

MATHIS AVENUE STREETScape STANDARDS

June 2017

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Gensler

A project of the City of Manassas

Funded by the Metropolitan Washington Council of Governments TLC Technical Assistance Program

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Future development plans for the Mathis Avenue and Centreville Road corridors are based on the 2002 Comprehensive Plan, a 2006 sector plan and a 2010 ULI study. These documents are aspirational and set out the City's future land use vision for the corridor. The ULI study recognized that some of the aspirations in the sector plan were not achievable in the foreseeable future and attempted to revise expectations based on market realities and the existing land uses in the corridor. However, even the ULI work set a high standard for types of development and does not suggest transitional changes that are more achievable and could progress the area towards reaching the aspirational goals.

In its 2015 Strategic Plan, City Council identified the enhancement of the City's gateway corridors as a top priority. The plan calls for the development of corridor plans with enhanced landscaping, signage, and regulations that support new development and redevelopment, focusing specifically on the Centreville Road (Route 28)/Mathis Avenue corridor. This action reinforced the need to implement components of the 2006 Mathis Avenue sector plan which called for high-density, mixed-use development, enhanced streetscapes and pedestrian/bicycle linkages, and attractive gateways.

To reach the City's goals, a number of actions are proposed. Some of these, such as developing incentives targeted to redevelopment, have begun to be implemented. Others, such as revisiting the work done on the sector plan and comprehensive plan, are planned for the near future. Additional redevelopment tools and strategies are being evaluated.

In 2016, the City sought and was awarded a technical assistance grant from the Metropolitan Washington Council of Governments' Transportation, Land-Use Connections program to implement the Mathis Avenue Sector Plan's vision for an improved transportation network within the Mathis Area. Specifically, the City requested consultant support for the development of a street scape plan and actionable design standards that can be implemented by the City or public and private partners. The following standards build upon the recommendations provided in the original Mathis Avenue Sector Plan and serve as a catalyst for:

- » Establishing a distinct character for the corridor that results in a sense of place and arrival;
- » Improving pedestrian connectivity to the City's two historic districts;
- » Creating a more predictable regulatory environment for future development.

It is envisioned that once adopted; the design standards will be incorporated into: the City's entitlement process including rezoning and special exceptions permits; Design and Construction Standards Manual (DCSM); future capital improvement projects (e.g. Centreville Road); and used as the acceptable standard for the landscape improvement matching-grant program.

While these standards have been developed specifically for the Mathis Avenue corridor, the City intends to use them to guide future gateway/corridor improvements throughout the City.

AREA MAP

LEGEND:

- Historic Districts
- Project Boundary
- Bike Lane
- Pedestrian Access
- Bus Stops
- ↔ Streets



PROJECT BACKGROUND

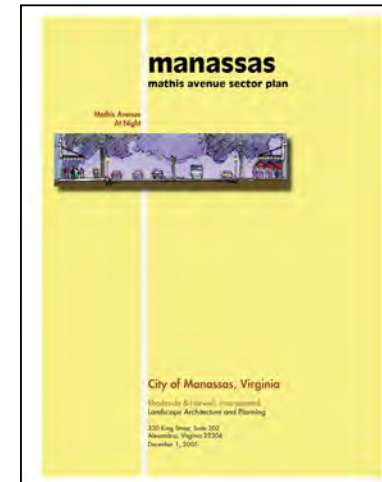
The Centreville Road (Route 28) and Mathis Avenue corridors (hereafter referred to as the “Mathis Area” or “study area”) can be primarily identified as a suburban-style commercial district that serves as an important regional transportation route and gateway to Historic Downtown Manassas. The area is a prototypical example of the low-density, automobile-oriented development of the 1960’s and 1970’s. The area contains 70 acres of commercial strip development, as well as some industrial and residential uses, and is largely characterized by extensive areas of parking with limited landscaping and pedestrian or bicycle connections.

As a major gateway into the City of Manassas (the City), there is a tremendous need for development and enhancement of this corridor. Understanding this, the City began planning for the redevelopment of the Mathis Area beginning with its 2002 Comprehensive Plan. In 2006, the City adopted a sector plan that provided a 20-year development vision for the area. The plan called for high-density, mixed use development, enhanced streetscapes and pedestrian/bicycle linkages, open space, green connections, and attractive gateways.

Limited development activity during the 2009 recession left the plan largely untouched until 2010 when the City sought and was awarded consulting services from the Urban Land Institute (ULI) for providing implementation recommendations for the sector plan. The ULI recommendations reinforced the need to improve the City’s image through enhanced streetscaping and better connectivity in the transition area between the Mathis Area and Historic Downtown.

Since the 2010 ULI study, the City has implemented several policy changes and has supported redevelopment in the transition area as ULI recommended. Nevertheless, the City’s aspirations for the redevelopment of the Mathis Area remain unrealized.

The City of Manassas is now pursuing to implement streetscape improvements in the City’s ROW and supporting private landscaping and façade improvements with a new grant-matching program. The result of these new efforts will be to improve the quality and viability of this important gateway and will hopefully encourage new economic and development activity along the Centreville Road and Mathis Avenue corridors.



The 2006 Sector Plan promotes a mixed-use vision for the study area.



The 2010 ULTI TAP Suggested focusing on streetscape improvements to improve the City’s image.

