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Landmark/Van Dorn Corridor Plan



Draft

February 3, 2009

Incorporates changes made by Planning Commission

City of Alexandria Department of Planning and Zoning

Landmark/Van Dorn Corridor Plan

City of Alexandria Department of Planning and Zoning

Draft

February 3, 2009

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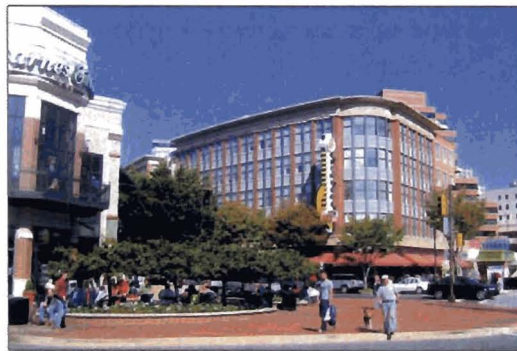
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Introduction

This Plan expresses a vision for the transformation of the Landmark/Van Dorn Corridor into one of the finest mixed-use communities in the Washington Region – a lively, urban place that is an important focus of community life for Alexandria’s West End. The vision establishes a strong sense of place for the community, with two distinctive mixed-use activity centers that unify and serve the surrounding residential neighborhoods. The vision includes tree-lined transit boulevards and a new network of local streets providing easy walking to parks, plazas, shops, and restaurants. Moreover, the Plan envisions an environmentally and economically sustainable community that through its land use, redevelopment, transportation improvements, and network of open spaces create a safe, healthy, vibrant community that meets the needs of residents and visitors.



Bethesda Row, Bethesda, MD



Las Ramblas, Barcelona



Third Street Promenade, Santa Monica, CA



Crown Farm, MD

1.1. The Planning Area

The Landmark/Van Dorn Corridor is an area of the City of Alexandria with tremendous potential. Surrounded by the strong neighborhoods of the West End, it is characterized by automobile-dominated corridors; disconnected commercial, multi-family, and industrial uses; and lack of a sense of place. The opportunities and challenges for the future are to transform the present suburban development pattern into a quality mixed-use urban community that serves the residents of the West End and beyond.

Encompassing about 240 acres of retail, office, residential, and industrial properties, the Landmark/Van Dorn Corridor planning area is focused along Van Dorn Street, extending from the Landmark Mall to the Van Dorn Street Metro (see figure 1-1). The planning area comprises the central portion of the Landmark/Van Dorn Small Area Plan.

Because the planning area is fully developed, creation of the new activity centers that redefine and unify the area will depend on a combination of private redevelopment

and public action. Recent development interest expressed by owners of key properties, including Landmark Mall, indicates that the greater Landmark/Van Dorn community faces a critical crossroads in its history. How these properties are redeveloped will determine whether the area will be transformed into a lively mixed-use urban community, or whether the present pattern of surface parking lots and strip commercial development will be continued.

The first challenge for the City of Alexandria is to establish in this Plan the vision and the requirements for the desired character of the area to meet public objectives such as building a greater sense of community and sense of place.

The second challenge is to achieve the desired character by managing the change that is coming. The City has an important role to play in this process through commitment to policies, regulations, incentives, and capital investments that encourage reinvestment, while ensuring

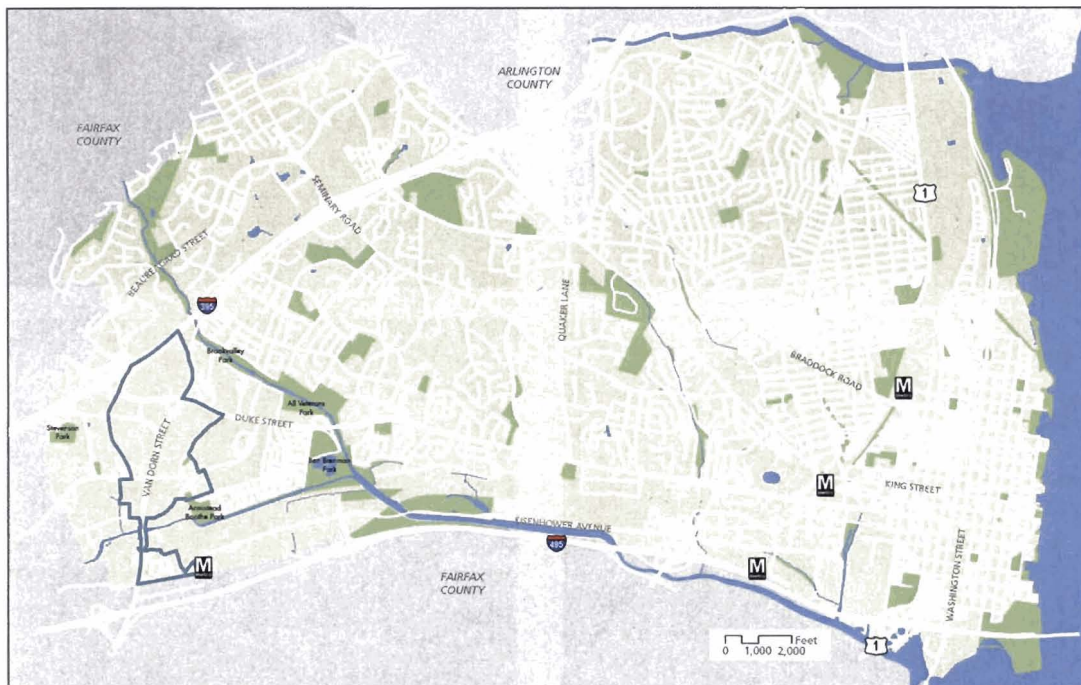


Figure 1-1. Planning Area

that this reinvestment results in the desired type and form of development.

Given the Landmark/Van Dorn Corridor's current auto-oriented development pattern and the regional travel demand caused by proximity to the regional highway system (I-395 and the Capital Beltway), transportation is both an opportunity and a constraint for redevelopment. However, a truly walkable community with a successful multi-modal transportation system can be created through mixed-use development policies, improved local connections, improved transit, and transportation demand management techniques.

1.1.1. History of the Area

Today this area is called the West End for the obvious reason that it is in the western portion of the City of Alexandria. Yet, the name has greater meaning. Until 1952 the area was part of Fairfax County and was a crossroads though an agricultural area west of the regional urban center, Alexandria. The name "West End" is actually a historic one associated with the first suburb of Alexandria. Not only was the original West End (today centered along Duke Street around the Carlyle area) just west of Alexandria, the West family were its early owners and 18th century developers. This first West End became a booming center of commerce along what was then Little River Turnpike, now Duke Street. As Alexandria annexed more land and expanded west, the West End name migrated as well.

The West family is also a part of the history of the Landmark/Van Dorn area. A founder of Alexandria, Hugh West operated the first tobacco inspection station and port at his facilities at West Point—now the foot of Oronoco Street—almost 20 years before the establishment of the town. The West family was prominent in Northern Virginia for decades. In the 18th century, John West, as well as John Summers and Michael Reagan, owned large tracts of land in what is now the Van Dorn corridor. The large tracts with plantations and slave quarters were subdivided over the years into smaller

farmsteads. Tobacco was the first crop grown in the colonial era, but people shifted their dependence from one export product to a diversified grain economy.

Good roads and bridges were critical to the movement of goods for commercial purposes and to link east (Alexandria) with the west (this area and beyond). A great period of road development started at the turn of the 19th century, resulting in many private turnpike companies. Little River Turnpike (Duke Street) was chartered in 1795 and first started collecting tolls in 1803. It became a major east-west artery connecting rural hinterlands with Alexandria and continues to be the spine of east-west transportation more than 200 years later.

Although this new turnpike promoted commerce through the area, the local agricultural economy was depressed by the early 19th century as the soils had become depleted from growing tobacco. In the 1840s and 1850s, people from northern states moved into the area and brought new farming methods, such as deep plowing and fertilization. Agriculture was reinvigorated before the Civil War. Wheat was milled locally at places such as Cloud's Mill on Holmes Run and taken for export to the Alexandria wharves. The Orange and Alexandria Railroad was constructed in the early 1850s, and ran parallel and south of the Little River Turnpike.

By the time of the Civil War (1861-1865), military maps show this area with few homes, which were generally situated on the highest uplands separated by streams. A road system, while not at the scale of an urban grid, operated as a grid with two major east-west arteries which were joined by several north-south connectors. Many of today's streets are continuations of these historic roads: Duke, Whiting, Van Dorn, and parts of Edsall and Reynolds. A road once ran in a similar manner to Eisenhower Avenue, and the rail tracks continue the historic pattern. The area just west of Landmark Shopping Center, Linconia, was a small village with taverns, a school, and a church.

The period before World War II saw the beginning of changes which would catapult the Landmark/Van Dorn area from a marginal, rural hinterland to a central location. Shirley Highway (route 395) began construction in 1944 to move large numbers of people to federal jobs. Virginia's first limited access freeway, the Henry G. Shirley Memorial Highway, was completed from Woodbridge, Virginia, to the 14th Street Bridge over the Potomac River, in 1952. A four-lane freeway 17.3 miles long, the road was named for Henry Shirley, Virginia Highway Commissioner and major supporter of the interstate highway system, which President Eisenhower championed in the 1950s.

In 1952, the City of Alexandria annexed a portion of Fairfax County. This increased the area's value and led to large-scale developments such as residential high-rises and strip shopping centers. The first projects cut down the highest uplands which once had farmhouses and dramatically altered the landscape. Through the late 20th century, the area added many retail businesses that augmented the regional economy and shifted residential population and retail sales from Old Town to the West End.

Many of the streets were named in the pre-Civil Rights era after Confederate officers: Pickett, Whiting, Van Dorn, Reynolds, Stevens, Jordan and Paxton. But at least one road retains a local historical name. Horace Edsall owned the Mount Hebron plantation and mill. The United States Military Railroad created a rail siding near his property during the Civil War after taking control of the Orange and Alexandria Railroad. This became a permanent stop on the rail line that continued through many owners and linked this area to Baltimore through the Wilkes Street Tunnel, a ferry across the Potomac River, and additional rail.

Duke and Van Dorn streets today echo the old cross-roads function of the area linking people and goods both east-west and north-south, while also maintaining its late 20th century retail role. While not the original West End, the area has evolved into a significant

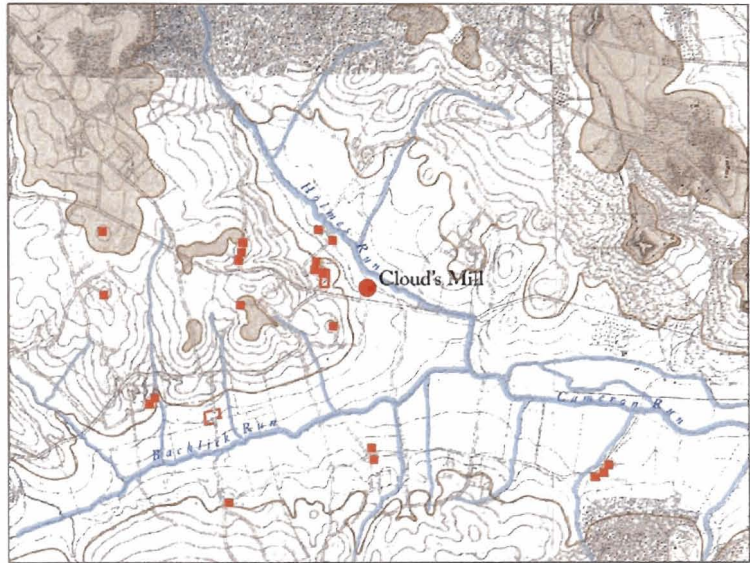


Figure 1-2. Civil War era topographic map showing fortifications of Washington D.C. with settlements in and near the planning area.

transportation corridor and commercial hub like its historic namesake at the other end of Duke Street.

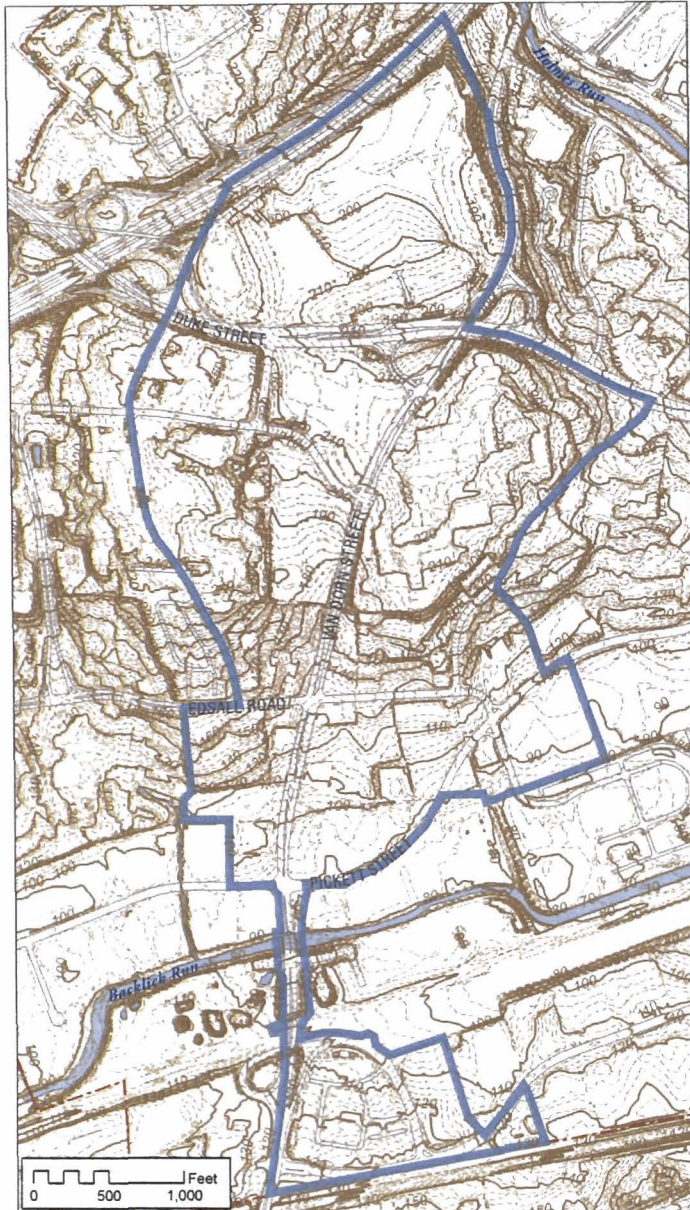


Figure 1-3. Topography. This figure shows elevations in the planning area and the immediate surroundings with two-foot (dashed lines) and ten-foot contours (solid lines). Elevations range from 70 feet at Holmes Run and Backlick Run to 250 feet at the highest elevations on Whiting Street just south of Duke Street. Steep slopes around large sites that have been terraced for development make connecting new streets and pedestrian ways difficult in some locations.

1.1.2 Geography of the Area

Terrain

Terrain within the Landmark/Van Dorn Corridor is sufficiently hilly to make it an issue in development and circulation. Elevations range from approximately 80 feet above sea level at Backlick Run up to 250 feet at the top of Whiting Street. Its highest elevations make the area visually prominent for approximately a mile in all directions, and its cluster of high-rise apartments and condominiums, often referred to as “condo canyon,” identify the area as far as the Woodrow Wilson Bridge, five miles to the east. In Alexandria, only the flat ridge top extending from the Virginia Theological Seminary northwest along to Fort Ward Park on Braddock Road is higher, at an elevation of up to 290 feet.

The steepest slopes within the planning area have been softened as natural contours have been terraced to accommodate large-scale development. Steep slopes are concentrated east and southeast of Landmark Mall, on the west side of Reynolds Street, and behind development on both sides of Whiting Street. These slopes create fragmented development areas and barriers to pedestrian and vehicular circulation.

Watercourses

Holmes Run and Backlick Run are locally significant watercourses set in corridors combining natural and landscaped vegetation. These corridors are natural boundaries to the north and south of the planning area. Some of these connected open space areas are currently City parks and open spaces; others present opportunities to provide additional public open space and ensure protection of connections. Smaller drainage systems enter these watercourses and provide opportunities for natural open space and trails that connect to these major features. Small buffer areas along these perennial streams are now protected as Resource Protection Areas under the Chesapeake Bay Protection Act and implementing local regulations.

1.1.3. Demographics of the Area

A demographic analysis was conducted to compare selected population, socio-economic, and housing characteristics of the Landmark/Van Dorn Corridor planning area and the surrounding context area to those of the rest of the City and the region. U.S. Census data from 1990 and 2000 were used in the analysis.

The larger context area included census tracts within about one mile of Landmark Mall (Figure 1-1). The context area had a population of 48,845 at the time of the 2000 census.

The demographic characteristics of the Landmark/Van Dorn Corridor planning area and the surrounding context area are not radically different from those of the rest of Alexandria. However, there are some differences. The demographic analysis reveals the following characteristics of the population within the context area compared to the rest of City:

- Its population is more ethnically diverse.
- Its population is more transient.
- It has a higher percentage of renters.
- It has somewhat lower household incomes.
- It has somewhat lower levels of educational attainment.
- It has fewer school-age children.
- It has a higher percentage of persons in the 20 to 29-year age group.

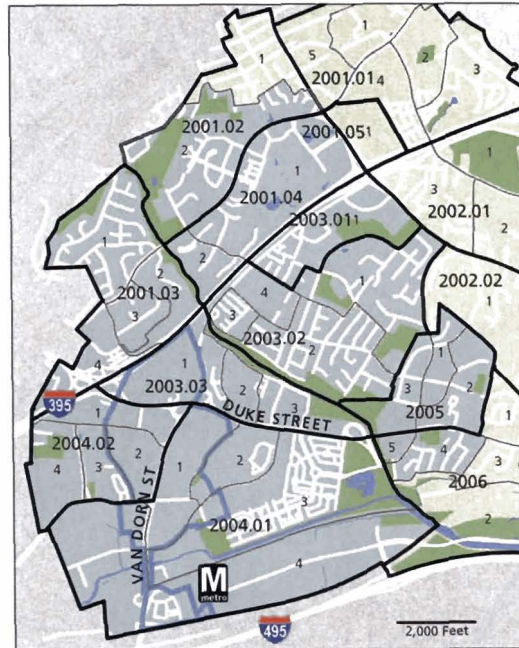


Figure 1-4. Figure 1-1. Census 2000 tracts defining study areas for statistical analysis. Census tract numbers (with two decimal places) and block group numbers (single digits) within tracts are shown. The Context Area is shown in blue-gray, with the planning area outlined in blue

1.2. Why a New Plan?

Originally constructed in 1965 as one of the area's first regional shopping centers, Landmark Mall has experienced continuing declining sales in recent years and is – like many older shopping centers around the country – becoming increasingly obsolete as the retail world and consumer preferences continue to evolve and change. The initial impetus for preparing a new plan for the area was provided when General Growth Properties of Chicago, the owner of a portion of the mall site, approached the City of Alexandria in 2004 with a proposal to redevelop with a mix of uses, including retail, restaurants, a theater complex, hotel, and over 1,500 residential units.

