TYSONS URBAN DESIGN GUIDELINES

Tysons

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OCR
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Introduction

1. INTRODUCTION

In June 2010, the Fairfax County Board of Supervisors (the Board) amended the Fairfax County Comprehensive Plan (the Plan) for the Tysons Corner Urban Center. The 2010 amendment incorporated significant changes to the Plan intended to encourage and guide the continuing growth of one of Fairfax County's key communities. In concert with changes to the Plan, the county's Zoning Ordinance was amended to create a new zoning district, the Planned Tysons Urban District (PTC), as a means to assist in implementing the Plan. These actions build upon the economic success of Tysons evidenced in its transformation into a vast suburban center from its agricultural origins in the 1960s.

On March 14, 2017, the Board approved an amendment to the Plan that reconciled the Tysons plan text and maps with the studies and planning activities completed since 2010. Included in these editorial updates was updating the text in order to reflect the official name change from "Tysons Corner" to "Tysons" that was approved in 2016 through the U.S. Board of Geographic Names, the nation's official geographic names repository. As a result of the updates to the Plan, the Tysons Urban Design Guidelines were also amended in order to further articulate and clarify the guidelines based on the aforementioned changes, as well as lessons learned through the development review process.

The twenty-first century brings with it the challenge of providing space for a growing population and economic base. Fairfax County's proximity to Washington DC, and the County's many desirable amenities, including an excellent school system and a highly educated and trained work force, combine to make it a highly desirable place to live, work, and play. As the economic engine for Fairfax County, Tysons is the ideal place to apply smart growth principles to new development so that the County can sustainably accommodate future growth. For Tysons to grow successfully and responsibly, under-utilized and impervious land area will need to be reused, optimized, and enhanced in a sustainable way. New elements such as complete streets, urban parks, and innovative architecture will also be created.

The new vision for Tysons calls for future development to follow Transit Oriented Development (TOD) principles, particularly around the four new Metro Rail stations. TOD principles prescribe establishing the areas of highest density closest to the transit stations, in concert with encouraging mixed use development in order to achieve greater sustainability and balance between land use and transportation. Focusing greater density in the TOD areas, establishing rigorous urban design standards, and environmental stewardship recommendations, while adhering to proven land use principles, will transform Tysons into a new vibrant and sustainable urban center for Fairfax County.

Urban design is the discipline that guides the appearance, arrangement, and function of elements in the physical environment, with particular emphasis on public spaces. An urban environment is comprised of many components including streets, blocks, open spaces, pedestrian areas and buildings.

Urban infill development and redevelopment present different design challenges than those experienced by rural or suburban "green field" development. Transforming a highly functioning suburban development into a more efficient, sustainable, pedestrian focused and transit-oriented city will be a great urban design challenge. Higher population and building densities, increased building heights, varied adjacent land uses and limited open space require thoughtful building placement, architectural definition, and articulation of the public realm.

The urban design concepts and principles as set forth in the following chapters provide guidance for the evolving built environment in Tysons, and how it will shape the public domain.

Opposite: Tysons skyline today and tomorrow, Image: Tysons Partnership

Top Right: Highline, New York City, Image: robinandrose, flickr.com

Bottom Right: New York City skyline, Image: www.fxfowle.com

1.2 Intent and Purpose of the Urban Design Guidelines

The purpose of the Tysons Urban Design Guidelines (the Guidelines) is to elaborate on the Urban Design Recommendations set forth in the Comprehensive Plan. These Guidelines adhere to the following Urban Design Principles:

- Enhance Regional Identity
- Establish a Sense of Place
- Improve Connectivity
- Design Sustainable Environments
- Respect Surrounding Neighborhoods
- Create a New Destination for the Arts

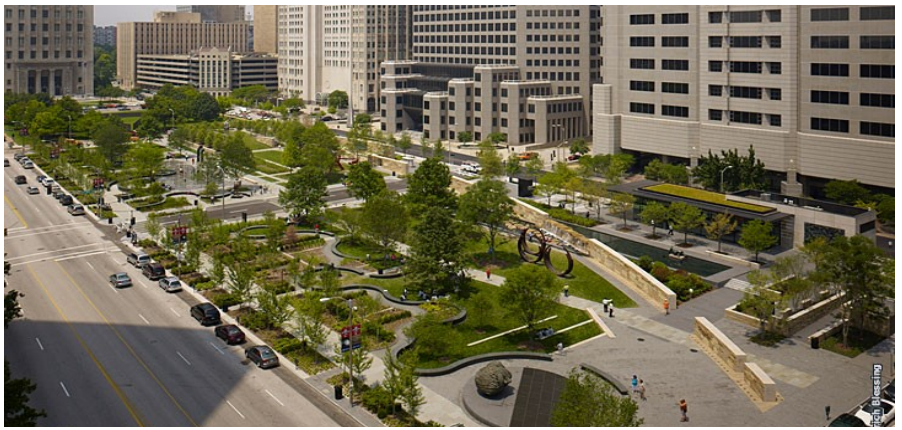
The following chapters provide detailed information regarding the urban design elements mentioned in the Comprehensive Plan such as streetscape layout, hardscape elements, planting strategies, building mass and architectural form.

As the home to several Fortune 500 headquarters and many other high profile companies, Tysons has gained a national and international reputation for excellence. The Urban Design Recommendations set forth in the Comprehensive Plan and the following Guidelines call for the built environment to be designed as a reflection of the above mentioned principles. It is the intent of the Guidelines to encourage outstanding, creative, and innovative design for the urban form in Tysons.

Because there is little historic or iconic architectural precedent to draw from for the new urban form in Tysons, it is expected that Tysons' identity will emerge over time. For this reason, the Guidelines emphasize high quality urban design concepts while allowing for flexibility. This flexibility is intended to encourage distinct character in each district and neighborhood. Additionally, as Tysons continues to develop, the Guidelines will be revised as needed to reflect the changing circumstances.

These Guidelines do not regulate or dictate a particular architectural style for Tysons. Rather, it is envisioned that designers, planners, developers, and the community will create a place of the highest quality where each building and public space will be a reflection of the community in which it is located. The Guidelines offer general direction and reinforce continuity from which a diversity of design will emerge.

The Guidelines are intended to provide flexibility in their implementation. Alternative, but comparable, design strategies may be considered if such design solutions result from the unique circumstances of a particular site. The Guidelines recognize that a wide variety of conditions exist in Tysons and flexibility is necessary, so long as the outcome furthers the implementation of the vision set forth in the Comprehensive Plan.



Organization of the Guidelines

Chapters 2 and 3 of the Guidelines follow the format of the Urban Design section of the Tysons Comprehensive Plan by focusing on the Pedestrian Realm. Chapter 2 elaborates on the Pedestrian Realm Framework described in the Comprehensive Plan and introduces the Pedestrian Plan Hierarchy. Chapter 3 focuses on the details within the pedestrian realm, describes design concepts, and provides specific suggestions for streetscape furnishing, signage, and public art.

Chapter 4 provides details regarding Building and Site Design. These include recommendations regarding building massing, parking design and signature sites.

Chapter 5 provides recommendations regarding signage in Tysons.

Chapter 6 elaborates on the urban design elements related to Urban Parks in Tysons.

Chapter 7 focuses on interim conditions and the 'in between' spaces that may occur as Tysons redevelops. The emphasis is on maintaining design continuity and connectivity as the built form is under transition.

Chapters 8, 9, and 10 provide supplemental information to assist in the design process. Section 8 contains a listing of Resources, Section 9, a Glossary, and Section 10 two appendices which provide the Urban Park Evaluation Checklist and the Urban Design Checklist.

Updating the Guidelines

As Tysons and its neighborhoods continue to develop and change, the Guidelines should be amended as needed to respond to changing conditions. At the same time, new technologies and other innovations may provide opportunities which should be reflected in updated versions of the Guidelines.

Future amendments to these Guidelines are expected to be an administrative process, undertaken by County staff in consultation with a wide range of stakeholders. More significant policy changes, however, may require additional consideration, including input from the Planning Commission and Board of Supervisors.

Opposite: Citygarden, St. Louis, MO. Designer: Nelson, Byrd, Woltz, Image: Hedrich Blessing Photographers

Right: View east from Spring Hill Metro Station

1.4 Using the Urban Design Guidelines

How to Use this Document:

This document should be used by citizens, developers, designers, Fairfax County staff, the Fairfax County Planning Commission and the Board of Supervisors when either proposing, designing or reviewing development in Tysons.

The Guidelines apply to all properties within Tysons that are seeking to develop in accordance with the redevelopment options in the Comprehensive Plan and should be referred to when preparing zoning and site plan submissions. As a result, the Guidelines will be implemented in differing ways based upon the property's status.

The Guidelines are intended to offer direction, but are not a substitute for the codes and ordinance provisions associated with the permitting and entitlement processes. All applicable requirements and regulations established by the proffers, Zoning Ordinance, the Building Code, the Public Facilities Manual, as well as all applicable state or federal statutes must be satisfied.

It is important to recognize that the Comprehensive Plan sets out very specific goals for properties seeking redevelopment to PTC. These goals include, but are not limited to: stormwater management retention, urban parks and tree canopy. In order to achieve the Plan goals, the demonstration of certain commitments will be necessary at the time of rezoning. Building in flexibility ensures that developments can meet the Plan goals and allow for future innovation.

Recommended Initial Steps with the Development Review Process:

1. Use the Comprehensive Plan and the Zoning Ordinance to clarify what type and scale of development is appropriate in a given area.

2. Schedule an appointment with the Department of Planning and Zoning (DPZ) staff to discuss the application and receive preliminary information about how to proceed.

3. Use the Comprehensive Plan and the Transportation Design Standards for Tysons Corner Urban Center (see Chapter 8, Resources) from the Fairfax County Department of Transportation to understand the design standards for Tysons.

4. Use these Guidelines to understand specific urban design recommendations for the pedestrian realm and site and building design.

5. Early in the schematic design stage, make an appointment with DPZ staff for a pre-application meeting to receive preliminary comments on roadway design, site layout and vision.

6. Begin the design process and development of the Conceptual Development Plan (CDP) by incorporating guidance from the Comprehensive Plan, the Zoning Ordinance, and these Guidelines to create an urban street grid, appropriately dimensioned and designed streetscape, and well-located, high-functioning parks and open spaces.

7. Create a pedestrian hierarchy plan based on the recommendations in these Guidelines and existing conditions. Use the grid and block layout to determine the pedestrian hierarchy, keeping in mind how people will move through and around the site to access metro.

8. Site buildings according to the height guidance in the Comprehensive Plan and the Site Design and Building Massing recommendations in these Guidelines and the Comprehensive Plan.

9. Develop a conceptual utility strategy which addresses the placement of service lines and vaults without compromising the functionality and aesthetics of the public realm. At the same time, consider sustainable development strategies which address energy use, stormwater, and other resources, consistent with the guidance in the Comprehensive Plan. Integrate site design and building design to accommodate these elements.

10. Create building articulation, fenestration, and other details based on the guidance in Chapter 4 of these Guidelines that will create an inviting, dynamic pedestrian realm.

11. Address and incorporate other site specific issues, such as public facilities and art.

Opposite: Streetscape, Washington, DC

1.4 Using the Urban Design Guidelines

The Urban Design Guidelines should be referred to at all stages of the development review process. Below is a list of the important elements that should be considered at each stage in order to set the development up for future constructability and to avoid major rework or road blocks later in the process.

At time of Pre-Application:
Grid and Vision level elements, such as:
Street network
Block Size
Building Height and Massing
Park locations
Pedestrian Hierarchy
Land Use Diagram, including first floor uses
Loading and Parking access
Streetscape Dimensions, including tree space design

At Time of Conceptual Development Plan (CDP):
All of the pre-application elements, plus:
Tree space layout
Vault location and access
Parking Design
Building Design
Build-to lines
Park functions and elements
Streetscape furnishings (location)
Lighting for roadways and pedestrians
Transit shelter locations
Phasing and Interim Conditions

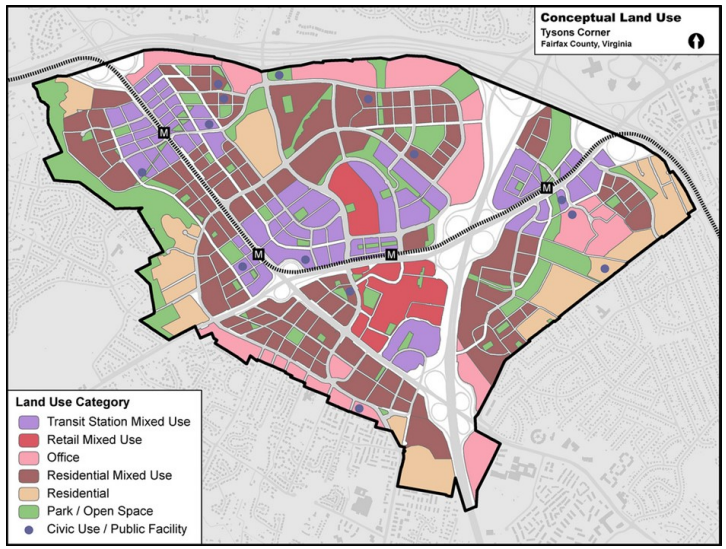
At time of Final Development Plan (FDP):
All of the rezoning elements, plus:
Tree space layout overlaid with conceptual utility plans
Building articulation
Streetscape furnishings (selection)
Detailed park design
Potential sign locations, wayfinding
Paving concepts
Outdoor dining locations

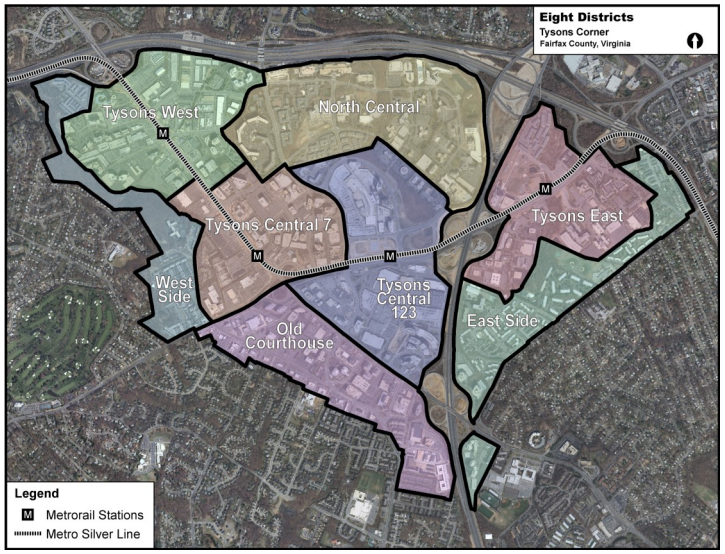
Above: Cross-Section from the approved Westpark Plaza CDP (RZ 2013-PR-009)

Tysons is located in northeastern Fairfax County and encompasses approximately 2,100 acres. Tysons is located halfway between downtown Washington D.C. and Dulles International Airport at the confluence of Interstate 495 (the Capital Beltway), the Dulles Airport Access and Toll Road, Route 7, and Route 123. It is bounded on the southeastern side by Magarity Road, on the southwestern side by commercial development along Gallows and Old Courthouse Roads and by Old Courthouse Stream Branch. It is bounded on the north by the Dulles Airport Access and Toll Road.

Tysons has the highest topographic elevations in Fairfax County and lies in the watershed for the Chesapeake Bay. Local riparian areas include Scotts Run and the Old Courthouse Spring Branch. Currently, it is estimated that there is 20 percent tree canopy cover in Tysons, most of which is in the existing Scotts Run and Old Courthouse Stream Valleys.

Tysons' neighbors include the residential communities of McLean, Vienna and Falls Church.



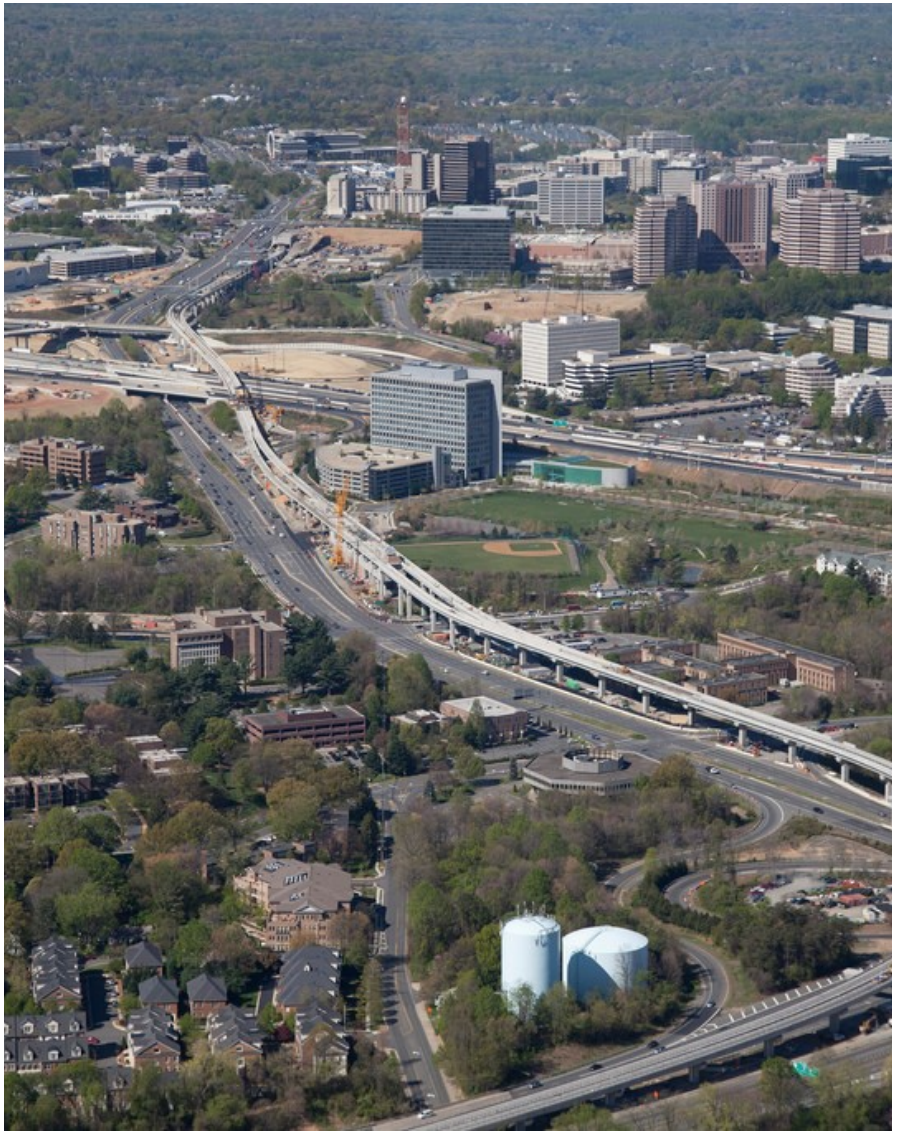


Above Top: Conceptual Land Use, Fairfax County Comprehensive Plan

Above Bottom: Eight Districts from the Fairfax County Comprehensive Plan

1.6 History of Development in Tysons

The last 60 years have witnessed remarkable growth and change throughout the Tysons area. In 1950, Tysons was the site of a general store at the crossroads of Routes 123 and 7, and much of the surrounding area consisted of dairy farms. In the 1960s, suburban office and retail development boomed in Tysons following the construction of the Capital Beltway and the Dulles Airport Access Road. The Tysons of 2011 increased in land area and density to accommodate one quarter of Fairfax County's office space, and has since moved towards creating a more diverse land use mix.



Above Left: Tysons Corner, Image: Fairfax County Library Archives

Above Right: Silver Line under construction, Image: Washington Post

Major planning studies and Comprehensive Plan amendments in 1975, 1978, 1990, and 1994 sought to evolve planning guidance for the continued growth in Tysons. With the certainty of four new Metrorail stations under construction in Tysons and a subsequent influx of development proposals in 2004, the Board established the Tysons Land Use Task Force for the purpose of recommending updates to the 1994 Comprehensive Plan. In 2008, after extensive study and public outreach, the Task Force presented its recommendations to the Board of Supervisors. County staff and the Planning Commission were tasked with drafting the amendments to the Comprehensive Plan and Zoning Ordinance to achieve the Task Force's vision for Tysons.

The future vision for Tysons is that of a high-density city that has dynamic walkable streets, an iconic skyline and quality public spaces. The Tysons Urban Design Guidelines is a document that builds on the Comprehensive Plan recommendations to guide developers, staff and the Board towards implementing the urban form for Tysons.

Above: Capital One site under construction, Image: InTysons Blog


Food Market And Pharmacy
HD

2

Streetscape Guidelines, The Framework

2. STREETSCAPE GUIDELINES, The Framework

The pedestrian realm is the public space where people move and interact. It is composed primarily of the streetscape and urban parks (See Chapter 6). These are the most visible areas within the urban environment and are critical elements of a neighborhood. The pedestrian realm can provide environmental benefits through tree cover, remediation of heat island effects and a place for stormwater infiltration.

The streetscape is the space within the pedestrian realm that is between the building facade, or build-to line, and the curb. It provides connections to homes, places of employment, and connects people to retail establishments, restaurants, parks, plazas, trails and other public places.

The framework and character of the streetscape will differ depending on the scale of the adjacent street and the associated land uses. Therefore, once land uses, building intensity, the street grid, and functional street classifications are established, the tools in this chapter can be used to establish build-to lines and to begin design for the streetscape.

This chapter addresses the streetscape framework: block sizes and streetscape types. Chapter 3 addresses the streetscape details including hardscape elements, planting, street furnishings, public art and lighting.

Block size is integral in creating a streetscape that is safe and pleasant. Excessively long blocks offer few choices for pedestrians and bicyclists, inhibit transit use, and encourage reliance on automobiles for mobility. The grid of streets concept for Tysons emphasizes shorter blocks and more frequent mid-block connections (including pedestrian passages and breaks in buildings) that result in convenient, short walking distances. Shorter blocks also allow for varied uses and architectural building faces within the span of a short walking distance to create interest and activity along the street edge.

The Urban Design and Transportation sections of the Comprehensive Plan recommend block sizes as follows:

- Blocks should have a maximum perimeter length of 2,000 feet, measured at the curb.
- Any block side longer than 600 feet should have a mid-block pedestrian connection. Examples include a pedestrian walkway, a service street with a sidewalk, or a publicly-accessible walkway through a building.
- The ratio of the longest side of a block to the shortest side is ideally less than 2:1 and should be no greater than 3:1.
- Due to topography and other existing conditions, some blocks may not be rectangular.

The graphic above is conceptual and is intended to demonstrate how a street network will be created for Tysons; it should not be used to determine final road locations or alignments.

Above Left: Tysons—Existing Grid of Streets, Fairfax County Department of Planning & Zoning, June 2010

Above Right: Tysons—Proposed Grid of Streets, Fairfax County Department of Planning & Zoning, June 2010

2.2 Streetscape Types and Zones

Streetscape Types

In addition to block size recommendations discussed in the Urban Design section of the Plan, the Transportation section of the Plan includes guidance for the functional classification, location and dimensions of streets in Tysons. This information is used to determine the location of the roadway and dimensions of the street from curb to curb.

Once a road width and location have been established, the map on the opposite page, the Tysons Urban Design Streetscape Types Conceptual Map, should be used to determine the Streetscape type for each street.

The Tysons Urban Design Streetscape Types Conceptual Map is derived from Map 7 in the Plan which contains five transportation classifications for streets: Boulevards, Avenues, Collectors, Local Streets and Service Streets. Although the lane configurations for Avenues and Collectors differ, the streetscape dimensions are the same and for this reason are referred to as a single type, the Avenue/Collector, in these Design Guidelines.

General descriptions of the character and function of the four Streetscape types - Boulevards, Avenues/Collectors, Local Streets, and Service Streets - can be found on the following pages.

How to Determine the Street and Streetscape Dimensions:

1. Determine the location and functional classification of a proposed street (See Map 7 in the Comprehensive Plan). Map 7 will be further revised over time based upon additional information, including Consolidated Transportation Impact Analyses (CTIAs), a more refined public facilities plan, the Tysons Park System Concept Plan, the Tysons Circulator Study, the Tysons Bicycle Master Plan, and the Tysons Metrorail Station Access Management Study, as well as actions on approved rezoning applications.

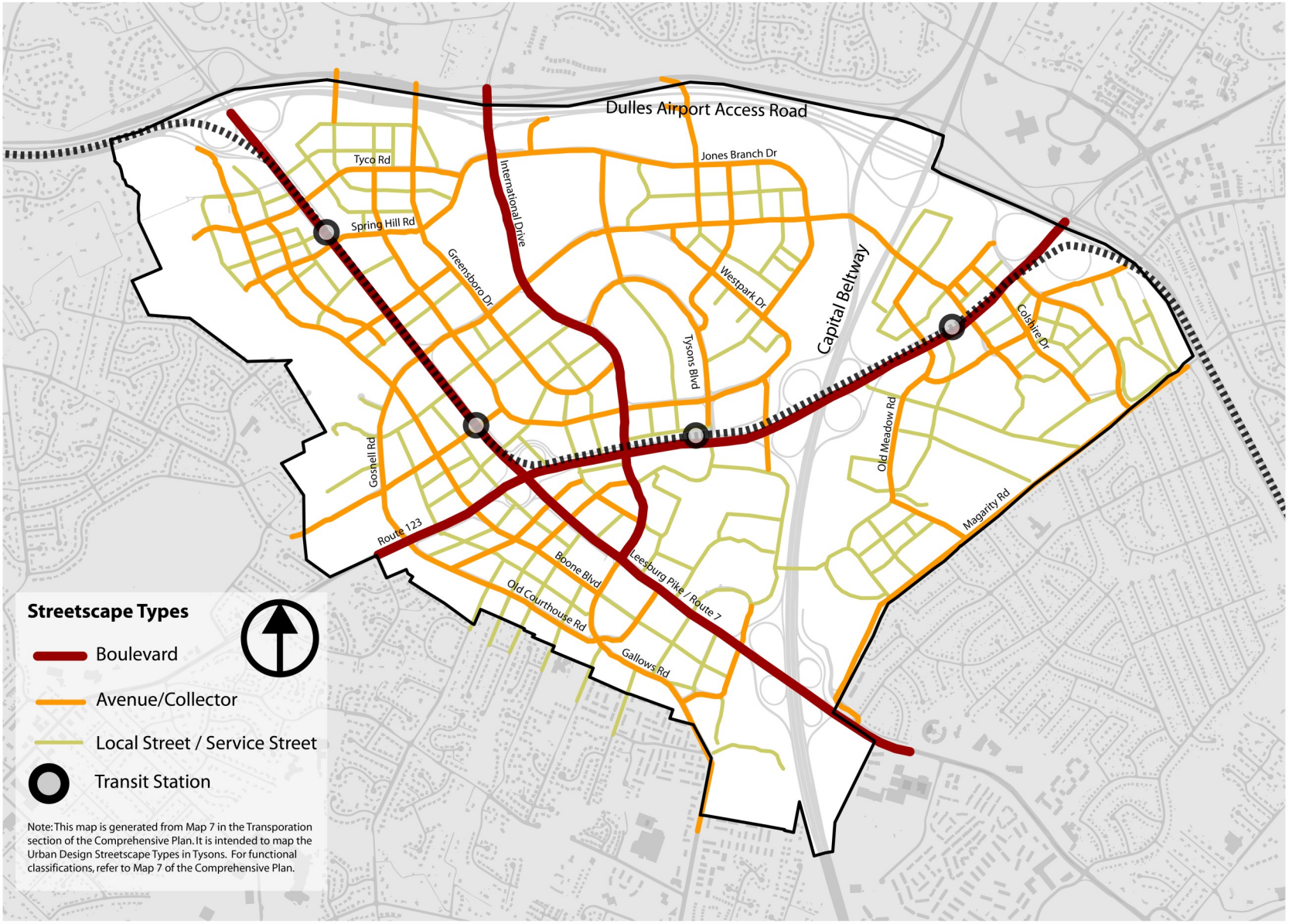
2. Determine the Urban Design streetscape type. See The Tyson Urban Design Streetscape Types Conceptual Map on the opposite page.

3. Refer to Section 2.2A for General Streetscape Design Guidelines for design suggestions that apply to all Streetscape types.

4. Refer to Sections 2.2B—2.2E for design suggestions and dimensions for each specific Streetscape type.

5. Refer to Section 2.4 for recommendations regarding a Pedestrian Hierarchy Plan and how to accommodate the appropriate pedestrian activities within the Streetscape types.

Tysons Urban Design Streetscape Types Conceptual Map



2.2 Streetscape Types and Zones

Boulevards are multi-modal thoroughfares within Tysons. They have wide, multi-use streetscapes lined with a double row of trees. Medians may also be present in the Boulevard streetscape to accommodate plantings as well as mass transit lines and stations. In many cases, Boulevards will be adjacent to the tallest buildings in Tysons and will be the locations for the Metro entrances. Even in instances where Boulevards may not have the most significant pedestrian circulation, the full complement of streetscape amenities should be provided. In these cases, the aesthetic, environmental and transportation benefits of Boulevards remain an important element of urban design in Tysons.

Avenues / Collectors are streets that provide a balance between pedestrian and vehicular circulation. Shops, galleries, restaurants, hotels, offices, and residential uses will line these streets and help to energize the streetscape. Residents, workers, and visitors will use Avenues and Collectors to connect to local neighborhood streets and amenities; they will be the venues for street festivals and parades. On-street parking, bicycle lanes, and a planted street edge will provide a buffer between cars and the pedestrian realm. Tree shaded benches in the streetscape will provide a place for pedestrians to rest, and bicyclists can use these streets to connect from home to small outdoor cafés and other amenities.

Local Streets support the internal pedestrian and vehicular traffic within Tysons' neighborhoods. They contain shady places to walk the dog or sit and have a coffee. Local Streets will be lined with a mix of uses, including residential and retail. They will provide connectivity within a neighborhood. Local Streets will connect to neighborhood parks, places of worship, and schools. Stoops and porches along Local Streets will be meeting places for Tysons residents. The majority of new streets constructed in Tysons will be Local Streets.

Service Streets provide access to parking, loading docks, waste management, utilities and other "back-of-house" operations. While Service Streets are not designed primarily to serve pedestrians, they should still be accessible and safe.

Opposite Left: Pennsylvania Avenue, Washington, DC

Opposite Right: Streetscape in Reston, VA

Above Left: Streetscape in Washiington DC.

Above Right: Cady's Alley streetscape, Washington, DC

2.2 Streetscape Types and Zones

Streetscape Zones

All streetscape types in Tysons (with the exception of service streets) are made up of the following three zones: the **building zone**, the **sidewalk**, and the **landscape amenity panel**. This section describes the function and size of each zone and presents conceptual layouts for each. Specific dimensions for each zone within the different streetscape types are provided in Sections 2.2A – 2.2E.

The **building zone** is the area immediately adjacent to a building where building entrances are located and where activities such as outdoor dining and retail browsing occur. Awnings and architectural canopies may project above the building zone at building entrances and windows. In-ground planting and planted containers may also be located in the building zone but should be carefully situated as to not block pedestrian or visual access into doors and retail or commercial windows. Outdoor dining should be located in the building zone (not in the landscape amenity panel) and should be sited early in project development, so that the appropriate building zone width can be provided. Utility vaults should be located outside of the public right-of-way, and preferably within the building. In the Boulevard streetscape, the subgrade in the building zone includes space for street tree root zones and priority should be given to the tree root zone over utility placement. In some cases, utility lines will cross this tree root zone; however, utility locations should be planned early in the design process to ensure that utilities, adequate soil volume for trees, and appropriately sized paved areas for pedestrian circulation are all accommodated appropriately.

The **sidewalk** is exclusively reserved for pedestrian movement and should be clear of any obstructions. To minimize conflicts with street trees and plantings in the building zone and landscape amenity panel, an underground utility zone dedicated for community serving utilities such as telephone lines, electric lines, and fiber optic lines should be located below the sidewalk.

The **landscape amenity panel** is the area adjacent to the street in which street furniture, street lights, signage, transit stops, and other public realm amenities are located. The landscape amenity panel includes areas for street trees and ornamental plantings. Tree root zones should be given the priority in the landscape amenity panel subgrade. It is understood that in some cases utility lines will cross this tree root zone, however, careful planning early in the design of the project should plan for utility placement to prevent conflicts with street tree placement and survivability.

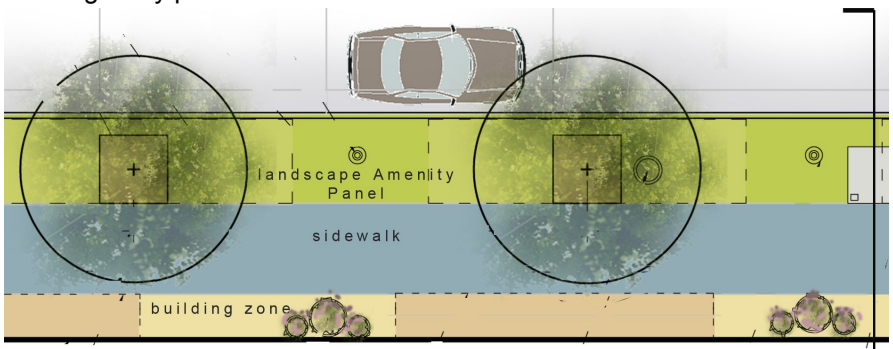
Streetscape zones

Utility Vaults and Parking Structures below grade in the streetscape - Public Streets:

Building zone: The location of stormwatwer and electrical vaults can have major impacts on the pedestrian realm; therefore, they should be located early in the design process and accommodated inside the building and below grade to the extent feasible. If vaults are unable to be provided within the building, the second preferred option is within the building zone, outside of the public right-of-way. All access points should have ADA accessible surfaces that are attractively incorporated into the streetscape by insetting the streetscape paving materials into the access doors to minimize their appearance.

Sidewalk: Except in rare cases, building serving utility infrastructure such as stormwater vaults, electric transformers, mechanical rooms, or parking structures should not be located below the sidewalk. There should be a 5 ft. minimum structure-free zone that extends down from the top of finished pavement to accommodate street tree planting and community serving utility placement.

Landscape amenity panel: Except in rare cases, neither building-serving utility infrastructure as described above nor parking structures should be placed below the landscape amenity panel. There should be a 5 ft. minimum structure-free zone that extends down from the top of finished pavement to accommodate street tree planting and community serving utility placement.

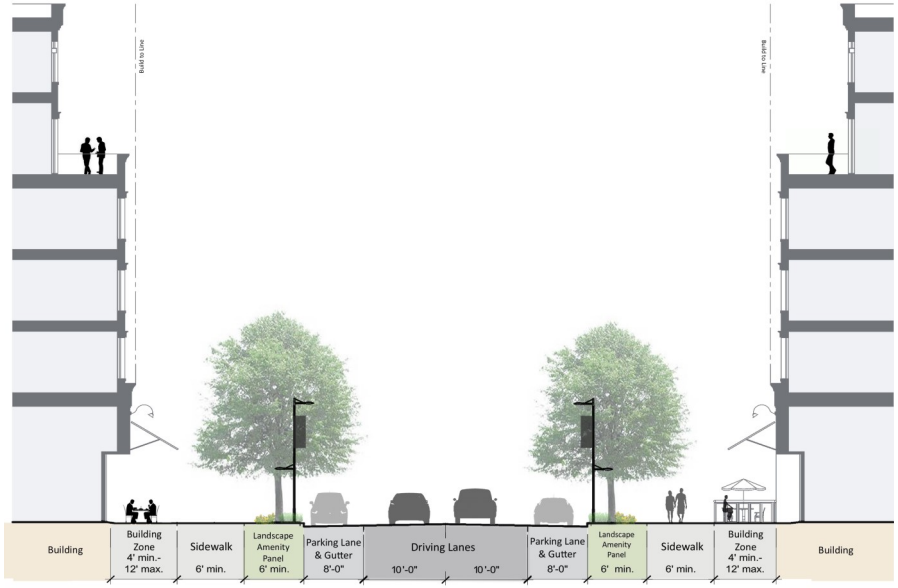


Streetscape zones - Plan

Utility Vaults and Parking Structures below grade in the streetscape - Private Streets:

Below grade parking and utility structures, such as stormwater or electrical vaults, may be located in the **building zone, sidewalk**, or **landscape amenity panel** provided:

- All access points are clear of the sidewalk zone, should have ADA accessible surfaces, and be attractively incorporated into the streetscape design as mentioned above; and,
- There is a 5 ft. minimum structure-free zone that extends down from the top of finished streetscape paving to accommodate street tree planting and community serving utility placement.



Streetscape zones - Section A

2.2A General Streetscape Design Guidelines

The following suggestions for incorporating streetscape design elements into the public realm supplement the guidance of the Comprehensive Plan. Coordination with the Virginia Department of Transportation (VDOT) is critical for any improvement within the VDOT right-of-way. Projects that propose construction within a VDOT right of way must obtain all necessary permits from VDOT, including those for streetscape elements that may impact roadway clearance standards. Additionally, all streetscape designs must adhere to VDOT clear zone and sight distance standards as set forth in the Transportation Design Standards for Tysons Corner Urban Center that is available from the Fairfax County Department of Transportation (FCDOT).

Design suggestions have been included that are applicable to all streetscape types. In addition, Sections 2.2B – 2.2E include illustrative diagrams that demonstrate how these suggestions may be applied to the specific streetscape types. Chapter 3, which follows, provides details regarding materials and furnishings.

The dimensions provided are suggested minimums and may need to be larger in order to accommodate street tree planting requirements and outdoor dining, and to meet other required standards.

Design Suggestions for all Streetscape Types:

- As detailed in Chapter 4, Provide consistent **build-to lines** along the street, but architectural features and building articulation may also be incorporated. The design of the streetscape should respond to and complement variations in the build-to line.

- Consider incorporating **awnings, canopies** and **architectural elements** over doorways and windows that project into the building zone. These elements provide protection from the weather and assist in way-finding for pedestrians. Size awnings appropriately to avoid conflicts with adjacent street tree's projected 15 year canopy size.

- **Porches** and **balconies** may also project into the building zone. Locate these elements to avoid conflicts with a street tree's projected 20 year canopy size. These should not extend into the sidewalk zone.

- Accommodate adequate soil volume in all **tree planting spaces** to foster healthy root growth for street trees. Innovative use of subgrade structural elements and suspended paving is encouraged to provide sufficient soil volume while accommodating pedestrian traffic. See Section 3.6A for tree space design guidelines.

- The **planting spaces around trees** can either be entirely planted or partially paved. This planting strategy should remain consistent, at a minimum, within a block. See Section 3.6A for tree space design guidelines.

- Accommodate both adequate paved areas for passenger loading, including accessible routes and landings, as well as adequate soil volume for trees at **transit stops.**

- Provide an ornamental boundary or edge, such as moveable posts and rails, to delineate **outdoor dining** spaces in the building zone.

- Provide **transitions** between public spaces such as plazas and other urban parks and the streetscape. This could include extending paving patterns from a park into the streetscape, or placing benches, signage, or other seating elements in that streetscape that is near the entrance to a park.

- Incorporate creative stormwater remediation and other **Low Impact Development (L.I.D.) techniques** into the streetscape. See Section 3.6F, Stormwater Planting Design.

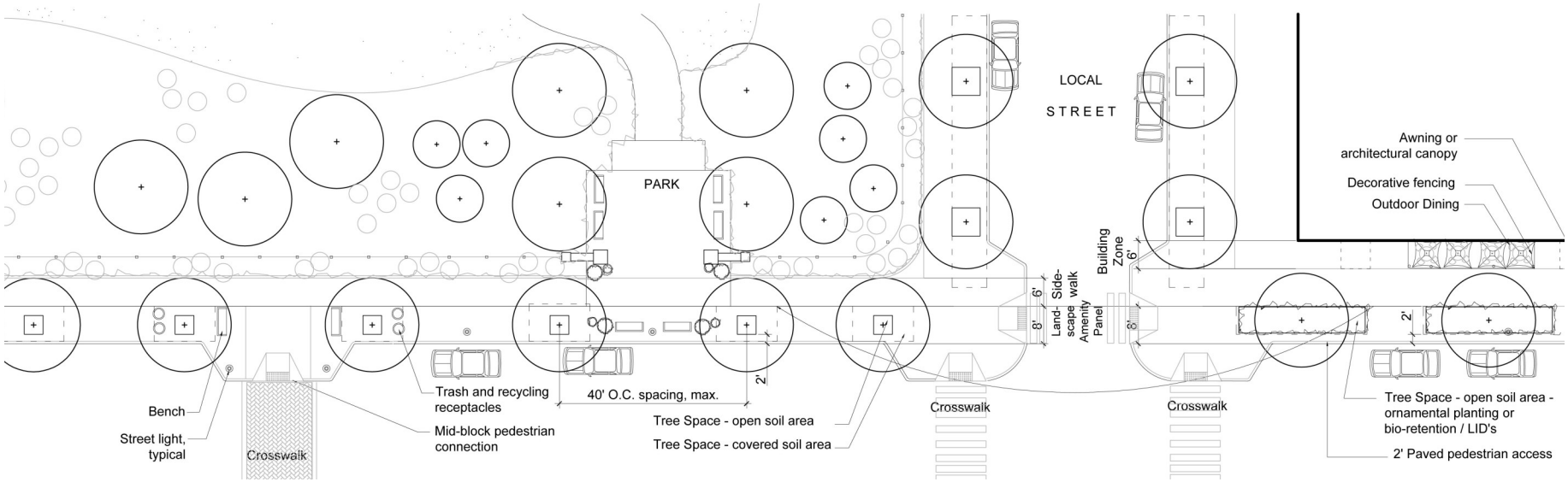
- Provide regularly spaced, publicly accessible **seating** in the building zone and/or landscape amenity panels, where possible. See Section 3.4, Streetscape Furnishings, for suggested seating.

- Consider including **Public art** installations in the building zone or landscape amenity panel.

- In the event that the streetscape is adjacent to a large urban park or other designed landscape that occupies at least one block, the building zone may be eliminated. Sidewalk and landscape amenity panels should align with those located on adjacent blocks.

- Consider both sides of the road, including alignment and spacing of street trees in all streetcape designs.

- Consider Crime Prevention Through Environmental Design (CPTED) strategies that help increase visibility and safety.



General Streetscape Concept Plan
(Note: Streetscape dimensions vary by streetscape type, example shown is a Local Street)

All Measurements shown are from back of curb.

2.2B Boulevard Streetscape Design

The Boulevard streetscape applies to Route 7, Route 123 and International Drive.

Boulevards are the Metro and vehicular gateways to Tysons. They will have wide, tree-lined street edges and will often be where a visitor's first perception of Tysons occurs. Boulevards will be activated with pedestrians moving to and from the Metro and work, browsing at window displays, and shopping in retail establishments. Major art installations and other monumental architectural elements may also be found within the Boulevard streetscape.

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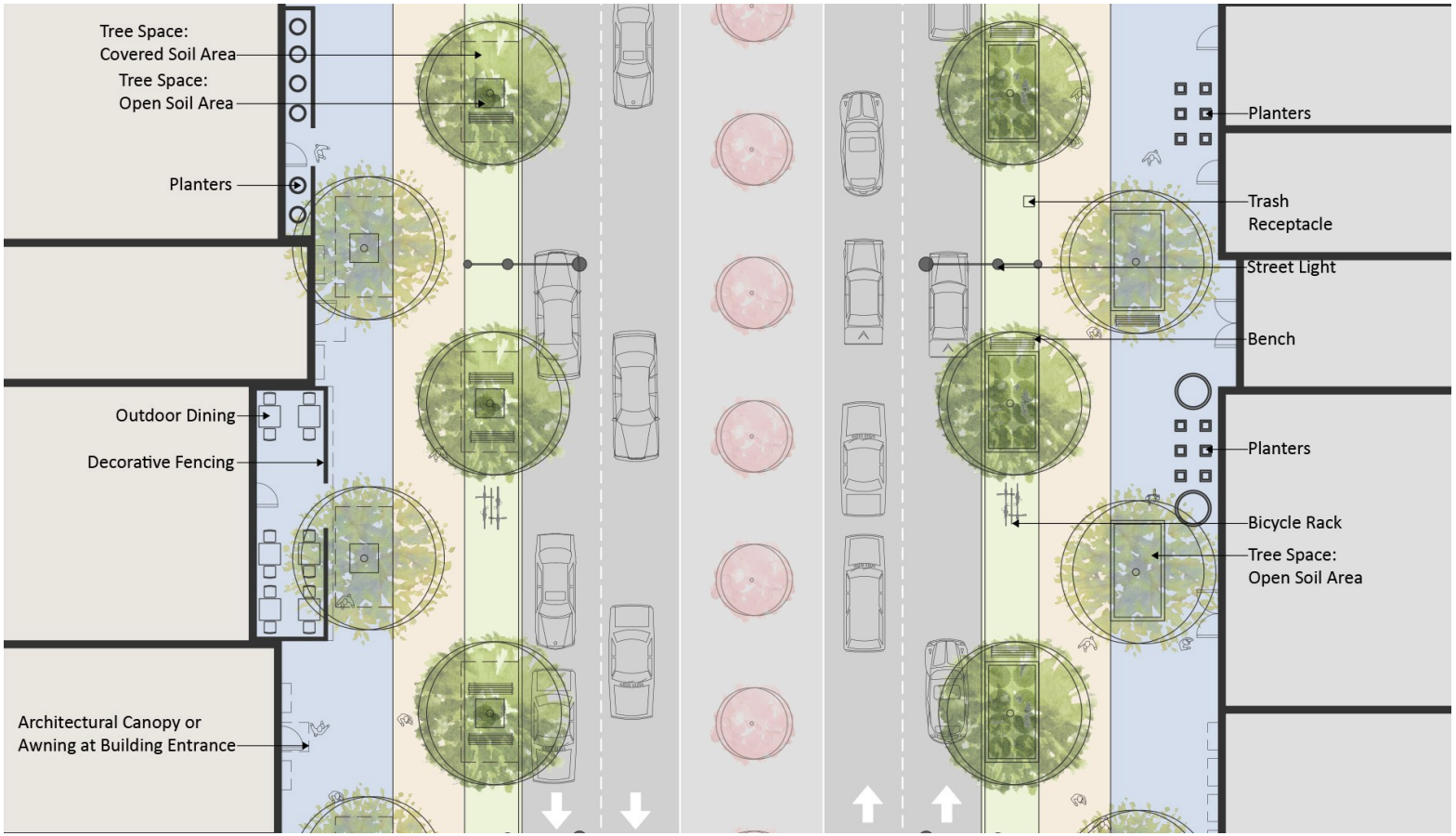
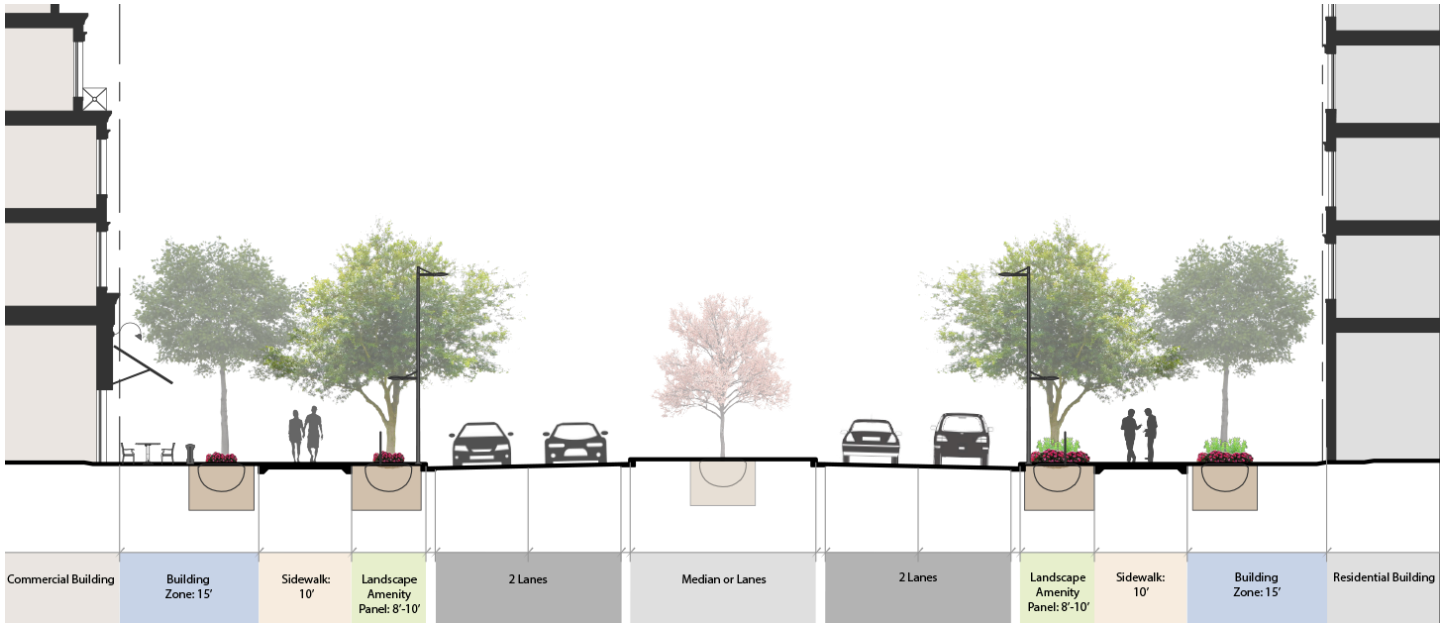


Boulevard Streetscape Example - Plan

Design Suggestions:

- The **building zone** dimension is preferred to be 15 feet wide. If the boulevard must be used for fire access, accommodations can be made by reducing the width of the building zone for certain segments.
- The **sidewalk** is preferred to be 10 feet wide.
- All **landscape amenity** panels are preferred to be 10 feet wide.
- Use **design elements** that are consistent in type and style along the entire length of each Boulevard. This includes street tree varieties, paving patterns and materials, and street furnishings. Chapter 3 provides suggestions for specific plant varieties, hardscape materials, and furnishings.
- Include a staggered **double row of trees** that is spaced at 40 - 50 feet on center. Additionally, clustering groups of trees in groves or bosques would be a successful alternative design along the Boulevard streetscape.
- Include **streetscape lighting** fixtures that illuminate both the roadway as well as the streetscape and pedestrian realm. These fixtures may or may not be physically attached to each other, but they should be consistent throughout the length of the Boulevard.
- The utilities for Metrorail are largely located within the right-of-way along Route 7 and Route 123 and can present challenges in the implementation of the Boulevard streetscape. Flexibility in the streetscape standards may be necessary to accommodate utilities that can not be moved.