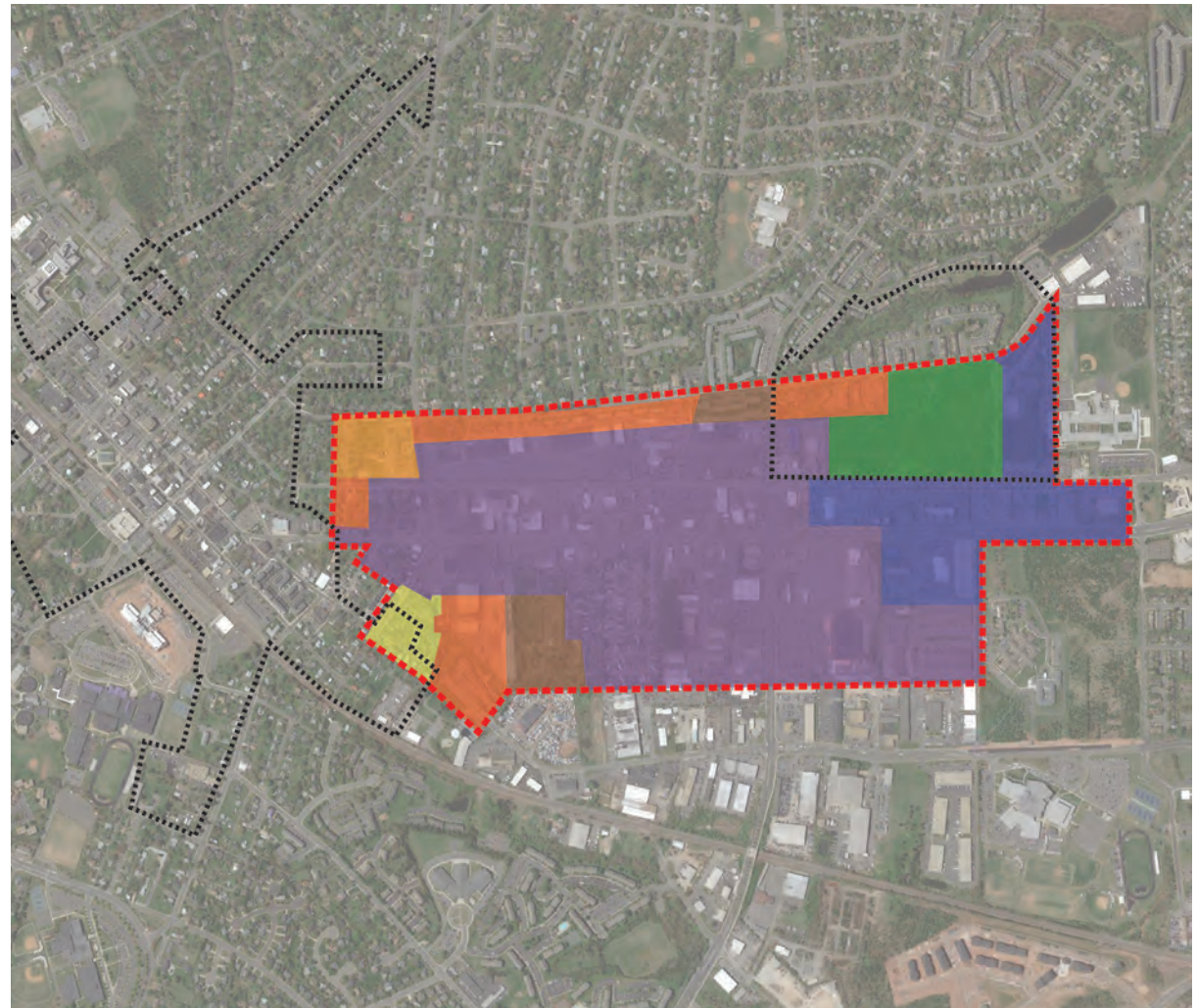
2006 SECTOR PLAN PROPOSED LAND USE

BUILDING ON PREVIOUS WORK

The existing land use in the Study Area is dominated by retail and surface parking. This land area stretches from the northwest side of Mathis Avenue to the southeast side of Centreville Road, all the way from Sudley Road to the northeast edge of the area.

A mix of land uses has been proposed for the Study Area in the 2006 sector plan. In general, the proposed uses gradually transition from existing residential edges, where adjacent compatible new residential uses are proposed, to a higher density mix of office and commercial areas. Please refer to the 2006 sector plan for the definition of the proposed land use categories.

What is important to learn from this sector plan is the vision for the proposed design of the sidewalks in this study area. The mixed-use land area suggests multi-story, mixed-use buildings which replace the existing single-story, single-use pattern of suburban commercial areas along Centreville and Mathis Roads. These buildings will be situated along the street edge, separated by broad, shaded, walkable sidewalks. The bottom floors of these buildings will have retail on the ground floor with office and residential uses on the floors above. It is the intention of the sector plan that people will be encouraged to walk between stores, offices, and residences which will, in turn, help create a more vibrant and lively place for the City of Manassas.



LEGEND:

■■■■ Historic Districts

■■■ Project Boundary

■ Residential Medical Campus

■ Medium Density Residential

■ Mixed Use

■ General Commercial

■ Single Family

■ High Density Residential

■ Open Space

The space between the roadway curb and the building face can incorporate some street furniture designs to improve the pedestrian experience and support increased public life along the streets in the study area. To achieve the goal of creating a safe and pleasant walking experience (leading to a more vibrant place in the study area), these sidewalk standards describe the configuration of the paving, landscaping and street furnishings in the area between the street curb and the build-to line.

SIDEWALK STANDARD

The aim of this document is to guide a new streetscape design for all streets in the study area. This document focuses on the area from the back of the existing street curb to the ROW and adjacent property.

SIDEWALK COMPOSITION

The components of public sidewalks that would support the intended vision of the Mathis Area include the following:

Planting and Furnishing Zone:

This zone is immediately adjacent to the curb and is defined primarily by street trees contained in tree wells or planting strips. It may include furnishings such as lampposts, benches, bike racks, and trash receptacles. Placing trees along the curb achieves two goals: this placement moves trees away from buildings allowing them more space to grow, and it provides a buffer between pedestrians and cars leading to a more comfortable walking experience.

Elements that can be included in this area are special paving or permeable paving (between tree boxes), water recharge areas between tree boxes, trash/recycling receptacles, bike racks, benches, street/pedestrian lighting, and signage/kiosks.

Pedestrian Zone:

This area provides unobstructed passage for pedestrians along a sidewalk.

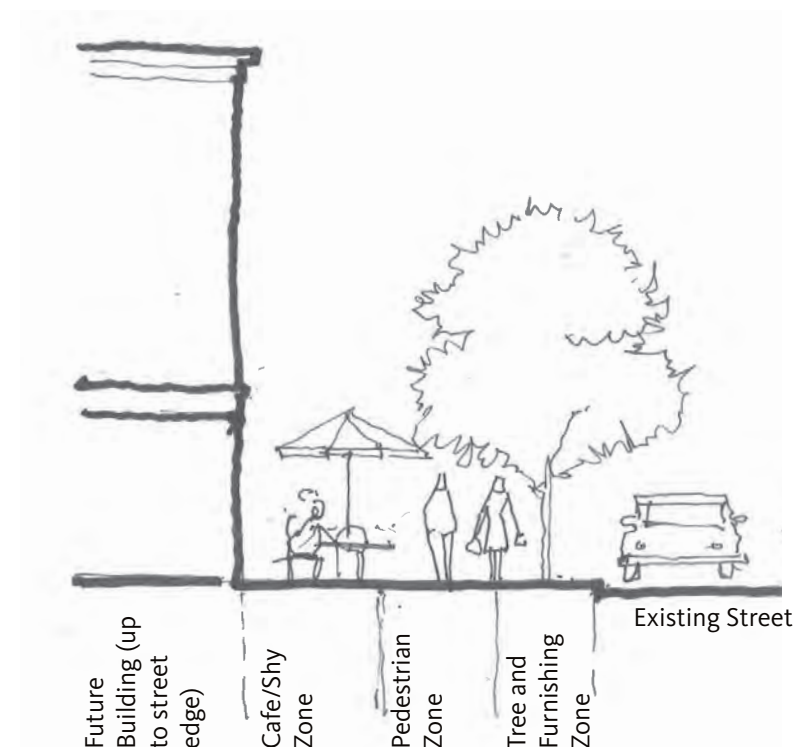
Café/Shy Zone:

This area occurs next to retail frontages. In addition to seating in front of restaurants and cafés, this zone can be permitted for outdoor

retail display and other retail-related activities. In the absence of such uses, the area can be furnished with benches, planters, and other items consistent with a retail environment. Elements that can be included in this area are specialty paving, tables/chairs, planters, benches, and trash/recycling receptacles.