Given the importance of Landmark Mall to the West End and Alexandria as a whole, it is important that the redevelopment take advantage of the opportunity to transform the present isolated, inwardly-focused configuration of the mall into a more urban activity center. In addition to the mall, owners of older retail properties along Duke and Van Dorn streets have expressed interest in redevelopment. The potential redevelopment of the mall and nearby strip commercial properties underscores the need for an integrated vision and strategy to guide future change in the Landmark/Van Dorn Corridor. Accordingly, the Landmark/Van Dorn Corridor Plan has three primary purposes:

1. Develop a long-range vision and plan for the Landmark/Van Dorn Corridor, including planning and urban design principles to guide public and private sector investment.
2. Address the future role of the Landmark Mall site and similar older retail properties along Duke and Van Dorn streets in their potential to establish an urban mixed-use corridor that unifies and supports the surrounding established residential neighborhoods.
3. Ensure that public benefits and amenities for the overall community are incorporated into new development.

The Plan has been designed to provide land use policy and guidance through the year 2030. It supports full redevelopment of Landmark Mall and the older retail centers along Duke and Van Dorn streets. The Plan encourages the preservation of the surrounding residential communities as they provide market-rate affordable housing. While the planning area is defined as the Landmark/Van Dorn Corridor, it is important that implementation of the Plan also consider the area's larger sphere of influence within Alexandria's West End. Surrounding neighborhoods and uses affect and are affected by the planning area, and can potentially benefit from broader application of the principles and strategies established within the area of the Plan.



Van Dorn Street. Looking south on Van Dorn Street from Edsall Road



Landmark Mall. Looking north toward Landmark Mall from Walker Street

1.3. Past Planning and Policy Directives

This planning effort builds upon the 1992 Landmark/Van Dorn Small Area Plan and has been guided by the principles, goals, and recommendations of other City documents. Several documents frame the context for the Landmark/Van Dorn Corridor Plan and form the foundation of its principles, goals, and recommendations:

- Landmark/Van Dorn Small Area Plan (1992)
- City of Alexandria Open Space Plan (2002)
- City of Alexandria Strategic Master Plan for Recreation, Parks and Cultural Activities (2003)
- City Council's 2004-2015 Strategic Plan (2004)
- Mayor's Economic Sustainability Work Group Final Report (October, 2007)
- City of Alexandria Transportation Master Plan (2008)
- Pedestrian & Bicycle Mobility Plan (June 2008)
- Eco-City Environmental Charter 2008

The Landmark/Van Dorn Small Area Plan, which was adopted by the City of Alexandria in 1992 as a part of a citywide Master Plan update, addresses a larger planning area than the Landmark/Van Dorn Corridor Plan, as it is bordered by I-395 to the north and west, Holmes Run to the north and east, and the city limits to the south and west. A primary focus of the Small Area Plan was on redevelopment of Cameron Station, a former federal military installation, as a mixed-use residential community through rezoning to a Coordinated Development District. The 1992 Small Area Plan largely reaffirmed existing development patterns in the Van Dorn Street corridor, including Landmark Mall as a regional shopping center, general commercial uses along Van Dorn Street, and medium to high density residential uses applied to the apartment communities east and west of Van Dorn Street. The area south of Landmark Mall between Duke Street and Stevenson Avenue was designated for higher intensity mixed uses (retail, office, and residential).

The City Open Space Plan (2002) includes goals for the preservation and provision of open space in the City.

Although, the planning area is approximately 70% impervious, the planning effort seeks to find opportunities to preserve the existing open spaces within it and create additional open spaces through the redevelopment of impervious surfaces. The Open Space Plan encourages the preservation of institutional open space, the protection of environmentally sensitive areas, creation of an open space network in new development areas, protection of existing parks, and development of innovative ways to create additional open space. One specific recommendation of the Open Space Plan is the creation of a "green crescent" which would connect local rivers and streams with open space. The Plan Area is located close to Holmes Run, Backlick Run, and Cameron Run.

The Strategic Master Plan for Recreation, Parks and Cultural Activities, adopted as an element of the Master Plan in 2003, identifies strategies for the facilities and services operated by the Department of Recreation, Parks and Cultural Activities. The plan catalogs existing park and recreation facilities and identifies needs for such facilities in the future to respond to expected population growth.

The City Council's 2004-2015 Strategic Plan (adopted in 2004) sets forth the context for this planning effort by articulating a vision, principles, and goals whereby Landmark/Van Dorn can fulfill its potential as a vibrant, exciting, and successful part of the City. The Strategic Plan identifies "Landmark Mall Redevelopment and Area Study" as one of three top priorities in meeting Goal 1 of its Plan for 2004-2009, which states: "There is Quality Development and Redevelopment that is Well Planned and Consistent with Alexandria's Vision." In addition, "Landmark Mall Redevelopment and Area Study" is listed as the top priority of the City of Alexandria Policy Agenda 2004-2005.

The Mayor's Economic Sustainability Work Group Final Report (October 2007) identifies the redevelopment of Landmark Mall into a major economic center as one of its key recommendations. In addition, it asserts that the City must expedite the redevelopment of Landmark

Mall “into a high quality, high density, mixed use City Center development;” revamp the prior Landmark Mall redevelopment plan to include substantial office space, and ensure that the redevelopment creates a product that becomes the “focal point of West End activities and vibrancy.”

The principles of the City of Alexandria Transportation Master Plan (2008) have also guided the transportation recommendations presented herein; including the accommodations for dedicated transit along Duke Street and Van Dorn Street and the creation of a grid-based roadway system that improves pedestrian, bicycle, and vehicular connectivity. The relevant guiding principles include the development of “innovative local and regional transit options,” “quality pedestrian and bicycle accommodations,” “environmentally friendly transportation policies,” and “policies that enhance quality of life, support livable, urban land use and encourage neighborhood preservation.”

The Pedestrian & Bicycle Mobility Plan (June 2008) was developed to outline and detail the implementation of the policies within the Transportation Master Plan that are related to pedestrian and bicycle accommodations. The recommendations of the Pedestrian & Bicycle Mobility Plan were also considered in the development of the Landmark/Van Dorn Corridor Plan’s transportation recommendations.

The Eco-City Charter 2008 provides a vision for an environmentally sustainable city. The aspects of the proposed vision that are most relevant to this planning effort include sustainable building practices, protection and provision of natural spaces, improved water quality, clean air, improved transit accommodations and ridership, energy conservation, and waste reduction. The recommendations included herein support the vision presented in the Eco-City Charter.

1.4. The Landmark/Van Dorn Advisory Group and Planning Process

On November 19, 2007, the City Council adopted Resolution No. 2252 establishing the Landmark/Van Dorn Advisory Group to provide broad community input into developing a plan for the future of the area. In accord with the resolution, the Mayor appointed 18 Advisory Group members representing local residents and residential property owners, commercial property owners and developers, business owners, business association representatives, representatives of community associations in Alexandria's West End, and at-large members representing citywide interests. The Advisory Group was charged with:

- working with the Planning and Zoning staff and study consultants in identifying issues, challenges, and opportunities with redevelopment of Landmark Mall and other major sites within the planning area;
- providing advice on options for the future of the planning area and assisting in development of policy recommendations for the Plan; and,
- assisting in keeping the public and groups they represent informed on issues and progress in preparation of the Plan, and advising the Planning Commission and City Council on their analysis and recommendations.

The Advisory Group participated in a total of 18 public meetings and work sessions between December 2007 and December 2008. All meetings and work sessions were advertised and open to the general public. The Department of Planning and Zoning provided the primary administrative and technical support for the Advisory Group. Subsequent to each meeting, summary notes and presentations to the Advisory Group were placed on the department's website.

The first meeting of the Advisory Group, held in mid-December 2007, established the general approach for meetings throughout the planning process, with presentations by the staff and consultants and interactive sessions with the Advisory Group on key issues affecting development of the Plan. The meeting included presentations on the planning process and work program,



Discussion following presentation.



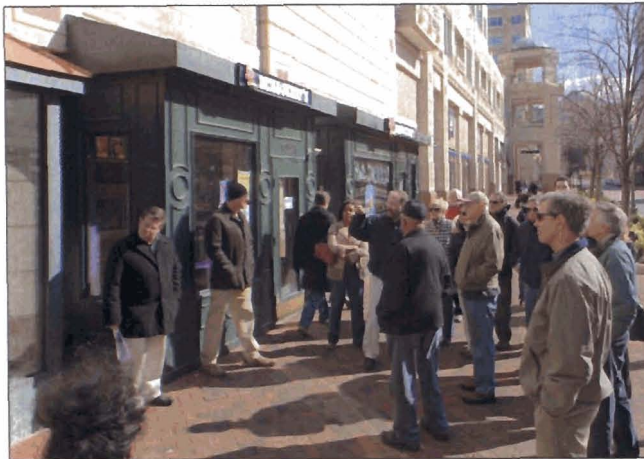
Breakout group developing street framework.



Breakout group developing Town Center land use concept.



Breakout group reporting.



Discussing retail storefront treatments at Reston Town Center.



Viewing central open space at Clarendon Market Common.

background on previous planning efforts, and a summary presentation on the planning area. The Advisory Group members discussed key issues, challenges, and opportunities within the planning area, and the meeting concluded with an opportunity for comments and questions from public attendees.

Subsequent meetings during the first half of 2008 focused on key issues and opportunities within the planning area, with presentations on major issues including the history of the area, land use, affordable housing, transportation and transit, open space, stormwater management, community facilities, urban design, infrastructure financing, and real estate and retail market conditions that would need to be considered in preparation of the new plan. Presentations on potential development of the Landmark Mall and properties near Van Dorn and Pickett streets were made by Advisory Group members representing the landowners. The Advisory Group also held a public tour of successful urban redevelopment projects within the Washington Region.

On two Saturdays in May, the Advisory Group held full-day interactive work sessions involving Advisory Group members and public participants to develop concepts and goals to guide preparation of the Plan. The first session focused on the overall study area. Attendees were divided into groups to explore goals for the planning area and how these goals could be physically achieved in a new land use plan. The five categories of community goals presented in Chapter 4.0 were developed from the work session.

The second work session focused on redevelopment of the Landmark Mall site. Consultants for General Growth Properties gave presentations on consumer research, and parameters and opportunities for redevelopment of the site. The City consultant team provided an overview of goals and key ideas from the earlier work session, potential mall access improvements, and design concepts that could be applied to the mall site. Work groups were asked to explore these issues and report out key ideas and concepts for the mall site. The work groups

prepared graphics physically applying their ideas and concepts to redevelopment of the site.

The community goals and concepts developed through the two interactive sessions and subsequent Advisory Group meetings during July 2008 through September 2008 have been used to guide additional technical studies and preparation of the plan elements and recommendations that form the Landmark/Van Dorn Corridor Plan.

The community process will continue after the adoption of the Plan. The community will be involved in the implementation of Plan recommendations through both a community-level process of community-wide meetings and a formalized citizen-led Implementation Advisory Group (IAG). This IAG will work with City staff to develop an Implementation Plan, prioritize recommendations, implement recommendations, and report to City Council annually via an Annual Report. As conditions in the

development, real estate and financial markets change, implementation of specific recommendations in the Plan will be phased in over a number of years. Therefore, the community and IAG will engage in a long-term on-going partnership with the City to fulfill the goals and recommendations of the Landmark/Van Dorn Corridor Plan.

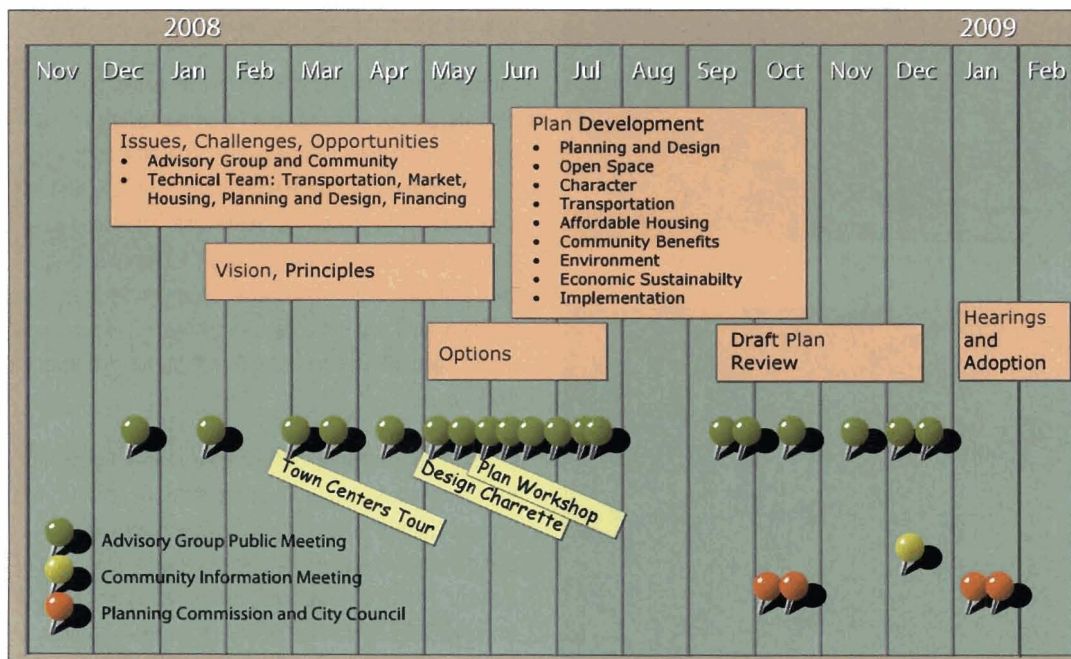


Figure 1-5. Work program for development of the Landmark/Van Dorn Corridor Plan

2.1. Vision

This Plan sets forth a vision to transform the greater Landmark/Van Dorn Corridor into one of the finest mixed-use communities in the Washington Region. The Plan will be achieved largely through redevelopment of Landmark Mall and older retail centers along Duke and Van Dorn streets, creating two distinctive mixed-use centers. Landmark Mall and nearby retail properties are redeveloped into "West End Town Center" - a lively town center of regional scale, with major office, retail, and residential uses establishing a distinctive gateway into the City of Alexandria. The older retail centers near Van Dorn and Pickett streets are redeveloped into "Pickett Place" -- an active mixed-use center providing community-level office, retail, and residential uses well integrated into nearby established neighborhoods. The two centers are connected by a redesigned Van Dorn Street, reconstructed as an attractive green boulevard with dedicated transit lanes and new pedestrian and bicycle facilities. Together, the new centers create an active mix of uses and strong sense of place supporting and enhancing the nearby residential neighborhoods where land use change is not proposed.

The Plan includes new open space and gathering places, and tree-lined streets, trails, and open space linking the town centers and community to nearby natural areas such as Holmes Run and Backlick Run. The planning area is transformed from its current suburban, auto-oriented character into an active urban community with smaller blocks and landscaped streets designed for pedestrians and new transit services.

The greater Landmark/Van Dorn area is attractive to its residents and visitors not just because of its convenient location, but because of its lively mix of uses, distinctive urban character, and community life. Its diverse population sees the community as something of value, worthy of an investment of time and energy to make the community in which they live a great place for themselves and their children.

This vision has been shaped through interaction with the Landmark/Van Dorn Advisory Group and through public

participation in community meetings and workshops throughout the planning process. It defines the kind of place citizens want the area to be in the future, providing a long-term perspective for achieving positive change over time.

While the vision focuses on the Landmark/Van Dorn Corridor planning area, it also considers Landmark/Van Dorn's role in improving the quality of life in Alexandria's West End as a whole. Early in the planning process, residents expressed their strong belief that the Landmark/Van Dorn area is important as a center of activity for people throughout the West End. The West End of today is a vitally important part of the City of Alexandria, but one that needs a community focus of its own.

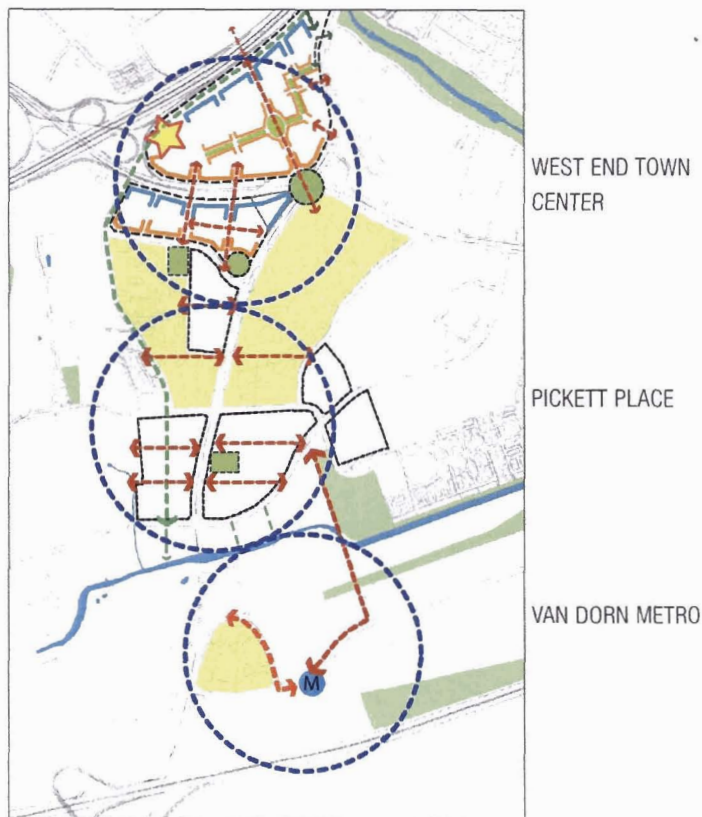


Figure 2-1. Key organizing features of the Landmark/Van Dorn Corridor Plan, summary diagram as developed in community workshops.



