownership of existing homes. The second analysis (“Redevelopment”) includes the possibility of lot aggregation within a block and subsequent re-subdivision. This is less likely to occur because of acquisition and subdivision costs, but rising property values may inspire removal of existing homes and re-subdivision to maximize a return on investment. This analysis was conducted on a block-by-block basis, through spreadsheet compilation of the area and applicable minimum lot size for each parcel and each block segment.

Infill Development: Potential for additional homes based on current zoning and subdivisions

Redevelopment: Potential for additional homes based on current zoning, but also assuming lot aggregation and re-subdivisions within current blocks.

Zone	Existing Homes	Infill Development	Redevelopment
RR-1	158	+ 18	+ 31
RR-2	49	+ 2	+ 4
RR-3	1	+ 1	+ 1
RR-4	17	+ 12	+ 16
Totals	225	+ 33	+ 52

These projections for additional homes are not exclusive; that is, the potential for additional homes from redevelopment includes and extends the potential from infill development. Thus, for each zone, the projection for redevelopment represents the maximum growth potential for additional homes within that zone.

2.1.3 Accommodating Growth within Town

The infrastructure investments for water supply and wastewater treatment associated with accommodating additional homes within the RR-1 and RR-2 zones will be significantly less than that required in the RR-4 zone. All homes within the RR-1 and RR-2 zones receive water and sewer service from the Washington Suburban Sanitary Commission (WSSC), and the RR-1 and RR-2 zones already are substantially built out with complete networks of water and sewer pipes adjacent to developable parcels. By contrast, the RR-4 zone has been developed to only half of its potential for homes, and 16 of the 17 existing homes within the RR4 zone rely on individual wells for water. While all existing homes have WSSC sewer service, each additional RR-4 home requires a substantial installation to connect to the primary sewer lines. MNCPPC required the installation of a water stub between the new Shady Grove Crossing and lower Ridge Road as backup in case of well failures due to the new development. No well failures were reported by the eligible households but the water stub would provide for municipal water on lower Ridge Road should these residents want to do so.

The incremental stormwater management for homes within the RR-1 and RR-2 zones would be handled with the Town's network of almost a mile of installed and maintained storm drain pipes and channels, more than half being grass swales and open ditches that allow for absorption. These drainage pipes and channels convey the Town's stormwater runoff to the Town's East Woods and West Woods, historically located and preserved to absorb the stormwater while also providing for passive recreation and environmental rejuvenation. The larger lot sizes within the RR-4 zone (minimum 18,000 square feet) would continue to ensure stormwater can be accommodated on-site and/or with local improvements as part of the subdivision and development process.

A primary concern associated with additional potential homes is accommodating the needs of the additional Town residents. Using the current average occupancy (555 residents in 225 homes = 2.47 residents/home), the associated population increases are as follows:

Infill Development:	+ 33 homes	x 2.47 =	- 82 additional residents
Redevelopment:	+ 52 homes	x 2.47 =	128 additional residents

The 2010 Census estimate of the Town's population was 555. The potential for additional homes from re development throughout the Town has an associated population increase of 128 additional residents. The projected total of $555 + 128 = 685$ reflects the maximum growth potential for the Town's population under this plan. Since this maximum growth potential was derived via block-by-block analysis of current residential land and existing zoning, the land capacity within present municipal boundaries can accommodate this population increase.

The Town government expenses for these additional residents are associated with infrastructure (e.g. Parks, Roads) and services (e.g. Waste Collection, Recreation, Administration). The Town's largest expense category is "Parks" -- 28% of the Town's annual expenses. The Town has set a high community standard for "Parks" expenses to support active and passive recreation. An increased population will increase the use and demand for the Town's parks, and the increased expenses for this category would be covered using increased income from "Real Property Tax" for the additional homes.

The Town's second largest expense category is "Streets, Roadways, and Alleys" 13% of the Town's annual expenses, but only 7% of the expenses after the income from the "Highway User Revenues" category is applied. Since these projections for additional residents involve infill development, there is no associated increase in road mileage, but there would be an expected heavier use of the existing roads and a resulting increase in expenses for repair and repaving. Some of this increased road expense would be covered with an expected increase in "Highway User Revenues" from the number of automobile registrations, and some would be covered by expected increases in "Income Tax" for the additional residents, but most of the load would be covered by the increased income from "Real Property Tax" for the additional homes.

To offset expenses for major Town services, the Town has established user fees such as the "Dwelling Tax" (11% of annual income) that is set to match the "Waste Collection and Disposal" expenses for homes in Town -- and this income category would be adjusted to

accommodate the expenses for the increased homes. The Town has also established a high standard of public commitment to “Recreation” services, and an associated support category of “Recreation Program User Fees” (2% of annual income), and this income would likewise be adjusted to accommodate increases.

Other services to accommodate growth within the Town, e.g. public schools, libraries, police, fire, and emergency medical, are provided through County agencies. For public schools, the MCPS Superintendent’s Capital Improvement Program provides planning projections for the Gaithersburg Cluster, including the elementary, middle, and high schools serving students from Washington Grove. While the above Washington Grove population increase projection may well result in a total increase of 26 students (using an estimate of 0.5 students/dwelling unit) for these schools, such an increase is dwarfed by development approvals in nearby communities. For example, development of the Crown Community is moving ahead with over 2,000 residential units, so a detailed school impact analysis here is not useful. Likewise, the local increase in Shady Grove area dwelling units will significantly impact library services as well, and a new County library facility is planned to be just a short walk from Washington Grove. The Town’s consultation with County officials and agencies, as well as with the Town’s municipal neighbors, will ensure consideration of the above development capacities and a coordinated implementation of this growth element.

2.1.4 Subdivision and Growth Management

This Comprehensive Plan provides guidance for establishing conditions that the Planning Commission may apply to subdivision approvals that promote stability of neighborhoods, encourage the appropriate use of land, compatibility with the neighborhood, and long-term viability of the housing stock.

The relevant purposes of the Plan include *protection of the original character of the community, of the “sense of place” and setting, guarding against the threat of diminished physical integrity, and integration into the natural environment befitting “A Town within a Forest”*.

Additional guidance for each neighborhood comes from Sections 1.1 *Residential Zones* which defines the land use goals and requirements and Section 9.7 *Town Neighborhoods* which defines the character of neighborhoods and recommends promoting new development to be in physical scale with the surrounding neighborhood. Section 9.7 *Infill Development and Redevelopment* sets out that any new development must preserve the sense of place and retain the character-defining elements of structure and setting. The conditions available to the Planning Commission are not limited within the ordinance and may include layout, setbacks, amenities and environmental and design compatibility. Plat approval should require that the applicant demonstrate to the Town government how the subdivision reinforces the Plan goals and neighborhood compatibility.

With regard to development plans and subdivisions, there is need for formalization of agreements, commitments, and conditions regarding responsibility for shared elements such as driveways, walkways, or lighting, and timing of execution of how those responsibilities transfer with ownership. Currently the plat approval is not contingent upon delineation of those responsibilities, nor is it contingent upon acceptable design compatibility for the houses. There

is no mechanism to assure the subsequent house designs reinforce the character of the neighborhood. To protect the character of the neighborhood the ordinance should be modified to include with the plat approval submission the concept designs for the houses or an agreement to demonstrate compatibility of any subsequent house design submitted for building permit.

Should the proposed development include major demolition of any houses, the applicant should demonstrate how the loss of contributing elements is mitigated with the new construction.

Additional guidance for compatible design of new homes is set out in Section 9.5 *Scale and Character of Homes* and the *Guidelines* published by the Historic Preservation Commission. For the Town to benefit from this guidance, the Town should further examination of available measures for management of the scale of new house construction to preserve the neighborhood character and prevent Mansionization.

In the interest of assuring long-term sustainability of new construction in the Town, the PC may develop and require standards that improve on the Montgomery County Building Code requirements for houses or for environmental stewardship.

Recommendations:

- **Re-examine the provisions of Articles VII Zoning and XII Subdivision Regulations to better enable the Town to manage infill development and redevelopment resulting from subdivision in order to assure the goals stated above. These should include references to applicant demonstration of neighborhood compatibility, common element responsibilities, environmental mitigation, sustainability and individual house compatibility.**
- **Examine the need to revise the current demolition requirements to deter or mitigate the loss of structures that contribute to the integrity of the Historic District.**



2.2 Municipal Growth Areas

To control and coordinate the physical development of areas near the Town's boundaries with Montgomery County and adjacent jurisdictions, the Town adopts municipal growth areas for the Town through the comprehensive planning process. These municipal growth areas have potential for annexation into the Town's corporate limits. Clearly, what is in the Town's best interests is the lessening of bordering impacts with the continuing goal of preservation of this historic Town.

The original 267-acre property purchased by the Camp Meeting Association in 1873 was a portion of the Nathan Cooke farm and included areas outside the current municipal boundaries. These areas consist of property across Washington Grove Lane, property adjacent to the Humpback Bridge extending to Hershey's Restaurant in the Oakmont development, and the Conservation Meadow.

The review should continue of adjacent properties which could be included in Washington Grove. The Town has completed ten annexation actions to better define community boundaries while ensuring a capability to continue to provide municipal services with the current governmental structures.

This Comprehensive Plan extends a vision toward the future preservation and protection of the Town, and refines the municipal growth areas to reflect logical boundaries as well as the original property, e.g. the Oakmont Subdivision to the south, the City of Gaithersburg to the west, and the Piedmont Crossing development to the east. Within these bounds are five municipal growth areas that need focused attention.

2.2.1 Five Municipal Growth Areas

Area 1: Legacy Open Space Field along Ridge Road:

In 2000, the Town was approached by the contract purchaser (Oxbridge) of the approximate 67-acre Casey agricultural property, which abuts the town to the south. The proposed development was to include high-density residential development adjacent to Ridge Road, including the approximate 12-acre field on upper Ridge Road (the Meadow). During the subdivision process, the Town was successful in achieving the designation of the Meadow as “Legacy Open Space (LOS)” in the Legacy Open Space Functional Comprehensive Plan of Montgomery County, and this was included in the revision of the Shady Grove Sector Comprehensive Plan. In July 2005, the Montgomery County Planning Board (the Board) approved a preliminary plan of subdivision which recognized the importance of the Meadow as an LOS, in particular to protect the historic character of the Town and which included a condition for dedication of the Meadow to the Maryland-National Capital Park and Planning Commission (M-NCPPC) by Oxbridge. In return for support of the Town on the subdivision plan, Oxbridge dedicated the Meadow to M-NCPPC for designation as a LOS park.

In the summer of 2005, certain County Council members indicated that they would like the Meadow to be purchased by the County for a service park facility being planned for relocation because of redevelopment of the existing service parks near the Shady Grove Metro Station. The Town viewed this potential action as undermining efforts to protect the Meadow in the long term, since the LOS designation was not permanent and could be withdrawn at some later date. Consequently, a Town Meeting was held on August 31, 2005, where residents voted to approve the use of the municipal power of eminent domain to purchase the LOS for use as a “public park and a passive recreational resource in a natural state, and which will also continue to afford protection to the historic character of the Town into the future.”

Consequently, the Town (plaintiff) filed a condemnation lawsuit in December 2005 with the Circuit Court of Montgomery County. The defendant was Oxbridge, which pulled the M-NCPPC into the lawsuit as a third-party defendant for a declaration that the Town’s taking of the Meadow would constitute a failure to dedicate the Meadow as required by the July 2005 approved subdivision plan. Litigation followed.

In early 2007, the Town filed a motion with the Circuit Court to determine that it had the legal authority to condemn the Meadow and that its purpose in condemning the property for open space and parkland was a public purpose. In April 2007, Toll (who purchased the land from Oxbridge) executed a document entitled “Deed of Dedication” to M-NCPPC to comply with the dedication condition of the approved subdivision plan. Based upon the Deed of Dedication, the M-NCPPC and Toll re-asserted the argument that the Town could not condemn the Meadow. The Circuit Court granted the Town’s motion and denied the motions filed by the M-NCPPC and

Toll, and determined that the Town had both the legal authority and an appropriate “public purpose” to acquire the Meadow by use of its power of eminent domain through condemnation. It also ruled that the Deed of Dedication was no more than an easement and did not transfer ownership rights to M-NCPPC.

Subsequently, the Town filed a motion with the Circuit Court to dismiss M-NCPPC from the condemnation lawsuit as a third-party defendant. The motion was granted but M-NCPPC filed a motion to intervene as a defendant. The Court denied that motion and M-NCPPC filed an appeal with the Court of Special Appeals, but requested that the Court of Appeals (Maryland’s highest court) take the appeal. In March 2009, the Court of Appeals ruled that (a) the M-NCPPC had enough of an interest in the Meadow to be a defendant and (b) that a condemnation action such as the Town’s lawsuit, attaches at the time it was filed (in this case in December of 2005), and that any subsequent purchaser/donee of property will generally take the same pursuant to the pre-existing equity interest of the Town if it succeeds in the condemnation lawsuit.

In early November of 2009, the final “record plats” for the subdivision were to be considered by the Board, and by then the subdivision was known as “Piedmont Crossing.” The specific plat for the Meadow indicated a fee simple transfer of Toll’s interest in the Meadow to M-NCPPC. The Town requested a hearing before the Board, and on November 5, 2009, the hearing resulted in the Board recognizing that the April 2007 Deed of Dedication from Toll as compliance with the dedication condition of the approved preliminary plan of subdivision did not require Toll to transfer its fee simple interest in the property to M-NCPPC. However, the Chairman of the Board made it very clear that the M-NCPPC could still accept Toll’s underlying fee simple interest as a “gift”, and the Board’s legal counsel disclosed that Toll intended to “donate” the Meadow to the M-NCPPC. In fact, a few weeks later our legal team was informed that Toll and M-NCPPC had an agreement and a deed conveying the fee to the Meadow had already been delivered to M-NCPPC by Toll prior to the Board’s November 5 hearing, which was to be recorded upon final recordation of the record plats. Our legal team asked the Circuit Court for a temporary restraining order and preliminary injunction preventing Toll from “giving” its underlying fee simple interest to M-NCPPC. The Court entered injunctive relief ordering that the deed be returned to Toll, and prohibited Toll from “giving” or transferring its retained interest in the Meadow to M-NCPPC or any other entity during the litigation.

In early 2010, the Town Council authorized our attorneys to suggest a settlement agreement to the opposing parties; namely, that the Town would acquire Toll’s interest in the Meadow subject to M-NCPPC’s public easement. After negotiations and draft revisions, the agreement was approved by all parties. At a Town Meeting on September 15, 2010, residents voted to modify the Town’s annual budget to increase the limitation on total expenditures by \$100,000 for the purpose of acquiring the LOS property. On September 17, 2010, the Town, Toll, and M-NCPPC signed an agreement that provided for the Town to purchase Toll’s fee simple interest in the Meadow for the total sum of \$100,000 and acknowledged the existing 2007 Deed of Dedication (easement) from Toll to M-NCPPC. The closing occurred on October 4, 2010, and a stipulation of dismissal to conclude the litigation was filed with the Circuit Court on October 6, 2010. The Town now owns the Meadow and has the legal right to object to any substantial change in the future use of the property. M-NCPPC has an easement and has agreed to provide maintenance

for the Meadow in coordination with the Town. The Town's future goal includes annexation of the Meadow, now known as the "Washington Grove Meadow Conservation Park."

Area 2: Residences on Western Side of Washington Grove Lane: A standing offer of possible annexation exists to the three residences remaining between the Town's corporate limits and the limits of the City of Gaithersburg. Annexing these three properties (total area is 54,763 square feet) into one of the Town's existing residential zones would reinforce the historic residential character of this area and continue the compatible relationship with the neighboring, low intensity, agricultural implement business. There are no significant infrastructure requirements associated with annexing these three already developed residential properties, and the impacts of extending Town services can be accommodated from general municipal revenues. The zoning for this area is proposed to be RR-1 – Residential, One Family, Detached.

Area 3: Industrial Parcels West of Humpback Bridge: These are the industrial parcels located east of the City of Gaithersburg limits and west of the humpback bridge, along the railroad tracks. One of the parcels in this area is already owned by and within the corporate limits of the Town, and developed as "Railroad Park" to commemorate the historic ties to the B&O Railroad. Creating a new Industrial Services zone within the Town and annexing the other six parcels (total area is 35,652 square feet) into this new zone within the Town will enable development of local industrial uses that can be compatible with the historic character of Washington Grove. Services for this area would involve subdivision and business development reviews and approvals. The Town would also represent the property owners in discussions with the County on the future of the humpback bridge and impacts on these properties. The Town services would be financed from general municipal revenues. The Town should also explore the possibility of annexing both the railroad tracks and Washington Grove passenger shelter that lie east of the humpback bridge. The zoning for this area is proposed to be S-1 – Services. The specific uses permitted in this proposed new zone would be negotiated with property owners as part of the annexation process, such uses to be compatible with the Town and appropriate for these entrance areas.

Area 4: Roberts Oxygen and Adjacent Storage: Considering rising property values and the associated pressures of 'smart growth' within the Shady Grove Comprehensive Plan, the Town should pursue annexation discussions with owners of the Roberts Oxygen. Current uses on these two parcels of 7 and 5 acres are incompatible with the adjacent Town residential properties. Redevelopment under County zoning could bring even more undesirable results should they be converted to high density housing or other incompatible uses. Issues such as truck access, and noise and visual buffering from Town residential areas are of prime concern, and further exploration is needed to assess whether current use and operations violate County law. Annexation discussions should focus on low intensity industrial/research and development uses that provide compatible buffering adjacent to residential areas while reflecting an upgrade in property condition and economic value. Services for this area would involve subdivision and business development reviews and approvals, and the Town services would be financed from increases in general municipal revenues, including Real Property Tax and Operating Property Tax. The zoning for this area is proposed to be S-1 – Services, as described above.

Area 5: Segment of Historic Railroad Corridor and Portions of Oakmont Subdivision:

This area includes: 1) a segment of the historic Baltimore & Ohio Railroad corridor with the Washington Grove station and the Humpback Bridge, which played a central role in the history of Washington Grove, and 2) portions of the 1888 subdivision of Oakmont that contribute to the original setting of railroad station and Washington Grove, including parkland that formed the centerpiece of the development, a former general store and post office at 17030 Oakmont Avenue, a former boarding house at 16950 Oakmont Avenue, and a residence at 16960 Oakmont Avenue.

- 1) The Washington Grove segment of the 66-foot-wide railroad corridor extends along the southern municipal boundary of Washington Grove between the intersection of Railroad Street and Oakmont Avenue (at Aitcheson Crossing) on the south, to the eastern municipal boundary of the City of Gaithersburg. In the 1870s, the B&O Railroad built a timber, pony truss bridge about 600 feet northwest of the Washington Grove station. By 1945 the railroad replaced the nineteenth-century structure with a new three-span timber bridge in the same location, with a humpback shape. In 1986, CSX Transportation took over ownership and authority of the B&O line, and two years later carried out a major rehabilitation that replaced the timber beams with steel I-beams. Additional changes occurred in 2001, when the bridge was re-decked and the railings were replaced, and in 2009, when the timber bents supporting the bridge superstructure were replaced in kind. The most recent rehabilitation occurred in 2014 when the cap timbers of the bents were replaced with new cap timbers to raise the height of the bridge and support five new curved, steel I-beams. New wood decking cut to the original 22-inch width and new laminated guardrails were also installed. The 2014 rehabilitation preserved or replaced in-kind the character-defining elements of the structure related to its dimensions, details, profile, approaches, and landscape.
- 2) Within these portions of the first subdivision of Oakmont, a “Park” was dedicated in 1888 “for public recreation, no permanent buildings are to be erected thereon, no spiritous liquors or intoxicants are to be sold or given away thereon.” Over many years, this park has been neglected and abused with excessive dumping of wood chips and unauthorized use for sale of used merchandise, and the surviving greenery is being overwhelmed by non-native invasive plants. In 1889, the founders of the subdivision built a two-and-a-half story, frame building on one of the lots (now 17030 Oakmont Avenue), and the building operated as a general store and also hosted the Washington Grove post office for over 80 years until 1978. In the 1970’s, Charles and Doris Hershey opened a tavern in the building, and today the building continues to operate as Hershey’s Restaurant. The early twentieth-century houses at 16960 Oakmont Avenue and 16950 Oakmont Avenue were developed at the north end of the subdivision of Oakmont directly across the railroad tracks from Washington Grove.

The Washington Grove segment of the railroad corridor, and these portions of the 1888 subdivision of Oakmont, are essential attributes of the community due to association with the establishment of Washington Grove and its growth and development into the twentieth century. Inclusion within this municipal growth area is intended to facilitate preservation of the natural and historic features, and the character and setting of this historic community.

2.2.2 Municipal Growth Area Strategy

It is the Town's intent to assert its interest in the municipal growth areas in order to forecast the future needs for Town and County services, and to establish responsibility between the Town and the County governing bodies for developing and maintaining these public services. The Town will work on a cooperative basis with the County Council, the County Executive, the City of Gaithersburg and other public agencies in the development of plans and programs that affect parcels within the municipal growth areas. It is also the Town's intent to provide notice to owners of properties within the municipal growth areas that annexation will be pursued when annexation is deemed in the public's best interest to further the goals and objectives of this Plan.

Recommendations:

- **Monitor the areas within the municipal growth areas for zoning/rezoning activities and opportunities to discuss potential annexations issues with property owners and other interested parties.**
- **Meet and confer with appropriate County agencies and the City of Gaithersburg regarding this municipal growth element.**

2.3 Town Boundary

2.3.1 Boundaries

While Washington Grove has been able to maintain its historic integrity (as defined in the National Register Designation), the areas surrounding the Town continue to grow with resulting impact to the Town. Increased traffic, both pedestrian and vehicular, has resulted in the opportunity to share the uniqueness of Washington Grove with our neighbors. It has also resulted in an increase in noise, speeding, and littering, especially along Railroad Street and Washington Grove Lane. One of the issues is that there is a perception that these roads go “around” the Town and not through it. Present signage only adds to this impression. Strategically placed signage at the Town’s three main entrances will have a positive impact in changing that perception and providing motorists with a warm welcome to our Town.

To reinforce the sense of being in a town, sections of identity fencing are recommended along the West Woods and Morgan Park. Identity fencing would also be placed at all walkways leading into the Town.

An important goal of this effort will be to make our residents living on the “perceived” Town borders (Daylily, Boundary, Railroad, Washington Grove Lane, and Lower Ridge) have more of a sense of living “within” the Town.

The Town now maintains the strip of Town-owned land along the south side of the easternmost segment of lower Ridge Road. This provides about half off the wooded buffer between the Town and the new Shady Grove Crossing development.

Recommendations:

- Enhance the entrances to the Town with appropriately designed landscaping and signs at the Town entrances.
- Maintain entrance signage and add reference to National Register Status and history.
- Research should be undertaken to determine the historic structures and locations of the Town's gateways in the past and the historic buildings at the Commercial corner in order to assist compatible integration with the Town.
- Develop comprehensive planning documents to guide improvements to the Railroad Street, and Washington Grove Lane and Ridge Road corridors.
- Continue to develop plans for enhancing the historically forested areas and viewsheds at our borders.
- Encourage developments that border the Town to recognize its historic designation and ensure commensurately compatible construction.

2.3.2 Boundary Surveys

Within the corporate limits, there is a need to complete the survey work required to confirm the exact boundaries of certain of the original Town blocks, public rights of way, and public parks near the Circle and radial avenues and to record the updated Town plats. Surveying and recording these block corners will enable the Town to have an accurate public land record and potentially reduce costs to Town residents to obtain boundary surveys for their properties in the future. Boundary surveys are now required of property owners seeking additions or alterations where property lines are ambiguous in nature.

Recommendations:

- Continue funding and coordination of the ongoing re-survey, and install monuments at Town block boundary corners; ensure the inclusion of the updated Town plats as required.
- Active Boundary Maintenance should be performed on a regular basis.

2.4 Historical Concerns

Concerns for historic features which lie within the zones/categories above and are identified by the Town's National Register Historic District should be considered in drafting zoning ordinances.

3 TRANSPORTATION

The original plan for Washington Grove, developed by its founders in the late 19th Century, established a concept of pedestrian walkways separated from vehicular ways, and interspersed with numerous parks and open spaces.

The streetscape, comprised of alternating streets and pedestrian walkways, with the Circle anchoring its center, is a remarkably intact reminder of Washington Grove's camp meeting period. Its "avenues" are grass or gravel covered and reserved for pedestrians only, while vehicles are directed to streets that are its "roads."

The streetscape's most unusual component, a radial-centric street layout lying at its core, is based around a central open space (the Circle), with avenues radiating outwards like the spokes of a wheel. With the exception of Washington, D.C. and Detroit, Michigan, the radial-centric street design was employed exclusively at camp meeting grounds. There are only eight surviving examples of Post-Civil War camp meeting grounds with radial-centric layouts. Washington Grove is among them. The original core of our streetscape was in place by 1875. During the initial camp meeting seasons, its central open space (the Circle) would have been the site of open-air preaching and conversions, holding perhaps a speaker's platform and benches. By 1877, a tabernacle had been constructed within this space, able to accommodate 500 worshippers.

During the years immediately before and after the turn of the century additional avenues were laid out and "perfected." The details of this history suggest that the avenues lying between the train depot and the Circle, together with the avenues centered around the Circle, were the portion of the streetscape created to serve a primarily "spiritual intent." Washington Grove's roads can be seen to be the portion of the streetscape created with more secular purposes in mind.

This layout and pedestrian walkways are contributing elements cited for inclusion of the Town on the National Register of Historic Places. This legacy must continue to be protected and preserved for future generations.

Since the adoption of the 1995 Comprehensive Plan significant changes have taken place in the area surrounding Washington Grove which have included major implications for transportation planning. Those changes include:

- The Shady Grove Sector Plan, adopted by Montgomery County in 2006, calls for dense residential, multi-use development centered around the current Shady Grove metro stop, as well as a new transportation hub with a rapid bus stop.
- The Intercounty Connector (ICC) with a major interchange neighboring Washington Grove, recommended by the Montgomery County Council and approved by the State of Maryland, has been completed.
- The City of Gaithersburg has undertaken major new development in Old Town Gaithersburg.
- Comprehensive The land adjacent to Ridge Road has been developed into the Shady Grove Crossing development and the remaining legacy open space field is now the Washington Grove Conservation Meadow Park (see description in Section 2).

- The parcels of land between the ICC interchange and the Town owned Meadow have been procured by Montgomery County with plans to complete the connection of Amity Drive to Crabbs Branch Way and construction of playing fields.

Those changes bring intense development with greater overall traffic in the area surrounding Washington Grove. To ensure the existing, historic community of Washington Grove is preserved, residential roads at the Town's periphery and within the Town must be protected from additional traffic. The Town is committed to ensuring that roads at the edges of Town (including Washington Grove Lane, Railroad Street and Ridge Road) remain in keeping with the residential and historic nature of Washington Grove. This is critical to preserving the quality of life for residents in terms of noise, safety, environment, history and aesthetics. These roads should remain rural in nature with the primary goal to serve local residential users. Speeds and traffic volume should be kept low and consistent with the residential nature of the area. In addition, roads internal to the Town must be kept safe and pedestrian friendly by continuing to be protected from cut-through traffic.

3.1 Walkways

One of the most unique attributes afforded to residents of the Town are the internal walkways. These walkways offer residents and visitors an opportunity to stroll through a bucolic residential setting not normally found in a metropolitan area. As tract after tract of surrounding woodland and fields fall prey to development, the preservation of these walkways becomes an increasingly important part of that which defines the character of Washington Grove.

Grove Avenue is the main artery in the Town, originating as a path or rough roadway, connecting the train depot to the Circle. Disembarking from the train and entering the well-shaded grounds, camp meeting participants were entering a world that was distinct from the hot and crowded everyday world in which most of them normally lived and worked. Progressing down Grove Avenue they would catch sight of the Tabernacle, set in the distance within its circle of consecrated ground. Gradually Washington Grove's seasonal canvas tents gave way to more solid and permanent cottages. By 1886, Grove Avenue had been platted and cottages constructed along its sides. The trustees sought to set aside Grove Avenue for other than utilitarian purposes envisioning "a public promenade only . . . a proper and ample walk through the center. . ." By 1890, three other avenues had been opened, South (now Brown Street), Chestnut, and Maple. Within a few years arrangements were being made for "the perfecting" of various other "roadways," an effort that was finally completed in 1896. Initially the avenue was "well rounded with clay so as to shed water from the center." After this new clay surface was "rolled," it was then topped with two to three inches of "fine stone" purchased by the Association and delivered to Washington Grove by the Baltimore and Ohio Railroad. When the layers were compacted with a "heavy roller" (most likely steam-powered), the job was considered done.

Within developed areas of Town, the walkways require regular maintenance. Although these walkways include partially graveled areas, a few sections remain with grass only or attempts to grow grass. Gravel along Town walkways helps to convey a sense of public access, an invitation for pedestrian use, and year-round access for emergency vehicles. Given the density of Town

homes and the Town house numbering system (a majority of houses front on walkways) as well as the location of fire hydrants, the walkways within developed areas of Town also provide essential emergency vehicle access. (Note: Resolution 6-82 designates all Town walkways as Fire Lanes.) Concerns have been raised about excessive vehicular use of walkways.

Recommendations:

- **Continue to maintain walkways within the developed areas of Town, allow a sense of public ownership, invite pedestrian use, and ensure year-round emergency access.**
- **Increase public awareness of permitted vehicle use of walkways as designated in the ordinance.**
- **If instances of excessive vehicular use are numerous, consideration should be given to erecting a barrier, as long as its design permits emergency vehicle access.**
- **Periodically review walkways to assess need for trimming adjacent shrubbery to maintain usable widths, to remove any barriers and encroachments that would impede access by emergency vehicles, and to otherwise ensure they are reasonably maintained.**
- **Continue placing benches at intervals along walkways. (Sites for benches to be determined as benches are donated.)**



3.2 Parking Policy

Encroachments on public property on an ongoing basis, including the regular parking of vehicles on public property, detract from the bucolic nature of the Town and may create safety problems.

In some more densely built sections of the Town, particularly along Acorn Lane, there is a problem of inadequate parking space on private property. As a result, many residents regularly park on Town property. Adequate parking should be evaluated before granting of permits to expand or add structures on residential properties in a manner that further reduces space for parking on the affected property.

This Parking Policy is presented to guide actions by the Mayor and Council regarding parking of motor vehicles on public property. Implementation of this policy should be accomplished through regulations and requirements enacted in accordance with the Town Charter.

It is public policy, where possible and practical, that Town residents and guests will meet their primary parking needs by parking their vehicles on private property, and that all parking on public property will be in Public Parking Areas established by ordinance.

- The criteria for establishing a Public Parking Area will include the safety of pedestrians and vehicles in the immediate vicinity, the number of dwellings and potential drivers residing in the immediate vicinity, the extent to which the parking requirements of the Zoning Ordinance can be met using private property, existing conditions that limit vehicular accessibility to nearby residential property, and ensuring no environmental damage.
- The greatest need for Public Parking Areas is within the RR-2 zone where the arrangement of public rights of way and smaller lot sizes have historically limited vehicular access to some properties; there is less need for Public Parking Areas within the other residential zones as lot sizes are generally sufficient to accommodate residential parking needs.
- Public Parking Areas will be identified by posting of Town signs or by Council designation on a Public Parking Area map.
- Public Parking Areas are to be located such that vehicles will not be parked so as to inhibit the safe flow of traffic.
- Public Parking Areas must be prepared by application of Town-approved paving material, and such preparation is to be performed only by the Town or under the Town's direct control.
- A motor vehicle with expired, revoked, cancelled or suspended registration may not be parked on any public property for more than 24 hours.
- Parking a motor vehicle on public property continuously for more than 7 days will not be permitted, unless a waiver has been obtained from the Mayor based on good and sufficient reason, e.g. owner out of Town for an extended period.
- Stopping of vehicles on public property is to be permitted to receive and discharge passengers or merchandise only.