Non-Retail Street Shy Zone:

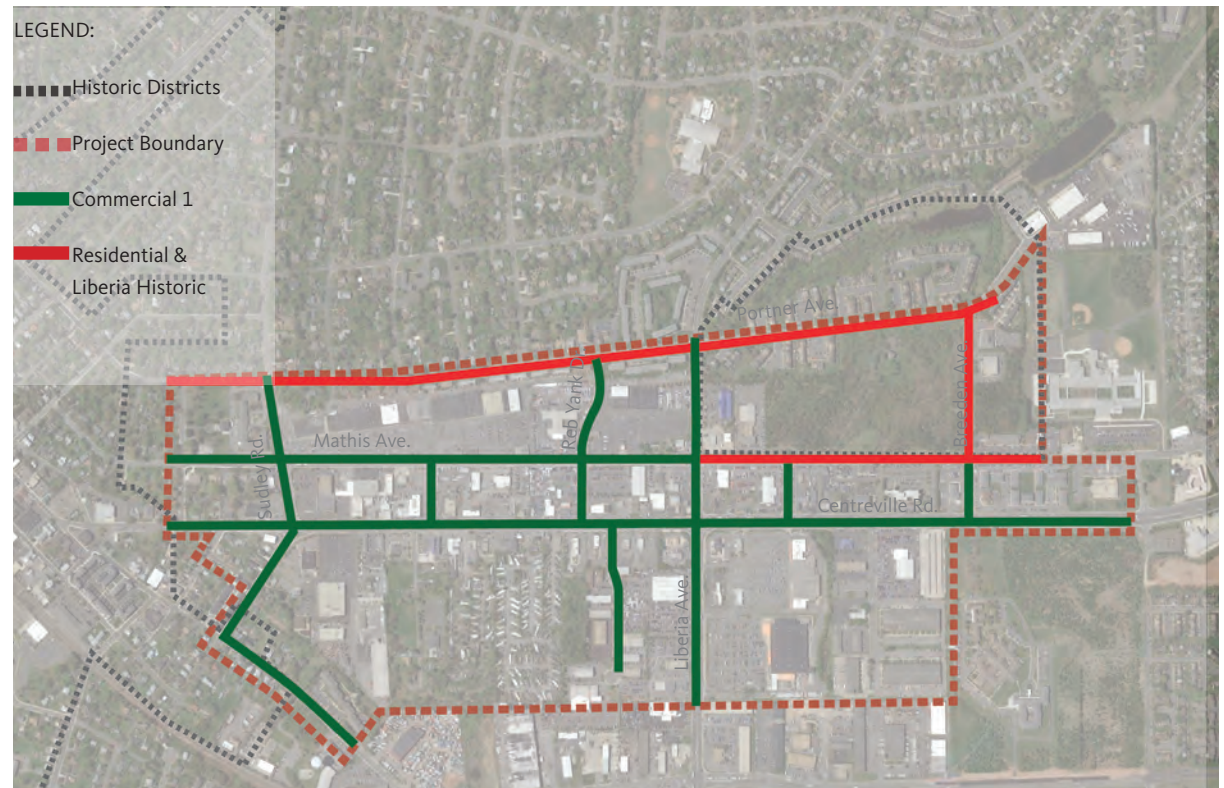
This zone only occurs on non-retail frontages and is intended primarily as a landscape buffer between the building face and the sidewalk. Landscaping elements may include yards, raised planters, and continuous planting beds.



STREETSCAPE TYPES

There are two main street types in the study area. The “Commercial Street” type run adjacent or between commercial properties. These are most notably represented by Mathis Avenue and Centreville Road but also include other streets such as Reb Yank Drive and Liberia Avenue.

The “Residential and Liberia Historic” Street type is comprised of Portner Avenue and the portion of Mathis Avenue that lies alongside the Liberia Historic site.



Mathis Avenue

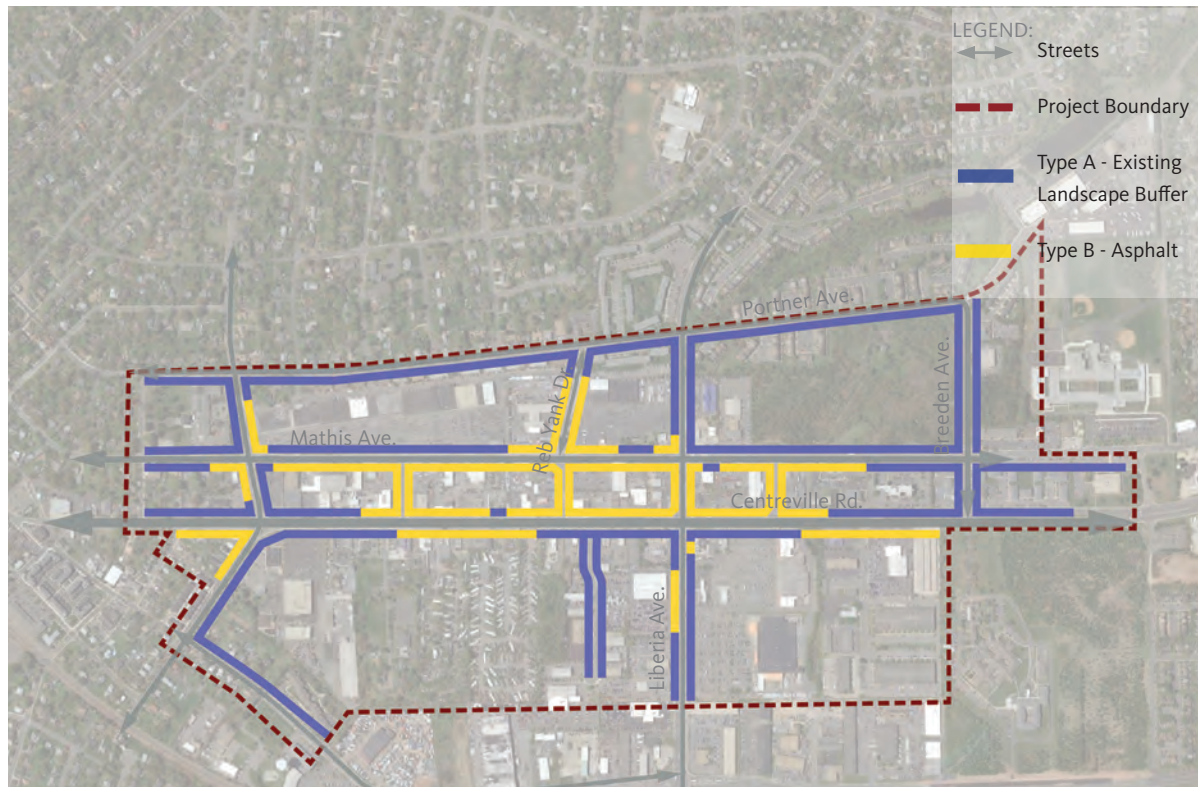


Portner Avenue



Centreville Road

FRONTAGE TYPES



Most of the properties within the Study Area were developed before Manassas adopted its current standards for frontage improvements, including landscaping and sidewalks. Therefore, private properties adjacent to the streets in the Study Area have different frontage characteristics. Some properties are paved with asphalt up to their property edge, while others have a grass or planted landscape buffer that may or may not meet current code. Where landscape buffers exist, they are typically located on private property and maintained by the property owner.

For a few select properties, the City has obtained easements to provide and maintain landscaping. The diagram to the left identifies where the two types of property edges are in the Study Area.