Recent mixed-use development at Bethesda Row



Near Eastern Market in Washington, DC



Light rail transit in Portland, OR

2.2. Community Goals

The Advisory Group agreed upon the following community goals that form the basis for the vision:

Housing, Development, and Neighborhood Enhancement

- The Landmark Mall area should become an attractive gateway for the City of Alexandria.
- Landmark Mall should serve regional, local, and neighborhood needs.
- A mix of uses and sizes of development should be provided, with a focus on vibrant neighborhoods, neighborhood needs, and human-scale.
- A variety of housing types should be provided, including mid-rise and high-rise units, compatible with existing housing types and groups within the community.
- A diverse mix of ownership and rental housing, and market rate, affordable, and workforce housing should be maintained.
- The history and cultural diversity of the area should be promoted as background for establishing and reinforcing neighborhood character.

Transit and Transportation

- A more connected, urban street grid system should be created where feasible with walkable blocks to provide increased mobility for both pedestrians and vehicles.
- Transit ridership should be increased through reliable, convenient, and coordinated transit services throughout the area, with emphasis on effective transit service along Van Dorn Street between Landmark Mall and the Van Dorn Street Metro Station.
- Safe, convenient, and attractive pedestrian and bicycle access should be provided to all transit nodes, centers, and stations.

- Off-street, dedicated pedestrian and bicycle paths should be provided where feasible to connect transit, activity centers, neighborhoods, open space, and community facilities.

Open Space and Civic Amenities

- Existing green space, natural areas and features, including privately-owned neighborhood-oriented open space and parks, should be preserved and enhanced.
- Facilities should be provided that can be programmed for seasonal activities that serve all age groups, such as an ice rink, farmer's market, fountains, evening events, recreation centers, and plazas.
- More cultural and public art facilities should be introduced and integrated into adjacent uses and neighborhoods.



Market Square, Old Town

Environment & Sustainability

- An area-wide, comprehensive approach should be established for environmentally sustainable development, including Leadership in Energy and Environmental Design (LEED) standards, best practices in local and regional stormwater management, reduced impervious areas, enhanced water quality, and protection and restoration of habitat areas and natural features throughout the planning area.



Formal path.

Implementation and Fiscal Sustainability

- The City's Economic Sustainability Work Group recommendations should be used as a guide to maximize office, retail, and hotel development, in a manner consistent with creating vibrant activity centers and mixed-use neighborhoods.



Pentagon Row. Plaza in mixed-use development.

2.3. Planning Principles



Based on the community goals, the following planning principles were developed to provide guidance to achieve the vision. The planning principles have provided guidance in preparation of Chapters 4 through 9 that include recommendations on land use, transportation, urban design, environmental sustainability, and implementation:

An Attractive Gateway to Alexandria with entryways, streetscapes, and development forms that establish a distinctive image and identity for the West End.

- Establish a “West End Town Center” at the northern portion of the planning area with regional-level office, retail, supporting residential development, and a varied skyline of distinctive architecture as the primary gateway into west Alexandria.
- Implement gateway improvements (distinctive signage, landscaping, public art, etc.) at other prominent City entrances within the planning area.
- Improve the visual character of roads and streets through streetscape improvements and guidelines for building and site design that promote good urban form.
- Use public art, wayfinding signage, and other coordinated visual improvements to build a distinctive visual image and identity for the new activity centers.

Pedestrian-Friendly Activity Centers for residents of the West End and beyond.

- Create both the West End Town Center and Pickett Place with a hierarchy of attractive, walkable streets that provide convenient access and connections to surrounding neighborhoods.
- Establish a pedestrian-oriented character and “sense of place” within each activity center through the design of buildings, open spaces, and sidewalks that:
- Provide a quality public realm with pedestrian amenities

- Bring buildings to the sidewalk and street and animate their facades
- Provide active uses on the ground floors of buildings; such as stores, restaurants, cafes, etc.
- Provide public gathering places to promote informal social contact and accommodate performances, cultural celebrations, and other public events.

A Multi-Modal Transportation System providing safe and convenient options for vehicles, pedestrians, bicyclists, and transit.

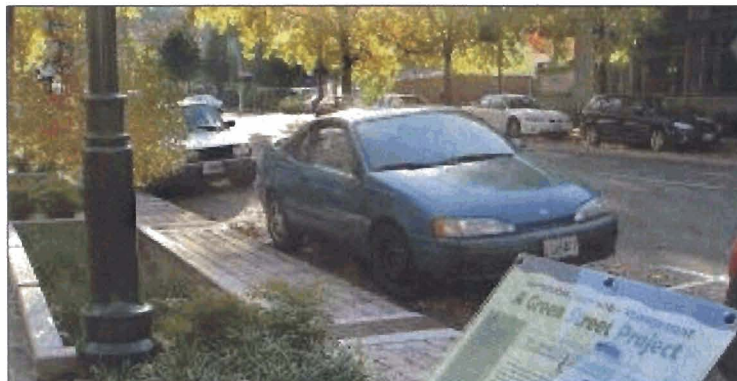
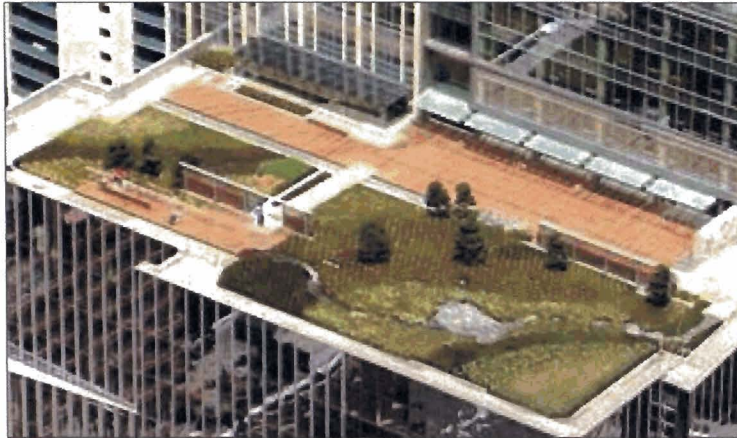
- Address vehicular mobility through targeted capacity improvements and by developing a more interconnected street system.
- Develop a safe, pedestrian-friendly environment with walking connections from neighborhoods to activity centers.
- Develop a system of on-street lanes and off-street paths for bicyclists.
- Provide more frequent, reliable regional and local transit service, with connections to and between activity centers and the Van Dorn Street Metro.
- Ensure that the location and design of parking facilities support the transformation of Landmark/Van Dorn from a suburban, automobile-oriented to an urban, pedestrian-oriented environment:
 - Place parking below grade to the greatest extent possible to minimize barriers to pedestrian movement, decrease the mass/bulk of buildings, and provide more ground-level open space.
 - Locate any above-grade structured parking within a block lined with active uses.
 - Limit surface parking where feasible to on-street parking and integrate green building best practices into parking design.

An Interconnected Open Space System comprised of public parks and open spaces of varying sizes and functions connected to green corridors.

- Develop a network of public parks and open spaces of varying sizes and functions:
- Preserve, protect, and rehabilitate natural open space (steep slopes, stream corridors), connecting and expanding area-wide natural systems
- Provide residential open space (neighborhood and community parks)
- Include places of gathering (public spaces within activity centers)
- Establish and enhance green corridors (key street connections).
- Develop Van Dorn Street and Duke Street as Green Transit Boulevards with landscaped medians, street trees, and attractive pedestrian and bicycle facilities.

Quality Neighborhoods offering a range of housing opportunities for the area's diverse residents.

- Create and reinforce compact, pedestrian-friendly neighborhoods with a range of housing types and price levels, including affordable and workforce housing as a priority.
- Promote a variety of neighborhood-oriented retail, service, and entertainment uses within walking distance of neighborhoods.
- Provide usable public open space within neighborhoods and connect neighborhoods to a larger, interconnected park and open space system.
- Provide needed community facilities accessible to residents of Landmark/Van Dorn and the West End.
- Retain and support local businesses serving residents, employees and visitors.
- Maintain a diverse mix of ownership and rental housing, as well as workforce and affordable housing, with an emphasis on the preservation of existing affordable and workforce rental housing.



- Provide heights, scale, and transition in new development that is compatible with established residential development and nearby neighborhoods.

Environmentally and Economically Sustainable

Development providing long-term benefit to residents and the City of Alexandria.

- Provide for the redevelopment of Landmark Mall in a way that takes full advantage of its potential as a center of economic activity and community life in the West End. Ensure that the site retains its important regional retail role while also providing employment through office development and the 16-hour, 7-day-a-week life of a mixed-use residential neighborhood.
- Ensure that the pattern of new development in the Landmark/Van Dorn area takes full advantage of the environmental and economic benefits of denser, mixed-use urban development with a pedestrian- and transit-friendly pattern of walkable blocks with substantially enhanced transit service.
- Promote fiscal health of the City as a whole by providing a balance of residential and nonresidential uses that responds to the City's objective and long-term market potential for office and other nonresidential development. Develop a critical mass of mixed-use residential development in the Town Center and Pickett Place areas that meets the plan's objectives for building community with a variety of housing that creates neighborhoods and expands the range of housing choices in the Landmark/Van Dorn Area.
- Ensure that development projects in the Landmark/Van Dorn area keep appropriate sites identified in the Plan for office, retail and hotel uses available in anticipation of the time when transit improvements and the mixed-use environment create stronger office and other nonresidential demand. Prevent the premature development of these sites for residential uses.

- Build on the opportunity provided by the Van Dorn Street Metro Station by improving connections from the Metro station to the planning area and by providing local circulator service.
- Take advantage of redevelopment and public improvements to create a more energy-conserving and environmentally sustainable future for the Landmark/Van Dorn area, by applying Leadership in Energy and Environmental Design (LEED) building and site development standards, best practices in local and regional stormwater management for water quality and water quantity, and protection and restoration of habitat areas and natural features in and near the planning area.

The Plan for Landmark/ Van Dorn

3



3.1. Realizing the Vision

The Vision for Landmark/Van Dorn Corridor will be realized by a synergistic combination of private investment and public action. While driven by market demand, private investment must be guided by the vision, goals, and guiding principles presented in this Plan. The Plan recommends that public investment be targeted to implement key infrastructure, public amenities, and quality-of-life improvements.

In order to adapt to changing market conditions and the intentions of individual property owners, the Landmark/Van Dorn Area Corridor Plan does not attempt to prescribe precisely how each parcel is to be redeveloped. Rather it provides direction for the redevelopment that will take place over time by defining:

- a framework of streets, open spaces, and other “public realm” elements,
- a proposed mix of land uses necessary to achieve the vision, and
- design principles and guidelines for the type, form, and quality of private development.

The implementation strategy recognizes that the current development market, in the region generally and in the Landmark/Van Dorn area specifically, is not strong enough to support the redevelopment envisioned by this Plan. Therefore, the initial phase of the implementation will be geared toward encouraging redevelopment, in part by limiting expectations for developer contributions. Once redevelopment has begun, and the area begins to emerge as a choice location for new offices, retail, and housing, the City will increase its expectations for developer-funded community amenities. This phased approach will allow the City to capture a portion of the area’s increased value and use those resources to fund the public facilities necessary for the area’s continued success.

The Plan envisions the redevelopment of Landmark Mall and the older retail centers along Duke, Van Dorn and Pickett streets within the immediate timeframe through the year 2030, although the timing and detailed

characteristics of individual redevelopment projects will depend on the investment decisions made by the property owners and developers. Owners of the Landmark Mall, the Van Dorn Plaza site at the Van Dorn/Stevenson Avenue intersection, and parcels in the block bounded by Van Dorn Street, Edsall Road, and Pickett Street have expressed interest in redevelopment. It is anticipated that smaller, separately owned retail centers in these areas, such as those on the west side of Van Dorn Street from Edsall Road to Pickett Street, will not be redeveloped with mixed-use until the redevelopment of larger parcels and major infrastructure improvements have established the mixed-use character of the area and created opportunities for similar development on a smaller scale. The Plan does support the coordinated redevelopment of the smaller sites in accord with the principles and recommendations set forth for the Plan area.

Plan Area

An Illustrative Development Plan has been prepared depicting the Landmark/Van Dorn Corridor with redevelopment of the older retail centers in accord with the above goals, vision, and guiding principles. It includes a framework of existing and new streets and open spaces established through public investment and private redevelopment. The concept for the new “West End Town Center” is in a manner generally consistent with the conceptual mixed-use plan for Landmark Mall presented by General Growth Properties during the Advisory Group process. The new “Pickett Place” mixed-use center is proposed in accord with the established goals, vision, and planning principles. The development concepts for these centers reflect the land use parameters, urban design principles, and development guidelines presented in Chapters 4, 6, and 7, respectively. Chapter 6 presents specific urban design guidelines for both “West End Town Center” and “Pickett Place.” The Illustrative Plan also responds to topographic constraints, parcel configurations, and related Plan area characteristics.

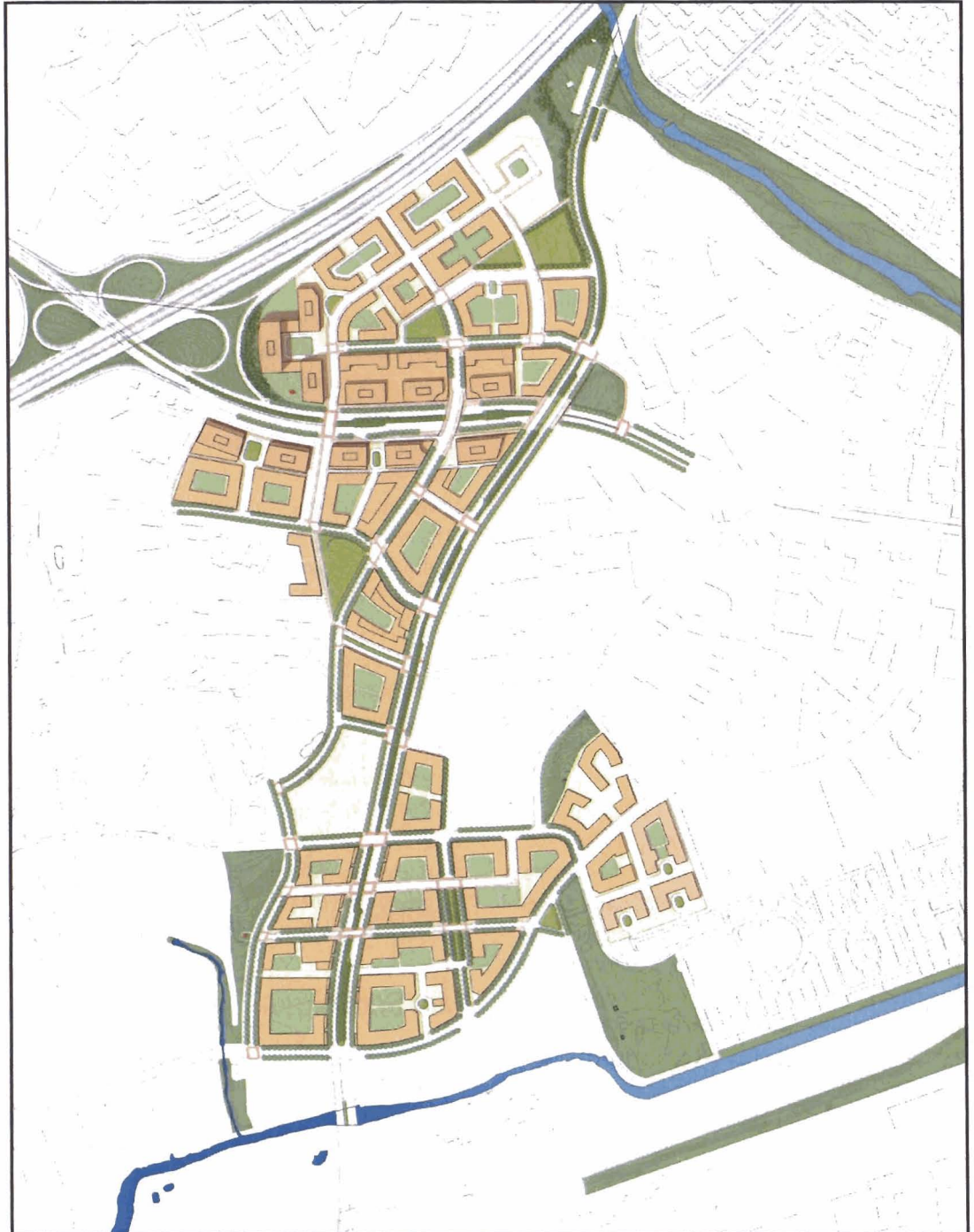


Figure 3-1. Framework Plan. The framework plan shows conceptually how the areas proposed for redevelopment in the plan could be developed to achieve the vision outlined. New streets, parks and new mixed-use developments are shown.

3.2. Districts in the Plan Area

The Plan area is divided into four distinct districts, based on feedback received during a participatory process involving the Advisory Group, the public, City staff, and the project consultants. Key considerations were identified for land use planning and development of parcels in the planning area and include:

- The relationship with existing transportation infrastructure and major roadways.
- Existing natural features, especially topography.
- The area's walkability.
- Retail strategies.
- The relationship of existing development to adjacent land uses.
- The likelihood of near-term redevelopment.
- The community's broad vision for the areas.

These considerations informed the development of the four districts: West End Town Center, Pickett Place, Van Dorn Metro, and areas of existing residential development.

The West End Town Center

The name "West End" has historical significance as the West Family was central to the founding of Alexandria on the Potomac River and greatly influenced the planning area as well. The West End Town Center is so designated as to recognize this history. This district encompasses the part of the Plan area from I-395 to Landmark Terrace apartments. The West End Town Center comprises two distinct areas – the Bluffs at West End and Landmark Mall at West End – based on the natural topography of the area. With the proposed redevelopment of three large parcels right off I-395 and Duke Street – at Landmark Mall, and the Bluffs (the BJ's site and the CompUSA site), along with the Van Dorn Plaza site – this area has the potential to become a Town Center that has local as well as regional appeal, comprising offices, a lifestyle center and high density housing.