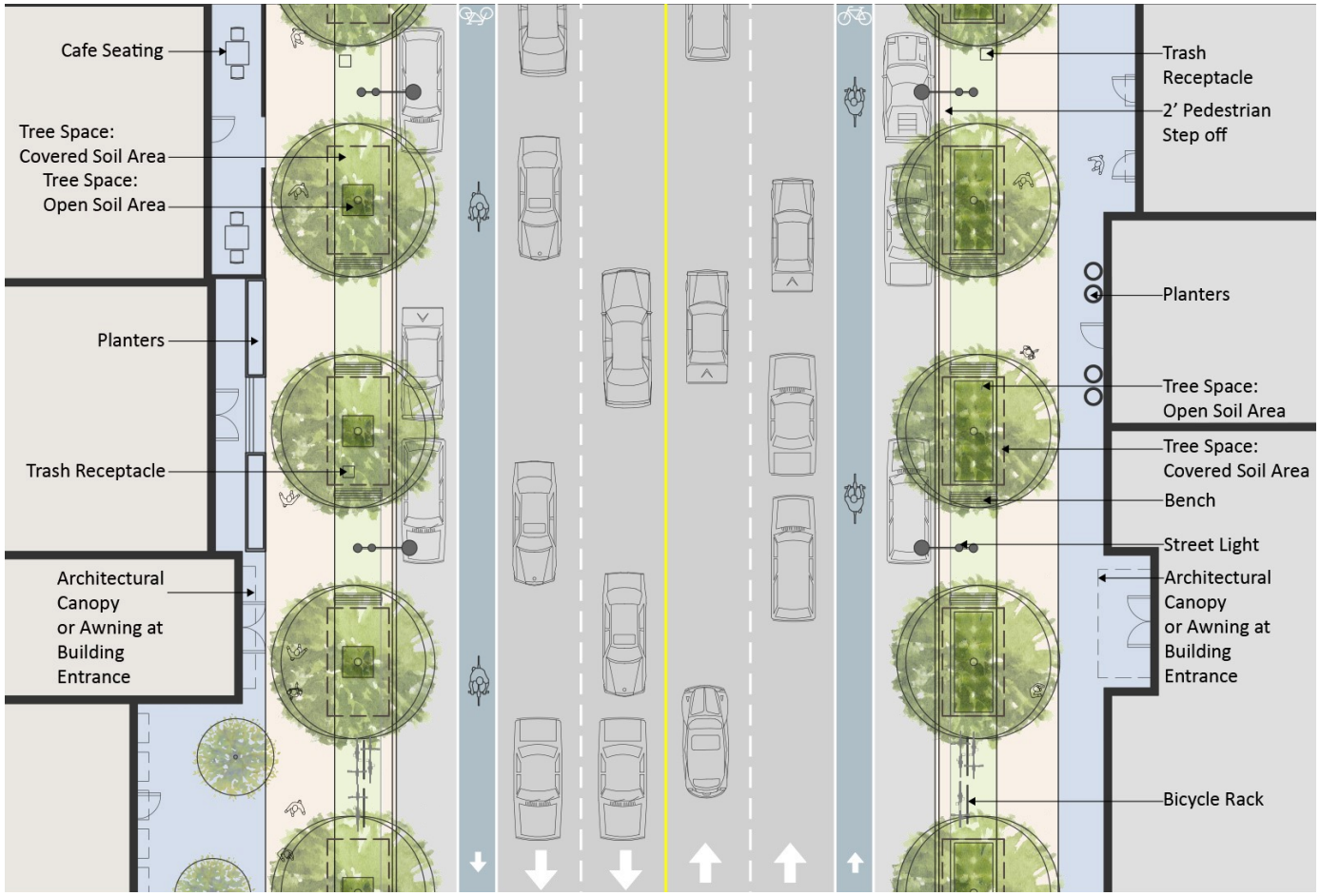
Boulevard Streetscape Example– Section

Note: All measurements shown are from front of curb.

2.2C Avenue / Collector Streetscape Design

Avenues and Collectors will provide connections between the diverse neighborhoods planned within Tysons. Avenues and Collectors may be the location of restaurants, local grocery stores, doctor's offices, movie theaters, shops, small performing arts venues, art galleries, live-work and residential units, as well as fire and police stations. Offices, hotels and residential buildings may also be located along Avenues and Collectors.

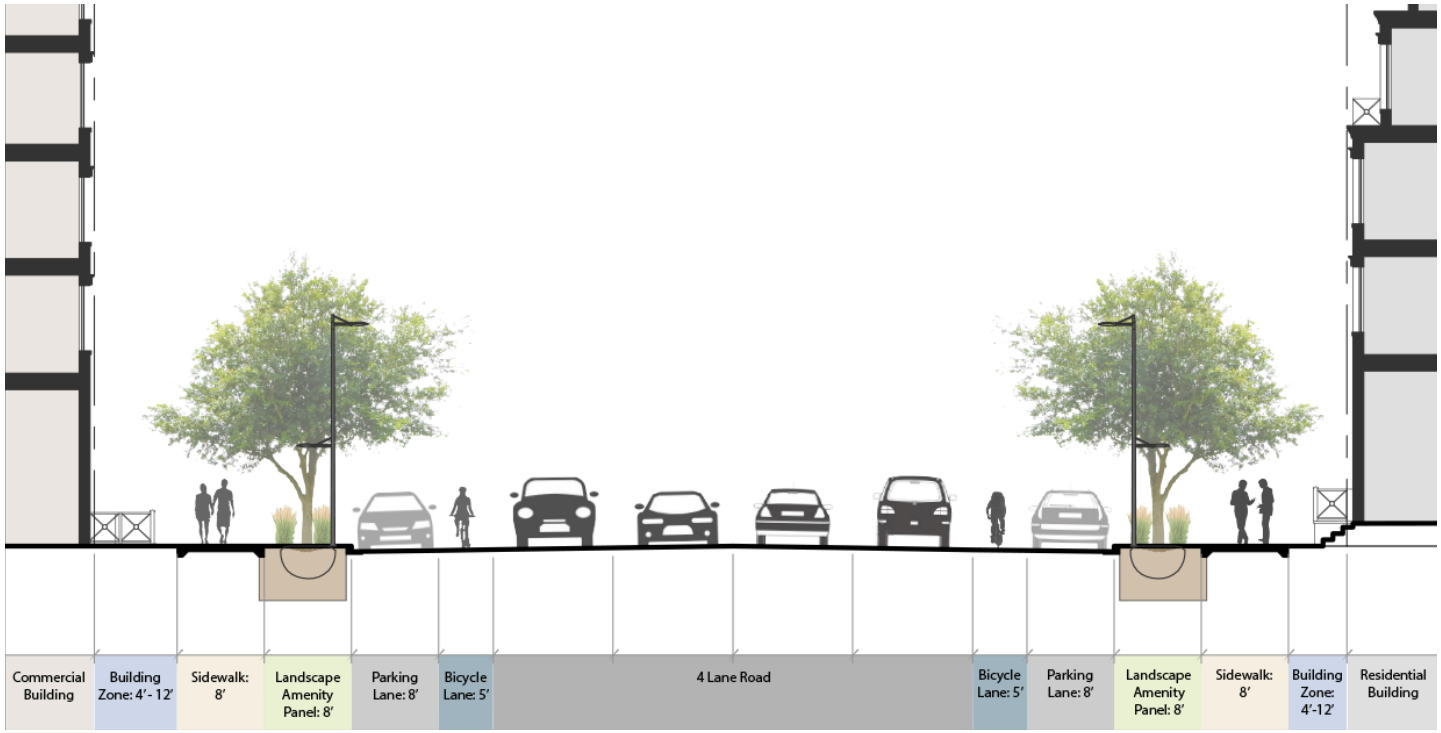
Avenues and Collectors will be the routes for parades and will set the stage for street fairs and farmer's markets. Larger scale urban parks may have their entrances and edges along Avenues and Collectors. Bus and circulator service will make frequent stops along Avenues and Collectors to bring Tysons residents and workers to their daily destinations.



Avenue / Collector Streetscape Example - Plan

Design Suggestions:

- The **building zone** dimension can range from 4 feet to 12 feet in width.
- The **sidewalk** is preferred to be a minimum of 8 feet wide.
- The **landscape amenity panel** is preferred to be a minimum of 8 feet wide.
- Provide a 2 foot wide **paved walkway** adjacent to planting areas and parallel to the curb to accommodate passengers entering and exiting cars parked along the street.
- **Space Street trees** at 30 - 40 feet on center.
- Use **Planting in the building zone** especially when the adjacent land use includes residential development.
- Provide safely designed **mid-block pedestrian connections** at high-activity areas or where intersection spacing exceeds 600 feet to reduce walking distance.
- Include **streetscape lighting** fixtures that illuminate both the roadway as well as the streetscape and public realm.



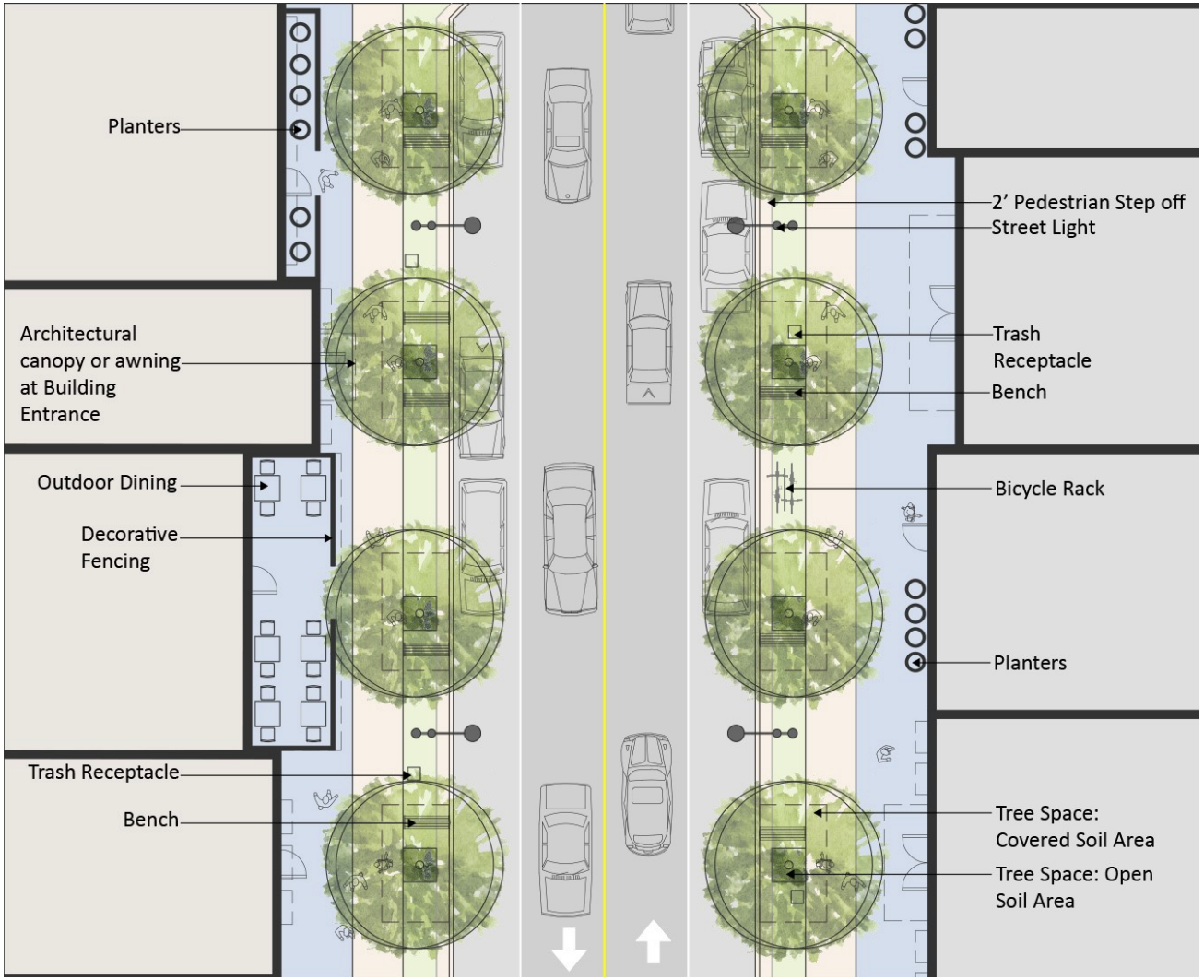
Avenue / Collector Streetscape Example - Section

Note: All measurements shown are from front of curb.

2.2D Local Street Streetscape Design

Local Streets will be home to many of the new residents in Tysons. They will connect residents to their places of employment, their sources of recreation and to Metro. Local streets will include entrances to local playgrounds and parks, small restaurants and coffee houses, and places of worship.

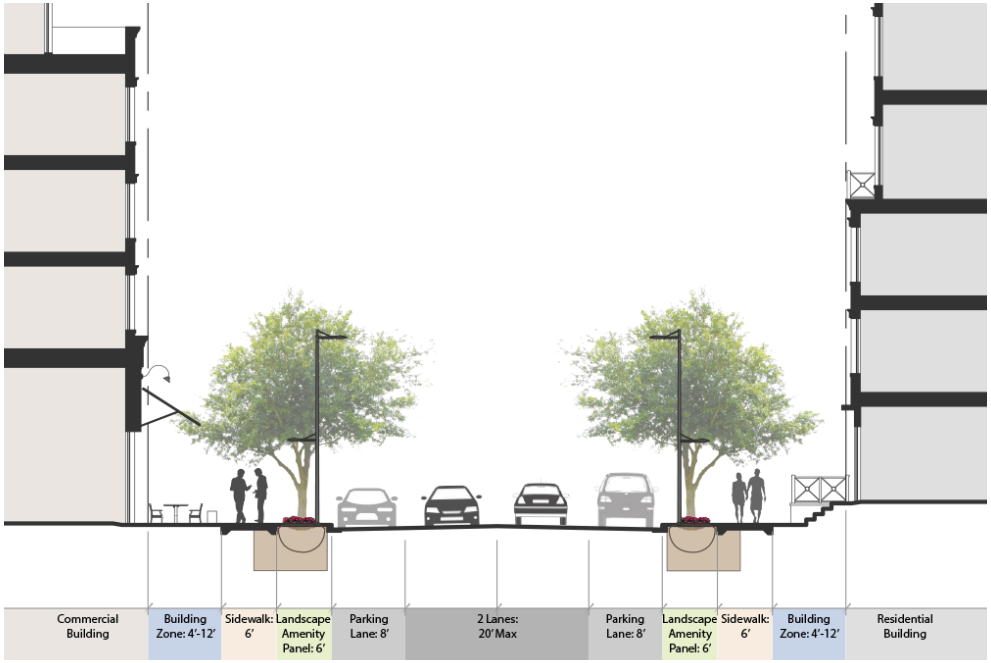
The street edge along Local Streets will be intimate, while providing comfortable pedestrian access along residential and commercial streets. Plantings and trees in the landscape amenity panel will provide visual interest and shade, and will create a clear edge between the roadway and the pedestrian realm.



Local Street Streetscape Example - Plan

Design Suggestions:

- The **building zone** dimension can range from 4 feet to 12 feet in width.
- All **sidewalks** along are preferred to be 6 feet wide.
- All **landscape amenity panels** are preferred to be a minimum of 6 feet wide. (Note: All tree planting spaces must be 8 feet wide. On Local Streets when the Landscape Amenity Panel is 6 feet wide, tree planting spaces should extend beneath the sidewalk zone in order to meet the standards set forth in the Fairfax County Public Facilities Manual. (See Local Street Streetscape Example - Sections A and B on the opposite page and planting details in Section 3.6.)
- Use **planting in the building zone** when the adjacent land use includes residential development.
- Provide a 2 foot wide **paved walkway** adjacent to planting areas, parallel to the curb, to accommodate passengers entering and exiting cars parked along the street.
- **Space street trees** at 30 - 40 feet on center.



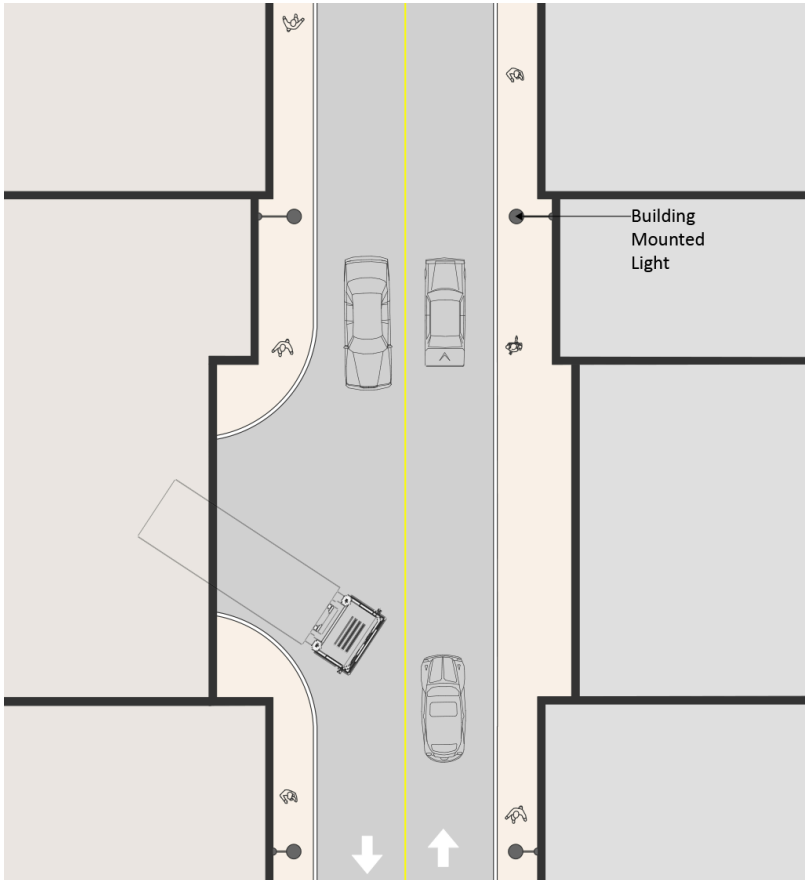
Local Street Streetscape Example - Section

Note: All measurements shown are from front of curb.

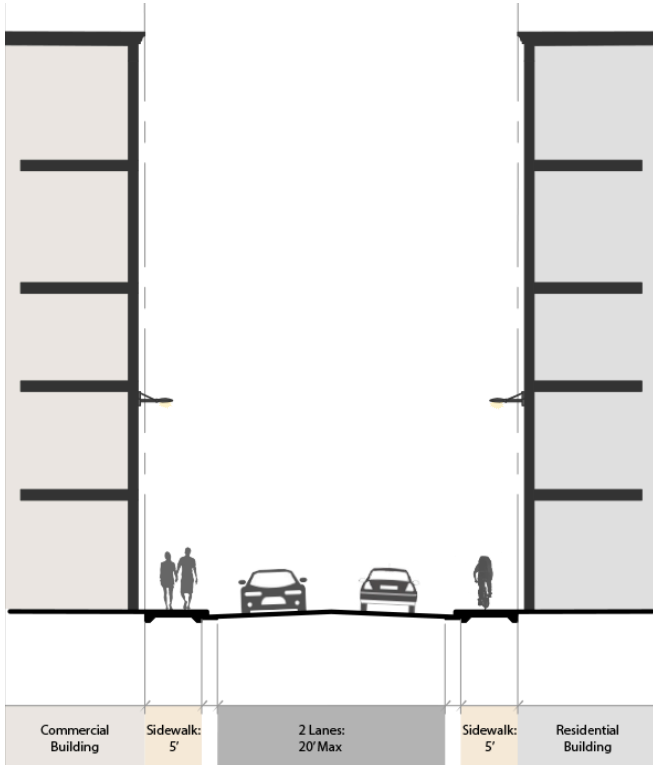
2.2E Service Street Streetscape Design

Service Streets will provide access to parking, loading docks, waste management, utilities and other back-of-house operations. While service streets are not designed primarily to serve pedestrians, they should still be safe and accessible. Service Streets may be purely functional but should also provide opportunities for unique, intimate, and hidden places within the urban fabric. Cady's Alley in Washington, DC is an example of this type of space. Alleys should also be considered a place to implement LID strategies such as pervious pavement to reduce stormwater runoff.

The design of service streets can vary. Some may provide more a more enhanced pedestrian experience, depending on the pedestrian hierarchy and the use of the streetscape to meet other Plan goals such as tree canopy and stormwater management. Some service streets may perform more like local streets rather than alleys and include amenities such as street trees and enhanced lighting.



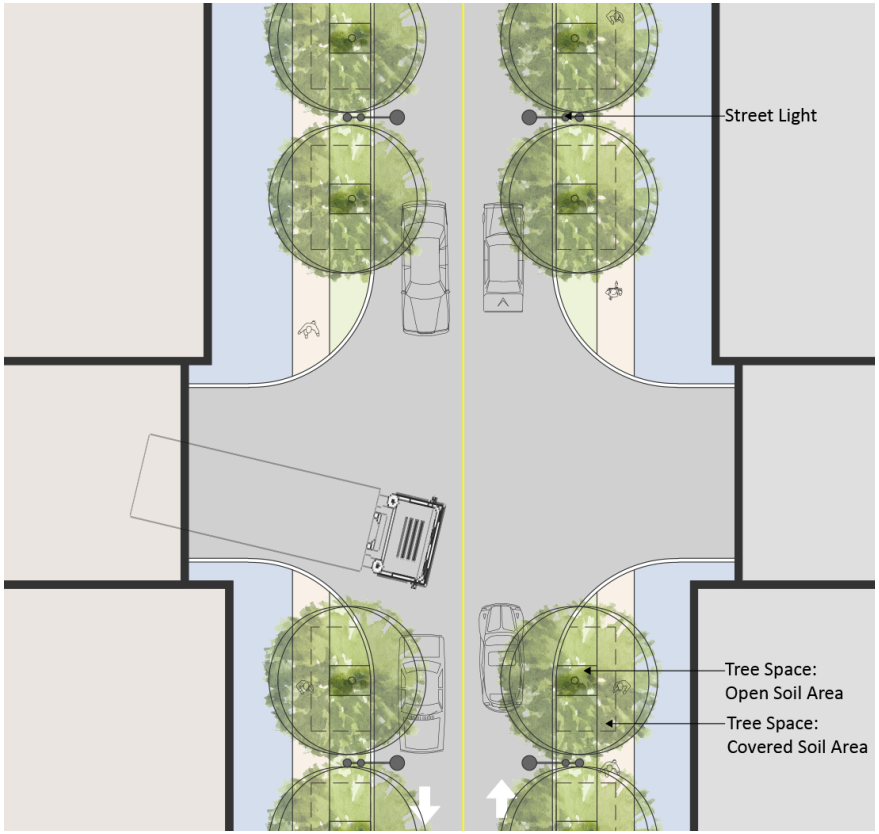
Service Street Streetscape, no landscaping, Example - Plan



Service Street Streetscape, no landscaping, Example - Section

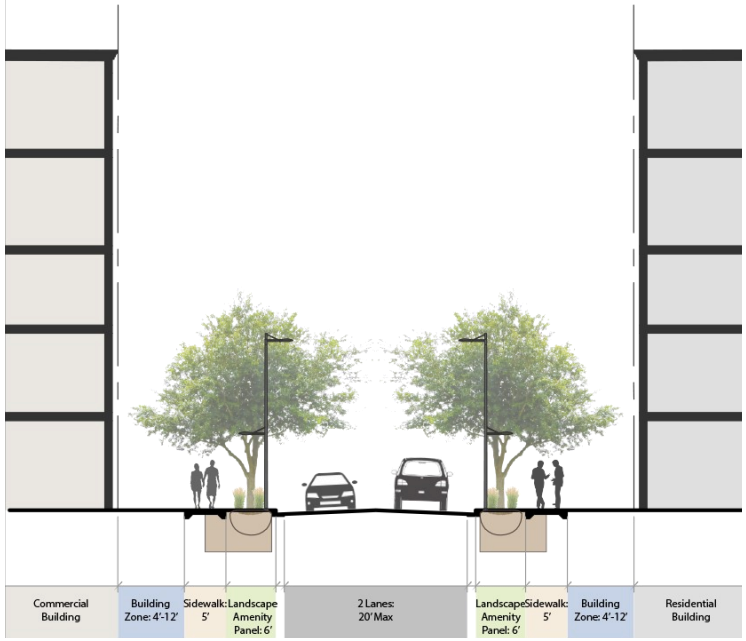
Design Suggestions:

- Build **utility and service operations** such as waste storage, waste collection and loading docks into the mass of the building.
- Provide a 5 foot minimum width unobstructed **walkway** for pedestrians.
- Consider eliminating **curbs** provided that pedestrian ways are clearly distinguished using material color or texture changes and positive drainage is accommodated.
- Consider including high quality and well-designed, building-mounted **street lighting** to illuminate the public realm and decrease conflicts between sidewalk amenities and pedestrians.
- Designation of **ADA-accessible parking** or locating the primary accessible path to a building is not allowed on service streets.
- Consider **pervious paving** systems for sidewalk and street paving.



Service Street Streetscape with Landscape Amenity Example - Plan

Note: All measurements shown are from front of curb.



Service Street with Landscape Amenity Streetscape Example - Section

2.3 Street Crossing Design

Creating a new urban environment brings with it the need to balance and accommodate the needs of a wide range of street users including pedestrians, bicyclists and motorists. In the efforts to design this new environment, prioritizing safety for all people, but particularly the more vulnerable groups (children, the elderly and those with disabilities) and vulnerable modes (walking and bicycling) becomes crucial. Care must be given to the design of safe and frequent pedestrian crossings and bike paths through intersections.

A crosswalk is defined as the portion of roadway designated for pedestrians to use in crossing the street. Crosswalks indicate preferred locations for pedestrians to cross and help designate right-of-way for motorists to yield to pedestrians. The design and treatment of crosswalks and bike crossings should help create a safe pedestrian and bicycle network throughout Tysons and should be coordinated with FCDOT and VDOT. The following are crossing design suggestions and diagrams of typical intersections that can be applied to street crossing design in Tysons.

Design Suggestions:

- Install stop bars ten feet from all crosswalks to provide a buffer between vehicles at intersections and pedestrians crossing the streets.

- Install Leading Pedestrian Intervals (LPIs), in which intersection signals allow pedestrians to cross before traffic, at crossings where there is a high volume of turning vehicles, particularly where the pedestrian crossing distance is long.

- Install pedestrian countdown signals at all signalized crossings and provide adequate time so that pedestrians of all mobility levels can safely cross the intersection. Locator tones for the visually impaired may also be included.

- Install high visibility crosswalks on all streets with more than one moving lane in each direction to make the crosswalk more visible to both pedestrians and motorists as seen in the diagrams in sections 2.3A, 2.3B, and 2.3C on the following pages.

- Provide curb extensions or bulb-outs into the parking lane wherever feasible. As seen in the diagrams in sections 2.3A, 2.3B, 2.3C, and 2.3D on the following pages.

- Utilize mid-block crossings, where warranted, to reduce walking distances at primary pedestrian crossings and on street types where warranted and safely accommodated. All mid-block crossings are subject to review by FCDOT and VDOT.

- Incorporate mid-block curb extensions into the parking lane at all signalized mid-block crossings and signalize midblock crossings on streets with more than one moving lane in each direction. Unsignalized mid-block crossings may be considered on local streets but are subject to review by FCDOT and VDOT.

Benefits of Curb Extensions / Bulb-outs:

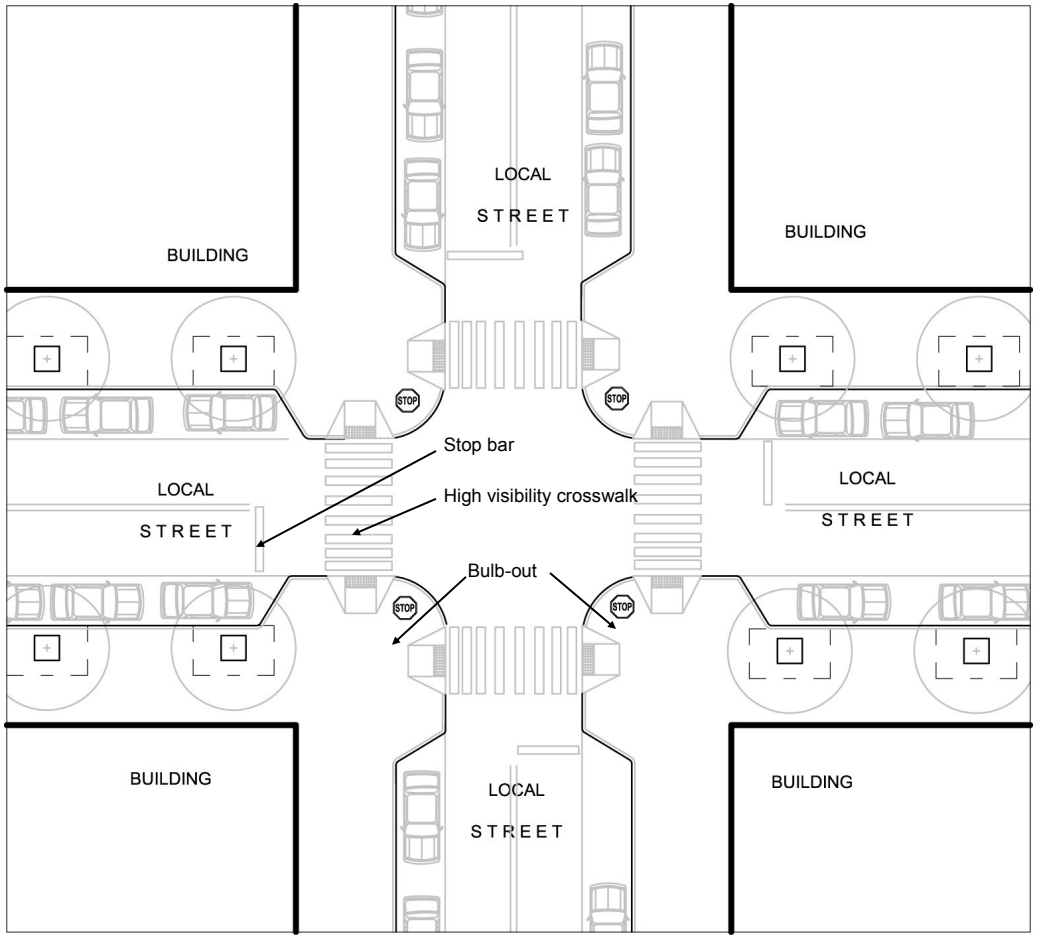
- Calms traffic by physically and visually narrowing the roadway
- At a corner, slows turning vehicles and emphasizes the right of way of crossing pedestrians
- Shortens crossing distance, reducing pedestrian exposure and minimum required signal time for crossing
- Improves the ability of crossing pedestrians and drivers to see each other
- Makes the crosswalk more apparent to drivers, encouraging them to stop in advance of the crosswalk and reducing illegal parking within crosswalk
- Reinforces lane discipline through the intersection; prevents vehicle passing in parking lanes
- Provides additional pedestrian space and reduces crowding, particularly for queing at crossings and bus stops
- Creates space that may be used to locate street furniture, bike parking, bus stop, public seating, and street vendors, potentially reducing clutter in the sidewalk zone
- Keeps fire hydrant zone clear when located in front of a hydrant
- Defines the ends of parking
- Can include vegetation to help mitigate air pollution and capture carbon dioxide from the air, improving environmental health and public health

Sections 2.3A to 2.3D illustrate conceptual and typical intersection designs including the use of bulb outs and curb extensions, high visibility crosswalks, pedestrian refuge areas, and other intersection design concepts.

Opposite Left: Pedestrian crossing street, NYC, Image: Newcity.com

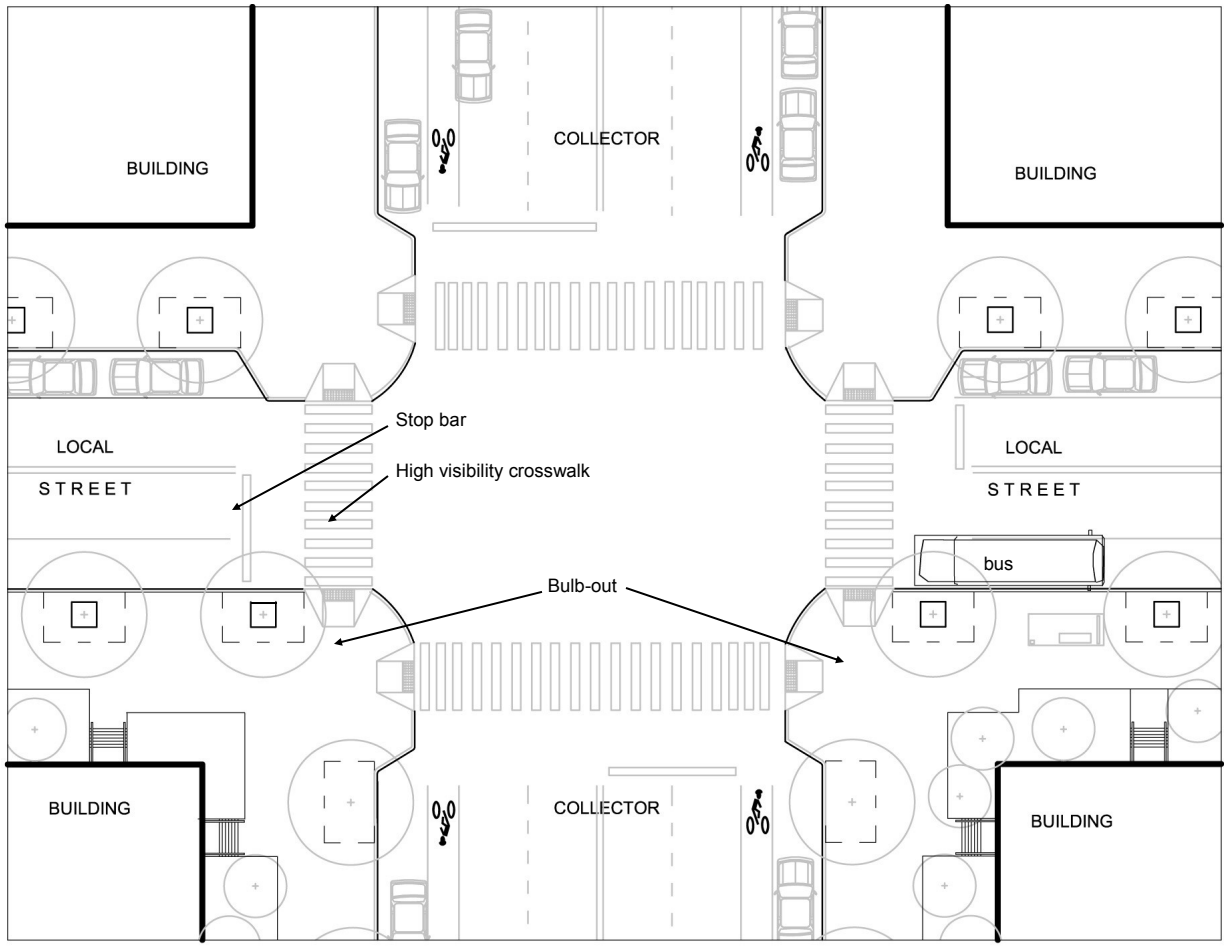
Right: Intersection at 9th Ave. bike lane, NYC, Image: NYCDOT

2.3A Local Street / Local Street Intersection Crossing Design



Local Street / Local Street Intersection (4-way, Stop Controlled)

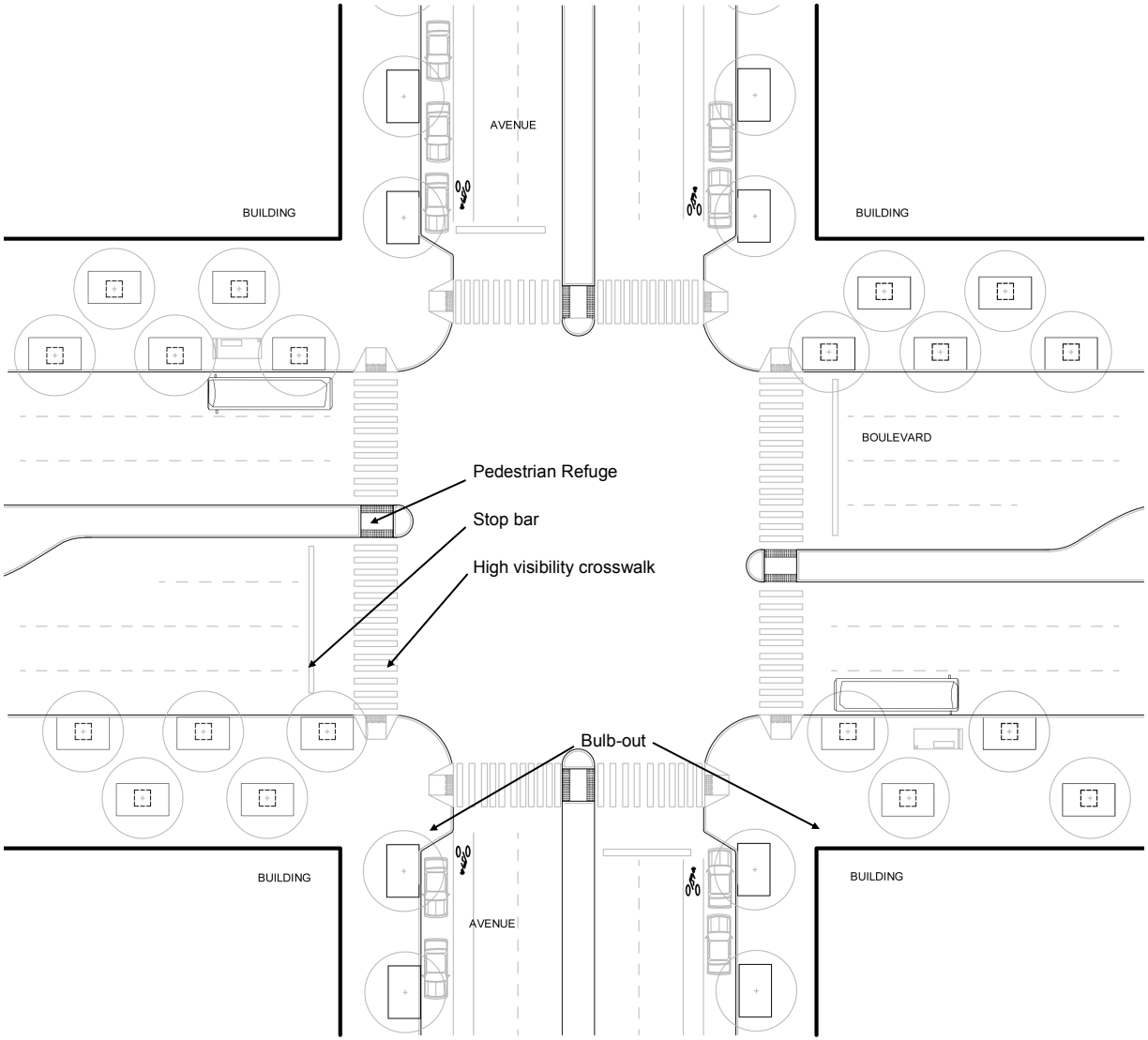
Note: For conceptual purposes only. Street sections may vary.



Local Street / Collector Intersection (Signalized with Bus Service)

Note: For conceptual purposes only. Street sections may vary.

2.3C Boulevard / Avenue Intersection Crossing Design

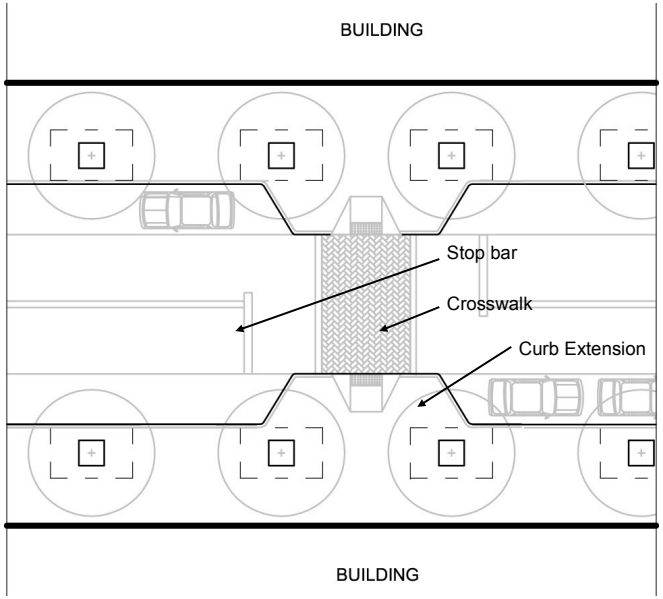


Avenue / Boulevard Intersection (Signalized with Bus Service)

Note: For conceptual purposes only. Street sections may vary.

2.3D Mid-Block and Loading Entrance Design

Careful consideration should be given to the spaces where there is potential for pedestrians and vehicles to conflict. Street designs that minimize the distance a pedestrian has to cross a street are encouraged. In addition, loading and parking entrances that are located along high pedestrian volume areas should include elements such as textured pavers, bollards, special lighting, flush curbs, and other elements that alert pedestrians and vehicular drivers to pay special attention without disrupting the pedestrian flow on the sidewalk. In particular instances, raised tables may need to be considered. There are multiple design solutions for addressing the potential conflicts between pedestrians and vehicles, and the solution may vary depending on the site conditions.



Mid Block Crossing (Signalized)

Design Solutions for Loading and Garage Entrances. Images: LandDesign

Note: For conceptual purposes only. Street sections may vary.

2.4 Pedestrian Hierarchy

The streetscape designations described previously in this chapter provide a structure for the basic form of the streetscape primarily related to the adjacent street network. However, the street designation does not necessarily relate to how pedestrians will use the streetscape. For example, pedestrians might avoid walking along a noisy, high-traffic boulevard, while a smaller, local street, may be the location of numerous outdoor cafes and other significant pedestrian activity.

Developments should consider how the streetscapes will function, how they might be used, and how people will move through the space. Streetscapes should be designed for flexibility in uses. A hierarchy of pedestrian experiences should be developed within each neighborhood and throughout Tysons to reinforce an integrated connective network that provides a safe, functional and enjoyable pedestrian environment. As a result, a hierarchy plan will use the street grid as a basis, but may not necessary relate to the underlying streetscape designations in terms of functionality for pedestrian-oriented activities and level of use.

As the pedestrian hierarchy is looked at as a holistic network, every site may not have a primary corridor. The pedestrian paths should be considered in context with the site's proximity to metro and any adjacent planned developments.

Goals of a Pedestrian System and Hierarchy:

A pedestrian hierarchy plan shows how pedestrians will use the street network. It recognizes that some routes will be more used that others, and that some streets may be used for different functions by pedestrians. Some corridors can be used primarily for movement or access, while others may be used for social interaction, shopping and dining. A clearly defined pedestrian hierarchy can help focus pedestrian-oriented activities in certain areas and coordinate future development along corridors to support a public realm that provides an appropriate level of comfort, utility and amenities. Further, the pedestrian hierarchy will:

- Connect Tysons through the provision of an organized system of pedestrian routes through, between and among neighborhoods
- Reinforce transit-oriented development patterns
- Facilitate connections to transit facilities and bus stops
- Support active and attractive pedestrian areas within neighborhoods
- Help determine locations for retail, outdoor dining, and other uses which support business viability
- Connect parks, libraries, schools, community centers, and other civic uses

Using a Pedestrian Hierarchy

Creating a hierarchical pedestrian system furthers the development of a pedestrian-friendly Tysons. As such, it is a tool that can assist developers, property owners, businesses and the County in making appropriate decisions to support this goal.

A pedestrian hierarchy will help organize and orient land uses that are supportive of the most important pedestrian corridors. Understanding the hierarchy can help determine potential locations for retail and urban parks so that these uses can build upon positive adjacencies with other projects within the district, and will assist in identifying the most appropriate locations for parking and access, mechanical spaces, and other non-active uses. Above all, a pedestrian hierarchy helps provide a context for proposed development so that it may be understood within the larger networks of transportation, urban parks and land use.

Understanding the pedestrian hierarchy helps inform site and building orientation, and provides guidance regarding building facades and their treatment. Each of these elements can contribute to a functional and pleasurable pedestrian realm. It is important that the design of buildings and sites consider their impacts on the pedestrian experience early in the design process. The pedestrian hierarchy proposed can also provide guidance for the phasing of pedestrian and public realm improvements.

The pedestrian hierarchy plan should be one of the first decisions undertaken when starting site layout and design work, as the hierarchy has implications for building footprints and impacts on pedestrian spaces. For example, siting potential locations for outdoor dining is important to do at the outset, as outdoor dining typically needs a larger building zone than the minimum.

Opposite Left: Residential streetscape

Above Right: Residential streetscape

Bottom Right: Pentagon City streetscape, Arlington, VA

2.4 Pedestrian Hierarchy

The pedestrian hierarchy plan utilizes four corridor categories: Primary, Secondary, Tertiary, and Service Streets/Alleys. These categories are distinct and separate from the streetscape designations. The following descriptions provide an overview of these categories. The chart on the opposite page provides a synopsis of each, including some recommendations regarding their applicability.

Primary Pedestrian Corridors

Primary Pedestrian Corridors are intended to have the highest levels of pedestrian activity and interaction. They typically occur near transit stations and are the location of significant retail, major building entrances, and social and civic gathering spaces. Primary Pedestrian Corridors support pedestrian circulation, but should also include spaces for outdoor gathering, sidewalk cafes and browsing areas. As a result, these areas typically have the widest streetscape and most animated building facades. These corridors may be identified as a neighborhood destination in and of themselves.

Secondary Pedestrian Corridors

Secondary Pedestrian Corridors typically have significant pedestrian volumes, and generally are utilized for pedestrian movement as opposed to pedestrian interaction. Some retail activity that is generally more neighborhood or district-serving occurs within these corridors. Residential and civic uses should have their entrances facing Secondary Pedestrian Corridors. These corridors typically have wider streetscapes to facilitate pedestrian movement, and a significant level of building façade animation to create an interesting and comfortable walking environment.

Tertiary Pedestrian Corridors

Tertiary Pedestrian Corridors support pedestrian connectivity through and between neighborhoods. These corridors typically include residential entrances, access to parking, and limited access to loading and service facilities. Any retail which occurs will typically be found at intersections with other more significant streets. Residential yards and stoops typically can be found along this corridor type. Building facades provide some variation and level of detail to create an interesting and comfortable walking environment.

Service Streets & Alleys

These include any remaining corridors (not previously categorized) which may support other pedestrian movement or connectivity. These typically include the most basic streetscape amenities, including sidewalks and lighting. Landscape buffers may be provided when adjacent to exposed parking garages or in order to meet other plan goals, such as tree canopy or stormwater management retention. Mechanical and service spaces, along with loading, can be found in these areas.

Pedestrian Hierarchy Plan Designations

	Primary Pedestrian Corridors	Secondary Pedestrian Corridors	Tertiary Pedestrian Corridors	Service Streets & Alleys
Primary Activities	Major pedestrian movement and interaction Primary building entries and lobbies Direct access to parks and open spaces Retail opportunities Outdoor dining Access to major public facilities, civic and cultural institutions	Major pedestrian movement Building and unit entries Access to parks and open spaces Some retail Limited parking garage access	Pedestrian connectivity Unit entries Parking garage access	Parking garage access and frontage Building service functions
Building Zone	Widest Building Zone to allow for outdoor dining and other activities	Widest Building Zone sufficient to allow for outdoor dining and other activities	Building Zone may include residential yards and stoops	Varies
Active Uses (Ground Floor)	~80% Active uses along street frontage Pedestrian Entrances every 15'- 40' ~70% Façade transparency Parking decks screened with active uses	~60% Active uses along street frontage Pedestrian Entrances every 15' - 60' ~50% Façade transparency Parking decks screened with active uses	~30% Active uses along street frontage Pedestrian Entrances at 15' - 100' ~30% Façade transparency Parking structures screened with architectural treatment	Facade articulation and changes to vertical plane every 180' for visual interest. May include landscape buffers for garages Parking structures screened with architectural treatment
Active Uses (Above the Ground Floor)	~80% Active uses along street frontage Parking decks screened with active uses	~60% Active uses along street frontage Parking decks screened with active uses and architectural treatment	~30% Active uses along street frontage Parking decks screened with architectural treatment	Facade articulation and changes to vertical plane every 180' +/- for visual interest.

2.4 Pedestrian Hierarchy

Creating a Pedestrian Hierarchy Plan

The pedestrian hierarchy system is an organizing feature for the whole of Tysons. The pedestrian system provides links within developments as well as between and among developments. As such, the pedestrian hierarchy plan for an individual development must be considered in the larger context of Tysons as a whole.

All applications will be expected to include a pedestrian hierarchy plan, using the designations described in this section, as applicable. Existing and future street alignments, along with potential sidewalk and trail corridors, should be shown with their pedestrian hierarchy category. In developing this plan, the Tysons-wide system should be considered and the proposal should demonstrate how the site will be integrated into that system. In addition, it is anticipated that site features such as building orientation, building zones, service areas, enhanced placemaking opportunities, etc. will be located in a manner that is responsive to the category.

In most cases, the Metrorail stations and their landings act as an organizing feature. In addition, the pedestrian hierarchy system should take into consideration:

- Access to other transit facilities, in addition to rail
- Existing and proposed bicycle routes
- Proposed transit and circulator routes
- The character of the existing and proposed road network, including street widths, vehicular traffic flow, and connectivity within and between districts
- Existing and planned uses both on-site and in the area
- Existing and planned density and intensity of development both on site and in the area
- The existing and proposed network of urban parks and other resource-based amenities
- Other potential amenities or other place-making features
- Connections to existing neighborhoods within and surrounding Tysons

Above: New York City sidewalk, New York City, NY, Image: Flickr

Design Suggestions:

- Pedestrian circulation should occur at ground level to the greatest extent possible. Above-grade skybridges or below-grade pedestrian tunnels are strongly discouraged as they detract from the vibrancy of the streetscape. Further, skybridges and tunnels can pose challenges for security and public access.