Existing Condition: Existing Buffer along Centreville Road

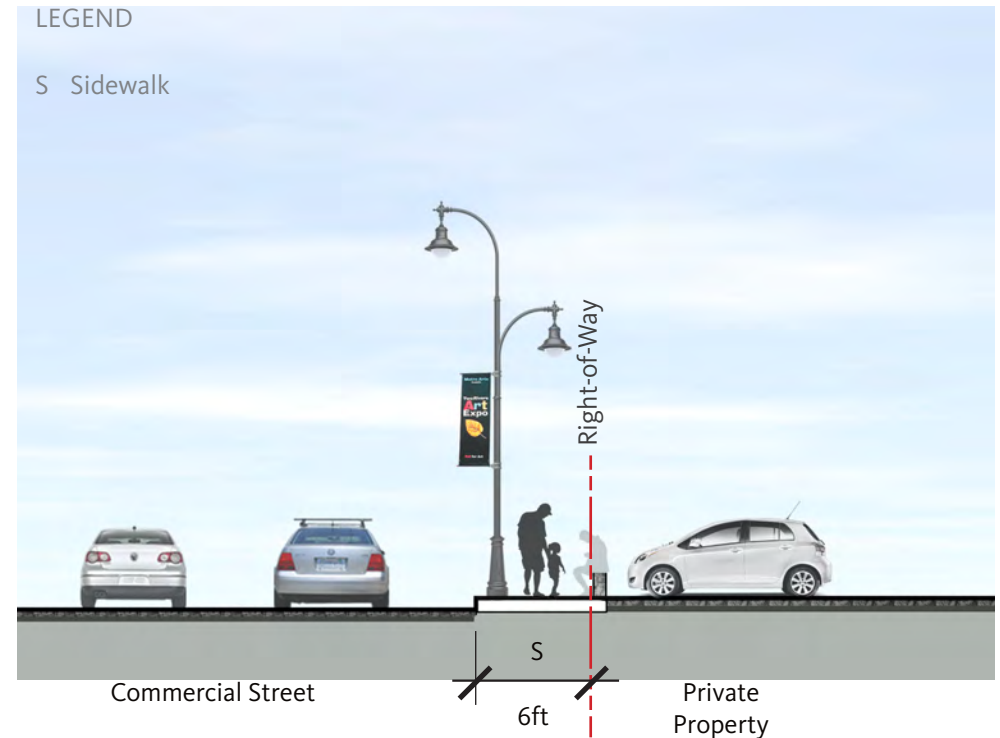


Existing Condition: No buffer along Reb Yank Road

RIGHT-OF-WAY CONSIDERATIONS



Mathis Avenue streetscape improvement vignette



Mathis Avenue streetscape improvement section - working within the existing right-of-way.

WORKING WITH EXISTING RIGHTS-OF-WAY

The right-of-way (ROW) is the land area owned by the City that forms the public street and typically contains road improvements, utilities, sidewalks, amenity zones, landscaping, lighting, and street furniture. Exclusive of redevelopment or property/easement acquisition, it is in this area that streetscape improvements can be implemented.

The ROW width varies substantially within the Study Area, and the current width cannot accommodate the City's ultimate goal of providing street trees, wider sidewalks, and

street furnishings. For example, the Mathis Avenue ROW is only 53' wide, which allows only six feet of space for streetscape improvements on each side. As a result, widening the sidewalks to six feet leaves no space for street trees or landscaping, although other embellishments, such as new lighting, could be added.

Centreville Road's existing ROW width creates an uneven condition on both sides of the street. In some parts of Centreville Road, one side of the street has a nine-foot area for streetscaping while the other side of the ROW only has a

RIGHT-OF-WAY CONSIDERATIONS

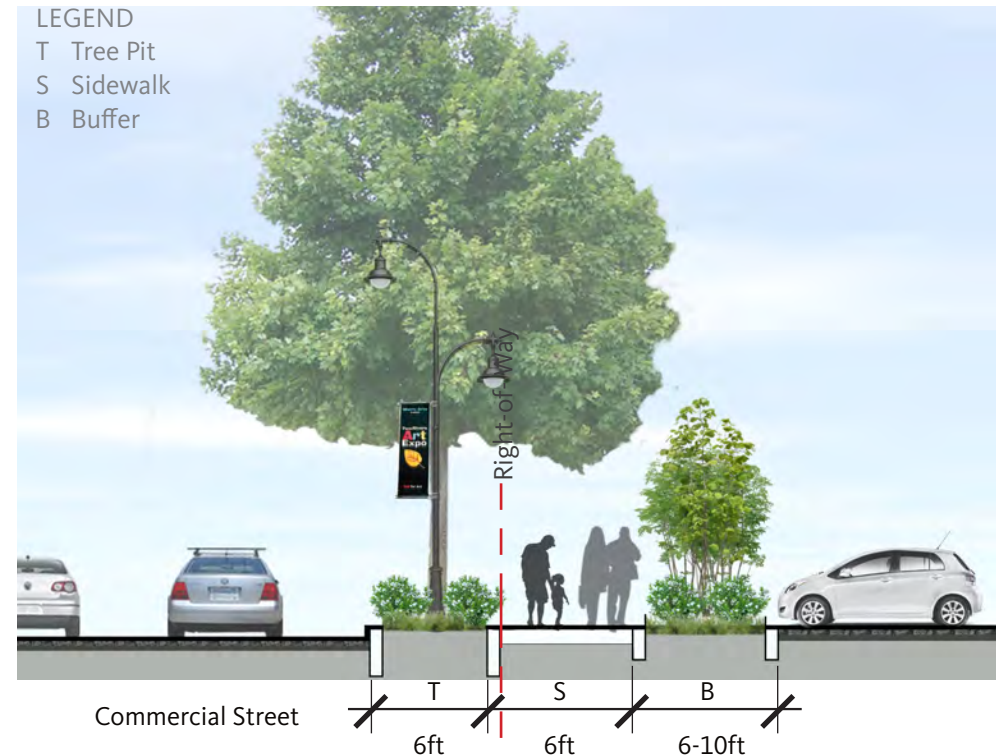


Centreville Road streetscape improvement section - working within the existing right-of-way.

four-foot width within the ROW, which is not sufficient for an effective sidewalk and does not meet the City's minimum 5-foot standard. Similar to the Mathis Avenue condition, it may be possible to add streetlights and banners to embellish the streetscape. The section above shows a condition where a 6' sidewalk straddles the ROW and requires a 4' private property dedication, or a reduction in existing street lane widths to create additional space within the existing ROW.

If the City is interested in creating a streetscape with street trees, wider sidewalks and planted buffers, it will need to consider ways to expand the ROW or work with landowners to implement planted buffer areas.

COMMERCIAL STREETSCAPE



The commercial streets identified in the sector plan are envisioned to be Manassas' "Main Streets" where pedestrians can stroll along a continuous edge of retail. The ideal streetscape provides a continuous row of street trees along the curb approximately 40 feet on-center. Each tree should have a tree well of six feet by eight feet.