Recommendations:

- **Review implementation of the Parking Policy; update Zoning Ordinance, Subdivision Regulations, and Building Permit Regulations to reinforce existing minimum parking requirements associated with the type of use in each zone including the number of parking spaces, the location of parking spaces, and the plan and design standards.**
- **Limit such building expansion and new construction on residential lots as would effectively eliminate parking on the affected property.**

3.3 Walkway/Bikeway Connection

The ability to walk and bike safely within Washington Grove is a cherished town amenity, one enjoyed by many residents. Unfortunately, there are significant impediments to such travel beyond the town limits. Since adoption of the 2009 Comprehensive Plan, several local developments have increased the need for improved non-vehicular access to Washington Grove.

On the negative side, the completion of the ICC has effectively prevented non-vehicular north-south movement along several miles of its route. The barrier posed by I-370 and ICC prevents easy non-vehicular movement to Shady Grove Metro Station, which is less than 2 miles from the town.

Nevertheless, there have been several positive developments:

- Dedicated paved multiuse lanes have been built:
 - From Shady Grove Road to Lake Needwood and the Rock Creek trail system, which continues to Washington DC and beyond.
 - Along the intercounty connector (ICC) with connections to adjacent trails, parks, and neighborhoods.
 - Circling the city of Rockville, which at its northern side runs alongside Gude Drive.
- High density housing and retail development has or is being built along Crabbs Branch Way from Shady Grove Road to Shady Grove Metro. A multiuse paved path along Crabbs Branch Way is complete, and additional Capital Bikeshare locations are planned.
- The Shady Grove Crossing development (formerly Piedmont Crossing) was completed, including its road system and separation from Ridge Road.
- The July 2015 Shady Grove Sector Monitoring Report calls for “a shared use path along Crabbs Branch Way extended to Brown Street in the Town of Washington Grove” (2015 Biennial Master Plan Monitoring Report of the Shady Grove Sector Plan, page 63).
- Most significantly, the Comprehensive Montgomery County Bicycle Comprehensive Plan was completed and approved by the County in late 2018. This plan calls for an off-road trail from Crabbs Branch Way to Amity Drive and Brown Street to be built in the next few years. Approval of the Bicycle Comprehensive Plan does not automatically result in project funding, which is set by the Department of Transportation (DOT) based on the availability of funds and the importance of the project. The first step is inclusion in the Facilities Planning Budget. One of the few projects that has received such near-term guaranteed funding by DOT is a study of a trail to Shady Grove Metro from the other side of I-370 and ICC.

For the same timeframe as the Shady Grove trail planning, the City of Gaithersburg has budgeted funds to study trail connections to Shady Grove Metro. For Grove residents, such a connection would provide easy access to numerous locations that are now difficult to access other than via motorized vehicles. Some of these locations include Old Town Gaithersburg and City Hall, Montgomery County Fairgrounds, Bohrer Park, Asbury Village, as well as Gaithersburg Aquatic Center and elementary, middle, and high schools. The Town must be positively engaged in these planning studies to assure that the outcomes best suit the Town’s needs.

Recommendations:

- **Support the development of safe and convenient bike and pedestrian access between Washington Grove and surrounding bikeway networks.**
 - **To the Shady Grove Metro Station, the Grove Shopping Center, and the Montgomery County bikeway system. The greatest priority is a connection to the Shady Grove Metro Station and points in between. The Town should coordinate with the County for a shared-use path between Washington Grove and the Metro Station that minimizes travel time and is in keeping with the history and character of the Town.**
 - **To Old Town Gaithersburg and the City of Gaithersburg bikeway system. The Town should work with the City of Gaithersburg to establish a safe and convenient bike and pedestrian route across Washington Grove Lane and Railroad Street and on into Gaithersburg.**
- **Consideration of safely connecting the Town to the County and the Gaithersburg bikeway systems could include creating a Washington Grove shared use route on town streets with due consideration for any impacts, including from an increase in bike and pedestrian traffic, and any accompanying safety concerns.**

3.4 Railroad Corridor

Commuter Trains -- Historically, the Town began with the railroad, linked to the expansion of the Baltimore and Ohio Railroad Company's Metropolitan Line to the northwest of Washington, D.C. The Town is served by a double set of tracks along its southerly border owned and operated by CSX Transportation, successor to the B&O. The 66' roadbed is on the National Register of Historic Places. The tracks are used by numerous daily freight trains and by Amtrak. Washington Grove is a sheltered stop for morning and evening MARC commuter trains operated for the Maryland Department of Transportation that provide daily transportation for Town residents and others commuting to Rockville, Garrett Park, Kensington, Silver Spring, or Union Station. Some parking spaces are available along the southernmost side of the railroad tracks, opposite the Town, between the tracks and Oakmont Avenue, and for a few cars on the north side of the tracks, along Railroad Street. Many Town residents walk to and from the commuter stop, as do residents from the Oakmont and Deer Park areas. Additional parking might encourage more riders to use the Washington Grove stop, and lessen concerns that the stop could be eliminated at some time in the future. The public property dedicated in 1881 as "Oakmont Park" and the adjacent public right of way used for access to parking behind Hershey's Restaurant could be explored with Montgomery County for expanded commuter parking and completing the development as a park. Delineation of a crosswalk on Railroad Street near Grove Road has increased pedestrian safety, but pedestrians are still at risk given Railroad Street traffic and limited sightline to the east.

The area of the station including views up and down the tracks, and across to Hershey's Restaurant and the houses of Oakmont are considered contributing elements to the Historic District because of their close association with the development of the Grove. Hershey's served at various times as a store and as the Post Office for the Town.

Recommendations:

- **Support the continuation and expansion of MARC commuter train service at the Washington Grove stop.**
- **Explore options for providing additional southside parking for MARC commuters using the Washington Grove stop.**
- **Explore additional measures to ensure pedestrian safety for those crossing Railroad Street near Grove Road.**
- **As part of the Railroad Street improvement plan, work with MARC to improve the area of the stop with streetscape and landscape elements.**
- **Encourage Montgomery County to develop and maintain Oakmont Park as an amenity for the Oakmont and Washington Grove communities.**

3.5 Washington Grove Lane

In response in large part to Washington Grove concerns, old State Highway MD124 has now been relocated away from Washington Grove. While the stretch of the highway now named Washington Grove Lane was transferred from the State to the County in 1998, truck traffic, speeding, and pedestrian safety at the Maple Lake pedestrian crossing on the 0.57-mile stretch through the Town continue to be of concern.

The Town previously sought to have this stretch of road transferred from the State to the Town. The Town's 1975 Comprehensive Plan called for this section of road to revert to Town control and that it be discontinued as a through street, to serve as a residential road only. In March 1993, a Special Town Meeting voted to accept jurisdictional responsibility for the road, including maintenance. In 1998 the State was ready to pursue transfer of ownership but chose to transfer the road to the County as part of a compromise with Washington Grove, Montgomery County and Gaithersburg. A negotiated formal agreement provided land swaps between Gaithersburg and Montgomery County and the State to relocate MD124 away from Washington Grove. In addition, the agreement responded to Gaithersburg's concern by providing that Washington Grove Lane cannot be permanently closed unless all four signatories—the County, the State, Gaithersburg, and Washington Grove—agree to it.

To address Washington Grove concerns regarding speeding, the agreement also specified that speed humps would be installed. Subsequently, seven speed humps were installed. The speed humps had the desired effect of significantly lowering speeds. Traffic volume was also significantly reduced. However, an unexpected consequence on some nearby homes of one of the humps was increased noise and vibration due to braking, accelerating and trucks going over the humps. As a result, that hump was removed.

With the re-routing of MD124, Washington Grove Lane qualified as a County "traffic calming" project. To respond to concerns regarding truck traffic, the road has been posted for a 7,000-lb gross vehicle weight restriction; enforcement, however, remains a problem. Other efforts are underway to reinforce a driver's perception and understanding that Washington Grove Lane is a residential road in a special place.

In 1979 the Town Council enacted an ordinance including authorization to limit vehicle access for the intersections of Center Street and Oak Street with the road now known as Washington Grove Lane, to permit the passage of emergency vehicles while discouraging non-emergency vehicles. For safety purposes, planning and work to improve appearances and stormwater flows at these two intersections should reflect the details in Ordinance 2-79 to enable the passage of emergency vehicles. This facilitates critical equipment access to McCathran Hall and this portion of the town. While this may not yet have been used for such emergency access, such use of these two intersections remains a critical safety concern.

The sidewalk along Washington Grove Lane is located on the 20-foot strip of land owned by the Town that adjoins the easterly edge of the Washington Grove Lane right of way. For purposes of constructing and maintaining the sidewalk (excluding snow and ice removal), the Town granted a permanent easement to Montgomery County in 1979, and the Town specified that provisions for adequate drainage by the County were included with this grant of easement.

Recommendations:

- **Continue efforts to improve speed and weight limit enforcement on Washington Grove Lane.**
- **Continue to seek ways to improve safety at the pedestrian crossing at the intersection of East Diamond Avenue, Railroad Street and Washington Grove Lane; explore additional traffic calming options.**
- **Undertake improved signage and landscaping on Washington Grove Lane to distinguish it as a residential road that runs through a National Register Historic District.**
- **Explore the need to keep Oak Street and Center Street accessible at Washington Grove Lane for Emergency vehicles, but otherwise closed to vehicles to reduce cut-through traffic.**
- **Enhance Oak Street and Center Street at Washington Grove Lane to provide inviting access for pedestrians, strollers, and bicycles.**
- **Manage encroaching vegetation to ensure pedestrian safety along the sidewalk on Washington Grove Lane. Note that the sidewalk is located on a sperate strip of land which is not located within the road right-of-way and thus is not subject to Maryland Roadside Tree Law restrictions.**
- **Since the addition of speed humps on Chestnut Avenue, Grove Road and Hickory Road have reduced cut-through traffic, explore adding “rush hour” restrictions to the existing turn prohibitions to ease the driving burden for residents on the North side of Town.**

3.6 Humpback Bridge/Railroad Street

The present alignment of Railroad Street extending from the bridge to the southeast to Aitcheson Crossing and Oakmont Avenue became a public way by usage through the early 1900s. The B & O Railroad reconstructed the bridge about 1946, replacing a deteriorating timber structure with a new timber structure that replicated the earlier bridge design.

In April 1961, a Comprehensive Plan for the vicinity of Gaithersburg was adopted by M-NCPPC that showed a new road through the area now occupied by Girard Place and Gaithersburg Ford Tractor, crossing over the then existing alignment of Route 124 (East Diamond Avenue) with the bridge over the B & O tracks and tying into Oakmont Avenue in lieu of East Deer Park Drive.

The Town's 1975 Comprehensive Plan incorporated this location for the County's planned bridge replacement location but did so to preclude the direct connection of Railroad Street to Crabbs Branch Way. The plan noted that such a connection would stimulate increased traffic flow and that the bridge as planned would have a deleterious environmental impact.

Around 1977, a study prepared for the Gaithersburg Planning Department proposed construction of the new bridge at Girard Street. This concept was the subject of a public hearing by Gaithersburg in January 1985, and was supported by Town testimony.

Subsequent to the January 1985 Public Hearing in Gaithersburg, the County Planning Board asked the County DOT to prepare various studies of the alternatives to accommodate flow in this traffic corridor, including the Girard Street Option with variations, the Comprehensive Plan Option with variations, and the Railroad Street to Crabbs Branch Way Option. The Town asked that a "No Build" Option with variations also be evaluated.

The bridge alignment in the 1961 Gaithersburg Vicinity Comprehensive Plan would have created a new four-lane bridge crossing the tracks at a skew, much longer and approximately 6 feet higher than the existing bridge, highly visible and projecting traffic noise farther into the Town than at present, and "impose(d) a serious nuisance on Grove residents through loss of direct access to the south" (as stated in the Town's 1975 Comprehensive Plan) by requiring that all vehicular access to the Grove be by way of Washington Grove Lane.

The Girard Street Bridge Alignment would have moved most traffic to the west side of the railroad. The connection of existing Railroad Street to Crabbs Branch Way would still be a possibility to be faced. While the proposal would have had no significant visual impacts on the Town, it shared with the prior plans the requirement that all vehicular access to the Grove be by way of Washington Grove Lane.

The Railroad Street to Crabbs Branch Way connections would have opened a major traffic route paralleling Route 355 between Gude Drive and downtown Gaithersburg intensifying traffic on Railroad Street and Washington Grove Lane (then MD124).

In 2004, the County's Department of Public Works and Transportation (DPWT) once again brought up the issue of replacing the bridge with multi-lane alternatives, all of which, if built as proposed, would have deleterious impacts on the Town and neighboring residential communities and no significant transportation benefit. Part of the justification for consideration of four-lane bridge replacement options by DPWT was that Oakmont Avenue was identified in existing Comprehensive Plans as a four-lane road.

On July 9, 2005, the Washington Grove Town Council adopted a resolution opposing the three bridge replacement concepts proposed by DPWT and supporting rehabilitation and preservation of the existing humpback bridge. Among the negative impacts on the Town cited in the resolution of the DPWT proposals were:

- additional traffic, safety concerns, pollution, and noise at unacceptable levels that would be magnified by increasing the height of the bridge;
- the elimination of “forested areas on both sides of the tracks including cherished old Oak trees that contribute to the rural views from Washington Grove’s historic walkways”;
- the taking of Town land dedicated to public use and adversely impacting internal Town pedestrian and auto circulation patterns.

The Town hired a bridge engineer, nationally recognized for historic preservation, to study the bridge. In a July 12, 2005 letter, the engineer stated, “My conclusion is that the bridge is in good condition structurally, and can be preserved for decades to come with the appropriate maintenance and rehabilitation.” Subsequently, the bridge was nominated for the Comprehensive Plan for Historic Preservation in Montgomery County, and the Montgomery County Historic Preservation Commission recommended the bridge for the Comprehensive Plan. On July 14, 2005, the Montgomery County Planning Board placed the bridge on the County’s Locational Atlas and Index of Historic Sites. The bridge was accepted by the State as being eligible for listing on the National Register of Historic Places and the Maryland Inventory of Historic Properties.

This plan recognizes the future of the humpback bridge and Railroad Street may be directly tied to two alternatives to expand transit capacity between Montgomery County and points to the north. The first alternative is a third set of railroad tracks proposed by the Maryland Transit Administration (MTA) to expand rail capacity. The MTA’s 2018 MARC Cornerstone Plan identified capital investments necessary for increased service on the Brunswick Line, including \$700 Million for additional mainline track expansions between Washington, D.C. and Boyds. While there is no funding commitment at this time for additional mainline track along the Brunswick line, the Shady Grove Sector Plan is being amended to state that properties adjacent to the MARC rail line should dedicate width called for by MTA’s Plan. For Washington Grove, it appears unlikely that a third set of tracks can fit under the humpback bridge.

The second alternative is the 2019 proposal for a monorail linking the Shady Grove Metro Station with Frederick. The proposed monorail route would start near the MARC train station in Frederick, then join I-270 where the elevated monorail would go on the east side of the interstate until Germantown, where it would leave I-270 and use other public rights of way to go to the Metropolitan Grove MARC station in Gaithersburg and then to the Shady Grove Metro station. No land acquisitions are required for this proposal. (Oct 30, 2020 note: The High Road foundation is about to release a report that Bob Eisinger says will show building a monorail would be an economically sensible way to relieve traffic between Frederick and the Shady Grove Metro station.) Acceptance of this proposed monorail would most likely displace adding a third set of railroad tracks adjacent to Washington Grove, and thus support retention of the humpback bridge.

With the completed annexation of the Cator/Harrison property, more of Railroad Street is now within the Town's corporate limits, including the portion of Railroad Street fronting the Employment Office (EOF) zoned properties in the County known as Roberts Oxygen and the adjacent storage yard.

Recommendations:

- **Continue Town opposition to any connection of Railroad Street to Crabbs Branch Way due to the negative impacts of the high-volume traffic flow that would result on Railroad Street and Washington Grove Lane, as well as the potential for additional cut through traffic through the Town.**
- **Continue to support proposed access of the EOF zoned property (known as Roberts Oxygen) to Crabbs Branch Way, and seek long-term closing of that property's access to Railroad Street as called for in the Shady Grove Sector Plan, to help reduce industrial traffic crossing the CSX at-grade crossing on Railroad Street or traveling on Railroad Street through the Town.**
- **Support improved maintenance and preservation of the existing single-lane historic humpback bridge, as well as the improved maintenance of the at-grade crossing.**
- **Seek full historic preservation designation of the existing historic humpback bridge at the county, state and federal levels.**
- **Continue opposition to planning and construction of a new multi-lane bridge from Oakmont Avenue or East Deer Park Drive across the CSX Railroad tracks.**
- **Continue to monitor development of the MTA plans for mainline track expansion by Washington Grove.**
- **Continue to monitor development of the plans for a monorail route between Frederick and the Shady Grove Metro Station.**
- **Maintain closure of Brown Street at Hickory Road to reduce cut-through traffic.**
- **Seek improved signage and other improvements on Railroad Street to slow traffic to enhance the safety of pedestrians and vehicles.**

3.7 Ridge Road

Prior to 1992, the southern portion of Ridge Road delineated the eastern boundary of the Town. With annexation of the 1.58-acre Washington Suburban Sanitary Commission property (Parcel 360), the 2.88-acre Ward property (Parcel 635), the 0.95-acre Moyer-Gussack property (Parcel 291), the 0.42-acre Pammel property (Parcel 660), and the 13.55 acres of the Voigt Properties and Washington Grove Hills, the corporate limits have moved eastward. Ridge Road is a narrow residential lane within the Town corporate limits.

As part of the Shady Grove Crossing development process the 13-acre meadow bordering upper Ridge Road was designated a Legacy Open Space Meadow and an easement given to MNCPPC to administer the area as a County Park. The Town subsequently purchased the underlying fee to the land so we would have an ownership stake in determining what happens on this important Town buffer area. The Town and the Montgomery County Parks Department have a detailed mutually agreed upon, Operation and Use Plan. The Parks Department provides ongoing

maintenance of the area. See the complete description of the meadow parcel and process by which it was purchased in Section 2.2.

The Shady Grove Crossing development that borders lower Ridge Road has had a dramatic impact on the rustic rural character of the road. A landscaped buffer was included in the development requirements in order to buffer the impacts on the character of the road. In addition, the houses in the new development were required to face those in the Grove in order to provide a more friendly relationship.

Recommendations:

- **Preserve the character of Ridge Road as a country road along its entire length.**
- **Maintain the Meadow as an open field as defined by the Conservation Meadow Park Operation and Use Plan.**

3.8 McCauley Street and Maple Road

The Town holds title to a 50-foot strip of land along the northern side of McCauley Street in order to accommodate public improvements and any future widening of that street. The Town also holds title to a 25-foot strip of land along the eastern edge of most of Maple Road to accommodate possible public improvements and as surety in maintaining open space on the narrow roadway by restricting construction.

3.9 Center Street

The possible opening of the portion of Center Street between Grove Road and Maple Avenue for emergency vehicle access has been discussed. While opening this street would save transit time, there are possible negative consequences. Among the most obvious are the maintenance area and its environs, which will become more susceptible to trash and waste dumping, thus compromising the ecological balance of the adjacent woodland area.

Recommendation:

- **Continue restriction of vehicular access on Center Street between Maple Avenue and the Maintenance area.**

3.10 Cherry Avenue

In 1976, special permission was given to four homeowners of Lots 16 of Block 31 to use the center 10 feet of width of Cherry Avenue between Brown Street and its coincidence with the intersection of Lots 6 and 7 of Block 31 for reasonable vehicular access to their properties. The 1976 resolution provided that this permission shall be progressively withdrawn from each successive lot owner beginning at Lot 6, Block 31, as said lot owner gives consent to such withdrawal or as each of the four properties is sold. This permission now only applies to one residence, 108 Ridge Road. Despite the limitations on vehicular access, there have been occasional eruptions in controversy caused by vehicular use of Cherry Avenue contrary to the

1976 resolution. Recent Town action has included reminding residents of the area and eliminating trash trucks on Cherry Avenue.

Recommendation:

- **As vehicular use of Cherry Avenue ceases, as provided in the 1976 Town Council resolution, Town maintenance staff should work with the Forestry and Beautification Committee to restore that portion to conform with other walkways in Town.**

3.11 Brown Street

The western end of Brown Street at Hickory Road is closed to regular vehicular traffic by a locked gate. This has dramatically reduced cut-through traffic speeding along narrow roads of the Town. The decision to close Brown Street began with a consensus during the June 1989 Town Meeting for a temporary closure on a trial basis, with re-evaluation after 30-60 days and then a public hearing before permanent closure. Notifications were provided in two successive Town Bulletins, and then the 60-day temporary closure began. During August 1989, the Mayor wrote to the County Fire and Police Departments to solicit their comments and to announce the public hearing scheduled for November 8. In addition to the letters received from the Fire Department and residents, 24 residents spoke during the public hearing. At its November 15 meeting, the Town Council approved closure with a gate that does not prohibit access to fire and safety vehicles. During the years since this closure, there have been various recommendations to modify the closure to improve safety for pedestrians, strollers, and bicyclists.

Recommendations:

- **Continue restriction of vehicular access at the western end of Brown Street.**
 → **Modify the Brown Street closure to provide a welcoming and attractive entrance for pedestrians, strollers and bicycles.**

3.12 Historical Concerns

The elements identified in the National Register as contributing to the historic integrity of the Historic District include:

- The radial layout of the original tent district
- The orthogonal layout of gravel walkways alternating with vehicular roads for the cottage district
- The streetscape created by the walkways and relation of the cottages to the walkways
- Contributing viewsheds have been defined for Railroad Street and the station, Ridge Road, the Commercial Corner and Washington Grove Lane.
- All the streets, avenues, roads, lanes, and walkways, within the National Register Historic District boundaries are contributing resources.

Concerns for historic features which lie within the transportation ways above and are identified by the Town's forthcoming National Register update should receive consideration in planning and treatment.

4 COMMUNITY FACILITIES

The Town facilities include both buildings and systems.

The systems include the Pepco electrical system, the Verizon telephone system, the Comcast cable system, the WSSC water and sewer systems, the storm water management facilities, and the street and walkway lights and signs. The Town manages the storm water and street sign systems.

The Town makes heavy use of its several existing facilities: McCathran Hall and its Historic Archives Room, the Town Garage, the Gazebo and the Recreation shed, all of which the Town operates and maintains. Over the years, these facilities have provided residents and guests with a wide and enriching range of changing activities and services. In the future, four overarching considerations should guide the Town with regard to its existing facilities and any additional it may construct:

1. The use and maintenance of Town facilities should include an annual review by a standing committee to ensure the safety, viability and usability of these spaces.
2. Energy consumption and conservation is of growing concern. Use of Town facilities should be governed by an informed evaluation of current or planned energy consumption and effective conservation methods appropriate for the circumstances.
3. Reflect the Grove's historic character in any changes to Town facilities. Implementation of the recommendations of this document should always take into consideration the historic integrity of each facility as an important part of such actions.
4. New facilities or modifications thereto should reflect the scale and materials of, or be compatible with, the neighborhood and surrounding structures.

4.1 McCathran Hall

McCathran Hall, constructed in 1901, renovated in 1997 with an addition, is composed of the main hall, the lower hall, the Council room and Archives room. The renovation and addition were supported by a grant from the Maryland Historic Trust which holds a historic easement on the building's exterior. As the oldest remaining public structure in Town, the Hall serves as a multi-purpose center of the community, tops the list of historically contributing structures, is the one closest to the heart of the Town, and will be treasured into the foreseeable future.

Recommendations:

- **Continue to support the special needs of McCathran Hall under the direction of the designated Council member.**
- **Annually inspect settling effects related to the new addition to determine when corrective/preventive measures should be taken.**
- **Devise and enact a drainage plan for the building that will solve existing problems in the furnace room area.**

- **Consult with HPC for modifications to the Hall that impact the historic integrity of the structure or its environs.**

4.1.1 Electrical Systems

The Town has completed a modification to the Hall's electrical service to meet current demands. There are existing short-comings that include lights dimming when the air conditioning starts in the lower hall. These are under investigation related to lower hall air conditioning operations.

Recommendation:

- **Determine and complete electrical modifications to correct existing light dimming.**

4.1.2 Air Conditioning

As part of the 1997 addition, the Lower Hall and new Council and Archive Rooms were air-conditioned. Air conditioning the main Hall is a topic of very differing points of view among its users. Air conditioning has cost, comfort, and possible exterior and interior visual implications that should be explored in detail.

Recommendations:

- **Thoroughly study the full range of issues, including an energy audit associated with air conditioning the main hall, and present all the findings at a special Town meeting.**
- **Investigate the environmental standards for archive preservation in the archive room.**

4.1.3 Lighting

Existing lighting in the Hall is relatively stationary and basic in its function and availability. A lighting plan for the main Hall has been implemented. This includes modifications for specific events from general lighting to specialized capabilities such as spot and flood. Remote control of individual lights - an emerging and, at present, costly advancement - has advantages for control of lighting in the main Hall with its extremely high ceilings. Advances in the quality and availability of assorted low-energy bulbs have expanded the possibilities for desirable illumination at more efficient energy consumption levels.

Recommendations:

- **Conduct ongoing review and conversion, as identified through the energy audit and as economically feasible, of light bulbs throughout McCathran Hall to take advantage of energy-efficient advancements.**
- **Maintain the historic color temperature of the bulbs to be similar to the original incandescent lights – 2700 K.**

4.1.4 Insulation

Presently, the Main Hall is above unheated crawl space. There is no floor or ceiling insulation. A resistance rating of R-25 for crawl spaces and of R-38 for attics is a minimum level that should be considered. If installed, special care will need to be focused on electrical and fire suppressant systems that now exist within these areas.

Recommendation:

- **Guided by the energy audit and given energy and operating cost implications, consider installing industry recommended R-rated insulation to meet actual and anticipated use as soon as this can be budgeted.**

4.1.5 Historic Integrity

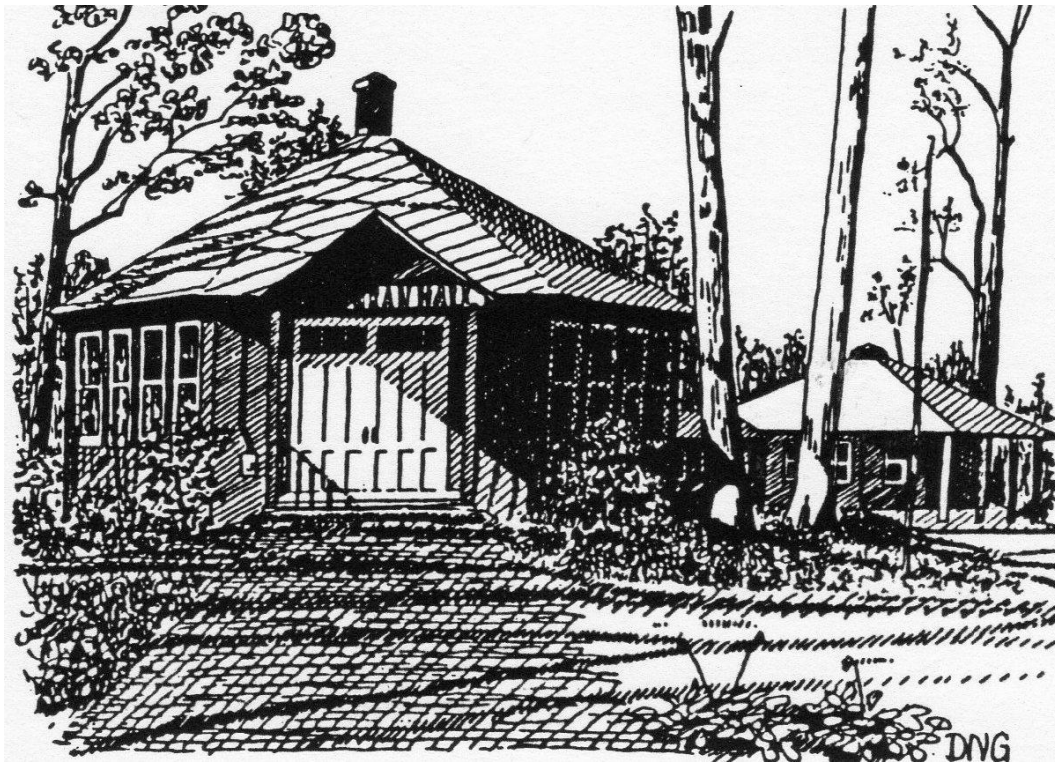
The Hall is an octagonal shingle style structure with a peaked roof and six-over-six double sash windows built in 1901 as a Methodist Assembly Hall to replace the Tabernacle. From the exterior, the Hall is unique in its appearance and any modifications deserve special attention associated with it and the environs and requires consultation with the Maryland Historic Trust.

4.1.5 Landscaping

Landscaping efforts to date have been aimed at enhancing those qualities, making it more attractive within its setting and for adjacent residences. The popular Summer-In-The-Parks program for Town children makes heavy use of the Hall grounds. The entrance and walkway tile paving has held up and continues to make access to entrances of the whole building more comfortable in all weather.

Recommendations:

- **Explore underground wiring for McCathran Hall.**
- **Investigate replacing some of the heavily used grassy areas on the grounds with lower maintenance mulch to accommodate play activities, to reduce earth compaction over tree roots and to reduce mowing and water needs.**



4.2 Town Maintenance Shop

The original building was constructed in 1955. An addition to the garage in 1999 provided sufficient work and storage space for Town maintenance activities. Storage of waste pick-up, etc. is held outside for regular removal, but can be unsightly to walkers along this wooded section of Center Street and can harbor insects such as mosquitoes and rodents during the interim. The flourishing but sometimes rampant bamboo forest provides a good screen of the Maintenance Shop and is a favorite spooky trail for younger kids in Town.

Bathrooms with exterior access on the playground side of the Maintenance Shop are important to kids waiting for the morning bus as well as to the assorted users of all the playground areas, including casual walkers. Vandalism has been enough of a problem over the years to necessitate combination locks for a good portion of the time.

Recommendations:

- **Establish screening of the trash storage area to create a visual block from Center Street and investigate enclosed storage that allows easy transfer of waste materials, both in and out.**
- **Institute a regular bamboo containment schedule that will control spread beyond a range intended to shield the garage and immediate environs.**
- **Increase lighting in and annually paint and generally improve the interior appearance of the restrooms.**

4.3 Gazebo

The Town Gazebo, built originally by volunteers in 1974 and heavily used for organized and informal events, is an open structure that is the focus of Zoe Wadsworth Park between the east woods and a quiet residential portion of Grove Road. Periodically, the gazebo undergoes a wave of vandalism that requires significant repairs. The issue of security lighting has been proposed as one possible means of control.

Recommendation:

- **Monitor use of Town Gazebo and evaluate opportunities to discourage vandalism there.**

4.4 Recreation Shed

Designed and built by Town volunteers in 1997, and dedicated as “Ann’s Folly” in honor of Ann Briggs in 1998. The two-part recreation shed has had active use for equipment by the many tennis groups in Town, while the second side is largely an “away” space for odds and ends. Shed maintenance requires periodic exterior cleaning and eventual attention for the ramp to the door on the tennis side.

4.5 Street and Walkway Lighting

Early “street” lights were primarily on the avenues and at the Circle, and were lit by kerosene, gasoline, and acetylene. None was satisfactory, due to cost, safety, or dimness. Avenue gas lights were on short wood posts. A lamplighter had to light the lamps each night.