However, Duke Street, due to its inhospitable terrain, is a significant hurdle to the development of these parcels as an integrated place that is conveniently accessed from the adjoining areas. Connecting across Duke Street is key to the success of this district.

Pickett Place

The name "Pickett" also has historical significance as it was the name of a Civil War Confederate general, Major General George Pickett, who led an unsuccessful charge on Union Soldiers at Gettysburg. This district includes the part of the planning area between Edsall Road and Pickett Street, and is so named "Pickett Place." This district includes the part of the planning area between Edsall Road and Pickett Street, and includes several parcels on either side of Van Dorn Street that are likely to redevelop in the near term. The proximity to existing residential developments such as Cameron Station and the EOS-21 condominiums and apartments, the natural resource of Backlick Run along with the community's vision for the sub-area present an opportunity to develop an "Urban Village" that is distinct from the West End Town Center to the north.

This urban village will be centered on a "main street" that forms a retail spine, and will have good access to a restored and enhanced Backlick Run. A compact street grid created by adding three new streets, along with well integrated retail uses and open spaces, will give special character to West End's new urban village.

Van Dorn Metro

This part of the Plan area is separated from the Pickett Place district by industrial uses that are not covered by the scope of this Plan. However, the Landmark/Van Dorn Corridor planning boundary was extended to the Van Dorn Metrorail station to ensure consideration of connectivity and access to this major transportation asset. This Plan includes a proposal to connect the Pickett Place district with higher density development near the metro station by way of a multi-modal bridge

that crosses Backlick Run and the industrial uses. This Plan also proposes retention of the existing zoning for all properties within the Plan area within the vicinity of the Van Dorn Metro station.

The plan proposes changing the name of the Van Dorn Street Metrorail Station to the "Landmark-Van Dorn Metrorail Station" to provide additional regional identity for the area as recommended by the Mayor's Economic Sustainability Work Group.

Existing Residential Areas

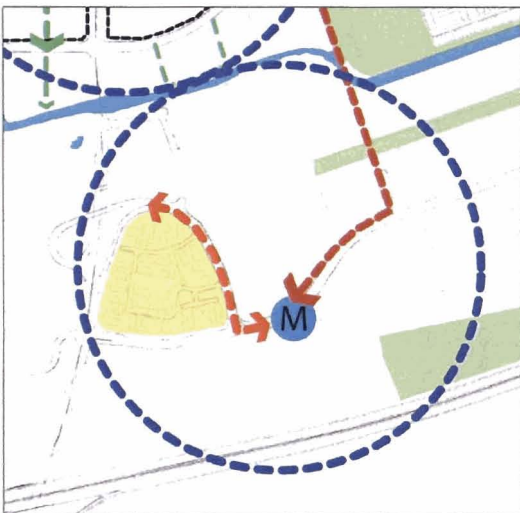
The Plan supports retention of the existing land use and zoning in the established residential communities and neighborhoods that surround the commercial sites proposed for redevelopment. These residential properties are considered unlikely candidates for major redevelopment because of their existing quality and the substantial investment and cash flow represented by the existing uses. In addition, these properties represent an important housing resource for current residents. They provide affordable and workforce housing that cannot be replaced with new housing in current economic conditions without substantially increasing housing prices and displacing most current residents. While the intent of the Plan is to encourage retention of the existing zoning and land use within these areas, the guiding principles and urban design guidelines will provide a framework to guide any future proposals for redevelopment of properties under existing zoning. The Landmark/Van Dorn Corridor planning boundary was extended to the Van Dorn Metro to ensure consideration of connectivity and access to the station. This Plan proposes retention of existing zoning for all properties within the Plan area in the vicinity of the Van Dorn Metro.



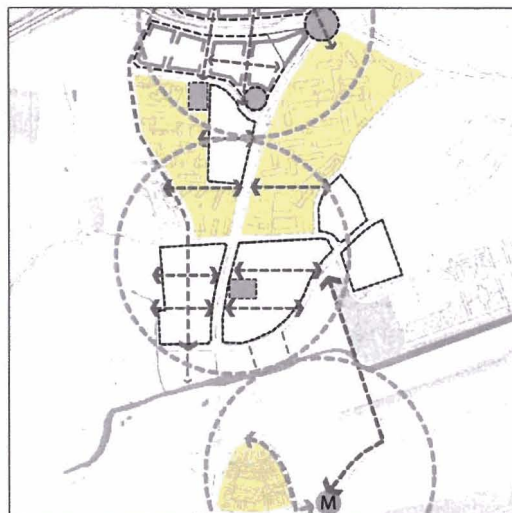
The West End Town Center



Pickett Place



Van Dorn Metro



Existing Residential Areas

Figure 3-2. Plan Districts. The four principal subareas of the plan are illustrated on a map that summarizes plan concepts developed at two community workshops in May, 2008. These are generalized diagrams that do not reflect the detailed land use pattern in some locations, and are presented here for information on how policy was developed, not to communicate the adopted policy of the plan.

3.3. Plan Recommendations by Chapter

CHAPTER 4: LAND USE

To achieve greater economic vitality and to provide nearby residents with sought-after amenities, the Plan recommends creation of two mixed-use activity centers in the Plan area. In the north, the Plan recommends redevelopment of Landmark Mall and older retail properties along Van Dorn and Duke streets to create “West End Town Center,” a lively mixed-use town center of regional scale, with major office, retail, hotel, and residential uses establishing a distinctive gateway into Alexandria. In the southern half of the area, the Plan recommends redevelopment of older retail centers and several industrial properties in the vicinity of Van Dorn Street, Edsall Road, and Pickett Street to create “Pickett Place,” a community-level mixed-use center with residential development and office and retail uses serving nearby residential neighborhoods.

West End Town Center

Properties within the West End Town Center are proposed for a minimum floor area ratio (FAR), the ratio of the floor area of structures to the area of the site, of 2.0 and a maximum FAR of 2.5 to encourage regional scale development at this prominent entry into Alexandria. Full development of this regional activity center is intended to achieve an overall land use mix of approximately 70% office, retail, and related commercial uses and 30% residential. A total of 8.7 million square feet of development is permitted on the 82 acres of the West End Town Center, compared to 1.3 million today. Of this, at least 3.75 million square feet must be office and 1.0 million square feet must retail. A major full-service hotel is required, with potential for additional hotels. A minimum of 1.2 million square feet of residential use (1,000 to 1,200 units) is required to achieve the desirable mix of uses and level of activity. A maximum of 3.1 million square feet of residential is permitted. In addition, a minimum of 25,000 square feet of civic or community use is required.

Pickett Place

Properties within Pickett Place are proposed for a minimum FAR of 1.5 and a maximum FAR of 2.0, providing an incentive for redevelopment but at the lower scale consistent with a community-level mixed-use center. Full development of Pickett Place is intended to achieve 70% residential uses and 30% retail, office, and related commercial uses, although a higher ratio of non-residential uses is permitted. A total of 4.8 million square feet of development is permitted on the 55.3 acres of Pickett Place, compared to approximately 850,000 square feet today. A minimum of 250,000 square feet of office space, and a minimum of 500,000 square feet of residential space (400 to 500 units) is required, although significantly more residential development is expected. A minimum of 12,000 square feet of civic or community use is required.

Existing Residential Development

This Plan recommends no increase in potential development for parcels with existing residential development in order to help preserve the declining stock of affordable market-rate housing. These areas include the EOS 21 condominium and apartment complex, Foxwood Place, the Fields at Landmark, and Landmark Terrace. The townhouse community of Summers Grove, built in the mid-1990s near the Van Dorn Metro, is also not recommended for an increase in development potential.

Zoning

The Plan recommends changing the zoning for the West End Town Center and Pickett Place districts to the Coordinated Development District (CDD), which is designed to encourage mixed-use development projects with open space and other amenities as well as land assemblage or joint development planning. The Plan recommends that the underlying zoning for these parcels continue to apply for development proposed without a CDD Special Use Permit, except that any project would have to conform to any master plan (or subsequent) design guidelines.

Workforce and Affordable Housing

The Plan encourages the preservation of the existing workforce and affordable housing in the area and proposes no changes to the current zoning or land use designation of these sites. With regard to the provision of new housing as part of mixed-use developments, the Plan recommends a phased approach to developer contributions that could include a cash contribution, preservation of existing affordable housing, and new on- or off-site units (see also Chapter 9: Implementation). The City is about to begin a Housing Master Plan and establish a new taskforce to determine recommendations for developer contributions to the Affordable Housing Trust Fund. New City-wide requirements resulting from these efforts will specifically address the treatment of affordable and workforce housing provision in the planning area and may or may not result in changes to the strategy set forth in this Plan.

The Plan also recommends that the City seek opportunities to secure public housing units within private development proposals in the Plan area.

Community Facilities

The West End Town Center and Pickett Place districts have minimum requirements for civic and community uses – West End Town Center has a minimum requirement of 25,000 square feet and Pickett Place has a minimum requirement of 12,000 square feet. Several facilities have been considered to meet this obligation. The Plan recommends that a community/recreation center be provided within the Landmark/Van Dorn Corridor, with the preferred locations being in the West End Town Center and Pickett Place. The Plan recognizes the importance of and encourages the establishment of places of worship and health care and wellness facilities as they provide needed and desired community services. Facilities that provide higher education functions should also be considered (see also Chapter 9: Implementation). Other facilities with regional appeal are also recommended and could include an ice skating rink

(if financially feasible), a performing arts theater or other cultural attraction that complements the active mixed-use, 16-hour environment envisioned in the Plan.

The Plan recommends that, as the City reviews development applications for major parcels in the City, Alexandria City Public Schools be involved in evaluating the potential for those projects to include a school site or contribute to school facilities. (see also Chapter 9: Implementation).

This Plan recommends the siting of public art in key locations throughout the Plan area (see also Chapter 9: Implementation).

Sanitary Sewer

According to preliminary analysis of sanitary sewer capacity requirements for the proposed redevelopment, sufficient long range conveyance and treatment capacity of the sanitary sewer system does not exist. The Plan recommends that the City continue its on-going efforts of evaluating improvements and technologies to address these capacity needs. The Plan recommends that redevelopment projects provide improvements as part of the project approvals and/or contribute to improvements that will be implemented by the City. In addition, the plan recommends that the City evaluate its sanitary sewer connection fees with regards to the level of funding necessary to construct the necessary sewer improvements (see also Chapter 4: Land Use).

CHAPTER 5: TRANSPORTATION

Street System Improvements

The planning area has functioned as a crossroads for trade and commerce since the 18th century, linking people both east-west and north-south. Duke Street and Van Dorn Street continue this historic function today. The Plan recommends the creation of a walkable, urban environment with a well-connected local street system that supports driving, transit, bicycling, and walking

within the Plan area and to adjacent neighborhoods and the Van Dorn Metro station.

West End Town Center Access Over Duke Street: The Plan recommends connecting the north and south sides of the West End Town Center with a bridge over Duke Street that is sited approximately at the location of the existing ramps to and from eastbound Duke Street at Van Dorn Street. The bridge is preferred over an at-grade street connection because it creates the functional retail and walking street that is needed to connect each side of the Town Center, it allows the two transit lines to cross each other without conflict, and it enables cost-effective underground parking solutions which may be needed to make the redevelopment project financially feasible.

New High Street: The Plan recommends a new “High Street” that will connect the core of the Landmark Mall redevelopment to the balance of the West End Town Center across Duke Street. It then continues south to Pickett Street as a local-serving alternative to Van Dorn Street. Along the way, it greatly improves local connectivity while creating considerable market value for the adjacent parcels. North of Stevenson Avenue, New High Street will also accommodate dedicated lanes for the new Van Dorn Street transit line as it makes its way through the core of the West End Town Center.

Grid Network of Streets: The Plan recommends creation of a grid network of streets in the Plan area, which is critical to realizing the multiple transportation objectives of this Plan. In general, the new grid street pattern will emerge as part of the redevelopment process, as many of the new streets are either wholly contained or adjacent to parcels that are expected to redevelop. Of these, two are especially notable: the Pickett Place Main Street, which will form an east-west spine for the Pickett Place neighborhood; and Metro Street, which runs perpendicular to Pickett Place Main Street and provides a potential connection to a new multi-modal bridge.

Additional Access to West End Town Center: The Plan recommends that direct access to and from the I-395 entrance ramp be explored during the redevelopment of the Landmark Mall site.

Bicycling Enhancements

In addition to separated bicycle lanes along Van Dorn Street between the dedicated bus lane and the pedestrian sidewalk, this Plan recommends providing bicycle facilities (as shared-use paths or “cycle tracks”) on Duke Street and recommends that appropriate bicycle facilities be included on new streets within the Plan area. The Plan recommends developing Backlick Run Trail as a regional multi-use trail connecting the Holmes Run Trail to Turkeycock Run in Fairfax County. The Plan also recommends requirements on new development to further support bicycle use, including on-site parking and showers.

Creating a Pedestrian Environment

The new bridge over Duke Street south of Landmark Mall is a recommendation in part because it will provide a superior pedestrian environment in the Town Center, which is critical to its economic success. In addition to the new bridge, the Plan recommends the following improvements to increase access and connectivity and pedestrian mobility:

- Add sidewalk to existing Van Dorn Street bridge over Duke Street. The Van Dorn Street bridge currently does not provide space for pedestrians to cross the bridge safely. Pedestrian ways on both sides of the bridge, with well-marked pedestrian crossings at the ramps to Duke Street, are recommended.
- Multimodal bridge connection to Van Dorn Street Metro. Also listed as a transit improvement, this bridge will connect Pickett Place to the Van Dorn Street Metro Station.
- Pedestrian improvements to the Duke Street bridge over I-395. When the Virginia Department of Transportation makes improvements to this bridge,

this Plan recommends that they should improve safety for bicycles and pedestrians.

Transit Improvements

The following transit improvements are recommended:

- **Dedicated transit.** Make transit the mode of choice to and from the area with frequent, reliable regional service. Consistent with the Transportation Master Plan, this transit will be on a dedicated right-of-way on Duke and Van Dorn Streets, which are reconstructed as “transit boulevards.”
- **Transit Transfer Center.** Support a redeveloped West End Town Center by routing the Van Dorn Street transit line through the core of the Town Center where a new transit center will provide seamless connections to the Duke Street transit line and local transit service.
- **Transit Service Improvements.** Significantly improve transit service within the Plan area by adding express bus service and frequent local circulator service, to the West End Town Center transit transfer center, and to the Van Dorn Street Metro station.
- **Transit Infrastructure.** Upgrade individual bus stops with shelters, lighting, information, and other passenger amenities so that locating and riding transit is an easy, comfortable experience.
- **Multimodal bridge connection to Van Dorn Street Metro.** Encourage use of Metro by providing a multimodal bridge from Eisenhower Avenue near the Van Dorn Street Metro Station to Pickett Street.

Transportation Demand Management (TDM)

The Plan recommends the establishment of a TDM district in the Landmark/Van Dorn area. Participation in the TDM district would be a condition of approval of redevelopment in the Plan area.

Parking

The Plan recommends a phased-in approach to reducing parking and parking demand. The reduced parking requirements will support non-auto travel choices and reduce construction costs so that funds are available for investment in other public facilities. The Plan recommends bicycle parking be required of new development projects. This Plan acknowledges that the challenge of providing underground parking during the initial, or catalyst, phase of development and recommends that surface and structured parking be permitted during this phase under certain circumstances.

CHAPTER 6: URBAN DESIGN

Street Hierarchy

The Plan classifies each street into one of several categories and recommends design standards for each classification.

- **A1 and A2 streets** are the primary streets and set the character and tone for the community. A1 streets are Duke Street and Van Dorn Street; examples of A2 streets are Stevenson Avenue, Walker Street, and New High Street (from its beginning at the Mall site to Stevenson Avenue or south of Stevenson Avenue to the end of retail frontage). The Plan recommends high design standards for these streets, with a focus on large tree canopies, wide medians and sidewalks, and buildings that front these streets should have the highest quality character and appearance. The Plan recommends that curb cuts on these streets be minimized.
- **B streets** are the secondary streets of the community. For these streets, the Plan recommends that buildings front the street, that active uses be located on each street frontage, that curb cuts be limited to one per block, that main entrances front the street unless the building is adjacent to a higher category street, and that a high quality façade treatment be

used. The portion of New High Street not classed as an A2 street is considered a B street.

- C streets are tertiary streets through a neighborhood and provide access and service entries to parking. They are the least public and the Plan recommends that curb cuts, alleys, and garage entrances be located on C streets.

Creating New Blocks

The Plan recommends a block length of 350 feet to a maximum length of 500 feet and a maximum width of 300 feet, with blocks on Duke Street and Van Dorn Street oriented with the long dimension on those streets.

The Plan recommends that blocks in the Town Center be configured to incorporate larger building types.

Open Space Network

The Plan recommends a network of open spaces, with a ground-level on-site open space requirement of 25% of the site area excluding dedications for streets or other public uses per development project (see also Chapter 9: Implementation). The Plan recommends a hierarchy of publicly accessible parks and open spaces, including:

- West End Town Center (Landmark Mall site): The Plan recommends an approximately 3.5 acre open space network across the site that includes open space and squares that incorporate sustainable design elements.
- New High Street Park: The Plan recommends a 0.5 to 1-acre public open space along Stevenson Avenue in the area between Van Dorn Street and Walker Street.
- Pickett Square: The Plan recommends an approximately 1-acre urban square in the heart of Pickett Place that is modeled after successful active urban open spaces.

- Pickett Plaza: The Plan recommends the consideration of an expansion of Armistead Boothe Park by approximately one-half acre.
- Edsall West Park: The Plan recommends an approximately 1-acre park on the west side of the proposed extension of Whiting Street and adjacent to the South Port apartment development south of Edsall Road. This proposed park connects at the south to the Resource Protection Area (RPA) along a small stream flowing to Backlick Run.

In addition, the Plan recommends a study of parcels south of the planning area and adjacent to Backlick Run to explore the limits of redevelopment within the RPA and the potential of converting the developed parcels into green space that would connect to the planning area for purposes of public open space and stormwater management.