- Active uses, such as retail, should occur at street level along the appropriate pedestrian corridors. Such uses should have their primary entrances from the sidewalk. Above-grade retail or retail accessible only from interior courtyards or lobbies is strongly discouraged.

- In locations where retail is not expected to be viable, consider other active uses like live-work units, offices, or walk-up residential units to provide activity along the street.

- Pedestrian corridors which must pass through the interior of buildings are strongly discouraged. Pedestrian circulation should be focused on publicly-accessible sidewalks and open spaces which are located outdoors.

2.4 Pedestrian Hierarchy

Enhanced Placemaking Opportunities

In addition to pedestrian corridors, locations for enhanced placemaking should be indicated on the pedestrian hierarchy plan. These are intended to highlight certain areas as places of importance, or opportunities to emphasize the character or identity of a district, corridor, neighborhood, or development. These can be locations of retail, civic facilities, urban open spaces, public art, special architecture and/or other elements which create an identifiable destination.

Enhanced placemaking opportunities can include:

- Iconic architecture, or unique architectural elements (A).
- Civic or cultural uses, either stand-alone buildings or within mixed-use developments (B).
- Public open spaces, such as common greens, plazas, or pocket parks (C).
- Special landscape and hardscape elements, such as water features and seating areas (D).
- Special retail destinations (E).
- Public art, either in permanent installations, or places designed to accommodate changing art (F).
- Signature sites, as discussed in Section 4.7.

A

B

C

E

D

F

2.4 Pedestrian Hierarchy

Designing and Accommodating Outdoor Dining

The location of outdoor dining is highly related to pedestrian movement and typically occurs in areas with high pedestrian volumes. Outdoor dining also impacts building design and building zone widths and should be located early in order to avoid negative impacts on the pedestrian realm.

Outdoor dining is highly encouraged to be located in the building zone and should be clearly defined by the use of low fencing, walls, or planters to create a clear separation from the private dining and public walking spaces. The sidewalk zone should always remain clear of encroachments from outdoor dining areas. Outdoor dining space is discouraged in the landscape amenity panel, as separation between the building and the outdoor dining space creates conflicts with pedestrian flow, on-street parking, tree spaces, and alcohol control laws.

The images provided on this page are examples of well designed and integrated outdoor dining spaces.

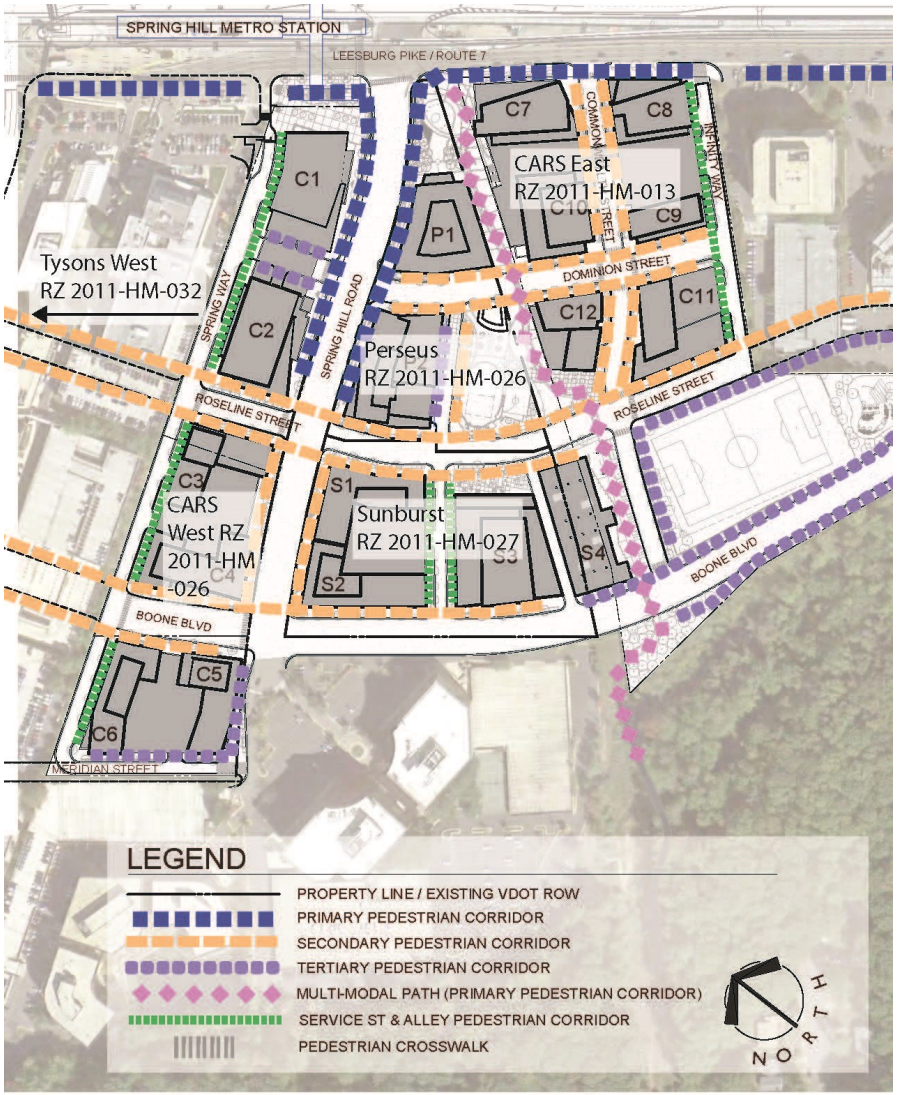
Pedestrian Hierarchy Plan – Map

The pedestrian hierarchy plan is closely aligned with the grid of streets and it may not necessarily relate to the streetscape types described in Chapter 2. Although boulevards may have the greatest vehicular traffic, they may not be the locations of the greatest pedestrian traffic, for example. Many primary pedestrian corridors may be located on smaller streets which have less vehicular traffic and a more appropriate pedestrian scale. Not every development will have a primary corridor; developments should be considered in context with adjacent developments and in relation to the metrorail station.

The pedestrian hierarchy plan shown on this page is an example demonstrating features of a good plan. The previous pages in this chapter provide guidance on the purpose and intent of the plan, as well as additional descriptions of the various features.

A pedestrian hierarchy plan should:

- Extend beyond the boundaries of the site a sufficient distance to encompass nearby features that are pedestrian "attractors" (such as the Metro station on the example plan)
- Indicate pedestrian "attractors" and other significant features that are located further away and not shown on the plan using directional arrows, such as a civic plaza or performing arts venue
- Identify Primary, Secondary and Tertiary Pedestrian Corridors (see pages 2-30 to 2-31)
- Identify building entrances and other pedestrian "attractors" such as significant features on or off-site (see pages 2-32 to 2-35)
- Identify ground floor uses
- Coordinate with proffered commitments relating to fenestration, building design and activated streetscapes



Opposite Left: Ponce City Market, Atlanta, GA. Image: Stephanie Pankiewicz

Opposite Middle: Outdoor dining space, Image: Staff

Opposite Right: Streetscape in Washington, DC, Image: Staff

Above: Pedestrian Plan from CARS West CDP, Tysons, VA. Image: LandDesign


THE CHILDREN'S PLACE
THE CHILDREN'S PLACE
Shoppe
SALE
ONE WAY

3

Streetscape Guidelines, The Details

3. STREETSCAPE GUIDELINES, The Details

The streetscape in Tysons serves many purposes and creates a visual character for the area. For the pedestrian, it is the surface upon which pedestrians will walk, a place to connect with transit, a place to rest, a place to acquire goods, a place to eat and drink, a place to enjoy at night as well as during the day, and a place to browse into store windows. The streetscape also serves the transportation network not only as a multi-modal connector for people, but as a place where cars and people experience signage that allows them to navigate the city streets. It also is where on-street parking is purchased and monitored and where bicycles park. Finally, the streetscape is a conduit for utility and infrastructure such as stormwater, electricity, fiber optic lines, gas and other utilities. What would appear to be simply sidewalk and street trees is a functioning system, comprised of many elements, that is used by many people.

All of the above functions require a physical presence in the streetscape; for this reason, attention must be paid to how all of the furnishings and amenities are organized in the streetscape such that pedestrian flow is not inhibited. In addition, above ground telecommunications equipment should be integrated into light poles or blended with street furniture or other structures in order to minimize its visual impact on the pedestrian realm. The following section describes where to locate streetscape elements and provides guidance on specific furnishings that should be used in Tysons.

In general, the aesthetic for the streetscape elements in Tysons should embrace innovative and contemporary design concepts, materials, and forms.

For new streets in Tysons, refer to Section 2.2 in these guidelines for the appropriate streetscape dimensions and zones. Although on public streets, the public right-of-way line falls somewhere within the expanse of the streetscape, it is expected that the right-of-way line will be invisible to the eye, and that the design and maintenance of the streetscape will be consistent in character and quality for the entire streetscape width, from the curb to the building face.

All of the elements described in this section should be supplied, installed and maintained by the private sector and should be included in a streetscape furnishings plan in all Final Development Plans (FDPs). This maintenance will include, but not be limited to:

- Care, repair, and / or replacement of paving, lighting, and all street furnishings
- Horticultural maintenance and irrigation of all plantings including street trees, planters and shrub and groundcover plantings
- Replacement of any dead or dying plantings
- Regular maintenance including snow removal and debris pick up

The following recommendations for pedestrian realm streetscape details apply to all streetscape areas between the curb and build-to line on both public and private streets. They include hardscape elements, paving, planting, lighting, benches, litter and recycling receptacles, bike racks, signage and public art. Each section includes a description and design suggestions for each streetscape element.

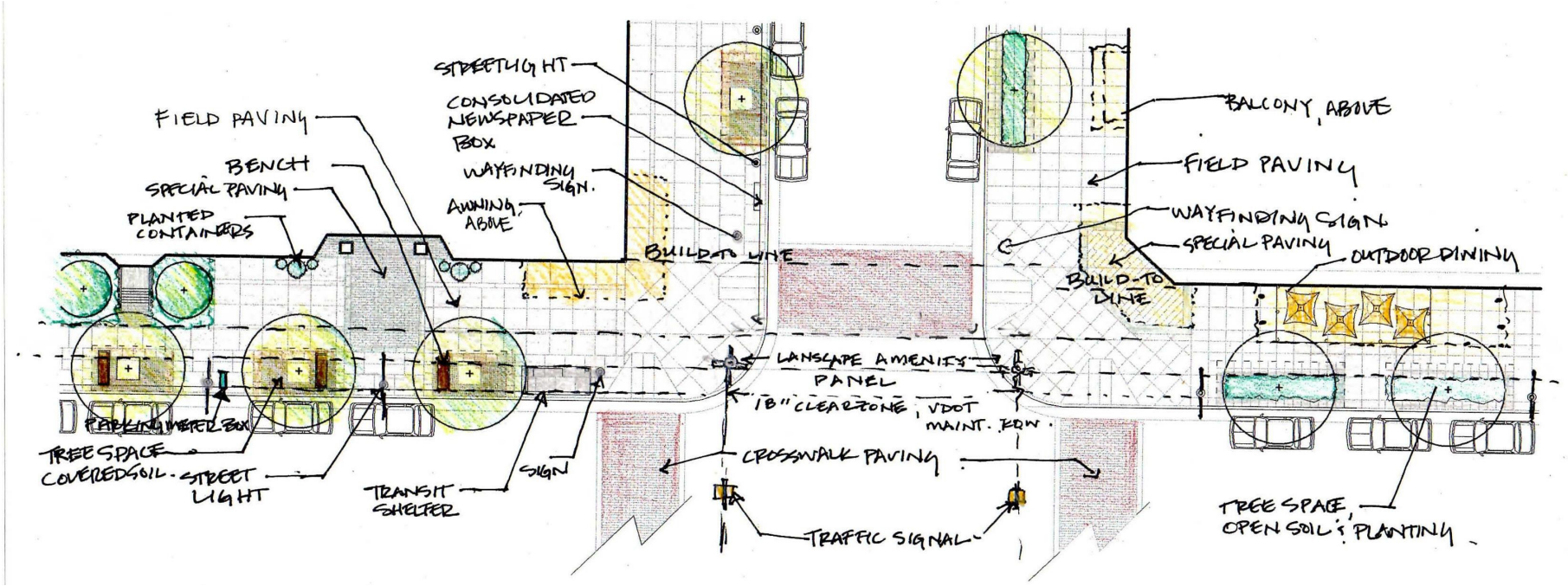
Although unique design elements will emerge in all of the Tysons neighborhoods, there are several streetscape elements that should remain consistent throughout Tysons so they act as wayfinding elements and provide a degree of visual consistency. This section provides specifications for the preferred streetscape elements and design suggestions for the other elements.

The preferred materials include:

- Paving materials for primary pedestrian corridors (See Section 3.2D)
- Streetscape pole-mounted lighting (See Section 3.3)
- Streetscape furnishings by subdistrict including benches, litter and recycling receptacles, and bike racks (See Section 3.4)

It is anticipated that there will be cases when the recommended streetscape elements may need to be modified and flexibility will be provided as required on a case by case basis.

As neighborhoods develop over time, these guidelines will be updated to reflect the character of and precedent set by each place. Additionally, future revisions will include product and technology innovations that may need to be added or modified.



Above: Design sketch of a Local Street streetscape in Tysons.

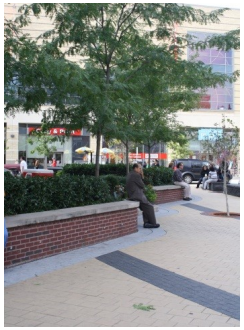
3.2 Hardscape Design

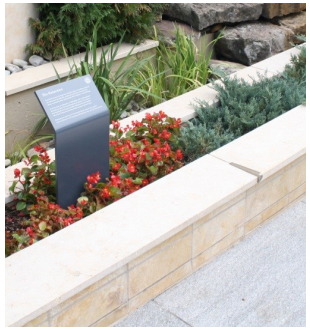
Hardscape is the built environment in the urban landscape on which we walk and sit, and it includes architectural features that create edges and mark places. It comprises constructed elements such as paving, seat walls, water features, and raised planters. These elements can be found in the streetscape, in parks and in other the exterior spaces that make up the ground plane, as well as vertical elements that are incorporated into the urban landscape.

Hardscape elements are constructed of materials such as stone, brick, pre-cast concrete, metal, and wood, and should be sufficiently durable to withstand the harsh, outdoor urban environment. Sustainable building materials and methods that contribute to green building practices should be utilized. While it is desirable that all hardscape elements in Tysons adhere to these guidelines, the following design suggestions specifically pertain to hardscape elements that are located in the public pedestrian realm.

Given the varied topography in Tysons, grade changes within the streetscape an important and common consideration. Innovative design approaches that incorporate grade transitions into a site design while preserving pedestrian visibility and accessibility are expected. Large (long or tall) retaining walls as street edges should be avoided.

Low masonry walls can serve several purposes: they create transitions between grade changes, mark entrances, highlight architectural elements, serve as raised planters, and create the walls of water features. Masonry walls that are at a comfortable seat height can serve both as a structural element and a seat wall. Seat walls and raised planters can create an edge to a gathering space or performance space, and can act as landmarks in the streetscape.





Opposite Left: Sidewalk paving materials at vehicular entrance to parking garage, Washington, D.C.

Opposite Top Right: Fountain in Washington, D.C.

Opposite Bottom Right: Paving pattern, Frederick, MD

Opposite Bottom Far Right: Sidewalk paving materials, Washington, D.C.

Above Left: Seat wall, Washington D.C.

Above Right: Low, raised planting bed in building zone. Sign describing bio-retention function of planting bed.

Bottom Right: Paving materials, Austin, TX

Design Suggestions:

- Use high-quality masonry products and applications that complement adjacent architecture.
- Locate and design walls that are integrated into the architectural design of the building façade or urban park spaces. Walls should not be located in the sidewalk or landscape amenity panel zones of the streetscape or impede pedestrian traffic in any way.
- Construct seat walls 18 – 22 inches high and a minimum of 12 inches deep to provide a comfortable seating area.
- Use innovative design elements such as raised decorative features to discourage damage from skateboards, bicycles or maintenance equipment.

3.2B Water Features

Water features are an important element of the pedestrian realm because they provide places to play, attenuate street noise, create visual pleasure, and serve as landmarks and focal points. Water features are often used to mark places such as civic centers and cultural institutions and distinguish these places from other building entrances along the streetscape. There are many ways to creatively and beautifully integrate water features into the urban landscape, including the use of Low Impact Development techniques such as stormwater collection, storage, and circulation. The following are design suggestions for water features in the Pedestrian Realm.

Design Suggestions:

- Use high-quality masonry products and applications that complement adjacent architecture.
- Locate water features in the building zone, landscape amenity panel or urban park spaces. Water features should not be located in the sidewalk zone of the streetscape or impede pedestrian traffic in any way.
- Consider how the water feature will appear without the presence of water such as during the winter months or during periods of drought.
- Use water features to augment recycling, storage and recirculation of stormwater and HVAC condensate.
- Design all water features to adhere to Fairfax County standards for outfall, drainage, and other requirements.
- Maintain all water features on a regular basis.
- Consider the use of unobtrusive and well-integrated water features as barrier elements for sites which have additional security requirements.

3.2B Water Features

Opposite Left: Streetscape Fountain in the building zone.

Opposite Right: Interactive spray fountain in a plaza.

Above Left: Water feature at the Dominion, Austin, TX.

Above Right: Fountain at Dupont Circle, Washington, D.C.

3.2C Paving

Paving in an urban environment must be able to withstand harsh weather conditions and a high volume of pedestrian traffic. It must also accommodate vehicular crossings at garage entrances, loading and unloading of materials for retail establishments, and the stresses caused by shoveling snow and de-icing treatments. It must also be easily repaired or replaced in the event of damage or utility work. Paved surfaces must be slip resistant and safe for pedestrian movement. Light colored paving can also remediate a heat-island effect and count towards LEED credits.

The paving in Tysons is described in the following pages by streetscape hierarchy corridor (See Section 2.4 for streetscape hierarchy). Following is a preferred material palette for the primary pedestrian corridors that will provide visual clues to pedestrians, act as a wayfinding tool and provide a unifying design element between neighborhoods.

Also included here are palettes for secondary corridors, tertiary corridors, and alleys which suggest a material framework, but offer flexibility in color, material and paving patterns.

The following paving palettes utilize materials that are cost effective and readily available in the market place and will simplify sidewalk repair over time.

The following material palettes consist of three elements: field paving, accent paving, and paving at tree planting spaces. Field paving is the predominant material used between the curb and the building face. Accent paving is used in limited quantities to highlight key places such as entrances, urban parks, pedestrian crossings and important intersections. Paving at tree planting spaces is a walkable surface that is supported above a tree's soil volume (See section 3.2D and 3.2E for plan diagram). Tree planting spaces should be paved or covered when they are located in areas of high pedestrian traffic (See Section 3.6).

Flexibility is provided regarding the placement and design for paving patterns and control joint patterns. Additional flexibility will be afforded for innovative, sustainable paving materials that contribute to the neighborhoods sustainability goals.

How to Use this Document to Create a Paving Material Strategy:

1. Identify the appropriate streetscape hierarchy shown in Section 2.4 and / or which is contained in a rezoning application's pedestrian hierarchy plan.
2. Identify the soil percolation rates for the area to be paved to determine if porous pavement is a viable choice for the project.
3. Identify key places in the neighborhood where the location would benefit from accent paving. Examples include formal and primary entrances and transitions to public park space.
4. Determine locations for street trees and design paving around and with the tree planting spaces.
5. Understand the size, number and type of any utility access points and how they will be integrated into the paving design.
6. Refer to the materials lists, paving diagrams, images and product information on the following pages to determine the appropriate paving material.

Design Suggestions:

- Pave the sidewalk predominantly with field paving to minimize tripping hazards in the pedestrian travel way.
- Use accent paving to highlight important places such as building or park entrances, tree planting spaces, mid-block crossings, public art work and water features.
- Use porous paving over tree spaces should be porous, either by utilizing porous pavers, setting unit pavers on a pervious setting bed or using tree grates (See in Section 3.6).
- Consider the use of porous pavers, pervious paving techniques, or other viable Low Impact Development (LID) techniques as stormwater infiltration tools in the streetscape.
- Construct utility access doors using ADA compliant, slip resistant surfaces that are flush with adjacent paving, and attractively incorporated into the design of the pavement. This can be achieved by using like materials that are inset into the access door or grate or by using high-quality, creatively designed manhole covers.
- Minimize the appearance of the service entrances in the sidewalk by using the same paving at driveway and service entrances that is used along the streetscape.
- Install ADA-compliant ramps and pavement treatments as required.
- Paving used on public roadways is subject to VDOT approval.
- Paving used on private Service Streets and roadways is subject to Fairfax County Department of Public Works and Environmental Services (DPWES) approval.

Right: Accent and field paving, Columbia Heights, Washington, D.C.

3.2D Paving - Primary Pedestrian Corridors

Primary pedestrian corridors will carry the most pedestrian activity and will connect people throughout Tysons. For these reasons, the following Preferred Paving Materials List specifies a consistent standard of quality and a general appearance for streetscape paving palettes in these pedestrian corridors to provide continuity in them. These paving specifications only apply to streetscape areas. Paving in urban parks is at the discretion of the design team. If, however, a park is directly adjacent to the streetscape, a creative transition to the streetscape paving should be utilized. On a case by case basis, deviations from this recommended paving list may be considered.

FIELD PAVING: There are two options for field paving and are specified in the Preferred Paving Materials List. One option should be chosen and remain consistent, at a minimum, on both sides of a street, and for an entire block, and as specified in the chart on this page.

ACCENT PAVING: Accent paving in primary pedestrian corridors should be beige or grey in color, but the size and type of paver is flexible and is specified in the Preferred Paving Materials List on the following page.

TREE PLANTING SPACES: Tree grates will provide an ADA compliant, permeable, walkable and cost effective covered surface over tree spaces (See section 3.6 for tree planting space details).

The following is a preferred paving materials list and paving diagrams and for these corridors.

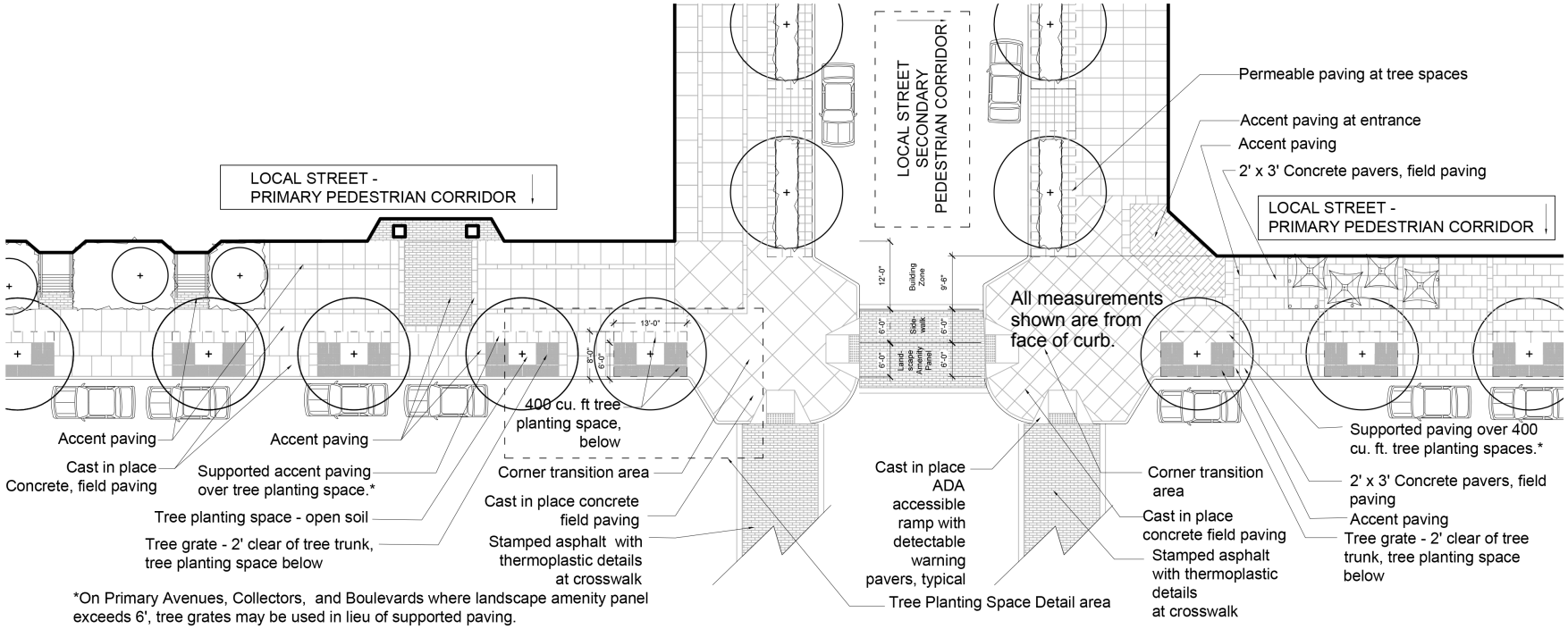
Primary Pedestrian Streetscape Corridors - Preferred Paving Materials List
(See pages 3-24 through 3-29 for images and product information)

	BUILDING ZONE	SIDEWALK	LANDSCAPE AMENITY PANEL
FIELD, OPTION A	Cast in place concrete Color: Buff Finish: Brush	Cast in place concrete Color: Buff Finish: Brush	Cast in place concrete Color: Buff Finish: Brush
FIELD, OPTION B	2' x 3' x 2' precast concrete pavers Color: Limestone grey or limestone grey with black aggregate Finish: ADA non slip	2' x 3' x 2' precast concrete pavers Color: Limestone grey or limestone grey with black aggregate Finish: ADA non slip	2' x 3' x 2' precast concrete pavers Color: Limestone grey or limestone grey with black aggregate Finish: ADA non slip
ACCENT	Masonry unit pavers To be used sparingly to accent special places such as building entrances, parks, etc. Color: beiges and greys. Color: Beiges and greys Finish: ADA non slip	Masonry unit pavers To be used sparingly and should not exceed 25% of sidewalk zone paving, ADA compliant non-slip finish Color: Beiges and greys Finish: ADA non slip	Masonry unit pavers To be used sparingly to accent special places such as building entrances, parks, etc. ADA compliant non-slip finish. Color: Beiges and greys Finish: ADA non slip
TREE PLANTING SPACES	Tree grates* ADA non-slip compliant, Material: Brushed aluminum	NA	Tree grates* ADA non-slip compliant Material: Brushed aluminum

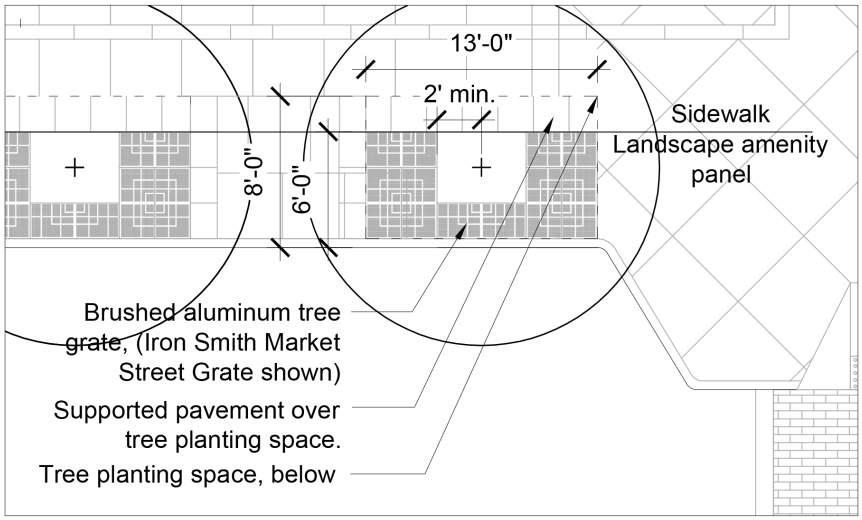
*All tree grates must be a minimum of 2' away from any tree trunk. See Planting Design Section 3.7

Opposite: Example of cast in place Concrete in a primary pedestrian corridor, Bethesda, MD

3.2D Paving - Primary Pedestrian Corridors



Primary Pedestrian Corridor Paving Example - Plan
(Not to Scale)



Tree planting space detail

Primary Pedestrian Corridor Paving Example
Tree planting space detail (Not to Scale)

3.2E Paving - Secondary and Tertiary Pedestrian Corridors

Secondary and tertiary pedestrian corridors are expected to be designed as complete streets and to create a sense of place. Secondary and tertiary corridors, however, will support less foot traffic and therefore a broader palette of materials is encouraged. Following is a suggested paving materials list and paving diagrams for these corridors.

FIELD PAVING: Any paving may be considered. To prevent trip hazards, unit pavers smaller than 2' x 2' should only be used as an accent. Permeable paving methods are encouraged.

ACCENT PAVING: Any paving may be considered. Permeable paving methods are encouraged.

TREE PLANTING SPACES: Tree grates or supported, permeable masonry paving units, will provide an ADA compliant, permeable, walkable and cost effective surfaces at tree spaces (See section 3.6 for tree planting space details). Open tree planting spaces and stormwater planting areas are encouraged.

3.2E Paving - Secondary and Tertiary Pedestrian Corridors

Secondary and Tertiary Streetscape Corridors - Suggested Paving Materials List

(See pages 3-24 through 3-29 for images and product information)

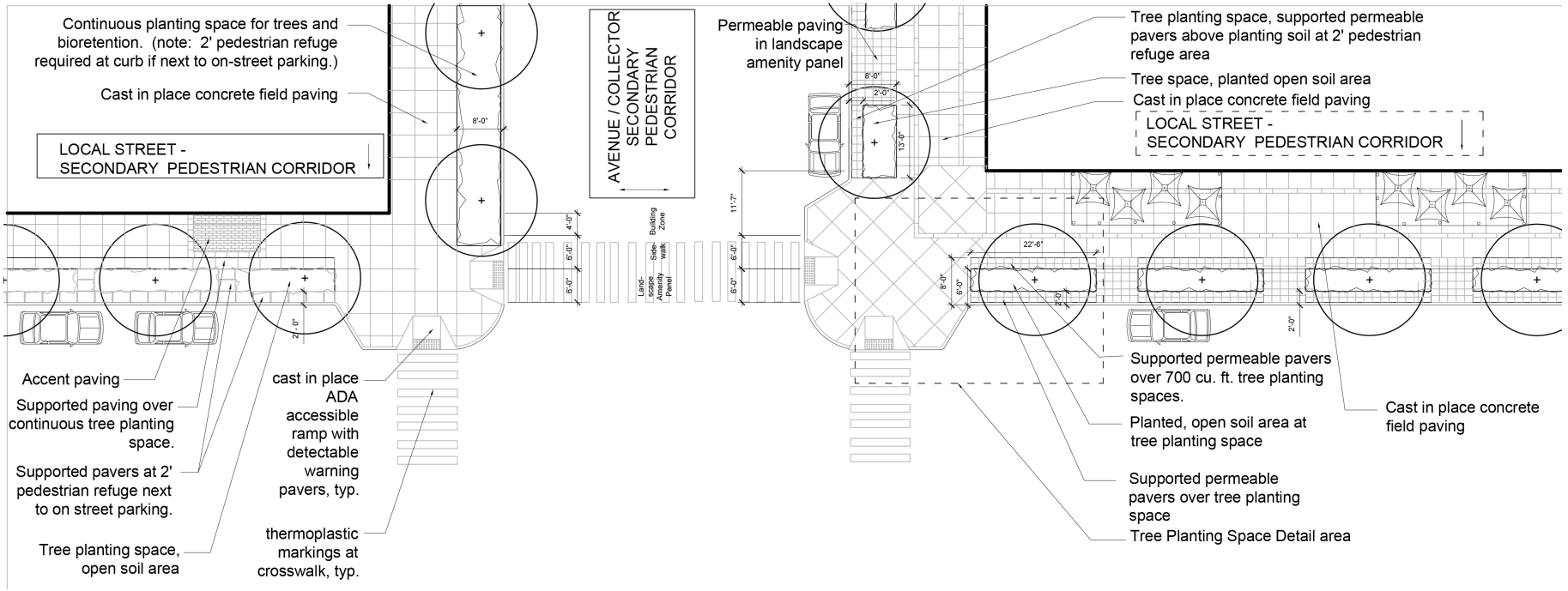
	BUILDING ZONE	SIDEWALK	LANDSCAPE AMENITY PANEL
FIELD, SUGGESTION A	Cast in place concrete Color: Buff Finish: Brush	Cast in place concrete Color: Buff Finish: Brush	Cast in place concrete Color: Buff Finish: Brush
FIELD, SUGGESTION B	Any unit pavers (no smaller than 24" x 24") Color: Any Finish: ADA non slip	Any unit pavers (no smaller than 24" x 24") Color: Any Finish: ADA non slip	Any unit pavers Color: Any, permeable pavers encouraged Finish: ADA non slip
ACCENT	Masonry unit pavers To be used sparingly to accent special places such as building entrances, parks, etc. Color: beiges and greys. Color: Any Finish: ADA non slip, permeable pavers encouraged	Masonry unit pavers To be used sparingly and should not exceed 25% of sidewalk zone paving, ADA compliant non-slip finish Color: Any Finish: ADA non slip, permeable pavers encouraged	Masonry unit pavers Permeable pavers encouraged Color: Any Finish: ADA non slip finish
TREE PLANTING SPACES	Tree grates or supported, permeable masonry unit pavers* Color: Any Finish: ADA non slip	NA	Tree grates or supported, permeable masonry unit pavers* Color: Any Finish: ADA non slip

*See Planting Design Section 3.7 for suggested methods to support paving over tree planting spaces. All tree grates must be a minimum of 2' away from any tree trunk.

Opposite Top: Stone, cast in place concrete paving and stormwater storage in the streetscape. Roombeek the Brook, Netherlands. Buro Sant en Co Landscape Architecture. Image: Bruno Sant en Co.

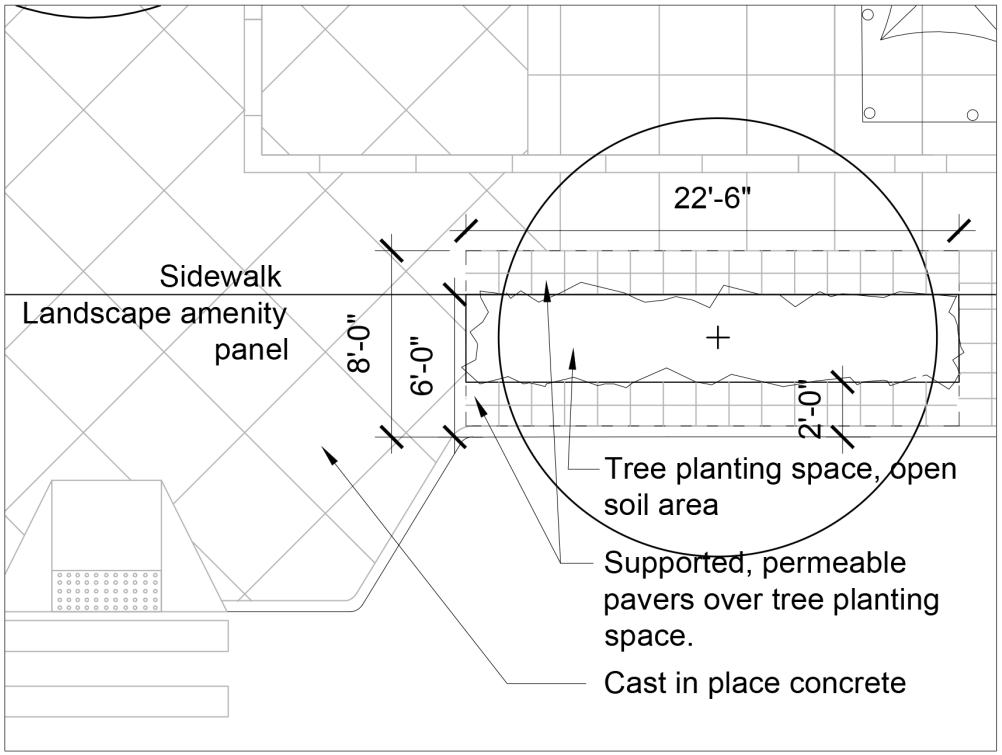
Opposite Bottom: Aerial view of paving and stormwater in the streetscape. Roombeek the Brook, Netherlands. Buro Sant en Co Landscape Architecture. Image: Bruno Sant en Co.

3.2E Paving - Secondary and Tertiary Pedestrian Corridors



Secondary Pedestrian Corridor Paving Example - Plan
(Not to Scale)

All measurements shown are from face of curb.



Secondary Pedestrian Corridor Paving Example
Tree planting space detail (Not to Scale)

3.2F Paving - Service Streets

The primary function of service streets is to provide building access for service and delivery vehicles. High volumes of pedestrian and vehicular traffic are not anticipated on service streets. Additionally, many utilities such as transformers, stormwater, and other infrastructure will be located below service streets and in the buildings adjacent to them. These utility and service functions require ease of use for large trucks and in some cases, the operation of large machinery to facilitate loading, repair, trash removal and other service needs. Finally, service streets provide space for possible stormwater infiltration and collection. For these reasons, the paving and structure of the pedestrian zones on service streets may deviate from standard roadway and sidewalk materials. When appropriate, the use of roadway grade unit pavers, permeable paving or other paving material may be used to improve the appearance of a service street, increase the efficiency for trucks and equipment and decrease impervious paved areas.

On service streets, safe and ADA accessible pedestrian access may be accommodated by indicating pedestrian zones with changes in paving rather than creating a raised sidewalk and curb. This will allow for greater flexibility in turning movements for large trucks.

In some cases, service streets can function as an intimate alley that may offer some service and loading opportunities, but may also be serve as a pedestrian connection point. In these cases, a creative design that accommodates attractive, roadway grade unit pavers may be considered.

The following is a suggested paving materials list for Service Streets and a diagram that demonstrates how these suggestions may be implemented.

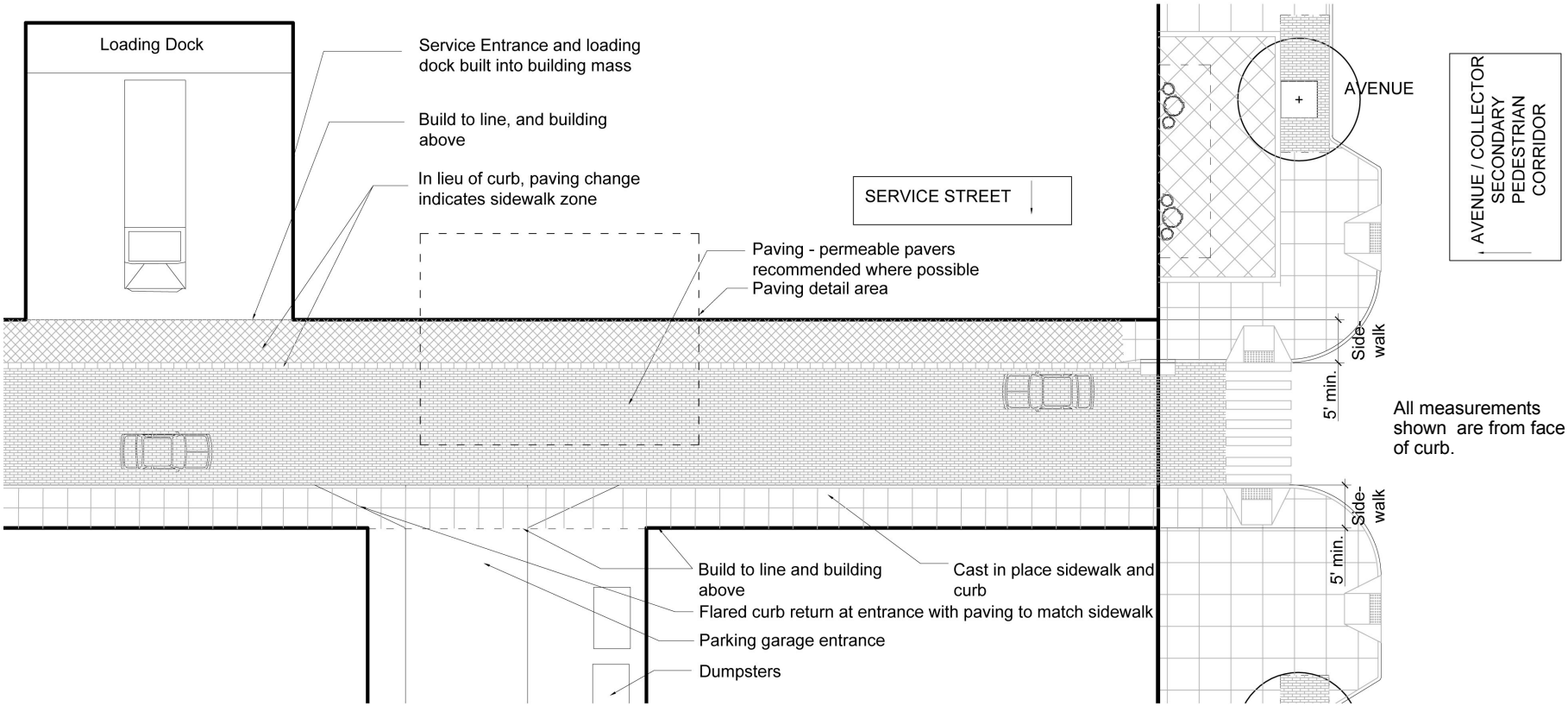
Tertiary Streetscape Corridors at Service Streets Suggested Paving Materials List

(See pages 3-24 through 3-29 for images and product information)

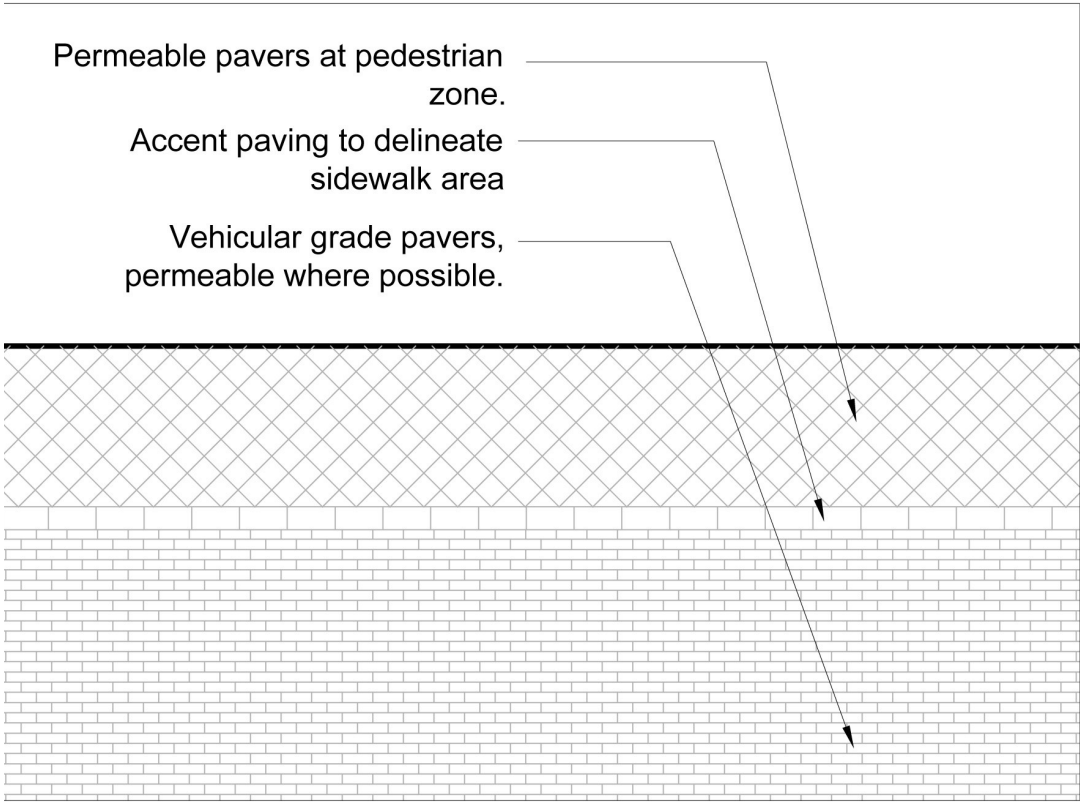
	SIDEWALK	STREET
FIELD (SUGGESTION A)	Cast in place concrete Color: Buff Finish: Brush	Asphalt or permeable concrete Specifications per VDOT and Fairfax County DPWES standards
FIELD (SUGGESTION B)	Masonry unit pavers Size: 12" x12" minimum Color: Any Finish: ADA non slip, permeable pavers encouraged	Masonry unit pavers Specifications per VDOT standards Color: Any Finish: ADA non slip, permeable pavers encouraged
ACCENT	Masonry unit pavers rated for vehicular traffic Used to delineate sidewalk area when no curb is included Size: 12" x12" minimum Color: Any Finish: ADA non slip, permeable pavers encouraged	Permeable masonry unit pavers rated for vehicular traffic Specifications per VDOT standards Size: varies Color: Any Finish: ADA non slip

Opposite: Service street, Washington, DC

3.2F Paving - Service Streets



Service Street Paving Example- Plan
(Not to Scale)



Service Street Paving Example
Detail (Not to Scale)

3.2G Paving - Product information

FIELD PAVING—Cast in Place Concrete

Location: Building zone, sidewalk, landscape amenity panel

Product Description: Cast in place concrete, brush finish
Color: Buff, suggested scoring patterns: 3' x 3' square or 2' x 3' rectangular London Bond. Creative scoring patterns used to highlight building entrances or other streetscape elements are encouraged.

Image: Bruno Carvalho

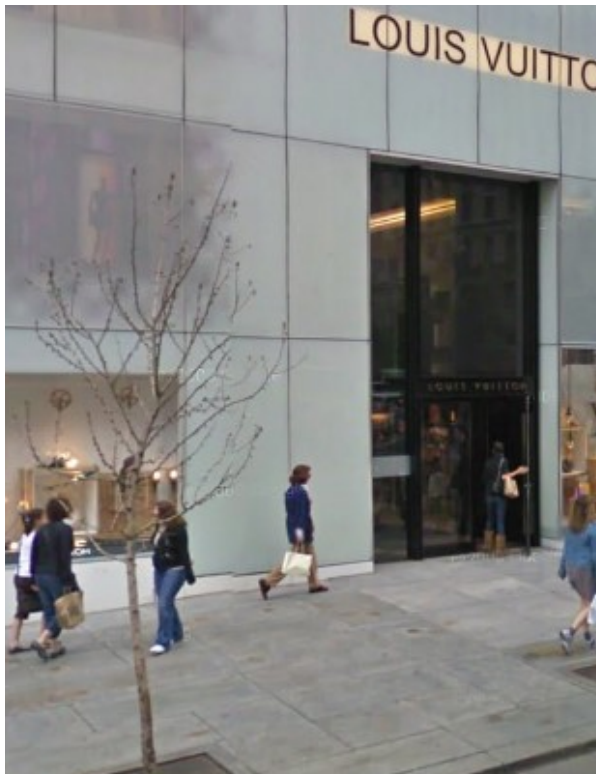


Image: Bruno Carvalho

FIELD PAVING — Unit Pavers

Location:	Landscape amenity panel, sidewalk, building zone.
Product Description:	2' x 3' x 2" min. precast concrete , stone pavers, or permeable pavers. Color: Limestone grey or limestone grey with black aggregate, ADA, non-slip finish. Suggested product example: Hanover Prest Pavers, Matrix #M1109, Tudor Finish. www.hanoverpavers.com

3.2G Paving - Product Information

ACCENT PAVING— Small Unit Pavers

Location: Landscape amenity panel, building zone and select accents that make up no more than 25% of the side-walk

Product Description: Brick, concrete, stone, or permeable pavers (or unit pavers set in pervious setting bed). Non-slip finish
Color: Any




OTHER—TREE GRATES

Location:	Landscape amenity panel, building zone
Product Description:	Primary pedestrian corridors tree spaces: brushed, cast aluminum grate, suggested pattern: Ironsmith Market Street Grate www.ironsmith.cc or approved other. Secondary and tertiary corridors any ADA compliant, non-slip grate. Set on frame. (Note: all tree grates should be offset by 2 ft. (min.) from any tree trunk. (See Section 3.6 for tree planting space details)

3.2G Paving - Product Information

OTHER—ADA Accessible Ramp Paving

Location:	ADA curb ramps
Product Description:	Pre-cast detectable warning pavers Charcoal grey suggested but color to be determined by project such that ADA requirements are met

OTHER—Crosswalk Paving—Thermoplastic Markings

Location:	Crosswalks as approved by VDOT
Product Description:	Imprinted pattern in asphalt with thermoplastic paint applied. Color and pattern may vary as approved by VDOT

OTHER—Crosswalk Paving— Masonry Unit Pavers

Location:	Local Street crosswalks at primary pedestrian corridors and as permitted by VDOT and FCDOT
Product Description:	Pre-cast concrete or stone unit pavers or paver sets

OTHER—Crosswalk Paving— Stamped Asphalt

Location:	Local Street crosswalks at primary pedestrian corridors and as permitted by VDOT and FCDOT
Product Description:	Stamped and colored asphalt

3.3 Lighting

Lighting in Tysons will help to create a safe environment for both pedestrians and cars. Pole mounted lights in the streetscape will illuminate the ground plane and serve as armatures for wayfinding signage and seasonal or event specific banners that highlight local events and places. Additionally, streetscape lighting will be augmented by building mounted and accent lighting for signage and by lighting in and around architectural projections. It is intended that the quality of light from all fixtures will create a pleasant and safe environment that encourage s pedestrian activity at night.

Emerging sustainable lighting technologies including LED lights will provide the opportunity to light the streetscape and streets in Tysons in an energy efficient manner while providing a pleasant quality of light. Developers are encouraged to use energy efficient lighting technology when possible for all streetscape and site lighting.

All lighting design is subject to review by Fairfax County and must comply with the Outdoor Lighting Standards contained in Article 14 of the Zoning Ordinance and any requirements set forth in the Public Facilities Manual. Additionally, all street lighting must comply with applicable VDOT standards for roadway lighting. Lighting levels for both roadways and pedestrian paths should be adequate, but not over lit. After installation, lighting should continue to be monitored for levels and hue, and adjustments made as necessary.