By 1912, Pepco had power lines to Rockville to run the trolley and around 1913 service was extended to Gaithersburg. In 1913 the Association entered into a contract with Pepco for the perpetual right to set and maintain power poles and wires along the streets and roads of Washington Grove, specifically excluding any poles on the walkways except lampposts for streetlights. Installation of poles and wires started in April, 1914. Power was turned on in July, 1914, to 51 domestic customers, the Hall, and the Auditorium. In the fall of 1914, 26 iron lamp posts were placed on the walkways and the lamps had clear glass envelopes.

Washington Grove’s street/avenue lights have evolved over time. The Town now has about 100 streetlights along its roads and walkways and most were likely installed in the Post-World War II historic period (1945-1969) as defined in the National Register Designation. All of the post lights along the walkways are gone and most of the current fixtures are standard Pepco-owned, Pemco brand bracket streetlights with galvanized steel arms, cast aluminum housings, and ribbed plastic globes. Some of the globes are spherical, but most are cylindrical. The lighting is included as a Historic Associated Feature in the National Register Historic District Listing. These fixtures use screw-in bulbs which facilitates replacement of the bulbs.

For decades, the soft lighting in the Pemco fixtures had been provided by incandescent bulbs. Despite periodic urging by Pepco to convert them to less expensive, more intense kinds of light such as sodium or mercury vapor, the Town held fast and willingly paid the cost of lighting that accommodated the historic character of the Town Within a Forest. In 2011 the Town signed an agreement with Pepco to convert the 93 incandescent lights to screw-in induction bulbs at a significant savings in electricity costs. The induction bulbs have a warm color temperature that replicates the original incandescent light quality. The remainder of the fixtures is an assortment of styles and use mercury (blue) or sodium (orange) vapor lights which are not as readily converted.

By 2018 the screw-in induction bulbs were no longer being manufactured and the Pepco maintenance contractor was replacing them with incandescent bulbs as they failed. The Town began providing standard off-the-shelf LED bulbs to the contractor as an energy-saving measure, and to reduce the rate of failure. The LED bulbs were available in various output levels and color temperatures which allowed the Town to maintain the soft, warm character of the lighting. The LED bulbs were lower power and maintenance than the induction bulbs, but the town was not receiving the cost benefit of that piecemeal conversion. In 2020 the Town signed an agreement with Pepco to replace all of the remaining induction bulbs with LED bulbs and reduce the energy and maintenance charges to the town to the existing tariff rate for LED lights.

The existing Pemco fixtures are aging and do not meet modern lighting standards, so this was known to be a temporary solution. A temporary ad hoc committee had been formed in January of 2019 to recommend the future for lighting in the Town. In addition to negotiating with Pepco

on the LED conversion, this committee proposed a set of attributes based on input from a variety of residents. The recommended attributes include:

- Fixture aesthetics – Lighting that maintains the historic integrity of the Town.
- Light footprint – Pools of light rather than continuous swathes of light.
- Color temperature – Maximum of 3000 K, or more likely 2700 K to match the appearance of the existing lights.
- Light output – Approximately 1600 lumens (approximately 15 W for an LED bulb).
- Site specific lighting – Different lighting for the streets versus the walkways both in terms of height and fixtures.
- Light intrusion – Any new light fixtures should have a full horizontal cut off and therefore be dark sky compliant. Additionally, all new fixtures should have the provision to attach shields to prevent light intrusion into nearby homes.
- Bulb attachment – Ideally, a light bulb that one could screw in or at least lights that are easy to maintain in general.
- Smart lighting – Provision for modern features as “smart lighting,” such as 2 AM-6 AM light reduction and possibly motion detectors for certain areas.
- Solar lighting – Explore solar lighting near Woodward Park or areas in Town that have a lot of sun.
- Supplemental lighting – There may be areas where it is desirable to leave them dark and use personal lighting such as flashlights; flashlights are effective, efficient, relatively inexpensive, and in keeping with the historic nature of the Town.

Most of our streetlights are currently owned by Pepco and most are on wooden poles that are also owned by Pepco. Pepco also provides maintenance on our streetlights and distributes our electrical power. During negotiations with Pepco for the 2020 agreement regarding LED bulbs, it was discovered that Pepco and its owner Exelon are preparing a major revision to the tariff for lighting in Maryland that could have a major impact on the town. Pepco representatives indicated that Pepco plans to replace all lights in its service area with modern, high intensity LED fixtures. It was apparent that their definition of “modern” lighting would not be acceptable to the Town.

The new tariff has not been filed, and it is anticipated that a lengthy review and approval process will be required, but the Town needs to be proactive to preserve the historic integrity of our lighting. This might include purchasing and installing our own definition of modern fixtures, or perhaps purchasing the existing Pemco fixtures from Pepco and renovating them to modern standards including dark-sky compliance and intrusion control.

Recommendations:

→ **Replace or convert the existing streetlights and walkway lighting system with a more modern lamping system that also preserves safety and is in keeping with the historic aspect of the Town, yet minimizes glare, light trespass, and light pollution. The restoration or replacement should consider differentiating lighting for roads, walkways and recreational facilities, (e.g. use of foot-level lighting along sections of the Town walkways, rather than pole lighting). Lighting should be chosen to illuminate only the**

target area using only the amount of light needed. Any modifications to the lighting should consider the historic pattern reflected in the scale, placement and character of the existing lights.

- Closely monitor the updated Pepco lighting tariff as it makes its way through the regulatory process to ensure that historic districts are considered, and to prevent the wholesale replacement of our lights with something considered more modern.
- Work with other local jurisdictions, particularly smaller ones with historic characteristics, to ensure that the concerns of such jurisdictions are considered during the review of the proposed new lighting tariff.
- Explore sources of funds to assist with replacing or restoring our lights with fixtures that maintain the historic integrity of the town.
- Develop a standard procedure for a resident to request addition/removal of individual lights.

4.6 Avenue, Street, and Road Name Signage

Soon after the Town's incorporation in 1937, it set about modernizing, including installing a system of wooden street signs made by town residents. At each street and avenue intersection four brown-painted board signs mounted to a 4" x 4" post. The street or avenue name was painted in white block high letters using a stencil. As these signs deteriorated, they were replicated with few changes until the 1980's.

In 1986, the Town decided to hire Town resident and maintenance supervisor Jim Fletcher, among other things an artist, to take over the sign production. Jim integrated painted sketches of native species to the signs and experimented with increasing the visibility of the lettering.

Washington Grove is the only historic district in Montgomery County to have historic street signs and probably the only historic district in Maryland to have historic wood street signs. Once the maintenance supervisor could no longer reproduce the historic signs, town resident Susan Van Nostrand volunteered to organize a group to rehabilitate or replicate the wood signs with reflective lettering. These signs follow the original parameters of size, surface, lettering style, and configuration and are considered contributing elements to the National Register Historic District.

Recommendations:

- Document the approved restoration process and develop a long-term maintenance plan for volunteers to follow into the future.
- HPC should take responsibility for managing the maintenance of the historic street signs.

4.7 Incidental Structures

4.7.1 Athletic Club Fireplace

Planned and built in 1935 by the then Teen Athletic Club of Washington Grove, the fireplace which formerly was often used for cook-outs has fallen into some disrepair: its lintel with names

and date of the founders is mostly gone, the exterior stones have some mortar decay, and the cooking area and grate have missing and degenerated fire brick, mortar and stones. Recent picnics have relied mostly on individual grills brought to a specific event. The fireplace continues, however, to have limited use and a real visual impact on Woodward Park. The previous Comprehensive Plan suggested locating a fire circle in the park for similar events.

Recommendations:

- **Acknowledge the historic artifact qualities of the Fireplace.**
- **Solicit professional recommendations for the restoration and renovation of the cook area for practical use.**
- **Establish a fire circle as an adjunct to certain Town events and as an active area for group and community gatherings: sing-alongs, story hours, marshmallow roasts, general camaraderie.**

4.7.2 Landscape Storm Water Structures

There are several distinctive landscape structures built as part of the extended efforts to control standing and storm water in the Grove. One is a low stone wall along Grove Road that marks the drainage from the Circle. Another is at the intersection of Grove and McCauley.

Recommendation:

- **Maintain the structural and historic integrity of the existing structures**

4.7.3 Granite Pediment Sculpture

The 3 stone pieces in Woodward Park next to the bamboo were a donation to the Grove upon completion of the restoration of Daniel Burnham's 1914 City Post Office next to Union Station. They were removed from the NE corner window when a direct bridge was built between the station and the post office.

4.8 Historical Concerns

The elements identified in the National Register as contributing to the historic integrity of the Historic District include:

- McCathran Hall
- The Town Garage
- The handmade wooden street and walkway signs
- The traditional ambiance created by the street and walkway lights
- The various handmade landscape features such as the fireplace, gazebo, recreation shed, stone storm water features, and stone wells.

All the historic Community Facilities described above and included in the National Register Historic District, their related viewsheds and features, should be given consideration in planning and treatment.

5 PARKS AND FOREST PRESERVE



Washington Grove has a long-standing interest in recreation and has sponsored many activities in Town parks and public areas since the earliest Camp Meeting days. Several town parks, the East and West Forest Preserves, and spring-fed, man-made Maple Lake provide space and openness that enhance the quality of life within the Grove. Town parks also provide an opportunity for spontaneous activity by children and adults, perhaps a "pick-up" game, in contrast to the regulated pace that is characteristic of the work and school day.

Town parks are intended to provide active recreation areas and are located in several locations within the Town boundaries. Active recreation refers to outdoor recreational activities such as organized sports and playground activities which require extensive facilities or development and which can have considerable environmental impact on the recreational site. Active recreation can be accomplished on an individual basis with one or more players (golf practice, shooting hoops, use of children's play equipment, croquet, tennis) or on a team basis with several members composing each team. In general, team play requires much larger areas and has a potential for ancillary needs, such as parking and spectator spaces. Typically, both individual and team players want to practice to improve their skills and use Town facilities for that purpose.

Because most of Town parks are embedded within the residential areas of the Town, adjacent households have the advantage of immediate access for their recreation, and are front row

spectators for all activities related to park use. Users of the parks have a responsibility to adjacent households to minimize any peripheral effects of the users' activities. These include, but are not limited to, physical damage to property, excessive noise, and inappropriate behavior. This is reflected in the Town regulations for use of public spaces.

The Forest Preserve provides unique opportunities for passive recreation by Town residents. Outdoor passive recreational activities include walking, hiking, bird watching and other nature observation which require a minimum of development and which have a minimal environmental impact.

It is the responsibility of users of the parks, lakes, and Forest Preserve to safeguard the conditions of these public areas and to abide by Town regulations concerning such things as parking, trash, and hours of use. The Town has a *Carry In-Carry Out* Trash-Free Policy for all Town property.

It is the responsibility of the Town to maintain the park areas and Lake in good condition for their intended uses, both for current residents and guests and for future generations of Grovers and their friends. The popularity of certain sports, games, or activities will wax and wane with succeeding generations and town regulations should provide flexibility for these changes. The Town is also responsible for maintaining the Forest Preserve for its habitat value to include restoration of degraded areas and protection of the forest ecosystem. The next section 6.0 describes the Forest Preserve in more detail.

Recommendation:

- **As a part of the Town Safety Plan, continue to annually review playground equipment for safety issues and address any concerns.**

5.1 Designated Parks and Green Space (See Exhibit A and B)

Woodward Park

Woodward Park has its origins in the 1897 Maddox plan, which set aside three blocks along the west side of Maple Avenue as a public park named in honor of William Ryland Woodward, one of Washington Grove's founding trustees and the vice president of the Washington Grove Camp Meeting Association for its first fifteen years. In 1905, the park was informally expanded west to Grove Road. That same year, the area bound by Oak Street on the north, Maple Avenue on the east, the building lots on Pine and Maple avenues on the south, and Grove Road on the west were set apart for recreational purposes and dedicated as Athletic Park. This land was poorly drained and consisted of mainly thicket and bog before it was adapted for recreational use. A plat map dated January 6, 1930, records the lots south, west, and north of Woodward Park (including the area known as Athletic Park) had been officially dedicated as "Park" by the camp meeting association on May 30, 1925. This area, which extended from the private lots along Pine and Maple avenues on the south to Boundary Street on the north and roughly from Grove Road on the west to Maple Avenue on the east, matched the parcels surrounding Woodward Park that were shaded green for "Parks and Parking" in the 1897 Maddox plan.

Historically, Woodward Park has provided Grove residents and visitors areas for both passive and active recreation. Between 1905 and 1963, the auditorium stood in Woodward Park north of Oak Street and east of the tennis courts. It was used for Chautauqua as well as other activities. Landscape features associated with the auditorium included a fence and footpaths. Other structures included a men's clubhouse (no longer extant), a girls' clubhouse (built in 1910), which was used by the Woman's Club before being destroyed by fire in 1939, and a large, stone fireplace built by the Athletic Club in 1935. The park's tennis courts and athletic fields were popular with residents and the public. For a period beginning in 1903 and continuing through at least 1916, track and field events were held in the park every summer. They attracted athletes from Maryland as well as from neighboring states. After drainage improvements were carried out along Center Street, a location along the south side of the street was selected as the site for a town maintenance building, which was built in 1955. Following the demolition of the auditorium in 1963, its site was redeveloped as part of a new Woodward Park "recreation center" that featured playground equipment and a multi-purpose, all-weather court. In 1965, a town nursery was established in southeast section of the park. (In 2007, it was redefined as an arboretum.) To commemorate the Grove's centennial, celebrated in 1974, a group of volunteers built a gazebo (noncontributing structure) in the park on a site northeast of the intersection of Grove Road and Center Street.

Currently bounded by Grove Road, Maple Avenue, and Center Street, this large park includes the following active recreation areas: 1 playing field, 2 baseball fields with back stops, 3 tennis courts, 1 basketball court, children's playground equipment, and picnic areas. A simple, direct, sign has been installed at the entrance to the parking area in Woodward Park which states that a permit is required for use of the field by groups of ten or more people.

Recommendations:

- **Support a consistent policy for use and maintenance of the active recreation areas within Woodward Park to ensure their continuing viability for present and future users.**
- **Continue to examine the tennis court fence condition and repair accordingly.**
- **Enforce the permitting process for use of the playing field.**

Wade Park

Wade Park is located north of the Circle between Fourth Avenue on the west and Fifth Avenue on the east. It was named after John W. Wade, a founding layman member of the Washington Grove Camp Meeting Association and its treasurer for fourteen years beginning in 1884. During the camp meeting period, a topographically high point in Wade Park known as Political Hill was a popular gathering place for politicians who attended camp meetings to make speeches and visit with constituents. A flagpole was installed and dedicated in the park in 1921. Around 1939, when Acorn Lane was established, its route passed through Wade Park, roughly bisecting the space. Today, the park features shade and evergreen trees, turf, and hedges. Small-scale features include concrete and wood-slat benches, the flagpole, and signage. Within the park are small parking areas associated with Acorn Lane. They are paved with gravel and feature timber curbs.

Knott Park

Knott Park is a small, triangular park bound by Grove Avenue on the west and First Avenue on the east. It may have been named after Ignatius Knott, an active member of the Washington Grove Camp Meeting Association, whose wife Mary was also one of the original stockholders. As early as 1878, Knott Park was the location a furniture warehouse operated by Wash B. Williams, a merchant from Washington, D.C. This building (no longer extant) was later repurposed as a Young People's Hall for the Washington Grove camp meeting. In 1902, it was moved out of Knott Park. Today, Knott Park is planted with shade trees and shrubs, including a notable English yew. Its edges are defined by the gravel roadbeds of First Avenue and Grove Avenue. Undeveloped lots along its north end create the sense that the park is larger than it actually is.

Chapel Park

Chapel Park is located along the south side of Center Street between Grove Avenue and Chestnut Road. The 1886 Lang plan set aside a block of land at the western terminus of Park Avenue (later Center Street) as a public park. The 1897 Maddox plan divided this park into two separate spaces: Chapel Park, which was located south of Center Street and measured 171 feet by 150 feet, and Howard Park along the north side of Center Street. Chapel Park was set aside for a chapel, but this use was never realized. For a period before World War II, Chapel Park was used for low impact recreation, including roque, croquet, and badminton. Today, the park features mature oak trees on turf with some understory plantings, including a row of hydrangea shrubs along Grove Avenue. Small-scale features include a concrete and wood-slat bench. A pull-in parking area at the north end of the park along Center Street is paved with gravel.

Howard Park

Howard Park is located along the north side of Center Street between Grove Avenue and Chestnut Road. As noted above, the 1897 Maddox plan divided this park into Chapel Park and Howard Park (also referred to historically as Hotel Park). Howard Park was named after Dr. Flodoardo Howard, a founding trustee and the first president of the association. In 1901, the assembly hall (today McCathran Hall) was erected at the southern end of Howard Park. In 1927, the hotel at the north end was razed because it no longer generated revenue. In 1940 a new assembly building for the Woman's Club was built on the site. Today, Howard Park extends from Center Street on the south to Miller Drive on the north between Chestnut Road and Grove Avenue. It provides a common green for McCathran Hall and the Woman's Club. Footpaths associated with the structures pass through the park, which otherwise features turf lawn, rhododendrons, oakleaf hydrangea, and other shrubs, and deciduous and evergreen trees, including holly, oak, pine, and tricolor beech. Behind the Woman's Club is a stand of cherry trees. The park has an uneven topography that slopes down to the northwest. Small-scale features include four concrete and wood-slat benches and various types of signage.

Zoe Wadsworth Park

Zoe Wadsworth Park is bounded by Center Street, Grove Road to the intersection of Locust Lane, and Woodward Park. Originally a portion of Woodward Park, it was carved out and dedicated as a separate park named after Zoe Wadsworth for her long-term leading of the Town Elections Board. It contains the Gazebo, which was built by volunteers in 1974 to commemorate

the Town's Centennial. The gazebo became structurally unsound and was replaced in 1995 by the current Gazebo, which has a lower roofline.

McCauley/Washington Grove Lane Park

Also known as Washington Grove Lane Park, McCauley Park is a triangular parcel that provides a verdant entrance to the Grove from Washington Grove Lane. McCauley Street passes through the park, which features shade trees, as well as smaller, flowering trees, including a magnolia. As the setting of the northern entrance to the Grove, there are several types of signage within the park. Along the western edge of the park is a concrete sidewalk.

McCathran Woodland Park

McCathran Woodland Park is located on the east side of Maple Road between house numbers 105 and 115. It was dedicated by former Mayor Donald McCathran and the McCathran family as a neighborhood woodland park.

Jackson Park

Jackson Park started out as a small, irregularly shaped park east of Grove Avenue and northwest of the Circle between Third Avenue and Johnson Alley. Based on available records, it is believed the park was named in honor of Richard Plummer Jackson (1816-1891), an early stockholder of Washington Grove. Town records indicate that there was a well and pump in Jackson Park. A local effort by the Washington Conference of Methodists' Ladies Guild to "beautify" the park in 1916 included plans to plant shrubbery and lay walks. Part of Jackson Park was eliminated when Acorn Lane was established (ca. 1939). The space identified today as Jackson Park differs from its historic counterpart. Today, Jackson Park is comprised of what historically has been the north end of Howard Park. It is located west of Grove Avenue and bound by Acorn Lane, Chestnut Road, and Miller Drive. Along the edge of Miller Drive is a small parking area, paved with gravel. Otherwise, the park features a turf lawn planted with evergreen and deciduous trees and shrubs. Small-scale features include a wood bench and a small statue of a seated girl (both located near the intersection of Chestnut Road and Acorn Lane) and signage.

Morgan Park

Morgan Park extends between Brown Street on the north, the municipal boundary line on the south, Hickory Road on the west, and Maple Avenue on the east. With the exception of a few parcels between Pine and Maple avenues, which were platted for residential development, the majority of this area was set aside as open space in the 1886 Lang plan. Recognizing the significance of the space as the front door of Washington Grove, it was officially decreed a park in 1890. The park was named after Major Thomas P. Morgan (d. 1896), the second president of the Washington Grove Camp Meeting Association. The forested area provided a natural buffer between the noise and dust of the train depot and the tranquility of the camp meeting grounds. Later, as Washington Grove became a year-round community, Morgan Park also served as a transitional space between the rail corridor and the Grove's residential areas. In the early twentieth century, Morgan Park was the focus of improvements by the Washington Conference of Methodists' Ladies Guild. In the early 1980s, as part of a reforestation effort, the town planted more than three hundred evergreen trees in the park. On July 4, 2008, a plaque (affixed

to a boulder) commemorating the history of Washington Grove was dedicated in Morgan Park. Today, roughly one-third of the park is emerging woodland, densely planted with trees and shrubs. A drainage ditch passes through the park from the intersection of Pine Road and Brown Street to a culvert at Railroad Street. A strip of the park along the south side of Brown Street has been cleared of understory vegetation. The section of the park traversed by Grove Road has also been cleared of understory plantings and features shade and evergreen trees on turf, flowering plants and shrubs (including rhododendrons, azaleas, and hellebores), a concrete and wood-slat bench, the commemorative plaque, and various types of signage.

MacGregor Park

This small memorial area sits in Woodward Park where McCauley Street runs into the East Woods (at the Challstrom Trail). It was established circa 1980 by friends and neighbors of Margaret MacGregor the long-time resident at 418 4th Avenue. Occupying the house in the 60's and 70's she was known for her warm welcome to all including her "great parties" and an open porch swing and a cookie for children who stopped by. After her death in 1979 her neighbors arranged for a memorial plaque inset on a stone facing the trail. A bench was placed along with several trees in the area which they mowed for some years.

Railroad Park

Railroad Park is a small parcel of land on the south side of Railroad Street between Washington Grove Lane and Hickory Road. The park is owned by the town and comprised of land that was part of the original tract acquired by the Washington Grove Camp Meeting Association in 1873. The park, dedicated in 2003, commemorates the community's historic ties to the B&O Railroad. It consists of a turf lawn informally planted with small trees and shrubs. Salvaged railroad ties are used as retaining walls. See Section 7.3 for discussion of this park.

The Dog Spot

Near the parking lot in the West Woods, the Dog Spot was established to give residents a fenced dog exercise area. It is an approximately 4000 square-foot oval area which allows dogs belonging to Town residents to engage in off-leash play. The entrance is located on the West Woods trail on the north side of the Maple Lake parking area, a few feet from the trail head. The exercise area is surrounded by a five-foot high chain length fence. A Dog Park Working Group reviewed multiple possible locations for the exercise area in 2018 and recommended the West Woods location to the Council. In September 2018, the Council approved the establishment of the exercise area, adopted as Resolution No. 2018-09, and developed rules and regulations governing the use of the area, adopted as Resolution No. 2018-06.

Recommendations:

- **These parks should be maintained as open space within the Town.**
- **Park name signs (similar to the one at Zoe Wadsworth Park) should be added to raise awareness of town park locations and public purpose.**

5.2 The Forest Preserve (East and West Woods)

From its earliest years as a camp meeting ground Washington Grove's landscape has been characterized by a central area of human settlement adjoined on the east and west by two forested areas, known today as the East Woods and the West Woods. Throughout Washington Grove's history these forests, comprising nearly one-half of the Town's lands, have served purposes both spiritual and secular.

Like many other Methodist camp meeting sites, Washington Grove was originally chosen as a setting for religious revival due in part to the sense of isolation and otherworldliness conferred by its forests. Although considered holy ground, these forests also served very practical purposes as well. The 1886 J.C. Lang "Map and Plan of the Washington Grove," commissioned by the Washington Grove Camp Meeting Association, depicts the present-day East Woods as containing a "Laundry Reserve" and "Carriage Park." Timber was harvested here during the early years of the camp meeting. Additionally, it was the location of the camp privies and trenches for burying waste, which were periodically treated with lime. C.J. Maddox's 1897 "Plan of Subdivision with Tabernacle" depicts a proposed subdivision of the East Woods into residential lots. In the very earliest map we have of Washington Grove (the 1873 "Sketch Map" by James L. Ewins) an arrow points westward from the tent sites reading "To Springs." Here, separated from main settlement by what the map labels "Country Road" (present day Washington Grove Lane), were nearly 47 acres that came to be known as the West Woods. As the location of two springs (Whetstone Spring and Maple Spring), this wooded area was a vital source of water. Unlike the East Woods, the West Woods were never platted for building lots. A timber source for the Camp Meeting Association, its logging trails were used by camp meeting attendees for picnics and excursions. Maple Spring, located within the West Woods, became a popular destination.

In Washington Grove, through time, there occurred a gradual shift away from the pure religiosity of the camp meetings to milder forms of spiritual uplift, such as those associated with Chautauqua Assemblies, the first held here in 1902. Nature study and nature appreciation were major features of the movement. As a result, the woods took on new and more secular meanings as evidenced in an excerpt from "The Grove Chautauqua" encouraging participants to "become acquainted with a large number of bird neighbors in their leafy homes and secret haunts." Wildflower study was also recommended.

During the Progressive Era (roughly 1890 to 1920), Washington Grove residents came to view their woods in more managerial and economic terms. Specifically relevant to the history of Washington Grove's forests is the rise of the American conservation movement with its emphasis upon improving the nation's management and exploitation of natural resources. The leading reformer to emerge in this field was Gifford Pinchot (1865-1946), generally credited with introducing sustainable-yield forestry to America. Pinchot's imprint upon the forests of Washington Grove can be traced through the work of one of his protégés, Fred W. Besley (1872-1960), Maryland's first State Forester, who visited the Grove in 1913. Amelia Elmore Huntley (1844-1936), the first woman to serve on the Washington Grove Association's Board of Trustees and a member of the Forestry Committee, was instrumental in bringing him here. Besley's inspection of the Grove's forests was part of a statewide cooperative forest improvement program. Trees that were mature or past maturity, Besley wrote, required an "improvement

cutting,” which would bring revenue to the owner and improve the condition of young growth. After dividing the Grove into sections, the forester provided recommendations for cutting, reforestation, and other custodial practices. A “plan of operation” was crafted based on Besley’s recommendations, and the Forestry Committee recommended a balance between the need for firewood and the “injudicious [*sic*] felling of trees.” Assistants trained in scientific forestry were tasked with selecting and marking trees for cutting based on species, maturity, and marketability. The Grove generally followed this approach to maintaining its forested landscapes throughout the next half-century. Besley continued to be involved with Washington Grove in the following decades.

For the next half-century forestry management practices in Washington Grove followed an approach similar to the one first introduced in 1913. However, by the 1960s and 70s Washington Grove residents had become forceful advocates for the protection of the town’s natural resources. As early as 1962, residents, including Mayor Don McCathran, suggested formally dedicating the town’s West Woods as a wildlife preserve to protect it from future development. The shift from thinking of the woods as a *reserve* to a *preserve* reflected the conclusion that their value would not be determined from timber sales. The West Woods were officially designated a forest preserve in 1964. Despite this, in 1971, a state forester studied the East and West Woods and determined that mature tulip poplars in the West Woods could sell for \$2,000. The town’s Forestry Committee agreed only to cut dead trees. When it was discovered that live trees had also been marked for cutting, a groundswell of opposition developed. Protests from angry residents at a town council meeting stopped the timber harvest and ultimately led to the resignation of Mayor Al Christie. The incident led to the establishment of a Forestry Policy Committee, which authored studies that led to a forestry policy section included in the town’s Comprehensive Plan. The town’s forests were recognized not only for their aesthetic and recreational value, but as protection from noise and a buffer against nearby development.

The Washington Grove Historic District was listed on the National Register of Historic Places (National Register) on April 9, 1980. In it, there was no consideration of the historic significance of the town’s open spaces, including its two forest preserves. To provide a broader context for understanding the District’s significance, an amended nomination has been prepared and submitted, reevaluating the local, state, regional, and national events and trends that have shaped the development, design, and character of Washington Grove. The nomination defines a period of significance of 1873 to 1969 and identifies and describes the architectural resources, landscapes and viewsheds that add to the historic associations, qualities, and values for which the historic district is significant. Among these are the East Woods and the West Woods. Both are officially defined as “Contributing Sites.”

5.3 Maple Lake, Maple Spring, Whetstone Spring

In 1910, the Washington Grove Association (successor to the Washington Grove Camp Meeting Association) initiated a project to create an “artificial lake” by clearing and dredging the area around Maple Spring in the West Woods. Maple Lake as it came to be known, was used for recreation in the summer and to harvest ice in the winter. Since water sports were discouraged by the Methodists, the recreational function of the lake never flourished, and its use as an ice

pond was also short lived. As a result, the lake fell into disuse for a number of years until the summer of 1927, when it was revitalized and repaired. Due to a combination of factors, however, the lake basin was not maintained during most of the 1930s and 1940s. In 1953, the town chartered a Lake Committee to guide the restoration of the site. The redesigned lake, inaugurated in 1955, measured roughly 330 feet long by 160 feet wide with a depth that varied from 30 inches to 8 feet deep. It featured an island and a dock, and a new access road was created to the lake from the trail to Whetstone Spring. Later improvements included a bridge to the island (1962) and a perimeter fence (1973). In the early 1990s, a well and pumping system were installed to feed the lake. It is periodically drained and dredged. Today Maple Lake offers both passive and active recreational opportunities in the form of picnics, birding, fishing, and swimming.

Maple Lake

Maple Lake continues to be one of the prime sites for recreational use in the Town. Lifeguards are on duty from 12:00 noon to 6:00 p.m. weekends starting Memorial Day weekend, and then daily from the day in June that public schools close for the summer through the Labor Day weekend. The Town has continued to support 4 weeks of swimming lessons in the month of July. The Lake area is also used year-round for walking, birding, fishing and quiet contemplation. A security camera has been installed and is monitored by Town Maintenance.

Maple Spring

Maple Spring is the primary source for Maple Lake and, along with Whetstone Spring (also located within the West Woods), are headwaters to Great Seneca Creek. It comes up south of and historically was a feeder to Maple Lake (see description below). During the camp meeting era, the spring was an important source of potable water and a popular destination for nature walks, picnics, and other passive recreational activities. Historic photographs indicate that early improvements at the site of the spring included the construction of a tiered, masonry spring box. Maple Spring continues to run in the late winter and early spring; however, it no longer feeds Maple Lake. (As a result of adjacent development, a well and pumping system were installed to feed the lake in the early 1990s.) An archaeological survey may identify remnants of historic features associated with the spring, and this site should be considered archaeologically sensitive.

Whetstone Spring

Whetstone Spring is located in the north end of the West Woods. While it was an important source of water for Washington Grove, its location deep in the woods and far from the center of the campground made it an inconvenient source for daily use. Instead, Whetstone Spring mainly provided a cool, shady spot for outdoor gatherings. In the late 1930s, Washington Grove hired a local mason to build a stone fireplace (no longer extant) at Whetstone Spring. It was located along the bank opposite the spring. Additional improvements were made in 1949 when the ground around the spring was cleared and benches were installed. The dugout area of the spring was once capped with a slab of granite. According to oral tradition, the stone was removed in the 1950s, although the reason why is unknown. Today, Whetstone Spring's waters are visible during the late winter and early spring from along one of the trails that passes through the woods. The site is also considered archaeologically sensitive, as remnants of the fireplace or other features may remain.

5.4 Washington Grove Conservation Park

(See also more detailed history of why and how the “fee” to this land was purchased by the Town in Section 2.2 Municipal Growth Area 1)

The original tract of land acquired by the Washington Grove Camp Meeting Association included a 50-acre farm on the east side of Ridge Road. This farm was sold in 1890 and became the property of Maryland landowner Eugene B. Casey. For decades, the Casey farm and other agricultural resources on the fringes of the Grove, defined the rural character of the community and reinforced the idea of the Grove as a “place apart.”