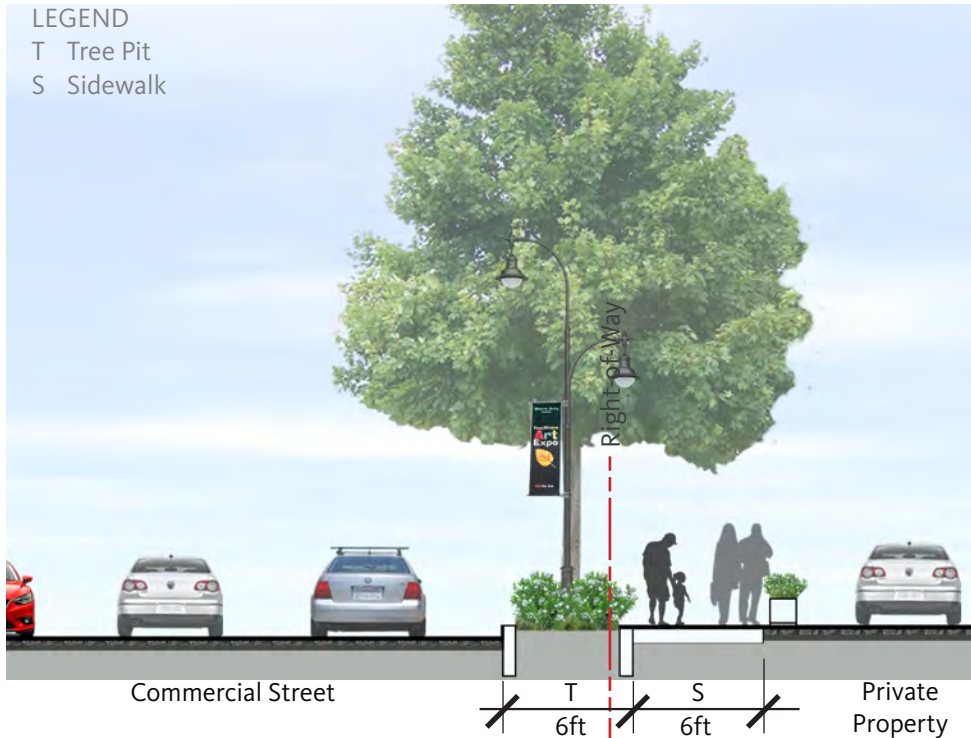
The area between the trees should be covered with permeable paving or with concrete pavers to increase the amount of walkable area along the street. Decorative street lights are also

proposed to be centered between the street trees. These lights should be tall enough to provide sufficient lighting for the street with a lower pedestrian-oriented light on the sidewalk side. Seasonal banners can also be added to these light poles to help create a sense of place.

The sectional drawings on this page show a six-foot wide sidewalk. This sidewalk could be typically concrete and will provide a visual contrast to the permeable pavers that lie between the street trees.

The proposed streetscape designs for the commercial street type include alternatives for two frontage types: 1) with wide planted buffers, and 2) with raised planters to help define the edge of asphalt and parking.

The section on page 10 shows the ideal streetscape with street trees and a planted landscape buffer. This buffer is to be between six to 10 feet in width. This section should be used as the streetscape standard for development and redevelopment within the district, and may also be achievable where existing landscape



buffers exist. Barring this, the City will have to either acquire additional ROW, partner with private landowners to create the buffer on the private properties that lie alongside the new streetscape or reduce existing street lanes widths to create additional space within the existing ROW.

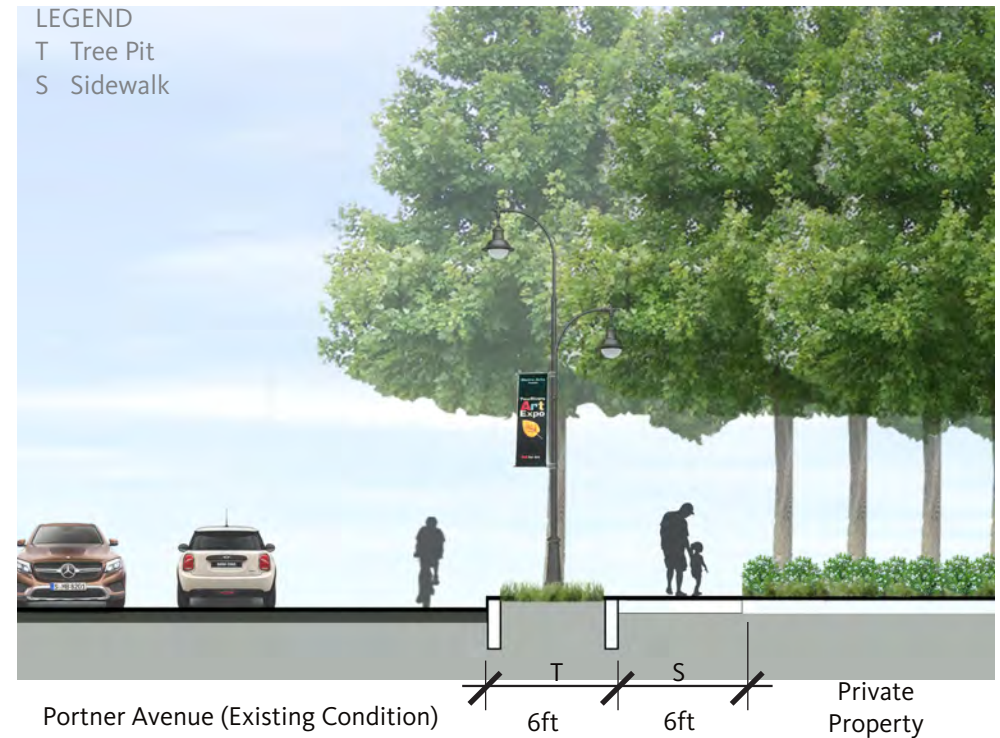
The section on page 11 shows an alternative streetscape, specifically developed for properties that lack landscape buffers and have asphalt to the edge of sidewalk or roadway. This section is considered an intermediate condition

offered as an inexpensive, temporary solution for improving corridor aesthetics before full redevelopment or ROW acquisition. The section separates pedestrians from parking and travel ways using raised, movable planters or seatwalls to act as a buffer. These planters can be planted with shrubs or seasonal flowers and could be ultimately moved and reused as needed. Fiberglass planters are recommended as they are more durable than concrete or metal planters.



Example of a fiberglass raised planter.

RESIDENTIAL/HISTORIC STREETScape



The proposed streetscape for the residential street and historic areas maintains street parking and incorporates street trees and lighting. The street trees are placed along the curb and proposed to be 40 feet on-center with grass between them. The sidewalks lie next to the street trees and are five to six feet in width.

Similar to the commercial streetscape design, streetlights are also proposed to be placed in between the street trees. Additionally, banners and decorative flags can be hung from the lamp poles.

It is assumed that the private property along the street edge will either be lawn or forested areas, so there is no need for additional planted buffers or raised planter boxes.

As an intermediate improvement for the residential/historic streetscape, the City may also consider implementing vegetated bulb-outs and curb extensions at key intersections. These features not only increase aesthetic appeal but can also improve pedestrian safety at intersection crossings and improve stormwater management.

RESIDENTIAL STREETSCAPE ENHANCEMENTS



Example of curb extension at a crosswalk.



Example of a stormwater garden.



Example of curb extension with a stormwater garden.



Example of striped bike lane.

Portner Avenue has on-street parking which can provide room for additional streetscape enhancements that commercial streets (which does not have street parking) cannot provide.

CURB EXTENSIONS

Curb extensions (also called bulb-outs) extend the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space at key locations; they can be used at corners and at mid-block. Curb extensions enhance pedestrian safety by increasing pedestrian visibility, shortening crossing distances, slowing turning vehicles, and visually narrowing the roadway.