The following sections provide guidance on lighting design for the streetscape, site and building design in Tysons.

The following are general design suggestions for streetscape lighting as well as specifications for the three preferred pole-mounted light fixtures. Two of the options should be used in each development for lighting the streetscape and the roadway for Local Streets, and Avenues/Collectors; the GE Evolve option should be used for the Boulevards, or in other cases where the roadway is wider. All fixtures offer a variety of mounting heights and light configurations to accommodate a safe and pleasant standard of light, and can accommodate banner arms as needed.

As technology changes, new lighting options may become available. Any new light fixtures used should be of complimentary style with the lights in these design guidelines.

Design Suggestions:

- Refer to Section 3.3B for the preferred fixtures for all new pole mounted, streetscape lighting.
- Any lighting that is not located in the streetscape can be at the discretion of the design team, provided such lighting complies with all applicable requirements.
- Use full cut-off or directionally shielded and controlled lighting to highlight important architectural or streetscape elements.
- Use energy efficient technologies such as solar powered lights, LED fixtures and photocells to reduce energy consumption.

Opposite: Shirlington, VA evening streetscape, Image: KevinH - Flickr.com

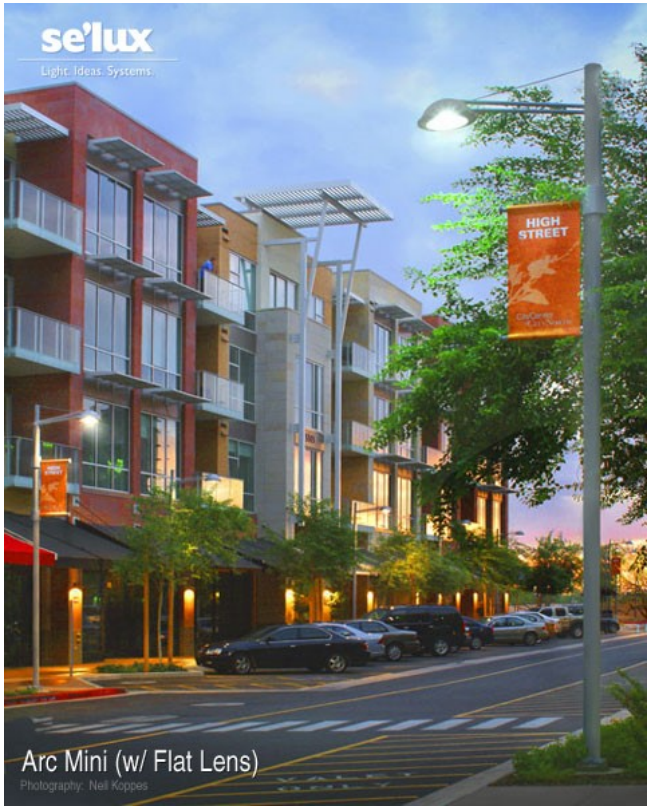
Above Right Top: Downtown Denver, Image: Downtownnews.org

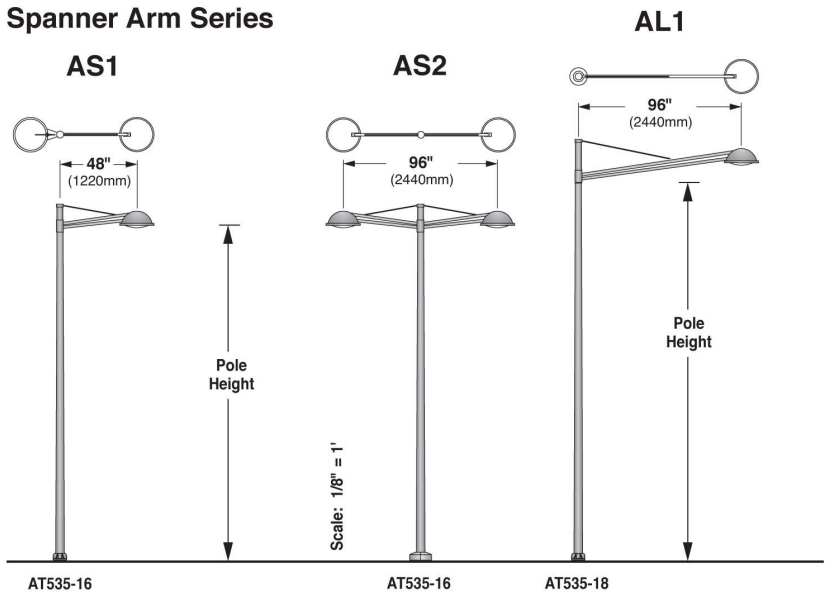
Above Right Bottom: Citygarden fountain at night, St. Louis. Image: ronronron - Flickr.com

3.3B Preferred Streetscape Lights - Product Information

Pedestrian Scale Streetscape Lights—Option A

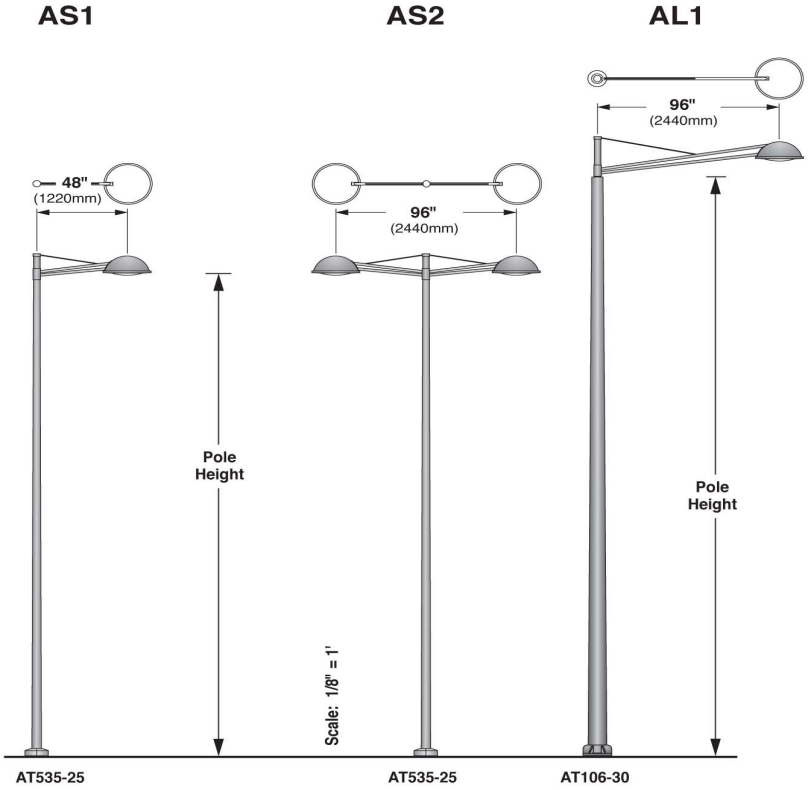
Product Name / Manufacturer:	Se'lux , Arc Mini, Spanner Arm Series. Silver finish, LED or HID lamp, tempered flat glass lens. AT535 pole with base cover. LED Model# ARC MINI – ARC2-L-R(*)-ASI-LED-SV-S635-18-125-SV-BC(*) HID Model # AT535-18-188-SV-BC(*) www.selux.com or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel, medians for all new developments in Tysons
Other:	Banner arms and signage connections encouraged





Roadway Scale Street Lights—Option A

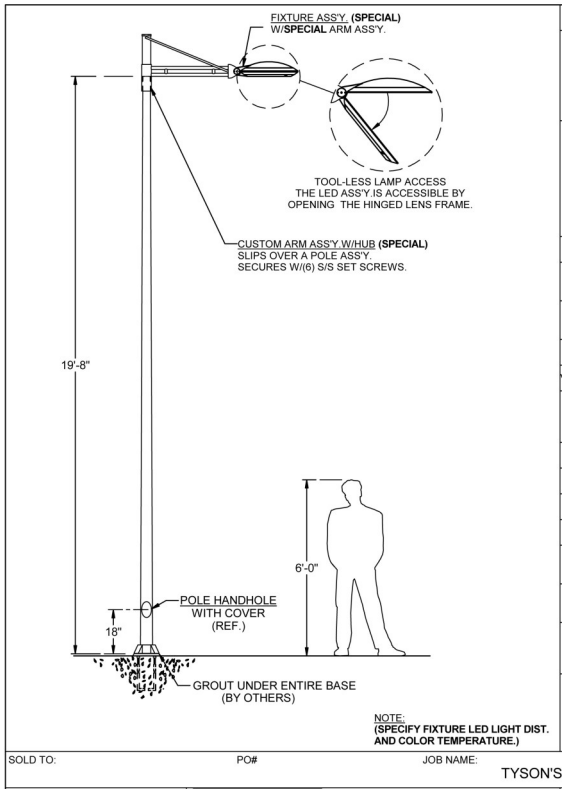
Product Name / Manufacturer:	Se'lux , Arc, Spanner Arm Series. Silver finish, HID or LED lamp, tempered flat glass lens. AT635 or AT106 pole with base cover. LED Model # ARC – ARC-L-R(*)-ASI-LED-SV-AT635-25-188-SV-BC(*) or HID Model #AT106-35-188-SV-BC(*) www.selux.com or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel, medians at wider roads such as Boulevards or multi-lane Avenues and Collectors
Other:	Can also be combined with Arc Mini fixtures at lower mounting height to illuminate both roadway and streetscape on one pole. Banner arms and signage connections encouraged



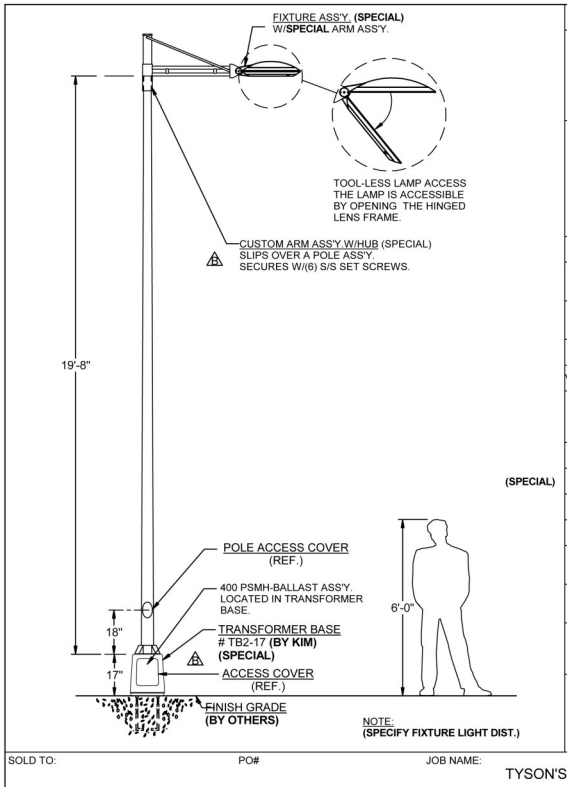
3.3B Preferred Streetscape Lights - Product Information

Pedestrian Scale Streetscape Lights—Option B

Product Name / Manufacturer:	Architectural Area Lighting Flex Series: Matte aluminum finish. HID option item number FH3-400PSMH-11A-1750-B, or LED option item number FH-T2-32LED-5K-350 www.aal.net or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel and medians for all new developments in Tysons
Other:	Banner arms and signage connections encouraged



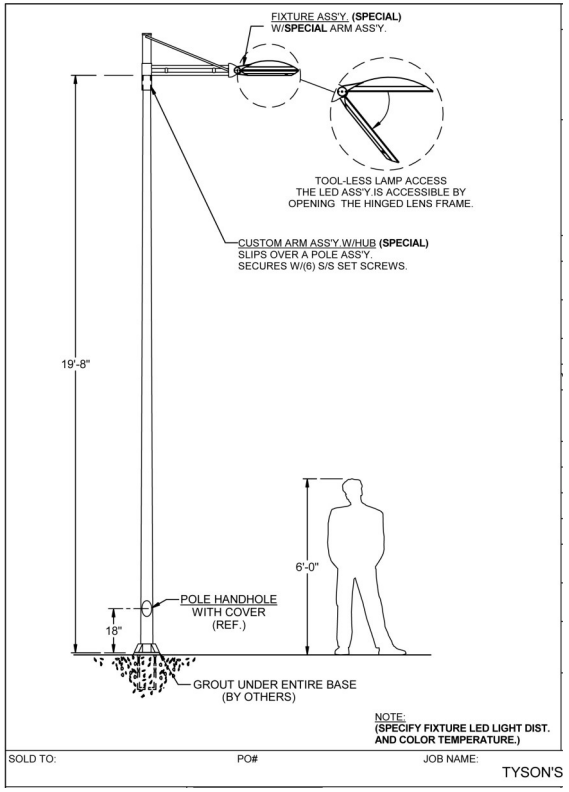
LED Option



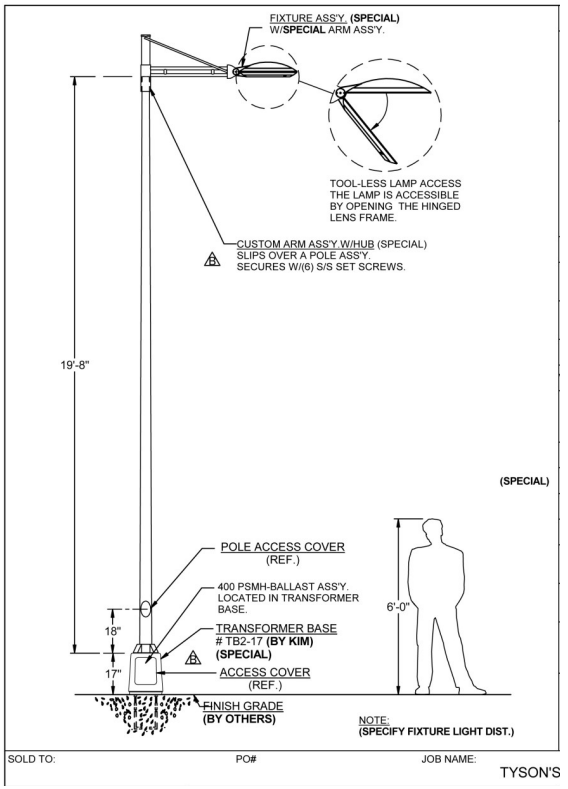
HID Option

Roadway Scale Street Lights—Option B

Product Name / Manufacturer:	Architectural Area Lighting Flex Series: Matte aluminum finish. HID option item number FH3-400PSMH-11A-1750-B, or LED option item number FH-T3-56LED-5K-700 www.aal.net or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel and medians for all new developments in Tysons
Other:	Can also be combined with additional fixture at lower mounting height to illuminate both roadway and streetscape on one pole. Banner arms and signage connections encouraged



LED Option

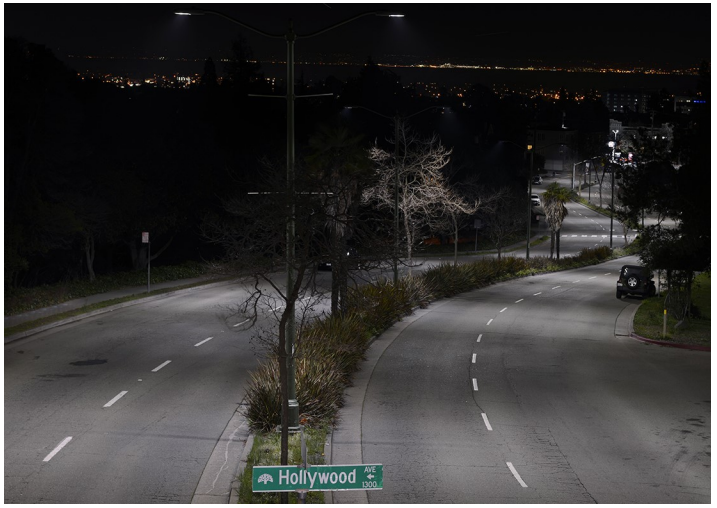


HID Option

3.3B Preferred Streetscape Lights - Product Information

Pedestrian Scale Streetscape Lights—Option C

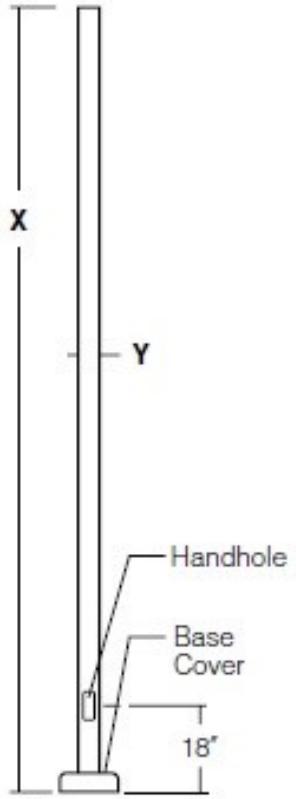
Product Name / Manufacturer:	GE Evolve LED: Corrosion resistant powder painted finish. LED option item number ESRI_C3A11740 www.gelighting.com or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel and medians for all new developments in Tysons
Other:	Banner arms and signage connections encouraged

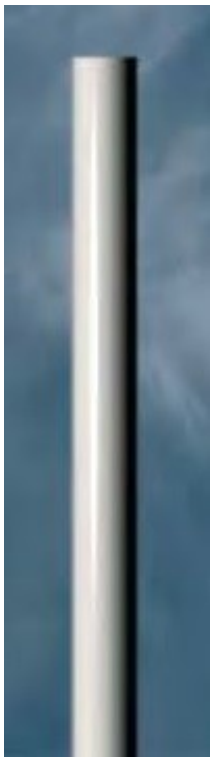


Above Right: GE Evolve installed in Oakland, CA. Image: http://www.businesswire.com/news/home/20140508006463/en/GE%E2%80%99s-LED-Street-Lighting-Installation-Demonstrates-Ongoing

Roadway Scale Street Lights—Option C

Product Name / Manufacturer:	GE Evolve LED Roadway: Corrosion resistant powder painted finish. LED option item number: ESRI_C3A11740 www.gelighting.com or approved other
Specifications:	Meet Illuminating Engineer Society (IES) photometric performance standards for urban streets and streetscapes
Location:	Landscape amenity panel and medians for all new developments in Tysons
Other:	Can also be combined with additional fixture at lower mounting height to illuminate both roadway and streetscape





3.3C Building Mounted and Site Lighting

Specific building mounted and accent lighting fixtures are not specified in these guidelines because they should be integrated aesthetically and sustainably into the design of individual buildings and sites. The following are qualitative design suggestions that should guide the choices for this type of lighting:

Design Suggestions:

- Create visual interest by illuminating architectural features such as overhangs and canopies.
- Use building mounted fixtures to highlight entrances, doorways, and porticos.
- Light alleys with building mounted light fixtures.
- Consider creative and tasteful lighting concepts for tower elements that will add interest to the skyline of Tysons.
- Integrate lighting design elements for all signage in Comprehensive Sign Plans.
- Incorporate site lighting into hardscape elements such as steps, railings and in the paving to illuminate the pedestrian realm.
- Consider a seasonal lighting strategy for prominent pedestrian activity zones such as shopping districts and civic centers.
- Avoid over lighting buildings that is intrusive to adjacent buildings and streetscapes.
- Avoid excessive interior retail lighting that creates bright light that spills into the streetscape.

- Utilize bird-friendly site and building lighting methods such as implementing a “lights out” policy in tall building towers during peak bird migration periods and reducing light trespass from interior sources. (See Chapter 8, Resources for additional bird-friendly design resources)

Opposite: New York Times Building, bird-friendly site lighting and façade, Image: FX FOWLE Architects

Above Left: Georgelas Spring Hill Station development. WDG Architecture., Image: WDG Architecture

Above and Bottom Right: Toronto’s skyline is shown above, both with lights at normal levels (top) and during times of heavy bird migration when lights are dimmed (bottom). In addition to saving birds, Lights Out programs save building managers an average of $6,000 per year on utilities. Photo credit: WWF Canada

3.4 Streetscape Furnishings

Streetscape furnishings are an important element of neighborhood identity. They serve a practical purpose while helping to provide the character of a place. Following are specific guidelines for Tysons-wide elements such as transit shelters, traffic signal poles and parking stations. These are followed by recommendations for district-specific furnishings including benches, litter and recycling receptacles, and bicycle facilities. Furnishings in parks and other private exterior spaces are at the discretion of the design team.

Design Suggestions:

- Locate all **furnishings** outside of VDOT clear zones and required sight line distances. (See Transportation Design Standards for Tysons Corner Urban Center for clear zone and sight line distances)
- Do not locate **furnishings** of any kind in the sidewalk zone.
- Limit **Outdoor dining** to the building zone area of the sidewalk and do not place any outdoor dining amenities in the sidewalk zone or the landscape amenity panel. Do not allow outdoor dining areas to "creep" into the sidewalk.
- Use **outdoor dining** furnishings that are constructed of high-quality materials and complement the architecture of the adjacent buildings.
- Surround all **outdoor dining** areas by an ornamental boundary such as moveable posts and rails.
- Use removable **outdoor dining elements** including, but not limited to, seating, tables, umbrellas, service carts and fencing.
- Use streetscape **furnishings** that can withstand harsh weather and other urban site conditions.
- Use furnishings that are designed using **universal design principles** and are adaptable to users of varied mobility levels.
- Use high quality **free-standing planters** that will withstand harsh weather and other urban site conditions. This may include, metal,

stone, terra cotta, resin, or fiberglass. Do not use thin plastic pots. See Section 3.6D for planting and maintenance recommendations for free-standing planters.

- Cluster **Newspaper vending machines** in racks to minimize the footprint and visual complexity of numerous structures.

- Use hardened street furniture, street furnishings that are crash and blast resistant, which can be unobtrusive and also serve as site amenities for sites with additional **security** requirements.

Opposite: Bethesda, MD Benches in streetscape

Above Left (Left): Stacked newspaper kiosk. Image: Bruno Carvalho

Above Left (Right): Outdoor dining, Washington, D.C.

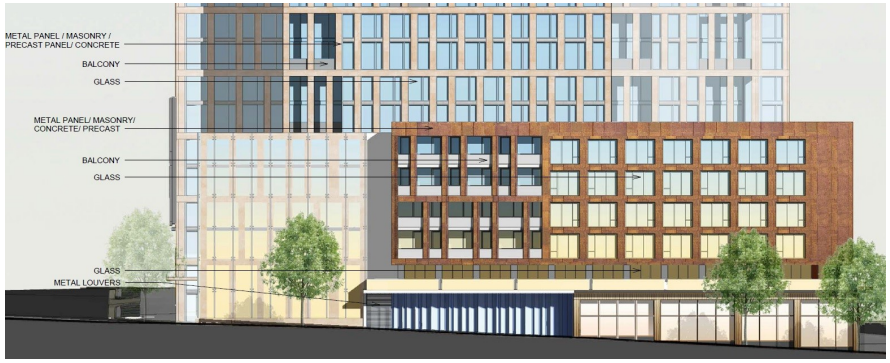
Bottom Right: Public art as seating, Artist: Cliff Garten, Salt Lake City, UT

3.4A Transit Shelters

All Fairfax County transit shelters should be specified as the FCDOT standard transit shelter. The preferred standard shelter option for Tysons is shown on the following page. All transit shelter specifications and locations are subject to review by FCDOT.

In an effort to enhance the streetscape and the sense of place in Tysons, and allow for innovation in transit systems, a stakeholder group such as the Tysons Partnership is encouraged to work with OCR, FCDOT and VDOT on a Tysons wide transit shelter strategy. This shelter strategy should be contemporary in nature, incorporate innovative technology to provide real-time ridership information, utilize solar power and other sustainable elements, fit in with the grey color pallet of the street lights and furnishings and should include a side opening for ADA wheelchair access. Shelters can look to incorporate technology based on Transit Demand Management strategies in coordination with and approval from OCR, FCDOT, and VDOT.

Transit shelters should be placed within the landscape amenity panel and not project into the clear sidewalk zone. Shelters should be placed so that they adhere to ADA accessibility standards. Alternatively, shelters can be integrated into the building design and placed in the building zone when the site conditions are favorable for this option.



Transit Shelters

Product Description: Fairfax County Standard Transit Shelter

Manufacturer: Tolar Manufacturing Euro Series

Color: (Grey) Drylac Powder Coat 049/73510

Opposite Top: Bus Shelter integrated into building, Design: The Boro development, illustrative

Opposite Bottom: Bus Shelter integrated into building, Design: The Boro development, elevation

Above Left: Tolar manufacturing Euro series bus shelter, Image: Metro Magazine

Above Right: Tolar manufacturing Euro Series bus shelter, Image: Staff

3.4B Traffic Signal Poles

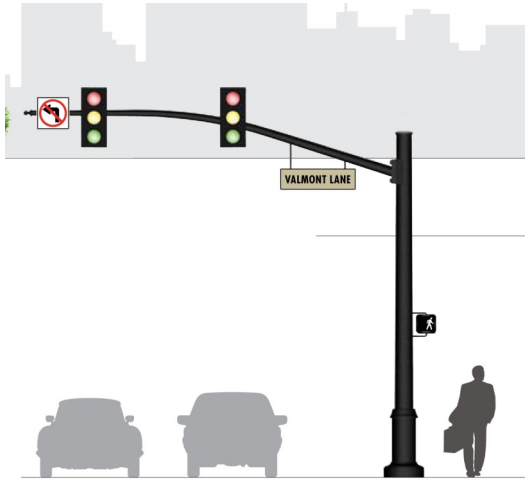
Traffic signal poles will be located at many of the intersections and should be coordinated both in color and appearance with the street lights specified previously and with those specified by the Dulles Rail Project for Route 7. The following specification and image represent the post base that will be used on the Route 7 lights which coordinates with the bases of the proposed streetscape lights.

Traffic Signal Poles and Bases

Product Description:	Valmont Industries, round, tapered pole with Renaissance A02 post base, or approved other
Material:	Per VDOT specifications
Color:	(Dark Grey) Drylac Powder Coat RAL 9004, or approved other

Design Suggestions:

- When possible street lighting and traffic signals should be co-located on one pole.
- All signal heads and pedestrian signals should adhere to VDOT specifications.



The streetscape serves as a transition between the street and buildings, and while it is a place where people travel on foot, there are many built objects in the streetscape that assist in the operations of vehicular traffic.

Parking meters, traffic signals and transit shelters are three of these elements, all of which take up a great deal of space in the streetscape. Care should be taken to co-locate these and other streetscape elements in order to minimize the amount of appurtenances in the streetscape. Additionally, using new and innovative products that minimize the footprints of these elements is encouraged. The placement of many of these elements should follow all building code requirements for ADA accessibility as well as any requirements by VDOT, FCDOT, or Fairfax County DPWES. The following are recommendations for parking meters, traffic signal poles and transit shelters.

Parking Meters & Stations

Parking meters and stations are a common part of urban living and once a parking authority (public or private) has been established, a comprehensive strategy for the type, placement and aesthetic of parking meters should be established. This should be undertaken in consultation with VDOT, Fairfax County DPWES, and FCDOT.

Design Suggestions:

- Use parking stations throughout Tysons that are similar in style and manner of operation.
- Use multi-space parking stations to minimize the number of meters in the streetscape.
- Use stations that accept multiple forms of payment, including credit/ debit cards, online payment and pay-by-phone.
- Utilize innovative technologies such as solar power to operate the stations.

This Page, Left: Multi-space parking meter with solar panel, Washington, D.C.

This Page, Right: Digital parking meters with credit card payment method. Washington, D.C.

3.4D Bicycle Racks and Facilities

Bicycle racks are expected to be prominent and frequent elements in Tysons in parks, the streetscape, and in private spaces including courtyards and garages. Additionally, bike-share programs are anticipated. The Fairfax County Department of Transportation is in the process of creating the Fairfax County Guidelines for Bicycle Parking which includes standard specifications for bike racks and should be referenced prior to specifying bicycle rack or parking design. The following guidelines for bike racks are specific to Tysons.

Bicycle parking should be carefully located to provide visual prominence while avoiding conflicts with pedestrian flow. Innovative, efficient, and attractive designs for bike parking areas such as stacked racks or architectural bike stations should be planned for and located early in the design of a neighborhood.

Following are Tysons-wide bicycle parking design suggestions that should be considered when choosing and locating bike racks. Additionally, Sections 3.4E—3.4J provide alternate suggestions for district specific bicycle racks that adhere to the parameters for bike racks in the Fairfax County Department of Transportation's Bicycle Parking Guidelines. For more information, see Chapter 8, Resources.

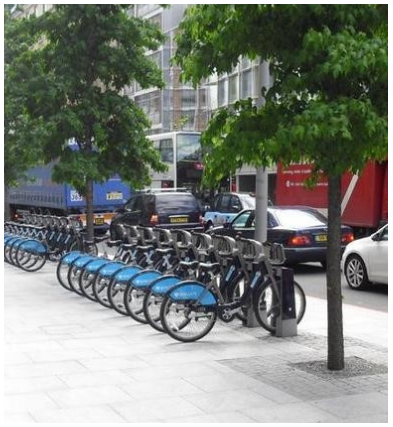
Design Suggestions:

- Consider using the custom Tysons bike rack as suggested on the following page. Efforts should be coordinated with Fairfax County and the Tysons Partnership to determine appropriate locations for using this custom design. Potential locations are along the Circuit Trail Loop or a future Metrorail Green Artery, both of which are described in Chapter 6.

- Plan early for bike share programs so that they can be located in a manner that does not conflict with street trees or pedestrian flow (A). Also, plan for solar-powered bike stations by locating facilities appropriately so that they receive adequate sunlight.

- Consider using "art" racks, (custom designed, signature racks) at prominent locations (B).

- Consider bike garages in buildings or the use of bike valets to reduce the amount of bike storage on busy



A

B

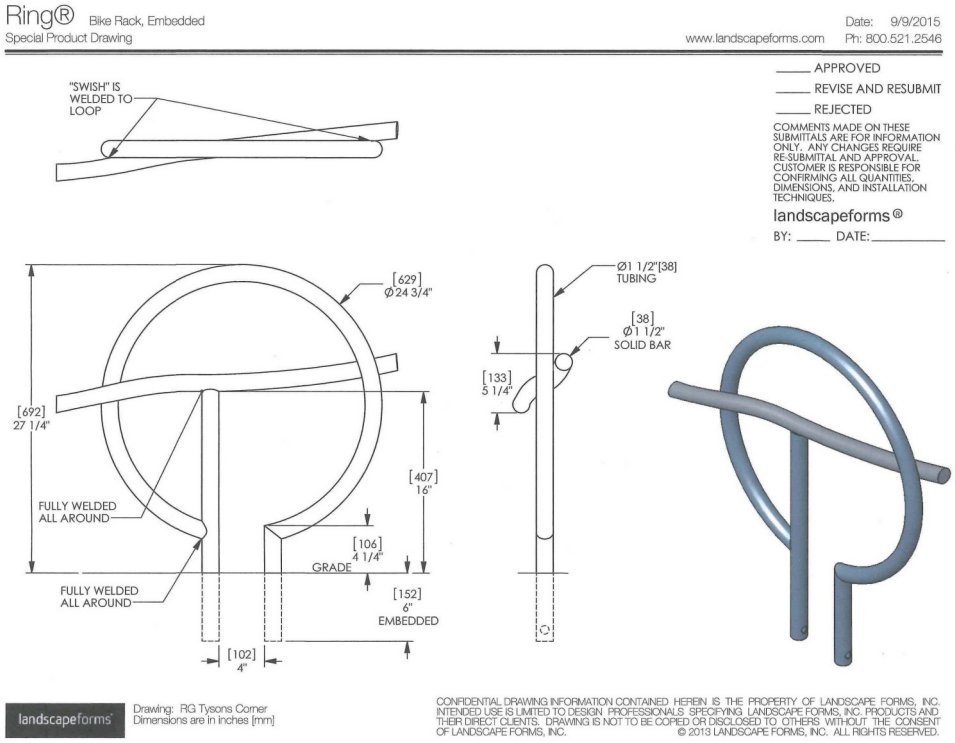
This Page, Left: Bike Share at streetscape edge with street trees, Image: Inhabitat.com

This Page, Right: Tysons Corner Center custom racks by Dero, Image: accesstysons.com

Tysons Custom Bicycle Rack

Product Description: Custom design, adapted from the Landscape Forms Ring Bike Rack (www.landscapeforms.com)
Material: Stainless Steel

Other: Dero Bike Rack Co. (www.dero.com) is also a preferred option



3.4E Streetscape Furnishings by Subdistrict

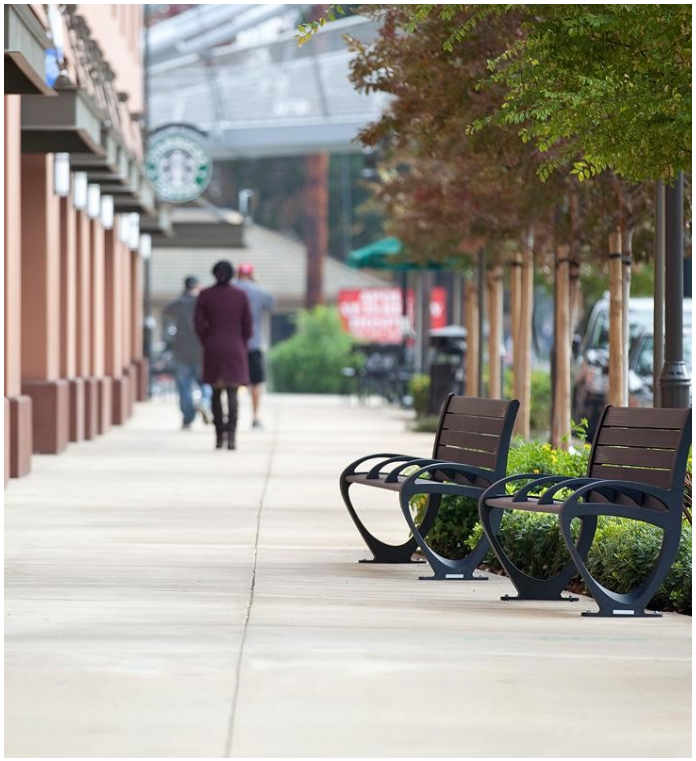
As neighborhoods in Tysons emerge with their own sense of place and identity, streetscape elements will add to their unique character. For this reason, the following palette of furnishings by subdistrict was chosen to differentiate between each subdistrict and provide a visual clue in the streetscape that one has left on district and entered another.

Flexibility will be considered for alternative designs or selections particularly when site furnishings are designed as public art elements or when a community organization or an entity such as a business improvement district creates a neighborhood-specific palette of furnishings. If an alternative design is suggested by a single rezoning case as an alternative to one of these subdistrict palettes, it may be considered provided that the furnishings are submitted early in the Final Development Plan review process of a rezoning case and be are vetted with other sub-district landowners.

Furnishings that are located in places such as the building zone, parks, quasi-public space or private open space areas, may be chosen at the discretion of the design team. Any Tysons-specific furnishings proposed by the Tysons Partnership and/or similar neighborhood organizations are encouraged to be implemented.

Design Suggestions:

- Locate all furnishings outside of VDOT clear zones and sight distances. (See Transportation Design Standards for Tysons Corner Urban Center)
- Do not locate furnishings of any kind in the sidewalk zone.
- Use outdoor dining furnishings that are constructed of high-quality materials and that complement the architecture of the adjacent buildings.
- Use streetscape furnishings that can withstand harsh weather and other urban site conditions.
- Seating should be designed using universal design principles and be adaptable to users of varied mobility levels.



Above Left: Portland Streetscape - Landscape Forms custom litter receptacle, Image: Landscape Forms

Above Right: Forms + Surfaces streetscape furnishings, Image: Forms+Surfaces

3.4F Streetscape Furnishings / Tysons East & East Side

Benches

Product Name / Manufactuer: Landscape Forms, Park Vue Bench, Silver powder coat finish. www.landscapeforms.com, or approved other

Location: Building zone, landscape amenity panel
Other: Backless bench, and bench with or without arms are all acceptable

Litter / Recycling Receptacles

Product name / Manufacturer: Victor Stanley, Steelsites litter receptacle SDC-36, Recycling receptacle RSDC-36, Silver powder coat finish
www.victorstanley.com, or approved other

Location: Building zone, landscape amenity panel

Bicycle Rack

Product name / Manufacturer: Landscape Forms, Ring Bicycle Rack, stainless steel
www.landscapeforms.com, or approved other

Location: Building zone, landscape amenity panel

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

SDC-36 Steelsites™ Series side-deposit side-door litter receptacles.
Visit **www.victorstanley.com** for details.

3.4G Streetscape Furnishings / Tysons Central 123 & North Central

Benches

Product Name / Manufactuer: Urbanscape Dewart Bench DE1113C, with horizontal slats. Stainless powder coat finish. www.urbanscapefurniture.com, or approved other

Location: Building zone, landscape amenity panel

Litter / Recycling Receptacles

Product name / Manufacturer: Urbanscape Receptacle TA3F33P and TA3F33P with Bonnet for Recycling Receptacle . Stainless powder coat www.urbanscapefurniture.com, or approved other

Location: Building zone, landscape amenity panel

Bicycle Rack

Product name / Manufacturer: Urbanscape Loop Bike Rack BRH5381. Stainless powder coat. In-ground or surface mount www.urbanscapefurniture.com, or approved other

Location: Building zone, landscape amenity panel

3.4H Streetscape Furnishings / Tysons Central 7 & Old Courthouse

Benches

Product Name / Manufactuer:	Landscape Forms Rest Metro 40 Bench, Silver powder coat finish. www.landscapeforms.com, or approved other
Location:	Building zone, landscape amenity panel
Other:	Backless bench, and bench with or without arms are all acceptable. Use of one or two seat dividers should be considered

Litter / Recycling Receptacles

Product name / Manufacturer: Creative Pipe Degaldo trash receptacle and recycling receptacle, Grey powder coat RAL 7040: DLGT-HLS-36-F-P-DT and DLGT HLS-36-F-P-LDD www.creativepipe.com, or app. other.

Location: Building zone, landscape amenity panel

Other: Stainless steel also acceptable

Bicycle Rack

Product name / Manufacturer Createive Pipe Horseshoe Rack, flanged surface mount, Stainless Steel. www.creativepipe.com, or approved other

Location: Building zone, landscape amenity panel

3.4J Streetscape Furnishings / Tysons West & West Side

Benches

Product Name / Manufactuer:	Forms + Surfaces Trio Bench with aluminum texture powder coated frame, clear anodized aluminum slats. www.forms-surfaces.com, or approved other
Location:	Building zone, landscape amenity panel
Other:	Backless bench, and bench with or without arms are all acceptable

Litter / Recycling Receptacles

Product name / Manufacturer: Landscape forms Poe receptacle square opening for trash, round opening for recycle. Silver powder coat www.landscapeforms.com or approved other

Location: Building zone, landscape amenity panel

Bicycle Rack

Product name / Manufacturer: Landscape Forms Bola Bicycle Rack, stainless steel www.landscapeforms.com, or approved other

Location: Building zone, landscape amenity panel

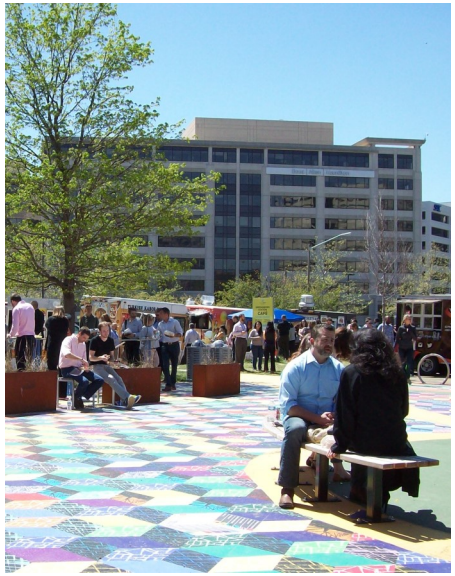
3.5 Public Art

Public art installations are important elements in the urban landscape and can be located in parks, in the streetscape, at building entrances, and other strategic locations Art pieces can reflect neighborhood character and act as landmarks which distinguish one place from another.

The Art In Transit program that is associated with the four new Metro stations in Tysons will set the stage for other art installations in the area. Public art pieces are encouraged throughout the pedestrian realm in Tysons. Although no style or type of art is preferred or recommended in these guidelines, the following are design suggestions for locating public art.

Design Suggestions:

- Work with the Arts Council of Fairfax County to facilitate a public art program and to connect with local artists.
- Include local, national and international artists' work of all scales.
- Consider establishing places that will house temporary and rotating art installations, such as in medians, or on sites that are slated for phased development.
- Consider various and emerging forms of art including digital media, sculpture, painting, murals, digital displays, performance art, and other forms of artistic expression.
- Locate art in prominent places within primary pedestrian corridors such as at major intersections, locations of civic uses and in retail areas.
- Do not install public art installations that could impede pedestrian traffic flow in the sidewalk zone of the streetscape.
- Consider both pedestrian and automobile scale art pieces.
- Consider functional art that can be incorporated into benches, bicycle racks or fences.



Opposite Left: Greensboro Metro Art, Artist: David Dahlquist, Image: Staff

Opposite Right: Springhill Metro Art, Artist: Barbara Grygutis, Image: Staff

Above Left Top: Tysons Luxury Lilies Mural, Artist: Naturel, Image: Staff

Above Left Bottom: Temporary Projection "For the Capitol", Artist: Jenny Holzer, Image: Jenny Holzer

Above Right Top: Temporary installation in a median, Arlington, VA. "CO2LED" Artists: Jack Sanders, Robert Gay, Butch Anthony, Image: Sanders, Gay, and Anthony

Above Middle Bottom: Tysons Tiles, Artist: Julia Vogel, Image: Staff

Above Right Bottom: Sculpture at Tysons West, Artist: Robert Cole, Image: Staff

3.6 Planting Design

Planting in the urban landscape is one of the most versatile and affordable design elements that can provide shade, texture, and color to public spaces, creating visual interest and encouraging pedestrian activity within the pedestrian realm. In addition to providing visual interest, well planted spaces in the pedestrian realm provide significant benefits to the urban ecology and environment. Stormwater remediation, urban heat island effect reductions, biodiversity and carbon sequestration are a few of the benefits that planting provides.

In addition to planting on the street-level, Tysons' urban architecture will provide many opportunities for parks and planted spaces on roof tops, building step back areas or other structures. These green roof spaces will provide places for recreation and relaxation, and all will offer additional ecological benefits for Tysons and the region.

The following are design suggestions and references to be used when designing streetscape and other planted spaces in the pedestrian realm.

Tree Space Design

Fairfax County recognizes the importance of a robust tree canopy and has established a county-wide goal to increase the overall tree canopy from 40% to 45% by 2037. The urban landscape in Tysons provides a unique opportunity to contribute to Fairfax County's tree canopy by replacing parking lots and treeless street edges with well designed blocks that accommodate a planted pedestrian realm. The Comprehensive Plan calls for a 10% tree canopy coverage goal for each new redevelopment project. By implementing the conceptual grid and the streetscape planting design recommendations from the Comprehensive Plan, it is estimated that, over time, approximately 15,000—20,000 street trees will be planted in the Tysons streetscape alone. This streetscape tree canopy, along with that of other planted spaces such as urban parks and green roofs, could result in a significant increase in Tysons' overall tree canopy .

To achieve the tree canopy goal noted above and to create a well planted urban pedestrian realm, one of the most fundamental elements of horticulture that must be addressed is soil. The ability for trees to grow and thrive in a harsh urban environment is dependent on the quality and volume of soil provided for trees. Without adequate, uncompacted soil urban trees will be short lived and provide little aesthetic and ecological benefit. Traditional "tree pit" designs that provide limited space for tree roots are the primary cause of poor tree health. They also create dangerous conditions where tree roots grow into sidewalk areas and crack paved surfaces. Innovative horticultural and design engineering research provides an alternative approach to tree planting that should be applied in Tysons.

Opposite: Washington DC Streetscape—1105 K St., NW

Right: Pennsylvania Avenue Streetscape, Washington, D.C.

3.6A Tree Space Design

Casey Trees, along with an advisory group of arborists, urban foresters, landscape architects and horticulturalists published a report that outlines innovative design strategies that provide healthy environments for urban trees. The following section includes many of the concepts in the Casey Tree report; further information can be found at www.caseytrees.org.

The Casey Trees report and this document use the term tree space to replace commonly used terms such as "tree pits" and "tree boxes." As defined on page 7 of Tree Space Design: Growing the Tree out of the Box, Tree space is the open or covered area that is dedicated for the planting and growing of a street tree.

As noted in the Comprehensive Plan, the goal for tree spaces is to provide an environment that promotes healthy root growth. Because the ultimate size and health of trees is largely dependent on soil volume, tree spaces should be a minimum of 4 feet deep and provide a minimum soil volume in the root zone of approximately 700 cubic feet. The length and width of tree spaces varies depending on the streetscape type and the amount of anticipated pedestrian traffic on that streetscape. Tree space soil volumes greater than 700 cubic feet are highly encouraged and will lead to larger tree canopies. For two or more trees planted in a contiguous area, the volume of soil per tree could be reduced as tree roots will share much of the same space. Provision of continuous tree spaces is highly encouraged.

There are different strategies to achieve the elements necessary for trees to thrive in an urban environment. Some strategies include structural elements, while others may involve providing more than the minimum landscape amenity panel width if structural components are not desired. For example, with a 6' wide landscape amenity panel, 2' of space will be located underneath the sidewalk zone (cantilevered sidewalk) in order to meet current Public Facility Manual (PFM) requirements. If an 8' wide landscape amenity panel is provided, no cantilever is required, as the tree space design can meet PFM requirements.

The benefits of using this method of tree space design include:

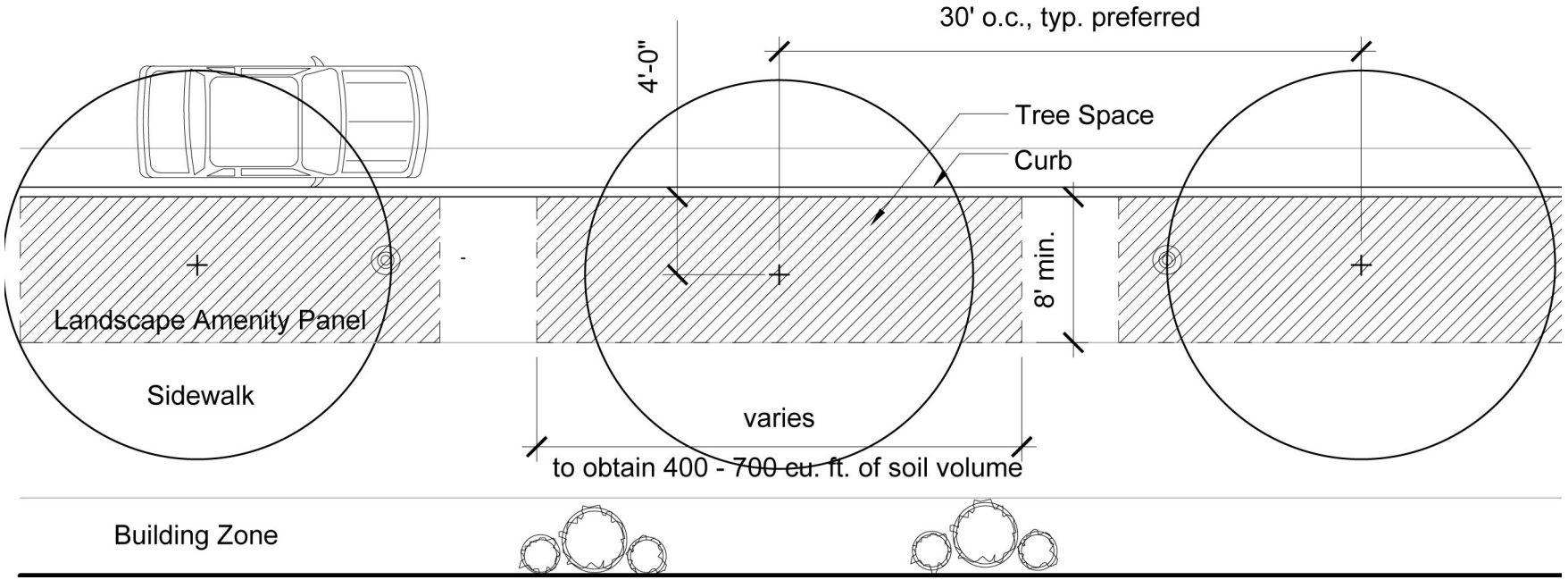
- Better Shade - trees planted in tree spaces of 700 cubic feet of soil reach an approximate 18 - 20 foot diameter canopy size before they show signs of decline compared to traditional "tree pit" trees which result in trees achieving a 5 - 10 foot diameter canopy.

- Lower Maintenance Costs - Trees planted in tree spaces are healthier and require less maintenance because they have a healthy root environment and suffer from fewer stress-related diseases.

- Lower Replacement Costs - Trees planted in tree spaces of 700 cubic feet of soil live 10 - 20 years versus "tree pit" trees which average a 5-year life expectancy.

- Safer Sidewalks - Trees planted in tree spaces have adequate soil volumes for their roots versus "tree pit" trees which have to break out of their small root zones and crack or buckle adjacent sidewalks to find air and water.

The following tree space design should provide both a healthy environment for tree roots and accommodate the high volume of pedestrian traffic that is expected in Tysons. Although the surface area of the tree space is larger than traditional "tree pits," only a portion of the surface area must remain open soil area. The remainder of the surface area may be covered with a permeable, walkable paving system that protects tree roots from compaction and allows for pedestrian traffic above the tree space.



Above Left: Tree Space design diagram, Open Soil Area. © 2008 Casey Trees.

Above Right: Tree Space design diagram, Covered Soil Area. © 2008 Casey Trees.

Bottom: Tree space conceptual Diagram.

3.6A Tree Space Design

Greater soil volume will lead to healthier trees; however, there are many variables in building the urban streetscape, such as pedestrian traffic, underground utility infrastructure, and economic viability, that could potentially conflict with the goal of healthier trees. For this reason, it is important to balance healthy trees and walkable and buildable streetscapes. With this understanding, the recommendation for tree space design in Tysons is as follows:

- 700 cubic feet is the suggested volume for street trees in Tysons. 400 cubic feet is the minimum that will be considered by the Urban Forest Management Division (UFMD).