Today, the 12-acre Washington Grove Meadow Conservation Park, which is located on part of the land that once comprised the Casey farm, is a key component of the setting of Washington Grove. The park helps contextualize the Grove within Montgomery County’s agricultural heritage, which influenced the region’s settlement and land use patterns well into the twentieth century. The park also provides a critical buffer between the Washington Grove’s residential streets and surrounding high-density residential and highway development and preserves the rural, open vistas and spatial organization of the agricultural fields that historically formed the setting of the Grove. The park is located along the eastern edge of Ridge Road and features a native meadow habitat with forested edges and natural surface trails. Built structures are limited to park signage and an informational kiosk. While the town owns the land, the park is wholly maintained and operated by the Maryland-National Capital Park and Planning Commission (M-NCPPC).

5.5 Historical Concerns

The elements identified in the National Register as contributing to the historic integrity of the Historic District include:

- All the above-named parks
- Maple Lake
- Washington Grove Conservation Park

The historic character of these features should be given consideration in planning and treatment.

6 SENSITIVE AREAS AND ENVIRONMENTAL CONCERNS

In accordance with State law, this Plan recognizes the need for goals, objective, principles, policies, and standards designed to protect, from the adverse effects of development, sensitive areas, including streams and their buffers, 100-year floodplains, habitats of threatened and endangered species, and steep slopes.

The abundant and clean water supplies within the 200 acres of the Town were a major attraction for the original purchasers of the Town. Over the years, open and piped drainage systems were installed in the residential and wooded sections of Town.

6.1 Forest Conservation

The Forest Preserves of Washington Grove cover 82 acres—almost one half of the Town’s lands. There are two stands—commonly called the East Woods and the West Woods and located respectively on the Northeast and Northwest sides of Town. The Town’s Forest Preserves (see Exhibit A) are what remain of the forested context of the original Camp Meetings. The woods are an important part of Washington Grove’s historic context, a defining feature of the town’s character and an essential part of its identity as a Town within a Forest.

Benefits of the town’s forest preserves include:

- Improved air quality and cooler temperatures
- Natural habitat for native plants and a variety of wildlife
- Prevention of soil erosion
- A natural buffer from surrounding development
- A place for reflection, exploration and passive recreation such as walking, bird watching and wildflower observation through a network of trails
- Water quality protection—water running through the East Woods is part of the Rock Creek headwaters; water running through the West Woods is part of the Great Seneca Creek headwaters.

Washington Grove has an established Forestry Policy since the 1970’s designed to protect the East and West Woods so that their benefits will be available for future generations and in 2015, the Town commissioned the Forest Stewardship Plan 2015 by Parkton Woodland Services to report on the current condition of the woods from registered forester, Bill Bond. That report, referred to here as the Bond Report, is now the cornerstone of the Town’s forest stewardship planning.

The East Woods

The East Woods is a 38.6-acre oak-dominated forest with white oak being the predominant tree in the over-story. This is an old growth stand with canopy trees estimated to be 120+/- years old. It has no history of any disturbance such as logging or fire.

US Fish and Wildlife Service's National Registry wetland maps identify about 12 acres of non-tidal wetlands in the center of the East Woods. It is typical of Piedmont region wetlands, forming low swales or depressions; flooding seasonally or temporarily; and underlain by poorly drained soil. The trees growing in the wetland area differ from the rest of the stand and include swamp chestnut oak and pin oak plus an abundance of native Greenbrier.

The West Woods

The 44.5-acre West Woods is dominated by yellow poplars which are the predominant over-story tree. The Bond Report noted that the trees are of exceptional size and quality and that the West Woods has far better drainage than the East Woods. The West Woods has a history of timber being harvested between 1920-1950 including the harvest of American chestnut trees dying from the blight. No timber has been harvested since the 1970's and the rapidly growing yellow poplar, which is the first tree to emerge, will eventually be replaced by a hardwood forest in the natural process of field succession. The under-story is dominated by native spicebush and non-native invasive plants—the most common of which are Japanese barberry, wisteria vine and Japanese privet. The West Woods includes two active natural springs, Maple Spring, which feeds Maple Lake, and Whetstone Spring.

Ecosystem Health of the Woods Preserves

Both the East Woods and the West Woods are under pressure from the presence of more deer than the forests can sustain. Of specific concern is the loss—due to deer over-browsing—of both native species at the herb/ground level, under- and mid-story level as well as the suppression of seedlings, saplings and young native canopy trees required for maintenance of a full canopy. The consequent absence of a multi-storied forest and lack of native plant variety significantly reduces or eliminates specific wildlife habitats.

The situation in the East Woods is grave. Years of over-browsing by deer have wiped out most native plants, shrubs and small trees in the herb/ground cover, under- and mid-story. Ongoing failure of mature trees has led to an increasing loss of canopy. That canopy loss, combined with the absence of a succession of native trees (also a result of over-browsing by deer) has created ideal conditions for the incursion of non-native invasive (NNI) plant species. In fact, at the time of the 2015 Bond Report, almost 50% of the East Woods had dense concentrations of non-native invasive species—the most common of which are Japanese stilt grass, wisteria vine, mile-a-minute and Japanese honeysuckle. These invasive plants are not palatable to deer and they are dominant where native species (preferred by deer) once thrived. The NNI plant removal work in the East Woods shows significant progress and will continue. That said, mature trees continue to fail and openings in the canopy continue to grow, creating additional opportunities for non-native invasive plants to spread in the East Woods.

According to the Bond Report, stocking levels are not constant throughout the East Woods. There are many areas of low stock—the result of blow downs or age-related death of small groups of mature trees. In many of these low-stock areas, there is little or no canopy and no succession of native canopy trees. The report goes on to note that advanced regeneration in the East Woods is limited to only a few areas where there is a) full canopy, b) the under-story is open and c) the soil remains friable. These are the East Woods areas which, if protected from deer over-

browsing, are prime candidates for restoring themselves.

The West Woods is healthier than the East Woods according to the Bond Report. The drainage is better; there are fewer holes in the West Woods canopy; those holes are smaller; and the canopy trees in the West Woods are younger and healthier than in the East. That said, there are increasing signs of deer damage and incursions of NNI plants including Japanese barberry, wisteria vine and Japanese privet.

Invasive plants are concentrated in a few areas along the perimeters of the West Woods and are likely be kept under control with recently adopted monitoring and remediation practices. In the summer 2018, a new NNI plant, wavy leaf basket grass, which has been spreading in the mid-Atlantic region, was spotted in the West Woods. The incursion was more extensive than initially thought but the Town, working with its invasive plant control contractor and town volunteers, responded quickly to address it.

However, without a concerted and continuing effort to control the deer over-browsing, the lack of succession of native canopy trees will lead to the same conditions in the West Woods that are currently laying waste to the East Woods. These conditions include loss of canopy as trees age and fail, absence of succession of native canopy trees to fill gaps in the canopy, and a subsequent increase in NNI plants wherever the sun hits the forest floor.

The main ecological driver in the current at-risk state of the town forest preserve is the large (and growing) population of resident and transient whitetail deer. The deer over-browsing is responsible for the dramatic reduction of native plants, shrubs and trees; the loss of the forest “layers,” and the suppression of a succession of native canopy trees.

The over-population of deer is a problem that’s not unique to the Town. It exists throughout the Mid-Atlantic region. Montgomery County Parks and some private land owners have been controlling deer by managed hunts and report significant reductions in damage from over-browsing and a natural restoration of the forest ecology.

Other forest and land owners have used deer exclosures to control over-browsing. Once deer were fenced out, native trees and understory vegetation began to re-emerge. The non-exclosed sites saw continued reduction in diversity and the increasing presence of NNI plants. Some institutions, such as Brookside Gardens, use a combination of deer exclosure and deer harvesting.

The Woods Committee’s Vision Statement paints the picture of a restored forest as a diverse, successional, and self-sustaining ecosystem of multi-story native trees, shrubs, and plants.

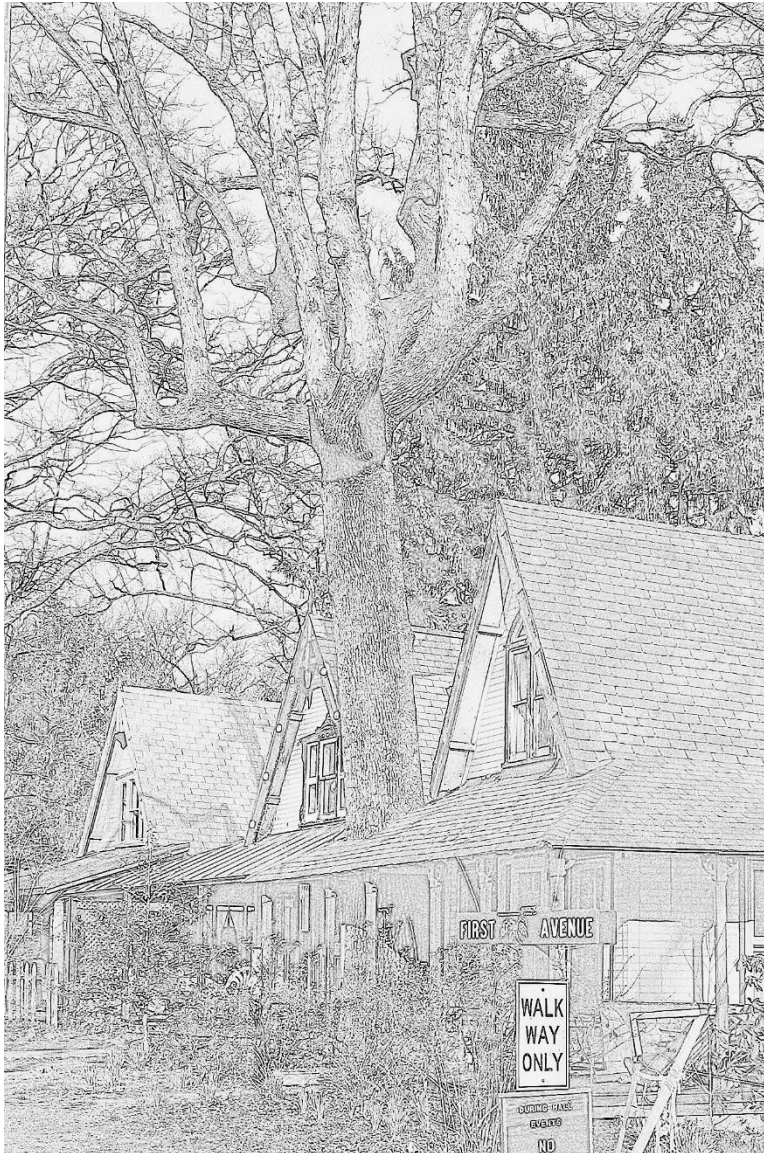
This will require both immediate action and a long-term commitment by the Town. The Woods Committee has developed an integrated multi-pronged strategic framework based on the Bond Report to achieve the goal of forest ecosystem protection and restoration. This framework includes deer population control, non-native invasive plant control, and replanting native trees and vegetation to support reforestation. The Woods Committee will specify how success will be measured.

Community education and engagement

The issues related to saving the woods will require community education and engagement. This will include ongoing educational outreach to town residents, meaningful volunteer activities, and opportunities for residents to participate in decision-making about forest preservation.

Recommendations:

- **Establish a new Forest Preserve zone in the East and West Woods through the zoning amendment process.**
- **Continue to follow our multi-pronged Forest Stewardship Plan (2015), which includes:**
 - **The deer control plan to reduce over-browsing in both East and West woods.**
 - **NNI plant species removal and control to include both mechanical and chemical methods as necessary. Scheduled herbicide application will be conducted by a professional certified contractor. Annual assessments will be conducted.**
 - **Replanting native trees and understory vegetation**
- **Continue community outreach and education on forest ecosystem health.**
- **Additional support of forest ecosystem health restoration to include mitigating trash and vandalism in the Forest Preserve, remediate storm water runoff and erosion of West Woods; restore Maple Spring to include fencing for protection; restore Whetstone Spring; maintain walking trails, and explore need for expansion of Town maintenance staff and/or contractors in order to support increased reforestation efforts.**



6.2 Residential Forest

6.2.1 Town Trees

Within the residential portion of town, huge old trees are a complement to the forest preserves. In addition to natural trials such as drought, they have others to contend with, among the most lethal of which are lack of nutrients as they age, air pollution and base wounds. In the past ten years over browsing and rubbing by local white tail deer have also become a very serious problem. In the town parks and residential areas, we now plant only trees greater than 2" caliper, usually 2.5-3.5" caliper and they must be protected from deer rubbing for at least 5 years thereafter. Only trees with 5-10" caliper, which must be brought in by tree spade, are large enough to withstand both browsing and rubbing on their own. This option is expensive but quite effective. It has also enabled us to increase residential area tree age diversity. Shrubs, when planted, need 5 to 6-foot square enclosures to protect them for extended periods until they are

large enough to withstand deer browsing. There are many native species it is no longer realistic to plant at all. And the methods used in the residential part of town are unrealistic in the two town forests where deer browsing has removed the understory portion of the canopy and eliminated natural forest succession. The lack of understory has also eliminated habitat for insects, birds and small mammals. If nothing is done our woods will not be forests much longer.

Measures have been implemented to improve tree health. Town Maintenance now has a (ground injector) which can be used to administer mycorrhizal fungi or other nutritional supplements to a tree. This is done in conjunction with the new water wagon program. The water wagons are used to water all new trees we plant for one to two years in the case of nursery grown trees, and two to three years for larger tree-spade installed trees. Another program to improve tree health is the rolling pruning now occurring throughout the town. Inspection and pruning are done by a Maryland licensed tree expert/contractor. Serious arrears have been addressed in the past (five) years and now annual pruning covers the entire residential area every two to three years. Separate line items are now included in the Town budget for tree pruning, tree removals, and buying new trees. Although we watch for gypsy moth infestation, we also rely on the Maryland Department of Agriculture gypsy moth program to alert us when the amount of gypsy moth infestation is cause for concern. A small placeholder sum for gypsy moth treatment is now included in the town budget. This can be adjusted as need arises.

A Town Nursery was established within the Woodward Park boundaries over 30 years ago. Many plantings in the Grove began as small slips and seedlings from the nursery, transplanted over the years by volunteers and Town maintenance staff. Material which was suitable for transplantation has now been relocated. The remaining trees are now a more natural looking area in Woodward Park-which is no longer suitable for a nursery. As long as the deer population in Washington Grove remains high only larger trees can be planted with any chance of for survival.

The 2005 Tree Inventory proved problematic as tree tags fell off, were removed, or were subsumed by tree growth and the Inventory usefulness declined. The new pruning program substitutes regular inspection and pruning by an outside licensed tree service to preserve public safety. We are looking into the use of GPS mapping to keep track of newly planted trees. As older trees are removed our planting of new trees has accelerated. In the past six years we have added 60 upper canopy trees (such as Red Oak), 11 intermediate canopy trees (such as American holly), and 14 understory trees (such as Serviceberry).

Problems with increasing amounts of non-native invasive plant species has been recognized for some time. A new Plant Replacement Policy has been adopted to facilitate the removal of invasive plants in our parks and residential areas. See also Section 6.2.

Recommendations:

- **Maintain a Tree Inventory through regular updates, especially for trees that are removed or for new plantings. Explore the use of GPS coordinates to facilitate electronic record keeping.**
- **Maintain a program for tree health and, when necessary, replacement. Inspection for insect threats, including Gypsy moth and Ambrosia beetle, should be part of the**

program. Continue to include necessary supplies and staff time in the Town's annual budgets.

- **Review and update the goals of the 2006 Urban Forest Management Plan; the educational component of the Plan should be implemented.**
- **Given the disastrous impact of the deer population on our urban canopy; seek outside resources to minimize and even reverse these impacts in our town parks and walkways, our forests, and our resident's yards and gardens.**

6.2.2 Control of Non-Native Invasive Plants

Washington Grove is justly proud of its woods, leafy parks, and tree-lined streets and avenues. However, these verdant places are increasingly threatened by non-native invasive (NNI) plants.

NNI plants are introduced species that can thrive in areas beyond their natural range of dispersal. Within their own range, plant species belong in a particular ecosystem where they have evolved in balance with other plant, animal and insect species. That balance is maintained by the totality of that ecosystem, as the plants provide food for particular predators. When they find themselves away from their normal range, the absence of predators and competitors gives certain species a key competitive advantage over the native flora. Additionally, these plants are characteristically adaptable, aggressive, and have a high reproductive capacity. Given their natural advantages, NNI plants crowd out and choke native species, depriving them of light and nutrients and upsetting the balance of the native flora. Compared to other threats to biodiversity, invasive introduced species rank second only to habitat destruction.

An example of a large NNI that is prevalent throughout Washington Grove is Amur or Bush Honeysuckle (*Lonicera maackii*), which thrives in our yards, along our streets and avenues, and in our parks and woods. Ecological concerns with Bush Honeysuckle are numerous.

Recommendations:

- **The town should identify non-native invasive species (NNI) found on town property. As the town tackles the problem of NNI plants, it needs to reference an authoritative source of information that is applicable to our own area. There exist numerous national and regional lists of NNI plants that use various criteria for listings. We recommend Plant Invaders of Mid-Atlantic Natural Areas, 5th ed. Published in 2014 by the National Park Service and U.S. Fish and Wildlife Service. It is widely used and issued to all members of the Maryland Parks Department Weed Warriors.**
- **The town should prioritize removal of these NNI plants and, as it becomes possible, replace them with more appropriate plants. Replacement should focus on plants native to the Mid-Atlantic.**
- **Residents should be educated as to the threats of NNI plants, their identification, and options for removal/replacement on their properties.**

6.3 Additional Sensitive Areas

6.3.1 Maple Lake (See Exhibit B)

Maple Lake is one of the great environmental and recreational treasures of Washington Grove and its source, Maple Spring, is part of the headwaters system of Great Seneca Creek. Originally constructed in 1910 for swimming, boating, and ice harvesting, the Lake later was neglected and gradually filled in with silt, plants and decayed organic material. In the 1950's it was revived by cleaning out and deepening the basin, building the earth berm on the east side and improving the drainage and outflow systems. In 1974 and again in 2000, the Lake was drained and dredged by a bulldozer to remove the silt, mud and organic decayed material. The sludge was heaped and left at the southeast side of the lake, where it became covered with overgrowth.

A deep drainage ditch was constructed outside the entrance to the Lake. This ditch carries runoff and storm water from the woods and Washington Grove Lane around the area of the Lake. A concrete culvert is used to span the ditch allowing access to the Lake.

In the late 1980's significant water flow was lost from Maple Spring (the Lake's source) due to construction outside of Town west of the Lake. With support from the City of Gaithersburg, the Town was reimbursed by the builder for the construction of a deep well and pumping system which is now adding cool, clear water to the lake on a timed basis each day during the summer months.

Monitoring and Management of Maple Lake: The primary goal is to prevent eutrophication, the process by which excessive nutrient enrichment (including increased nitrogen and phosphorus) due to decomposition of organic materials, including algae and submerged rooted pond weeds, depletes oxygen levels in the water. Lakes then gradually fill in with new plant growth and silt and become swamps or small streams. This process is what happened to Maple Lake after 1912. In recent years, algae and submerged rooted pond weeds have been controlled fairly well with algaecides and herbicides, but the decomposition of algae and weeds as they fall to the bottom increases the nutrients in the water, causing further growth.

The Town must continue to maintain the delicate ecological balancing act that allows the use of the Lake for safe swimming, and keeps it safe and hospitable for water creatures including fish, turtles, muskrats, frogs and birds both on site and as headwaters for Great Seneca Creek. This balance can best be accomplished by continued water quality testing and by continued use of safe herbicides and algaecides while we consider and investigate long-term plans. The fecal coliform count has been well below the standard acceptable level.

Recommendations:

- **Continue water testing and appropriate use of safe herbicides and algaecides to protect and maintain this headwater of Great Seneca Creek.**
- **Monitor water quality parameters and plant, animal and fish characteristics to monitor for signs of degradation of the Lake's ecology; seek advice and assistance from environmental experts, in addition to Town volunteers.**
- **Increase planting of native trees and shrubs on the west side of the Lake for visual screening and to prevent erosion. The Forestry and Beautification Committee should be consulted for ideas and recommendations.**
- **In conjunction with the Town block surveys, maintain the Town boundary on the west**

- side of the Lake beyond the fence line; use plantings to help define the property line.
- **Inspect the bridge over the drainage ditch to determine its weight capacity and remaining life.**
- **Eliminate erosion of the Lake fence post anchors by some means, such as reinstalling the fence farther into the Lake compound area and away from the drainage ditch or, in conjunction with the ditch inspection, analyze the cost of piping the ditch along the limits of the Lake fence. Alternately, consider stabilizing the ditch with rip-rap or gabions to curtail further erosion.**
- **Investigate the possibilities of installing seasonal port-a-potty(s) facilities.**

Prevention of Future Eutrophication: To increase depth and remove the rooted pond weeds and accumulated organic debris, the Town should plan for periodic dredging of the accumulated silt, mud and organic debris from the Lake bottom as was done in 1974, 1998, and 2002. The problem of disposal of the sludge also must be looked into with attention to legislation since the earlier dredging work to determine if any restrictions now apply to the process of dredging or disposal of sludge from the Lake. In 1998, an aeration system was installed at the Lake to decrease turbidity and improve oxygen flow throughout the water.

Recommendations:

- **Establish a schedule to dredge Maple Lake to prevent future eutrophication. Maintain the aeration system and monitor its effectiveness for increasing dissolved oxygen levels in the Lake.**
- **Following any dredging project that may be undertaken, maintain the sand beach from its present location as far as practical to the island bridge.**

6.3.2 Maple Spring and Whetstone Spring

Maple Spring is the primary source for Maple Lake and, along with Whetstone Spring (also located within the West Woods), are headwaters to Great Seneca Creek. In order to enable Town residents to enjoy the springs that were so much a part of the leisure activities of the original residents, the spring box at Maple Spring should be refurbished and an elevated boardwalk should be explored (see Exhibit B, item H). Because the environment is sensitive, access to this new nature area should be limited. Therefore, the fenced perimeter around Maple Lake should be enlarged to incorporate this area.

Recommendations:

- **Refurbish the spring box at Maple Spring. Explore a raised boardwalk nature trail up to and around the spring. Erect a fence so that Maple Spring is included within the present Maple Lake compound. Install rustic log benches at the Spring. Maintain the rest of the area as open space and natural habitat.**
- **Annually clear silt and undesirable growth around Whetstone Spring to enhance its use for passive recreation while safeguarding its natural qualities.**
- **Implement means to minimize the run-off from Washington Grove Lane and Lake parking lot into the Maple Spring area.**
- **Check with the Montgomery Parks Department for vandal-resistant seasonal (contractor supported) toilets.**

6.3.2 Brown Street Corridor

The Brown Street Park corridor extends from Maple Avenue westward to the intersection of Railroad Street and Hickory Road. A gate at this intersection restricts vehicular access to Brown Street between Hickory and Chestnut Roads. A major portion of this corridor, Morgan Park, extends from Maple Avenue westward to Grove Road and borders Railroad Street. Water flowing through this area is one headwater of the Muddy Branch tributary to the Potomac River. Approximately two-thirds of Morgan Park is an emerging woodland. The remainder is semi-wooded and includes two memorial gardens. A drainage ditch traverses the park near Pine Road to a culvert at Railroad Street.

The Brown Street park corridor is a major buffer zone between the Town and the traffic along Railroad Street and along the railroad tracks. The completion of possible extensions to Metro, in addition to the steady growth in railroad and vehicular traffic, will increase noise and air pollution in the Town. The existing woodlands is heavily populated by bush honeysuckle. If the resident deer population can be reduced it would be desirable to increase the native species in this area to improve the quantity and quality of the wooded buffer.

Recommendations:

- **Consider increasing wooded growth with native species as a shield throughout the Brown Street Park corridor.**
- **Maintain the ditch in Morgan Park to ensure drainage of both residential and wood areas and to safeguard the quality of water draining into Muddy Branch. Proper drainage is critical to woodland health. County officials should correct drainage flow problems under Railroad Street to support the Town's efforts. Greater compliance by CSX in maintaining the drainage culvert under their railroad tracks is also required.**

6.3.3 Ridge Road Corridor

The Ridge Road corridor extends north and east from the intersection with Brown Street to the easternmost end of Ridge Road. Residential lots cover the west side of Ridge Road, while the east side is as yet undeveloped, except for four homes within the Town. Waters from this area drain to Rock Creek.

The original tract of land acquired by the Washington Grove Camp Meeting Association included a 50-acre farm on the east side of Ridge Road. This farm was sold in 1890 and became the property of Maryland landowner Eugene B. Casey. For decades, the Casey farm and other agricultural resources on the fringes of the Grove, defined the rural character of the community and reinforced the idea of the Grove as a “place apart.”

In 2002, 13 acres of the former Casey Field on the east side of Ridge Road were designated for protection as Legacy Open Space.

Today, the 12-acre Washington Grove Meadow Conservation Park, which is located on part of the land that once comprised the Casey farm, is a key component of the setting of Washington Grove. The park helps contextualize the Grove within Montgomery County's agricultural

heritage, which influenced the region's settlement and land use patterns well into the twentieth century. The park also provides a critical buffer between the Washington Grove's residential streets and surrounding high-density residential and highway development and preserves the rural, open vistas and spatial organization of the agricultural fields that historically formed the setting of the Grove. The park is located along the eastern edge of Ridge Road and features a native meadow habitat with forested edges and natural surface trails. Built structures are limited to park signage and an informational kiosk. While the town owns the land, the park is wholly maintained and operated by the Maryland-National Capital Park and Planning Commission (M-NCPPC).

The Town's highest priority for the Legacy Open Space portion of Casey Field is that it be preserved Conservation Meadow in order to retain the agricultural context of and views from the Historic District.

A strip of land on the south side of the easternmost portion of Ridge Road is owned by the Town, and east of that a 15-foot-wide wooded buffer and an intermittently wooded drainage bed buffer the new housing development.

Recommendation:

→ **Protect the easternmost portion of Ridge Road and the Town-owned strip of land on the south side of that portion by delineating and maintaining that strip as a wooded barrier and buffer.**

6.3.4 Archaeological Concerns and the Presence of Indigenous People

The presence of indigenous people within what is now Montgomery County is well documented in a number of published sources and most recently in a special written report prepared for the Washington Grove Racial and Social Equity Committee. Another important source of information is the Maryland Historical Trust's Cultural Resource Information System, Medusa, an online database devoted to architecture and archaeology. According to Medusa, several indigenous archaeological sites have been recorded in areas within Washington Grove's general vicinity. Most of these are small and generally characterized as short-term resource procurement camps.

Immediately adjacent to Washington Grove, however, on lands belonging to Montgomery County Parks, is a large European American archaeological site, containing what may be an indigenous component. The Washington Grove Steatite Quarry Site (Maryland Site #18MO6221) is comprised of several depressions in the ground surface representing areas that were once mined for steatite (known also as soapstone). In addition to artifacts and quarrying byproducts associated with historic period European Americans, archaeologists have also discovered flaked stone tools, suggesting that the region's indigenous inhabitants conducted quarrying here prior to the site's use by local farmers and Washington Grove residents. It should be noted that the National Park Service has recorded three indigenous steatite quarries within the District of Columbia, specifically within Rock Creek Park.

Although the Steatite Quarry Site lies outside the town's boundaries, its presence has implications regarding the possible presence of indigenous archaeological sites on lands belonging to the town, especially the Conservation Meadow and other undeveloped open spaces. Archaeological remains associated with indigenous quarrying activities may well extend beyond the site itself, consisting of processing stations, temporary base camps, etc. The presence of several springs within the immediate area increases the possibility that such related sites exist nearby. Such terrain should be regarded as archaeologically sensitive and thus possibly subject to archaeological site surveys in advance of federally or state sponsored construction projects.

Recommendation:

→ **Continue to work closely in partnership with the Montgomery County Parks Archaeology Program to define, investigate and preserve the Washington Grove Steatite Quarry Site and related cultural resources.**

6.4 Historical Concerns

The elements and viewsheds identified in the National Register as contributing to the historic integrity of the Historic District include:

- The East Woods
- The West Woods
- Maple lake
- Maple Spring
- Whetstone Spring
- The Conservation Meadow
- The buffer along lower Ridge Road

Historical concerns as well as environmental concerns should be given consideration in planning and treatment for these locales.

7 WATER RESOURCES ELEMENT

In accordance with State law, this Plan recognizes the need for goals, objective, principles, policies, and standards designed to protect, from the adverse effects of development, sensitive areas, including streams and their buffers, 100-year floodplains, habitats of threatened and endangered species, and steep slopes.

The abundant and clean water supplies within the 200 acres of the Town were a major attraction for the original purchasers of the Town. Over the years, open and piped drainage systems were installed in the residential and wooded sections of Town.

The Town of Washington Grove is within the area serviced by the Washington Suburban Sanitary Commission (WSSC). The WSSC was established in 1918, but the concept of a bi-county water/sewer agency was first suggested in 1912 following a strong complaint from the neighboring District of Columbia about the streams within the Nation's Capital being fouled by waste from Montgomery and Prince George's Counties. Over the years, small existing community systems, some run by municipalities like Hyattsville and others privately operated by land companies such as those in Chevy Chase and Edgemoor, were acquired and eventually integrated into the WSSC regional system. Among the early acquisitions were the water systems of Takoma Park (1919), Mount Rainier and Kensington (1922), and Glen Echo (1926). Washington Grove, served in its earliest times by a collection of springs and wells (and honey wagons), approved joining the WSSC system at an annual meeting in 1923, thus initiating a major construction effort that resulted in the first hookups in 1927 including a fire hydrant system throughout the community.

7.1 Water Supply System

With regard to water supply, the Patuxent Plant was the WSSC's principal supply facility during the last half of the 1940s and in the 1950s when rapid post-World War II suburban growth was taking place. During the 1950s, the WSSC pursued the study, design, and construction of what is today its principal water supply facility, the Potomac River Filtration Plant in western Montgomery County. When the first 30 MGD (million gallons per day) stage of the Potomac Plant was opened in 1961, the WSSC was in a position to operate a dual source system, drawing on both the Potomac and Patuxent Rivers. The Potomac Plant was expanded progressively during the 1960s and now has a nominal capacity of 250 MGD with the ability to produce at a rate of 285 MGD for short operational periods.

Further expanding its resources, the WSSC completed construction of the Little Seneca Creek Dam and Reservoir in northwestern Montgomery County in 1985. The Reservoir, containing 4.25 billion gallons of water, is available to supplement flows in the Potomac River during dry periods and serves as a recreational resource along with the other two WSSC reservoirs. The WSSC also has access to water stored in the 30-billion-gallon Jennings Randolph reservoir, located further upstream on the Potomac in Bloomington, Maryland, and operated by the U.S. Army Corps of Engineers. These resources ensure adequate water supply for the Town of Washington Grove for the foreseeable future, including the maximum potential of 54 additional

homes from redevelopment within the current municipal boundaries. (Capacity confirmed via communication from Roland Steiner, WSSC, 24 October 2008.)

However, many homes located along the easternmost portion of Ridge Road still rely upon wells for their water supply. When the former Casey Field was developed, there were concerns regarding impacts on the water table that supports these wells. As part of the development process, plans and funding contingencies were put in place for the possible extension of the WSSC water lines to serve these homes along Ridge Road within the Town if the existing wells failed.

There is also significant concern for the condition of the aging water delivery systems within the Town. The frequency of water line assessments and rehabilitation work has increased, as well as the impacts of such work on public roads, walkways, and parking areas. As noted in the July 2007 WSSC Utility-Wide Comprehensive Plan, the renewal of buried assets is WSSC's most immediate challenge, with approximately 85% of the buried water distribution system piping reaching or exceeding its useful life by the year 2020. Considerable Town diligence will continue to be required to ensure that WSSC contractors and crews restore the disturbed areas in an acceptable manner.