Building Heights

The Plan recommends building heights within the West End Town Center in a range of 85 to 250 feet, with the tallest buildings (150 to 250 feet) fronting on Duke Street and along I-395. The Plan recommends that all building heights in the West End Town Center be subject to approval through the special use permit process, with varied heights, transitions, and fine architecture being required.

The Plan recommends building heights within Pickett Place in a range of 65 to 120 feet, with the maximum 120 foot height restricted to the central portion of Pickett Place. A maximum height of 85 feet would be allowed along the frontage of Van Dorn Street at the new neighborhood main street and along a segment of Pickett Street. Buildings in a range of 65 to 85 feet are proposed at key locations to provide variety in scale and transition into nearby neighborhoods.

The Plan recommends building heights east of Pickett Place in a range of 65 to 85 feet, with lower heights next to existing neighborhoods. Similar heights are proposed

west of Pickett Place along the west side of Van Dorn Street between Edsall Road and Pickett Street.

Urban Design Principles

The Plan recommends establishing multi-modal connections to the Town Center at Walker Street, at the BJ's site, and the Van Dorn/Duke Street crossing and create smaller, walkable blocks at the BJs, CompUSA and Safeway sites.

The Plan recommends connecting to Holmes Run by using a green spine that links through the Town Center.

The Plan recommends creating a park, which may incorporate the natural open space between Walker Street and Van Dorn Street, off of Stevenson Avenue.

The Plan recommends, to the extent feasible, all parking should be located below grade.

The Plan recommends leveraging high visibility along Duke Street and I-395 by creating a distinctive skyline and buildings along major arterials.

The Plan recommends creating a central gathering place within the Town Center for Alexandria's West End.

The Plan recommends create a strong and direct pedestrian and vehicular connection to link both sides of Duke Street, preferably with a grade separation.

The Plan recommends creating smaller, walkable blocks between Edsall Road and Pickett Street.

The Plan recommends creating a main street that connects Van Dorn Street with Pickett Street. The Plan recommends creating a "four corners" retail intersection at Van Dorn Street and the new Main Street.

The Plan recommends planning for a new street connection from Pickett Place to the Van Dorn Metro station.

Urban Design Strategies

The Plan recommends establishing Van Dorn Street and Duke Street as urban transit boulevards serving unique neighborhoods.

The Plan recommends allowing frequent, multi-modal connections across Duke Street to the new West End Town Center.

The Plan recommends creating a distinctive character for each neighborhood within the Plan area.

The Plan recommends establishing a framework for future connections to the Van Dorn Street Metro station.

The Plan recommends enhancing and connecting the area's natural assets, such as Holmes Run and Backlick Run.

CHAPTER 7: DEVELOPMENT GUIDELINES

The Plan includes a series of recommended development guidelines for streets, buildings, and open spaces; addressing issues of identity through attention to public art, elements of the streetscape, and design of building facades and infrastructure at key locations.

CHAPTER 8: ENVIRONMENTAL SUSTAINABILITY

Stormwater Management

Significant stormwater management issues are present in the study area. As a result, the Plan recommends somewhat more stringent standards for stormwater quality and quantity control when compared to existing City regulations. This master plan encourages opportunities for collaborative regional solutions as well as individual lot-based opportunities to minimize runoff, reduce flooding and increase water quality. The master plan provides guidance for stormwater runoff minimiza-

tion as well as how to utilize stormwater as a resource and urban amenity.

Stormwater quality recommendations include capturing at least the first ½ inch of runoff from a site, predominately from impervious surfaces and reducing phosphorous loads by 40 percent. Stormwater quantity recommendations focus on reducing runoff from the 1 year, 24 hour storm.

CHAPTER 9: IMPLEMENTATION

Phased Approach to Developer Contributions

The Plan recognizes that national, regional, and local market conditions do not currently support large scale redevelopment and recommends that the City look for opportunities to encourage a critical mass of initial redevelopment activity, which will act as a catalyst for future redevelopment. This encouragement can take the form of: lowered expectations for developer contributions for on- and off-site improvements; publicly-funded infrastructure; or public-private partnerships, such a tax increment financing or its functional equivalent.

As market conditions improve and market rents and other factors begin to support redevelopment, the Plan recommends that expectations for developer contributions toward planned infrastructure increase. These improvements, in turn, will reinforce continued improvement in market conditions.

The implementation of planned bus dedicated transit lines in the Plan area will further add to the attractiveness of the area for redevelopment. As transit service improvements reduce the need for parking, this Plan recommends that City expectations for developer contributions be high.

Infrastructure Phasing and Funding: Transportation

The Plan recommends that new roadways be constructed by private developers during the development process. These include the new High Street, the interior streets on the Landmark Mall site, and the new grid roadways in the Plan area.

The New High Street Bridge over Van Dorn Street provides areawide mobility improvements as well as site access. For this reason, as well to address the financial feasibility of the Landmark Mall redevelopment, the Plan recommends that the major decisions about the New High Street Bridge, including whether the preferred (bridge) option will be selected and the funding strategy, be addressed when the property owners submit a development plan for City review.

Because of its special role as a potential catalyst for broad redevelopment, the City would consider tax increment financing or its functional equivalent for Landmark Mall infrastructure, but only if economics warrant such city financial participation.

If the West End Town Center on both sides of Duke Street does not develop simultaneously, the Plan recommends a phased approach to building the New High Street Bridge with an interim connection on the south side to Van Dorn Street. The Plan recommends that the final decision on whether the bridge is to be built be made at the time of the first CDD rezoning or major development approval on the Landmark Mall or BJ's/ Passport block. The bridge should then be constructed so it is in operation when needed for access and development of the retail area on either side of Duke Street on New High Street following the demolition of the Duke Street flyover ramp.

The Plan recommends that as private landowners along Duke Street and Van Dorn Street bring redevelopment proposals to the City, they dedicate sufficient land for the increased right-of-way needed. The added right-of-

way should in general be taken equally from both sides of Van Dorn Street.

Because reduced parking and increased transit ridership are so important to the success of this plan, the Plan recommends the construction of the Van Dorn Street dedicated transit lanes within the Plan area around the time of the construction of 25 percent of the increased development permitted in this Plan. the Plan also recommends the construction of the multimodal bridge linking Pickett Place and the Van Dorn Metro Station around the time of the construction of 25 percent of the increased development permitted in this Plan. As transit service and accessibility are improved, reduced parking becomes more feasible.

The Plan recommends that new development approved in the Plan area be required to achieve a 20 percent non-driver mode share prior to the completion of the Van Dorn Street dedicated transit line and attainment of a 30 percent non-driver mode share after it is completed. For properties adjacent to Duke Street, the 30 percent non-driver mode share requirement begins when either the Van Dorn Street or Duke Street transit line is completed. During the development review process, the applicant will submit for public approval a plan to meet these mode share goals, which will become conditions of approval.

The Plan recommends the timely delivery of transportation improvements to support redevelopment. A table in Chapter 9 shows development activity and the transportation improvements needed to support it. Implementation of the transportation improvement recommendations should be made as quickly as possible and no later than indicated in this table.

The Plan recommends creation of a transportation management district for the Plan area and development approvals should require participation in the district once it is formed.

In addition to the traffic studies required with new development applications, the plan recommends that each

major development project submit supplemental traffic analyses to assess the cumulative transportation effect of development in the Plan area. This information will be used to inform and guide the phasing of transportation improvements.

Infrastructure Phasing and Funding: Community Facilities

The City will encourage a developer to agree to provide a community or recreation center within the Plan area by not counting the square footage of the center toward the total FAR of the redevelopment. The City may also consider extending the FAR exemption to other developer-provided facilities that serve a civic function. The Plan recommends that, as the City reviews development applications for major parcels in the City, Alexandria City Public Schools be involved in evaluating the potential for those projects to include a school site or in contributing to school facilities.

When developer contributions are financially feasible, the Plan recommends that the City evaluate opportunities for contributions by developers of public art or monetary contributions to the Alexandria Commission for the Arts for public art in the Landmark/Van Dorn Corridor Plan area.

The Plan recommends the provision of several public open spaces in the Landmark/Van Dorn Plan area to be realized through the development process. The Plan recommends the creation of an open space fund to receive developer contributions that may be used to acquire parkland that is not obtainable through the development process.

Green Infrastructure

Streams adjacent to the planning area, Backlick and Holmes Run, are amenities to the planning area and should be restored. The Plan recommends a feasibility study, in cooperation with the US Army Corps of Engineers restoration study currently underway, to examine the feasibility of realigning Backlick Run to

mitigate issues of flooding and the provision of additional stormwater management benefits.

ommendations, implement recommendations, and report to City Council annually.

Affordable and Workforce Housing

The Plan recommends a phased approach to contributions from developers for affordable and workforce housing. During the catalyst phase, the City would apply the voluntary affordable housing formula set forth in the Final Report of the Developer Housing Contribution Policy Work Group that was accepted by City Council in June 2005. In later phases, the developer contribution, when appropriate, would increase and may include cash contributions, preservation of existing units, or construction of new on- or off-site units at the City's option.

Economic Development and Small Business

To facilitate economic vitality and desired redevelopment, the Plan recommends consideration of applying the administrative special use permit (Admin SUP) process to review land uses that have little or no impact on nearby residential areas and that will help enhance existing business areas. The Plan also recommends consideration of permitting specific SUP uses identified in a development plan to be pre-approved through the development process and thereafter would not be required to go through a separate SUP approval process.

When an existing retail center is to be redeveloped, this plan recommends that a portion of the retail space in the new development be reserved for displaced retailers.

Implementation Advisory Group

The Plan recommends establishing a Landmark/Van Dorn Plan Implementation Advisory Group (IAG) comprised of area residents, local business owners, landowners, and other committed community members who have been active in the planning effort to oversee implementation of the Plan. This IAG will work with City staff to develop an Implementation Plan, prioritize rec-

Land Use

The Landmark/Van Dorn area we see today was developed with distinct areas of single uses, connected by roads.

The Landmark/Van Dorn area envisioned for the future has a mix of uses at a variety of scales. This mix provides more choice, and makes the place accessible, convenient and interesting for those who live, work, shop or play here.



4.1. Character of Existing Development

The pattern of development in the planning area today was defined in the 1950s through the 1980s as a pattern of large development parcels in even larger blocks designed for automobiles, not pedestrians. While most streets have sidewalks, pedestrians have to negotiate parking lots ranging from 60 to 300 feet deep to reach the front door of most commercial buildings in the planning area.



Landmark/Van Dorn. Large blocks and large, plain, dispersed buildings make walking difficult and provide little to attract the eye

Buildings, Parcels and Blocks

The scale of buildings within the planning area is much larger than in most other parts of the City. Except for the Metro area, which includes the Summer's Grove residential development, the average size of building footprints is 24,140 square feet, or more than one-half acre. Similar to differences in building size, the planning area has larger parcels than Old Town and most other parts of the City. The average parcel size excluding the Metro area is about 1.5 acres. While large parcels can make



Alexandria's Old Town. A pattern of small blocks and parcels makes the area walkable and gives buildings an intimate pedestrian scale with lots of visual interest.

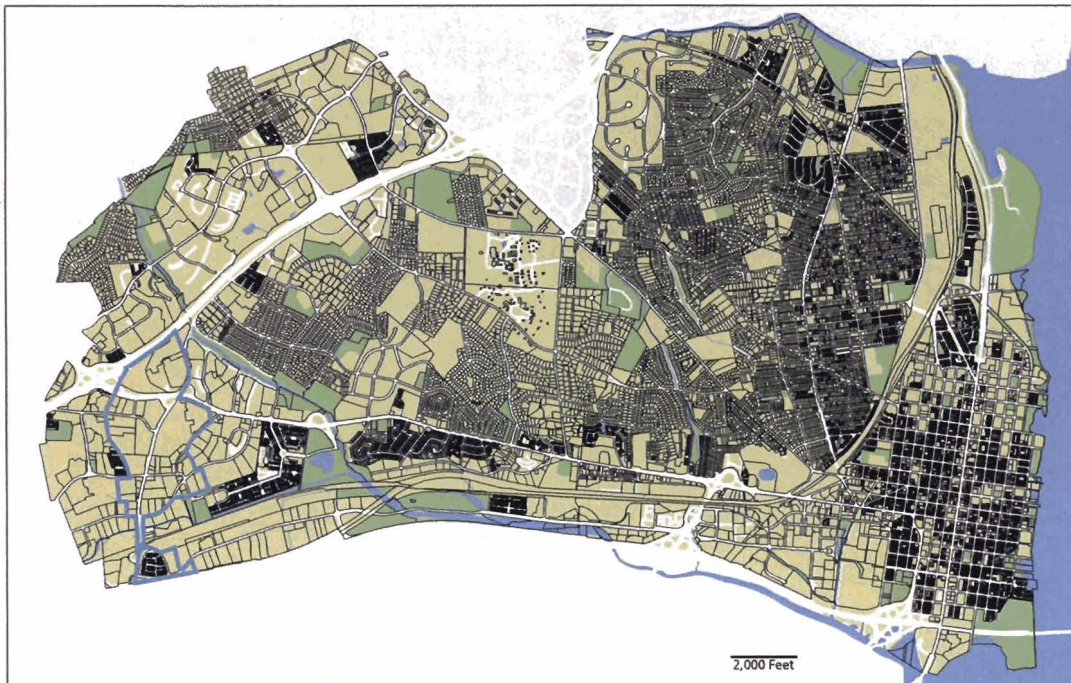
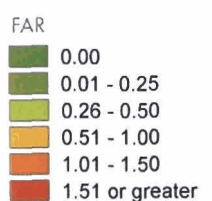


Figure 4-1. City of Alexandria existing parcels; Large parcels in the Landmark/Van Dorn Area create obstacles to pedestrian movement.



Figure 4-2. Structures, Blocks and Parcels in Landmark/Van Dorn Area and Old Town. These diagrams, drawn at the same scale, show clearly the difference between the fine-grained texture of Old Town and the large parcels and blocks of Landmark/Van Dorn.



Floor area ratio is the ratio of floor area on all floors to the area of the site.

Figure 4-3. Existing Floor Area Ratio (FAR). Because they have large surface parking lots, shopping centers have relative low FARs.



redevelopment easier, some key areas are developed in small parcels with separate ownerships that will make achieving a coordinated development with improved circulation difficult. The smallest block in the planning area is much larger than a typical block in Old Town. Some are larger than 50 acres and take 15 to 20 minutes to walk around. Large blocks are obstacles to direct vehicular routes and make the area difficult for pedestrians. When combined with terrain, the large blocks often mean a difficult long walk down and then back up to reach a nearby destination at the same elevation.

Development Intensity

The Landmark/Van Dorn planning area is fully developed with buildings and parking lots, resulting in a high degree of impervious coverage. Approximately 70% of the area consists of buildings, parking areas, driveways, and sidewalks. The lack of undeveloped land and open space within the area contribute to this extremely high percentage.

Analysis of floor area ratios (FARs, gross building area divided by total parcel area) indicates that most parcels are developed at a relatively low intensity typical of uses with surface parking. Landmark Mall is developed at an FAR of 0.44 with some structured parking. Other retail centers are typically developed with single-story buildings at an FAR of 0.2 to 0.4 with large surface parking lots. Industrial properties are typically developed at an FAR of 0.4 to 0.6, and residential properties developed at a floor area ratio of 0.6 to 1.1 and building heights of three to six or more stories, reflecting lower parking requirements per unit of floor area for these uses. The average floor area ratio within the planning area is .48, with most sites not developed to the maximum allowable intensity of development permitted by existing zoning.

Residential Building Types

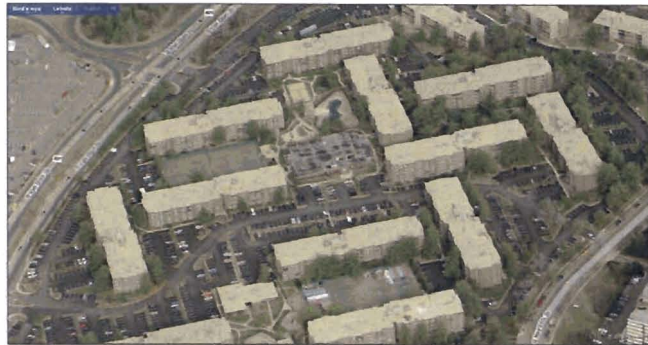
Residential buildings in the Landmark/Van Dorn Corridor and the immediately surrounding area are predominantly multi-family units. These buildings can be divided

into two major types. The majority of the buildings are low-rise, 3-5-story apartments with surface parking. A second building type occurs north of Edsall Road and west of Whiting Street. These "Apartments in the Park" consist of high-rise buildings with surface and structured parking and more extensive green areas.

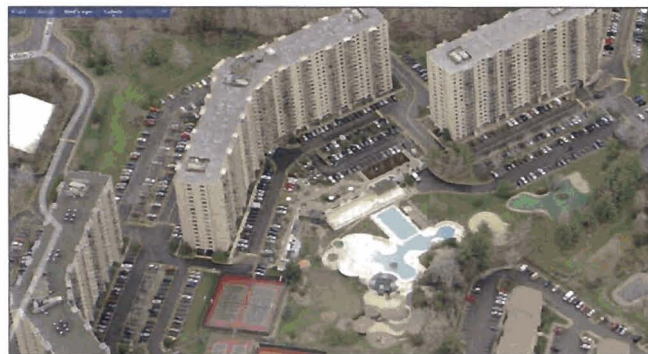
Residential densities are similar for densely developed garden apartments and high-rise residential buildings. Figure 4.27 shows the residential densities in Alexandria and surrounding areas as listed in the 2000 Census. These densities are based on the gross area of the census block, which includes streets and nonresidential uses.

Commercial Building Types

The planning area contains two major types of commercial buildings. Landmark Mall was built in the mid-1960s as an open-air mall. It was later redeveloped as an enclosed mall with internal circulation in the form of a trident. The enclosed mall with its two anchor stores (Sears and Macy's) and other retail stores exemplifies the larger scale commercial building type typical of an



Garden apartment and condominium building type.



High-rise apartment and condominium building type.