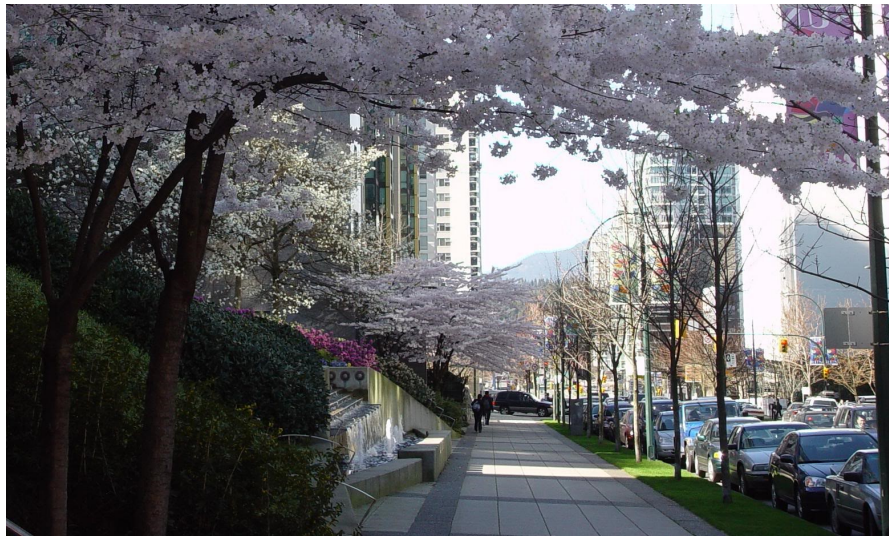
- Achieving these soil volumes can be achieved by using:
  A. Open soil areas (Detailed in section 3.6B) or
  B. Covered soil areas (Detailed in section 3.6C) that utilize assorted methods for structurally supporting pavement over planting soil.

- The following recommendations include tree planting details that demonstrate how innovative planting methods can accommodate both the suggested soil volumes and provide a desirable amount of paved surface area for pedestrians. Additionally they demonstrate how the 8' minimum planting space width, called out in the Fairfax County Public Facilities Manual, can be achieved in the Tysons streetscape.

- A minimum of 400 cubic feet of soil volume may be utilized for the following conditions:
  A. Primary pedestrian corridors (see Section 2.4)
  B. Secondary pedestrian corridors that are located in retail areas
  C. Where utilities cannot be located in the roadway or under the sidewalk zone and must cross a tree planting area

- Larger soil volumes (700 cubic feet), which can be achieved in a number of ways and they are detailed in the following section and in the Casey Tree publication Tree Space Design: Growing the Tree out of the Box, should be utilized for the following conditions:
  A. Secondary Pedestrian Corridors in residential areas
  B. Tertiary Pedestrian Corridors in residential areas
  C. Public and private parks

- Utilize innovative methods to increase soil volume for trees such as providing root paths to adjacent open soil areas or by planting trees in contiguous soil planting areas. This and other methods are detailed in Tree Space Design: Growing the Tree out of the Box



Above left:, top Washington, D.C. Streetscape with planting in the building zone and continuous street tree planting spaces in the landscape amenity panel .

Above left, bottom Michigan Avenue Streetscape, Chicago, IL Image: Bruno Carvalho

Above right: Washington, D.C. Streetscape and street trees using partially open and partiallyl covered tree spaces. Root path connection to green space on right.

3.6A Tree Space Design

Open Soil Area

Page 5 of Tree Space Design: Growing the Tree out of the Box defines open soil area as "an unpaved area of soil surrounding a tree which contains existing, new or amended soil." Open soil area is encouraged when space and pedestrian flow allows it. This planting method provides space for ornamental plantings and trees in the tree space and maximizes the amount of stormwater that can be absorbed into the ground.

Design Suggestions:

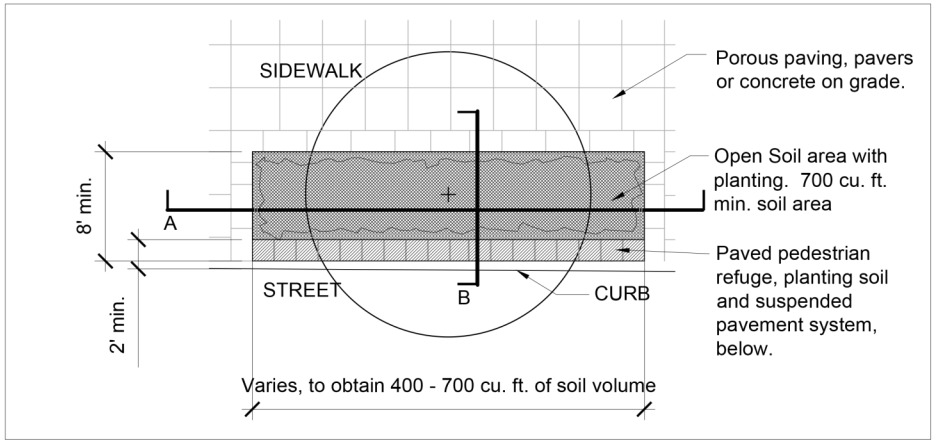
- To ensure clear pedestrian circulation, open soil areas should not be used in high volume, primary pedestrian corridors (Section 2.4) or in any activity nodes or retail areas. If used, they should not exceed 12 feet by 8 feet as measured at the surface. (See Covered Soil Area details on the next page)

- Continuous open soil areas may be considered in secondary corridors with lower pedestrian volumes and in tertiary corridor landscape amenity panels. However, where on-street parking is adjacent to the streetscape, a 2 foot, minimum, paved walkway should be provided both parallel to the curb and as paths, at 12 foot increments, from the curb to the sidewalk.

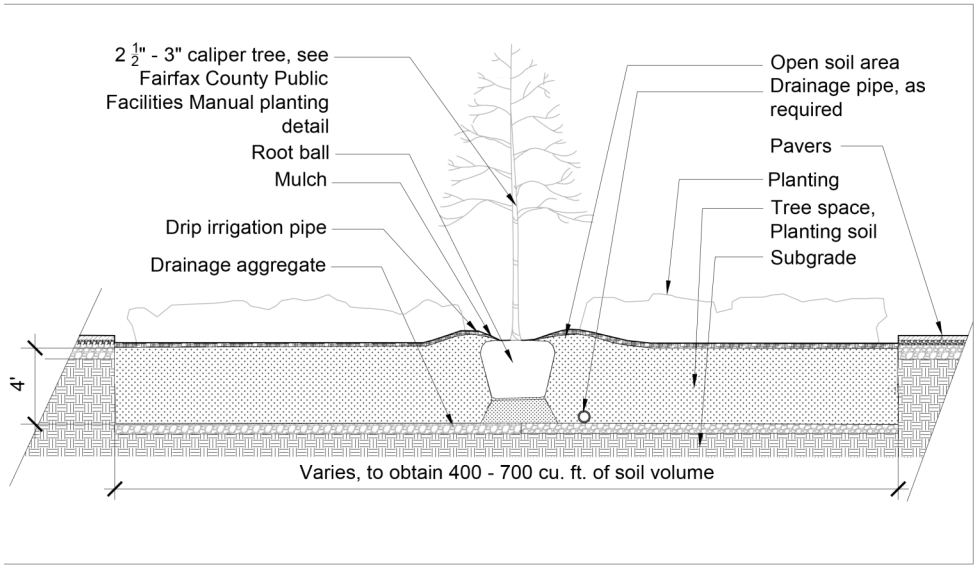
- A permanent, automatic irrigation system should be provided for tree and ornamental plantings.

- Open soil areas should be planted with turf or hardy, drought tolerant perennials, grasses and/or small shrubs that do not conflict with vehicular sight line distances. (See recommended plant list in Section 3.6H)

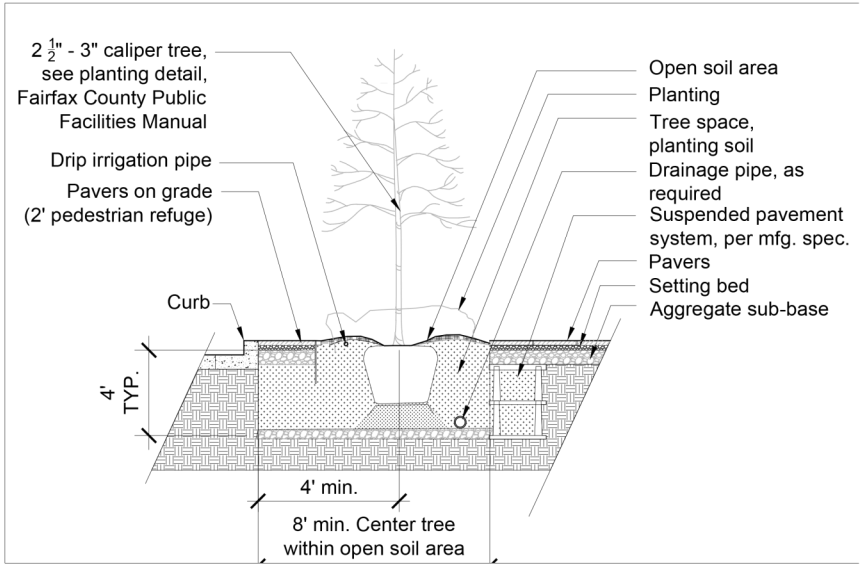
- To avoid compaction of soil and damage to ornamental plantings, a low fence structure could be installed to discourage pedestrians from walking in planted areas.



Tree Space Design - Open Soil Area, Plan



Tree Space Design - Open Soil Area, Section A



Tree Space Design - Open Soil Area, Section B

Opposite: Streetscape, Washington, D.C.

Above: Urban Street Tree Planting Details, Plan and Sections—Open Soil Area

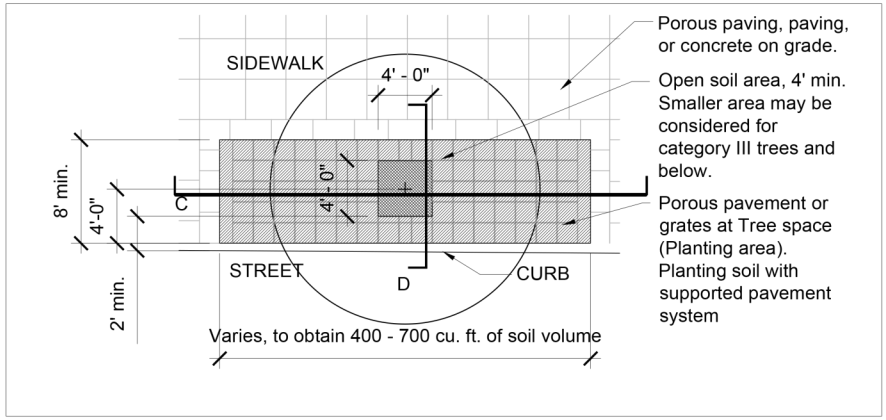
3.6A Tree Space Design

Covered Soil Area

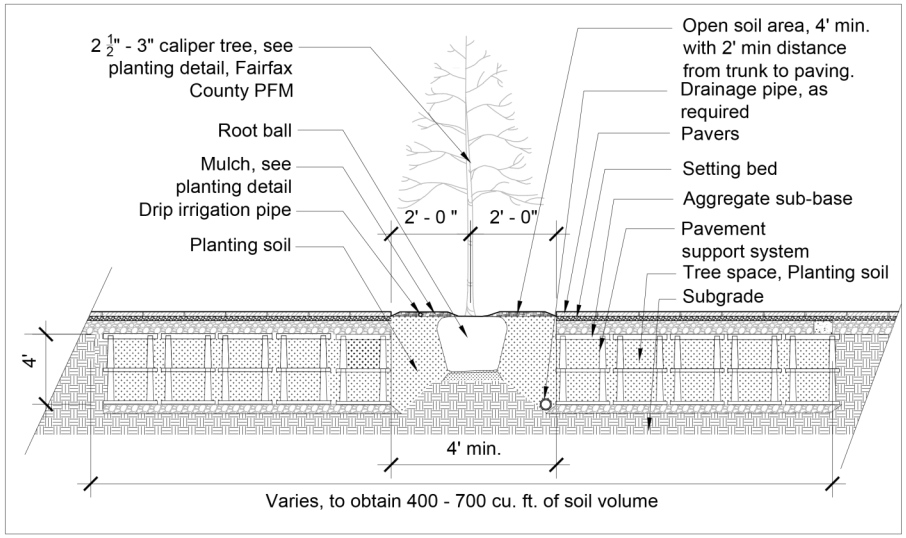
A covered soil area, or "an area of soil that is under pavement and specially designed to accommodate tree root growth'"[3] should be used in areas of high pedestrian traffic, especially at transit stops. The following design suggestions, details, and images describe these methods for providing covered soil areas:

Design Suggestions:

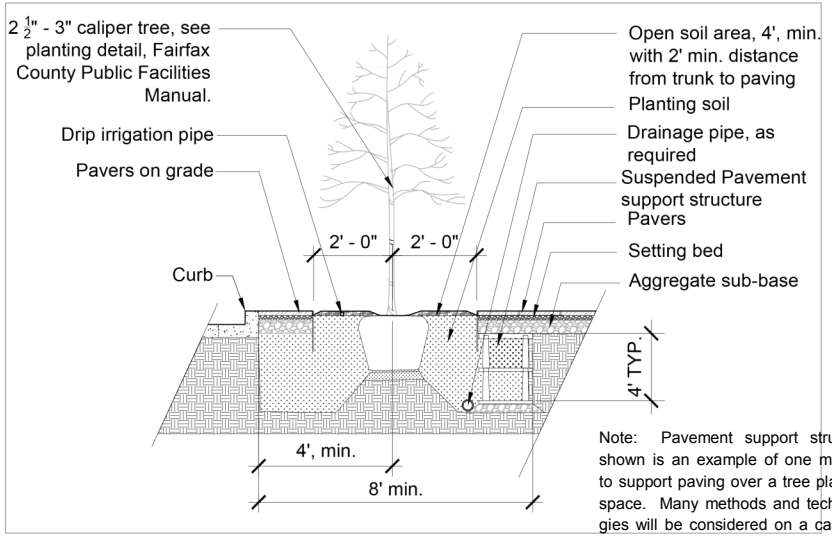
- Maintain a minimum open soil area of 4 foot by 4 foot around the base of trees. A 2 foot by 2 foot opening may be acceptable for some ornamental trees. (See Ornamental Tree Recommended Plant List in Section 3.6H)
- Utilize supported pavement technologies such as structural cells, cantilevered paving and properly placed tree grates for the covered area of the tree space.
- All paving that is supported above tree spaces should be permeable so that water and air can reach tree roots. This can be achieved by using permeable or traditional unit pavers set in an aggregate base and a permeable sub-base above tree spaces. (See Section 3.2C for recommended paving materials)
- If tree grates are used as the walkable surface over the tree space, they should be placed at least 2 feet away from all sides of the tree trunk. Tree grates should not be used directly adjacent to tree trunks as they are rarely maintained over time and cause serious damage to trees when trunks grow into narrow grate openings.
- Install a permanent, automatic irrigation system to support healthy plant growth.



Tree Space Design - Covered Soil Area, Plan



Tree Space Design - Covered Soil Area, Section C



Note: Pavement support structure shown is an example of one method to support paving over a tree planting space. Many methods and technologies will be considered on a case by case basis and as approved by the Urban Forestry Management Division.

Tree Space Design - Covered Soil Area, Section D

Opposite Top: Covered soil area using tree grates. Image: Casey Trees

Opposite Bottom Left: Covered soil area using pavers. Image: Casey Trees

Opposite Bottom Right: Covered soil area diagram. Image: DeepRoot

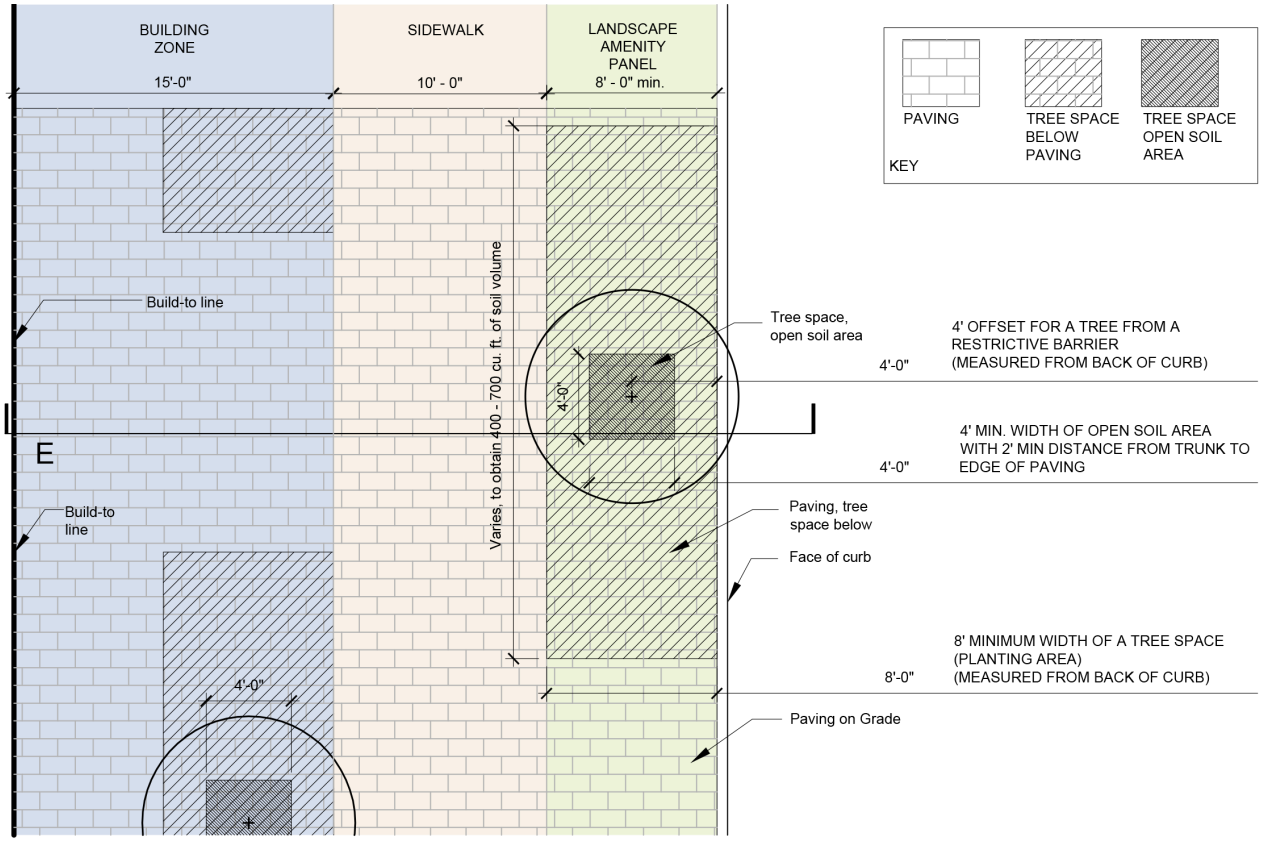
Above: Urban Street Tree Planting Detail, plan and sections - Covered Soil Area

3.6A Tree Space Design - Boulevard

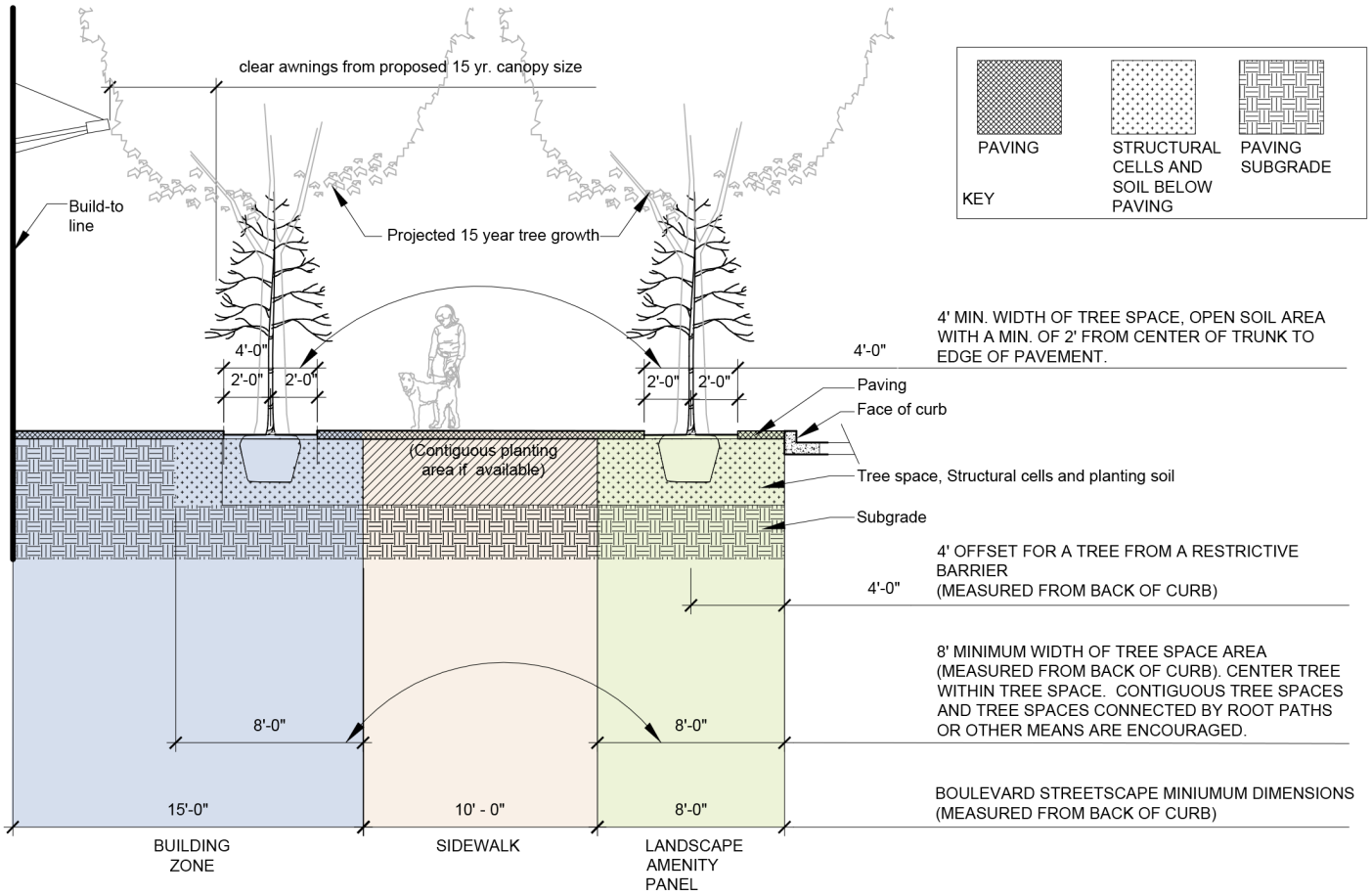
The dimensions of the streetscapes in Tysons vary by each of the streetscape types (Boulevard, Avenue/Collectors, Local, and Service Streets). In coordination with the Fairfax County Urban Forest Management Division (UFMD), the following details have been developed and show how tree spaces can be accommodated in each of the Tysons streetscape types. Street trees are generally not anticipated to be planted on service streets therefore, that streetscape type is not represented in the following diagrams.

Tree Space Design - Boulevard

The following diagrams depict a conceptual covered tree space on a Boulevard but it is anticipated that both open and covered soil tree spaces could be used. In primary pedestrian corridors, covered soil using tree grates is preferred. The flexibility exists to use either open or covered tree spaces in secondary and tertiary corridors. In both open and covered tree spaces and for all streetscape types, a 2 foot pedestrian refuge strip should be provided adjacent to on-street parking.



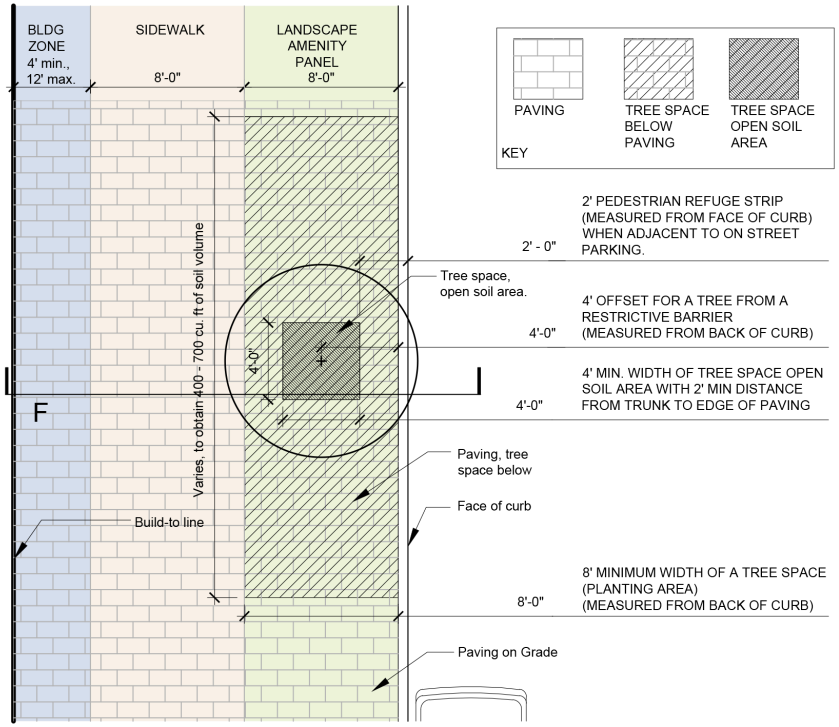
Tree Space Design Boulevard - Plan



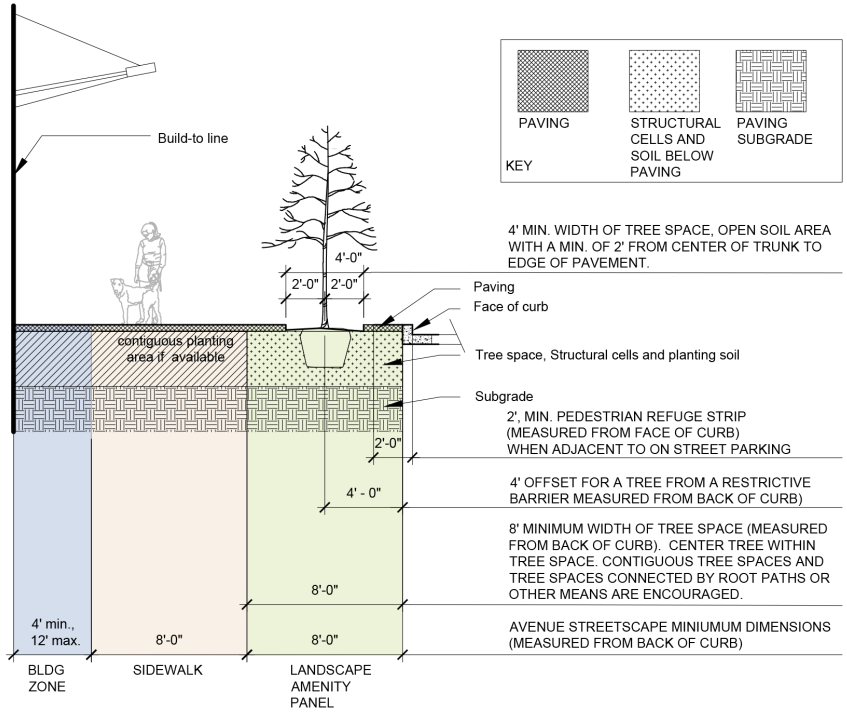
Tree Space Design Boulevard - Section E

Tree Space Design - Avenue / Collector

The following diagrams depict a conceptual covered tree space on an Avenue / Collector but it is anticipated that both open and covered soil tree space details could be used. In primary pedestrian corridors covered soil using tree grates is preferred. Flexibility exists to use either open or covered tree spaces in secondary and tertiary corridors. In both open and covered tree spaces and for all streetscape types, a 2 foot pedestrian refuge strip should be provided adjacent to on-street parking.



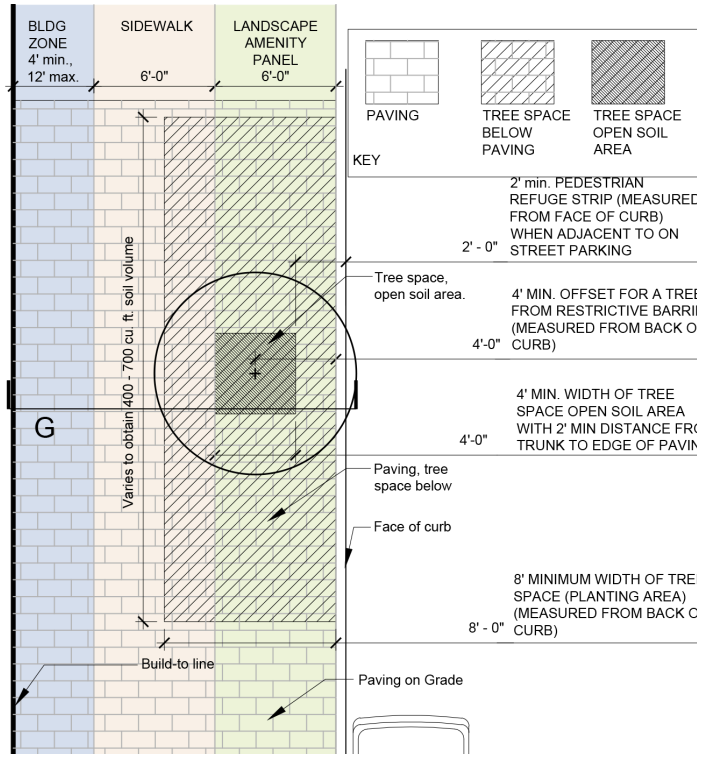
Tree Space Design Avenue / Collector - Plan



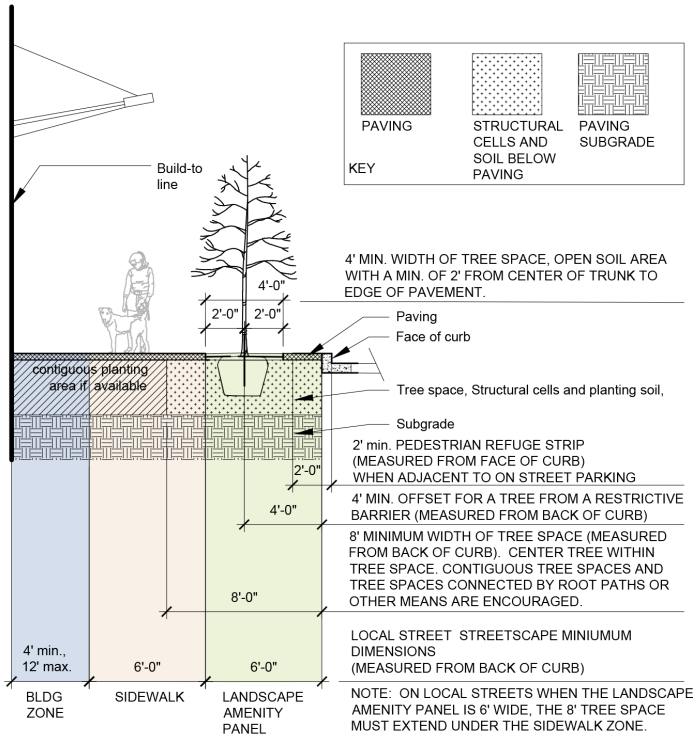
Tree Space Design Avenue / Collector - Section F

Tree Space Design—Local Street

The following diagrams depict a conceptual covered tree space on a Local Street but it is anticipated that both open and covered soil tree space details could be used. In primary pedestrian corridors covered soil using tree grates is preferred. Flexibility exists to use either open or covered tree spaces in secondary and tertiary corridors. In open soil areas, the 6 feet minimum local streetscape landscape amenity panel will require 2 feet of covered soil area for all tree spaces in the sidewalk zone to meet the required 8 foot wide planting space called out in the Fairfax County Public Facilities Manual. This detail is shown below. In both open and covered tree spaces and for all streetscape types, a 2 foot pedestrian refuge strip should be provided adjacent to on-street parking.



Tree Space Design Local Street - Plan



Tree Space Design Local Street - Section G

3.6B Street Trees

Street trees in Tysons will contribute to the transition from the ground plane to adjacent tall buildings. They will provide shade and seasonal interest, and will complement the lines of streets and architecture. They will add to bio-diversity, stormwater remediation and improve air quality in Tysons.

This section provides recommendations and design considerations for planting street trees. For primary pedestrian corridors and on select important streets (as listed in section 3.6H), refer to the Primary Pedestrian Corridors and Important Streets Plant List in Section 3.6H. Street trees on secondary and tertiary pedestrian corridors are at the discretion of the design team, but should adhere to the following design suggestions and may be from the list of suggested shade trees that are suitable for street tree applications (Section 3.6H) or approved others.

Design Suggestions:

- Use street tree species and cultivars that are proven to survive in urban conditions. Native species are preferred, but non-native species will be considered provided they are drought tolerant, disease resistant and non-invasive. (See recommended plant list in Section 3.6H)
- Keep street tree species along primary pedestrian corridors and monumental streets consistent on both sides of the street and along the entire length of the street. (see Section 3.6H)
- Keep trees species along other streets consistent, at a minimum, along each block and on opposite sides of streets.
- Use street trees in both the landscape amenity panel and, when space allows, the building zone .
- Install trees at a minimum of 4 inch in caliper in primary pedestrian corridors and on important streets as listed in Section 3.6H. These trees should be free of branches such that vehicular clear zones may be achieved. Refer to the American Standard for Nursery Stock for appropriate tree size and branching height relationships for each species.
- Install trees at a minimum of 3 inch caliper along secondary and tertiary streets. These trees should be free of branches such that vehicular clear zones may be achieved. Refer to the American Standard for Nursery Stock for appropriate tree size and branching height relationships for each species.

Design Suggestions (cont.):

- Plant trees at an appropriate time of the planting season to optimize temperate conditions and availability of irrigation water.

- Provide permanent, automatic irrigation for all trees in Tysons. The use of rainwater or other sustainable sources for irrigation is encouraged. Additionally, the use innovative water saving measures such as rain sensors and timers to conserve water use.

- Regularly maintain all trees and tree spaces regularly including removal of all stakes and guy wires one year after planting, regular removal of weeds and debris in all tree spaces, regular irrigation and irrigation maintenance, plant health care monitoring and treatment of insects and diseases.

- Do not use permanent tree mounted lighting that requires damaging attachment to trunks or branches.

- When using tree grates, install them with a minimum of 2 feet clear of any tree trunk on all sides. (See section 3.6A)

Opposite Left: Elms in downtown Frederick, MD

Opposite Right: Street tree planting, Washington, D.C.

Above Right: Street tree planting, Washington, D.C.

3.6C Ornamental Planting

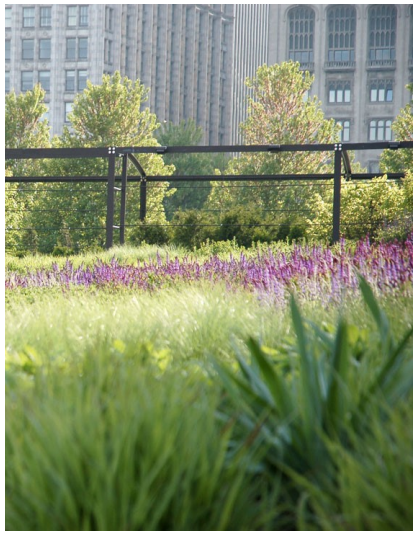
Ornamental plantings will activate the ground plane of the streetscape and pedestrian realm. They will add vibrant and colorful seasonal interest. Ornamental plantings provide diversity of species, color, texture and fragrance. Ornamental planting can occur in the landscape amenity panel, the building zone, and in urban parks as well as in other semi-public and private spaces.

Design Suggestions:

- Utilize drought tolerant and non-invasive species that are suited to urban conditions. (See recommended plant list in Section 3.6H)
- Include permanent, automatic irrigation systems in all ornamental planting areas.
- Adhere to vehicular sight line requirements as specified by VDOT.
- Do not install ornamental plantings in the sidewalk zone of the streetscape or impede pedestrian traffic in any way
- Ornamental plantings consist of evergreen, ornamental or flowering trees, deciduous and evergreen shrubs, grasses, perennials, and annuals.
- Include ornamental trees that are at least 2 1/2 inch to 3 inch caliper at the time of installation. When using a multi-stemmed variety, install trees whose stem diameters add up to at least 3 inches and are 8 feet in height. Install evergreen trees that are at least 8 feet in height.
- Consider seasonal interest and viability when designing ornamental plantings.

Design Suggestions (cont.):

- Consider raised planting beds at building entrances and along the build-to line as well as in other areas of the building zone, and incorporate seat walls into raised beds as appropriate.
- Consider installing a low fence structure to discourage pedestrians from walking in and compacting planted areas.
- Maintain all pedestrian realm ornamental planting areas on a regular basis. This should include horticultural care as well as litter removal.



Opposite: Building zone ornamental planting, Bethesda, MD

Above Bottom Left: Ornamental Planting at Lurie Garden—Millenium Park, Image: Linda Bryan, Mark Tomaras

Above Bottom Center: Landscape amenity panel ornamental planting with metal edging. Washington, D.C.

Above Right: Seasonal early fall plantings, Caroll Creek Linear Park, downtown Frederick, MD

3.6D Free-Standing Planters

In many cases, planting in the pedestrian realm will occur in free-standing planters, raised beds, hanging planters and other containers. Containers provide additional interest and are encouraged in both the landscape amenity panel and the building zone. Planting in containers is intended to supplement in-ground planting, and should not be the only means to achieve planting in the pedestrian realm. The following design suggestions describe the character of free standing container planting and where they should be located. Guidelines for specific containers and hardscape materials are found in Section 3.3, Streetscape Furnishings. (See Section 3.6H for recommended plants)

Design Suggestions:

- Utilize drought tolerant and non-invasive species that are suited to urban conditions. Native species are encouraged. (See recommended plant list in Section 3.6H)
- Use planters to define streetscape areas such as building entrances, outdoor dining areas, seating areas, and park entrances.
- Do not place planters in the sidewalk zone of the streetscape or in other places that would impede pedestrian traffic in any way.
- Use planters that are an appropriate size, mass, and design to complement the style of adjacent buildings and the neighborhood
- Use planters that are made from materials that will hold up to severe outdoor, urban conditions such as UV exposure, winter weather, and pollution.
- Provide drainage holes in all planters.
- Provide irrigation for permanent planters greater than 3 feet in diameter. The use of rainwater or other sustainable sources for irrigation is encouraged. Additionally, the use innovative water saving measures such as rain sensors and timers to conserve water use.
- Use small shrubs, perennials, grasses, and annuals in planters.

Design Suggestions (cont.):

- Rotate container plants throughout the growing season to maximize seasonal interest.
- Maintain containers on a regular basis including irrigation, horticultural care, and litter removal.
- Remove and replace cracked or damaged containers.

Opposite: Ornamental trees in free-standing planters. Washington, D.C.

Above Bottom Left: Building zone free-standing planters planted with shrubs, annuals, and perennials, Image: Tournesal Site Works, www.tournesalsiteworks.com

Above Right: Landscape amenity panel planting including free-standing planters and raised beds. Chicago, IL, Image: Haddonstone, Ltd. www.haddonstone.com

3.6E Vertical Planting

Innovations in planting design for the urban landscape have created new ways in which sites can be augmented by planting. Vertical planting techniques used in planters along a structure's façade, directly on building walls, as armature to enhance a wall, or as free-standing vertical trellis systems all add to the beauty of the pedestrian realm. These techniques offer aesthetic and environmental benefits and should be considered, where appropriate, when designing the pedestrian realm in Tysons.

The application of a vertical planting wall is generally discouraged over the use of architectural treatments, as the climate in this region is not ideal in supporting planting walls that thrive and provide year-round interest. However, vertical planting can be a beneficial part of the pedestrian realm and for parking structure screening when very specific site conditions exist. Adequate microclimate elements such as light levels and wind need to be considered when proposing a vertical planting wall as part of a design.

Design Suggestions:

- Consider vertical planting concepts early in the building design phase so that the proper infrastructure, such as, structural elements, water proofing and irrigation can be included.
- Use vertical planting to highlight entrances to buildings, enhance exterior parking garage walls and provide visual interest along building facades.
- Include appropriate plants for all vertical planting systems. In the case of trellis systems, use vines that are suited to the Mid-Atlantic region and are not invasive. For planted walls, choose plants that are appropriate for the wall's solar orientation and irrigation specifications.
- Use trellis systems that can hold up to severe outdoor conditions such as UV radiation, winter weather, wind and pollution.
- Maintain vertical plantings on a regular basis and include regular irrigation, horticultural care and litter removal. Maintenance should include monitoring of the vertical planting surface or system to prevent structural failure, paint chipping and other damage.

Opposite: Musee du Quai Branly, vertical planting with a living wall, Designers: Jean Nouvel and Patrick Blanc, Image: inhabitat.com

Above Left: Vancouver Airport, vertical planting with a living wall, Sharp & Diamond Landscape Architecture, Image: Landscape Architecture Magazine, April 2010

Above Right: Portland Airport, vertical planting with vines on screens, Image: of Tournesol Site Works, www.tournesol.com

3.6F Planting for Stormwater Remediation and Use of Low Impact Development Techniques

Low Impact Development (LID) is development techniques that manage the impact of a site's stormwater on the greater environment. This is achieved by slowing, cooling and reducing the volume of stormwater that enters downstream waterways. Additionally, some LID techniques can reduce the amount of pollutants in stormwater. Rain gardens and bio-swales, planted spaces that temporarily hold water while it can infiltrate into the ground, are commonly used to achieve LID goals. Planting strategies are used as an element to beautify and increase functionality of these systems. Creative landscape architecture, civil engineering and horticultural methods can result in effective, environmentally sensitive, and aesthetically pleasing planted systems in urban environments. The streetscape provides locations in which these techniques can be implemented. Particular attention must be paid to the types of plants used in stormwater design and will be addressed in Section 3.6H.

Bioretention planting areas require regular maintenance and the cost should be accounted for in a development's maintenance budget. As these tree spaces are designed to help meet a project's stormwater management and tree canopy goals, as well as providing a beautiful pedestrian environment, and are urban in nature, the entire system may need to be replaced over time as the bioretention media breaks down, trees and plantings reach their life cycle, and normal wear and tear of streetscape elements occurs.

Design Suggestions:

- Consider including LID techniques early in the design process so that they are part of a comprehensive stormwater management system and to insure that the proper infrastructure is planned.
- Design all LID planting areas to perform safely, effectively and over time in various states of inundation and drought. All areas will be reviewed by Fairfax County staff for compliance to all stormwater design requirements.
- Consider using LID planting areas in the landscape amenity panel and the building zone where they do not impede pedestrian traffic.
- Limit LID techniques in the sidewalk zone to the use of permeable paving and possible sub-grade water storage systems.
- Ensure that all LID planting areas are safely designed and placed in the urban landscape so that grade changes and flooding concerns do not compromise the safety of pedestrians, vehicles, or adjacent structures. LIDS located in the right-of-way are allowed per the Tysons Memorandum of Agreement between Fairfax County and VDOT, but are subject to VDOT review.
- Include plants that can thrive in conditions of inundation and drought and have been proven for use in rain garden or bio-retention applications. (See Section 3.6H for a recommended plant list.)

Opposite: Atwater Place Development, Portland Oregon, Image: City of Portland

Top Left: Urban Bio-retention Cell, New York City, New York, Image: Inhabitat.com Yuka Yoneda

Top Right: John Ross Building, Portland, Oregon, Image: City of Portland

Bottom Right: The Merriweather development, Portland, Oregon, Image: City of Portland

3.6G Planting for Green Roofs

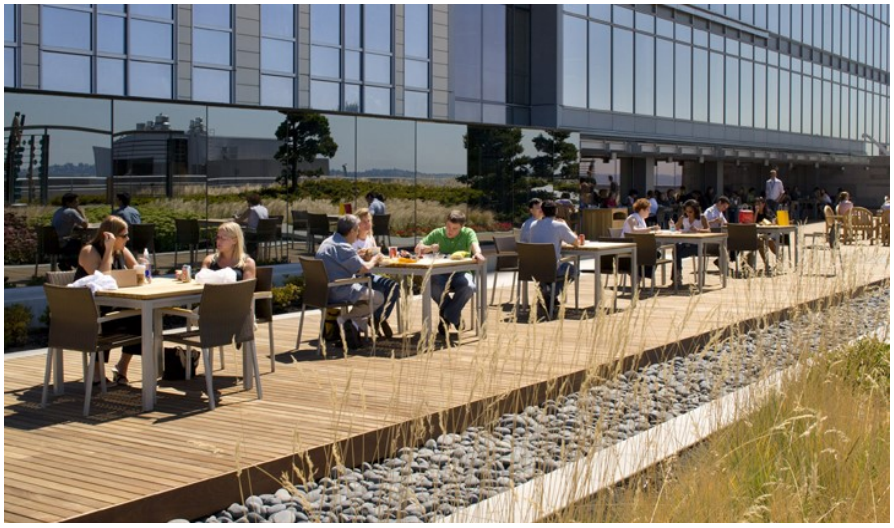
The vision for Tysons includes a sustainable landscape with the frequent and creative use of green roof technology. Green roofs provide environmental benefits such as remediation of as much as 50% of roof drainage, reduction in heat island effect and the provision of habitat for birds and butterflies. Green roofs also add a picturesque element to the urban skyline from adjacent buildings. Planting strategies for green roofs may be as simple as minimal soil depths planted with sedum sod, or as intricate as raised beds with trees, shrubs, perennials, sod and even food crops.

Although green roofs are largely within the private spaces on top of buildings, there may be instances when a green roof is appropriate for public and civic space within the pedestrian realm. Green roofs will thrive over underground parking and other architectural elements. Additionally, sites that are challenged with extreme grade changes can use green roof design to integrate at-grade public space into activated architecture. The many ways in which green roofs may be integrated into private roof areas, are discussed in Chapter 4, Site and Building Design.

Design Suggestions:

- Use tall green roof tolerant plants for lower roof spaces that are visible from the ground plane and from raised Metro platforms.
- Incorporate green roof concepts early in the design phase of any project so that the proper infrastructure can be included.
- Consider locating civic uses such as schools, libraries and recreation centers adjacent to green roof spaces and programming the green roof space accordingly.
- Include hardscape paths for pedestrian circulation and seating. Also include paths that accommodate horticultural green roof and building mechanical maintenance.
- Consider green roof urban agricultural practices such as herb farming and space for urban bee keeping in green roof designs.
- Refer to Fairfax County DPWES Recommended Plant Lists (see Resources, Chapter 8) for extensive and intensive vegetated roofs. These lists are not exhaustive and are intended to give the designer a palette of plan materials to choose from.

3.6G Planting for Green Roofs



Top Left: Rooftop Haven for Urban Agriculture, Gary Corner Youth Center, Chicago, IL Hoerr Schaudt Landscape Architects, Image: Scott Shigley
Top Right: View of Washington Mutual Center Roof Garden by Phillips Farevaag Smallenberg. Seattle, WA Image: Joseph Fry (PFS)
Bottom Left: Pepco substation green roof, Washington DC, Oehme, van Sweden & Associates. Image: Roger Foley
Bottom Right: Washington Mutual Center Roof Garden by Phillips Farevaag Smallenberg. Seattle, WA Image: Lara Swimmer Photography

3.6H Plant Lists

Street Trees—Primary Pedestrian Corridors and Important Streets in Tysons

There are two types of streets on which a consistent tree planting strategy along the length of the entire street is preferred. These streets are primary pedestrian corridors, (see Section 2.4), and the streets that exist today that will transform into important pedestrian and vehicular corridors. On all of these streets, tree varieties will assist with wayfinding for pedestrians, bicyclists, and vehicles and will provide a sense of place for each street.

When redevelopment occurs on primary pedestrian corridors, as well as Route 7, Route 123, Greensboro Drive, Boone Boulevard and International Drive, a street tree from the following list should be chosen and remain consistent on both sides of the street and along the entire length of the street. The redevelopment project that proposes the first trees on any primary pedestrian corridor will set the precedent for future cases. Any future development should follow the precedent set by the first case and also specify the same trees along the length this primary pedestrian corridor. All street trees in primary pedestrian corridors and on important streets should be a minimum of 4 inch in caliper at the time of planting. Street trees should be free of branches such that vehicular clear zones may be achieved. Refer to the American Standard for Nursery Stock for appropriate tree size and branching relationships for each species. Following is the recommended plant list for primary pedestrian corridors. This list refers to street trees only. Primary pedestrian corridors that are located in urban parks are exempt from this list. Flexibility is available to choose species that are not listed here; however, they are subject to approval by Fairfax County UFMD. Consult the Fairfax County Public Facilities Manual for an extensive list of trees.

	Botanical Name	Common Name	Mature	Mature	Caliper size
STREET TREES FOR PRIMARY PEDESTRIAN CORRIDORS AND IMPORTANT STREETS			**Height**	**Spread**	**At Planting**
AR	*Acer rubrum 'Columnare'*	Columnar Red Maple	60'	15'	4” min.
CB	*Carpinus betulus 'Columnaris'*	Columnar European Hornbeam	30'-50'	20'-30'	4” min.
CJ	*Cercidiphyllum japonicum*	Katsura Tree	40'-60'	20'-30'	4” min.
GB	*Ginkgo biloba 'Autumn Gold’*	Autumn Gold Sentry Ginkgo	65'	30—40’	4” min.
GT	*Gleditsia triacanthos var. inermis*	Honeylocust	45'-55'	35'-45'	4” min.
PA	*Platanus x acerfolia 'Liberty'*	London Planetree	60'-80'	50'-60'	4” min.
QP	*Quercus phellos*	Willow Oak	40'-60'	30'-40'	4” min.
SJ	*Ulmus Americana ‘Valley Forge’*	Valley Forge Elm	50'-70'	40'-50'	4” min.
TC	*Tillia cordata 'Greenspire'*	Greenspire Little Leaf Linden	40'-50'	30'	4” min.

Ginkgo biloba

Quercus rubra

Quercus phellos

Tilia cordata

Gleditsia triacanthos inermis

Acer rubrum

3.6H Plant Lists

Street Trees— All other roads and Shade Trees

Street trees on all streets other than those mentioned on the previous page, may be chosen from the following list of street trees. All street trees should remain consistent on either side of the street for a minimum of one block. Shade trees that are to be used in park spaces or other areas that are not in the streetscape are at the discretion of the design team. Street trees should be free of branches such that vehicular clear zones may be achieved. Refer to the American Standard for Nursery Stock for appropriate tree size and branching relationship for each species. The following list represents a sample of street tree species for urban conditions that should be considered. Consult the Fairfax County Public Facilities Manual for an extensive list of trees.