Recommendations:

- **Monitor contingency plans, water assessments, and funding commitments to support extension of WSSC water lines to serve all of Ridge Road.**
- **Coordinate with WSSC representatives to plan ahead, when possible, for water line rehabilitation work; ensure follow up tracking of restoration work needed for both public and private areas disturbed by WSSC pipeline repairs and rehabilitation.**

7.2 Wastewater System

The Camp Meeting originally relied on communal outhouses in the East Woods, individual outhouses and a scavenger ("honey wagon") service. Initial early private attempts under Grove and Chestnut Roads in 1910 failed.

While the water supply system was being developed, progress was also being made on the regional integration of the wastewater system. The first sewer constructed by the WSSC was installed in 1919 in Riverdale, Prince George's County. The early backbone of the Commission's wastewater system was formed by the acquisition of municipal networks in Hyattsville, Takoma Park, Kensington, Mount Rainier, Chevy Chase and Edgemoor. Direct connections, under agreements with the District of Columbia, were made with the Washington system for the Little Falls, Rock Creek, and some other tributary trunk facilities in the 1930s and 1940s as the WSSC was able to complete connecting lines. Shortly after the end of World War II, negotiations began with the District of Columbia for the joint, Maryland-D.C. development of the Blue Plains Water Pollution Control Plant, which was designated as the regional facility for both Washington, D.C. and the Maryland suburbs. Today, all major trunk sewers in Montgomery County, with the exception of the Great Seneca Sewer Basin, are connected to the regional Blue Plains System,

which have a present-day capacity of 370 MGD, of which just under 170 MGD has, by agreement, been allocated to the WSSC.

It was not until the late 1950s and the 1960s that the WSSC began to develop some major new permanent sewage treatment facilities of its own. In the 1970s, the WSSC developed the 5 MGD interim Seneca Treatment Plant in Montgomery County and two lesser facilities with capacities under 1 MGD, the Horsepen Wastewater Treatment Plant near Bowie (no longer in service) and the Damascus Plant in Upper Montgomery County. The Seneca Wastewater Treatment Plant was expanded to 20 MGD in 2003 and is currently being expanded to 26 MGD. In recent years, all plants receiving sewage from the WSSC's wastewater collection system have been equipped with some form of advanced treatment. The WSSC service area is generally ahead of the rest of the nation in the development of facilities which have taken a big step (tertiary treatment) beyond the conventional primary-secondary processing of wastewater. Consequently, it produces an exceptionally high quality of effluent (treated wastewater) at all of its plants.

The advanced capabilities of these WSSC facilities and the associated programmed expansions, as documented in the WSSC Utility-Wide Comprehensive Plan, will ensure adequate sewerage treatment capacity for the Town of Washington Grove for the foreseeable future, including the maximum potential of 54 additional homes from redevelopment within the current municipal boundaries. (Capacity confirmed via communication from Roland Steiner, WSSC, 24 October 2008.) With regard to the possibility of annexing parcels for low intensity industrial/research uses, any water supply and local wastewater collection system capacity issues would be identified and addressed during the preliminary planning process and under WSSC's Development Services Process.

With the connection of the last home on McCauley Street to a WSSC sewer in 2007, the only homes in Washington Grove still using septic systems for waste disposal are among the properties along Ridge Road that were annexed into Town in 2000. The Town's Building Permit Regulations require that every plan for the erection of a new building must show suitable provisions for connection to the WSSC wastewater system.

7.3 Stormwater Management and Pollution Reduction

In its years of operation, the WSSC has taken on other responsibilities as well, such as the promulgation and enforcement of plumbing regulations (licensing and inspection) in suburban Maryland, and the development and maintenance of storm drainage facilities within its boundaries. In the late 1960s, Montgomery County assumed responsibility from WSSC for storm drain facilities within its boundaries. But Washington Grove was established as a planned community, where the practical art of stormwater management was best tested in the presence of the water itself. Early experience as a campground led to placing tents and cottages (and ultimately home sites) on the higher elevations within Washington Grove, with ongoing community investment in stormwater management. Efforts began early to divert stormwater both in the Tent and Cottage Districts and in the later areas cleared and drained for new development. Multiple efforts at the Circle were needed because of the flat topography.

Today, the Town has a network of almost a mile of installed and maintained storm drain pipes and channels, more than half being grass swales and open ditches that allow for absorption. These drainage pipes and channels convey the Town's stormwater runoff to the Town's East Woods, West Woods, and Morgan Park. Over the years, the runoff in these areas both from the town and from sources outside of the town have resulted in stream erosion with the attendant loss of some mature trees along these streams. This will require prompt attention and may result in erosion mitigation, stream bank remediation, and possibly full-scale stream restoration to repair the damage and return those areas to good health.

Stormwater management has multiple parts, but two of the main ones are to protect private and public property from damage due to uncontrolled accumulation of stormwater in yards and basements while metering the runoff to prevent erosion of Town property and control the amount of silt that is allowed to flow downstream. Runoff from roads, parking lots, driveways, and industrial areas contributes to chemical pollution in our water system, but silt is also very detrimental to the surface water systems and must be controlled.

Proper stormwater management is not only important for dry basements and protecting the health of our water supply; it is the law. There are federal, state, and county laws and regulations implementing those laws which we must follow. These regulations are extensive but can be boiled down to a simple principle of being a good neighbor to those downstream: the water leaving our town boundaries should be as clean and as controlled (in terms of flow rate) as if the town area were undeveloped natural forest and meadows.

As the climate changes, the challenges for stormwater management and watershed damage mitigation, remediation, and restoration can be expected to increase.

The Town is located at a high point between watersheds with all drainage from Town leading ultimately to the Potomac River and the Chesapeake Bay via three principal distinct paths. Within Town, each of these three paths includes Town-owned properties, which absorb and initially filter the runoff but do little or nothing to slow the flow of water and reduce erosion-induced sediment in the runoff. There is a fourth path, down Brown Street extended, which does have a county-mandated catch basin. Water from this basin also ends up in the Potomac River and the Bay via Rock Creek Park, but it flows through the Conservation Meadow instead of through the East Woods.

7.3.1 Morgan Park/Oakmont Park/Muddy Branch

A number of years ago, the Town undertook an aggressive multi-species planting effort within the parkland between Brown Street and Railroad Street to jumpstart regrowth of woodlands in this formerly mowed portion of Morgan Park. Besides establishing a visual and noise buffer, the regrowth has successfully increased absorption of runoff from Brown Street and adjacent private properties. However, once the stormwater runoff leaves Morgan Park, there are significant hindrances to stormwater flow that need attention, all within County jurisdiction. First is the drainpipe under County-maintained Railroad Street—this needs to be replaced and lowered about 6 inches. Replacement of the drainage pipe under Railroad Street is included in New

Mitigation Action 5.3.10 in the “Montgomery County Multi-jurisdictional Hazard Mitigation Plan 2018.”

Next is the larger drainpipe under the railroad tracks—where accumulated gravel and silt have filled about half of the pipe’s diameter. Cleaning of the drainage pipe under the railroad itself also is included in New Mitigation Action 5.3.10 in the “Montgomery County Multi-jurisdictional Hazard Mitigation Plan 2018.”

Finally, stormwater flow through the drainpipe under Oakmont Avenue and into County-owned Oakmont Park is hindered by the excessive accumulation of wood chips. These wood chips, dumped in the last decade in Oakmont Park by trucks of the Asplundh Corporation, have inhibited water flow and killed trees and other vegetation that should be helping to absorb and filter the runoff. Some cleanup of these drainpipes has been done over the years by Town volunteers, but much more work is needed by the County to restore flow capacity and filtering of this stormwater that drains into Muddy Branch.

7.3.2 East Woods/Mill Creek/Rock Creek

Some of the most historic stormwater drainpipes convey runoff from The Circle into the East Woods, where almost all of that runoff is absorbed within this property of more than 40 acres. Originally laid out with walkways and waterlines, including several fire hydrants, the East Woods is preserved and enjoyed as a Forest Preserve of mature trees, with renewed efforts to enhance the trails with pedestrian bridges over the wandering swales and wetter areas. There is also a renewed focus on controlling invasive species within the East Woods to help ensure that trees and other vegetation continues to thrive. Recent efforts have included programs to control both non-native invasive plants and the deer population.

Most of the runoff into the East Woods comes from the eastern half of the town. Essentially all of the rain that falls between Grove and Ridge Roads is channeled into a drainage system culminating in a large ditch that flows northeast out of Woodward Park into the East Woods. There it is joined by other feeder channels to become a woodland stream that eventually passes through the Amity area before joining Mill Creek which is a tributary of Rock Creek.

The East Woods area includes a lot of designated non-tidal wetlands that tend to fill with water during wet weather and storm events. This natural floodplain works to slow the runoff of water through the East Woods into the neighboring communities so, while we need to understand the hydrology of this area, there is significantly less concern with streambank erosion and silt-loading of the water in this area than in the West Woods. The concerns with the East Woods runoff are in the initial drainage of the water away from residences, and in the portion of the main drainage channel on both sides of Center Street where erosion damage is evident.

The “headwaters” of this drainage channel are in a system of channels flowing generally from the area of Ridge Road past Maple Avenue and into a system of well-maintained drainage ditches in Woodward Park. This system needs to be monitored and maintained, and perhaps extended to Center Street, but in general works very well.

7.3.3 West Woods/Whetstone Run/Great Seneca Creek

Significant stormwater challenges come not only from within Town, but also from properties outside the Town boundaries that have been allowed by the County to dump their stormwater into the West Woods. The tremendous outflows of stormwater (and trash) from Towne Crest and the surrounding County jurisdiction have plagued the West Woods with significant erosion, tree damage, and trash accumulation. The Town and the County have renewed their collaboration to improve management of this intrusive flow from adjacent properties and to conduct remedial restoration for natural streambeds suffering from the erosion. The County's contractor installed a 2-level catchment basin to lessen the velocity of the runoff and catch trash in basins accessible from the Towne Crest parking area for trash removal. Boy Scouts, Town volunteers, and young residents of Towne Crest tackled erosion areas and trash removal within the West Woods. While these actions brought a measure of control to the damage caused by the Towne Crest development, they were not fully in compliance with current guidelines for stormwater management from developments. There are reports of plans to redevelop the Towne Crest area that will require increased vigilance and coordination with the County.

While the Towne Crest development is a significant contributor to the stormwater problems in the West Woods, the largest source of erosion problems is from water that originates in the Town itself. Essentially all of the stormwater runoff from the Town west of Grove road and the Circle flow northwest eventually crossing under (and sometimes over) Washington Grove Lane and into the West Woods. This runoff has caused considerable erosion in the drainage channel that carries the water around Maple Lake and eventually into Whetstone Run. This erosion has caused the loss of several mature trees, necessitated the relocation of the fence around the lake, and more recently, the replacement of the bridge across the drainage channel with a large concrete culvert. This erosion issue is the subject of an ongoing engineering study which will result in recommendations for mitigation, remediation, and eventual restoration of the damage to the West Woods from the town runoff. This study is expected to serve as a model for similar studies and efforts in the other watershed areas of the town.

In addition to the concerns with stormwater flow into and through the West Woods, the Town needs to be concerned with the flow around and out of the area. The commercial area to the west of Maple Lake is served by a drainage system that runs underground adjacent to the Town's western border and flows into Whetstone Run. We need to monitor this area to protect the lake from pollution and the woods from excess runoff. We also need to ensure that the Town's runoff into Whetstone Run is in compliance with current guidelines for flow and for silt. These concerns will be part of the engineering effort studying the West Woods.

The County has announced plans to redevelop the land to the northwest of the West Woods, including Kelley Park, possibly as a school complex. This is another area where the Town needs to closely collaborate with the County and the City of Gaithersburg on stormwater issues.

Initial contact has been made with the Montgomery County office of Watershed Planners and a planner is anticipated to be assigned to the Town. Initial contact has also been made with the City of Gaithersburg and discussions have been initiated regarding coordination of our shared border area.

7.3.4 Other Areas within the Town

In addition to the major watershed areas described above, there are several areas within the Town itself that must be addressed. While this is expected to be a dynamic list, the major areas identified to date include:

Cherry Avenue South of Center Street – This area does not drain well, or at all, and is impassable even for pedestrians following a rain. The challenge is to channel the water from this area into the East Woods without affecting the neighboring residences.

Acorn Lane to Washington Grove Lane – In contrast to Cherry Avenue, this area sometimes drains too well with water rushing down Acorn Lane, through the church parking lot and down the asphalt-lined channel to Washington Grove Lane. This torrent of water causes washouts of dirt and gravel along Acorn Lane and adds to the drainage problem in the West Woods.

Chestnut Avenue South of Center Street – This is an example of an area where the flow of water away from and around residences needs to be improved. The water flowing down Center Street through a paved gutter needs to be directed away from residences and toward the West Woods. A temporary berm has been built across Chestnut Avenue at Center Street, but a more permanent and less intrusive solution is needed. Also, Chestnut Avenue itself is raised above the surrounding yards and affects the flow of water out of the area. This is just one example of the challenges faced in an old neighborhood without a formal stormwater system. Other similar areas will be added to the list as they are identified.

Uncontrolled Driveway and Parking Area Construction – Currently there are no constraints on building residential driveways and parking areas, including on Town land. These impervious and sometimes raised areas affect the free flow of water and contribute to the stormwater management issues. This is being addressed by requiring permits for future driveway and parking area construction on Town land, but there are no guidelines for evaluation of such permits.

These issues will be addressed in collaboration with the County watershed planning office and professional assistance will be sought if needed.

In 2006, the Federal Emergency Management Agency (FEMA) completed a Flood Insurance Study of Montgomery County, Maryland, and incorporated areas. This study revises and supersedes previous Flood Insurance Study reports and/or Flood Insurance Rate Maps for these areas including Washington Grove. This study developed flood risk data to be used to establish actuarial flood insurance rates. The information is also to be used by local governments to update floodplain regulations and to promote sound land use and floodplain development. This study concluded that Washington Grove is among the incorporated areas of Montgomery County that are not flood prone.

Recommendations:

- **Develop a Town Stormwater Management Manual based on those used by other jurisdictions. This manual should include resident education recommendations as well as standards for new and updated construction.**
- **Incorporate stormwater management provisions into the procedures for issuance of building permits, including permits for construction on Town property.**
- **Continue seasonal removal of leaves and debris from drainage swales.**
- **Conduct periodic inspections of swales and critical drainage points, with additional inspections particularly prior to predicted heavy rainfall.**
- **Convert paved swales to grassy swales, where practical and with due consideration of possible impacts on basements of adjacent homes, to promote natural filtering.**
- **Work with County to increase stormwater flow capacity under Railroad Street and the railroad tracks to improve drainage for Morgan Park.**
- **Monitor effectiveness of the stormwater catch basin intended to slow the heavy flow of stormwater and waterborne debris entering the Town's West Woods from the neighboring apartment development under County jurisdiction.**
- **Schedule periodic trash collections in West Woods to remove debris along borders and from improved stormwater catch basin on the Town's northern boundary; coordinate efforts to include volunteers from Town and the apartment development.**
- **Continue to consult with experts in streambed restoration to develop and implement restoration in the West Woods necessitated by years of excessive stormwater flows resulting from County-approved development; evaluate lessons learned by other jurisdictions; implement and enhance streamflow controls using downed wood and other heavy natural materials.**

7.4 Historical Concerns

The 2020 National Register Historic District recognizes the following water-related small-scale features of the Town's historic infrastructure systems:

- historic fire hydrants in the East Woods;
- architectural elements of the Town's historic stormwater and drainage systems.

These historic small-scale features should be taken into consideration in planning and treatment.



8 COMMERCIAL CORNER

The Town of Washington Grove is essentially residential in nature. In its early days, the Town was separated from adjoining communities by open space. At that time, there was some need to have easy access to food and supplies, and a small general store filled these needs. In addition, the Town's postal needs have been provided over the years by a local post office rather than home mail deliveries. Through much of its history, the Town has had a single local commercial zone of approximately 40,000 square feet at the southwest corner of the Town known as the Commercial Corner.

The Commercial Corner property sits on the corner of Block 1 of the 1897 plat of the Washington Grove Camp Meeting Association. It is bounded by Washington Grove Lane, Hickory Road, Railroad St./E. Diamond Ave, and the terminus of Brown Street.

Thomas I. Fulks, local Gaithersburg business man, purchased shares in the Camp Meeting Association in 1897 and obtained permission from the Trustees to locate a store with living quarters on his lot 2 of Block 1. His white frame general store, which sat in what is now the Commercial Corner parking lot, faced Washington Grove Lane and aligned with later adjacent residences. The store went through a series of tenants, owners, and additions. It was well-located to take advantage of surrounding development spurred by the building of the railroad, including the establishment of the popular camp meeting itself, the Humpback Bridge, the Washington Grove station and freight yard, the Oakmont subdivision, and Thomas I Fulks' later feed mill and farmers' supply along the tracks on E. Diamond Avenue.

The Trustees of the Camp Meeting Association had not previously considered outside commercial uses of the Association's residential tracts. All commercial activity on the grounds was strictly controlled by the Trustees and took place at designated locations. However, the Block 1 corner was open ground, outside the perimeter fence encircling the rest of the grounds. Unlike the rest of the grounds, it was exposed to public traffic on two sides, lessening its appeal for cottage builders. The Trustees approved the use of lot 2 for a general store with housing, with restrictions—"that nothing objectionable was to be kept for sale or sold in such store," i.e., no alcohol.

In 1919, the Odd Fellows Lodge acquired Fulks's other lot, #1, and in 1920 constructed its architect-designed lodge hall, a two-story building of ashlar-molded concrete block with stepped front gable. The first floor was commercial store space and the upstairs for Lodge activities and event rentals. The upstairs may also have housed rooms or apartments. The forested grounds and openness made it seem a part of the Town.

By 1973, the general store had been demolished and two additions had been built onto the Lodge Hall. The east end was constructed as new 7-Eleven convenience store. The two anchors were connected by two smaller set-back storefronts on the north.

The new construction was veneered with dark red-brown brick, including the 1920 lodge hall lower front, and a projecting faux mansard roof supported by two columns. The original block

structure can be seen on the side and rear of the building. The 1920 lodge hall, even though superficially altered, is included as a contributing historic resource in the consultants' draft National Register Designation. The remainder of the site was paved for parking.

The 7-Eleven, with a low modernist profile, was also clad in brick. The store front is plain with large plate glass windows and doors surrounded by aluminum frames and mullions. Originally at the crossing of the low cross-gable roof there was a colonial revival-style cupola with weather vane and balustrade, since lost during roof repairs. Although the building has lost some of its features, it still conveys its original form and function.

The 7-Eleven building is historically significant as representing the battle the Town successfully fought against the business's owner, Southland Corporation, over trespassing and harmful and unsanitary conditions in Town and at the store site. These were occasioned by the convenience store's being open 24 hours a day, in spite of the Town's objection, and its failure to police activities and conditions at the site. Town Mayor Barbara Hawk led the Town in its defense of Southland's 1984 federal lawsuit against the Town, and the Town's countersuit which resulted in settlement and the business's ultimate exit in 1985. It was replaced by the Post Office.

The Town's residents continue to need and want a local post office which functions as one of the focal points for the community. The postal facility now housed in the commercial zone well serves that need. For many years, Town residents have had access to an ever-increasing number of commercial centers outside the Town where they can fill their commercial needs. Businesses at the Commercial Corner, therefore, have become less critical for meeting the needs of Town residents. This change in importance of the Commercial Corner to Town residents calls for new thinking on the relationship of the corner to the Town.

In the past decade, the Town has attempted to address, through ordinance revisions and discussions with the property's owners, the commercial needs of Town residents regarding the types of businesses housed at the corner, and improvements to the physical environment of the Commercial Corner. Although progress has been made, the corner continues to require significant attention of the Town Council and Planning Commission in monitoring and intervening to improve the relationship between the commercially zoned property and the Town's primarily residential character.

As a major gateway to Washington Grove, the Commercial Corner and businesses adjacent to the corner across Railroad Street and Washington Grove Lane do not positively project the vision of a predominantly residential "Town within a Forest" of quiet, sylvan beauty and charm. Any effort to improve the Commercial Corner will ideally include the entire gateway, including the adjacent business areas. While the Town's ability to influence or control commercial development outside its borders is limited, the Town can have significant influence and control within its borders.

8.1 Long-term Vision for Commercial Corner

The Town should move in the coming years to develop and implement a plan for improvements at the Commercial Corner that will be more compatible with the sylvan beauty and quiet residential nature of the Town. The overarching goals should be to create an environment inside and around the Commercial Corner that will result in increased green space, more pedestrian-friendly walkways, automotive-friendly roads, building façades that better reflect the residential nature of the Town, and a more welcoming connection to the Town.

The Commercial Corner exists in an area that has potential impacts from ongoing outside stresses, such as plans by the Montgomery County Department of Transportation for the future of the Humpback Bridge, potential dense transit-oriented developments in areas adjacent to the Town, possible changes in Washington Grove Lane, and the impact of the Inter-County Connector on surrounding roads. Areas that must be monitored include changes in roads or road patterns in the area, zoning issues in Gaithersburg that may impact the Commercial Corner, annexation issues in properties adjacent to the Town and Gaithersburg, and the development of strategies to address issues proposed by Montgomery County that could potentially impact both municipalities. The Town must be vigilant in staying involved in these issues to monitor their impact on future plans for the Commercial Corner.

The Commercial Corner is located at the intersection of Railroad Street and Washington Grove Lane. Its vehicular access is limited to two bi-directional entry points from Railroad Street and a single limited direction exit point to Washington Grove Lane. The existing commercial properties and supporting parking face both Hickory Road and the intersection of Railroad Street/Washington Grove Lane. On nearby properties, mature tree canopy delineates the boundary of the Town along Railroad Street and outward-facing single-family homes delineates the boundary of the Town along Washington Grove Lane. At the Commercial Corner, the boundary is defined only by the roadway.

Successful revitalization strategies depend on enhancing a sense of place that is safe, comfortable and essential to the community. As the gateway to the Town from this side, the property should identify more fully with the Town and express its role as a vibrant, distinctive and attractive feature of the Town. One proven element of revitalization strategies involves uncovering and focusing on historic buildings to give character, uniqueness and significance to the space. Another is enhancing foot traffic both from the Town side and from outside. This gives life and connectedness to successful spaces.

Other strategies for place-making include developing partnerships between the public and private interests, securing governmental interactions like the post office, encouraging compatible retail and/or food service, and developing residential components to give full 24-hour presence and sense of ownership to the property.

Future Commercial Corner property renovation or redevelopment should enhance the Town boundary, be compatible with adjacent residential use and structures, and strive to become a keystone to both the Town and adjacent community.

In order to do this, a planning vision that incorporates its unique elements and relationship to surrounding structures can guide progress toward an improved presence for the Corner. Successes with initial low-hanging fruit can build support for incremental success. An examination of the regulatory environment, including zoning, could lead to tools appropriate for place-making. The Town could also explore community-supported enterprises, new business grants, or direct investment options.

Recommendations:

- **Develop a future plan for place-making at the Commercial Corner that includes the property within the Town limits, the roads and businesses adjacent to the corner, and development and construction plans in the area that may impact the corner, such as the future of the Humpback Bridge.**
- **Plan for landscaping and a tree border along Washington Grove Lane and Railroad Street.**
- **Plan for Town of Washington Grove signage to complement existing (wooden) Town signage.**
- **Improve pedestrian access from Hickory Road and Brown Street; connect to existing Washington Grove Lane sidewalk and the bus stop. Integrate planning for a shared use path to Gaithersburg.**
- **Remove metal traffic gate at terminus of Brown Street, convert the section of Brown Street to Chestnut Road into a shared use path, and introduce a landscape “gate” or pedestrian entry to the Commercial Corner.**
- **Improve the delineation between Hickory Road and the Commercial Corner east-facing parking. Introduce landscaping, sidewalk and limit parking spaces to those required by commercial uses. Enable dual frontage tenant spaces or additional tenant spaces facing Hickory Road.**
- **Examine whether a mixed-use definition would be compatible within the Commercial Corner with upper-level residential apartments/condominiums built over commercial/office tenant spaces.**
- **Consider the relationship of the Commercial Corner to the City of Gaithersburg commercial properties on opposite side of Railroad Street and Washington Grove Lane.**
- **Focus on development of beneficial relationships with the owner of the Commercial Corner, as well as proprietors of businesses housed therein.**
- **Institute a more formal relationship, at the level of Town Council, with the City of Gaithersburg, and work with the City to develop and monitor plans for compatible land uses for properties in the vicinity of the Commercial Corner.**
- **Work with the Montgomery County Department of Transportation and the City of Gaithersburg to redesign the intersection of Railroad Street and Washington Grove Lane in concert with any proposed changes to the Commercial Corner and the planned shared use path.**

8.2 Zoning Use Issues

The Zoning Ordinance appropriately provides that the purpose of the local commercial zone is to protect both nearby residences and local retail enterprises. The Zoning Ordinance presently sets out an appropriate mix of permitted and special exception uses that meet this goal.

The permitted uses can be expanded to include a residential component within the Commercial Corner, with upper-level residential apartments/condominiums built over the commercial/office tenant spaces. Mixed-use development has been cited as the key to revitalizing otherwise underdeveloped or blighted areas. While mixed-use opportunities are small in scale within the Commercial Corner, residential use requires less parking per development square foot as compared to the other permitted uses, and the on-site residential use will help ensure Commercial Corner compatibility with the other nearby residences.

The special exception uses currently do not include food and drink for human consumption, based on concerns that such uses produce unacceptable byproducts such as trash, odors, and traffic. A new category of special exception uses can be added to allow an eating and drinking establishment, coupled with action by the Town to make Montgomery County Code Chapter 15, Eating and Drinking Establishments, and the associated County regulations, applicable within the Town. The Zoning Ordinance can include criteria for an acceptable food service facility use that sells food and drink for human consumption on the premises, with specifications for maximum number of vehicular arrivals per hour, maximum number of seats, allowable hours of operation, and prohibition of use of a cooking surface that requires ventilation. The applicant for a special exception must then show by clear and convincing evidence that the proposed food service facility use will not significantly burden the Town with increased trash, odors, and traffic.

Recommendations:

- **Expand permitted uses to include a residential component with upper-level residential apartments/condominiums built over the commercial/office tenant spaces.**
- **Add a new category of special exception uses to allow an eating and drinking establishment consistent with criteria added to the Zoning Ordinance to ensure the food service facility use will not significantly burden the Town with increased trash, odors, and traffic.**
- **Enact an update to the Town's Article XIII in the Code of Ordinances to make Montgomery County Code Chapter 15, Eating and Drinking Establishments, and the associated County regulations, applicable within the Town.**

8.3 Parking Issues

The Town desires less impervious surface and more landscaping than currently exists. This requires re-examination of the parking regulations to better enable the Comprehensive Plan goals of increasing the natural setting, providing a proper gateway image, and improving integration with the Town. Issues of stormwater management, pervious surfaces, and pedestrian and bikeway access should be considered in the review.

Recommendations:

- Evaluate the extent to which impervious surface area at the Commercial Corner could be reconfigured to allow for greater green space.
- Review existing ordinances relating to the parking area and, where appropriate, make changes which are more in alignment with the Comprehensive Plan's vision for the Commercial corner.

8.4 Beautification and Safety Issues

An inviting commercial area attracts desirable tenants as well as customers and beautification of the Commercial Corner requires cooperation of the owner and tenants. The Town supports and encourages those permitted uses which motivate the landlord to make improvements to the property.

Beautification of the Commercial Corner should begin with a focus on the area within Town limits, but should include discussions with adjacent businesses that are not within the Town limits. With the creation and ongoing maintenance of Railroad Park, the Town has begun the process of improving areas adjacent to the Commercial Corner. An effort should be made to assist businesses adjacent to Railroad Park in making visual improvements along Railroad Street and Washington Grove Lane.

The focus of changes at the Commercial Corner to improve the visual and safety profile of the corner should begin with the following:

Recommendations:

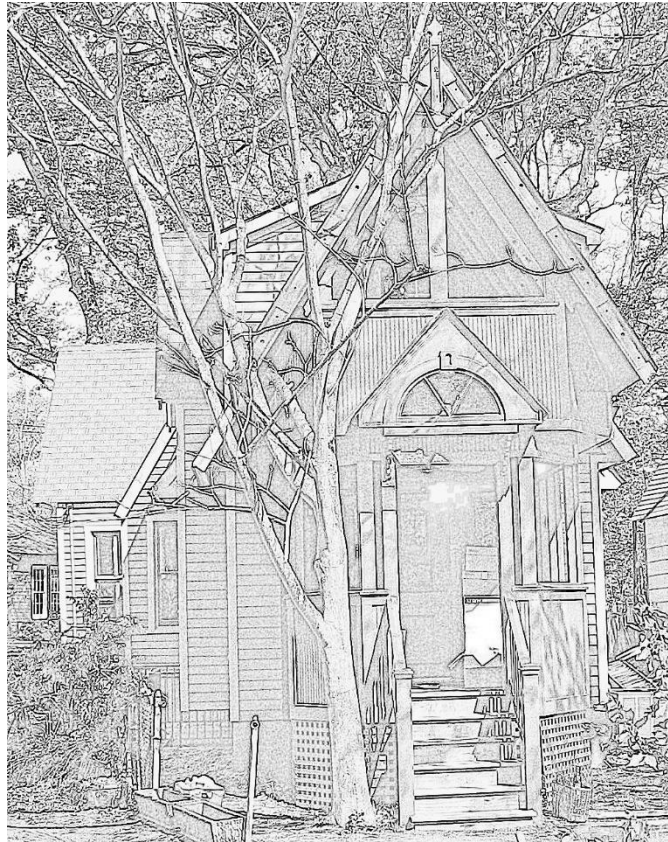
- Encourage improvements to the façade of the commercial structure, especially along Hickory Road and the north side in order to protect the residential character of the west side of Town and provide a more welcoming connection
- The front and rear parking area of the Commercial Corner should be reconfigured to help improve the general appearance. Elimination or movement of the dumpster is a high priority for both safety and aesthetics.
- Update the facades facing the front parking lot to reflect rehabilitation of the historic Odd Fellows Hall.
- In the area around the Commercial Corner, improving safety of pedestrians and automotive traffic will depend on improvements to the traffic patterns at the adjacent stop light. Construction of a traffic circle to replace the stop light should be investigated.
- Provide a more appropriate entrance feature to visually mark the corner as a part of Washington Grove.
- Maintain Railroad Park and encourage adjacent business owners to participate in visually enhancing the corner. Establish landscape treatment along Washington Grove Lane to establish a visual/psychological sense that one is entering a community that cares about itself.
- Consult with the City of Gaithersburg and the Montgomery County Department of Transportation to provide visual enhancements in the area surrounding the Commercial Corner.

8.5 Historical Concerns

The elements and viewsheds identified in the National Register as contributing to the historic integrity of the Historic District include:

- The Odd Fellows Hall
- The viewshed of the adjacent agricultural buildings
- The viewshed for the Humpback Bridge

Historical concerns as well as environmental concerns should be given consideration in planning and treatment for these locales.



9 PRESERVATION AND DEVELOPMENT STRATEGIES

The Town maintains both its economic and historic vitality because its structures and setting retain and amplify the overall sense of place that placed it on the National and State Registers of Historic Places. Its commonwealth and way of life depend on retaining the character-defining elements of its structures and setting while encouraging appropriate augmentation to its built environment.