BIKE LANES

Bike lanes create a special zone for bikers and serves as a guide to motorists to reduce potential collisions. Bike lanes exist on Portner Avenue and need to be enhanced, including updated pavement markings and signage.

STORMWATER GARDENS

Gardens placed along the street edge can collect stormwater runoff in neighborhoods and allow water to soak into the ground while soil and plants filter out pollutants. In addition to helping reduce the cost of stormwater management, these gardens provide additional beauty to the neighborhood and are natural habitat for pollinators and birds. When considering these gardens, the City will consider utility locations, existing drainage patterns, soils, tree impacts, and the estimated amount of runoff volume.

MEDIAN/TURN LANE LOCATION

Centreville Road and Mathis Avenue contain a combination of grass and concrete center medians and bi-directional turn lanes without medians. Please refer to the diagram to the right to see the locations of all medians and center turn lanes.

While it is recognized that maintaining access to commercial properties is important, expanding and improving planted medians is necessary to improve the public realm and create a boulevard-like effect within the Study Area. Any potential changes to medians should be coordinated with an access management plan. Medians should be planted with street trees and seasonal plantings to provide color and visual interest to the Study Area. Where possible, pedestrian refuge areas should be incorporated in the center medians to provide a safe area for pedestrians to wait for traffic to clear before crossing on the crosswalk. Refer to the proposed street section for planting suggestions.

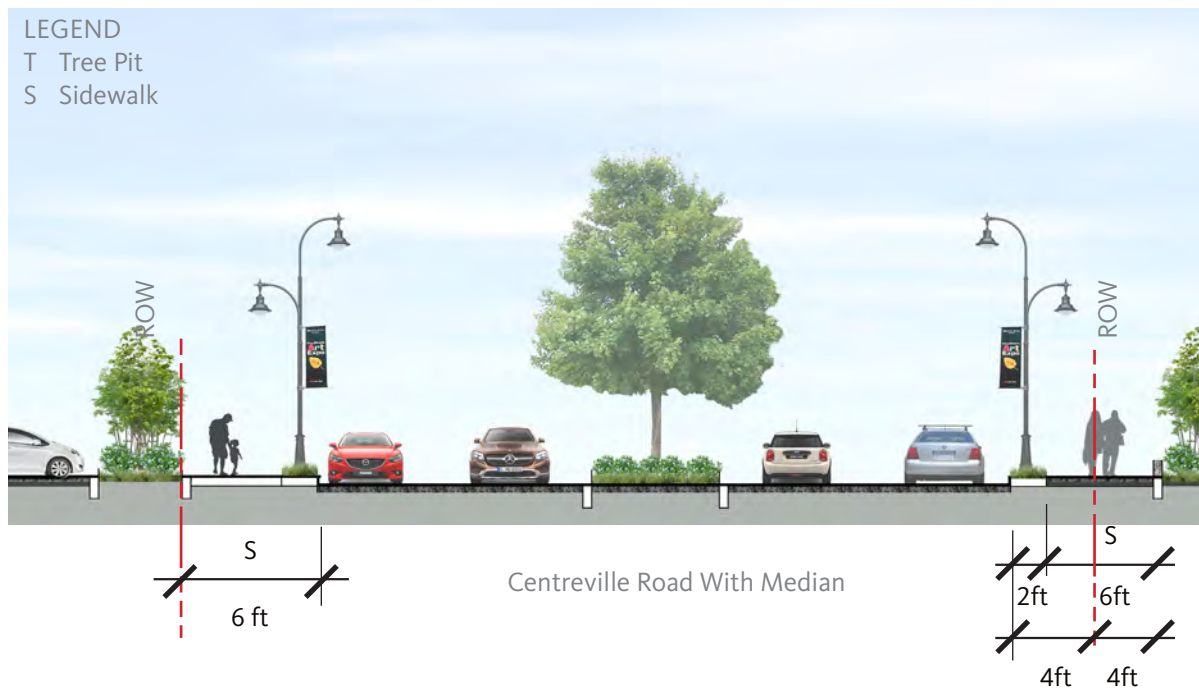
Additional recommendations for median treatment include:

- » Replace concrete medians with stamped concrete or pavers and adding median landscaping where feasible.
- » Provide additional landscaping in existing grassed medians, including ornamental trees, shrubs, and flowering plants.
- » Reduce space reserved for bi-directional turn lanes, replacing them with vegetated medians and left turn lanes at key locations. Where the bi-directional turn lanes must remain due to engineering or other considerations, utilize stamped asphalt to add visual interest.



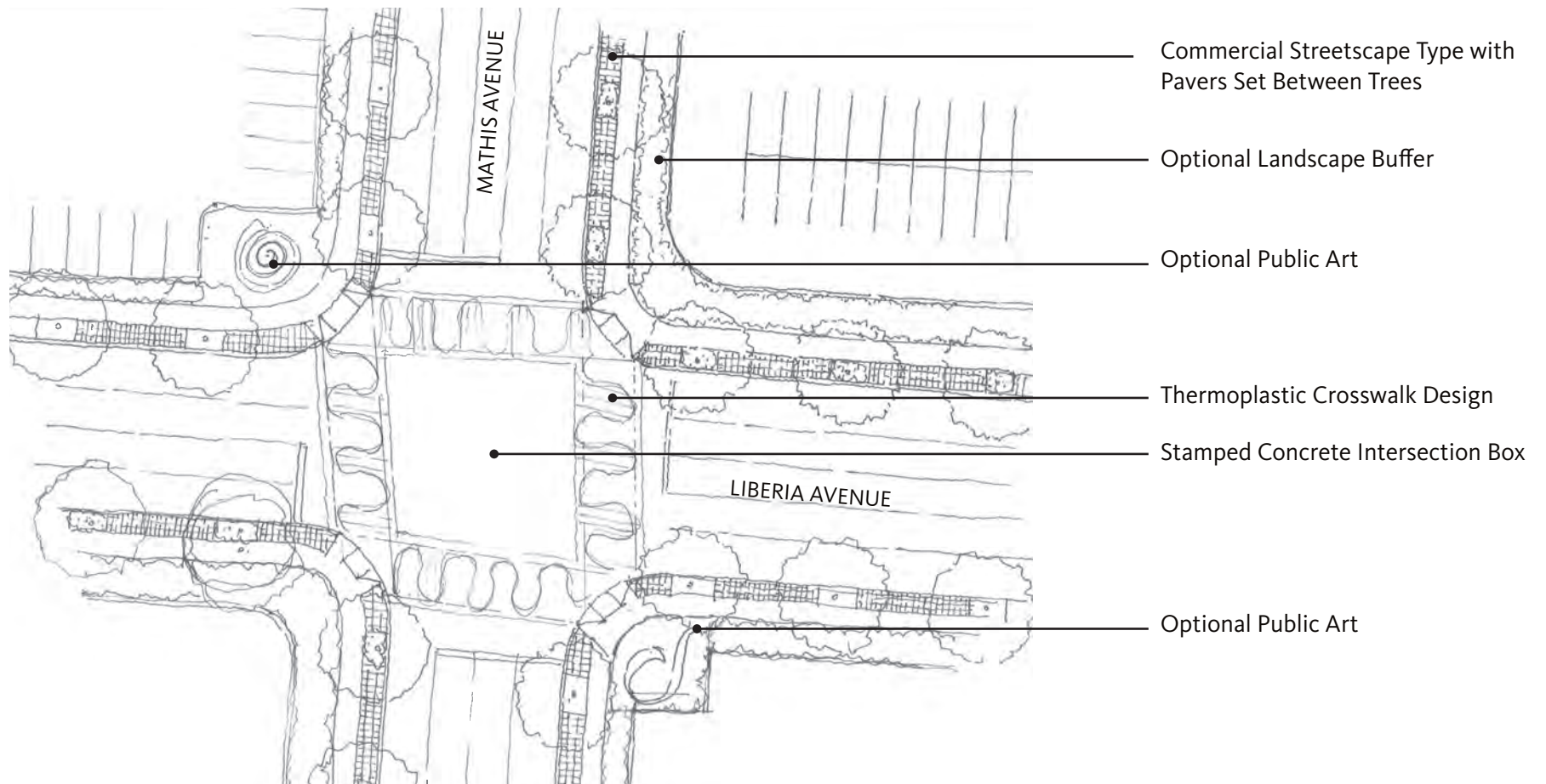


Example of stamped concrete center median.