Botanical Name	Common Name	Mature Height	Mature Spread	Preferred Street Trees	Caliper size at Planting
SECONDARY, TERTIARY CORRIDOR, AND SHADE TREES					
Acer rubra 'October Glory'	October Glory Red Maple	40'-60'	25'-45'		3" min.
Acer rubrum 'Columnare'	Columnar Red Maple	60'	15'	Yes	3" min.
Carpinus betulus	European Hornbeam	40'-60'	40'-50'		3" min.
Carpinus betulus 'Columnaris' or 'Fastigiata'	Columnar European Hornbeam	30'-50'	20'-30'	Yes	3" min.
Cercidiphyllum japonicum	Katsura Tree	40'-60'	20'-30'	Yes	3" min.
Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	65'	25'	Yes	3" min.
Gleditsia triacanthos var. inermis	Honeylocust	45'-55'	35'-45'	Yes	3" min.
Platanus x acerfolia 'Liberty' or 'Columbia'	London Planetree	60'-80'	50'-60'	Yes	3" min.
Quercus alba	White Oak	60'-80'	60'	Yes	3" min.
Quercus phellos	Willow Oak	40'-60'	30'-40'	Yes	3" min.
Quercus rubra borealis	Northern Red Oak	75'	50'-60'		3" min.
Sophora japonica	Japanese Scholar Tree	50'-70'	40'-50'	Yes	3" min.
Tillia cordata 'Greenspire'	Greenspire Little Leaf Linden	40'-50'	30'	Yes	3" min.
Zelkova serrata 'Green Vase'	Green Vase Zelkova	50'-60'	40-50'	Yes	3" min.

Ginkgo biloba

Quercus rubra—leaf

Quercus phellos

Tilia cordata

Gleditsia triacanthos inermis—leaf

Acer rubrum

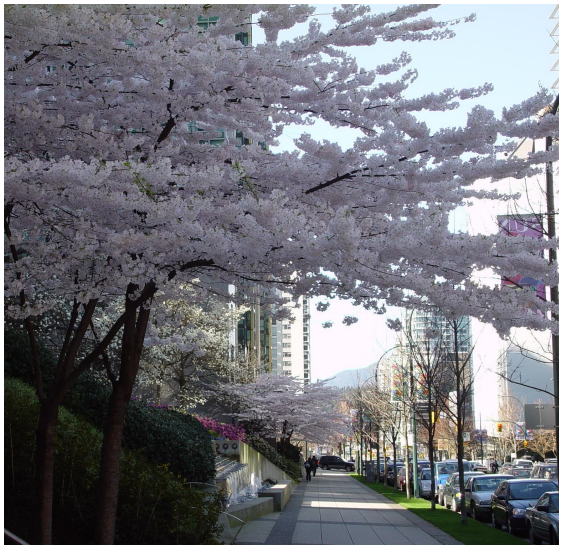
3.6H Plant Lists

Ornamental Trees

The suggested ornamental tree plant list below represent only a sample of the plant varieties suited for urban conditions that should be considered for use in the streetscape and in public parks and other open spaces. Consult the Fairfax County Public Facilities Manual for an extensive list of trees.

Botanical Name	Common Name	Mature Height	Mature Spread
ORNAMENTAL TREES			
Acer ginnala	Amur Maple	15'-20'	15'-20'
Amelanchier arborea	Serviceberry	15'-25'	10'-15'
Cercis canadensis	Eastern Redbud	20'-30'	25'-35'
Cladrastris kentukea	Yellowwood	30'-50'	40'-55'
Cornus kousa	Kousa Dogwood	20'-30'	20'-30'
Halesia carolina	Carolina Silverbell	30'-40'	25'-35'
Lagerstroemia indica 'Natchez'	White Crape Myrtle	15'-25'	15'-20'
Magnolia stellata	Star Magnolia	15'-20'	10'-15'
Magnolia virginiana	Sweetbay Magnolia	10'-30'	10'-20'
Magnolia x soulangiana	Saucer Magnolia	20'-30'	20'-30'
Parrotia persica	Persian parrotia	30'-40'	15'-30'
Styrax japonicus	Japanese Snowbell	20'-30'	20'-30'

Amelanchier arborea—berry and leaf



Prunus yedoensis

Cercis canadensis

Magnolia x soulangiana

Styrax japonica—flower and leaf

Lagerstroemia indica—bark

3.6H Plant Lists

Evergreen Trees

The suggested evergreen tree plant list below represent only a sample of the plant varieties suited for urban conditions that should be considered for use in the streetscape and in public parks and other open spaces. Consult the Fairfax County Public Facilities Manual for an extensive list of evergreen trees.

Botanical Name	Common Name	Mature Height	Mature Spread
EVERGREEN TREES			
Picea abies	Norway Spruce	40'-60'	30'-35'
Juniperus virginiana	Eastern Red cedar	40'-50'	8'-15'
Ilex opaca	American Holly	30'-60'	15'-35'
Ilex x *'Nellie R. Stevens'*	Nellie R. Stevens Holly	20'-30'	10'-20'
Ilex x attenuata *'Fosteri'*	Foster's Holly	15'-25'	8'-12'
Cedrus atlantica	Blue Atlas Cedar	40'-60'	30'-40'

Juniperus virginiana

Ilex x attenuata 'fosteri'

Picea abies

Cedrus atlantica

3.6H Plant Lists

Shrubs

The suggested shrub plant list below represent only a sample of the plant varieties suited for urban conditions that should be considered for use in the streetscape and in public parks and other open spaces. Consult the Fairfax County Public Facilities Manual for an extensive list of shrubs.

Botanical Name	Common Name	Mature Height	Mature Spread
DECIDUOUS SHRUBS		**Height**	**Spread**
Rhododendron sp.	Azalea	4'	4'
Cornus sanguinium 'Midwinter Fire'	Midwinter Fire Red Twig Dogwood		
Cotoneaster dammeri	Cotoneaster	2'	6'
Deutzia gracillis 'Nikko'	Nikko Deutzia	2'	4'
Fothergilla gardenii	Fothergilla	3'	3'
Hamamelis x intermedia 'Arnold's Promise'	Arnold's Promise Witchazel	8’	5’
Hydrangea quercifolia	Oak Leaf Hydrangea	5-6'	5'-6'
Ilex verticillata	Winterberry Holly	3'-5'	3'-5'
Itea virginica	Virginia Sweetspire	3'-6'	3'-6'
Styrax americanus	American Snowbell	6'-10'	6'-10'
Prunus laurocerasus 'Otto Luyken'	Otto Luyken Cherry Laurel	4'	4'
Forsythia x intermedia	Forsythia	8'-10'	10'-12'
EVERGREEN SHRUBS		**Height**	**Spread**
Abelia 'Edward Goucher'	Edward Goucher Glossy Abelia	6'-8'	4'-6'
Cotoneaster adpressus var. praecox	Creeping Cotoneaster	2'	6'
Ilex crenata	Japanese Holly	4'-6'	4'-6'
Ilex glabra	Inkberry Holly	3'-5'	3'-5'
Juniperus chinensis 'Sea Green'	Sea Green Chinese Juniper	6'	6'
Taxus x media 'Densiformis'	Densiformis Spreading Yew	4'	8'

Cornus sanguinium 'Midwinter Fire'

Hydrangea quercifolia

Hamamelis x intermedia 'Arnold's Promise'

Ilex glabra

Ilex crenata

Prunus laurocerasus 'Otto Luyken'

3.6H Plant Lists

Perennials, Grasses and Groundcovers

The suggested perennial, grass, and groundcover plant list below represent only a sample of the plant varieties suited for urban conditions that should be considered for use in the streetscape and in public parks and other open spaces. Consult the Virginia Cooperative Extension for additional plant lists.

Botantical Name	Common Name	Mature	Mature
PERENNIALS , GRASSES AND GROUNDCOVERS		**Height**	**Spread**
Amsonia tabernaemontana	Blue Star	18"	18"
Ater novae-angliae or oblongifolius	Aster	18-24"	18"
Coreopsis verticillata 'Moonbeam'	Tickseed	18"	18"
Echinachea purpurea	Purple Coneflower	24"	12"
Geranium sanguineum	Bloody Cranesbill	9"-18"	12"-18"
Hemerocallis sp.	Daylily	12"-48"	12"
Iris sibirica 'Caesar's Brother'	Siberian Iris	36"-48"	24"-36"
Liriope muscari 'Big Blue'	Big Blue Lily Turf	12"-24"	12"-24"
Miscanthus sinensis 'Gracillimus'	Maiden Grass	4'-6'	3'
Panicum virgatum	Switchgrass	3'	3'-6'
Pennisetum orientale	Dwarf Fountain Grass	18"-30"	18"-30"
Perovskia atriplicifolia	Russian Sage	36"	24"-36"
Rudbeckia fulgida 'Goldsturm'	Black-eyed Susan	24"	24"
Salvia nemorosa 'May Night'	May Night Meadow Sage	18"	18"
Sedum 'Autumn Joy'	Autumn Joy Sedum	18"	18"-24"

Geranium sanguineum

Amsonia taebernaemontana

Coreopsis verticillata 'Moonbeam'

Penesetum orientale

Panicum virgatum

Liriope spicata

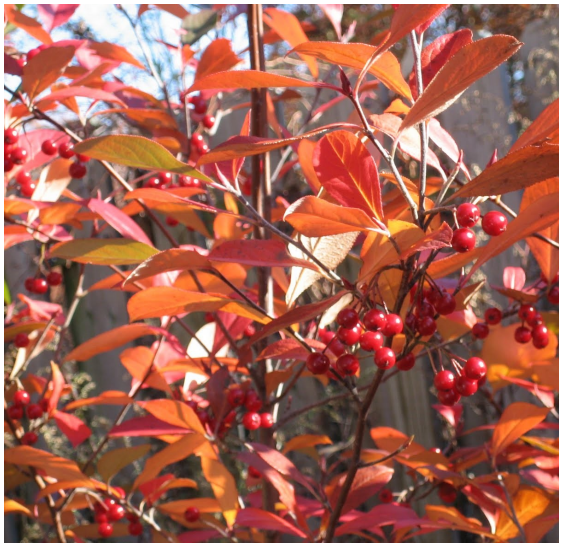
3.6H Plant Lists

Plants for Stormwater Remediation (Bio-Retention)

The suggested perennial, grass and groundcover plant list below represents only a sample of the plant varieties suited for urban conditions that should be considered for use in the streetscape and in public parks and other open spaces. Consult the Fairfax County DPWES Recommended Plant List for Bioretention Facilities for additional plants. (See Resources, Chapter 8)

Botanical Name	Common Name	Mature Height	Mature Spread
Plants for Stormwater Remediation (Bio-retention)		**Height**	**Spread**
Trees			
Betula nigra	River birch	25'	15'
Amelanchier canadensis	Serviceberry	20'	15'
Shrubs		**Height**	**Spread**
Aronia arbutifolia	Choke cherry	2'	4'
Callicarpa americana	Beautyberry	3'	3'
Cornus stolinifera	Red Twig Dogwood		
Myrica pennsylvanica	Wax Myrtle	5-6'	5'-6'
Ilex glabra	Inkberry	2'-4'	2'-4'
Perennials/Grasses/Groundcovers		**Height**	**Spread**
Asclepias tuberosa	Milkweed	30"	24"
Carex strica	Tussock Sedge	18"	12"
Chelone glabra	Turtlehead	18"	12"
Iris vericolor	Iris	24"	12"
Lobelia cardinalis	Cardinal flower	15"	15"
Panicum virgatum	Switchgrass	36"	18"-24"

Betula nigra



Aronia arbutifolia

Ilex glabra

Iris versicolor

Panicum virgatum

Lobelia cardinalis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4

Site and Building Design Guidelines

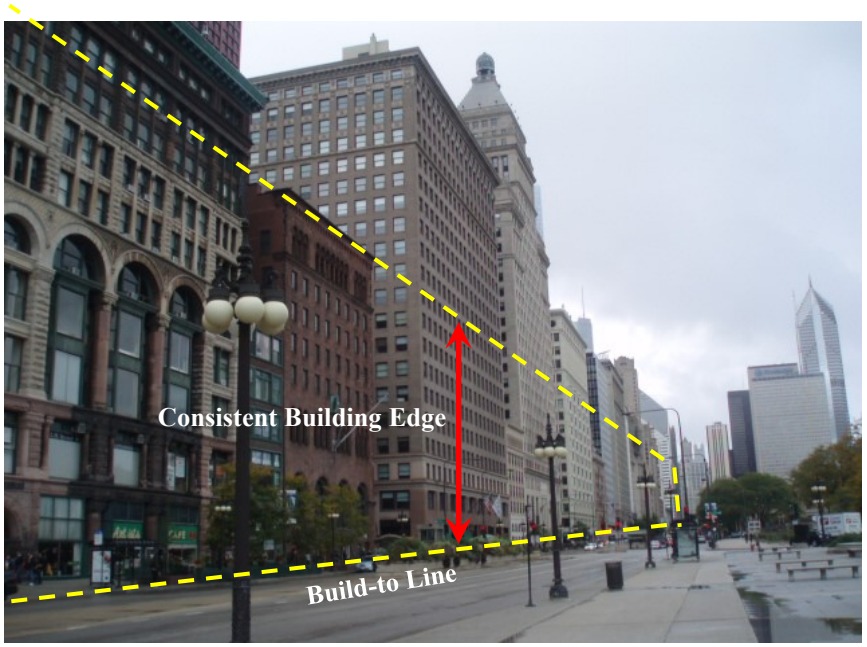
4. SITE AND BUILDING DESIGN GUIDELINES

Site and building design are integral pieces in the creation of a successful urban place. The pedestrian and public realm is framed by buildings and adjacent open spaces. It is the arrangement and character of the buildings, as well as the quality of the spaces in-between, that determine the quality of the urban form as a whole.

The following section builds on the principals in the Urban Design section of the Comprehensive Plan with detailed examples of how to implement those concepts. Photographs, diagrams and design suggestions provide guidance on how to approach the complex design challenges that arise when transforming an existing suburban environment into a new urban one. These Guidelines do not prescribe an architectural style, but it is hoped that a variety of designs will work together to create a unique and identifiable destination that is Tysons.

The Plan's vision for Tysons encourages an urban form that achieves the following:

- A consistent build-to line or street edge that frames the public realm but also allows for architectural variation and interest (A).
- A street edge that is fronted by active uses, such as retail, commercial, or residential, along which frequent entrances are located to activate the public realm (B). Blank walls should be avoided.
- Variation and creative articulation of the building façade to create diversity and an interesting, vibrant pedestrian experience (C).
- Buildings that accommodate their intensity using greater heights and smaller building footprints (D).
- Varied building heights, with the tallest located on Boulevards, Avenues and Collectors, and near Metrorail stations.
- Incorporation of parking in underground and/or internal structures wrapped by active uses.
- Inclusion of high-quality, well-integrated urban park elements and public spaces (E).
- Use of varied and high quality building materials.
- Use of step-backs to provide light and air at the street level.
- A commitment to excellence in site and building design.



A

B

C

D

E

A: Michigan Avenue Building Edge, Chicago, IL, Image: 85tours.com

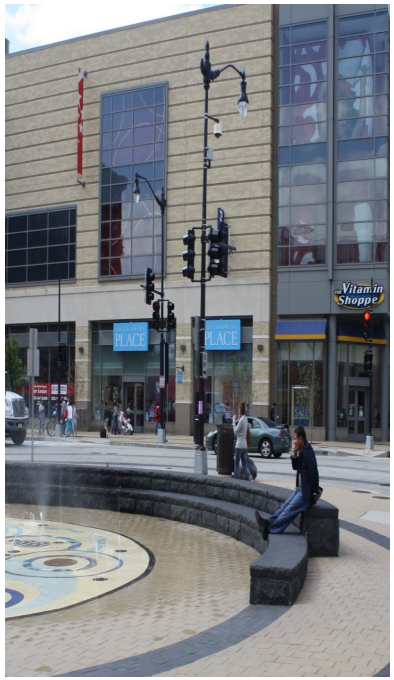
B: Ground floor active uses, Reston, Virginia

C: Ground floor retail, Washington, DC

D: Urban mixed-use building, Reston, Virginia

E: Gramercy at Metropolitan Park, Arlington, Virginia

4.1 Site Design



Once land uses, building intensity, street grid location, and streetscape dimensions have been determined (see Chapter 2), individual site design begins to take shape. Site design should balance the optimal locations for each use, spatial constraints, environmental conditions, adjacencies, and building regulations to create a cohesive, well-designed sense of place. Creation of a consistent street wall by adhering to build-to lines recommendations and successful location of program elements such as iconic buildings, parking structures, urban park spaces, and commercial and residential uses, will result in a functional and interesting urban environment.

Design Suggestions:

- Locate the bases of buildings along the build-to line (A) as described in Section 4.1A of the Guidelines.
- Orient the tallest buildings towards the busiest or widest streets (B), or when appropriate to highlight viewsheds or signature sites (see Section 4.7).
- Orient commercial and large-scale retail entrances towards Boulevards, Avenues, and Collectors.
- Locate ground-floor commercial uses to face the street, with one or more public entrances directly from the public sidewalk. Storefronts should be at the same grade as the sidewalk and building zone (C).
- Orient retail and residential entrances towards Avenues, Collectors and Local Streets.
- Conceal service entrances, loading docks, and trash collection areas from view within the building mass or by locating them along Service Streets. Some short-term retail loading may be located on the street.
- Locate public spaces and urban parks with careful consideration of adjacent uses, topographic conditions, solar orientation, and pedestrian connectivity (D). They should be accessible and easily viewed from public rights-of-way (See Chapter 6, Urban Parks).
- Locate building and service entrances safely and appropriately. Limit the number and width of vehicular entrances, when possible, to reduce potential conflict points with pedestrian flow.

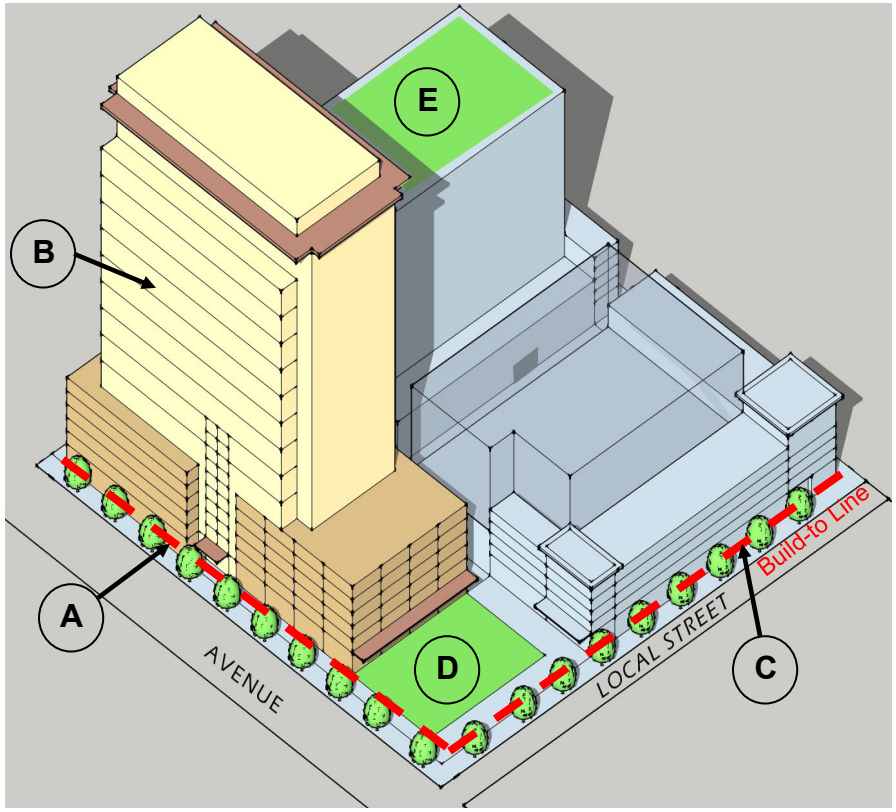
Design Suggestions (cont.):

- Consider the placement and function of adjacent open spaces when locating public open spaces within a site, both existing and proposed within adjacent developments. This will avoid possible duplication of public space programmatic elements and functionality. Coordinating open spaces can also help enhance their overall value and impact.

- Integrate telecommunications equipment and other building appurtenances into the building design, and screen them appropriately.

- Utilize rooftops for private open spaces and/or resource conservation, energy collection and management. For instance, use green and blue roof technology for stormwater capture and treatment (E). All roof tops, including towers, podiums and parking decks should be treated or screened appropriately. Mechanical and utility areas may be excluded from treatment if necessary, but should be screened.

- Accommodate requirements for stormwater storage and discharge, and underground utility locations when locating buildings and landscaping.



Opposite Left: Urban development, Columbia Heights, Washington, DC

Opposite Right: Urban development, Washington, DC

Right: Site and building design diagram

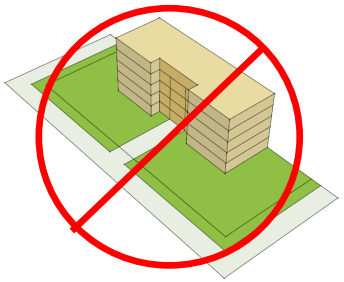
4.1A Build-to Lines

Building placement and orientation is critical to enhancing a community's character and promoting pedestrian activity. Buildings should be oriented toward streets and have easily recognizable pedestrian entrances. Build-to lines provide a way of creating visually interesting, pedestrian-oriented streetscapes by arranging buildings and entrances towards the street. As opposed to setbacks that establish areas in which a building cannot be constructed, build-to lines specify where a building is to be built on the property. Generally, the build-to line is located at the back of the building zone (as established by the streetscape) and establishes the limit of the building envelope.

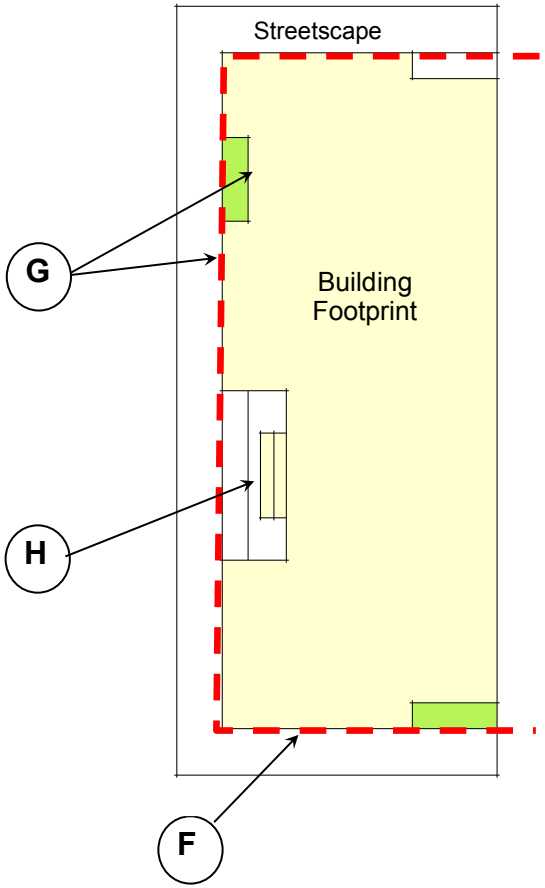
Building facades should define a continuous street and highly articulated building by building wall mass along all build-to lines. Building projections, such as awning and canopies, should not be precluded when implementing the build-to line. Designated public open spaces which meet the urban parks typologies are allowed to break the build-to line.

Design Suggestions:

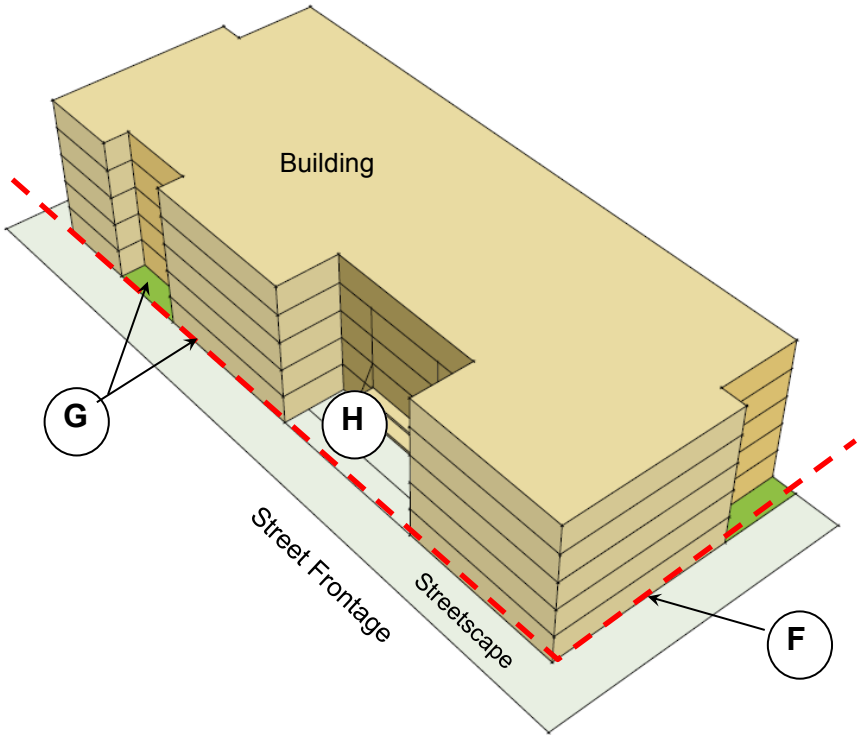
- Locate build-to lines by reviewing the streetscape requirements for each street frontage. The build-to line will be located at the back of the building zone, and should be indicated on all rezoning, site and building plans (F).
- Locate the first two stories of the building facade along the build-to line, but not intruding into the streetscape (G). This will provide a continuous building edge, but also allow for architectural variation.
- Provide recesses for important building entries and outdoor dining. Large recesses, greater than 10 feet in depth, should occupy no more than 25 percent of the street frontage (H).
- Provide steps and ramps within the building zone if they are necessary.
- Provide variation in the building façades on upper stories and roof lines to create variety and interest, as well as to accommodate step-backs for light and air.
- Awnings, canopies, and other building projections should be scaled appropriately and provide enough horizontal and vertical clearance to avoid conflicts with street trees.
- Buildings and any projections should avoid conflicts with trees and be located outside of the future right-of-way.



Building Plan



Building Axonometric



Opposite Left: Urban building edge along sidewalk, Washington, DC

Opposite Right: Building with unacceptable setbacks and no building presence at the streetscape

Top Left: Building plan indicating build-to line, including building articulation

Top Right: Building axonometric indicating build-to line, including building articulation

4.1B - Sustainable Site Design

Sustainable site and building strategies described in the Leadership in Energy and Environmental Design (LEED) certification program and suggested by the Sustainable Sites Initiative (SITES) should be considered early in the site design process. These can include optimizing site potential through solar orientation, increasing resource conservation, preserving or restoring habitat, and effective stormwater management. Addressing these issues should not wait until a basic building design has been completed. Early consideration will help avoid issues that are difficult to resolve later and can assist in achieving green building certification.

Design Suggestions:

- Incorporate sustainable building practices in the site design. For instance: orient buildings to effectively benefit from sunlight exposure, solar energy collection, wind energy collection, and positive air flow within the building.

- Consider preserving or restoring natural habitat areas on-site. These locations may be incorporated into open spaces and landscape buffers. Mature trees with attractive canopies can also be preserved and integrated creatively into the streetscape or parks (A).

- Determine what kinds of systems will be utilized for stormwater treatment and/or reuse, so that locations for these systems can be identified and integrated appropriately into developments. Consider incorporating infiltration into the streetscape (B).

- Determine locations for rainwater collection, including rooftops, terraces, cisterns, and planting areas so that the site layout and building footprint can be designed to accommodate them as applicable (C).

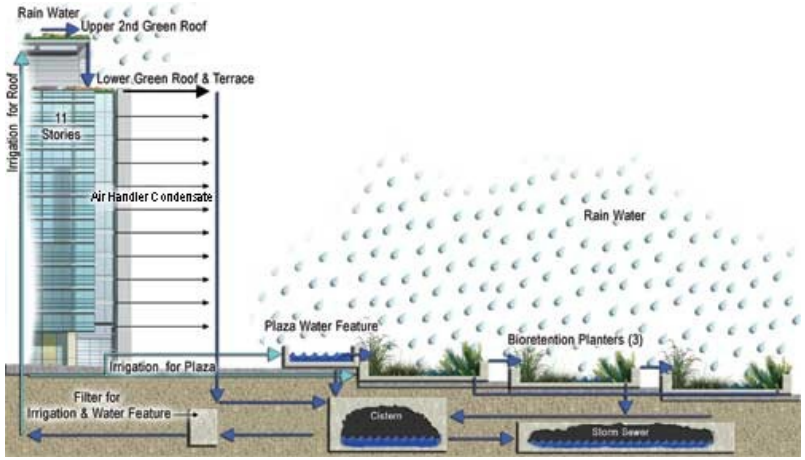
- Incorporate strategies for reducing heat island effect. Include the use of green roofs, rooftop screening, and high-reflectance building materials (D).

- Implement building systems that facilitate reuse of rain water, condensate and stormwater.

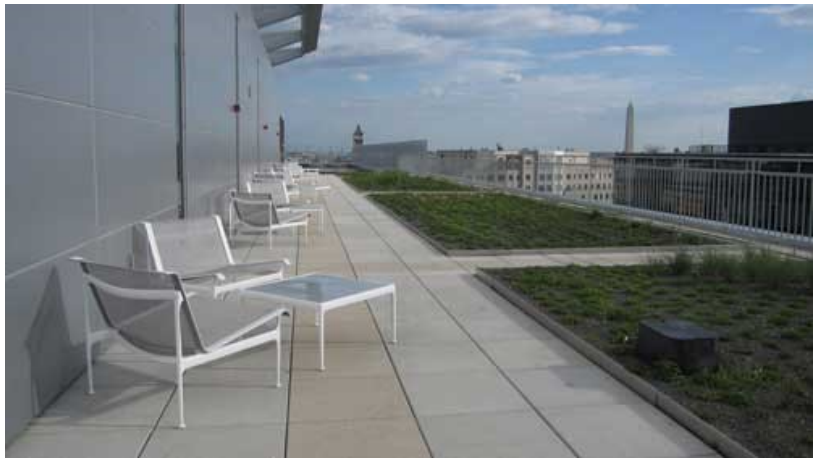
- Include bird-friendly site and building designs that reduce mortality and provide habitat opportunities. These can include addressing glazing hazards and reducing lighting which attracts birds at night.

A

B



C



D

Opposite: Omega Center for Sustainable Living, Rhinebeck, NY, Image: Inhabitat.com

Top Left: Mature streetscape, Tysons, VA

Bottom Left: Bioretention planters, 1050 K Street, NW, Washington DC, Image: LandsacpeOnline.com

Top Right: Rain/stormwater system at 1050 K Street, NW, Washington DC, Image: LandscapeOnline.com

Bottom Right: Green roof and terrace, 1050 K Street NW, Washington DC, Image: LandscapeOnline.com

4.2 Building Massing

Building massing refers to the height, volume, and general shape of a building and how it relates to other building masses in a city and in a neighborhood. Massing begins as a diagrammatic tool which allows a design to take shape in three dimensions.

Successful massing evaluates land use, spatial and architectural requirements, environmental elements, topographic relationships, technical requirements, and relationships to adjacent sites to create a successful urban space.

A creatively massed development incorporates techniques such as step-backs and building height variation to create urban spaces that function well for users. It creates a sense of place at the pedestrian realm and an interesting skyline that is viewed from afar and within Tysons.

Design Suggestions:

- Vary building heights to create an interesting skyline. Consider viewshed opportunities for all buildings. The Plan establishes a range of building heights varying by distance from the Metro and should be referred to when designing a building mass strategy.

- Avoid maximizing the height allowance for every building, create a variety of building heights and tower treatments to avoid a static skyline (A). The tallest building heights should be reserved for iconic and signature buildings.

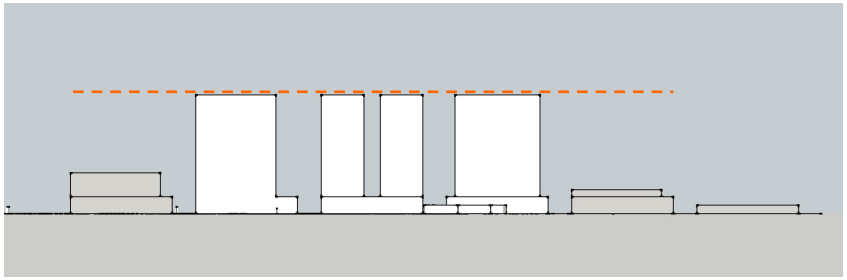
- Relate the massing of proposed architecture to existing and proposed architecture on adjacent sites. This can be achieved by creative transitioning between building height tiers, or architecturally breaking facades into a series of smaller elements (B).

- Creatively integrate programmatic elements such as parking structures, large retail spaces, theatres, and lecture halls that require a footprint that dominates a given block into the core of a building mass; these should not dominate the adjacent street wall (C).

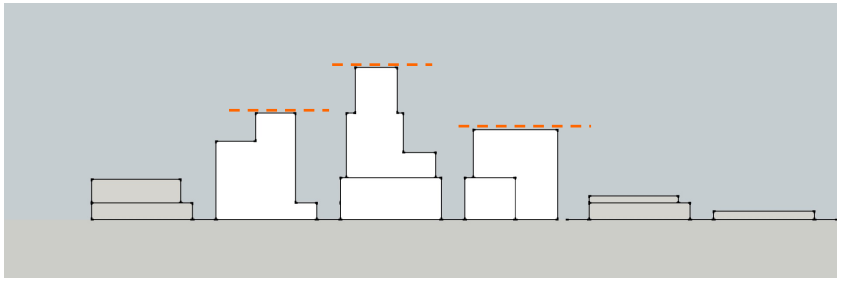
- Integrate building podiums and towers seamlessly. In some cases, they may be indistinguishable from each other. Their impacts, to the pedestrian realm and the character of the district, particularly due to size and scale, should be considered.

- Fire access and required setbacks should be considered in the design of building podiums and towers; if the buildings are located close together, an additional stepback may be required.

Design Suggestions (cont.):



A—Static or constant building heights are undesirable



A—Varied building heights are desirable

B

C

Opposite: New York City Skyline, Image: Skyspace International

Above Top Left: Undesirable Massing diagram

Above Top Right: Desirable Massing diagram

Bottom Left: E Street NW streetscape, Washington DC

Bottom Right: Mosaic District, Fairfax, VA, Image: LF Jennings, geostructures.com

4.2A Building Massing - Base

The building's base generally comprises the first several floors at the bottom of a mid- or high-rise building. It includes the major pedestrian and vehicular entrances, general building facilities, and may include structured parking.

The base is an important component of the building mass because of its direct relationship to the pedestrian realm, both in scale and proximity. The base is the portion of the building which people directly experience when walking by or into a building. Podiums, which are a type of building base incorporating structured parking, pose particular design challenges which should also be addressed.

The building's base spatially defines the public realm at an appropriate scale for adjacent streetscape's, open spaces, and buildings. The base should be designed in a way to minimize the impact of parking, loading, and building services that are detrimental to the pedestrian experience.

Design Suggestions:

- Scale the building's base or podium height to the width of the adjacent street and streetscape. The Plan recommends a ratio of street width (measured from building face to building face) to podium height from 1:1 to 1:2 (A). This proportion protects access to sunlight and the view of the sky from the public realm. It prevents the creation of large, imposing building facades on relatively narrow streets and prevents a wind-tunnel effect. On wider streets, this ratio can be relaxed, as the spaces will be less dark and windy due to the space created by the street width.

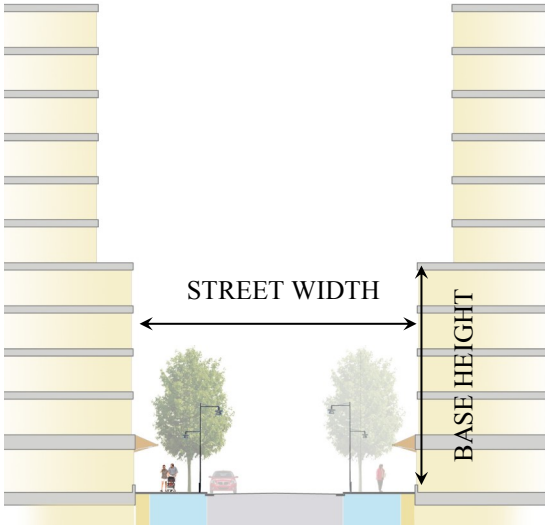
- When adjacent to existing buildings, the proposed base height should take into account the existing context. The base can relate directly in height, or utilize architectural details, step-backs, and/or materials, to address the adjacent buildings.

- Above the building base, step-backs should be utilized to reduce the impact of building height and shadows on the street and open space (B). Step-backs can vary in depth and location, depending on the size and proportion of the building, but generally should be a minimum of 10 feet in depth. Lobbies, building towers should come directly to the ground in some locations.

- Building articulation should be used to create interest in the building base and enhance the pedestrian experience. Material changes may be used in some cases to distinguish the building base (C).

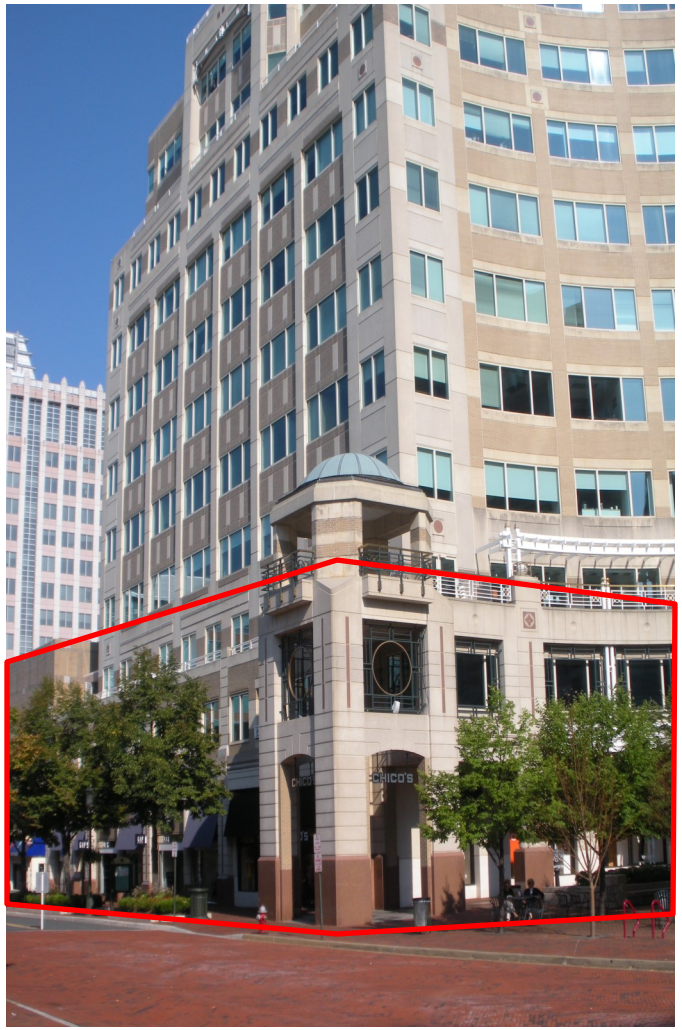
- First floor heights should be tall enough to be flexible for a variety of uses, including retail. Heights should range between 16 and 20 feet tall.

- When podiums are utilized, vary heights, architectural treatments, and articulation to break up the monotony of large podium decks. The integration of tower elements so that the podium is not evident is sometimes preferable.



A

C



B

Opposite: Building podium and towers, L'Hermitage, Vancouver, BC, Image: SkyscraperPage.com

Above Top Left: Stepback Diagram from the Tysons Comprehensive Plan

Above Bottom Left: Building base defined by change in materials, Reston, VA

Above Right: Step-back above second floor, Reston, VA

4.2B Building Massing - Tower

The tower is the portion of the building located above the building base, and typically includes the majority of the habitable building area, whether office or residential. Towers do not include parking. Towers can vary in height, and should comply with the height recommendations found in the Plan.

In general, towers should be designed to limit their impacts (scale, shadow, wind) on adjacent streets, open spaces, and other public amenities. Towers should be located to maximize potential views while minimizing negative impacts on adjacent buildings.

Towers can greatly enhance the character of a district by contributing to an interesting skyline. Varying building heights and architectural styles can help identify the character of the area.

Design Suggestions:

- Orient towers to minimize shadow and wind impacts on surrounding streets and parks. In general, taller buildings should be oriented towards wider streets. Towers should be sited and spaced from one another in a manner that allows for light at the street level and minimizes long periods of shadow on the street, adjacent buildings, and open spaces. A shadow study, which is a submission requirement for all development plans, should be used as a tool to determine if towers are properly located.

- Consider the size of the tower floorplate. In general, smaller floorplates are preferable since they will have less impact views and create smaller shadows. Large floor plates can cast substantial shadows and block views. Multiple slender building towers may be more appropriate than a single massive tower (A).

- Larger floorplates should be articulated to provide visual interest and help create a unique skyline. This can be achieved through varying floorplate size, step-backs and the integration of balconies or terraces.

- Consider extending the architectural treatment of the building tower to the ground plane in some important locations, such as lobbies and other monumental entries to create variety (B).

- Provide appropriate spacing between building towers to allow for light and views.

- Vary tower massing to contribute to a more interesting skyline (C).

A

B

Opposite: Reston, VA

Above Top Left: Residential towers, Reston, VA

Above Top Right: Mixed-use building with building element intersecting ground, Reston, VA

Bottom: Variation in Tysons skyline, Tysons, VA

4.3 Building Articulation

Buildings gain their character and distinction from innovative articulation. Articulation is the use of building details to transform a rectangular mass into a composition of vertical and horizontal planes. Features such as architectural materials, fenestration, bays, doors, cornices, rooflines, terraces, and other elements can be used to express a building's form and identity.

Articulation creates building detail and variety, an interesting building façade at the street, and defines the skyline. Variety in articulation will depend on the building's style, uses, location, and relationship to other spaces, and will develop throughout the design process. Articulation must be considered early in schematic design as it conveys the vision for a building. Articulation should also be communicated in development plans and indicate how it will relate to the public realm.

A

Design Suggestions:

- Create a variety of horizontal and vertical planes to break up the mass of large buildings and to create visual interest along the facade (A).
- Consider breaking facades into sections through the use of different materials or architectural treatments (B).
- Emphasize the difference between the base and tower through step-backs, material changes, and/or changes in fenestration, when appropriate to the architecture.
- Highlight important building features such as entrances through unique façade elements. Awnings and canopies can also be utilized.
- Create different patterns of façade treatment for different uses, such as retail versus residential. Different uses have different architectural requirements, such as window types and patterns, which can be expressed on the building façade (C).
- Create an interesting street edge by introducing a variety of fenestration patterns, entries, and portals.
- Use largely transparent facades at the lower levels and adjacent to the streetscape where ground floor retail, commercial, community or other non-residential uses occur (D). Opaque, mirrored and translucent glass should be avoided as they are not transparent.
- Utilize a variety of high-quality materials to create architectural interest.

Design Suggestions (cont.):

- Avoid exposed parking garages. In addition, lengthy parking garages (exceeding 180 feet) which have architectural treatment should incorporate articulation and detailing to provide visual interest and break up monotonous facades.

- In residential buildings, use less ground floor transparency for private uses, such as living areas. Residential lobbies and other common spaces should exhibit higher transparency and should provide a visual connection to the pedestrian realm.

- Grade-separate residential uses located at the ground level from the public sidewalk to distinguish the units and to provide privacy. This creates the opportunity for stoops, bays, porches or entries that establish a distinct transition between the private realm and the public realm (E).

- Locate the sill of ground floor windows above the eye level of passers-by on adjacent sidewalks to provide some privacy in residential buildings.

- Locate entry stairways to residential units, such as walk-ups, so that they do not impinge on the public right-of-way, including the sidewalk zone.

B

C

D

E

Opposite: Building articulation, Reston, VA

Above Top Left: Building articulation façade treatment, Washington, DC

Above Top Right: Building articulation, Reston, VA

Bottom Left: Ground floor articulated façade with at least 60% transparency.

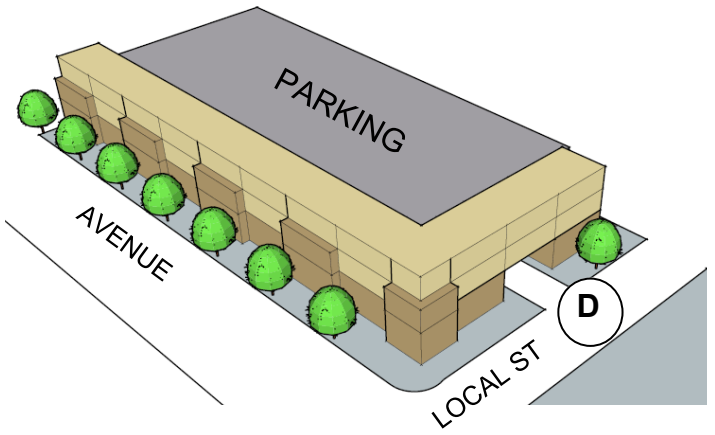
Bottom Right: Walk-up units, grade separated from sidewalk, Washington, DC

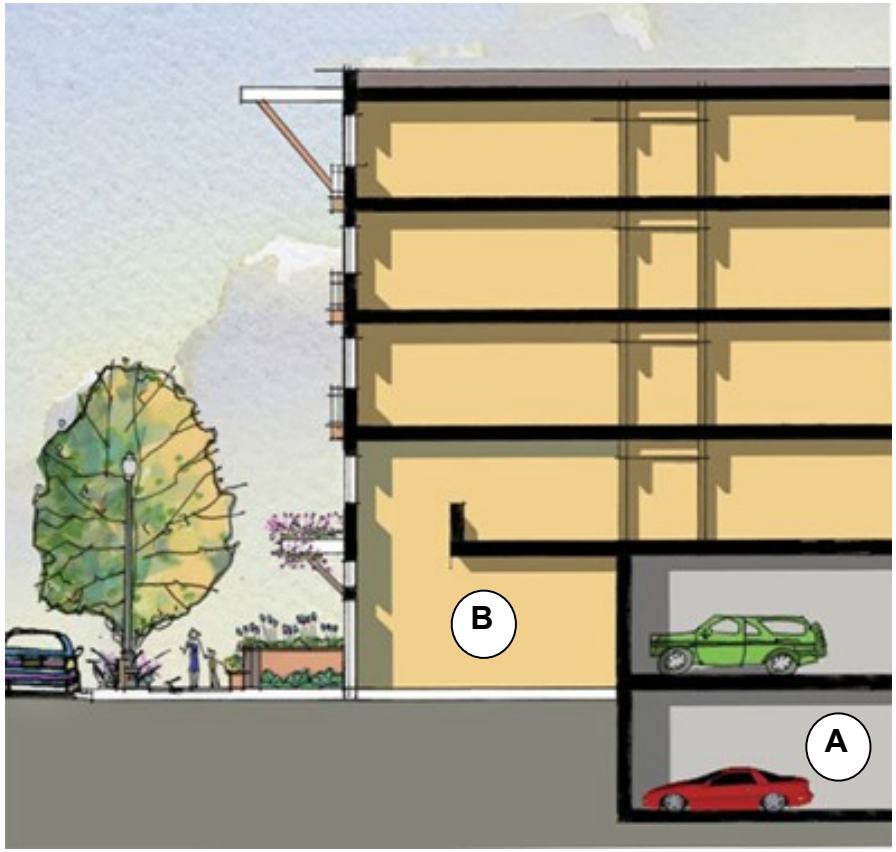
4.4 Parking Design

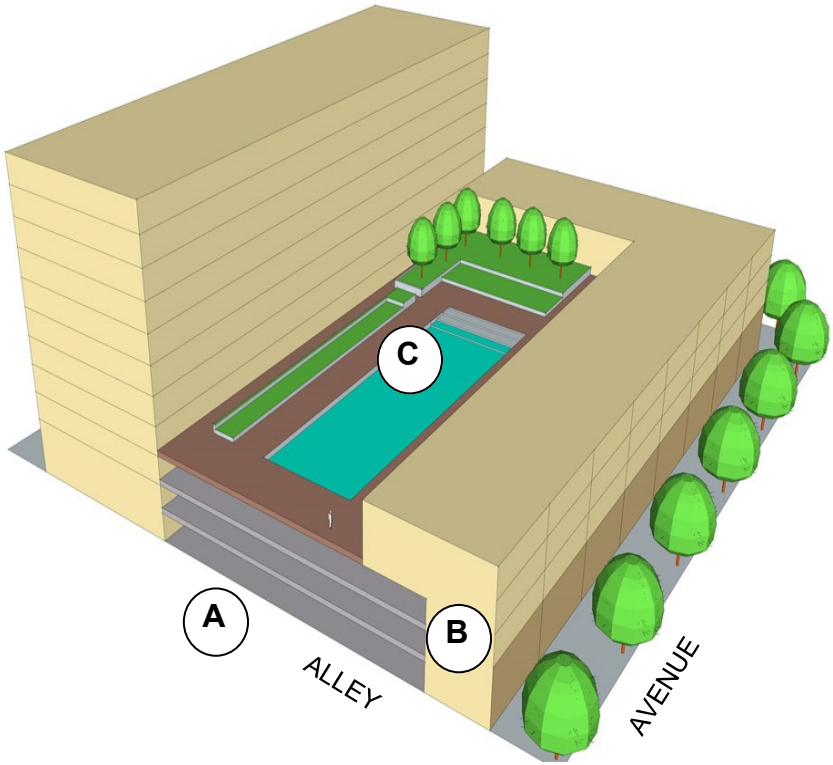
In order to create an activated and pleasant pedestrian realm, the vision for Tysons calls for parking that is accommodated below grade. However, when above grade parking is proposed, it should be located within the building mass and be hidden from view from the pedestrian realm. As parking needs drop over time, there is an opportunity to transition unneeded parking at or above the ground level into usable square footage; therefore, when above-grade parking is designed, the future reuse should be considered in the initial design phases. Structural design elements such as ceiling heights, structural column locations, and the placement of other features that could impact the future reuse of those floors should be considered early in the process. Surface parking lots and stand-alone structured parking lots are highly discouraged. The following design suggestions build on the general recommendations and examples for parking design in the Comprehensive Plan.