9.1 Historic Character

Generations of Washington Grove residents have acted as stewards of the Town’s historic buildings and landscape. The result has been a community with an extraordinary sense of place. In 1980, the U. S. House of Representatives voted to designate Washington Grove a National Register Historic District, part of the first wave of National Register designations, and the culmination of the efforts of three determined Town volunteers. The NRHP was a program established under the auspices of the National Historic Preservation Act of 1966, signed into law by President Lyndon B. Johnson. In their Historic District nomination, the volunteers expressed the Town’s historic character as follows:

“Washington Grove is an incomparable town—unique in its roots, in its initial land use plan, in the design of its dwellings, in its determination to retain more land in a natural state as forests and parks than developed property, and in the character of its history.”

Recognizing the need for future stewardship, in 2001 the town established a Historic Preservation Commission (HPC). As an official unit of the Town’s government, the HPC was tasked with safeguarding the Town’s heritage by encouraging the preservation of its historic character and the elements of its cultural, social, economic and architectural history. The HPC also serves as a resource and clearinghouse for information regarding historic preservation and works closely with the town’s archivist.

Although designation as a Historic District proved valuable over the years, several of the original 1980 nomination’s omissions hindered the Town’s efforts to protect its historic character. This became evident in 2013 when Preservation Maryland listed Washington Grove among the state’s most endangered historic places. A decision was reached by the HPC and the Town to update and expand the 1980 Historic District. Assisted by the HPC and the Maryland Historical Trust, the consulting firm Robinson and Associates finalized a nomination document in 2020. It incorporates new concepts, standards, and criteria that had not existed at the time the original Historic District was created. The new nomination also addresses several other shortcomings of the original Historic District, especially those pertaining to its boundaries.

Among the more significant revisions to the original Historic District is the inclusion of Washington Grove’s open spaces. Specifically, these are its parks, two forest preserves, views/viewsheds and the Conservation Meadow. Another addition is its unique streetscape. This includes not only its alternating streets (roads) and walkways (avenues) but also the entire

radial streetscape of the Circle and its immediate environs. Three water features are now included. These are Maple Lake, Maple Spring and Whetstone Spring. Finally, a group defined as “small-scale features,” are also included. Most of these are components of the Town’s infrastructure. Examples are camp meeting era stormwater and drainage walls and culverts, elements of the well water system and wooden street signs. All of the above are now considered to be sites or features contributing to the Town’s historic significance.

One of the criteria for evaluating whether or not a property is eligible for listing on the National Register is whether it is old enough to be considered historic. Because the threshold is fifty years, the buildings considered significant in the 1980 Historic District dated no later than 1937, the year that Washington Grove was incorporated as a municipality. These include residential buildings constructed in the Carpenter Gothic, Craftsmen, and Colonial Revival styles. The updated Historic District, however, includes buildings dating as recently as 1969. As a result, some of these now seen as contributing to the Town’s historic significance reflect Tudor Revival, Cape Cod, Minimal Traditional and Ranch styles. To summarize the updated nomination’s findings, the period of significance for the Historic District’s architectural resources, streetscape, landscape and viewsheds is now defined as 1873 to 1969.

The Historic District’s boundaries have been more clearly defined and the District itself has been expanded somewhat. Additions to the original Historic District resulting in its expansion include the Conservation Meadow, West Woods, East Woods, Daylily Lane (annexed in 1987), the section of Ridge Road that was annexed between 1992 and 2000, and a residential structure located at 3 Ridge Road.

The updated Historic District nomination document is designed to serve as a basis for protecting and preserving the Town’s historic integrity. Within its pages, the defining features of the historic district’s buildings, parks, forest preserves, streetscape, water features, small-scale features and views/viewsheds are carefully described. The individual histories and the historic contexts of these resources are also described in detail. So that the data presented in the nomination is more easily accessible, the consultants have provided tables and lists indicating which of the town’s buildings, structures, sites, and other features are assessed as either “contributing” or “non-contributing.” Taken as a whole, the Washington Grove Historic District nomination, its three appendices, and its extensive bibliography, represent a valuable, professionally written and comprehensive history of the Town that will be of interest to both residents and researchers.

Washington Grove's historic character is an economic driver for the Town. Its small scale, unique architecture, parks, woods, its lake and other outdoor recreation spaces, and unique layout all attract potential home buyers and increase the value of homes.

The elements identified in the following subsections combine to produce what is viewed as critical to the preservation of the Town’s character.

Recommendations:

→ **Because of its important contribution to the Town’s economic vitality and to residents’**

quality of life, sustaining the Town's historic character should be a goal in all planning efforts, together with respect for private property and accommodating residents' needs.

- All planning efforts should sustain the historic character of the Town as an important attribute and a key aspect of its economic vitality.
- The HPC and the Planning Commission should meet at least annually to identify threats to the Town's historic character and initiate solutions, including enhancing HPC's review role.
- The HPC and the Planning Commission should consult on integrating consideration of all contributing historic properties (structures and landscape features) into Town planning and treatment decisions, including revisions to ordinances and procedures (e.g., the Public Ways and Property Permit.).
- The HPC should disseminate the findings of the updated Historic District Nomination concerning newly identified elements of historic character and resources, by creating a map of the Town with all historic resources highlighted for easy reference by Town officials and employees, provide presentations to Town residents, officials and employees explaining the findings, and make the results readily available in the Town office and on the website.
- Provide copies of the National Register Historic District Nomination along with the underlying studies in the Town Office and on the website and notify residents.
- Town employees and officials should consult the HPC when treatment and planning issues arise which might affect historic resources.

9.2 Landscapes and Streetscapes

One of the appendices to the nomination is entitled "Cultural Landscape Analysis." Its stated purpose is:

"...to describe the intangible aspects, physical attributes, and systems of the landscape that collectively contribute to the character of the Town of Washington Grove. It serves as a first step in identifying and evaluating the landscape characteristics that add to the historic associations, qualities and values for which the Washington Grove Historic District is significant."

The landscape approach and methodology that has been officially adopted by the National Park Service and the National Register of Historic Places allows resources previously not considered for inclusion in Historic Districts to now be classified as "contributing" components of a historic cultural landscape. Although some of Washington Grove's historic landscape took form as part of the American tradition of camp meeting planning and design, other portions are the result of Progressive Era civic beautification and conservation efforts, much of it undertaken by women residents.

As we are "A Town Within a Forest," one welcome benefit of the landscape approach is that our two forest preserves (the East Woods and the West Woods), the Conservation Meadow, The Circle, and nine parks are now all designated as "Historic Sites" and thus are seen as resources contributing to the Historic District's significance. Also relating to our trees and forests are the more than twenty-five View and Viewsheds listed among a group of "Historic Associated

Features” that contribute to the Historic District’s significance. Among these are tree canopies lining Grove Avenue and other pedestrian walkways. As such, they define a sylvan corridor that existed historically as well as in the present. Another important category of resources designated as “Historic Associated Features” are hydrological features such as Maple Spring, Whetstone Spring, and Maple Lake. Along with native vegetation, all are part of a natural system that has influenced the development of Washington Grove’s landscape through time.

As was its landscape, Washington Grove’s “circulation system” (i.e., its streetscape or features associated with movement through the landscape) was shown to be historically significant. In both cases, this is due to the Town’s relationship with important nineteenth-century/twentieth-century planning and design trends. Its initial layout was derived from camp meeting traditions but reflected topography specific to its location. The “Sacred Circle” at its center, site of the preachers’ stand and later the Tabernacle, was located on a high point within the meeting grounds. The Tent Department developed around it, punctuated with radiating avenues and interstitial alleys. Grove Avenue, which connected the railroad depot to the Tent Department, was also laid out on high ground—the crest of a local ridgeline. Thus, although sharing aspects of the older Wesleyan Grove Camp Meeting’s radial concentric design, the Washington Grove camp meeting ground layout was nonetheless unique to its time and place. This historic street alignment has been retained along with a subsequent grid of alternating pedestrian avenues and roads for vehicular traffic that had its beginnings later in the nineteenth century. With this latter development, Washington Grove’s streetscape anticipated aspects of the Radburn suburban planning movement of the 1920s and 1930s in which pedestrians and cars were separated, and the fronts of houses were reversed to face walkways. By the late twentieth century, many of the design elements visible in Washington Grove’s landscape and streetscape were adopted by proponents of New Urbanism, whose planning approach emphasized pedestrian friendly neighborhoods and residential housing oriented towards open spaces and walkways.

Recommendations:

- **Maintenance and treatment of the Town’s historic landscape, whether planned or implemented by volunteers, employees, outside contractors, or utilities, should consider its historic character**
- **Define HPC review procedures for identified landscape and viewshed resources through the Public Ways and Property Permit process.**
- **Place a National Register plaque at the Grove Road entrance to Town and wooden signs at sites of significant demolished buildings such as the Hotel, Auditorium, and Tabernacle, as well as Political Hill**
- **The expanse of The Circle, the historic center of the community, should be reinforced by restoring the open character of the public areas of The Circle consistent with an emphasis on the hardwood canopy covering an open, mowed environment.**
- **Organize and implement street sign volunteer initiative when needed.**

9.3 Character and Scale of Homes

A great variety of architectural styles is represented in the housing stock of Washington Grove; the recent National Register Designation calls out 23 distinct architectural styles or forms.

Washington Grove’s current appearance is the result of five periods of development, listed below, and each period is associated with a pattern of evolving architectural styles:

- The Founding and Early Development (1873-1901) (Carpenter Gothic)
- Early Twentieth Century (1902-1936) (Bungalows and Revivalist Styles)
- Early Municipal Period (1937-1945) (Cape Cod, Minimal Traditional and Revivalist Styles)
- Post-World War II Period (1946-1969) (Minimal Traditional, Ranch, Contemporary and Moderne)
- Current Period (1970-present) (Revivalist Styles and New Traditional)

Also, especially from the *Founding* through the end of the *Early Municipal Period*, many simple vernacular houses were built that fall outside of the architectural styles identified above. These houses can be described simply by their plan or form (i.e., gable-front, cross-gable, side-gable, four-square, pyramidal, etc.).

Washington Grove possesses a significant collection of residential buildings that embody the built traditions of the American camp meeting movement, reflect critical national trends in late nineteenth- and twentieth-century American domestic architecture, and represent Washington Grove’s successful transition from a camp meeting to an independent municipality.

The Town has a high concentration of Carpenter Gothic cottages that is unique in Montgomery County and Maryland. Almost fifty of these architecturally distinctive houses remain. They feature peaked, front-gabled roofs, and double doors that evoke the shape and massing of the canvas structures that initially made up the community. The buildings vividly express the Carpenter Gothic style using highly ornamental scroll-sawn woodwork, bargeboards, bracketed pendants, decorative dressings over or around windows and doors, and turned or chamfered porch posts.

The cottages were built using natural materials that reflect the rustic setting and importance of nature to the interpretation of the camp meeting as a place apart. In their form, scale, and material, the cottages complement the forest or “sacred grove” that formed the setting of the outdoor religious revival from which the Historic District evolved.

Constructed initially as modest frame summer residences, based on the earlier 14x25-30’ platform tents, the cottages were converted into year-round homes and adapted to modern living through additions that took various forms – side or rear wings, enclosed porches, gabled dormers – and often occurred as a sequence of renovations over the years, even decades. The result is an architecture of accretions that gives Washington Grove’s camp meeting era cottages a highly eclectic and distinct character.

The persistence of vernacular forms through the early twentieth century represents a continuity with the past, and the introduction of revivalist styles adds to the architectural diversity. New domestic forms and styles introduced in the modern era embody a local manifestation of national trends in residential design. In their simplicity of form, open plans, and affordability, these

houses represent continuity in design from the camp meeting era.

Across the continuum of Washington Grove’s residential buildings, there is an adherence to standard forms that have been altered through individual elaborations, renovations, and additions to meet the changing needs of homeowners

Throughout the five periods of development, there has been a general faithfulness to elements of the original houses that contributes to that unique sense of place which justified, in 1980, the Town's inclusion on the National Register of Historic Places. The most important of these elements are the modest scale, the compatible character of the houses, and their easy integration with the natural landscape.

The first of these, modest scale, is the perceived size of a house or addition in relation to its surroundings, both natural and constructed. Along with actual small size, modest scale can be reinforced by multifaceted roof arrangements, use of porches, separate garages, and other design elements breaking up the mass of the house.

The second, compatibility of character, is the recognition of those common aspects of Grove houses that both contribute to their shared identity and that distinguish them from other communities. Though dominated by the Carpenter Gothic cottage style, it is described more broadly in the National Register Designation as an architecture of accretions that gives Washington Grove a highly eclectic and distinct character.

The last element, integration with the natural environment, is achieved by preserving native trees and plants and accommodating the built environment to them rather than the other way around. The practice has given rise to the motto “Town within a Forest.”

These three elements are critical to any effort to retain and enhance the historic character of the Town.

Recommendations:

- **Encourage individuality of design as it contributes to the eclectic composition of the Town.**
- **Encourage the three critical construction elements that contribute to the Town’s unique sense of place – modest scale, compatibility of character, and integration with the environment.**
- **Enhance the requirements for demolition permits as a means of preserving existing historic houses.**
- **Update the HPC Design Guidelines to reflect the findings in the updated District Nomination**
- **Educate arriving and current residents about the Design Guidelines and their basis.**

9.4 Protecting and Preserving Washington Grove’s Historic Character

The updated Washington Grove Historic District nomination identifies 193 contributing resources within the District's expanded boundaries. This includes 177 contributing buildings, 15 contributing sites, 1 contributing structure, as well as 64 "historic associated features." The latter category includes significant elements that are part of the historic landscape. The ability to protect these resources from internal Town-level adverse effects remains somewhat limited, at least in comparison with many other Maryland Historic Districts. This can be traced to the Town's lack of a municipal historic preservation ordinance regulating design, construction, architectural style, and maintenance. Instead, such oversight ultimately resides in the hands of the Planning Commission, who consults with the HPC in such matters. The latter's role is advisory, having been given authority to review and consult. This is reflected in historic preservation guidance provided in the Comprehensive Plan. In accordance with Article XV of the Town's "Codes and Ordinances", relevant sections of the Comprehensive Plan contain recommendations that the town consider historic resources defined as contributing in all future planning and treatment efforts.

Adverse effects to Historic Districts arising from state and federal undertakings are covered by the National Historic Preservation Act of 1966 (NHPA). Under Section 106 of this law, the Town would get "a seat at the table" in the planning of projects that involve federal action, funding or approval that could potentially affect the Historic District or lands adjoining it. Various actions are considered adverse effects and federal agencies are required to consider these in advance of any projects or licensing efforts that they undertake. Examples of federally funded or licensed projects include roadway, rail-line, pipeline, transmission line, and cellular tower construction; filling of wetlands, and certain types of housing projects. Examples of adverse effects include physical damage to the Historic District itself or to its setting, as well as what has been defined as "the introduction of incompatible visual, atmospheric, or audible elements." The Section 106 process involves consultation among the Town, the federal agency involved, the Maryland Historical Trust, and the National Advisory Council on Historic Preservation. If it is agreed during the consultation that the federal agency's actions will harm a Historic District, then a legally binding agreement must be reached to ensure that the agency will develop measures to avoid, minimize or mitigate the damage.

The Maryland Historical Trust Act of 1985 (as amended), State Finance and Procurement Article §§ 5A- 325 and 5A-326 of the "Annotated Code of Maryland" is the law regarding review of projects undertaken by the state. Its consultation procedures and the historic preservation protections it provides are similar to those found in NHPA's Section 106.

Recommendations:

- **After assessment of risks to the contributing resources, enact a municipal historic preservation ordinance tailored to the resources and execution abilities of the Town.**
- **Collaborate on introducing HPC review of in-house maintenance and repair projects affecting Town facilities and open spaces.**
- **In response to the updated National Register status, re-examine the Town ordinances to better define and protect the character defining elements of the Town's enumerated Contributing Resources including both structures, and Historic Associated Features such as circulation, parks, landscape features and viewsheds.**

- Assess situations where requiring approval by the HPC would further the preservation goals of the Town.
- Re-engage the effort to adopt measures to control “Mansionization” as a key to maintaining the modest scale of houses and protect the integrity of the Historic District.

9.5 Washington Grove Historic Preservation Commission

Town Ordinance XV was passed on November 11, 2001, officially creating the Washington Grove Historic Preservation Commission (“HPC”). The HPC is the center of historic preservation expertise for the Town government. The Town’s intent in creating the HPC was to safeguard the heritage of the Town by encouraging the preservation of the historic nature of the Town and the elements of its cultural, social, economic, and architectural history; increase property values; strengthen the Town’s economy; and for the education and welfare of residents, visitors, and sojourners.

The HPC provides preservation advice to the Planning Commission and Town Council on building permits, variances and special exceptions before the Board of Zoning Appeals, Comprehensive Plans and amendments, re-zoning, subdivisions, and outside development. Although Town Article XV authorizes the HPC to advise the Planning Commission and Town Council on maintenance, repair, and improvements to Town property, there is no procedure in place to facilitate HPC review. HPC reviews of building permits apply HPC’s Design Guidelines to proposed exterior changes if they are visible from the public way. The general HPC standard of review is whether the proposed changes are historically appropriate, have integrity, and are compatible with the neighborhood. The HPC also gives preservation advice to building permit proponents and other residents.

The HPC Ordinance also gives the Commission responsibility for the official archives of the Town; for collecting, preserving, and making available documents, artifacts and information about the Town’s history; for serving as an educational, clearinghouse resource; and fostering public appreciation for our history.

In its role as the official archival body of the Town, the HPC fulfills this duty in a multi-pronged approach. The HPC assures appropriate storage of historical materials through the controlled maintenance of the Archives Room in McCathran Hall, the promotion of information through the PastPerfect database for computerized indexing and researching, and long-range preservation techniques implementing the State-approved Records Management Plan.

An archivist, meeting the State’s requirements for this position, oversees the administration of the Archives which includes of accumulated records and artifacts from the founding. The archivist works in coordination with a Records Management Officer appointed by the Town Council. This position, required by State Law as part of an approved Records Management Plan, has the oversight of all official records of the Town.

The Archives Room has been outfitted with a dedicated HVAC system for improvements in temperature and humidity levels, and security measures are in place. Most of the current records

will be shipped to the Maryland State Archives (MSA), but a substantial amount, not meeting MSA's criteria, will remain on site. A long-range plan for a researcher's corner is under study. Currently there are also non-archival materials stored in the room which results in congestion. Access to the archives is restricted to the Archivist and Town staff; however, requests by researchers can be made for material.

The PastPerfect database, which has a parallel database on the Town's computer network, is extensively used and is being expanded to PastPerfect Online, now available on the Town's website. This is a work in progress and will be greatly enlarged as time goes by. It includes not only documents, but photos, objects and the Town's library of rare books.

The Records Management Plan dictates that historical artifacts predating 1937, the Camp Meeting Era, be preserved at the Maryland State Archives (MSA) Special Collections, now officially established under file number MSA SC 6320. All official original documents from 1937 and later are to be delivered to the Records Management Division of the Department of General Services. Both submissions require a digitized backup. Hard copies of pre-1937 (Camp Meeting and Chautauqua Era) and post-1937 (Municipal Era) original records sent to the Maryland State Archives are available to researchers in the Archives collection.

Ongoing training opportunities are provided to both staff and HPC through membership in the Maryland Association of Historic District Commissions (MAHDC), the American Association of State and Local History (AASLH), and the Montgomery County Historical Society.

Throughout its work, the HPC adheres to these principles:

- Preservation efforts must be balanced with respect for private property and accommodation of personal needs;
- The town's individuality of design contributes to the eclectic composition of the Town and should be encouraged;
- Modest scale, compatibility of character, and integration with the environment are desirable and character-defining features in the Town.

Recommendations:

- **Historic preservation efforts should feature educational initiatives that expand public awareness and build on the Town's rich history and the appreciation of that history by residents.**
- **The Historic Preservation Commission should continue its role to collect and disseminate relevant historical information, to promote the appropriate storage, display, and availability of archival material, and to conduct workshops on financial and other incentives associated with historic preservation.**
- **The Historic Preservation Commission should enhance the effectiveness of its advisory role by promoting to residents the value of its design review early in the planning process.**
- **Continue progress on completing the archive documentation and research**
- **In order to better reflect events in the Town's history, expand the Archives Collection to incorporate the non-current "working" and correspondence files of the Town Office**

- and of past and present Town officials and employees.
- Evaluate and plan for the future storage space needs of the Archives Collection.
- Initiate a broad Community Preservation program to include reviving the oral history program, soliciting Washington Grove artifacts and documents from current and former residents, and collecting input from current and former residents regarding their personal experiences and remembrances of life in Washington Grove and its built and natural environment over time.
- Identify institutional repositories that contain Washington Grove historical sources for future research and inclusion in the Archives.



9.6 Town Neighborhoods

The Town is an eclectic assembly of built elements that share features as set out in sections 9.1, 9.2, and 9.3 above. It is composed, as well, of neighborhoods that share common characteristics that distinguish them from other neighborhoods. These shared characteristics include the age the area became defined, the physical layout, the density and landscape features, a shared style and form, or scale and the orientation of the houses.

Delineation of neighborhoods is not always clear, but there are several that can be identified from the analysis provided in the National Register Designation:

- The original Tent District is defined by the Sacred Circle core and the radiating avenues that reflect the original Camp Meeting organization. The lots are very small and result in a densely developed and cohesive neighborhood where car access is limited. Many of the houses started as 14' x 25-30' platform tents and were modified into Carpenter Gothic cottages built between 1875 and 1910 with front porches facing the avenues.
- The Cottage District was laid out on the unique grid form focused on pedestrian avenues and roads behind. The first area built out was Grove Avenue between Center Street and Railroad Street that connected the Train Station with the Tent District. The houses in this neighborhood predominantly face the avenues with porches at a common setback. Most reflect the same common 14' x 25-30' Carpenter Gothic cottage as the core of the house, with highly eclectic additions. They were built during the same 1880 -1908 time period but tend to be somewhat larger and statelier than those in the Tent District.
- A later Cottage District neighborhood is along Chestnut Avenue between Oak Street and Railroad Street. The houses date from 1911-1935 with porches facing the avenue, but mainly no longer using the 14' x 25-30' core. They tend to have the broad side of the house facing the avenue at a common setback.
- Another later Cottage District is along Maple Avenue facing Woodward Park. It is less cohesive in the type of houses but shares a common setback and the orientation, access to, and viewshed of Woodward Park. Several of the houses along this avenue were original Cottages moved from the Tent District, two are from the 1911- 1935 era, and several from the 1955-1969 period.
- Another neighborhood defined by its common viewshed lies along Ridge Road. It was initially built out looking over the agricultural resource that has become the Conservation Meadow. Settled between 1912 and 1958, the houses are all modest and closely placed at a common setback.
- The other end of Ridge Road was developed initially between 1947-54 with a similar viewshed orientation and setback. It has further developed with more modern flag lots behind the original houses and now looks out on a common landscape buffer between the Town and a neo-traditional denser development.
- Another dense neighborhood lies along Washington Grove Lane at the other edge of town. Similar in-house form, scale, and orientation, the viewshed is the West Woods and the agricultural buildings concentrated at the Commercial Corner and RR siding.
- Daylily Lane neighborhood was built out as a single development in an annexation effort in 1987. They share scale, form, style, setback, and have porches facing the street. They also share the viewshed into the West Woods.
- A coherent Brown Street neighborhood was built out together as an annexation effort in 1994, facing an extension of Brown Street into the conservation meadow. They share scale, form, style, setback, and have porches facing the street. Some also share a viewshed into the conservation meadow.
- Four houses also built together in an annexation effort in 1992 on the original meadow at Ridge Road share scale, form, style, setback, and have porches facing the street.

The overall eclectic composition is a contributing aspect of the Town's extraordinary sense of place, but so are the neighborhood groupings that give each a unique sense of identity within the Town. The zoning that defines setbacks, heights, lot coverage, and FAR currently reflects the

uniqueness of the Tent District (RR2) but does not differentiate areas within the Cottage District (RR1). The RR2 zone has also been used for a portion of the Ridge Road neighborhood and a newer 4-house area along Daylily Lane. Special zones have been defined for the annexed areas both along lower Ridge Road and the Cator Property on Railroad Street. Preservation efforts must recognize the different ages, needs, and problems of the various neighborhoods and endeavor to augment their commonalities. Analysis of these needs and commonalities may inform updating of the zoning code.

Recommendations:

- **Examine whether definition of Local Historic Districts would assist in preserving the character and integrity of the Town**
- **Examine overlay zones, tiered designations and targeted guidelines for assistance in enhancing neighborhood character.**
- **Consider the possibility of applicability of the Neighborhood Conservation District concept as a preservation tool.**
- **Educate residents of newer and non-contiguous neighborhoods of their neighborhood's part in the history of the Town.**

9.7 Infill Development and Redevelopment

The Town plan laid out in 1897 was filled out thru several bursts of infill construction at times of prosperity and then altered thru various annexations and subdivisions. In some of these cases, conditions intended to shape the construction were incorporated into either the annexation or subdivision agreements. Several of the annexations were enabled thru accommodations allowing greater density than permitted by the county zoning while also preserving existing houses (Daylily Lane, Washington Grove Hills, the Cator property). A couple cases were also conditioned on the form and character of the proposed houses. The WSSC property (Washington Grove Park) was annexed first, then a subdivision plan was approved that had conditions requiring detached garages, a forest conservation zone, underground utilities and approval of the landscaping and house designs by the Town. After working with the County and the Town, the developers of Brown Street Extended proposed a subdivision that included stormwater requirements, a dedicated out-lot for a bikeway, reforestation, underground utilities, streetlights and review and approval of the proposed designs as part of the annexation agreement. The Town also worked with several internal re-subdivisions of platted property to enable retention of an existing house while tailoring the plat to enable new construction. All of these more or less successfully shaped the subdivisions to increase compatibility with the character of the Town.

Although most of the Town's privately owned parcels are already developed, the analysis provided in Section 2.2 demonstrates the capacity for further internal growth is significant. Section 2.2 deals with the adequacy of the infrastructure in the face of two types of possible internal growth. The challenges to preservation from both potential infill development and redevelopment are highlighted.

The first type of development essentially assumes no change to the current placement of existing homes and lots within each block and counts subdivision of existing larger lots into individually complying smaller lots. This infill development can potentially increase the number of residential houses by 33 units. This would represent additional growth of more than 15%. The second type of potential development for growth is substantially greater using a redevelopment scenario. When taking into account the possibility for demolition of existing homes, aggregating the lots within a block, and then re-subdividing the block to maximize the number of allowed units, the number of homes could increase by up to 52 units. This would represent growth of 25% above the current size. Either of these two scenarios would significantly impact the Town's character.

This has yet to happen, but could pose a risk through loss of historic fabric and potential incompatible new construction. The latter could either be in the form of a higher density with closely packed large houses, similar to many developments in the surrounding county, or with a lower density of large houses, which would also be incompatible with the modest scale of houses in the Town. The likelihood of this growth occurring may not be immediate or imminent, but many older neighborhoods in the County today are struggling to retain their original character in the face of the pressure of increasing land values and the resulting spread of Mansionization. Washington Grove is not immune. It faces the same pressures driven by the vanishing space available for new development and the presence of the MARC station. The pressure for infill and re-development will only increase as development in the surrounding sectors that is already planned or approved becomes reality.

The Town has augmented zoning protection by adopting Maximum Enclosed Area limits in residential zones. This has provided overall bulk controls related to the area of lot and is useful for the smaller parcels, but does not by itself provide bulk control to ensure compatible construction on the larger parcels.

The Town has also enacted two paths for preservation of the character of walkways in the original area near the Circle where it was found that existing historic porches were actually over the site boundary between the private lot and the Town-owned walkway. This was likely a result of the informal nature of the “tent sites” laid out in 1897 and the relatively temporary nature of the cottage locations. To resolve the conflicts of a limited number of properties the Town provides paths to an easement or to transfer of the property in exchange for requirements for protecting the existing porches. This protects the “streetscape” of the walkways that is so critical to the unique character of the Grove.

Demolition of structures that contribute to the Historic District is an ever-present threat to its long-term integrity. Currently there are no restrictions on demolition of existing houses. There are precedents in other districts that can be examined as applicable in our situation. These measures would enable the Town to work with the homeowner to find ways to preserve the integrity of the neighborhood and district.

There is a need to re-examine Town ordinances and to explore a wider range of measures to assure further infill and redevelopment is compatible with the historic character of the Town.

These ordinances include zoning, subdivision, demolition, and preservation. There is need for more review and control over construction of new houses to assure the desired compatibility.

Recommendations:

- **Continue to counter the trend towards Mansionization, re-examination of the Town's ordinances should continue to realign building coverage standards and to help assure that further infill, redevelopment, subdivisions, and re-subdivisions are compatible with the character of the Town.**
- **Examine subdivision requirements as a means to help encourage compatible new houses.**
- **Develop a demolition ordinance that enables the Town to work with the homeowner to avoid loss of existing historic houses.**

9.8 Financial Incentives

Most homes in Washington Grove are located within the National Register Historic District, and there are financial incentives available for the rehabilitation and restoration of those homes that have been identified as Contributing Resources within the Historic District. Washington Grove homes built as late as 1969 may have been designated as Contributing Resources. Tax credits that may ease the financial burden of their rehabilitation and restoration are as follows:

Maryland Historical Trust (MHT), Historic Revitalization Tax Credit Program

- Provides Maryland income tax credits equal to 20 percent of qualified expenditures for the rehabilitation of certified historic structures.
- Requires MHT review and approval of all aspects of the project and application before commencing any work.
- Rehabilitation work must meet the Secretary of the Interior's *Standards for Rehabilitation*.
- Capped at \$50,000 in a 24-month period and must have a minimum of \$5,000 of eligible expenses.
- Available for both owner-occupied residential property and income-producing property. While the **Homeowner Tax Credit Program** (for owner-occupied dwellings) and the **Small Commercial Tax Credit Program** (for income-producing property) are subject to similar requirements, Small Commercial project applications are accepted on a first-come, first-served rolling basis until the program cap of \$4 million (for all applicants) has been reached.

Federal Historic Preservation Tax Incentives Program

- **Only available for income-producing** certified historic structures.
- Offers a 20-percent federal tax credit for qualified rehabilitation expenses.
- Administered by the National Park Service in conjunction with the Maryland Historical Trust.
- Rehabilitation work must meet the Secretary of the Interior's *Standards for Rehabilitation*.
- Qualifying expenses must exceed the greater of \$5,000 or the adjusted basis of the building.

IMPORTANT: *Public Law No. 115-97 (December 22, 2017) amends the Internal Revenue Code and affects credits and deductions for individuals and businesses. Section 13402 modifies*

the 20% Historic Rehabilitation Tax Credit. These and other changes to the Internal Revenue Code may affect a taxpayer's ability to use the 20% tax credit. Applicants are encouraged to consult their accountant or tax advisor to ensure that the federal tax credit is beneficial to them before applying for the Federal Historic Preservation Tax Incentives Program.

Additional information about these programs may be obtained from the **Maryland Historical Trust** (<https://mht.maryland.gov/taxcredits.shtml>) and the **National Park Service** (<https://www.nps.gov/tps/tax-incentives.html>).