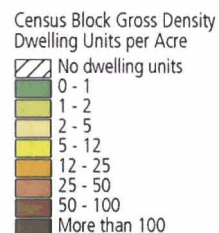
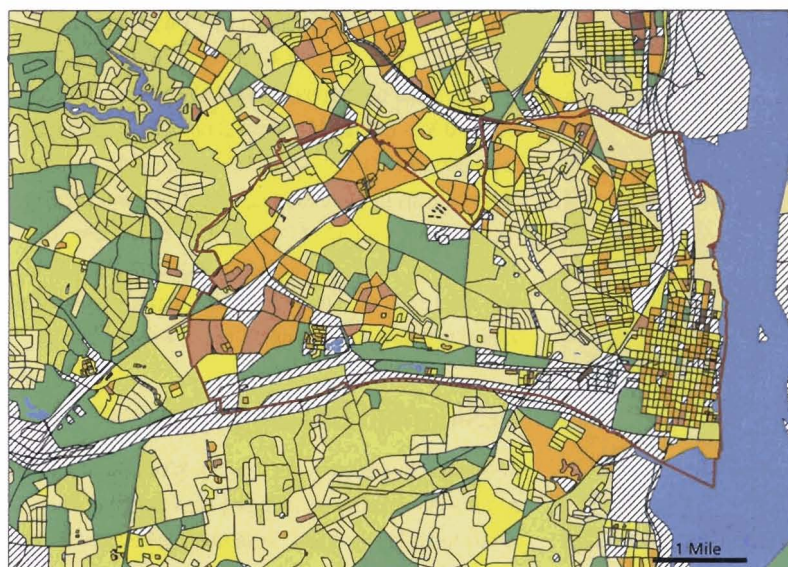


Figure 4-4. Dwelling Unit Density by Census Block, Census 2000. This figure shows the density in dwelling units per acre at the time of the 200 Census. Alexandria's overall density is similar to that of other fully developed inner suburbs throughout the United States. The highest densities in the City are in the Old Town North area, but Landmark/Van Dorn has a substantial area with residential density between 25 and 50 dwelling units per acre.



Landmark Mall. The large structure encloses an area as large as four to six typical city blocks.



Strip shopping centers and big-box stores are typically one story with surface parking.



earlier era of retail development. In addition to Landmark Mall, the area contains numerous one to two-story, large-footprint commercial buildings (retail stores, strip shopping centers, and warehouses).

Landmark Mall

Landmark Mall is the major retail destination within the Landmark/Van Dorn Corridor and the West End. While the mall is readily accessible from the regional street network, it is isolated and disconnected from immediately surrounding properties by barriers formed by topography, arterial streets, and the mall's own internal peripheral roadways and parking lots.

Vehicular access to the mall is complicated by overhead bridges, a variety of access drives and signs, and topography. Pedestrian access is made hazardous by the heavily traveled arterials that surround the mall and the lack of protected access routes and refuge areas. The peripheral access drives and expansive parking areas surrounding the enclosed mall contribute to the unfriendly pedestrian environment.

Figure 4-5. Commercial Building Types. All commercial buildings in the Landmark/Van Dorn area are auto-oriented with surface parking between the building and the street. There are no traditional commercial streets with front doors and display windows at the sidewalk. Most retail buildings are in shopping centers, with only a few with a single business on its own parcel.

- Regional Shopping Center
- 1-2 story large-footprint buildings

As a regional shopping destination, the existing retail offerings of Landmark Mall are geared to a regional customer base rather than to local shopping and service needs, reinforcing its disconnectedness from immediately surrounding residential areas and small-scale commercial uses located in the Van Dorn Street corridor. The recent development of new types of centers such as Clarendon Market Common and Pentagon Row, which have a greater variety and mix of uses and more pedestrian-friendly environments, have taken market share from Landmark Mall. The mall also faces competition from other regional centers that have been developed in its market area and the super-regional center at Tyson's Corner, which brings customers from throughout the region to its large number of stores, many of which have their only location in the region there.

The decline of revenue at Landmark Mall was identified by the City Council as a significant economic sustainability issue for the City when it adopted in principle the recommendations of the Economic Sustainability Work Group. The Council's adopted policy calls for the development of Landmark Mall as a major economic center for the City.

Fairfax County

The Landmark/Van Dorn planning area is physically proximate to Fairfax County. Several on-going planning efforts include revitalization and redevelopment studies at Bailey's Crossroads and Springfield Mall, and Base Realignment and Closure (BRAC) related efforts at various sites in the County. The Urban Land Institute (ULI) completed a report for Bailey's Crossroads in 2006 that envisioned an urban place with additional office, retail and housing units and transit to support this development. The County has hired a consultant to build on the report's findings. With regard to Springfield Mall, the new property owner is proposing to renovate the existing mall and has future plans to build a lifestyle center. As to BRAC, the County recently approved comprehensive plan amendments and oriented to attracting new jobs near transit locations.

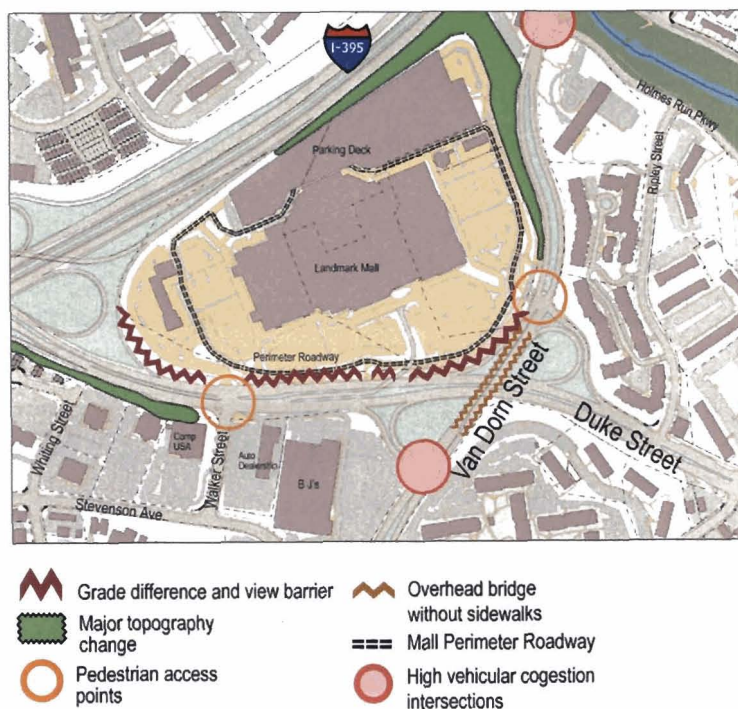


Figure 4-6. Landmark Mall Issues

4.2. Real Estate and Retail Market Context

Background

The years leading up to the preparation of the Landmark/Van Dorn Corridor Plan saw a significant shift in real estate market conditions. The real estate market in western Alexandria has long lagged the eastern part of the City, and the Landmark/Van Dorn area by 2005 had a concentration of underutilized properties and little recent history of significant real estate investment. However, a prolonged period of growth in the real estate sector regionally and in the City of Alexandria in the early and mid 2000s resulted in renewed interest in real estate investment in the Landmark/Van Dorn area. Developable parcels in established urban or urbanizing neighborhoods in the City and surrounding areas were quickly becoming scarce and/or very expensive. The concentration of underutilized properties in the Landmark/Van Dorn area now was a competitive strength, as the area emerged as a relatively affordable place to invest in real estate with several opportunities for large-scale redevelopment, good access to transit and roads, and proximity to a large, affluent trade area.

The residential market was first to emerge in the Landmark/Van Dorn area. Owners and developers of vacant or underutilized sites sought every opportunity to build new townhouses and condominiums, and a number of existing apartment developments, including some of the newest and oldest in Alexandria, were converted to condominiums in a state-regulated process over which the City has little influence and no control. Market-rate rents and prices in the area increased significantly as a result. While this price increase was a boon for those who wanted to build or sell, it squeezed those moving into the market or into the region to less expensive areas further from major employment centers.

The office and retail markets in the Landmark/Van Dorn area were slowest to respond. The retail market was -- and still very much is today -- characterized by older, suburban-style strip centers and big boxes, with the aging and increasingly obsolete Landmark Mall as a large, high-profile example of this character. Retail

investment typically is a market follower, and significant improvements in the quality and character of the local retail were waiting on continued new investments in the residential sector. The Landmark/Van Dorn area has never been established as a Class A office core. Industrial and flex land uses have historically dominated the commercial market in the Landmark/Van Dorn area, with some of this space transitioning into Class B and C office space in the 2000s.

Since earlier planning efforts in 2005, the regional and local market has shifted once again, with a slowdown in economic growth and overbuilding in certain real estate sectors. In particular, the for-sale housing market has been in a state of decline since the middle of 2006, with the residential condominium market -- which was driving much of the recent investment in the Landmark/Van Dorn area -- struggling badly with significantly lower sales and pockets of oversupply.

The slowdown in the residential sector has had an impact on other sectors, most notably the retail sector. Slowing economic conditions and a weak housing market limits retail expenditures, as consumers have less income to spend and tend to become more conservative with their spending. Further, investment in new retail is often done as part of a mixed-use project, where the residential use above was the key economic driver. The office market has been affected by slowing economic growth regionally and locally, although employment growth has continued to remain positive and the negative impact on the office market has not been as pronounced as in the residential and retail sectors.

The broader national economic trend in the near term is the credit crunch due to the troubles in the financial markets. The uncertainty surrounding the health of the financial markets and availability of capital will limit the ability to deliver financially viable projects over the next several years, particularly in fringe, emerging submarkets such as the Landmark/Van Dorn area. It is expected that this period of uncertainty will be resolved sometime in 2009, with market strength returning in 2010, but this

period of volatility in the real estate investment markets will delay some of the near- and mid-term investment foreseen in the 2005 plan. Still, the long-term fundamentals of the regional and local market are strong, and the plan should reflect the inevitable shift of market conditions as the Landmark/Van Dorn area continues to transition from an aging suburban core into a new urban core.

Market Opportunities

With respect to the City's expressed objectives of creating a greater sense of community for the area as a "town center" for the City's West End, the 2005 market analysis noted a number of opportunities. These opportunities have been confirmed as still viable long-term trends during the most recent update:

- Strong and stable economic growth is projected for the Washington region in the mid and long terms. The Landmark/Van Dorn area is a logical infill location given proximity to transit and access to large and affluent market areas.
- The area has a number of medium and large-scale redevelopment opportunity sites. These sites are attractive considering their location in a growing region with little developable land in close-in locations.
- The area has high visibility and accessibility in the region.
- Planned improvements in transportation infrastructure, including improved transit, internal connections and pedestrian access, will support emerging market trends that support a higher-density environment.
- Broad consumer preferences and demographic shifts support infill "live, work and play" environments such as those envisioned during the Advisory Group and planning process.
- The current challenges of poor aesthetic quality and lack of "sense of place" can be addressed with reinvestment in the public and private built environment.

The result will be a marked shift in land use, with a movement away from suburban-style development with lower-density, single-use buildings surrounded by surface parking into higher-density, mixed- and multiple-use projects with more urban parking options and a more pedestrian-oriented built environment.

Market Potential

Residential Development

In the 2005 study, new multifamily residential development demand was estimated at 1,835 new dwelling units by 2015, with an additional 2,030 units by 2030, for a total of 3,865 additional dwelling units by 2030. In addition to this net new demand, a potential demand for replacement or significant rehabilitation of 1,500 existing units by 2015 and another 1,500 units by 2030 was foreseen. The long-term development potential of the Landmark/Van Dorn area has not changed since 2005, but the recent slowdown in the residential market has delayed the onset of new demand, and thus the 2015 estimates are likely too aggressive; however, by 2030, we expect demand to "catch up," and thus the 2030 estimates are still valid for planning purposes.

Because of the strong demand for new residential development, residential use will be the land use that drives most development. The creation of a vibrant, mixed-use environment is critical to pushing residential values and supporting greater densities.

The draft Plan contains an estimate of 5,000 additional housing units. The average household size in Alexandria is 2.04 persons per occupied unit, but the average household size for multi-family units is a bit smaller: 1.88 persons per unit. At 100% occupancy, the 5,000 housing units would contain about 9,400 people.

Character of Residential Development

The residential market will support a wide variety of housing types, but lower-density housing (especially housing with surface parking) is unlikely given the expected land values and the cost of redevelopment.

As infill development and redevelopment ramps up, the market will push towards higher-density, more urban product types (particularly with regard to the mixing of uses, the relationship of the building to the street, and the treatment of parking – moving from surface to structured to below-grade parking). The initial market opportunities will support stick-built multifamily product with structured parking in most areas, but particularly attractive redevelopment sites may be able to initially support mid-rise product and/or underground parking.

In 2005, for-sale multifamily development was foreseen as the key driver of redevelopment, given the disparity between for-sale and rental values. The slowdown in the condo market and continued strength in the rental market makes it more likely that near-term opportunities will be rental, although the condominium market is expected to rebound in the near future, and for-sale condominiums are more attractive product types when attracting pioneering consumers to an emerging location. With that said, over the study period the question of tenure will shift many times over, and on a project-by-project basis will depend greatly on the immediate market conditions and project characteristics.

Retail Development

The urban mixed-use environment envisioned in the Landmark/Van Dorn Corridor Plan takes time to create, and depends on breaking up the current suburban form with the interconnected pedestrian network of new local streets planned for these areas. More urban environments require a high level of residential density, a significant concentration of existing street front retail, and a strong degree of pedestrian connectivity.

The demand for retail away from the large-scale, heavily-anchored retail center at or near Landmark Mall will be primarily for convenience and neighborhood-serving retailers, as well as some share of boutique retailers, limited-service and full-service restaurants. In the initial years of the study period, new neighborhood-serving retail development will likely concentrate in new retail centers, as retailers will initially desire a location

with concentrated retail that will maximize the volume of traffic.

Character of Retail Development

These new neighborhood centers will likely take more of an urban form and may be integrated with other uses. Ground-floor retail in mixed-use buildings will provide complementary retail space to the newer retail concentrations in the near term, but it is not expected to be the primary method of delivering new retail space, as it is difficult at the outset to create an effective retail environment on a parcel-by-parcel basis.

A more urban, streetfront retail environment, with a broader range of boutique comparison retailers and a larger concentration of restaurants, will be increasingly more feasible in the mid and long terms. In this environment, ground-floor retail in mixed-use buildings will take a more prominent role. Medium-box retailers have smaller footprints than bigger-box anchors, and are more likely to accept two-story formats. They often work well in urban, street front retail environments, but these uses require an established urban place in order to locate away from other anchors.

Office and Industrial Space

In 2005, an opportunity for up to one-half million square feet of new boutique class A and B office development was foreseen over the 25-year development period. This assumption is still valid, with the boutique office space developing as part of mixed-use projects throughout the corridor. The opportunity for larger class A office space is limited, and has strong regional and local competition. Rents will need to increase substantially to support the density and parking associated with urban office development. Over the long term, as available close-in sites for office uses are developed, Class A office demand may increase, driven by visibility and access to I-395 and I-495, market absorption at Mark Center, and access to the Van Dorn Metrorail station. Interchange locations are generally not preferred, with Metrorail access a primary driver of the office market locally and regionally. The Landmark Mall redevelopment may also present an

opportunity, over time, for the delivery of Class A trophy space, as this large-scale project will potentially create an attractive environment to work, play, and live.

The niche of secure office buildings for government agencies and their contractors is not compatible with the urban planning guidelines for mixed use, pedestrian-oriented streets, and transportation accessibility proposed for the area. These buildings require secured sites with large setbacks from public roadways, guarded entrances, and fencing. However, this product type is likely to locate in the nearby Victory Center along Eisenhower Avenue, which may create spin-off Class A office demand, some of which can potentially be captured within the study area. Similar spin-off demand may result from the location of the Pentagon's Washington Headquarters Service at Mark Center at the next interchange north of Duke Street on I-395.

The quantity of flex and industrial space is not anticipated to grow, but rather is expected to decline in the face of competition by retail and residential developers for these current industrial locations. These low-intensity uses cannot compete for the high land prices typical of urban areas with the kind of urban amenities that support higher-density development nearby. The majority of flex and industrial tenants use under 10,000 square feet, and most of these tenants focus on serving the large concentration of households within a 10-mile radius of the area.

A share of the industrial stock in the area today is functionally obsolete, which creates pockets of chronic vacancies and makes those sites ripe for future redevelopment.

Character of Office Development

Some demand will generally be driven by small tenants seeking boutique space in small-scale office buildings integrated into multiple-use settings, as well as ground-floor spaces below residential uses (often mixed with retail uses). Office users will include those seeking to lease and those seeking to purchase for-sale office

condominiums. Large-scale office buildings require a large anchor tenant, which is a limiting factor for this location. These buildings will tend to have larger floor footprints (20,000 to 30,000 square feet).

Given its location adjacent to I-395, Landmark Mall represents an opportunity for large-scale office development. Its location and proximity to Mark Center, Fort Belvoir and the Pentagon would be especially appropriate for defense and other government contractors and related businesses.

Retail Market Analysis

This retail study completed in 2008 as a part of the Landmark/Van Dorn Corridor planning process focused on local, community and regional potential retail market demand for the Van Dorn planning area.

This retail analysis concludes that the Van Dorn Corridor can support multiple new retail development projects by 2010, and has an opportunity to fill in current and future retail voids in the market, creating an urban shopping district to serve the local, community and regional markets. The Corridor's numerous underperforming retailers and vacant shopping centers are not representative of the area's existing and future market potential. Additional retail development is supportable along the Van Dorn Corridor because of the numerous dated shopping center typologies and retail store buildings. New proven retail formats require building sizes and layouts that are, for the most part, not available within the planning area.