Design Suggestions:

- Parking should be located underground as much as possible.
- Parking may also be located partially above grade when located in the center of a block (A). For most pedestrian corridors, above-grade parking decks should be completely wrapped by active uses (office, residential, retail, etc.) so that parking is not visible from the street (B).
- The top floor of parking structures should be covered with green roofs, park spaces, or recreation amenities so that the parking is not visible (C).
- Drop-off areas should be located within parking structures or located along the curb to reduce vehicular conflicts with pedestrians.
- The number and width of curb cuts and parking access points should be limited to reduce conflicts with pedestrians.
- Access to parking facilities should be limited to Service Streets, Local Streets, and in limited cases, Avenues or Collectors, and should be located to maximize continuity of the active street frontage (D).







Opposite Left: Santa Monica Civic Center Parking—Moore Ruble Yudell Architects and Planners

Opposite Right: Example of consolidated parking entrance away from continuous activated building frontage.

Above Left: Example of below-grade and above grade parking within a building mass.

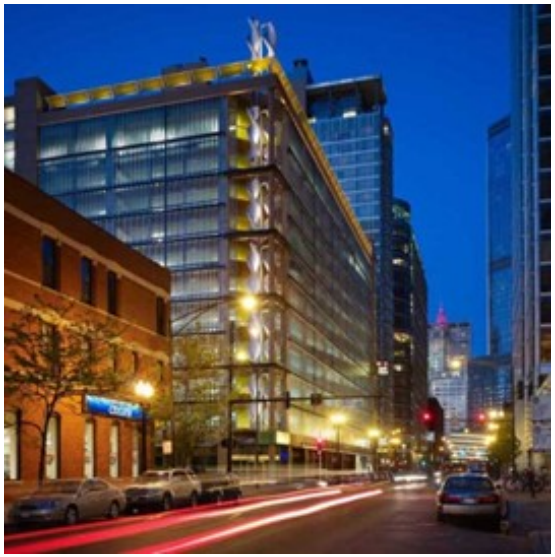
Above Right: Example of recreation and park amenities on top of parking that is wrapped in active uses and hidden from view.

4.4 Parking Design

Design Suggestions (cont.):

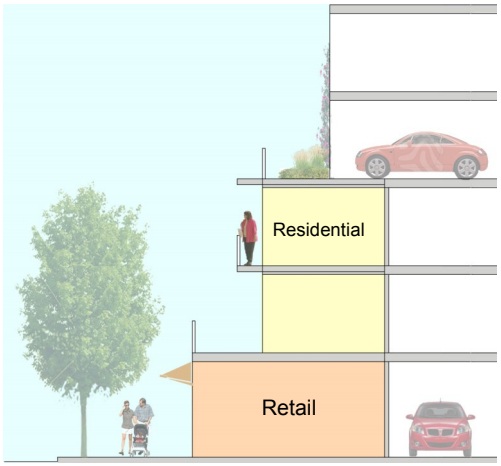
- Site constraints may occasionally preclude the ability to bury or wrap a parking structure so as to fully screen it from the street. In such cases, any visible edge should be oriented to the least significant pedestrian corridor (see Section 2.4). Additional architectural treatment should be provided that screens the garage exterior from view, such as public art installations, appropriately designed vertical planting (see Section 3.6, Planting Design), or other architectural features.

- Creative façade treatments and architectural form should be used to accommodate the mechanical and ventilation appurtenances associated with parking facilities.



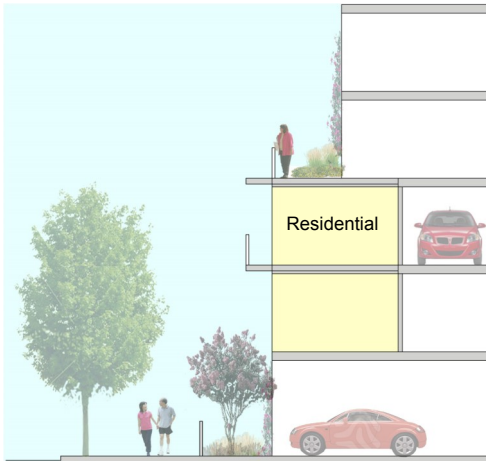
- First floor of parking garage is lined with retail uses, and architectural treatment is provided above (A). This is appropriate for garages with only a few levels facing secondary or tertiary pedestrian corridors.

A



- Parking garage on a Tertiary Pedestrian Corridor is lined with two story townhomes, and includes a small front yard for landscaping and additional screening (B). Architectural treatment of the garage is provided above the townhome liner.

B



Opposite Top Right: Greenway Self-Park, Chicago, IL, Image: HOK Architects

Opposite Bottom Right: Mountain Dwellings, Copenhagen, Image: BIG Architects

Above Top Left: BelMar Garage and Retail, Lakewood, CO, Image: Sitephocus

Above Bottom Left: Mirador Parking Garage / Townhomes, Mirador, FL,, Image: Zyscovich Architects

4.5 Safety and Security Design

Safety is a concern in all communities. Design strategies can be implemented that help increase visibility and foster positive social interaction. In addition, Tysons will be a destination for many kinds of uses, including public facilities and government offices, in addition to private businesses. Public and certain private buildings can be subject to additional rules and regulations regarding security and access. These requirements can directly impact site and building design in a way that is detrimental to the public realm. Heavily fortified buildings can be contrary to an active and inviting Tysons if they are designed inappropriately. Creative steps can be taken to integrate security measures while still creating a welcoming and attractive Tysons.

Life safety is an important aspect to be considered in urban design of public spaces. Spaces and buildings should be designed to accommodate fire truck and ambulance access while not detracting from the high-quality design envisioned for Tysons. Fire access should be one of the early considerations in the design process, and it should be integrated into the design.

The following recommendations provide some strategies to meet this goal.

Design Suggestions:

- Consider Crime Prevention through Environmental Design (CPTED) strategies which help to increase natural surveillance and discourage criminal activity.

- Consider using security elements such as hardened planters that are in harmony with the site and architectural conditions and integrated in a manner that will not stand out in well-designed streetscapes. See Chapter 3 for streetscape recommendations that might be considered related to security.

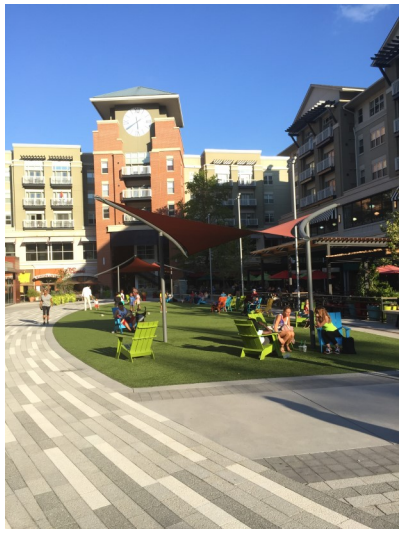
- Provide retail or other active uses on the site in the areas required as security setbacks for the main building. Generally such uses do not require the same setbacks or security measures. As a result, they may be oriented along the build-to line to help create an urban building edge.

- Locate parking garages that are not subject to setback requirements close to the street as appropriate. Integrate retail or other uses at the ground floor, and utilize attractive garage screening or architectural treatment to hide the garage.

- Provide functional outdoor spaces that invite use by employees, visitors, and the general public. Such spaces can be integrated with security setbacks and act as welcoming locations for public facilities. Open spaces also establish a strong civic presence for public buildings.

- Provide wiring and other hardware for public safety communications, as well as locations for emergency and back-up generators.

- Identify life/safety access needs and integrate them into the public space design early in the process to avoid unslightly retrofits.



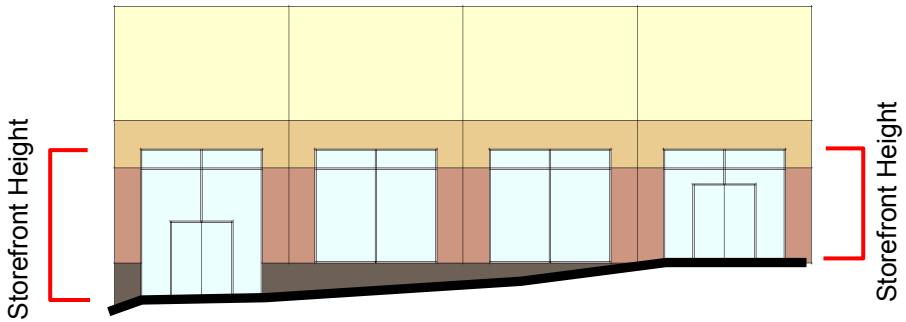
Above Top Left: Portland State University, Portland, OR, Image: www.insituarchitecture.net

Above Bottom Left: Avenir Place, Merrifield, VA

Above Top Right: Ecology Building, Image: cornell.edu

Above Bottom Right: Navy Yard Walk, Image: CapitolRiverfront.org

4.6 Topography and Building Design



A—Varying storefront heights respond to grade changes on street

Many parts of Tysons have significant changes in elevation and other variations in topography that can provide a challenge when designing urban neighborhoods. As a result, consideration should be given to designing building edges that respond to the topography without compromising the pedestrian experience along the streetscape. For example, steep slopes should not result in large retaining walls or long expanses of blank building walls. Creative design strategies can allow appropriate active uses and pedestrian movement even in areas with significant grades. Further, topography can provide additional design opportunities within parks and open spaces.

Above Left: Typical storefront elevation on a sloping street.

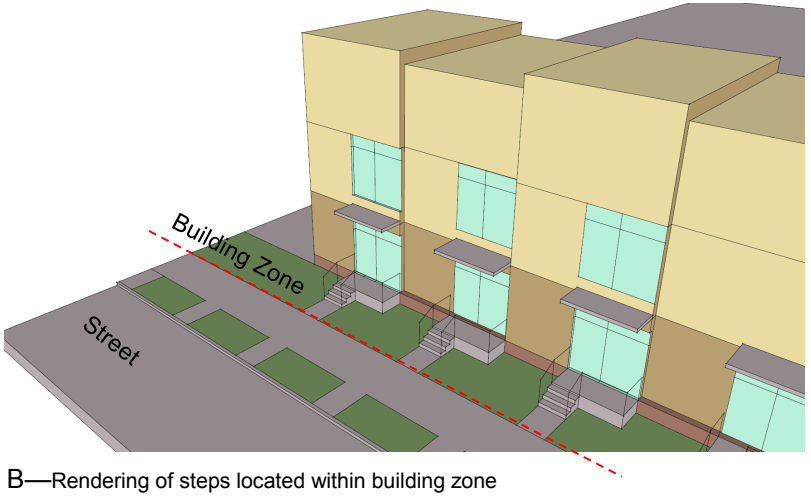
Right: Rendering of stoops/steps located within the building zone.

Design Suggestions:

- Storefronts along steeply sloped streets and sidewalks can be a challenge. Consider varying first floor heights to accommodate changes in grade and still allow direct pedestrian access from the sidewalk into active uses (A). Also, extend glazing to the ground to avoid blank walls.

- Steps and ramps for building access should be located within the building zone (B). They should not extend into the sidewalk zone or obstruct pedestrian flow.

- Long and/or tall retaining walls are discouraged. When such features are necessary to accommodate significant grade changes, consider integrating active uses at sidewalk level. Tiered plantings and other landscape elements should be considered as a way to break up large walls.



B—Rendering of steps located within building zone

Above Top Right: Retail Streetscape, San Francisco, Image: http://urbanland.uli.org

Above Top Left: Residential streetscape with Grade Change, Image: pedbikeinfo.org

Above Bottom Right: Retail streetscape with Grade Change, Image: www.dbarchitect.com

Above Bottom Left: Residential streetscape with Grade Change, Image: www.plannerdan.com

4.7 Signature Sites

Signature sites are recognized by their strategic locations within the urban fabric. They may highlight a particular vista or viewshed, or they can frame the edge of a special open space or terminate an important public street. Signature sites may also include unique and important civic uses, such as museums or theaters. Signature sites can act as enhanced placemaking opportunities described in the pedestrian hierarchy plan (see Section 2.4).

Signature sites may not include buildings at all. In fact, combinations of buildings and quality open spaces can be considered signature sites. These often help define a neighborhood and establish a sense of place. Innovative and unique designs should be considered for these sites. Although all new buildings in Tysons must complement the public realm and should adhere to the guidelines outlined in this document, a creative approach to signature sites is particularly important.

Design Suggestions:

- Display a commitment to the highest quality design, with an enhanced level of architectural treatment.
- Acknowledge the importance of the site by accommodating important views, corridors, and open spaces, and by providing visual interest.
- Not all sites require tall buildings or tower elements, although they may be appropriate in certain instances.

Opposite: Bryant Park, New York City, NY

Above Top Left: Strawberry Park, Merrifield, VA

Above Bottom Left: The Good Line, Sydney Australia, Image: Florian Groehn

Above Top Right: Dilworth Park, Philadelphia, PA

Above Bottom Right: Reston Town Center, Reston, VA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5

Signage and Wayfinding

5. SIGNAGE AND WAYFINDING

Signage is an important element that will contribute to the character of Tysons. The two predominant signage types that will most contribute to place making in Tysons are on-site signage (signs used to identify a place of business or a residential building); and wayfinding elements which are placed in the public realm and provide directional assistance or location information to pedestrians and motorists.

The quantity and quality of all signage should be considered in a comprehensive manner within a development but should also be complementary between neighborhoods and in most cases, the subdistrict, district, or Tysons as a whole.

Article 12 of the Zoning Ordinance provides guidance regarding the permitted types, size and location of signs. All signs require permits which are reviewed and approved by the Zoning Inspection Branch of the Department of Planning and Zoning. Depending on the size and illumination of the sign, building and/or electrical permits may also be required. When Article 12 was developed, it did not envision the signage needs of a high-density urban environment such as Tysons. To address these needs, it is expected that innovative signage design will emerge in Tysons as the urban form is built. It is recommended that a Comprehensive Sign Plan (CSP) be submitted for all redevelopment applications. It is further recognized that the signage requested in such CSPs may deviate significantly from that permitted under Article 12.

All signage should be well-organized, neat, well-maintained, concise and legible. Signage should fit with the architectural style of the building, using complementary materials and colors, and ideally be incorporated into the architectural elements of the structure.

The Memorandum of Agreement (MOA) between Fairfax County and the Virginia Department of Transportation (VDOT), executed on September 13, 2011, allows facilities such as wayfinding signs in the right-of-way, subject to review and approval by VDOT. The placement of signs in future right-of-way should be coordinated with VDOT to ensure they will be allowed to remain.

Design Suggestions:

- Use permanent, weather proof, well-designed signs.
- Limit the number of signs to convey a clear message and avoid visual clutter.
- Clearly state the business name or other information displayed on the sign.
- Scale typeface, characters and graphics of storefront signage to pedestrians and/or motorists, as applicable.
- The scale and materials used for signs should be appropriate to the neighborhood. For instance, monolithic digital or other illuminated signs may be considered on a case by case basis in areas close to the metro and adjacent to high concentrations of arts and entertainment uses. Similarly, small-scale blade signs or awning signage would be more appropriate for a mixed-use residential neighborhood.
- Signage must not present a visual obstruction to sight distances at intersections and vehicular entrances.
- See Chapter 7 for suggestions regarding signage in interim conditions.

Above Left: (top left) Retail signage - small scale, (top right) Retail signage, large scale, (bottom left) Directional signage for parking, (bottom right) Retail signage on an awning.

Above Right: (top left) Large scale, building mounted retail signage, (bottom left) Innovative lettering and signage for a cultural attraction, (right) Many sign types in a retail area.

5.1 Signage and Wayfinding Elements

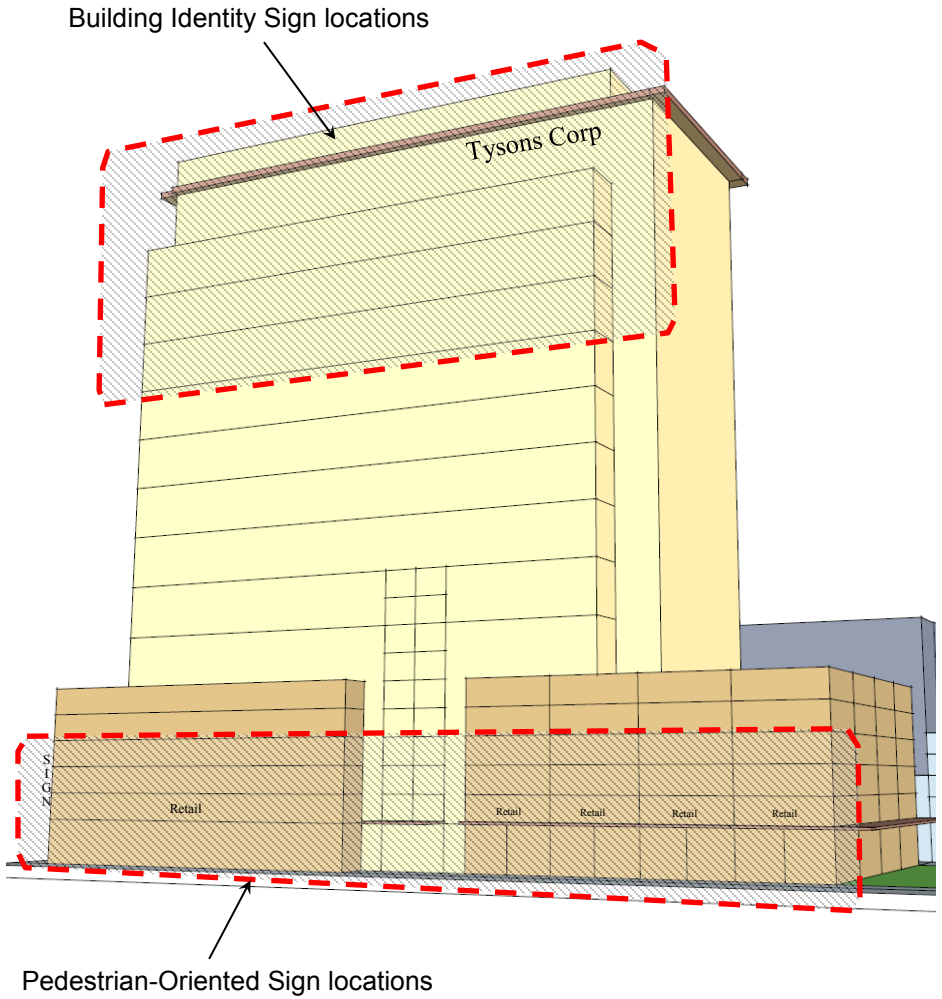
Building Identity Signs

Building identity signs are generally auto-oriented and intended to be seen from a distance. As such, they are usually located in the top half of the building, closer to the roofline, and are the largest signs in an urban area. Signs should be sized for legibility, but also appropriate to the scale of larger urban buildings. They are intended to identify the name of a building or the name of a major tenant within the building. Building identity signs can also contribute to the identity of the skyline by providing visual interest when they are well-integrated into the building architecture.

Pedestrian-oriented Signs

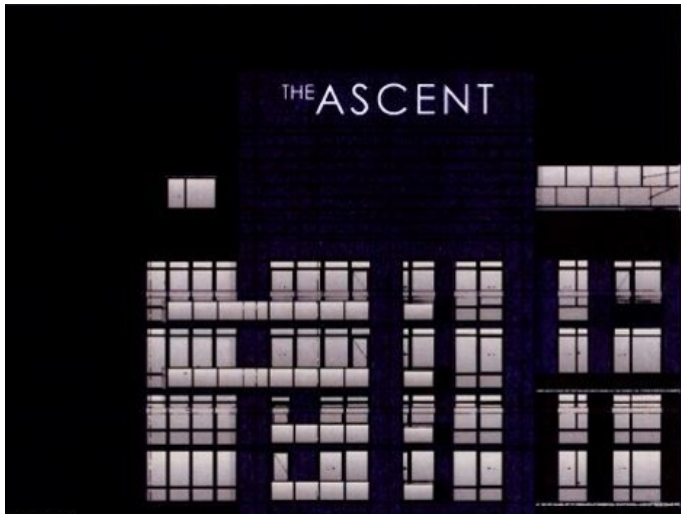
Pedestrian-oriented signs include blade signs, awning signage, and sign bands which are generally located within the first two or three stories of a building. These signs are typically for retail, services or other businesses which are accessible to the public from street level. They are not intended to identify individual office tenants. Window signage may also be considered for businesses with storefronts.

Additional signage may be considered on parking garages and other non-habitable portions of a building if it is well-integrated into the building architecture and does not create visual clutter.



Design Suggestions:

- Building identity signs recognize a corporate identity, a major tenant, or the name of the building. Signs can be comprised of text or logos.
- Building identity signs should be sized proportionally to the height of the building and the size of the building façade. In general, building identity signs should not be taller than one story in height, although some variation for stand-alone logos may be considered.
- Building identity signs should be located in the top half of a building, close to the roofline, and should be limited to one per major building façade. Additional building identity signs may be considered near the building base when the size is more appropriate to the pedestrian scale and does not produce visual clutter.
- Building identity signs should be integrated into the building architecture, taking into consideration the pattern of fenestration and building materials.
- Consider building identity signs that are projected and only visible at night.
- For extremely tall buildings, signage may not be readily visible unique building architecture should be considered as a branding technique in lieu of large signage.



Above Top and Bottom: Images from the approved Comprehensive Sign Plan for The Ascent at Spring Hill Station. This sign provides a good example of signage that compliments the building architecture, is of appropriate scale, and is visible in both day and night hours.

5.3 Pedestrian Oriented Signs

Design Suggestions:

Sign Bands

- A majority of pedestrian-oriented signs will be building-mounted signs for ground floor retail, services, and other commercial uses which face the street.
- Generally, building-mounted signs should be located within a "sign band" located above the storefront and below the façade above, to provide some continuity in placement (A).
- When several businesses are located in one building, individual signs should share some similar design characteristics, including scale, alignment, and placement to avoid visual clutter. Variation reflective of the nature of the individual businesses may be considered.
- In general, sign bands should be around 3 feet tall. Signage for individual businesses should be limited to the width of the associated storefront on the building façade.
- Awning, or canopy signage, in lieu of building-mounted signage may be considered (B).

Pedestrian Blade Signs

- Pedestrian blade signs projecting from buildings should be mounted a minimum of 8 feet above the sidewalk. Signs should project no more than 4 feet from the building façade (C).
- Pedestrian blade signs should be limited to one per business.

Vertical Building Signs

- Vertical building signs can be flush with, or project from, a building façade, and should be mounted above the first floor. Generally, signs should project no more than 3 feet from the building façade (D).
- Vertical building signs should be limited to one per business.

Monument Signs

- Monument signs, which are low and ground-mounted, are discouraged in an urban environment. If monument signs are proposed, they should not be located in the streetscape, but they may be located in the building zone or within plazas or open spaces which form entry features to the building.
- Monument signs may be integrated into seat walls or planter walls (E).

Storefront (Window) Signs

- Permanent or temporary window signs may be considered for a portion of the glazed area of the storefront. Signage should not unreasonably obstruct views from the street into storefront spaces.

Other Signs

- Stand-alone cabinet signs are strongly discouraged within the streetscape as they can disrupt pedestrian movement.
- Provide clear, unobstructed address signs for public safety purposes.


The UPS Store
INSTYLE
NAILS SPA
OPEN
12587
12589

A


JOS. A. BANK
ESTABLISHED 1905

C


OZZIE'S

D


ARHAUS FURNITURE

B


NATIONAL MUSEUM OF THE AMERICAN INDIAN

E

5.4 Wayfinding Elements

As the character of districts and subdistricts emerges, and as parks, museums and entertainment areas are developed, wayfinding signage will help pedestrians and motorists navigate throughout Tysons.

The Tysons Partnership began the initial efforts to establish a Tysons wide wayfinding and branding program, including the following: the placement of temporary wayfinding at each metro station; light pole banners on Route 7; gateway signage at major road entrances to Tysons; and a branding decal on the water tower near the Greensboro Metro Station. It is anticipated that the Tysons Partnership will continue to implement wayfinding as a collective vision that will complement and connect all of the redevelopment projects in Tysons.

Wayfinding should also be used to help integrate the park network in Tysons. The conceptual Tysons Community Circuit is mainly located along streets identified as Primary Pedestrian Corridors, and connects into residential areas. A network-wide park wayfinding plan would help connect new and existing residential areas to the mixed-use core areas of Tysons by identifying preferred bicycle and pedestrian routes as well as major features.

Above Left: (Left) Tysons Partnership Interim Wayfinding, Image: Rayn Riel (Right) Tysons Partnership Light Pole Banner Flags, Image: inTysons

Above Right: (Left) Portland wayfinding signage (Right) Retail signage—Bethesda, MD

Design Suggestions:

- Signs should include appropriately scaled elements that assist both motorists and pedestrians.
- Wayfinding signage should clearly convey information for both motorists and pedestrians without unnecessary clutter or detail.
- All signage structural components should complement the color and finish of streetscape furnishings in Section 3.4.
- Careful consideration should be paid to the placement of wayfinding signs in high-volume pedestrian areas. Signs should not obstruct pedestrian traffic in any way. Wayfinding signs should not be placed in the sidewalk zone.
- Streetlight-mounted banners that advertise public events, seasonal attractions or other attractions are encouraged.
- Conflicts with pedestrian flow should be minimized by consolidating different signs on one structure.
- Wayfinding programs should coordinate with online and interactive websites to provide up-to-date information on travel, events and other relevant information.
- Create wayfinding systems that can be utilized by a wide variety of users, including the visually and hearing impaired, and that comply with accessibility requirements.

Above Right: Wayfinding signage National Harbor—Maryland

Above Left: Banner arm signage on street light

6

Urban Parks

6. URBAN PARKS

Cities are made up of numerous elements, including walkable streets, interesting architecture, vibrant neighborhoods and unique amenities. The best cities in the world, however, also include a cohesive and comprehensive urban park network as an organizing element that connects neighborhoods and provides a setting for the urban elements.

Parks, recreation areas and other open spaces enhance the quality of life for residents, workers and visitors. Parks provide community and environmental benefits, and can also add economic value to surrounding properties. Some of the most prestigious neighborhoods in the world are located near highly-renowned parks.

To be successful, Tysons must include a comprehensive park network. The new vision for Tysons builds on its economic strength, accommodates greater population growth, and provides a healthy, beautiful place to live, work and play. Integral to this vision is the creation of a park network that serves the community in a variety of ways. Parks provide an opportunity to connect with nature in a way that might not otherwise exist in an urban area.

Parks provide visual breaks in the urban landscape, create calming areas of green in an urban environment, and provide places for people to enjoy passive and active recreation. Public parks and open spaces are important for residents of higher density neighborhoods who may lack access to private yards or recreation facilities. Further, urban parks improve air quality, reduce stormwater runoff, provide biodiversity and improve community health.

Along with the streetscape, parks provide locations where the public interacts and socializes. As such, it is important that high-quality parks are provided in the appropriate size, location, and type to address the needs of the community.

In Tysons, there is no minimum open space requirement in the zoning ordinance. However, an urban parkland requirement based on growth in residents and workers has been established in the Comprehensive Plan. The urban park requirement is calculated based on the amount of gross floor area (GFA) of space, and the amount of people expected to live and/or work in a development. Requirements for athletic fields and recreational needs are calculated according to the policies and standards set forth in the Comprehensive Plan.

The Comprehensive Plan sets forth four urban park types as found in the County's Urban Parks Framework. The Framework, as endorsed by the Fairfax County Park Authority Board, identified the four urban park types as: the pocket park, the common green, the civic plaza, and the recreation-focused park. The Framework is a tool to help plan for and develop urban parks in urbanizing centers, such as Tysons. The four urban park types include a variety of purposes, features, and sizes that respond to the wide variety of recreational and leisure pursuits expected in urban areas. The following sections include an overview and examples of each of the four park types. Design suggestions for each park type are provided, and further recommendations which apply to all park types follow in subsequent sections.

In order to help achieve the vision for a comprehensive park network, Fairfax County Park Authority staff, in coordination with an advisory group, developed the Tysons Park System Concept Plan in September 2014. The Concept Plan is a conceptual guide that builds on the Comprehensive Plan and Urban Design Guidelines documents to help bring about future park development by the public, private, and non-profit sectors to serve Tysons residents, employees, and visitors well into the future. The Concept Plan is organized according to key elements of the park system, including park placement and typology, connectivity, athletic fields and other recreational facilities, civic spaces and community building features, and cultural and natural resource preservation and interpretation. The Concept Plan should be reviewed and incorporated as appropriate when considering park development in Tysons.

Opposite Right: Rittenhouse Square, Philadelphia, PA. Image: Wikimedia.org

Opposite Left: Boston Common, Boston, MA. Image: Sunshinerunning.wordpress.com

Above Right: City Garden, St. Louis, MO. Image: Urbanophile.com

Below Right: Bryant Park, New York, NY. Image: Meetup.com

Previous: Millennium Park, Image: Illinois Institute of Technology

6.2 Pocket Park

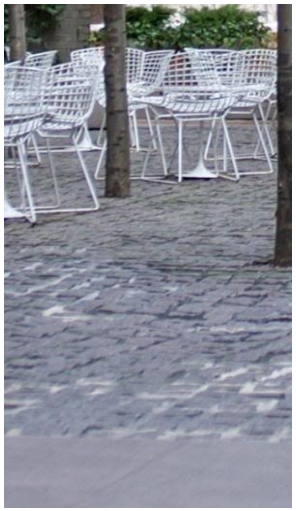
A pocket park is a very urban small park that is usually less than one acre in size (typical range is one-tenth acre to one-quarter acre). Pocket parks are generally located adjacent to areas with high volumes of pedestrian traffic. Pocket parks are intimate and act as a sanctuary from the urban environment. Pocket parks can offer play space for children, places to eat lunch in the shade or read next to a fountain. They can also offer opportunities for social interaction. They are easily seen and accessed from the streetscape and are framed by buildings and active uses. Each pocket park should have its own identity and be integrated into the community in which it is located. Planting, lawn areas, hardscape, fountains, seating, art, and play equipment could all be appropriate in a pocket park.

Example: Paley Park, New York, NY

Paley Park offers a unique, peaceful place to sit and provides respite from the bustling commercial neighborhood in which it is located. The park is small, but is appropriately scaled to the adjacent architecture and offers ample room for medium and small gatherings. Framed by adjacent buildings, Paley Park offers a sense of seclusion and separation from the urban streetscape and adjacent roadway and creates the sense of a comfortable garden room. The beautiful fountain and silhouetted trees draw visitors into the space, and the fountain serves as both a visual amenity and an auditory buffer to the noises of city traffic and sirens. There are attractive, moveable chairs that allow visitors to control their interaction within the space and there is a café where visitors can purchase refreshments. The plantings are few, but offer the appropriate amount of dappled shade from the trees and seasonal color in the planters.

Design Suggestions:

- Locate pocket parks appropriately so that they can best serve the immediate neighborhood. Pocket parks should be provided in areas of high-volume pedestrian activity, with easy access and high visibility to the street.
- Surround pocket parks with active uses, like retail or office that provide a beneficial synergy. Parks which are surrounded by parking garages, mechanical or service areas generate no such synergy and will not be as successful.
- Due to the smaller size of pocket parks, carefully consider the potential microclimate created by both the park and surrounding buildings. The park should optimize sun and shade conditions.
- Provide clear pedestrian access to the park. The pocket park should be well-integrated with adjacent streetscapes. As such, consider transitions in hardscape and planting materials between the streetscape and the park.
- See the Urban Park Evaluation Checklist in Appendix A for additional recommendations.



Above Left: Paley Park, chairs. Image: Flickr, taylolz

Below Left: Paley Park fountain

Above Right: Paley Park from across the street, wheelchair access and gates.

Below Right: Paley Park paving, Paley Park snack bar.

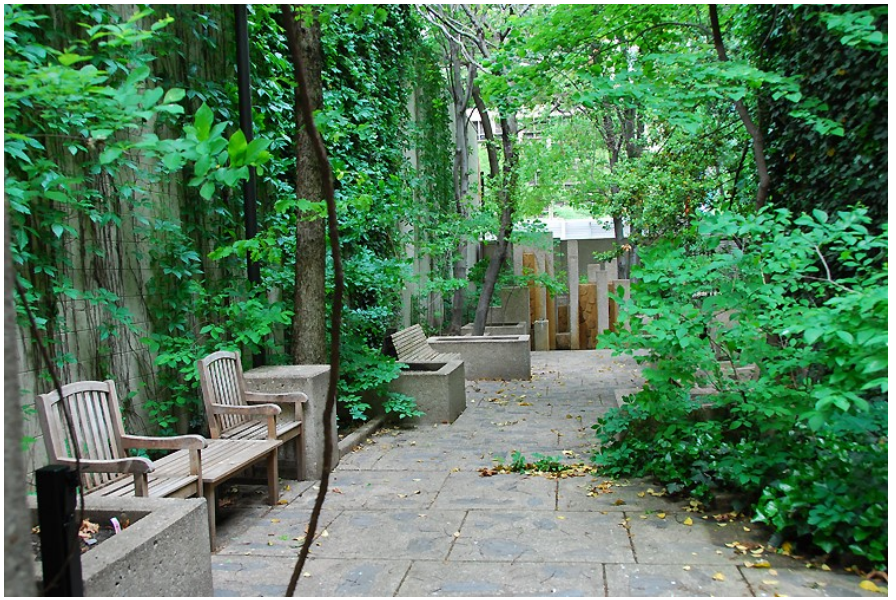
6.2 Pocket Park

Other Pocket Park Examples

Pocket park behind 1221 Avenue of the Americas, New York City, NY

Allows people to walk through a waterfall.

Images: dbeard from Google.com

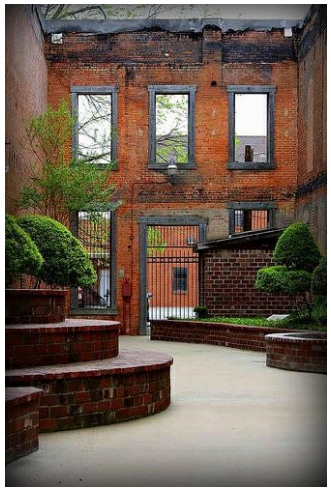


Park Place — Philadelphia, PA

Part of a city effort to convert vacant lots to pocket parks.

Images: Google.com

Murphy Park; Glendale, AZ
Images: Sherman Group, Inc.



Pocket park in Corsicana, TX
Images: Parks&Recreation.corsicana.tx.us, Corsicana Daily Sun, Caperton Realty

6.3 Common Green

A common green is a larger park (at least one acre in size) that can range in size and function but is always centrally located and easily accessed from both commercial and residential uses. As the name implies, it should include a large lawn area that can be flexibly used for gatherings or for informal recreation. A common green should offer a variety of spaces in addition to the lawn area, including smaller garden spaces, or rooms, that are suitable for small gatherings or individual enjoyment. A common green can be used for civic functions such as performances, markets and festivals. Although common greens can include hardscape elements, the focus typically is on the landscape element such as trees, shrubs and perennials in addition to lawn areas. A common green can also provide for small footprint recreational facilities, such as tot lots, sport courts, interactive art, etc., but such uses should not predominate.

Example: Adams & Sangamon Park, Chicago, IL

The Adams & Sangamon Park is 2.3 acres in size and is located in the West Loop neighborhood in the city of Chicago. The park is successful because it includes multiple amenities needed in the neighborhood and is located in an area of high pedestrian activity. It offers both flat lawn areas to lay out a blanket for a picnic and hardscaped areas for events and large gatherings. The park includes a playground area, shaded seating areas and sunny lawn spaces. It also includes an interactive fountain/ sculpture and a large open lawn area that can be used for pick-up soccer games, kite flying, or other casual active recreation.

Design Suggestions:

- Locate common greens appropriately so that they can best serve the area. Common greens are often located in the middle of residential or mixed-use neighborhoods. They can serve as a central public gathering space or activity center, and often times they take on the name of the surrounding community.
- Surround the common green with active uses, like residential or retail. These uses will provide a beneficial synergy with the common green. Parks which are surrounded by parking garages, mechanical or service areas will not be as successful.
- Integrate a variety of spaces that can accommodate different active and passive uses. Common greens typically include a large open lawn space and several smaller areas for other uses, such as playgrounds, garden plots and dog exercise areas. Consider flexibility in the design so the spaces can function for different uses.
- Consider the integration of other facility needs underground, including stormwater vaults and parking.
- Provide clear pedestrian access to and within the park, providing routes to all facilities. Provide a variety of internal pedestrian circulation routes, including trails, sidewalks and bicycle routes.
- See the Urban Park Evaluation Checklist in Appendix A for additional recommendations.

Above Left: Adams & Sangamon Park spray fountain. Image: Chicago Tribune

Below Left: Adams & Sangamon Park playground. Image: Chicago Tribune

Above Right: Adams & Sangamon Park lawn mounds. Image: Chicago Tribune

Below Right: Adams & Sangamon Park adjacent buildings and plaza area. Image: Chicago Tribune.

6.3 Common Green

Other Common Green Examples

Teardrop Park, New York, NY

Images: Elizabeth Felicella and Paul Warchol

Post Office Square in Boston, MA
Images: Google.com

Citygarden, St. Louis, MO
Images: David O'Brien, licensed to About.com (Top), and Asla.org (Bottom)

6.4 Civic Plaza

Civic plazas are public gathering spaces. By nature, civic plazas are located close to public transit, important intersections, cultural or civic uses, and are easily accessible by the urban street network. A civic plaza can include planted space but the emphasis is on the hardscape, such as paving, seat walls and fountains. It should include an expanse that is suitable for large gatherings of many kinds including concerts, festivals and farmers' markets. It should be flexibly designed so that when a large gathering is not scheduled, the park still offers a variety of spaces for small groups and individual users to enjoy. There should be a variety of qualitative spaces including shaded spaces, sunny spaces, small intimate spaces and large open spaces. Civic plazas are usually a minimum of one acre in size and may or may not include areas that could accommodate large-scale athletic activities.

Example: Union Square, San Francisco, CA

Union Square is an attractive landmark that acts as a collector of people and accommodates many types of gatherings from large to small. The park serves as a venue for large public concerts, a place for people to sit at lunch time, and a place that connects busy and successful retail and businesses from one side of the square to the other. Approximately two thirds of the park is built in the form of hardscape which allows for a large, symphony-sized performance space, a café and outdoor seating. The edges contrast this with their green planted areas and grassy sloped seating areas. These edge spaces provide valuable spaces for intimate gatherings and individual enjoyment.

Design Suggestions:

- Locate civic plazas appropriately so that they can best serve the immediate area. Civic plazas are often located near office and mixed-use areas, the Metro, and other high-visibility, high pedestrian traffic areas.

- Civic plazas can be integrated adjacent building entrances and provide access points to private buildings. However, civic plazas should be publicly accessible and not designed to feel as though they are private. Inviting elements, such as seating and water features should be included.

- Surround the civic plaza with active uses, like office or retail. These uses will provide a beneficial synergy with the civic plaza. Parks which are surrounded by parking garages, mechanical or service areas will not be as successful.

- Consider the surrounding development when formulating the proposed character of the civic plaza. Some plazas might be more hardscape, while other may be more lawn and landscaping.

- Provide clear pedestrian access to the park. The civic plaza should be well-integrated with adjacent streetscapes. As such, consider transitions in hardscape and planting materials between the streetscape and the park.

- See the Urban Park Evaluation Checklist in Appendix A for additional recommendations.

Above, Top Left: Union Square Park plaza and seating. Image: Bay Area Producers Conference

Above, Bottom Left: Union Square Park terraced lawn seating. Image: Bay Area Producers Conference

Above, Top Right: Union Square Park ice rink in winter. Image: San Francisco About.com

Above, Bottom Right: Union Square plaza and parking entrance. Image: indospectrum

6.4 Civic Plaza

Other Civic Plaza Examples

Union Square, New York City, NY
Images: Google.com

Pioneer Courthouse Square, Portland, OR
Images: Portlandenglish.com and maritros.wordpress.com

6.5 Recreation-Focused Park

This park type is distinguished by its primary function to provide recreational facilities for nearby residents and workers. These parks may be exclusively for active recreational purposes or, if space allows, could be designed to incorporate park elements of the common green or civic plaza park types to provide a variety of park amenities and spaces. Facilities such as athletic fields, sport courts and skate parks should be provided. Athletic fields should have synthetic turf and lighting to maximize usage. Support facilities and amenities, such as trails, seating, tot lots, shade structures, water features, picnic areas, restrooms, landscaping or hardscape, should be provided to complement the recreational component. Parking should be addressed through shared parking agreements with adjacent developments and/or on-street parking. The size of the park should be appropriate to accommodate the recreational facilities and support amenities located there.

While large-scale recreational facilities are highly desirable in Tysons, small-footprint active recreational facilities will also play an important role in building the Tysons park network. Providing small scale opportunities for people to get outside and participate in recreation will play a key role in building a healthy, active community in Tysons. Opportunities to incorporate small footprint activities such as basketball, ping pong, and outdoor fitness stations should be considered within development proposals.

Design Suggestions:

- Consider integrating a variety of recreational uses into the park. This may include larger athletic fields, smaller sport courts, and more passive areas. Indoor recreational spaces and general-use community facilities might also be accommodated. Consider co-locating recreation-focused parks with other civic uses.
- Locate recreation-focused parks appropriately to address the concerns of noise and field lighting on adjacent uses. If possible, provide buffers between fields and adjacent uses to reduce the impacts of noise. Work with a lighting engineer to direct lighting away from residential areas and reduce glare for pedestrians and drivers.
- Provide appropriate parking for patrons of sports events as well as casual park users. Also, include bike racks and bike share stations to support multi-modal use.
- Work with the Fairfax County Park Authority to meet requirements for field design, size and materials.
- Consider the integration of other facility needs underground, including stormwater vaults and parking.
- Provide clear pedestrian access to and within the park, providing routes to all facilities. Recreation-focused parks tend to be the largest type of urban park, and therefore should provide a variety of internal pedestrian circulation routes, including trails, sidewalks and bicycle paths.
- See the Urban Park Evaluation Checklist in Appendix A for additional recommendations.

Example: Quincy Park, Arlington, VA

Quincy Park is a 4.2 acre park that is located close to the heart of Clarendon in Arlington, Virginia. It is adjacent to a public library, located one block from the Virginia Square Metro station, and is within walking distance from high-rise multi-family and other residential buildings. The park includes two baseball diamonds, volleyball and basketball courts, as well as tennis courts that are lit at night, all of which can be scheduled for organized team sports. The diamond outfields can be used as rectangle fields outside of baseball season. Quincy Park also features open lawn areas for pick-up field games, a playground and picnic shelters.

Above: Quincy Park, Arlington, VA

6.5 Recreation-Focused Park

Example: Jones Branch Park, Tysons, VA

Located at 8081 Jones Branch Drive in Tysons, VA, Jones Branch Park contains the first set of new athletic fields in Tysons developed after the Plan was adopted in 2010. Developed in coordination with the Arbor Row Stream Valley Park, these two fields are the first of many new facilities that will help to redefine Tysons. The fields and the adjacent stream valley park were developed on an 8-acre vacant parcel of land.

Two synthetic turf rectangular fields were constructed including fencing, lighting, site furnishings, and a parking lot. One field is full size to accommodate all rectangular field sports and all ages of players. The other is a temporary youth size field on the site of a future urban elementary school. The temporary field is an example of an interim use of land that will ultimately serve another public facility use.

The stream valley work included restoring a severely eroded stream channel by re-grading and armoring the banks and adding plunge pools and large boulders. An asphalt trail, pedestrian bridge, and hundreds of plantings were also added. The stream valley park leads from Westpark Drive down to the athletic field complex along Jones Branch Drive and provides an important pedestrian connection in a beautiful natural setting.

The park is a 15-minute walk from the Tysons Corner Metro Station.

Above: Jones Branch Park

Small-footprint Recreational Examples

Above Top Left: Adult Fitness Station, Anacostia National Park. Image: www.nps.gov

Above Top Right: Playcubes. Image: Playcubes Magazine online

Above Top: Ponce City Market, Atlanta, GA. Image: Stephanie Pankiewicz

Above Bottom: Adult Fitness Station. Image: Stuart Villanueva/The Galveston County Daily News

6.6 The Elements of an Urban Park

The design of a successful urban park will take into account numerous factors, including location, access/visibility, function, form, amenities, programmability and maintenance. Each of these elements should be considered prior to site selection and during the design process. These general considerations are applicable regardless of the park type. The following design recommendations provide additional details which should be considered in creating all successful urban parks.

Design Suggestions:

Location

Selection of an appropriate location is essential to the success of any urban park. Location determines how well a park will be used, how it will interrelate to the park network, and how it will interface with the rest of the public realm. Design excellence can rarely overcome a poorly located site.

- Refer to the guidance in the Conceptual Park Network Map in the Comprehensive Plan for conceptual park locations.

- Locate parks so that they are directly visible and accessible from a public street or sidewalk. Parks should be located at-grade on at least one side. Elevated parks are discouraged as they provide challenges for both visibility and accessibility.

- Integrate parks into developments. Parks should not be an afterthought in a development plan or as a way to use “left over” spaces.

- Consider the scale and character of the surrounding neighborhood. Adjacent development, both existing and proposed, provides the context for the park experience. For example, pocket parks are best suited to areas with high pedestrian traffic, while commons greens should be located near residential or mixed-use neighborhoods. Civic plazas can be located near the Metro or in office and retail areas. Recreation-focused parks should be carefully located to minimize sound and lighting impacts on residential uses.

Design Suggestions (cont.):

Access and Visibility

Well-planned physical and visual access into an urban park is a critical factor in creating a successful park. Pedestrians of all mobility levels should be able to see, enter and circulate within a park with relative ease. A beautifully designed park will be empty and underutilized if it is difficult to find or inhabit.

- Consider visibility and sight lines when locating and designing a park. If people cannot see a space, they will not use it. Further, natural surveillance is important in enhancing safety and making users feel comfortable in a space.

- Topography presents challenges to designing accessible and inviting park spaces. Innovative grading techniques and use of hardscape structures to transition grades should be used to incorporate topographic changes as a park amenity. Plant materials can be used to soften the design of grade changes.

Opposite: Brooklyn Bridge Park, New York., NY. Image: flickr.com_dumbony

Above Top Right: Lincoln Center Plaza, New York, NY. Image: glenwoodnyx.com

Above Bottom Right: Boston Common, Boston MA

Design Suggestions (cont.):

Function

Function is one of the key features that differentiates the various park types. The way a park will be used is highly dependent on the park type that is proposed and what the needs are in the area.

- Review the Urban Parks Typology in the Comprehensive Plan for recommendations regarding park use and the typologies. The type of park to be considered should be based on its context, as well as district and Tysons-wide needs. The availability (or lack) of other similar parks nearby should also help guide the proposed park use and design process.
- Consider surrounding land uses. Park functions should be compatible with the surrounding land uses.

Form

Form refers to the physical elements of a park and how they are designed to respond to the needs of the users, ecological concerns, and surrounding influences, such as adjacent buildings, topography and streets. Park design should respond thoughtfully to each of these components in an integrated way.

- Make sure that the appropriate streetscapes are provided around park edges where the edges interface with the street.
- Form should reflect the expected functions of the park while still providing for flexibility in use.

Above Top: Interactive Musical Art in Sedona, AZ

Above Bottom: Interactive Water Feature, Camden, NJ

Amenities

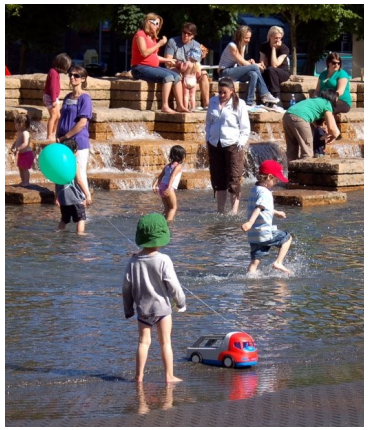
Amenities provide user comfort, support activities, and add detail and character. They can communicate an identity, style or a feel for the park. They can also determine the type of activities that will occur in a given space. Innovative, multipurpose features, such as interactive art, are encouraged in appropriate locations. Refer to the Urban Park Evaluation Checklists in Appendix A for recommendations. It is not expected that all of the amenity suggestions will be accommodated in every park.

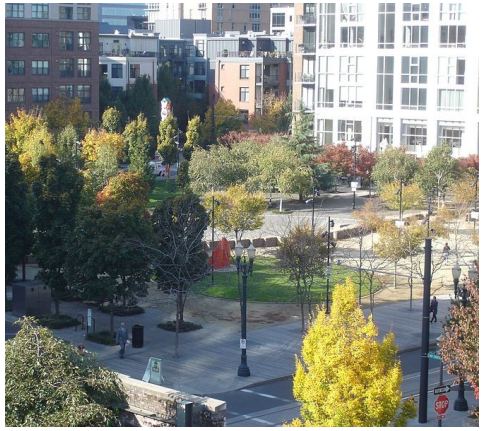
Programmability

Programmability refers to the ability of a space to be scheduled for events of different sizes and types, including festivals, market places, concerts and sporting events. Depending on the size and type of the park, different opportunities for programming may exist. Consider flexible designs so that a variety of events can take place. If the scheduling of private events is anticipated, the spaces should be designed so that a portion of the park can remain open for the public while private events are occurring.

Maintenance

High quality urban parks must be maintained on a regular basis to ensure an ongoing healthy appearance and safety for park visitors. Plantings, fountains, art, furnishings, lighting, irrigation and grass all require regular care and financial investment in order to maintain a high quality environment. The design and selection of materials and furnishings should consider their on-going maintenance requirements.





Above Top Left: Jamison Square Park, Portland, OR, Image: isa-and-hunter.blogspot.com

Above Top Right: Jamison Square Park, Portland, OR. Image: Flickr - pondskipper

Above Bottom Left: Pershing Square, Los Angeles, CA, Image: www.picable.com/slicedshow/tags/fountain/22

Above Bottom Right: Boston Common, Boston, MA, Image: www.lifeundersun.com/

6.7 Integrating Existing Parkland into the Urban Park Network

Within Tysons there are opportunities to enhance the existing parks and integrate them into the urban fabric. Scotts Run Stream Valley Park and Old Courthouse Spring Branch Park are existing stream valleys in Tysons that serve as green buffers as well as offer numerous ecological benefits. They have the potential to offer additional pedestrian circulation routes and an informal place to recreate and experience natural systems in Tysons.