9.9 Connections with Neighbors and Viewsheds

Washington Grove has longstanding historical connections to its neighboring landscape and the associated vistas. Maintaining mutually beneficial relationships has been a consistent objective of the Town. Oldest amongst these is the tie to the railroad and the string of railroad communities spawned by it. This connected Washington Grove to the City of Washington through daily commuter trips provided a common focus with the Oakmont neighborhood and instigated the commercial activity at the corner of Washington Grove Lane and Railroad Street. Oakmont developed a more suburban character of housing, but the layout focused on a public park to accompany the Train Station. The original General Store and Post Office (now Hershey's Restaurant) was built at the edge of the park, and the Washington Grove Elementary School was built not far away. The Oakmont viewscape from Town includes a Commercial-Transition zoned parcel, developed and undeveloped residential parcels, Hershey's Restaurant, the Oakmont Park, and 17051 Oakmont Avenue, which viewed across the railroad, is of a compatible scale and density. Several of the houses date from the Chautauqua period and at least one served as a boarding house for the events. Because the MARC train has a stop, it may be considered a commuter transit stop and thus risks future dense development. The Oakmont neighborhood qualified but turned down the opportunity to become a county historic district. A recent large parcel visible from the Train Station is being developed into multiple single-family homes behind an existing Chautauqua era house. The Oakmont neighborhood is considered a very important historic viewshed of the Town, and any construction will impact the historic integrity of the district and its context.

The Commercial Corner sprang up near one of the few crossing points of the railroad, the Humpback Bridge, and became a transfer point for agricultural goods from wagons to the railroad. The Corner provides a meaningful connection and transition area between the residential Town and the commercial East Diamond entrance into Gaithersburg which historically functioned as the "downtown" destination for the purchase of goods and materials for the Washington Grove summer residents. The elements of the agricultural character are retained in the southwest vista with the former silos and feed store, and the current tractor store. A more appropriate pedestrian connection to Gaithersburg must be addressed as well as overall planning for this commercial area. There is a high risk that this area could be developed into dense or incompatible uses as well.

The Amity community presently shares only the frontage onto our forest preserve areas and walking connections, but strong historical connections exist due to the parallel development of

the African American Emory Grove Community. While the Town's vistas to the more intensively built areas to the northwest and northeast are mostly buffered by the forest preserves, the proximity of the adjacent neighborhoods and the walking connections invite interactions and use of the recreational amenities. The Town is committed to keeping its park facilities available for enjoyment by its neighbors. The Town recently successfully opposed a dense redevelopment of the 1960s era Towne Crest garden apartments adjacent to Daylily Lane. The developer sought to up-zone the parcel based on its proximity to a transit stop (the Marc Station). The Town anticipates this happening again. The stretch of Washington Grove Lane out to Midcounty Highway is also at risk.

The farmland and woods to the southeast of the Town have always afforded the residents a chance to experience the founders' desire to "sojourn" within a rural agrarian environment as an escape from the urban environment of the city. Originally part of the parcel purchased by the Camp Meeting Association, it was sold in 1890 to raise money for other endeavors. This property underwent residential development, with 13 acres of the 'upper field' preserved as a Conservation Meadow. The dense neighborhood of single-family houses faces the houses along Ridge Road across a parallel road and a buffering hedgerow. It was intended that much of the character of Ridge Road as a country road would survive the development.

The Town's vista to the southeast was also impacted by the InterCounty Connector with its multi-level traffic loops, traffic noise, and associated lighting of the roadway, vehicles, signs, and toll facilities. Plantings to increase the treeline and buffer the impacts were included in the construction of the road. The lower field is currently planned to receive a road and shared-use path connection between Crabbs Branch Way and Amity Road. The remaining property is owned by the county and designated for recreational use. This has yet to be added to the capital budget.

The last connection is an inappropriate one represented by the industrial yard of Roberts Oxygen and the County's EMOC facilities to the south of Town. The latter facilities were relocated by the County from just adjacent to the Shady Grove Metro stop to redevelop that property into denser mixed uses. It includes a maintenance facility for the InterCounty Connector, the temporary worker center, a hydrogen vehicle refueling station, and the salt barn facility for county roads. The salt barn is a large storage structure within 50 feet of the Town border behind the Brown Street extended neighborhood. This tight setback contradicted the county's requirement of 100 feet for the zone, and the building looms behind the houses, negatively impacting the context of the historic conservation meadow viewshed. This county development also disrupted the existing stormwater flows and required the installation of stormwater containment ponds and piping adjacent to the wetlands at the bottom of Brown Street. The county road Comprehensive plan includes the roadway connection mentioned above. A multi-use trail is being planned as part of the County Bikeways Comprehensive plan to connect the Town with the Crabbs Branch Way bike path. The planned roadway will need to bridge intervening wetlands.

In addition, the adjacent multi-use open storage clutter, and the industrially zoned Oakmont strip continue to detract from the entrance to the Town. This development replaced the original landscape of farms and houses, has no positive connection, and provides a viewshed that is

detrimental to the character of the Town.

Recommendations:

- **Continue efforts to monitor and collaborate with development in the adjacent neighborhoods**
- **Approach the County to develop Oakmont Park from an abandoned woods into a community park. Encourage the County to reclaim the portion of the parking lot used by Hershey's as parking for the MARC.**
- **Work with the Border Committee to enhance the edges of town.**
- **Work with the County to develop the multi-use path to Crabb's Branch and Gaithersburg**
- **Work with the County to retain the integrity of the forested hedgerow defining the spatial edge of original Conservation Meadow and separation from the county facilities beyond.**



10 INTERJURISDICTIONAL ISSUES

The Montgomery County Planning Board developed the 2006 Shady Grove Sector Plan and the 1985 Gaithersburg Vicinity Comprehensive Plan which were adopted by the County. These planning documents delineated the County's general design for the area surrounding Washington Grove.

Since 2006, significant progress has been made to implement the Shady Grove Sector Plan's transformational vision of turning an industrial area at the Shady Grove Metrorail station into a new mixed-use community. This Sector Plan envisions the Shady Grove Metro Station area as a mixed-use and pedestrian oriented environment with attractive streetscapes, distinctive architecture, and a sense of place that is complemented with public art, facilities and amenities, and new mobility options. It is anticipated that new residential and non-residential development will implement a variety of public benefits, including new parks and open spaces as well as multimodal improvements for people who take transit, walk, and bike. New bus rapid transit (BRT) options in the Plan area, including along Frederick Road (MD 355), will enhance mobility options for existing and future residents, employees and visitors. New streets within the Metro Neighborhoods and new bikeways will enhance pedestrian and bikeway connections throughout the Plan area.

Another part of the Sector development relocated County facilities north along Crabbs Branch Way to the area between Washington Grove and Shady Grove Road. This included a two-story Ride-on bus facility, an ICC maintenance facility, a day-labor center, a county refueling station and a salt barn and staging facility. The latter was placed immediately adjacent to the homes on Brown Street Extended despite opposition by the Town. The parcel, along with Roberts Oxygen, was rezoned as Employment Institutional with setbacks and height restrictions. The setback restrictions were not followed by the County for siting of the salt barn, resulting in a basic incompatibility with the adjacent residential construction. They did select a gambrel roof barn form which relates to the agricultural historic context of the area. More recently they are constructing an additional salt storage facility that is even larger and does not carry the same agricultural allusions. The Town is opposing this as well.

The creation of a safe and direct bikeway/multiuser pathway connection to the Shady Grove Metro will realize a significant goal of the Town. The County has funded planning and construction for the "Washington Grove Connector – Crabbs Branch Extension" project study currently in progress, and is evaluating a number of roughly parallel alternative routes connecting to Crabbs Branch. A specific route for construction will not be chosen until this study is completed and the Town of Washington Grove and County agree on how to proceed.

The cities of Gaithersburg and Rockville provide much needed stability and a number of amenities for the area-at-large. Their recreation program and facilities are carefully controlled but available for use by many workers and residents in the greater Shady Grove area. The pressures on Washington Grove recreation facilities are likewise potentially impacted by the emerging "urban village" at Shady Grove Metro, and also by the reduction of Kelley Park bounding on our West Woods to accommodate a new school.

Additional development pressures are felt on our borders. The owners of the garden apartment parcel adjacent to Daylily Lane proposed to redevelop the property as a “transit-oriented” multi-story dense apartment complex surrounding a parking garage. They were seeking a zoning waiver to the existing zoning under the 1985 Gaithersburg Vicinity Comprehensive Plan, which the Town opposed as having a negative impact on the historic integrity of our Historic District. The waiver was not granted, but the parcel will undoubtedly come under pressure for rezoning under the upcoming County Comprehensive Plan revisions.

Similar pressure for transit-oriented development is possible with the commercial properties adjacent to our Commercial Corner, which is in the Town of Gaithersburg, and the Oakmont neighborhood, which is in the County.

The neighborhood is on the verge of radical transformation, losing the last vestiges of its rural character and becoming an attraction for a housing market with values revolving more around transportation opportunities than the peaceful contemplation of nature. This will inevitably affect the future of the Grove in ways that will require ever more efforts to protect its unique historic integrity. Cooperation among neighborhoods, municipalities, and county decision makers is an important ingredient for the successful resolution of these large issues that span such jurisdictions. Examples of such cooperative efforts are the Town's participation in the Maryland Municipal League and the Montgomery County Local Emergency Planning Committee. The Town should remain open to participation on other mutually beneficial organizations as appropriate.

Recommendations:

- **Ensure a Council-level responsibility for liaison with Gaithersburg, Rockville, and County agencies to coordinate development goals for adjacent properties.**
- **Promote cooperation with County agencies by holding “open houses” and other events/forums to host visits by County representatives.**
- **Continue to invite the District 39 State Senator and Delegates for periodic updates on legislative issues.**
- **Encourage participation by the Mayor, Council, and other Town officials in Maryland Municipal League meetings and events.**
- **Participate in the upcoming revisions to the 1985 County’s Gaithersburg Vicinity Comprehensive Plan.**

11 EMERGENCY PREPAREDNESS WITH RISK MANAGEMENT AND HAZARD MITIGATION

The emergency situational risks to the Town are, in order of expected probability, severe weather events, fires, accidents, hazmat incidents, pandemics, terrorism, and other criminal acts.

Responses to emergencies are affected by the severity of the emergency, advanced warning (if any), the duration of the emergency, and the effectiveness of hazard mitigation planning. Some severe weather events, such as hurricanes and snow blizzards, may have two or more-day advance warning. However, many emergency situations have little to no advanced warning.

To reduce the effects of emergencies, accidents, and disasters, a planning process based on cooperation with State and local authorities, community partners, and the public at large, can identify policies, capabilities, activities, and tools to make our community more resilient in the face of future emergency situations. To this end, the Town has established the Emergency Preparedness and Safety Committee to advise the Town Government, and to facilitate working with Montgomery County and other local governments.

11.1 Town Critical Functions

Almost all critical functions that are provided to the Town residents – for example: fire, police, ambulance, electricity, water, and sewer – are provided by organizations outside the control of the Town government. The Town government is responsible for two critical functions: road maintenance and refuse collection. Timely and adequate road maintenance, including snow and debris removal, is necessary to enable fire, police, ambulance, and utility maintenance vehicles to enter the Town. The Town’s highest priority during an emergency is to maintain Town roads so that emergency vehicles may respond to service calls within the Town. Critical steps necessary to augmenting the Town’s existing road maintenance capabilities are:

Recommendations:

- **Establish a snow and debris removal plan that can be implemented in severe weather emergencies. The plan would include designated emergency routes that must be kept free of parked or obstructing vehicles and a possible one-way traffic circulation system.**
- **Implement a fire hydrant identification system that would facilitate the location of hydrants in deep snow. The existing reflective bands on the hydrants can be augmented with reflective poles installed seasonally so as to be visible above the snow level.**
- **Continue the restoration and enhancement of street signage to facilitate emergency vehicle operators being able to quickly identify street names.**
- **Develop a contingency plan to handle interruption of trash disposal and other essential services.**

11.2 Chain of Command and Continuity of Operations

The Town should endeavor to be an “Emergency Ready” government. The Town government should have clear succession of powers and emergency decision/spending authority needed to

handle emergency situations where some governmental leaders may be temporarily or permanently unavailable to perform duties.

Recommendations:

- **Document the Town government’s succession of authority process.**
- **Establish emergency purchasing authority for use in cases of emergency.**
- **Designate one or more of the Town Council members to be responsible for reviewing emergency preparedness.**
- **Define Town Council roles for emergency operations, including establishing an incident command structure.**
- **Develop and adopt procedures to allow town election, town meeting, budget approval, and tax rate adoption, and other essential aspects of Town governance to take place under emergency conditions.**
- **Develop and document Emergency operations procedures.**
- **Add a new section to the Town Council handbook to address Emergency Situations.**

11.3 Town Infrastructure Use

During an emergency, the Town’s infrastructure should be used for governmental continuity of operations, as a possible emergency relief distribution location, and as a central facility to foster and coordinate volunteer efforts and emergency support.

Recommendations:

- **Develop a plan for using the Town Hall as an emergency relief and coordination center. This is intended for day-time use only, but under extreme circumstances may be used as a temporary overnight shelter.**
- **Explore possible alternative relief locations -- Town Maintenance facility, the Church, or the Woman's Club – that might be used for governmental continuity of operation in the situation where the Town Hall is not available for use.**

11.4 Town Communications Systems

The Town government must be able to communicate with residents during an emergency. There should be clear authority of who can issue Grove Alerts and/or alternative methods of disseminating information. Effective timely communication is a time-consuming task during emergencies.

The existing “Grove Alert” e-mail system maintained by the Town Office is workable but cumbersome. There is currently no way for Grove residents to easily update their preferred e-mail address or even to be contacted by alternative methods -- such as text messages. There are commercial services that would provide more flexibility to Town residents, allow Town officials to dispatch messages from any location or device, and reduce the burden on Town staff.

During emergencies, the official meetings of the Town government and committees should remain accessible to the public, and the Town website needs to provide the most up to date information.

Recommendations:

- **Identify a communications officer responsible for disseminating information to Town residents, especially during emergencies.**
- **Implement a Grove Alert messaging system that includes:**
 - **text messaging capability;**
 - **flexibility to dispatch emergency messages using a web page from any location or device;**
 - **allows residents to be electronically notified via more than one address; and**
 - **allows residents to update their own contact information.**
- **Document procedures and train Town government and staff in the use of the Grove Alert system – including writing sample template messages that can be used during common emergencies - e.g., Snow Emergency.**
- **Establish annual/semi-annual test of communications to residents. Notifications of the tests would remind residents to update their contact information.**
- **Explore legal requirements and alternative methods regarding notifications to residents that do not accept electronic communications.**
- **Establish virtual meeting accounts that can support the various Town government and committee meetings. Provide access information to the public.**
- **The Town should establish procedures to enable timely updates of the Town website during emergency situations. The procedures should include who can author, who can approve, and who can post the material.**

11.5 Risk Management and Safety Procedures

Risk management is planning and acting to minimize negative consequences of any action or decision. Risk management and safety procedures build upon a commitment to protect Town employees, property, and residents. As an element of emergency preparedness, these procedures guide how to respond to emergencies, accidents, and disasters, and then to build Town resiliency through review and monitoring.

Recommendations:

- **Conduct an annual review to maintain and update the Risk Policy Statement to demonstrate Town commitment to the protection of Town employees, property, and residents.**
- **The Emergency Preparedness and Safety Committee will advise the Mayor and the Council regarding risk management, including development and update of risk control procedures.**

11.6 Coordination with External Emergency Entities

The Town should improve coordination with County agencies and partners to make resources available to keep the community safe from the effects of hazardous materials and other natural or manmade hazards, and to facilitate emergency planning and preparedness, effective hazard mitigation, and response to all emergencies. The primary contacts are with Montgomery County Office of Emergency Management & Homeland Security (OEMHS) and Montgomery County Fire and Rescue Service (MCFRS).

Recommendations:

- **Establish and maintain contact with OEMHS and have a Town resident volunteer attend the quarterly Local Emergency Planning Committee meetings.**
- **Two Town residents should establish credentials to access the CSX emergency web site. Those individuals would act as an information resource to the Town Mayor, Town Office staff, Town Councilors, and Neighborhood Watch officials.**
- **The Town should volunteer to participate in emergency drills conducted by County, State, or Federal governments, commercial, and/or volunteer groups. Conducting such drills in the Town would raise visibility of emergency procedures to town residents and help the Town maintain contact with local emergency management authorities.**
- **Participate with assessments and adoption of the County Hazard Mitigation Plan to help ensure Town mitigation actions are deemed practical, considering Town capabilities to implement and to maintain eligibility for pre- and post-disaster mitigation grant funding.**
- **Consult with MCFRS to identify and review steps that can mitigate the likelihood of an emergency, including fire hazard reduction for Town residential and business buildings and for the Town's forest preserves and parks.**

11.7 Volunteer Efforts

The Town's greatest assets during an extended emergency are the volunteer efforts of the Town residents. The Town should foster and support volunteer efforts of residents in case of an emergency. This would include preparatory steps, in advance of an emergency, that will enable volunteerism to be effective during an actual emergency.

Recommendations:

- **Promote the revival of the Neighborhood Watch program and include emergency preparedness in addition to its traditional focus on crime prevention. The Neighborhood Watch program can provide an excellent organization for localized information sharing and coordination of assistance to residents in need.**
- **Promote other grassroots groups such as Washington Grove Cares in their effort to help residents in need.**
- **Explore augmenting the Town emergency response efforts, such as snow and downed tree removal, by formally training volunteer town residents. This may encompass training Town residents to use Town equipment.**
- **Encourage other volunteer response efforts that may be necessary during an extended emergency, such as establishing and staffing emergency relief aid distribution and relief sites within the Town.**

11.8 Outreach and Expertise Development

The Montgomery County Emergency Operations Plan of 2013 assumes that residents and businesses should be prepared to be “self-sufficient following a significant disaster event for up to three days.” Town residents should be encouraged to prepare for at least three days of self-sufficiency. The Town should develop and sustain information resources for residents about the State, County, and Town capabilities during an emergency and resources related to family and community emergency preparedness.

Recommendations:

- **The Town website should include detailed information during emergency situations and web links to emergency preparedness resources.**
- **The Town Office should maintain a supply of printed materials on emergency preparedness information.**
- **Encourage emergency preparation related presentations, workshops, and training events to take place in the Town.**
- **Encourage residents to stock a minimum three-day supply of food, water, medicine, and other essential supplies for family and pets. Consider keeping an extended supply if possible.**
- **Support programs to increase capability and expertise for emergency planning for Town officials, employees, and residents including Certified Emergency Response Team (CERT) training and Storm Camp, County Animal Response Team (CART), and Red Cross training (CPR/AED).**

11.9 Preparing for Extended Emergency Event

As we have seen with COVID-19, a pandemic not only puts Town residents directly at risk but can impair the ability of Town Government to function. First, if the Town’s very small number of employees and elected officials are struck by illness, replacements may not be readily available. Second, isolation measures required or encouraged may prevent or impair the ability of Town staff and officials to interact with residents or perform essential functions. To overcome these impairments, the Town therefore needs to adopt processes and prepare facilities and equipment.

Recommendations:

- **Ensure that the Continuity of Government recommendations under Paragraph B, above, reflect the lessons learned during the COVID-19 pandemic.**
- **Establish procedures to effectively close off selected areas, such as parks and playgrounds.**
- **Stock materials necessary to close off areas and to create necessary signage for closed areas and for other information.**
- **Stock and replenish as needed personal protective equipment to maintain essential Town services.**

→ Provide Town residents with timely and appropriate information for the duration of the extended emergency.

11.10 Historical Concerns

Historical concerns should be taken into consideration in planning and executing emergency measures.



12 HOUSING

The State of Maryland Housing vision is that:

A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes.

Building on this vision for the State, the Town's housing goals and objectives are represented by plans and recommendations to encourage housing growth and to expand racial, ethnic, and socio-economic diversity. The Town supports increased housing opportunities, including infill development subdivision, consistent with retaining the historic character-defining elements (as delineated in Section 9) and uplifting the unique elements and values of the Town. The housing-related recommended actions will follow the guidance presented here and elsewhere in this Comprehensive Plan to:

- Expand the diversity of the Town's residents;
- Sustain the Town's historic elements and retention of the historic structures that assure its position on the National Register of Historic Places;
- Acknowledge the past institutional racism embodied in the use of restrictive covenants;
- Reduce the number of long-term vacant homes;
- Support licensure of room and home rentals;
- Encourage infill subdivisions with conditions to assure compatibility;
- Reform parking requirements with linkages to rentals and subdivisions; and
- Introduce a residential component in the commercial zone.

12.1 Evolving the Foundation of Washington Grove

Established in 1873, the Washington Grove Camp Meeting Association convened summer camp meetings, bringing Methodists from Washington, DC to the countryside for religious retreats. The Grove began with a simple train depot, paths cleared, platforms for tents, and speakers and storage sheds. For the 1874 camp meeting, the Sacred Circle (albeit an irregular polygon) was established with a speakers' platform in the center, tent sites around the perimeter and six (later seven) avenues radiating from it. This camp lasted two weeks with reportedly 250 campers and 10,000 visitors. A Tabernacle was built in the middle of the Sacred Circle for the 1877 camp. An open-air, hipped roof chapel, it measured 70' x 48' with perimeter support posts about 12 feet apart. A wooden floor was added in 1884, as well as a means to close it up for the winter.

By 1902 the crowds coming to Washington Grove outgrew the Tabernacle's 500-person capacity. The Grove had become a stop on the Chautauqua circuit. Secular programs on music, literature, philosophy, self-improvement and other enriching entertainments were drawing even bigger crowds. The Assembly Hall, a wood-shingled, multi-windowed octagon was built that year as a chapel and to accommodate the Chautauqua activities.

Some of the earliest cottages that exist in the Grove derive in part from the tents that were pitched along carefully planned avenues. The number of tents grew each year. Gradually their canvas sides were replaced with wood and eventually they were completely replaced by narrow

Carpenter Gothic cottages right on the tent sites. The cottage style also derives from the popular plans for romantic rural Gothic cottages that were published in the mid-nineteenth century. The Carpenter Gothic style was an American adaptation of the English Gothic Revival style, which combined a reaction against Classical styles with a fascination for the Christian medieval past. The town plan developed from the early camp plans and was solidified by the Maddox survey and subdivision plan of 1897. It maintains the avenues or walkways in front of the cottages with vehicular roads at the rear, in a combination of grid and radial plans. Fortunately, the Grove was never developed to the 1897 potential. For example, a decision was made many years later to preserve the East Woods and not develop them; the present paths and fire breaks are vestiges of the 1897 plan. The resulting town-within-a-forest landscape exists only because it has been zealously guarded.

In the 1920s, the Grove began to be a year 'round community. It required more than a religious association to govern it. In 1930, the idea to merge with Gaithersburg was resisted; but in 1933, the decision was made to reorganize into a municipal corporation. By 1937, the Camp Meeting Association was dissolved, and the Town of Washington Grove was incorporated with a Mayor and Council/Town Meeting form of government. (The preceding five paragraphs are excerpted from "Washington Grove – An Informal History," by R. Carole Huberman, Washington Grove Woman's Club Historian, 1999.)

As part of this reorganization from a camp meeting association to a municipal corporation a committee formulated recommendations for issuing fee simple deeds to each property owner. The fee simple deed form for lots was to include only three covenants:

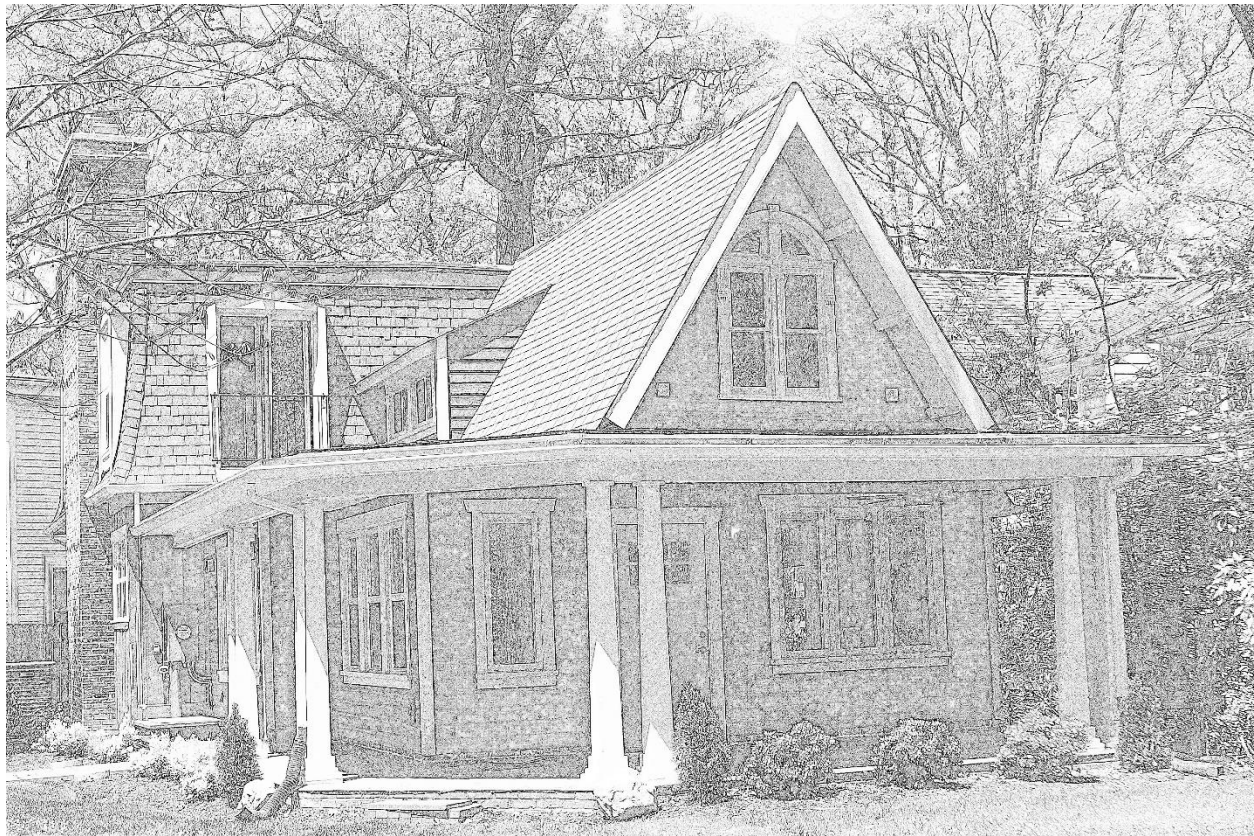
1. that any house constructed thereon would conform to building setback lines, and cost not less than \$1000,
2. that no use for mercantile, manufacturing, or mechanical purposes would be allowed, and
3. that for the purposes of sanitation and health neither the party, his heirs, or assigns shall or will sell, rent, lease, or otherwise dispose of said land or any improvements thereon to anyone of a race whose death rate is of a higher percentage than that of the white or Caucasian race.

The covenants were intended to take the place of the Association's tight control over the use of Grove property. These covenants were eventually adopted and remained on the deeds well into the 1950's; the third one was actively used to discourage Blacks, Jews, Asians, or Native Americans from seeking to settle in the Grove. The exclusivity of the Grove as envisioned by its founders, at least in their promotional literature, was intended to support the utopian ideal of a homogeneous community of persons with common beliefs. The third covenant reduced that notion to the language of bigotry.

The World War II housing shortage in Washington brought an influx of new residents. In 1955, the town acquired its own planning and zoning powers; one of the most critical factors of its whole existence. Forces of development were being felt just outside the boundaries. (The preceding three paragraphs are excerpted from "Washington Grove 1873-1937," by Philip K. Edwards, Town Historian, 1988.)

Just to the north of Washington Grove, Emory Grove was a historic Methodist camp community much like Washington Grove, except that it was founded by freed Black men between 1864 and 1870. Emory Grove was a cultural hub with its own unique vernacular architecture and traditions. But Emory Grove suffered the great misfortune of being part of an urban renewal project that erased its built environment in the 1960's, and very few Emory Grove natives could afford to stay in the community. (This paragraph is excerpted from Lampl & Kelly, "Historic Context Report," 2004.) Much of the community of Emory Grove is sustained today by the dispersed church community.

With acknowledgement of past institutional racism, including use of restrictive covenants, the Town of Washington Grove is poised to take a new look at planning outlooks and actions to achieve a wider diversity of residents while also supporting expansion of housing opportunities. The Town has a commitment to promoting fair housing policies, recognizing and supporting the objectives of federal and state law prohibiting housing discrimination. This historic community is experiencing another transition, moving away from a somewhat isolated and insulated single-family community, to a community with a commitment to encourage and welcome new residents and neighbors, broadening the opportunities for sharing the historic and cultural resources, and the natural environment of Washington Grove, as well as inviting and supporting individuals to share their ethnic, cultural, religious, and family traditions and practices.



12.2 Characterization of Housing in Washington Grove

To assist local jurisdictions, the Maryland Department of Planning has provided housing-related data for local jurisdictions from the American Community Survey (ACS), an ongoing program of the U.S. Census Bureau providing new data every year to plan investments and services. The ACS 2014-2018 data sets provided for Washington Grove are based on the 2010 Census, but include a number of households that are not within the Town's corporate limits. Some of the following housing data evaluations have therefore involved data adjustments based on local knowledge and assumptions.

In 2019, the Maryland General Assembly enacted House Bill 1045, which requires comprehensive plans updated after June 1, 2020, to include a Housing Element. Per HB 1045 (2019), the Housing Element shall address a jurisdiction's need for affordable housing, to include both low-income and workforce housing; and may include housing goals, objectives, policies, plans, and standards.

Affordable housing, as defined by Section 4-1801 of the Housing and Community Development Article of the Maryland Annotated Code, is housing with "costs not exceeding 30% of a household's total income." Low-income housing is defined by Section 4-1801 of the Housing and Community Development Article as housing that is "affordable" to a household with an aggregate annual income below 60% of the Area Median Income (AMI). AMI is the median household income for an area, adjusted for household size as published, and annually updated by the U.S. Department of Housing and Urban Development (HUD).

Workforce housing differs from low-income housing in terms of its range of affordability.

- Workforce home-ownership housing is "affordable" to a household with an aggregate annual income between 60% and 120% of the area median income.
- Workforce rental housing is defined differently from workforce home-ownership housing. Workforce rental housing is housing that is "affordable" to a household with an aggregate annual income between 50% and 100% of the area median income.

The following summary for Washington Grove has been derived from the ACS data provided by the Maryland Department of Planning.

2020 Area Median Income (AMI) for Washington Grove

[Washington-Arlington-Alexandria, DC-VA-MD HUD Metro]: \$126,000

HB 1045 Household Income Levels/Ranges

Workforce Ownership Range (60% - 120% AMI): \$75,600 - \$151,200

Workforce Rental Range (50% - 100% AMI): \$63,000 - \$151,200

Low Income (< 60% AMI): < \$75,600

Affordable Homeowner/Rental Monthly Payments

(Based on 30% of Household Income)

Workforce Ownership Range: \$1,827 - \$3,654

Workforce Rental Range: \$1,523 - \$3,654

Low Income Threshold: <\$1,827

Housing Tenure and Occupancy – There are 225 single-family homes in Washington Grove, of which 190 are owner-occupied and 23 are renter-occupied. Typically, the number of vacant homes ranges from 10 to 15, some in transition, and others are long-term vacant.

Housing - Year Built

Built 2014 or later	0
Built 2010 to 2013	7
Built 2000 to 2009	10
Built 1990 to 1999	16
Built 1980 to 1989	1
Built 1970 to 1979	12
Built 1960 to 1969	19
Built 1950 to 1959	39
Built 1940 to 1949	15
Built 1939 or earlier	106

Bedrooms – For the 225 single-family homes, 9 are one-bedroom homes, 45 are two-bedroom homes, 65 are three-bedroom homes, 72 are four-bedroom homes, and 34 are five-bedroom homes.

Households with Children Under 18 – It is estimated that 158 households have no children, and 55 households have children.

Households with Seniors – It is estimated that 127 households have no seniors, and 96 households have seniors.