Example of a raised median with brick paving.

CROSSWALK DESIGN



CROSSWALK DESIGN



Thermoplastic Crosswalks can also be made to look like brick which tie into Historic Manassas' character.



Painted sidewalks can include themes but wear out unevenly.



Stamped concrete can be made to look like stone or brick.



Thermoplastic Crosswalks is versatile and long lasting. Consider using bright colors to alert pedestrians and motorists.

Intersections and crosswalks deserve special attention within the Study Area. Recommendations for crosswalks are listed below. Major gateway intersections, such as the one located at Centreville and Sudley Roads, should be enhanced with special features to mark their importance. The drawing on the facing page (page 16) show treatments such as stamped concrete in the intersection box and public art.

STAMPED ASPHALT

Many jurisdictions are turning to stamped asphalt to create attractive crosswalks. Unlimited colors and patterns are available. Stamped asphalt is a durable choice lasting approximately six years before wear.

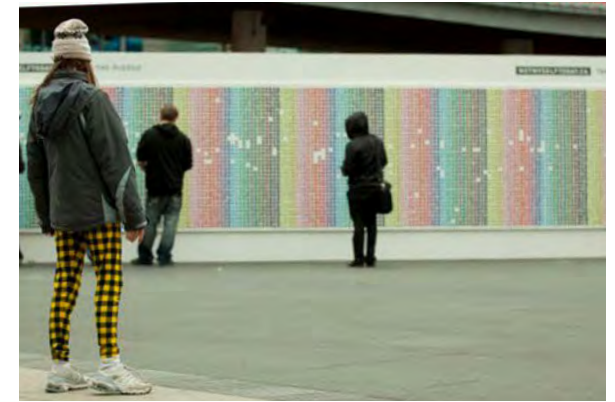
THERMOPLASTIC

These types of crosswalks provide the most flexibility and highest performance. Thermoplastic crosswalks can include reflective paint to improve safety and make drivers more aware of pedestrian movements. Unlike paint, the thermoplastic technology has reflective beads throughout so it stays reflective longer as the material wears away over time. It is also less likely to be scraped off by snowplows in winter or fade as fast as paint, lasting seven to 10 years.

PAINTED CROSSWALKS

Painted sidewalks can call special attention to a particular theme. Reflective paint can also be used. However, painted crosswalks tend to wear out unevenly as cars repeatedly cross the crosswalks reducing their effectiveness.

PUBLIC ART EXAMPLES



PUBLIC ART OPPORTUNITIES



There is a new trend in the City of Manassas to incorporate art around the historic downtown with such programs as the Banner Art project, Little Bits or Paint Manassas.

Public art could be an integral part of the design and image of the public realm throughout the Study Area. It can be an effective tool for marking the entry points at key intersections, bus shelters, sidewalks, benches, bike racks, and bollards.



"Lion Amongst Men" by Frank Albert



"Danville" by Hunter Knight



"Cognitive Dissonance" by Harry Mayer

MANAGING STORMWATER

Managing stormwater in the Study Area is an important consideration as municipalities are looking at ways to reduce their expenses. Stormwater best management practices such as Low-Impact Development (LID) and green infrastructure are used to reduce dependence on conventional stormwater systems, thus reducing the cost to cleanse and treat higher volumes of water.

A variety of design standards are used to collect stormwater and can be adjusted as the new stormwater regulations as their associated credit programs are refined.

Before deciding on specific stormwater strategies, soil testing should be completed to ensure proper drainage and performance.

STORMWATER MANAGEMENT STRATEGIES

All stormwater management strategies in the study will comply with applicable codes or standards including City of Manassas. The “Virginia Stormwater Management Handbook” should also be consulted.

To maximize the amount of pervious surface in the study area consider using tree wells and buffer stormwater infiltration areas.

Utilize the green space to limit the peak discharge by incorporating wet or dry detention basins, infiltration basins or trenches, and underground storage facilities.

Infiltration areas are to be used in the Planting and Furnishing Zone only.

Consider the use of green roofs on adjacent buildings to also reduce the volume of stormwater retention.



RECHARGE AREAS:

Stormwater recharge areas along the corridor could be placed in parks and buffers along the sidewalk. They are typically covered with grass or other vegetated material and topographically depressed so that stormwater flows easily into them. They are also constructed of porous backfill to let water pass through and recharge into the ground. In areas that drain poorly, such as clay soils, stormwater recharge areas can be further enhanced with underdrains.



BIOSWALE TREE WELLS:

Open tree pits with curb cuts can be used for stormwater infiltration. It is important to use vegetation and trees species that can withstand wet soil for longer periods of time.



POROUS PAVEMENT:

Porous pavement allows water to percolate into the soils where it falls, reducing the total volume of stormwater. This low impact development (LID) strategy could be used between the tree wells along the curb allowing the tree roots to get more water, air, and nutrients.

Note that permeable pavements need to meet the current regulations of the Americans with Disabilities Act.



SOIL CELLS:

Soil cells are designed to serve as a bioretention swale under the sidewalk and give street trees more space for their roots to thrive. These plastic components provide structure and support to sidewalks above prohibiting soil compaction. These structures are also filled with an engineered soil mix to slow, clean and store water from average rainfall events on-site.

STREET TREE RECOMMENDATIONS

TREE STANDARDS

Planting Requirements:

Throughout the study area, diverse tree species should be planted to create visual interest and avoid the devastating effects of drought or disease. It is recommended that no single tree family should exceed 30 percent, no single tree species should exceed 20 percent, and no single tree variety should exceed 10 percent.

The diversity of species will undoubtedly be apparent along the corridor. However, to enforce visual consistency, it is recommended that the same tree species, or trees with similar forms, are planted per block, as represented in the “Tree Planting Pattern” diagram to the right.

All tree selections need to be approved by the City Arborist and the Design and Construction Standards Manual (DCSM).

Tree Size:

It is recommended that trees with a 4 1/2-inch caliper or greater (per the DCSM) are planted along the streets in the study area per. Street trees are generally large trees that have a canopy spread of 40 feet. These trees should be planted 2.5 feet to 3 feet from street curbs. When choosing sidewalk and side median trees, consider the form of the tree so that pruning can be minimal.