The Comprehensive Plan calls for protection and restoration of stream valleys. It also suggests that the stream valleys could become "major linear urban parks and support the planned trail system with a variety of natural landscapes." These parks should be ecologically repaired and improved to function as part of the urban park network and provide connectivity and recreational resources. The Arbor Row Stream Valley Park is just one example of how an existing stream valley can be improved to become part of the urban park fabric. Other existing parks within Tysons can also be reconsidered and potentially redesigned to enhance the Tysons urban park network.

Image: Rock Creek Park, Washington, DC. Image: Meetup.com

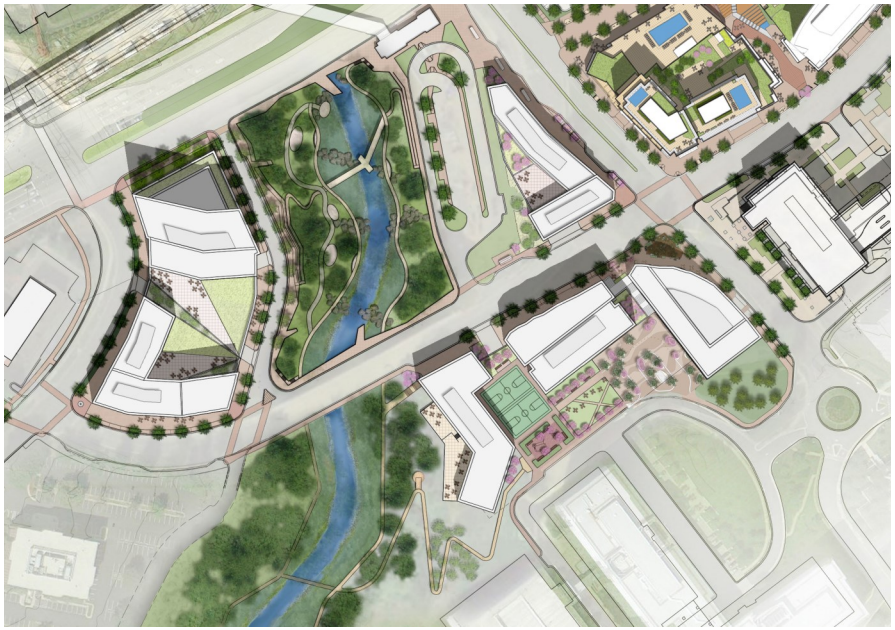
Design Suggestions:

- Consider opportunities to enhance and integrate existing parks into development proposals. These parks might better serve the area if their functionality, access, and amenities are improved.
- Include the stream valleys as organizing elements of neighboring developments.
- Begin the designs for parks, stream restoration, trails, natural areas and connectivity early in the development process so that technical and environmental issues can be resolved in a creative manner.
- Include ecologists, civil engineers, environmental engineers and landscape architects in the design team so that a holistic design for the site's hydrology, ecology and human interface can be achieved.
- Design for the integration and interface of existing parks with the urban fabric. For instance, if a portion of a stream valley is adjacent to a development, consider a variety of transitions, including open space, hardscapes, and other outdoor areas which can be used by the public. These spaces could include interpretive signage, seating areas, picnic tables, bicycle racks and other amenities. Designs should take into account the County's Environmental Quality Corridors (EQC) Policy and demonstrate their benefits.
- Provide different types of pedestrian and bicyclist opportunities within the stream valley parks, including ADA accessible paths and boardwalks, at-grade pedestrian trails (both long and short loops), at-grade and boardwalk trails for bicycles and strollers, places to stop and rest, and overlooks at key viewsheds.

- Create destinations within the parks, including seating areas along trails for bird watching or relaxing, outdoor "classroom" spaces, and interpretative signage at key locations which helps explain important elements of the natural environment.

- Include creatively designed hardscape elements such as storm drainage outfalls, flood overflow mechanisms, and check dams as unique features that enhance both the appearance and the hydrological function of stream valleys.

- As the Tysons Community Circuit concept is implemented, opportunities should be explored connect it to existing parkland through both physical connections and wayfinding.



Above Bottom Left: Scotts Run South Proposed Park, Tysons, VA. Image: SmithGroup JJR

Above Top Right: Thornton Creek Project, Seattle, WA. Image: Landscape Architecture Magazine

Above Bottom Right: Tanner Springs Park, Portland, OR. Image: Archlandscapes.com

6.7 Recreational Trail Loop

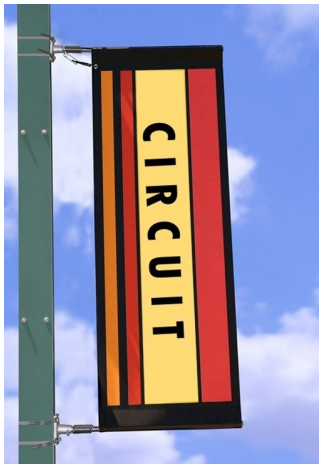
Signage and wayfinding will be an important part of creating a network of connected parks in Tysons. The *Conceptual Connectivity Map* in the Tysons Park System Concept Plan shows the "Tysons Community Circuit" trail loop as a signature park system element to tie all other park elements together and to elevate the park and recreation experience in Tysons. This Community Circuit concept is a recreational trail loop that is weaved into developments and can take on a variety of forms and features to create connectivity throughout Tysons.

Wayfinding is an important part of guiding pedestrians along the circuit trail and its connection to and through to cultural features, other recreational opportunities, civic spaces, and other urban amenities. The images on this and the following page demonstrate ways in parks can be provide a network that weaves through urban conditions and streetscapes and connects to adjacent stream valleys and parks outside the urban core.

Elements that create connectivity throughout Tysons can include:

- Specialized signage
- Unique lighting
- Custom bike racks (see Chapter 3)
- Specialty pavers/pavement medallions
- Connections through buildings, where appropriate

Development proposals that relate to the circuit trail can consider contributing to the advancement and refinement of the circuit trail concepts and help identify the elements that would best implement the concept. As the circuit trail identifies two beltway crossing locations, projects in proximity to those crossings are encourage to further the development of those connections. For development proposals in proximity to the W&OD trail, exploring and providing connections to that trail are encouraged.



Above Top: The Beltline through a building, Atlanta, GA. Image: Stephanie Pankiewicz

Above Bottom Right: Wayfinding signage at The Beltline, Atlanta, GA. Images: Fairfax County Park Authority

Above Bottom Left: Wayfinding signage. Image: Fairfax County Park Authority

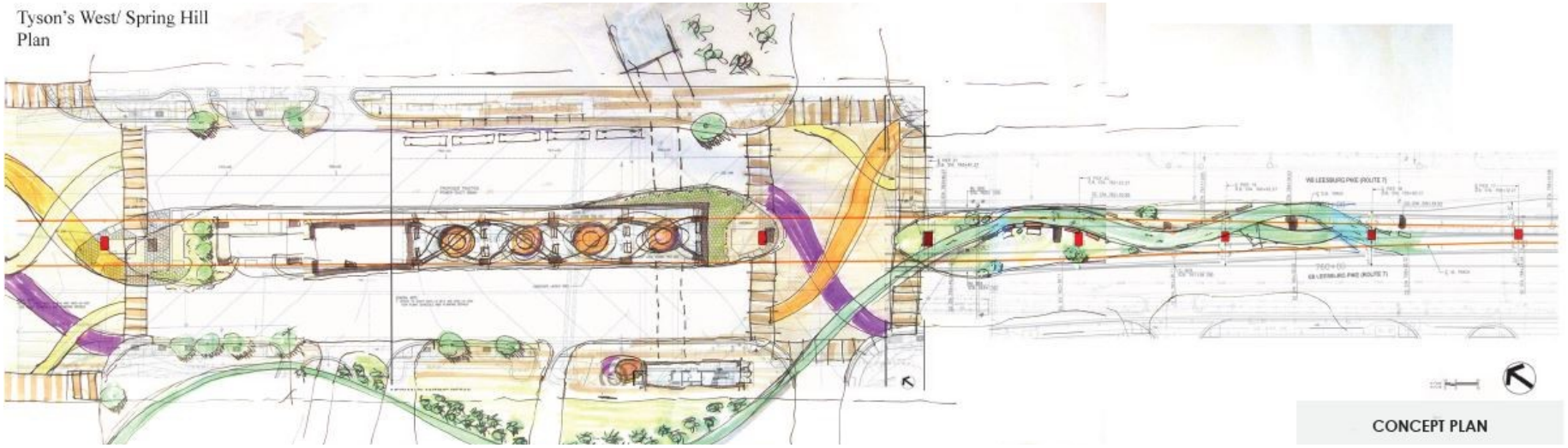
Above Top and Bottom Left: Indianapolis Cultural Trail. Images: Visit Indy

Above Top and Bottom Right: Wayfinding at the Ponce City Market, Atlanta, GA. Images: Stephanie Pankiewicz

6.8 Metrorail Green Artery

To address placemaking in relation to the Silver Line structures in Tysons, Fairfax County convened a design charrette – or workshop – on June 4, 2014, entitled "Art + Place: Beneath the Spans." Participants with backgrounds in architecture, landscape architecture, urban planning, art, and other design disciplines were tasked with envisioning an environment designed for all users, including pedestrians, bicyclists, transit riders, and drivers. A primary design concept that emerged is the idea of a Green Artery—the connection of the underutilized spaces beneath the elevated metro line to create attractive and functional space for people. Design concepts include using different paving materials, special crosswalks and signal timing, landscaping, lighting, and sculpture along Routes 7 and 123 to cue vehicles to slow down and that the station areas are special places for people.

Realizing this concept will involve further coordination with WMATA and other stakeholders. Initial steps to implement the concept could include minor improvements at the station platforms and underneath the rail lines through easements and other methods.



Above Top: Under the Silver Line, Image: New York Times

Above Bottom: Design graphic produced at the Under Rail Charrette

Design Suggestions:

- The design of the spaces under the Metrorail Silver Line should focus on creating places for people and improving pedestrian connections between the stations and important nodes within the Tysons community.
- The Silver Line is the central artery of the future urban Tysons. Pedestrians should be able to traverse the length of the Silver Line through the area utilizing the space under and adjacent to the rail line.
- The Metro stations should represent pulses of activity along the Silver Line. These nodes should maintain some commonality in style and function, but each should have its own distinct character.
- Since the Metro stations will serve as important nodes within Tysons, they should be strengthened by having great streets adjacent to them. Leesburg Pike and Chain Bridge Road should be designed to become focal points for pedestrian activity, making it easier for people on foot and on bicycles to experience development on each side of the rail line.
- The space under the Silver Line should be intensely green and/or pedestrian oriented. The landscape should be designed so that it interacts with and respects the structure, creating a relationship between the two.
- The structure and piers of the Metrorail Silver Line should recede into the urban landscape and act as a backdrop to the activity taking place on the ground. Design interventions should avoid drawing attention to the piers.
- Sustainable design, ecological features, and found elements should be used to establish a unique character and authenticity in Tysons.
- The character of the area should be futuristic, high-tech, and fun to reinforce the impression of Tysons as a modern urban center and not the “Edge City” of the past.

Above: Design graphics produced at the Under Rail Charrette

7

Interim Conditions

7. INTERIM CONDITONS

The vision for Tysons will be implemented over many years. Some sites will develop in the near future, while others may take decades to fully redevelop. As most development will be phased, interim conditions will exist on most sites until the ultimate project build out is complete. Interim conditions can last from several months to years; improvements can be more short-term or long term. Selecting improvements that are appropriate for the anticipated length of time that the interim condition will remain is important. More permanent type of features are encouraged for interim conditions that are anticipated to be in place indefinitely.

The expectation is that Conceptual Development Plans (CDPs) and Final Development Plans (FDPs) will demonstrate how developments may be phased over time and will address interim conditions. Development projects should consider what amenities and building conditions will exist with each phase; commitments to specific elements are anticipated with each phase at the time of FDP. These plans and commitments should demonstrate how the phases of development will support a livable and beautiful Tysons by maintaining (or adding) pedestrian access and circulation across sites and to metro; providing interim parks, interim streetscapes, and stormwater facilities; and by addressing interim building and site conditions such as exposed above grade parking structures and surface parking to remain.

Phasing plans may consider temporary placemaking efforts and how the site can contribute to the vitality of Tysons while full build-out is not yet achieved. Items such as the programing of parks, use of buildings for interim uses, construction of interim structures, and the inclusion of pop-up uses can all contribute to the vitality in Tysons.

It is important that even the interim conditions result in enhanced connectivity, functionality, and a pleasant appearance, and allow sites to contribute to an active Tysons. The items described above are further refined on the following pages and are provided to spark creativity on how interim conditions could be addressed in Tysons. Innovation in design and approach is highly encouraged.

Design Suggestions:

- Use a pedestrian hierarchy plan to determine which pedestrian-oriented facilities (parks, retail corridors, work places, etc.) will require interim connections and streetscape improvements. Determine if any new sidewalk connections or street crossings will be necessary.

- In phased development plans, indicate how pedestrian access will be provided and preserved throughout all stages of development. Consider building sidewalks and streetscapes prior to future building phases so that pedestrian access can be enhanced. Pedestrian connections should exist prior to the construction of a final street grid if they are deemed necessary.

- Design interim connections to be expanded, enhanced, or reconfigured upon completion of future phases of development. This may include widening sidewalks for a final streetscape or integrating a pathway into a future public open space. Consider implementing pedestrian facilities in earlier phases so that pedestrians can take advantage of furnishings such as benches and bicycle racks.

- Consider installing street trees early in development phases to provide shade for pedestrians. Early installation also gives trees a head-start for reaching their expected canopy size.

- It is likely that adjacent sites will be under construction simultaneously, and consideration must be given to the coordination and maintenance of pedestrian access across multiple projects.

Opposite Top: Book mural during construction, Kansas City Library. Image: Flickr, EMFphoto

Opposite Bottom: Greensboro Green, interim park at The Boro.

Above Top: Construction at Capital One. Image: inTysons.com

Above Bottom: One Tysons under development. Image: Stephen Barna, Dulles Corridor Metrorail Project

7.2 Interim Building and Parking Design

Buildings in Tysons which are part of a phased development strategy may include partial building podiums or other architectural elements that will be built before an ultimate design is realized. In this scenario, a creative interim design for all facades that interface with the pedestrian realm should be implemented such that an interesting and varied façade is created. It is expected that the building and site design objectives detailed in Section 4 will apply to interim conditions; however, temporary or less costly materials and construction methods may be considered as "stand-ins" for the ultimate façade. Architectural screening, painted murals, and mesh fabric treatment are a few ways in which this can be achieved.

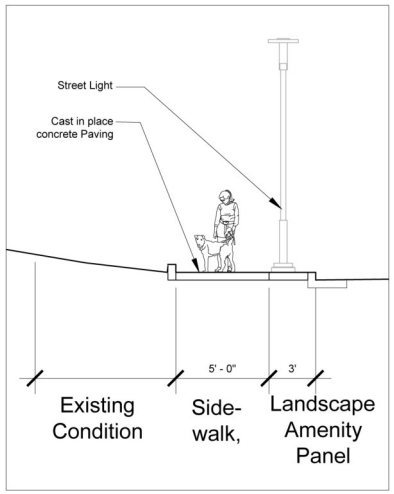
As development and the street grid will be constructed over time, many designs proposed will actually be an interim condition that will be completed by a future, non-related development. Off site grid connections may not be determined until an adjacent parcel is developed. Therefore, any new proposed building must be designed to respond not only to the immediately proposed development plan conditions, but also to future streets and streetscapes that are envisioned in the Comprehensive Plan Conceptual Grid of Streets. The Pedestrian Hierarchy Plan discussed in Section 2.4 will determine the hierarchy of many of the streetscapes in the grid and, in turn, the appropriate treatment for each building façade.

In addition, existing parking lots may remain in early phases of development to serve the development or as interim commercial parking. In these instances, the existing parking should be aesthetically improved and provide pedestrian connectivity to Metro and other surrounding uses. Allowing existing parking lots to remain untreated is highly undesirable and does not keep with the vision for Tysons.

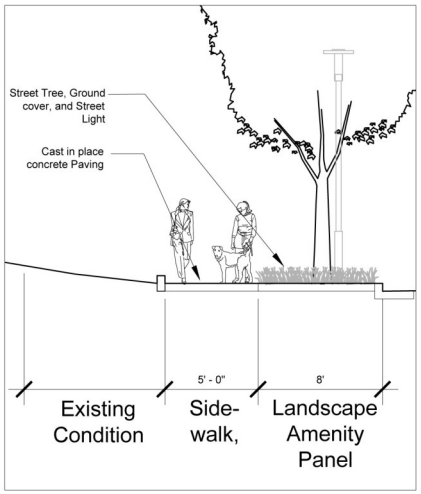
Design Suggestions:

- Consider monumental art pieces or other façade applications as interim conditions for partially constructed podiums or parking garages.
- Design buildings for the ultimate grid of streets by including appropriately scaled entrances and façade articulation to each building face as determined by the Pedestrian Hierarchy Plan described in Section 2.4.
- Enhance existing surface parking lots to remain by providing trees or other landscaping and clear pedestrian walkways.

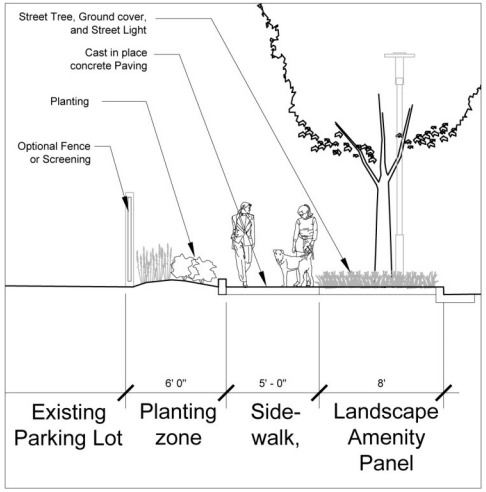
Many connections between neighborhoods and to Metro will be interim in nature because they are adjacent to parcels that have not rezoned, or are later phases of the same project which have not yet been built. In these cases, the following interim streetscape guidelines diagrams (A, B and C below), should be constructed to ensure a consistent, safe, and pleasant pedestrian experience:



Interim Streetscape A



Interim Streetscape B



Interim Streetscape C

Design Suggestions:

- Condition A: Interim streetscapes that are anticipated for up to two years should include, at a minimum:
  1. A 5 foot sidewalk paved with cast in place concrete or asphalt.
  2. A 2 foot landscape amenity panel that includes pole-mounted lighting that illuminates the sidewalk.

- Condition B: If Interim conditions are anticipated for longer than two years, interim streetscapes should include, at a minimum:
  1. A 5 foot sidewalk paved with cast in place concrete.
  2. An 8 foot landscape amenity panel that includes street trees (planting details approved by UFMD) and pole mounted lighting that illuminates the sidewalk.

- Condition C: If interim conditions are anticipated for longer than two years and immediately adjacent to an existing parking lot:
  1. Install a 6 foot minimum planting zone as a buffer to the parking lot. If trees are desired in this zone, an 8 foot minimum dimension is required.
  2. Install a 5 foot sidewalk that is paved with cast in place concrete.
  3. Install an 8 foot landscape amenity panel that includes street trees (planting details approved by UFMD) and pole mounted lighting that illuminates the sidewalk.

Opposite: Atlanta, GA, interim wall treatment.

Above: Interim Streetscape Guidelines diagrams. Measurements shown are from face of curb.

7.4 Interim Park Design

Parks may also evolve over time as neighborhoods are phased and as collective efforts to create the park network are assembled. Additionally, some parks will be built on structures and could be partially phased with the associated structures. It is also anticipated that interim public parks and amenity spaces will be provided with each phase of development if the ultimate park condition is not in place. These park spaces serve the residents by providing outdoor active and passive recreational opportunities. Temporary parks may meet the development's needed open space until the ultimate parks within the development can be constructed. In any case, interim parks should include fundamental elements from the Urban Park Typology.

Design Suggestions:

- Create a physical sense of enclosure while providing visual access into and out of the park.
- Create multiple, clearly visible entrances to the park.
- Include planted and hardscape elements.
- Create places to rest, play and socialize. Active and passive opportunities should be provided.
- Where appropriate, use economical, but high-quality and safe amenities such as benches, trash receptacles, lighting and play equipment.
- Ensure that site grades allow ADA accessibility into and through the park.
- For parks on structure, ensure that safe and attractive edges, guardrails or parapets are included in the design.
- Incorporate low-cost, interim planting strategies such as perennial and shrub plantings to create visual interest.
- Where interim park conditions are expected to remain less than five years, consider economical structures in lieu of trees to provide shade and shelter.
- Interim parks can accommodate placemaking by providing flexibility in programming; movable seating is one way that this can be achieved.

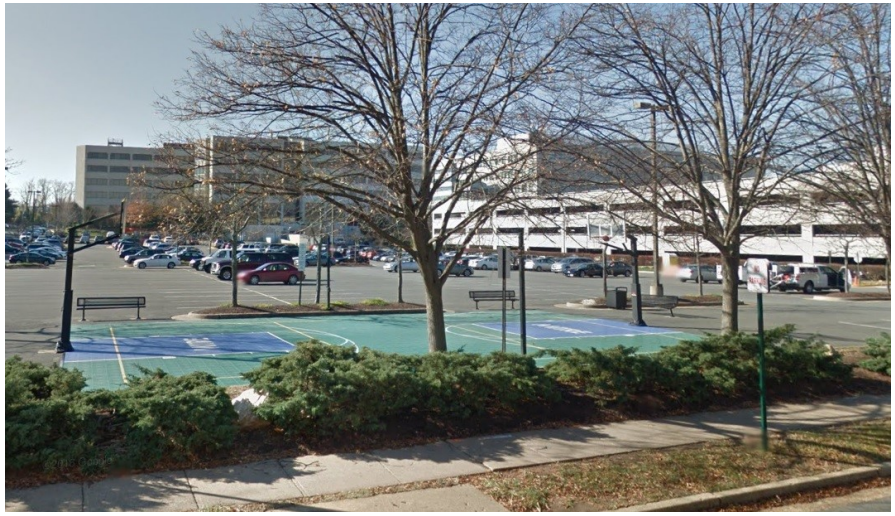
Design Suggestions (cont.):

- Include a maintenance plan for the interim park that includes all hard surfaces, planted areas, amenities and snow removal.

- Include design concepts for any interim park elements in the phasing plans section of the conceptual development plan (CDP) and include detailed interim park design details in the final development plan (FDP).

- Signage regarding the interim nature of the facility should also be provided.

- Where interim park conditions are expected to remain less than five years, consider planting and maintaining trees in a manner that they may be relocated to final locations in an ultimate park design or to other appropriate locations in Tysons.



Opposite Top: : Artwalk, Washington, DC. Landscape Architect Rhodeside & Harwell, Image: Steve Uzzell

Opposite Bottom: Painted ping-ping table, Foyer Project in Leederville. Image: POPP

Above: Temporary basketball court, Mitre Corp, Tysons, VA. Image: Googlemaps

As Tysons develops, the stormwater infrastructure will evolve as well. The stormwater system should be designed to manage interim conditions as well as consider how each facility will function as part of an integrated system at ultimate build-out. Stormwater mitigation must meet the regulations and requirements of Fairfax County, which may change over time in response to new state and federal regulations. Facilities must be designed to manage stormwater runoff for major storms as well as more frequently occurring events while protecting water quality, preventing flooding and property damage, and preventing impacts on receiving streams during and after construction.

In addition, detention ponds, stormwater vaults and other infrastructure are all form-giving elements to stormwater remediation that must be considered in phasing plans in interim conditions. These features must be integrated into an overall development plan and in consideration of phasing.

Design Suggestions:

- Any interim stormwater detention ponds should be designed such that they integrate into an interim landscape as a visual amenity or as an interim park element. This should include plantings, paths, benches and lighting.

- Where stormwater storage is contained beneath the interim streetscape, all access points and / or manholes should be placed outside of the sidewalk zone.

7.6 Construction Sites

Construction sites are another part of the Tysons landscape that, although less permanent than other interim conditions, will affect the appearance and quality of the pedestrian realm and livability for many years to come. Visually, the use of creative screening, scaffolding and other techniques will minimize the impact of this disturbance. Developments should ensure coordinated pedestrian maintenance of traffic plans with adjacent properties under construction to minimize the disturbance to the pedestrian experience and provide safe and convenient access to Metro. While construction conditions are inevitable, they should not detract from the livability of Tysons.

Design Suggestions:

- Ensure that a contiguous, safe pedestrian path is provided at all times during construction. This is especially important along primary pedestrian zones and at Metro station locations.
- Consider construction site screening concepts early.
- Consider cladding construction fence in public art pieces, tasteful photographs of future development or other aesthetic elements.
- Incorporate temporary lighting elements that illuminate the pedestrian way in all construction site screening and scaffolding.
- Confirm that temporary construction elements do not block site lines for vehicles at intersections or create low-visibility locations that may be unsafe for pedestrians.
- Coordinate with the relevant County agencies to appropriately locate temporary construction yards and related activities so that their impacts on surrounding residents and businesses, as well as with the street network, can be minimized.
- Coordinate with adjacent properties under construction to ensure seamless pedestrian paths are provided. Taking into account that routes may need to be widened or re-routed under certain circumstances to accommodate the volume of pedestrian traffic, the routes should be as direct as possible.
- Interim off-site pedestrian lighting may be necessary for safety.

Opposite: Scaffolding art installation—Camouflage by Ilkka Airas and Markus Wikari, Helsinki, Finland

Above Left: Interim Signage along construction fence at Nationals Park, Washington, DC.

Above Right: Demolition of the Westpark Hotel, Tysons, VA.

7.7 Interim Placemaking

In conjunction with phasing, there is a great opportunity to provide placemaking on sites located near Metro. Interim parks, the reuse of existing buildings, and interim structures provide opportunities to help build and brand Tysons as a destination and serve the needs of the community until the ultimate build out of entertainment options, restaurants, and parks occurs. Existing buildings that may remain in early phases may be retrofitted for temporary uses such as pop-up retail or restaurants.

Design Suggestions:

- Consider the interim use of existing buildings or new interim structures on site for short term retail or entertainment space.
- Install temporary parks on existing surface parking lots if the parking is not needed.
- Design interim surface parking with landscaping, shade structures, and/or movable furniture to allow off-peak use for farmers markets, festivals, or gathering spaces.
- Program interim park spaces and design spaces to be flexible so they can accommodate a variety of programs.
- Consider temporary art installations at key locations to help enliven the space and create visual interest.
- Designate space for food trucks as an additional element that adds vitality and interest to a site.

Opposite: Interim uses at the Wiehle-Reston East Metrorail Station. Image: David Madison Photography

Above Left: Concept design for a temporary park at The Boro by LandDesign, Inc.

Above Right: Concept design for interim structures at Scotts Run Station by SmithGroupJJR.

8

Resources

8. RESOURCES

For questions or comments about these Guidelines please contact:

Office of Community Revitalization (OCR)
www.fcrevit.org
(703) 324-9300

Tysons Urban Design Guidelines
www.fairfaxcounty.gov/tysons/design/

Tysons Under Rail Charrette
www.fcrevit.org/publications/download/SilverlineCharette_101614.pdf

For questions o**r** additional information regarding specific topics related to certain Fairfax County departments or agencies, contact the following:

Department of Planning and Zoning (DPZ)
www.fairfaxcounty.gov/dpz

Department of Public Works and Environmental Services (DPWES)
www.fairfaxcounty.gov/dpwes/

Intensive Green Roof Plant List
www.fairfaxcounty.gov/dpwes/publications/lti/07-03attach1.pdf

Extensive Vegetated Roof Plant List
www.fairfaxcounty.gov/dpwes/publications/lti/07-03attach2.pdf

Recommended Plant List for Bioretention Facilities
www.fairfaxcounty.gov/dpwes/publications/lti/07-03attach3.pdf

Public Facilities Manual
www.fairfaxcounty.gov/dpwes/publications/pfm/

Department of Transportation (FCDOT)
www.fairfaxcounty.gov/fcdot/

Fairfax County Bicycle Master Plan, Phase 1: Tysons Corner
www.fairfaxcounty.gov/fcdot/bike/tysonsbikeplan/tysons_final_bike_master_plan.htm

Transportation Design Standards for Tysons Corner Urban Center
www.fairfaxcounty.gov/tysons/transportation/

Tysons Metrorail Station Access Management Study (TMSAMS)
www.fairfaxcounty.gov/fcdot/tmsams/

Bicycle Parking Guidelines
www.fairfaxcounty.gov/fcdot/pdf/bike/fcdot_bicycle_parking_guidelines_final_.pdf

Park Authority (FCPA)
www.fairfaxcounty.gov/parks/
(703) 324-8702

Urban Parks Framework
www.fairfaxcounty.gov/parks/plandev/urbanparks.htm

Tysons Park System Concept Plan
http://www.fairfaxcounty.gov/parks/plandev/tysons-park-planning.htm

8. RESOURCES

The Guidelines draw upon a variety of resources, documents and other organizations outside of Fairfax County government. The following are referenced in the Guidelines:

American Bird Conservancy
www.abcbirds.org/
Bird-Friendly Building Design
https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_2015.pdf
(540) 253-5780

American Nursery and Landscape Association (ANLA)
(202) 789-2900
American Standard for Nursery Stock
http://americanhort.org/documents/ANSI_Nursery_Stock_Standards_AmericanHort_2014.pdf

Arts Council of Fairfax County
www.artsfairfax.org/
(703) 642-0862

Casey Trees
www.caseytrees.org
(202) 833-4010
Tree Space Design: Growing the Tree Out of the Box
http://caseytrees.org/wp-content/uploads/2012/02/tree-space-design-report-2008-tsd.pdf

National Crime Prevention Council
www.ncpc.org
(202) 466-6272

New York City Audubon Society
Bird Safe Building Guidelines
http://www.nycaudubon.org/pdf/BirdSafeBuildingGuidelines.pdf
(212) 691-7483

The Sustainable Sites Initiative
www.sustainablesites.org

Tysons Partnership
www.tysonspartnership.org

U.S. General Services Administration
www.gsa.gov
Public Buildings Service
The Site Security Design Guide

U.S. Green Building Council (USGBC)
www.usgbc.org/
Leadership in Energy and Environmental Design (LEED) programs
(800) 795-1747

9

Glossary

9. GLOSSARY

Active Open Space - Open space that is used for sports, exercise or active play, and typically programmed for such uses.

Active Use - A use located within a building that is designed for occupation and has views to the adjacent streetscape or open spaces. Active uses can include retail, commercial, office and residential uses.

Articulation (Facade) - The variation in an exterior building wall to provide changes in depth, horizontal or vertical patterning, or fenestration.

Base (Building) - The lower portion of a building where it meets the ground adjacent to the streetscape. The base typically includes the first few floors, but may vary in height depending on the architecture.

Best Management Practices (BMPs) - A practice, or combination of practices, that is determined to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to meet water quality goals.

Biodiversity - Refers to the variety of life in a particular habitat or ecosystem.

Build-To Line - The line along which the primary mass of a building facade should be set. It is typically located at the back of the Building Zone. The line should be consistent within a block, unless it is intentionally varied to achieve facade articulation, streetscape uses such as outdoor dining, or other public open spaces.

Crime Prevention through Environmental Design (CPTED) - An approach to deterring criminal activity by implementing specific strategies in the built environment, such as increasing natural surveillance and eliminating potential hiding places for offenders.

Facade (Building or Parking) - The exterior surface of a building which faces a street or public open space.

Fenestration - Refers to the pattern of opening in a building facade typically through the use of windows and other glazed areas.

Floor Area Ratio (FAR) - An expression of the amount of development allowed on a specific parcel of land. FAR is determined by dividing the total square footage of buildings on a site by the amount of site square footage.

Focal Point - A location of interest or activity. Typically refers to a point which is highly visible due to its location and impact. May include design features intended to focus the eye in a particular area.

Frontage (Building) - The portion of a building which faces and aligns to the adjacent street.

Hardscape - Refers to paved or built areas which are not planted or contain exposed soil.

Landscape Buffer - A continuous strip of land provided along the edge of a structure or property where landscaping is used to screen or provide a transition between uses or public space.

LED - Light-emitting diode.

Leadership in Energy and Environmental (LEED) - The U.S. Green Building Council's Design certification program for green buildings. Green building structures and their associated landscapes are located, designed, constructed, and operated in an environmentally responsible manner to minimize short– and long-term negative impacts on the environment and building occupants.

Liner (Active Use) - An active use that is used to hide parking, mechanical, storage, or other similar uses. Active use liners may include retail, commercial, office and residential uses.

Low Impact Development (LID) - Low Impact Development (LID) is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Microclimate - The climate of a specifically defined area, particularly one that is different from or contrasts with the climate of the surrounding area.

Open Space (Public) - Any open space for public use directly accessible by an abutting street on at least one side, and with pedestrian access from a public sidewalk or right-of-way.

Parking Garage - A building, or portion thereof, used for parking and its access, including automated and mechanical parking systems. Also referred to as a parking structure.

Passive Open Space - Open space which is generally used for sitting or relaxing, and is typically not programmed with specific activities.

Permeability - A material or a construction assembly's capacity to absorb water or to allow water to pass through. Synonymous with perviousness.

Podium (Building) - The base portion of a building which typically includes the first few floors, but can vary in height. The podium is a type of building base typically comprised of parking decks.

Public Facilities Manual (PFM) - The Public Facilities Manual sets forth the guidelines which govern the design of all public facilities which must be constructed to serve new development. It is intended to serve as a technical manual in the effort to implement the requirements of the Subdivision and Zoning ordinances and other applicable chapters of the Code of the County of Fairfax, Virginia (County Code).

Public Realm - All spaces physically or visually accessible regardless of ownership, including, but not limited to, streets, sidewalks, plazas, parks, viewsheds, and landmarks.

Sign Band - A general zone where building-mounted tenant signs are placed, located above the storefront and below the facade above, to provide continuity and organization in sign placement.

9. GLOSSARY

Step-back - The stepping back of floors of a building to reduce its apparent mass at the street level. Step-backs typically occur between the building podium and tower, and can vary in height and depth.

Storefront - The area of the building facade at sidewalk level which faces the streetscape or public open spaces. Storefronts enclose ground floor active uses, and provide the major visual and primary physical access to those spaces.

Streetscape - The full compliment of materials, both horizontal and vertical, that compose the publicly accessible space located between the street curb and the build-to line.

Tree Space - The area that is dedicated for planting and growing a street tree. Synonymous with tree pit or tree box.

Tower (Building) - The portion of a building located above the building base. The tower can vary in height but is primarily comprised of active uses, and does not include parking.

Treatment (Architectural) - Architectural or landscape elements on a building facade intended to conceal parking, mechanical, storage, or other similar uses. Architectural treatments may include the use of varying materials, fenestration, architectural features, screens, meshes, louvers, and glazing, or the incorporation of vegetated surfaces and planters. Architectural treatment does not include the application of paint.

Tree Root Zone - The area of soil in which tree roots extend and where the predominant root activity occurs.

Transit Oriented Development (TOD) - In Fairfax County, defined as compact, pedestrian– and biking-friendly, mixed-use development containing medium to high density residential, office and retail uses within walking distance of rail transit stations identified in the Comprehensive Plan.

Urban Park Network - A system of interconnected, interrelated urban parks, including pocket parks, common greens, civic plazas, and recreation-focused urban parks, that are existing and planned throughout Tysons.

9. GLOSSARY

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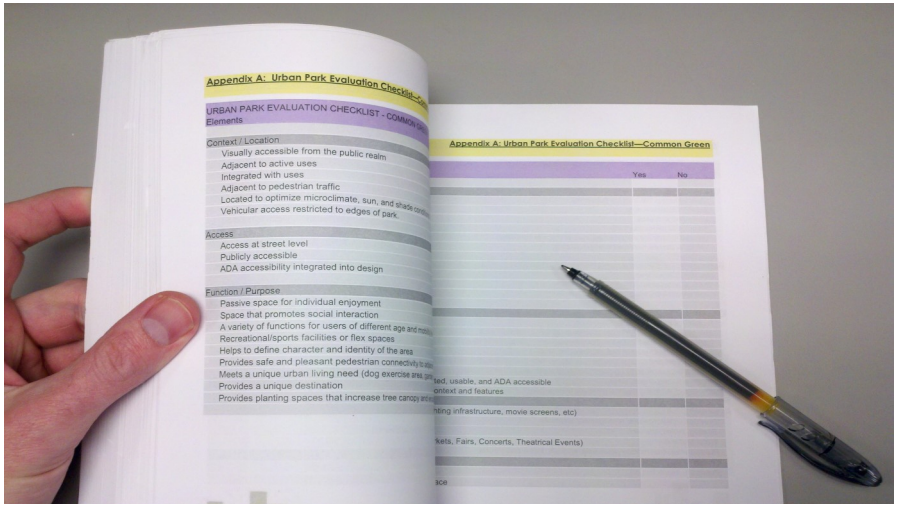
Appendix

10. APPENDIX



Several checklists have been created to help facilitate the design and development process. These checklists address some of the important elements and concepts described throughout the Guidelines. The purpose of these checklists is to help provide a easy-to-read reference which can be used during the design process.

The checklists are not intended to "grade" the completeness of a development application. The goal of the checklists should be to address as many of the points as possible, or at a minimum, consider the intent of each point and formulate potential design strategies as appropriate. It is possible that the specific conditions of some development may warrant modifying or adding certain checklist items. Additional information may be required for specific developments or unique design strategies.

Urban Park Evaluation Checklists

A series of checklists addressing the design of urban parks is provided in Appendix A. They are categorized according to the Urban Parks Framework described in Chapter 6 of the Guidelines. The checklists are intended to highlight the potential design strategies which reflect the character for the variety of urban parks expected in Tysons, including pocket parks, civic plazas, common greens, and recreation-focused parks.

Urban Design Checklist

A general urban design checklist is provided in Appendix B. The checklist highlights major design considerations described in the Comprehensive Plan and throughout the Guidelines.

The urban design checklist should be used by design teams to ensure that the proposed development has considered the many potential issues which must be addressed to create a successful urban environment. The checklist will also help County staff when reviewing development applications by creating a way to organize comments. It is expected that this will help facilitate staff/applicant discussions and issue resolution.

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Appendix A: Urban Park Evaluation Checklist—Pocket Park

URBAN PARK EVALUATION CHECKLIST - POCKET PARK Elements	Yes	No
Context / Location		
Visually accessible from the public realm		
Adjacent to active uses		
Integrated with adjacent uses		
Adjacent and connected to high volumes of pedestrian traffic		
Located to optimize microclimate, sun and shade conditions		
Access		
Access at street level		
Publicly accessible		
ADA accessibility integrated into design		
Function / Purpose		
Passive space for individual enjoyment		
Space that promotes social interaction		
Helps to define character and identity of the area		
Provides connectivity		
Meets a unique urban living need (garden plots, etc.)		
Provides a unique destination		
Provides a space to increase biodiversity in the urban landscape		
Provides area to integrate LID/stormwater amenities		
Provides planting spaces that increase tree canopy and encourage biodiversity		

URBAN PARK EVALUATION CHECKLIST - POCKET PARK Elements	Yes	No
Amenities		
Seating, tables, shelters		
Water features		
Planted areas that include perennials, annuals, trees and shrubs,		
Lawns		
Public art, interactive art		
Signs, interpretive features/displays		
Playgrounds, tot lots		
Café, restaurant or food service (in park or adjacent to it)		
Form		
Well-framed by buildings		
Focal point(s)		
Distinctive design/identity		
High quality materials		
Sustainable materials and design		
Topographic design that allows the majority of the space to be inhabited, usable and ADA accessible		
Size ranges from 1/4 acres up to (but usually less than) 1 acre		
Programmability		
Amenities to support public events (access to power, water, event lighting infrastructure, movie screens, etc)		
Rental space for picnics, parties		
Storage space		
Other / Comments		
Commitment to ongoing maintenance		
Commitment to working with an entity to schedule activities for the space		

Appendix A: Urban Park Evaluation Checklist—Civic Plaza

URBAN PARK EVALUATION CHECKLIST - CIVIC PLAZA Elements	Yes	No
Context / Location		
Visually accessible from the public realm		
Adjacent to active uses		
Integrated with uses		
Adjacent to pedestrian traffic		
Located to optimize microclimate, sun and shade conditions.		
Vehicular access restricted to edges of park		
Located at major intersection or at Metro		
Access		
Access at street level		
Publicly accessible		
ADA accessibility integrated into design		
Function / Purpose		
Passive space for individual enjoyment		
Space that promotes social interaction		
A variety of functions for users of different ages and mobility levels.		
Helps to define character and identity of the area		
Provides safe and pleasant pedestrian connectivity to adjacent uses and public realm		
Meets a unique urban living need (dog exercise area, garden plots, etc.)		
Provides a unique destination		
Provides planted spaces that increase tree canopy and encourage biodiversity		

URBAN PARK EVALUATION CHECKLIST - CIVIC PLAZA Elements	Yes	No
Amenities		
Provides LID/stormwater management elements		
Seating, tables, shelters		
Water features		
Planted areas that include perennials, annuals, trees and shrubs		
Lawns		
Public art, interactive art		
Signs, interpretive features/displays		
Playgrounds, tot lots		
Café, restaurant or food service (in park or adjacent to it)		
Community room spaces		
Form		
Well-framed by buildings		
Primarily made up of hardscaped surfaces		
Divided spaces or rooms that provide choices for activities and use		
Focal point(s)		
Distinctive design/identity		
High quality materials		
Sustainable materials and design		
Topographic design that allows the majority of the space to be inhabited and ADA accessible		
Should be a minimum of 1 acre in size; can be larger depending on context and features		
Programmability		
Amenities to support public events (access to power, water, event lighting infrastructure, movie screens, etc)		
Rental space for picnics, parties		
Storage space		
Flexible spaces that can be programmed in many ways (farmers markets, fairs, concerts, theatrical events)		
Other / Comments		
Commitment to ongoing maintenance		
Commitment to working with an entity to schedule activities for the space		

Appendix A: Urban Park Evaluation Checklist—Common Green

URBAN PARK EVALUATION CHECKLIST - COMMON GREEN Elements	Yes	No
Context / Location		
Visually accessible from the public realm		
Adjacent to active uses		
Integrated with uses		
Adjacent to pedestrian traffic		
Located to optimize microclimate, sun and shade conditions.		
Vehicular access restricted to edges of park		
Access		
Access at street level		
Publicly accessible		
ADA accessibility integrated into design		
Function / Purpose		
Passive space for individual enjoyment		
Space that promotes social interaction		
A variety of functions for users of different age and mobility levels.		
Recreational/sports facilities or flex spaces		
Helps to define character and identity of the area		
Provides safe and pleasant pedestrian connectivity to adjacent uses and public realm		
Meets a unique urban living need (dog exercise area, garden plots, etc.		
Provides a unique destination		
Provides planting spaces that increase tree canopy and encourage biodiversity		

URBAN PARK EVALUATION CHECKLIST - COMMON GREEN Elements	Yes	No
Amenities		
Provides LID/stormwater management elements		
Seating, tables, shelters		
Water features		
Planted areas that include perennials, annuals, trees and shrubs,		
Lawns		
Public art, interactive art		
Signs, interpretive features/displays		
Playgrounds, tot lots		
Café, restaurant or food service (in park or adjacent to it)		
Sport courts, fitness stations, play fields		
Trails		
Community room spaces		
Form		
Well-framed by buildings		
Focal Point(s)		
Divided spaces or rooms that provide choices for activities and use		
Distinctive design/identity		
High quality materials		
Sustainable materials and design		
Topographic design that allows the majority of the space to be inhabited, usable and ADA accessible		
Should be a minimum of 1 acre in size; can be larger depending on context and features		
Programmability		
Amenities to support public events (access to power, water, event lighting infrastructure, movie screens, etc)		
Rental space for picnics, parties		
Storage space		
Flexible spaces that can be programmed in many ways (farmers markets, fairs, concerts, theatrical Events)		
Other / Comments		
Commitment to ongoing maintenance		
Commitment to working with an entity to schedule activities for the space		

Appendix A: Urban Park Evaluation Checklist—Recreation Focused

URBAN PARK EVALUATION CHECKLIST - RECREATION FOCUSED Elements	Yes	No
Context / Location		
Visually accessible from the public realm		
Adjacent to active uses		
Integrated with uses		
Adjacent to pedestrian traffic		
Located to optimize microclimate, sun and shade conditions.		
Vehicular access restricted to edges of park		
Access		
Access at street level		
Publicly accessible		
ADA accessibility integrated into design		
Function / Purpose		
Space that promotes social interaction		
A variety of functions for users of different age and mobility levels		
Recreational/sports facilities or flex spaces		
Helps to define character and identity of the area		
Provides safe and pleasant pedestrian connectivity to adjacent uses and public realm		
Meets a unique urban living need (dog exercise area, garden plots, etc.		
Provides a unique destination		
Provides planting spaces that increase tree canopy and encourage biodiversity		
Amenities		
LID/stormwater management elements		
Seating, tables, shelters		
Water features		
Planted areas that include perennials, annuals, trees and shrubs,		
Lawns		
Public art, interactive art		

URBAN PARK EVALUATION CHECKLIST - RECREATION FOCUSED Elements	Yes	No
Amenities (cont.)		
Signs, interpretive features/displays		
Playgrounds, tot lots		
Café, restaurant or food service (in park or adjacent to it)		
Sport courts, fitness stations, lighted athletic fields		
Trails		
Community room spaces		
Form		
Divided spaces or rooms that provide choices for activities and use		
Focal point(s)		
Distinctive design/identity		
High quality materials		
Sustainable materials and design		
Topographic design that allows the majority of the space to be inhabited, usable and ADA accessible		
Programmability		
Amenities to support public events (access to power, water, event lighting infrastructure, movie screens, etc)		
Rental space for picnics, parties		
Storage space		
Flexible spaces that can be programmed in many ways (farmers markets, fairs, concerts, theatrical events)		
Generally larger than 1 acre in size; size is a function of the recreation facilities and amenities provided		
Other / Comments		
Commitment to ongoing maintenance		
Commitment to working with an entity to schedule activities for the space		

Appendix B: Urban Design Checklist

URBAN DESIGN PRINCIPLES / VISION OVERVIEW	ACHIEVED? YES/NO
Enhance Regional Identity	
Establish a Sense of Place	
Improve Connectivity	
Incorporate the Design of Sustainable Environments	
Respect Surrounding Neighborhoods	
Create a New Destination for the Arts and Design	

URBAN DESIGN ELEMENTS	ACHIEVED? YES/NO
Street Grid and Block Pattern (Does the application…)	
Provide grid connections suggested in the Comprehensive Plan? (provide Comp. Plan grid overlaid on proposed grid)	
Include maximum block perimeters of 2000 feet?	
Include mid-block pedestrian connection for blocks over 600 feet?	
Include block length ratios from longest to shortest side: 2:1 or 3:1?	
Pedestrian Hierarchy (Does the application…)	
Include a hierarchical strategy for each streetscape type as recommended in the Urban Design Guidelines? (Provide a Pedestrian Hierarchy Plan)	
Urban Parks (Does the application…)	
Include public parks that meet the Urban Parks Standard and that meet the recommendations in the Urban Design Guidelines?	
Locate public parks along Primary or Secondary Pedestrian Corridors?	

URBAN DESIGN ELEMENTS (Cont.)	ACHIEVED? YES/NO
Streetscape Design (Does the application…)	
Provide definition of streetscape zones that agrees with the Comprehensive Plan and Pedestrian Hierarchy Plan?	
Provide underground utilities and infrastructure?	
• Provide a utility plan overlaid on the landscape plan (CDP: Proffered to be shown at FDP).	
• Locate stormwater vaults such that they do not affect the landscape amenity panel and sidewalk zone.	
Address street and streetscape lighting?	
• Conform to lighting standards in the Urban Design Guidelines.	
Provide design alternatives for constrained areas (if applicable)?	
• Provide justification for design alternatives in constrained areas.	
Include a plan with dimensions for all streetscapes?	
Create a safe environment for the public?	
Include a commitment to maintain the streetscape and public realm elements?	
Include safe, convenient and pleasant pedestrian crossings?	
Provide pedestrian friendly and attractive medians (if applicable) planted minimum of 8 ft?	
Include on-street parking where appropriate?	
Meet Urban Design Guidelines standards for planting in the Public Realm?	
• Provide street trees?	
• Provide other plantings?	
Include Low Impact Development Techniques in the Streetscape?	
Provide a street furnishings strategy that meets the standards in the Urban Design Guidelines?	

URBAN DESIGN ELEMENTS (Cont.)	ACHIEVED? YES/NO
Building and Site Design (Does the application…)	
Include build-to lines as called out in the Comprehensive Plan?	
Provide building massing that is beneficial to the pedestrian realm?	
Provide building massing that creates an interesting skyline?	
Include step backs as set forth in Comprehensive Plan and Design Guidelines?	
Include creatively articulated buildings as set forth in the Comprehensive Plan and Urban Design Guidelines?	
Include fenestration and transparency as set forth in the Urban Design Guidelines?	
Include activated street fronts by streetscape hierarchy and as set forth in the Urban Design Guidelines?	
Follow parking design recommendations as set forth in the Comprehensive Plan and the Urban Design Guidelines?	
• Primary Ped. Corridors - No parking visible from pedestrian	
• Primary Ped. Corridors - No entrances to parking structures.	
• Secondary Ped. Corridors - No parking visible from pedestrian	
• Secondary Ped. Corridors - Few, if any entrances to parking	
• Locate below-grade parking structures within build-to line.	
Follow building height limits set forth in the Comprehensive Plan?	
Include varied building heights with tallest buildings closest to Metro?	
Does shadow analysis indicate that important public realm spaces such as parks are largely in the sun?	

URBAN DESIGN ELEMENTS (Cont.)	ACHIEVED? YES/NO
Interim Conditions (Does the application…)	
Provide interim pedestrian circulation that meets the connectivity goals of the Comprehensive Plan?	
Show how interim parking facilities will adhere to parking design goals?	
Include landscape and sustainable hardscape improvements that will improve the aesthetic, function, and character of any interim uses?	
Creatively incorporate interim stormwater facilities into a high-quality landscape design?	
Address interim uses/public amenities	