The retail analysis completed for the planning study indicates that up to 1,040,000 square feet of additional retail and restaurant space may be supportable in the planning area by 2010, if the new retail space is integrated by means of design and scale into the proposed new character of the planning area. The new supportable retail space includes; 169,900 sf of supermarkets, specialty/ethnic food stores and convenience food stores, 327,200 sf of warehouse club and discount department

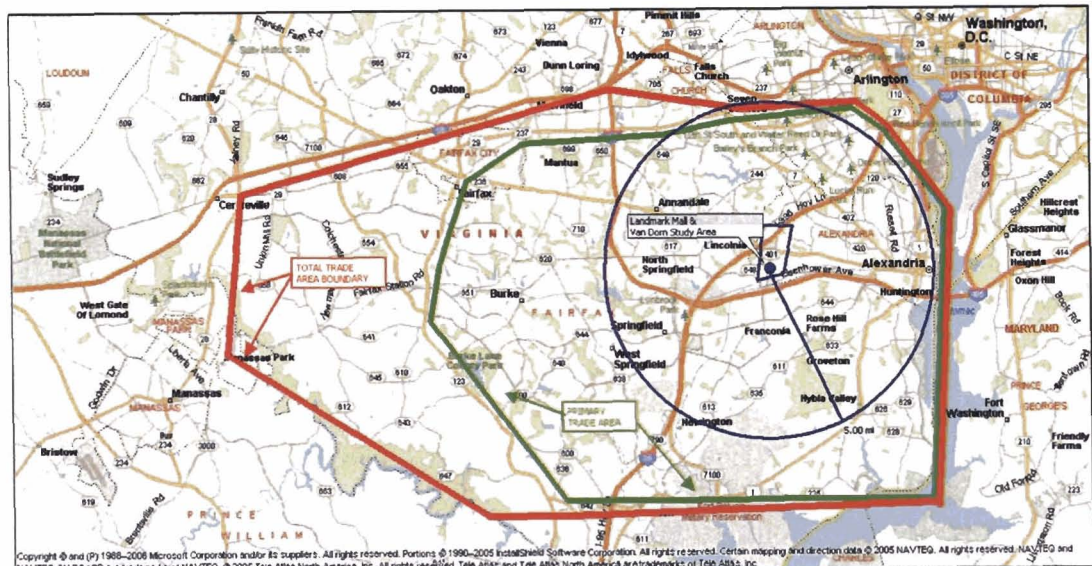


Figure 4-7. Market Area. The Van Dorn's retail market study is based on the above trade area boundaries. The red line indicates the estimated total trade area and the green line defines the primary trade area limits.

stores, 100,700 sf of apparel, 108,700 sf of restaurants, 87,000 sf of home improvement and 45,700 sf of drug stores.

These new retailers will likely be located in new dense mixed-use shopping centers. These new commercial centers will serve local, community and regional unmet shopping demands for the Van Dorn trade area and reduce the amount of spending that is presently leaving the trade and occurring in surrounding markets. Table 4.1 summarizes the types of retailers and shopping centers that are supportable in the planning area.

This study estimates that this new retail development will generate up to \$323.6 million annual sales by 2010, growing to \$345.1 million by 2013 (assuming normal economic growth and market conditions and no additional new retail development within the trade areas below). This new 1,040,000 square feet of supportable retail and restaurant space is in addition to the existing Landmark Mall and Van Dorn retail space.

This additional retail development can be grouped in up to 14 to 20 corner stores and stand alone shopping centers throughout the Van Dorn study area. This study recommends that these shopping centers be planned and programmed pursuant to industry standards as defined by the International Council of Shopping Centers (ICSC). Table 4.2 summarizes the supportable shopping center types that Gibbs Planning Group finds are supportable in the study area.

Should the existing Van Dorn Corridor's retailers and shopping centers increase their annual sales, or upgrade existing retailers with better-performing stores, then this net increase in sales would likely reduce the 1,040,000 square feet of new supportable retail. Although the planning area's retail demand is strong, the present economic downturn could significantly delay the time frame of the above new retail development. The proposed redevelopment and expansion of the Landmark Mall could also reduce the amount of additional supportable retail throughout the area.

Table 4-1
Landmark/Van Dorn Additional Supportable Retail Floor Area by Store Category*

Business Type	New Supportable Size	Number of Stores	Annual Sales
Apparel & Shoes	100,700 sf	20-30 stores	\$31.5 million
Bldg. Improvement	74,100 sf	2 – 3 stores	\$13 million
Discount Dept. Stores	120,000 sf	1 - 2 stores	\$23.6 million
Drug Stores	45,700 sf	4-5 stores	\$23.6 million
Electronics	26,500 sf	3 - 4 stores	\$12.7 million
Home Furnishings	50,400 sf	6 - 10 stores	\$13.3 million
Personal Services	29,500 sf	10 – 15 stores	\$ 9.8 million
Restaurants	108,700 sf	25 – 35 restaurants	\$34.8 million
Sporting Goods	23,000 sf	1 – 5 stores	\$ 6.1 million
Supermarkets	111,500 sf	3 - 4 stores	\$50.4 million
Warehouse Clubs	207,200 sf	3 – 4 stores	\$62.6 million
Totals:	1,040,100 sf		\$ 323,550,000 (2008)
			\$ 345,112,000 (2013)

* The above figures are in addition to the existing floor area at Landmark Mall and in the rest of the Van Dorn corridor planning area

Table 4-2
Van Dorn Corridor Additional Supportable Shopping Center Types *

Number of Centers	Center Type	Typical Size (sq ft)	Typical Trade Area	Typical Trade Area Housing Units
6 – 8	Corner Stores	1,000 sf	¼ mile	1,000 homes
3 – 5	Convenience Centers	25,000 sf	1 mile	1,500 homes
2 – 3	Neighborhood Centers	80,000 sf	2-3 miles	8,000 homes
2 – 3	Community Centers	300,000 sf	5-7 miles	30,000 homes
1	Lifestyle Center	200,000 sf	5-7 miles	100,000 homes

* The above figures are in addition to the existing Landmark Mall retail floor area.

The findings of this market study are based upon trade area or catchment boundaries. These trade areas are determined by natural features, transportation systems, demographic clusters and existing shopping center locations. The total trade area represents approximately 80% to 85% of Van Dorn Corridor's consumer base. The balance of the Corridor's sales and consumer traffic will be generated from out of town visitors, drive through traffic and employment centers.

The demographics of the total trade area population base reflect a 2008 dense core of consumers (820,224 persons) that is projected to grow 0.70% per year to 849,147 persons by 2013. Most (74.2%) are white-collar employed in Professional (30.8%) and Management/Business/Financial (22.6%) services and 59.9% hold a college degree. The persons-per-household is reported as 2.58, and median age is 37.7. Incomes in the total trade area are higher than average, with household incomes reported as \$93,864 and per-capita incomes as \$45,315. A total of 63.6% of households had an income over \$75,000 per year.

Market Analysis Conclusion

Creating vibrant, mixed-use nodes generates significant momentum that begets further urban redevelopment. These environments create residential premiums, which allow for the delivery of higher-density residential development, which then supports more streetfront retail development.

A catalytic project is the key to changing market realities and perceptions. The redevelopment of Landmark Mall has the scale to be a very strong catalytic development, and spur further redevelopment throughout the study area.

The market for mixed-use development will evolve over time, as market premiums support a higher cost of construction. The first phase of redevelopment (with the exception of Landmark Mall) will likely create strong integrated multiple-use environments, where uses are

built adjacent and planning creates strong functional and visual linkages. Over time, vertical mixed-use development will be supported in areas that have begun to establish an urban character.

The Landmark/Van Dorn planning area includes numerous small to medium sized independent retailers and offices that offer vital goods and services for the community. Community members have expressed their desire for small, locally-owned businesses in the Landmark/Van Dorn Corridor. Redevelopment of existing commercial centers will likely displace many of these important businesses. The Plan recommends that a careful policy be implemented to encourage and to assist these small businesses to relocate within the planning area. In some cases, a temporary holding location or sites may be needed to provide a practical location for these businesses to operate.

Moving a business is a difficult and risky task that may require special assistance and resources to cover relocation, tenant improvements, marketing and operations disruptions. The City may consider implementing a special relocation assistance program and offering developers incentives for retaining existing businesses.

Economic Sustainability

An important criterion used to establish the mix of land uses for the plan was the Economic Sustainability Work Group Final Report adopted in principle by the City Council in October, 2007. The policy encourages development of retail, office and tourist-oriented uses in the City because these uses are seen as generating municipal revenues that substantially exceed their costs on an ongoing basis. Retail and hotel uses in particular are high revenue generators per unit of floor area. Residential uses require more population-oriented services including schools than nonresidential uses for the same amount of development. While high-value and high-density residential uses are generally considered to have a positive net fiscal impact on municipal revenues, the overall revenue/cost ratio for residential uses on

an ongoing basis is typically lower than that for most nonresidential uses.

Because of the positive impact of office, hotel and retail uses on City revenues, the policy places an emphasis on preserving areas with high potential for retail and office development in the City, and not permitting these areas to be developed prematurely with residential uses that preclude their ultimate potential use for nonresidential development.

Although the ongoing revenue/cost benefit is higher for nonresidential uses, office and retail uses are much more intense generators of peak-hour trips and transit demand than residential uses per unit of floor area, and may have high capital costs for transportation infrastructure. However, the creation of mixed use neighborhoods creates an economic synergy that increases values for the residential and non-residential uses and will reduce overall trip demand.

4.3. Current Land Use and Zoning

The Van Dorn Corridor is unique within the City of Alexandria. Landmark Mall is the City's only regional mall and has the only Commercial Regional (CR) zoning in the City. Land use and zoning surrounding the mall include high-density residential and commercial districts along Van Dorn Street, and light industrial / warehouse districts along Pickett Street to the south. This pattern differs sharply from the pedestrian-oriented commercial

and residential pattern of Old Town and the single-family residential neighborhoods in the central portion of Alexandria.

The distribution of land uses within the context area for the plan, which includes the planning area and additional

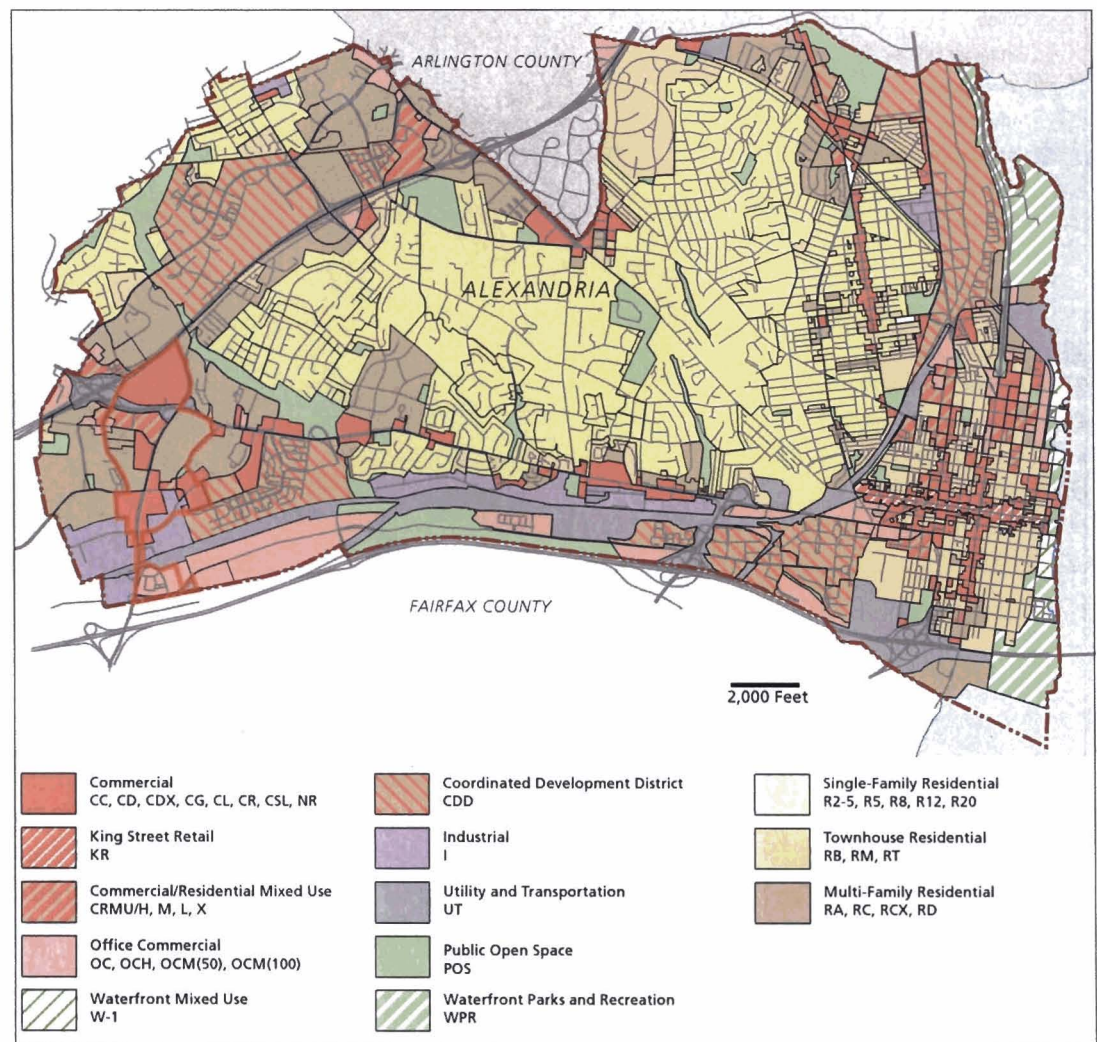


Figure 4-8. City of Alexandria Existing Zoning. Compared to most of the rest of Alexandria, the Landmark/Van Dorn area is characterized by large contiguous areas of land designated for commercial and multi-family development.

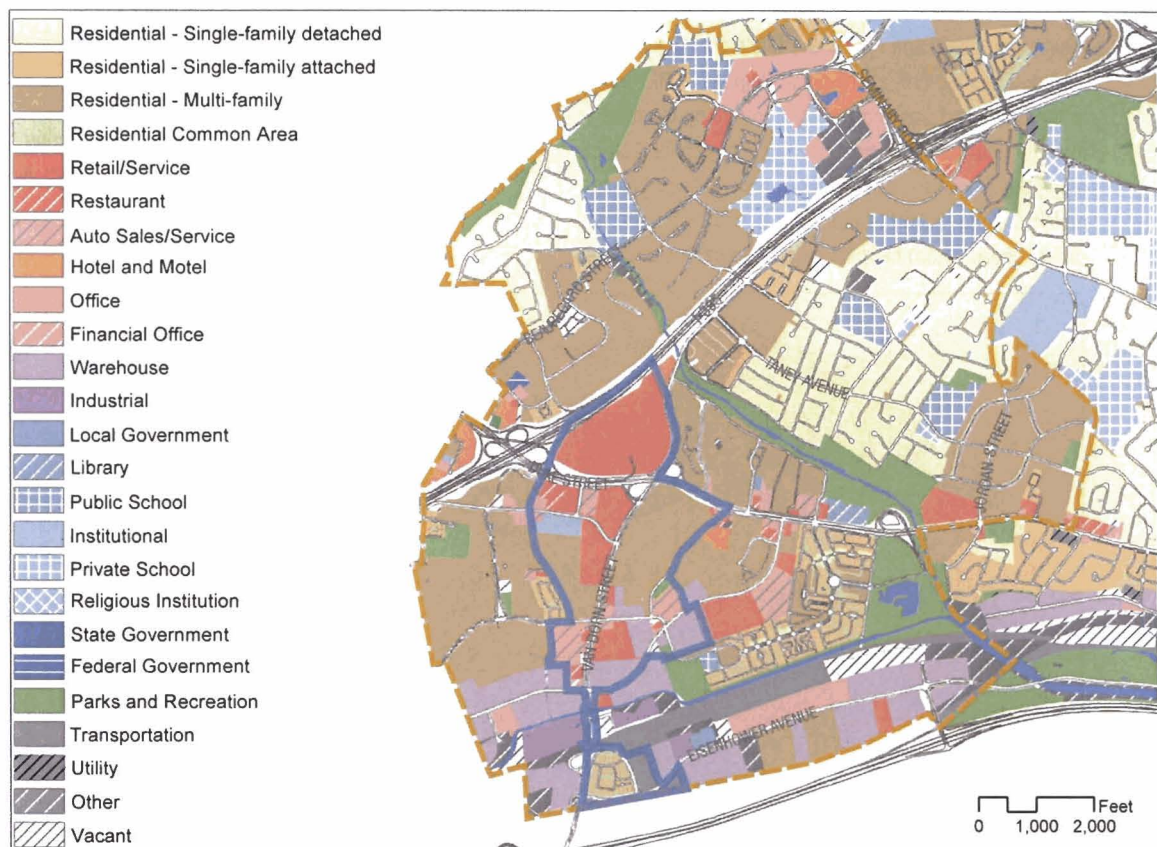


Figure 4-9. Landmark / Van Dorn Context Area Existing Land Use

Table 4-3
Existing Land Uses, Planning Area and Context Area

Land Use	Planning Area		Context Area Including Planning Area	
	Area (Acres)	%	Area (acres)	%
Multi-Family Residential	66	31.9%	1,458	49.6%
Single-Family Residential	-	-	397	13.5%
Parks, Open Space, and Cemeteries	1	0.5%	272	9.3%
Institutional	6	2.9%	210	7.1%
Commercial Retail and Services	112	54.1%	180	6.1%
Industrial / Warehouse	20	9.7%	149	5.1%
Office	2	1.0%	49	1.7%
Hotel	-	-	30	1.0%
Utilities	-	-	19	0.6%
Other	-	-	175	6.0%
Total	207	100.0%	2,939	100.0%