Tree Form:

Taking into consideration the shape of the tree at maturity is crucial. It is recommended that trees planted along sidewalks have a 7-foot clearance from the ground to the lower

branches, while trees for vehicular areas have 14-foot clearance. If trees with a broader form or lower branching are chosen, frequent and radical pruning could be required.

Soil Compaction:

The majority of trees that are planted in the study area are between sidewalks and roadways which restrict root growth with compacted soils. In these urban planting conditions, soils provide fewer nutrients to the tree, drain poorly, and tend to be more acidic. Tree species should be chosen that can handle these conditions. Please refer to the following page to see how soil compaction can be avoided.

TREE TYPES

Pine and Fir Trees

It is not recommended that evergreen trees be planted within the ROW because they could block sightlines and drivers' views of pedestrians. Pine and fir trees can be used in other locations so long as they are planted at a minimum distance of 10 feet from the ROW.

Accent Trees

Accent trees are to be used in areas throughout the corridor, such as plazas, pocket parks, and entry courts, but not along the street curb. These trees are meant to provide diversity throughout the corridor with seasonal interest and height variation. Typically, they can be planted in tight spaces due to their shorter heights, smaller canopies and narrower trunk sizes compared to sidewalk and side median trees.



Columnar:
Suggested for narrow sites. Shade produced can be limited due to lack of wide crown.



Round, Spreading:
Produces ample shade. Generally requires pruning on lower branches.



Oval:
Preferred for street tree. Requires minimal pruning. Produces generous shade.



Vase:
Preferred for street tree. Requires minimal pruning.



Pyramidal:
Generally requires pruning on lower branches.



PLANTED TREE WELLS:

A planted tree garden discourages people from compacting the soil by walking on top of the open tree well. Also, a well-maintained tree garden will enliven the public right of way in the study area.

Choose plants that require little watering. Use small plants and bulbs, as large plants require large planting holes which damage tree roots. Also, plants with large root systems compete with the tree for water and nutrients. Do not add more soil to your tree well. Raising the soil level will harm the tree.



TREE GUARDS:

Tree guards protect the tree well from soil compaction by closing off the tree area from pedestrians. Guards can come in many materials: decorative guards in metal (the traditional material), and in concrete and brick. The latter are not tree (trunk) guards per se, but they do hinder access to tree wells (pits, parkways, bed space).

Some tree guards can be designed to serve multiple purposes such as benches and bicycle racks.



TREE GRATES:

Tree grates are used to cover the tree well to protect the tree from soil compaction while providing a flat, walkable surface that is flush with the sidewalk for pedestrians.

There is some maintenance with tree grates. As a tree trunk expands, it can grow into the metal bars of the grate, so periodic cutting of the grate is needed.

VEGETATION



Little Princess Spirea



Ginkgo



Yoshino Cherry



Japanese Pagoda



Weeping English Yew



Green Vase Zelkova

TREES

BOTANICAL NAME	COMMON NAME	SIZE
<i>Ginkgo biloba</i>	Ginkgo (Male tree only)	3" Cal.
<i>Gleditsia triacanthos</i> var. <i>inermis</i> 'Skyline'	Skyline Honey Locust	3" Cal.
<i>Magnolia virginiana</i>	Sweet Bay Magnolia	2" Cal.
<i>Ostrya virginiana</i>	Ironwood	3" Cal.
<i>Prunus x yedoensis</i>	Yoshino Cherry	2" Cal.
<i>Sophora japonica</i>	Japanese Pagoda	2" Cal.
<i>Zylkova serrata</i> 'Green Vase'	Green Vase Zelkova	3" Cal.



Ironwood



Gleditsia triacanthos, thornless Honey Locust

SHRUBS

BOTANICAL NAME	COMMON NAME	SIZE
<i>Cephalotaxcus harringtonia</i>	Japanese plumyew	3 or 5 Gallon
<i>Ilex crenata</i>	Japanese Holly	3 or 5 Gallon
<i>Ilex glabra</i>	Inkberry	3 or 5 Gallon
<i>Spiraea japonica</i> 'Little Princess'	Little Princess Spirea	3 or 5 Gallon
<i>Taxus baccata</i> 'Repandens'	Weeping English Yew	3 or 5 Gallon



Inkberry



Japanese Holly



Sweet Bay Magnolia

Seasonal Flowers: to be chosen by City of Manassas.

STREET FURNITURE OPTION: TRADITIONAL FURNITURE FAMILY

Streetscape furniture can reinforce the street character as well as provide needed amenities for people visiting the commercial corridor.

Streetscape elements can include:

- » Lighting,
- » Benches and seating,
- » Bollards,
- » Tree grates and tree guards,
- » Street poles for traffic signs,
- » Traffic signal structures,
- » Sidewalk barriers to organize outdoor cafes and newspaper boxes, and
- » Bike racks.

Street furniture specified on this page may be substituted with the equivalent manufactures of the same quality. When not specified in this document refer to the DCSM for specific furniture specification. For street and pedestrian lighting, please coordinate with City Utility Department.



Perenne Series Freesia Backed Flat Arm Steel, Horizontal Steel Slat Seating | Manufacturer: Victor Stanley | Model: FRE-20



Perenne Series Freesia Backless Flat Arm Steel, Horizontal Steel Slat Seating | Manufacturer: Victor Stanley | Model: FRE-23



Bicycle Parking Rack | Manufacturer: Mad Rax | Model: 'UX' Rack (with Lean Bar)



Bicycle Parking Rack End Cap | Manufacturer: Mad Rax | Model: U-24 with City Logo



Trash Receptacle | Manufacturer: Victor Stanley | Model: RB-36

IMPLEMENTATION

To achieve the goals of the Sector Plan and the vision for the Mathis Avenue Streetscape Standards, the City will need to take a multi-faceted approach to implementation. This approach should include incentives for streetscaping through local grant programs, incorporating the standards as part of land use entitlement review, and investing in the corridor through maintenance and capital projects.

LANDSCAPE AND FAÇADE GRANTS

Manassas offers local façade and landscape improvement grant programs to encourage private investment in building and landscape enhancements along major thoroughfares and at gateway entrances to the City of Manassas. This program could be used to implement the Mathis Avenue Streetscape standards by actively marketing the program to targeted properties and prioritizing projects within the Mathis Avenue Revitalization District that advance the standards set here.

DEVELOPMENT APPLICATIONS

Land use and development applications offer another opportunity to implement these streetscape standards. When an applicant applies for a site plan, special use permit, or rezoning, projects should be evaluated against these standards and should provide streetscape improvements and/or ROW dedication as

appropriate for the scale and impact of the project. To prevent streetscape features from being duplicated during redevelopment, staff should coordinate with property owners to have them install appropriate elements of the streetscape plan in place of the City's standard buffer planting requirements. Efforts to identify curb cuts that can be eliminated should also occur during development application review. The streetscape standards will be incorporated as an amendment to the City's Design and Construction Standards Manual.

MAINTENANCE & CAPITAL PROJECTS

Maintenance and capital projects will be needed to achieve the ideal streetscape vision outlined in this report. Where existing landscaping easements and center medians exist, the City should consider allocating maintenance improvement funding for additional landscaping, including deciduous and ornamental trees, shrubs, and particularly at key intersections and gateways. Ultimately, capital projects may be needed to implement the standards and could include property acquisition, intersection and travelway improvements, sidewalks, and landscaping.

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