Workforce – The ACS estimated 65% of the population 16 and older were in the labor force with 62% employed. Of those employed, the ACS estimated 55% were private wage and salary workers, and 32% were government workers.

Household Income – The median household income in Washington Grove was estimated at \$111,050 in the ACS data, which was about \$4,800 higher than Montgomery County as a whole (\$106,287). While one out of five Washington Grove households had annual incomes less than \$75,000, more than 30% had annual incomes exceeding \$150,000.

Owner Costs and Rentals – Proximity to federal employers such as the National Institutes of Science and Technology and the National Cancer Institute, federal contractors, and the Great Seneca Science Center area, plus commuter transit via MARC trains with a stop at Washington Grove, have put upward pressure on home prices and rents. Based on the ACS data, it is estimated that 22% of households in the 190 owner-occupied homes, and 54% of households in the 23 renter-occupied homes, were “housing cost burdened” – defined as households who pay more than 30 percent of their income for housing.

12.3 Expanding the Diversity of Residents

Because neighbor-to-neighbor communication represents the fabric of community in Washington Grove, it is critical to welcome and make all residents aware of the social and governmental events and committees. Based on the ACS data for Washington Grove, it is estimated there are 82.9% White (non-Hispanic/Latino) residents, 10.6% Black residents, 5.5% Hispanic or Latino residents, and 3.9% Asian residents. This is in contrast to Montgomery County as a whole, which is 57.2% White (non-Hispanic/Latino) residents, 20.1% Black residents, 19.3% Hispanic or Latino residents, and 16.7% Asian residents (based on the ACS data).

It is recommended that all Town communications, starting with various modes of identifying and welcoming new residents, strive for a tone of inclusiveness while providing helpful information regarding town services, and inviting engagement with social and governmental activities. The Town website, the monthly Town Bulletins, plus interim Grove Alerts provide both the official governmental information and updates, but also notices of other community events and opportunities. Many Town residents also choose to participate with the non-governmental social media groups related to Washington Grove.

A concerted attempt to expand current efforts to share information about town activities with all residents and to draw all residents into these activities will help expand the circle of enthusiastic participants in programs and volunteer activities. When homes become available for sale/rent, it will be the enthusiastic and involved residents that invite their families and friends to experience Washington Grove.

12.4 Historic Homes and Support for Rentals

Section 9.3 provides an overview of the character and scale of the 225 existing homes in Washington Grove. Across this continuum of residential buildings, there is an adherence to

standard forms that have been altered through individual elaborations, renovations, and additions to meet the changing needs of homeowners.

The Town seeks to uplift some of its unique historical elements, including preservation of natural environment, public amenities (including walkways and recreational resources), and our representative model of town government. To sustain these elements and support retention of historic structures, the Town requires review of all building permits by the Historic Preservation Commission to assure that such activities typically do not diminish the integrity of the property's character-defining features which make the property a contributing resource to the National Register Historic District. To also support retention of historic structures, the Town has modified building permit requirements to foster ordinary maintenance and repair, the activities needed to keep a building or structure in, or return it to, working or usable condition. These activities typically involve general reconstruction, replacement or renewal of any part of an existing building with in-kind materials.

To reduce the number of long-term vacant homes, it is recommended the Town explore adding a property tax surcharge on vacant residential property. Use of a "Vacant Property Tax" is being evaluated in other communities. Such incentives could reduce the fire safety risks of vacant homes and could add to the number of homes available for sale or rent. This approach should be coordinated with strengthened demolition controls to avoid losing historic properties.

To further support expansion of room and home rentals, it is recommended the Town explore establishing a rental licensing program. Enforcement of an annual Town rental license, coupled with inspections to ensure compliance with Montgomery County Code Chapter 29, Landlord-Tenant Relations, can ensure safe rental housing stock, as well as compliance with updated parking requirements. Room rentals could enable some property owners to stay longer in their own homes. To help ensure retention of the character of the residential zones, it is recommended that accessory room rentals be limited to a maximum of two bedrooms. When the Town is ready to deviate further from its historic focus on single family dwellings, it should explore the use of accessory dwelling units (ADUs), popularly known as "Granny flats." This would increase affordable housing options to accommodate extended families and a broader range of households. As with rental expansion, compliance with parking requirements would be critical.

12.5 Infill Development

The roads and walkways, as designated with the original plats for Washington Grove and subsequently updated, provide the block boundaries for the subdivided land within the Town. In order to plan for growth within Town, the potential for additional homes was analyzed based on current zoning and the established block boundaries. Although most of the Town's privately owned parcels are already developed, the analysis provided in Comprehensive Plan Section 2.2 demonstrates the capacity for further internal growth is significant – 33 homes from infill development.

The Town's Subdivision Regulations provide that the Planning Commission may condition approval of subdivision plats upon such terms as may promote the purposes of the

Comprehensive Plan and the Zoning Ordinance. To encourage compatible subdivisions, it is recommended that conditions with plat approval include retention of historic structures, respect for traditional siting and alignments, compliance with vehicle parking requirements, retention of mature tree cover, and installation of new pedestrian ways and other features to support the character of Washington Grove.

While the challenges to preservation from potential infill development are highlighted in Comprehensive Plan Section 9.7, there are also strategic opportunities associated with property re-subdivisions, home renovations, and rentals. In addition to existing statutory zoning, forest conservation, and stormwater management requirements, it is recommended that housing project approvals be linked to planning objectives for retention of historic structures and features, housing design compatibility with the neighborhood by demonstrating adherence to published guidelines, and compliance with vehicle parking requirements.

12.6 Reformed Parking Requirements

The regular parking of vehicles on public property detracts from the bucolic nature of the Town and may create safety problems. The “Parking Policy” portion of this Comprehensive Plan provides more details and policy strategies to guide actions by the Mayor and Council regarding parking of motor vehicles on public property.

It is recommended that compliance with vehicle parking requirements be linked to housing issues. Specifically, previous considerations of the “degree of non-compliance” did not include consideration of non-compliance with regard to parking. It is recommended that evaluations of “degree of non-compliance” include the number of off-street spaces as specified in the Zoning Ordinance (Section 6.2224) except for the reconstruction of non-complying buildings to the extent that there is insufficient space to meet these parking requirements. The associated update to the Zoning Ordinance will ensure consideration of the parking impacts that may be associated with proposed renovations and expansions.

It is also recommended that compliance with vehicle parking requirements, with an updated specification for the minimum number of spaces, be linked to annual licenses for rentals of rooms and homes. The Zoning Ordinance (Section 6.2224) currently specifies a minimum of two spaces for each dwelling unit. For accessory residential room rentals, it is recommended that the minimum number of spaces be increased by one space for each bedroom rented. This must be coordinated with the limit on maximum vehicles per dwelling.

12.7 Residential Use in Commercial Zone

As described in Comprehensive Plan Section 8.2, the permitted uses in the local commercial zone can be expanded to include a residential component within the Commercial Corner, with upper-level residential apartments/condominiums built over the commercial/office tenant spaces. While such mixed-use opportunities are small in scale within the Commercial Corner, residential use requires less parking per development square foot as compared to the other permitted uses,

and the on-site residential use may help ensure Commercial Corner compatibility with the other nearby residences.

Recommendations:

- **Town communications, starting with various modes of identifying and welcoming new residents, should strive for a tone of inclusiveness while providing helpful information regarding town services and inviting engagement with social and governmental activities.**
- **As a party to the historic deeds, the Town should seek legal means to remove racially motivated restrictive covenants.**
- **Update Article XII, Subdivision Regulations, to reflect the role of the Historic Preservation Commission for review of any proposed plan of subdivision as specified in Article XV.**
- **Condition subdivision plat and building permit approvals on retention of historic structures, design compatibility, adherence to guidelines, compliance with vehicle parking requirements, and installation of new pedestrian ways and other features to support the character of Washington Grove.**
- **Explore adding a property tax surcharge on vacant residential property to reduce the number of long-term vacant homes, and strengthening demolition controls.**
- **Establish a rental license process to include home rentals and accessory residential room rentals, coordinated with County enforcement by Montgomery County Code Chapter 29, Landlord-Tenant Relations, where applicable, to link rental license issuance and renewals to annual verification of rental requirements, including minimum number of off-street parking spaces.**
- **Update Article VII, Zoning Ordinance:**
 - **Section 5.32 (Definition of Degree of Non-Compliance) to expand the definition to include “(d) for properties in the Residential Zones, there is no decrease in number of off-street spaces as specified in the Schedule of Minimum Requirements”**
 - **Section 6.2224 (Schedule of Minimum Requirements) to add “Accessory Residential Room Rental” with “1” for “# of Spaces” and “Bedroom” for “Unit of Measurement”**
 - **Section 8.2 (Commercial Zone, Use Regulations) to add a residential component with upper-level residential apartments/condominiums built over the commercial/office tenant spaces.**

13 SUSTAINABILITY

13.1 Global Climate Challenge – Key Building Blocks for Action by Washington Grove

This chapter is added to the Comprehensive Plan because of the existential threat climate change poses to the world, our nation, and Washington Grove. Below are multiple pathways the Town of Washington Grove and its residents can pursue in concert with Montgomery County and Maryland to significantly reduce our carbon footprint.

In May 2020, the global average atmospheric CO₂ reached 417 ppm, the highest monthly level ever measured. These changes are driven by rising greenhouse gases (GHGs) from burning fossil fuels, deforestation, and agricultural practices. As a result, global average surface temperatures have increased by 1.1° C above preindustrial levels.

At the current rate, average global CO₂ levels will double in the next 60 years. Further increases in CO₂ will have catastrophic impacts, such as: more frequent heat waves and extreme weather events (*derechos*, hurricanes); melting glaciers that raise sea levels and inundate low-lying communities; increases in pest infestations; crop failures; and forest fires.

In 2019, the Maryland Greenhouse Gas Emissions Reduction Act (GGRA), proposed statewide mandates for a 44% reduction in GHGs from 2005 levels by 2030. Montgomery County set a goal for an 80% reduction in GHGs from 2006 levels by 2027, and 100% reduction in GHGs by 2035.

Washington Grove’s climate strategy can be built on these key interconnected elements:

- 1. Replace fossil fuel-fired electricity with zero-carbon generated electricity from third party suppliers and community solar projects;**
- 2. Reduce energy use by residential and municipal buildings through cost effective, new, and retrofit investments;**
- 3. Convert from oil- and gas-based heating systems to alternatives that rely on zero-carbon electricity sources;**
- 4. Expand electric vehicles/equipment, install charging stations, rely on shared zero-emitting vehicles, mass transit, pedestrian and bicycle transport; and**
- 5. Increase carbon sequestration through management of our forests and lands.**

Recommendations:

- **Develop a Climate Action Plan for Washington Grove that prioritizes goals, timelines, actions, and metrics to confirm progress.**
- **Explore opportunities for climate actions in cooperation with Maryland, Montgomery County and other municipalities.**

13.2 Sustainable Energy Strategies for Washington Grove

13.2.1 Energy Use and Climate Impact

Energy used for heating and electricity (both by homes and the Town) has the largest climate impact measured in CO₂ emissions. There are several climate friendly options available to Washington Grove for both heating and electricity.

13.2.2 Energy Sources for Heating

Anecdotal information suggests that Town buildings (both municipal and household) use the following heat sources: firewood, pellets, fuel oil, natural gas, propane, and electricity. Each has a different efficiency, cost, and climate impact. With the current climate crisis, it is important to recognize we should not put any more CO₂ and particulates into the atmosphere.

Firewood and Pellets for Heating: Wood for heating is a major source of particulates as well as CO₂. The state provides rebates for wood pellets (which are less polluting) used in approved stoves with catalytic converters.

Fuel Oil Heating: Many Washington Grove homes are heated with fuel oil. Generally, fuel oil heat generates the largest amount of carbon dioxide (CO₂) compared to other fossil fuels. Replacing reliance on fuel oil can lower the Town's climate impact. The Town's greatest climate impact can be achieved by residents who convert from fuel oil heating to a heat pump that uses zero-carbon electricity (see below).

Natural Gas Heating: Natural gas heating can reduce CO₂ emissions by about 1/3 as compared to fuel oil. The Town has a medium-pressure natural gas line that runs the full length of Chestnut Avenue. The Town Hall and a few residences are connected to a lower-pressure line and operate natural gas furnaces. Although natural gas is cheaper than fuel oil and creates less CO₂, there are more climate-friendly options (see electric heat pumps). Natural gas can be a 'back-up' energy source for heat pumps on the coldest days, but the cost of extending natural gas lines throughout Town may be prohibitive.

Propane Heating: Several houses and the Town's Maintenance Shop use propane for heating or heat pump backup. Burning propane for heat is nearly as efficient as natural gas, but because it is a highly refined fossil fuel it tends to be more expensive per unit heat generated.

Electric Heating: Grove buildings are heated with electricity in two ways: baseboard heaters and heat pumps. Baseboard heaters generate heat through electrical resistance in the same manner as toaster ovens. Heat pumps *move* heat, from the outside air or ground into the house. Heat pumps require 1/3 to 1/4 of the electricity used by resistance units. Typical heat pumps struggle to provide sufficient heat when the air temperature is below roughly 30° F; geothermal systems may provide better efficiency in such circumstances. Heat pumps often have a 'back-up' system for the coldest days that burn fossil fuel or use resistance heating. Heat pumps also come as 'mini-split' units attached to walls without ducts. Newer heat pump designs can provide heat at colder outside temperatures.

13.2.3 Electricity Sources

Electricity provided by PEPCO (in 2020) is generated from 23.8% coal, 36.5% natural gas, 34.0% nuclear, and 5.7% renewables. Per unit electricity, coal generates the most CO₂ emissions by far, with natural gas producing somewhat less. Nuclear power does not generate significant CO₂ emissions but poses other challenges of handling and disposing of radioactive fuel.

MD Electricity Choice Program: The Town and its residents can reap immediate climate benefits by choosing an electric supplier that offers 100% renewably-sourced energy. Maryland deregulated its energy market in 1999, allowing private companies to sell electricity to residents, businesses, and municipalities. The monthly updated list of Maryland electricity suppliers includes many offers for electricity generated from renewable sources (solar, wind, and/or biogas). If a choice is not made, PEPCO is the default supplier. Regardless of supplier, electricity continues to be delivered through PEPCO lines.

Community Solar Electricity: To overcome the challenge of complex roofs and trees that would shade solar panels, the Town or a subunit can take advantage of a Maryland law permitting deployment and use of Community Solar. The Maryland Legislature and the Public Service Commission extended the Community Solar pilot program until July 2024 and doubled the cap on electricity that can be produced.

The Maryland Community Solar program encourages installing solar arrays to generate power that can be delivered through PEPCO's distribution system. Subscribers (e.g. Town residents) purchase a specified number of kilowatt-hours (kWh) of electricity at a discounted rate from the Community Solar entity and their monthly kWh is credited against that annual subscription.

The field below the Washington Grove Conservation Meadow Park, adjacent to the ICC/Metro Access Road cloverleaf, can provide approximately 1.5 megawatts of electricity -- enough to serve many homes in Washington Grove.

Recommendations:

- **In order to establish a baseline to measure progress, consider a household survey to determine current energy sources for heating, the average amount used per year, and the type and age of equipment.**
- **Investigate costs of extending low-pressure natural gas lines to other parts of Town and whether it would be cost-effective as a 'back-up' energy source for heat pumps.**
- **Encourage replacement of fuel oil furnaces with more efficient heat pumps.**
- **Educate Town residents about the benefits of the Maryland Electricity Choice Program.**
- **Encourage residents to consider photovoltaic (solar) panels on their property;**
- **Pursue community solar as a source of zero-carbon electricity.**
- **Couple community solar with education and incentives for Grove residents to improve home energy efficiency, such as increased insulation and air sealing.**
- **Encourage Town residents -- through community solar incentives -- to switch from fossil fuel heating to carbon-free heat pumps and other emerging zero-carbon technologies.**

13.3 Sustainability Opportunities for Town Buildings, Infrastructure, Natural Resources and Operations

13.3.1 Town Buildings

The Town owns and operates two buildings: McCathran Hall (Town Hall) and the Maintenance Shop. The following describes these structures and their energy use.

McCathran Hall: The older part of McCathran Hall was built in 1902 and is an uninsulated wood frame structure with large original fully-operational single glazed double-hung windows. It is heated by a gas furnace and has no air conditioning. This portion of the Hall is used intermittently for assembly and summer camp functions and is rented for events. It is protected by a historic easement with the Maryland Historic Trust that regulates the exterior of the building and grounds. The newer addition to the Town Hall (Council Room) was added in 1996 and met the exterior envelope requirements of the time. Temperature is controlled by an electric heat pump, with a natural gas back-up for cold days below 30° F. An additional heat pump was added for the ‘archive’ room to ensure proper humidity for stored materials. Natural gas is provided to McCathran Hall by Washington Gas through an underground line that comes from Chestnut Avenue. The Hall uses an annual average of 1,515 therms at an average cost of \$1,622. Electricity, which includes heating and air-conditioning for the newer addition, lights, and kitchen appliances, costs on average \$1,400 per year.

Maintenance Shop: The original portion of the Maintenance Shop was constructed in 1955 of uninsulated concrete masonry walls and a frame roof. Later additions were similarly uninsulated. It is intermittently occupied by the maintenance staff. Heating is via a propane furnace, which uses an annual average of 215 gallons at a cost of about \$500. Propane is provided by the National Propane Buyers Cooperative. Electricity for the Maintenance Shop costs about \$735 per year.

13.3.2 Town Infrastructure

Street Lights: In 2012, the Town changed street lighting from incandescent bulbs to induction bulbs, which saved thousands of dollars in annual electricity use. In 2020, the Town contracted with Pepco for conversion of street lights from induction bulbs to LED bulbs which is further reducing electricity use. Under the Pepco category of “Street Light Service” monthly billing is based on a State-approved Pepco Rate Schedule and an estimated number of night-time hours. With the new LED bulbs, the current total yearly operating costs for the Town’s street lights is about \$5,000.

Maple Lake: The water level in Maple Lake is maintained, in part, through pumping fresh water from a well. The surface is kept free of algae through the operation of two ‘bubblers’ that pump air to the surface of the Lake. Video cameras are set up during the swim season for security. The electricity for pumps and video cameras costs roughly \$575 per year. The pumps and video cameras do not operate during the non-swim season.

13.3.3 Town Natural Resources

Forests and trees play a key role in mitigating climate change, reducing greenhouse gas emissions, and preventing soil erosion, and must be included in sustainability and climate action plans. The Residential Forest and the Forest Preserves of Washington Grove are a powerful resource for carbon sequestration. Trees, understory vegetation, and soils act as a sink for carbon dioxide by fixing carbon during photosynthesis and storing carbon as biomass. An approximate value for a 50-year-old oak forest would be 30,000 pounds of carbon dioxide sequestered per acre (Timothy J. Fahey, professor of ecology in the Department of Natural Resources at Cornell University, cited in the New York Times, 3 Dec 2012). Although data is not readily available, it is reasonable to assume a wooded area (like a park) with tree canopy and associated root system and soil will sequester carbon dioxide in a similar fashion at an as-yet undetermined scale. Forests also support biodiversity and sustain ecosystem health to protect against the impacts of climate change. In addition, the shade provided by trees lowers heat indices by reducing ambient air temperatures thereby promoting human health and decreases energy use needed to cool residences.

The Forestry and Beautification Committee plants an average of 20 new trees in the Town Parks and residential areas every year. This includes the trees along our roads and on the avenues. The goal is to both replace trees nearing the end of their lives and to increase the overall number of trees for future canopy. (See also Section 6.2 Residential Forest)

The Woods Committee Mission Statement lists actions which optimize carbon sequestration:

- Maintain the area of our Forest Preserves without reduction or fragmentation.
- Protect the existing tree canopy.
- Plant native trees and foster existing seedlings to fill holes in the canopy.
- Control non-native invasive plants.
- Control deer over browsing through deer management.
- Allow natural decomposition of downed trees on the forest floor.

(See also Section 6.1 Forest Conservation)

The Town maintains the park land, woods and contracts for public services that include removal of yard-waste and leaves. Organic matter taken to the Montgomery County transfer station has significant embodied energy that could benefit the Town. Town plant-matter simultaneously absorbs CO₂ and stores potentially usable energy.

Plant-Matter Energy Potential: There are several routes to recover the embodied energy from the Town's biomass (e.g., fallen trees, invasive plants, and yard waste). Energy recovery can occur through: (1) generation of heat (burning) which is used directly or to create electricity; (2) generation of intermediary biofuels, which can subsequently be used for energy production; or (3) sequestration, where the carbon is transformed into a non-biodegradable, stable form.

Composting or generating mulch tends to be carbon neutral.

Biodigestion is a process that turns herbaceous matter and food-scrap into biofuels such as methane and soil amendments.

Pyrolysis is the process of burning wood in the presence of little to no oxygen and can recover energy and/or sequester carbon from woody plant-matter. Pyrolysis is surprisingly old, being one of the first reliable ways to make charcoal (i.e., biochar). Other byproducts called bio-oil and syngas (a mixture of methane, carbon monoxide, and carbon dioxide) can also be created from pyrolysis. There is a burgeoning market for bio-oil, which can be refined into higher quality petroleum products.

These technologies and other methodologies can work synergistically to utilize 100% of the stored energy of the biomass, as none of the waste-heat is discarded. These technologies are complex and well-suited for a larger facility serving a population large enough to ensure ample input material.

Community agriculture/food security: Many residential lots are too small or shaded for vegetable gardens. Space within Town could be converted to a community garden with requisite sun (southern exposure) and access to water. Local food production can provide pleasure and reduce the net carbon footprint of participating households associated with transportation and shipping.

13.3.4 Town Operations

The Town owns and operates many machines that run on gasoline: a pickup truck, two commercial riding mowers, golf cart/utility vehicle, weed-whackers, and leaf blowers. Average gasoline usage is 840 gallons per year at a cost of \$2,500.

Recommendations:

- **Select a 100% renewable supplier of electricity for the Town to cover McCathran Hall, Maintenance Shop, Streetlights, and Maple Lake or join a Community Solar group.**
- **Consider the following step-wise transitions toward net-zero operation of McCathran Hall and the Maintenance Shop, noting their intermittent seasonal use:**
 - **Electronic thermostats to ensure heating and cooling only during use.**
 - **Converting furnaces to biogas and/or installing battery back-up in lieu of the generator.**
 - **Installing solar panels on the south-facing roof of the Maintenance Shop and/or ground mounted panels.**
 - **Adding weatherstripping and seasonal interior storms to the original windows.**
 - **Insulating the ceiling and then the walls of the older part of McCathran Hall.**
- **Select a 100% renewable electricity supplier through Maryland Electricity Choice Program.**
- **Consider ground-mounted or other locations for small solar arrays.**
- **Investigate routes (e.g. via collaboration with Montgomery County), costs, and benefits of town-wide composting.**

- **Investigate opportunities and strategies, costs, and benefits of processing plant material for carbon sequestration in collaboration with Montgomery County and/or other partners.**
- **Consider the interest in and possible location of a community garden.**
- **Consider transitioning to non-gasoline powered maintenance equipment (i.e., plug-in electric or biofuel) as the current equipment reaches the end of its useful life;**
- **Consider installing plug-in chargers (EV charging) at the Maintenance Shop, Town Hall, playground parking, Commercial Corner, and/or Train Station if it can be done without financial detriment to the Town.**

13.4 Sustainability Options for Individual Residential Properties

The U.S. Energy Information Agency estimates that 10% of total U.S. energy consumption goes towards heating and cooling homes. Education and incentives can encourage Town residents to reduce the energy demand of their individual households.

13.4.1 Background - Existing Residential Grove Housing

Most of the 225 dwellings in Town are owner-occupied single-family detached houses dating from 1875 to the present. Fifty-four of these were built before 1900 as rudimentary summer cottages, derived from the original platform tents of the Camp Meeting era. They were minimally framed and sided with wood. There is evidence that the original roofs were fabric, and buildings likely lacked insulation and interior finishes. There were, however, ample single-glazed windows and doors for ventilation during hot summers and high ceilings in the gable portions. Much of the living was done outside under the mature tree canopy or on porches.

Between 1900 and 1937, the existing cottages were modified for year-round use, and 45 houses were built to a more substantial standard. Neither insulation nor air-tightness was considered; wood stoves and fuel oil furnaces were added for heating. Between 1937 and 1979, 85 houses were built to contemporary standards before the oil embargo and environmental movement raised awareness of the importance of the thermal envelope of houses. After 1979, building codes and standards required that houses and major additions have substantially more insulation. However, many houses and portions thereof remain with minimally insulated walls, roofs and windows. It is possible that virtually the entire housing stock of the Town will need to be upgraded in order achieve net-zero carbon emissions by 2050. Energy audits can serve as a guide to the upgrades, but they must be balanced by historic assessments to maintain the character-defining elements of each residence.

Historic Preservation & Residential Housing: Most of the houses are contributing structures to the Town's designation within the National Historic District. Exterior modifications can impact the historic integrity of the District and must be undertaken with care; full replacement is discouraged. Tax credits are available for historic rehabilitation, insulation, and selection of energy efficient systems.

Restoration and upgrades to extend a building's life can preserve its 'embodied energy' which is estimated to be equal to or greater than the lifetime operating energy. Stewardship of the existing

houses preserves these resources and enriches the community through the added layers of history and meaning. The HPC can advise both generally and specifically.

Carbon Impact of Individual Residents: Ballpark estimates suggest that residential properties account for between 80% and 90% of the Town’s total carbon footprint, and are thus prime candidates for further action. Establishing a detailed baseline of this carbon footprint would inform Town actions for addressing climate change.

13.4.2 Residential Homeowner Opportunities

Individual Solar: Domestic hot water and electricity can be generated on-site via ground mounted or rooftop solar panels. Federal and state tax credits provide incentives to offset solar installation costs. While some residences have adopted such technology, many cannot because of complex roof shapes, orientation, and/or lack of sunlight. Battery systems are available to store energy for times when solar panels are not producing electricity and/or offset peaks.

Insulation, air sealing and windows: Reduced energy demand can be achieved through upgrades to the building “envelope.” Adding insulation to existing houses requires either direct access to wall and roof cavities, or adding insulating layers to the structures inside or outside; or a combination of both. Air sealing is as important as insulation and can be done by applying sealants to gaps in the exterior shell – around windows, doors, sills, attics, and crawl spaces. Existing historical windows and doors can be upgraded with weatherstripping, storm layers, and insulation of framing cavities to preserve the character of the original glass. When the glass is not important windows and doors can be retro-fitted with new insulated designs.

Summer shading and ventilation: The tree canopy keeps the Town up to 5°F cooler than the surrounding areas. Abundant shade lowers solar loads on houses and provides clean air for ventilation. Along with the control of humidity, air movement serves to reduce or eliminate the need for air-conditioning. Windows, screened porches, and room or whole-house fans provide ventilation with little carbon footprint. Mechanical heat recovery units maintain conditioned spaces while providing ventilation with less energy than standard air-conditioning. Summer heat load can be reduced by replacing roofing with high radiant/reflective material.

Appliances and practices: Energy Star appliances save energy compared to their standard counterparts. Energy Star ratings are periodically revised to reflect improved efficiencies. Moreover, standby power consumption can be reduced by smart plug strips.

Programmable thermostats save money and energy by automatically reducing heating and cooling when not needed. For example, fuel-fired furnaces benefit from nighttime and unoccupied time setbacks when little fuel is needed to maintain temperatures. Smart thermostats can be tied to the internet for remote operation, or can be linked with PEPCO for peak management reductions resulting in electric bill discounts.

The climate impact of domestic water heating can be reduced by changing to solar, point-source (on-demand), or heat pump water heaters. A heat pump water heater has a secondary benefit of dehumidifying the space where it is located (e.g., the basement).

LED bulbs, which can be used in most light fixtures, are cost effective, last many years, and provide similar or better-quality light. Lighting controls can automatically make adjustments based on presence/absence in a room.

Everyone's carbon footprints can be reduced by limiting the use of "labor saving" devices that have climate-friendly alternatives, (e.g., line drying clothes, raking leaves). Employing a carbon tracking tool can raise awareness of a household's footprint for interested residents.

Transportation options: Electric vehicles (EVs) and hybrid cars are currently available. Charging EVs depends on battery size and AC voltage -- with larger batteries and lower voltages taking longer. Currently charging ranges from overnight to a couple hours with superfast charging on the horizon. Montgomery County is encouraging EVs. Rental EVs (e.g., Zip cars), are another climate-friendly option for occasional transportation. Town residents have access to climate-friendly commuter rail (MARC & Metro), bus routes, and some pedestrian and bicycle paths.

Intervention points: Opportunities for the Town to influence the personal choices of the residents occur at points where there are changes to tenancy or systems: at the point of house sale, change of lease, renovation permits, or equipment upgrades. Incentives targeted to these points could help residents make climate-friendly choices.

13.4.3 Residential Outdoor Property

Roughly half of Town land is zoned residential. Each homeowner's management of their outdoor property can help move toward a lower carbon future. Residential areas contain substantial numbers of fairly unmanicured lawns with a mix of ornamental and native bushes and shrubs. In Maryland, forest and agriculture offset 9% of carbon emissions. A diverse, deep rooted meadow grass can sequester as much as a forest. Both forested areas and natural meadows retain the biodiversity native to the Town's ecological zone. Lawn grass is far less effective at sequestering CO₂ than deeper-rooted meadow grass.

Where appropriate residents could "rewild" or replace lawns with more natural native landscapes. Reforestation and afforestation (i.e., planting native trees) on private property reinforces the existing tree canopy and sequesters substantial carbon. Choices of plantings can be done with the thought of minimizing mechanical maintenance. Much lawn equipment – mowers, trimmers, leaf-blowers, chain saws – is powered by fossil fuels and can be replaced by electric- or manual-powered equipment when the life of the equipment is over.

The waste products of landscaping -- from trimmings of bushes, removed trees, and autumn leaves -- are rich sources of carbon. As mentioned in the municipal section, these landscaping wastes can be utilized if collected by the Town.

Recommendations:

→ **Conduct a survey of the residential energy usage, reliance on specific fuel sources, heating and cooling equipment, water heaters, appliances, and lighting;**

- **Conduct a resident survey of transportation-related emissions;**
- **Coordinate with the HPC to investigate technical assistance and sources of funding or tax credits for rehabilitating and retrofitting historically contributing houses.**
- **Create ways to share information, to educate, as well as develop incentives, that will encourage Town residents to take actions to reduce their carbon footprint.**
- **Develop a list of best practices and resources for residents to consider, including:**
 - **Installing solar arrays for houses that have appropriate roofs or yards;**
 - **Improving insulation and/or air-tightening (including sealing windows/doors);**
 - **Landscaping to reduce heating and cooling loads;**
 - **Purchasing Energy Star appliances, and programmable thermostats;**
 - **Converting all light fixtures to LEDs; and**
 - **Replacing existing combustion-engine vehicles with electric or hydrogen.**
 - **Accessing green grants and loans.**
- **Investigate points when the Town can encourage climate-friendly home improvements.**
- **Consider use of energy audits to improve existing homes.**
- **Protect current climate-friendly public transportation options such as MARC train and county bus lines, and cooperate with adjacent jurisdictions for pedestrian and bicycle access to Metro and nearby areas.**
- **Consider tools such as education and financial support to encourage residents to replenish the forest canopy on their own property.**
- **Develop a list of best practices for residents to consider, including:**
 - **Transitioning to indigenous, low maintenance plantings;**
 - **Replacing fossil fuel equipment with manual or electric equipment;**
 - **Composting/mulching organics from personal waste streams; and**
 - **Engaging with county and state programs that facilitate sustainable landscaping (rain gardens, native species, pollinator-friendly habitats, etc.), biomass conservation (composting) and clean-water practices (retention and drainage).**