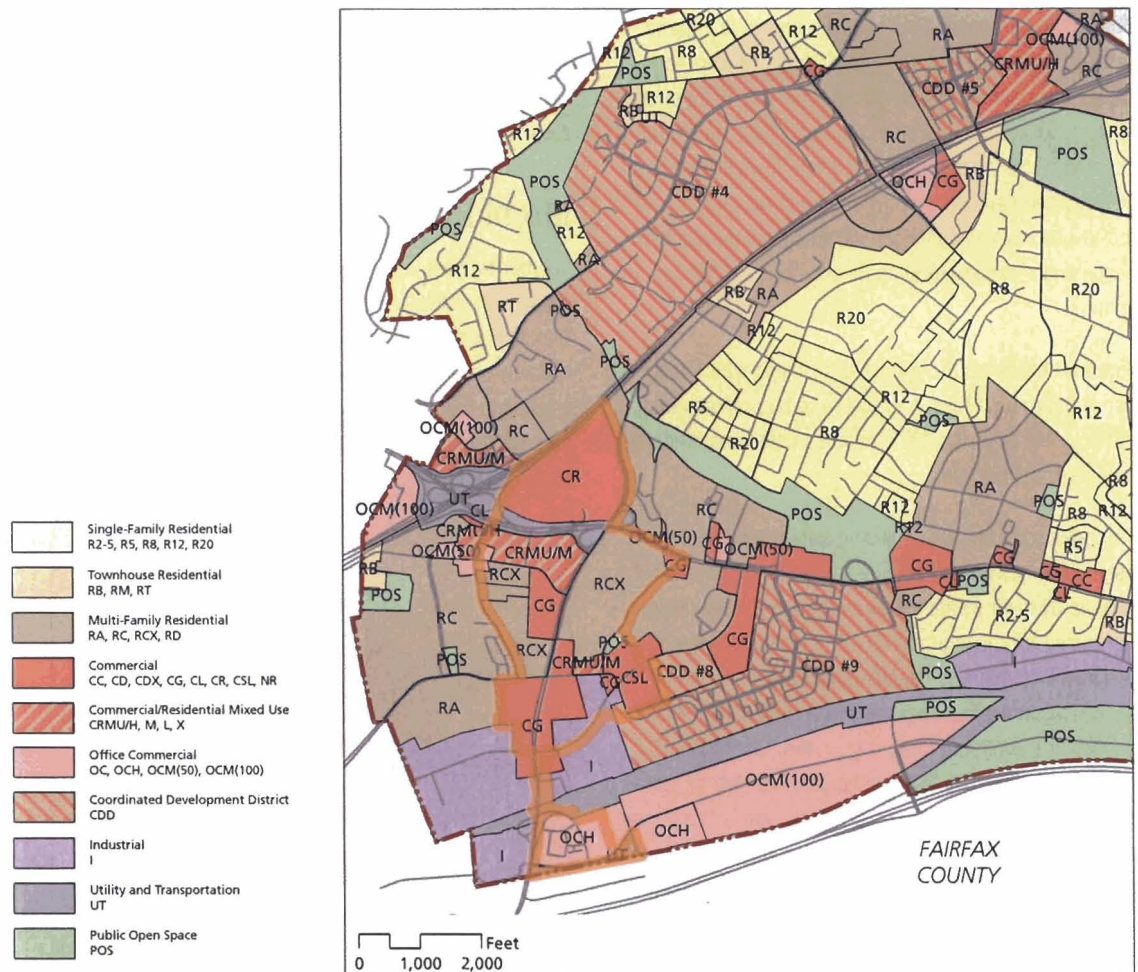


Figure 4-10. Context Area Existing Zoning

areas within the City within about one mile of Landmark Mall, is shown in Table 4.3. Multi-family residential is the predominant land use within the overall context area. Commercial uses are concentrated in the Landmark/Van Dorn Corridor and are found in scattered locations in the surrounding context area, primarily along Duke Street and Pickett Street. Warehousing and light industrial uses are concentrated to the south along Pickett Street and in the Eisenhower Avenue corridor. Office uses in the Context Area are concentrated in the Seminary-Beauregard area and on Eisenhower Avenue, with little office use in the Landmark/Van Dorn Corridor planning

area. Existing zoning largely matches the current land use pattern. Properties zoned for mixed-use development (residential/commercial) have commercial uses only.

4.4. Land Use Plan

Existing and proposed land uses are shown in Figures 4-9 and 4-11, respectively. The land use concept includes maintaining and enhancing the retail use pattern of the area with an important regional shopping center at Landmark Mall as part of a mixed-use Town Center, and neighborhood and community shopping centers in new mixed-use developments serving surrounding neighborhoods and replacing existing neighborhood shopping centers.

Figure 4-11 shows the expected locations where use above the ground floor is expected to be predominately office, a mix of residential and office uses, and predominately residential use.

The proposed Land Use Plan supports retention of the established residential areas adjacent to the two activity centers by maintaining the existing multi-family residential zoning for these properties. The Northern Virginia Juvenile Detention Home, located on the south side of Stevenson Avenue near the western planning area boundary at Whiting Street, retains the "Institutional" designation. This use is not anticipated to change within the foreseeable future. A portion of the site is designated for mixed-use development in case the City determines that development on that parcel is desirable and creates sufficient value to acquire desired parkland elsewhere in the Plan area. Several additional sites are proposed for open space. The Land Use Plan retains the existing land use designations for properties in the vicinity of the Van Dorn Street Metro Station.

Table 4-3 provides a comparison of existing and proposed land uses by development block in the planning area. Chapter 6.0 establishes the overall urban design framework, design principles, and guidelines for development in accord with the land use recommendations presented in this chapter. Chapter 7 provides detailed block-by-block guidelines for uses and patterns of development.

The land use changes envisioned in the plan will be implemented by owner and developer applications for

CDD rezoning including overall development plans, and applications for development special use permits for specific developments in accordance with the overall development plan.

Mix of Uses

In order to create new developments that will be successful in the long term, a mix of uses is needed. Districts composed entirely of offices and retail uses typically have activity only in the daytime during the work week, and may have little or no street life on evenings and weekends. Retail areas benefit from having both employees and residents in their market areas, so there

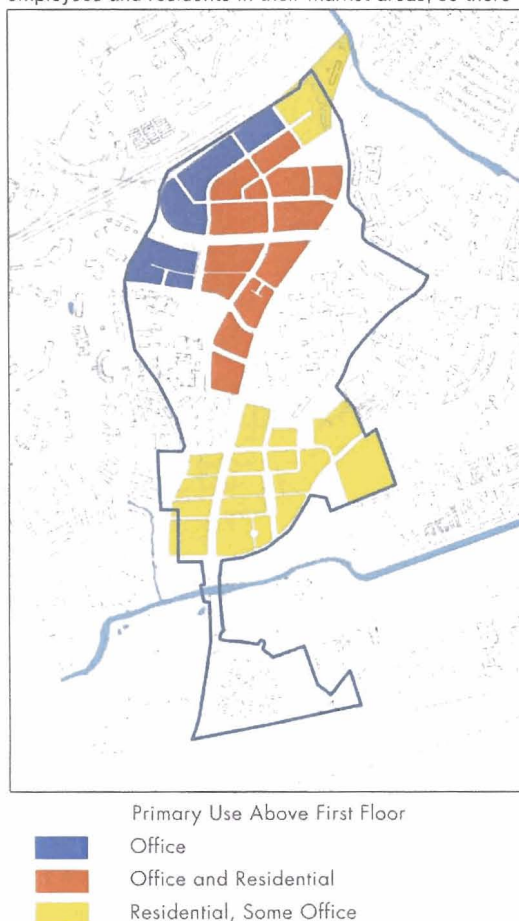


Figure 4-11. Conceptual Land Use Map for Redevelopment Area

are shoppers during the day as well as on evenings and weekends. Restaurants that have both noon-time and evening customers are typically more successful than those that depend on one or the other. A mix of uses within projects, particularly a mix of retail uses with either office or residential uses, means fewer auto trips for daily convenience items and the ability to distribute peak-hour traffic over a longer period as people have the choice to take advantage of nearby shops.

Maximums and minimums are established for each development block in the planning area to meet the following objectives:

- Each development block should have sufficient convenience retail uses or strong pedestrian connections to such uses on an immediately adjacent block to minimize auto use for convenience trips by employees and residents.
- Both West End Town Center and Pickett Place should include at least one neighborhood retail center including a grocery, drug store, and neighborhood restaurants and shops, so that both residents and employees can shop for a variety of daily needs without having to drive.
- Owners within development blocks should have the incentive to redevelop by having flexibility to respond to development demand and market cycles within the range of City objectives for a lively mix of uses, development of successful retail shopping districts, provision of adequate infrastructure to support the mix of uses over time, and development of an overall mix of uses that is economically sustainable and fiscally beneficial to the City.
- Residential development minimums are established to ensure that major subareas of the planning area have a 24-hour population that is sufficient to create a feeling of community and a significant presence of residents on the street, and does not seem isolated or overwhelmed by nonresidential uses.
- Residential development maximums and office development minimums are established to ensure that sites remain available for office, hotel and retail uses in the long term to provide the strong economic activity and fiscal strength to support the public improvements expected to be funded by project revenues. Office minimums are particularly important to preserve the long-term potential for office development along I-395 and Duke Street in the Town Center area. The total of the residential development maximums for the planning area is approximately 50% of the total development permitted.
- Ground floor retail development minimums and specific retail locations are established to capture identified local and regional retail demand in compact mixed-use retail centers that achieve the critical mass and continuity needed to be successful. Ground floor retail areas and required retail locations must be developed to accommodate industry-standard retail space requirements and must meet urban design guidelines for successful retail use outlined in Chapter 7, Urban Design.
- Development minimums are established to ensure that the overall development pattern has the intensity needed to support the level of contribution to public benefits anticipated, and has the resident population and economic activity needed to become an active, lively center that supports a mix of uses and a strong local and regional transit system.
- Open space requirements are established to ensure that public gathering places, places for play, places to promenade, places for performance and cultural celebrations, places for public art, and quiet places for contemplation are available throughout the planning area to establish each area's unique character and identity.
- While the maximums and minimums are important to achieving the Plan's objectives, they are recommendations. During the development process, a land use mix outside the recommended mix ranges may be

considered if a somewhat different mix better meets the Plan's objectives.

Development Parameters

To support the Land Use Plan, parameters for total minimum and maximum development to be achieved in a development plan for each site, mix of uses with minimum and maximum by use where appropriate to achieve the plan's objectives, and building height are recommended for key redevelopment sites within the planning area. The land use parameters are summarized in Table 4-4. The accompanying text and figures address the different parameters and compare them to existing zoning requirements.

Zoning

The current zoning reflects the planning area's fragmented land use and ownership pattern, consisting of seven different districts in some instances applied almost on a parcel-specific basis. This configuration does not support the land use vision for the Landmark/Van Dorn Corridor with two distinct, mixed-use centers integrated into the surrounding residential community. To address this issue, the Plan proposes that the zoning for each activity center eventually be changed to the Coordinated Development District (CDD), promoting the purposes stated in Section 5-601 of the Zoning Ordinance:

"...The CDD is established for those areas which are of such size or are so situated as to have significant development related impacts on the city as a whole or a major portion thereof and in order to promote development consistent with the master plan. A site zoned CDD is intended for a mixture of uses to include office, residential, retail, hotel, and other uses with appropriate open space and recreational amenities to serve the project users and residents of the city. A CDD zone is intended to encourage land assemblage and/or cooperation and joint planning where there are multiple owners

in the CDD zoned area. A review process is established to ensure that such developments exhibit a proper integration of uses, the highest quality of urban and architectural design, and harmony with the surrounding areas of the city."

The underlying zoning districts would apply to development proposed without a CDD Special Use Permit, except that the development would be required to conform to the design guidelines established in Chapter 6.0 in order to ensure that development under zoning is compatible with the pattern of framework streets and the pattern of adjacent uses to be developed under the plan, and does not substantially interfere with the ultimate redevelopment of the site for mixed use as envisioned in the plan. Development proposed using the CDD process would be required to comply with the Floor Area Ratio (FAR) and other development parameters described in this section and the design guidelines in Chapter 6.0.

Floor Area Ratio and Mix of Uses

Floor Area Ratio or FAR — the total floor area of all buildings on a lot divided by the total lot area — provides a basic measure of development intensity that affects urban form, level of activity and infrastructure impacts. Table 4-4 compares the existing FARs permitted in the planning area to proposed maximum FARs under the plan. Increased FARs are proposed for the new activity centers for three reasons: to provide an incentive for redevelopment of the older retail uses in accord with the vision, to encourage more human activity on the street to make it an interesting and lively place, and to provide an intensity that supports pedestrian-oriented uses and transit. The plan recommends that above-grade parking be counted as FAR because it adds to the visual and physical bulk and mass of the development and reduces the amount of ground-level area developed with active uses

The base area on which FAR is defined is the total area within today's property lines or any property that may be added (such as by the vacation of a street). The potential

floor area resulting from areas that may be dedicated for streets or public parks within a parcel can be built on other parts of the parcel or site, subject to the other conditions that apply to development. If an existing parcel or multi-parcel development site is divided into blocks by new streets, the floor area ratio may vary among the newly created blocks, provided that the overall minimum and maximum floor area ratio for the major development block (Blocks A, B, C, etc. in Table 4-5) is maintained.

West End Town Center

Properties within the West End Town Center are envisioned for a minimum FAR of 2.0 and a maximum FAR of 2.5 to encourage regional scale development at this prominent entry into Alexandria. Full development of the Regional Activity Center is intended to achieve an overall land use mix of approximately 70% office, retail and related commercial uses, and 30% residential uses, in order to maximize the potential for regional office and retail development. The development of Landmark Mall as a major economic activity center for the City was one of the important recommendations of the Economic Sustainability Work Group Final Report. The plan expands this concept to include the properties along the south side of Duke Street as part of the Town Center and its focus on economic activity.

A total of 8.7 million square feet of development is contemplated on the 82 acres of redevelopment sites within the West End Town Center area, compared to 1.3 million square feet of development on these sites today. Of this development, at least 3.75 million square feet must be office use and 1.0 million square feet must be retail use, maintaining the strong regional retail role of the Town Center. A major full-service hotel is required, with the potential for additional hotels provided. A minimum of 1.2 million square feet of residential use, or 1,000 to 1,200 residential units, is required to achieve the mix of uses and level of activity desired by the community at the town center. A maximum of 3.1 million square feet of residential development is permitted.

Pickett Place

Properties within Pickett Place are envisioned for a minimum FAR of 1.5 and a maximum FAR of 2.0, providing an incentive for redevelopment, but at a lower scale consistent with the community-level center being proposed. Full development of the Community Activity Center is intended to achieve an overall land use mix of approximately 70% residential uses and 30% retail, office, and related commercial uses, though a higher ratio of nonresidential uses is permitted in the event that the market for these uses becomes stronger in the future.

A total of 4.8 million square feet of development is permitted on 55.3 acres of redevelopment sites in Pickett Place, compared to approximately 850,000 square feet of development on these sites today. A minimum of over 450,000 square feet of retail use is proposed, providing both a strong community retail center and convenience centers for adjacent residential areas. A minimum of 250,000 square feet of this development capacity is to be reserved for office use, anticipating office demand as the character of the area changes with development of a more urban, mixed-use environment and improved transit service. A minimum of 500,000 square feet of residential development is required. Substantially more residential use is expected, and a maximum of approximately 3.7 million square feet of residential use is proposed in accordance with fiscal sustainability guidelines.

Development targets by land use are established for each development block as a guide to achieving the overall land use mix within West End Town Center and Pickett Place. Development targets provide guidelines for review of CDD development plans, and should be considered in light of development markets and conditions at the time of approval, and the mix of uses in previously approved CDD development plans within the planning area. While the maximums and minimums are important to achieving the plan's objectives, they are recommendations. During the development process, a land use mix outside the recommended mix ranges may be considered if a somewhat different mix better meets the Plan's objectives.

Table 4-4
Development Parameters for Redevelopment Blocks

Development Block ¹	Gross Site Area ² (acres)	Floor Area Ratio Maximum (Minimum)	Allowable (Minimum) Gross Floor Area ³	Land Use	Maximum Height Feet (stories ⁴)	Retail Minimum ⁵	Residential Maximum (Minimum)	Office Minimum
West End Town Center								
A. Landmark Mall	51.48	2.5 (2.23)	5,606,000 (5,000,000)	Regional Town Center	85 - 250 (5-25)	800,000	1,800,000 (1,200,000)	2,500,000
B. Choi	8.21	2.5 (2.0)	895,000 (715,700)	Regional Town Center	85 - 150 (5-15)	10,000	300,000	500,000
C. Millennium/ Saul Centers	12.46	2.5 (2.0)	1,357,000 (1,085,500)	Regional Town Center	85 - 150 (5-15)	125,000	445,000	700,000
E. Van Dorn Plaza	10.67	2.0 (1.5)	930,000 (697,000)	Residential/Office Mixed Use	65 - 85 (4-8)	100,000	550,000	50,000
Total Town Center	82.82		8,788,000 (7,498,200)			1,035,000	3,095,000 (1,200,000)	3,750,000
Pickett Place								
H. Edsall/ Van Dorn North (part ⁷)	5.35	2.0 (1.5)	466,000 (350,000)	Residential Mixed Use	65 (4-6)	25,000	325,000	0
I. Koons Collision	13.86	2.0 (1.5)	1,207,000 (905,000)	Residential Mixed Use	65 - 85 (4-8)	60,000	800,000	50,000
J. Edsall/Pickett/ Van Dorn	23.25	2.0 (1.5)	2,025,000 (1,519,000)	Mixed-Use Community Retail Center	65 - 120 (4-12)	250,000	1,450,000 (500,000)	200,000
K. Auto Dealer	5.09	2.0 (1.5)	443,000 (332,000)	Residential Mixed Use	65 - 85 (4-8)	12,000	431,000	0
M. Gateway II Pickett	7.80	2.0 (1.5)	669,000 (509,500)	Residential Mixed Use	65 - 85 (4-8)	12,000	657,000	0
Total Pickett Place	55.34		4,810,000 (3,615,500)			359,000	3,673,000 (500,000)	250,000
Total Development Sites	138.17		13,598,000 (11,113,700)			1,394,000	6,768,000 (1,700,000)	4,000,000
Max nonresidential with max residential			6,841,000					
Max nonresidential with min residential			11,909,000					

Notes:

1. Data is provided only for blocks expected to redevelop for mixed use. Existing residential properties are not expected to be redeveloped.
2. Site area is approximate based on the best available information.
3. Gross Floor Area based on 2.5 floor area ratio (FAR) north of Stevenson Avenue and 2.0 FAR south of Stevenson Avenue, should be adjusted based on surveyed site area. Site area for FAR calculations includes required setbacks, rights of way and public open space to be dedicated. GFA shown is only available through rezoning and development under a CDD Special Use Permit with development plan. Below-grade active uses and structured parking levels at or above grade are included in floor area. Below-grade parking is not included. Below-grade parking area equal to site area excluding rights of way is required before above-grade structured parking is permitted. See Chapter 7 for detailed discussion of structured parking.

Table 4-5
Existing Development and Development Permitted Under Existing Zoning

Development Block	Gross Site Area (acres)	Existing Development		Development Permitted under Current Zoning	
		FAR	Floor Area (sq ft)	FAR	Floor Area (sq ft)
A. Landmark Mall	51.48	0.44	978,488	1.00	2,242,469
B. Choi	8.21	0.24	86,256	2.00	688,287
C. Millennium/Saul Centers	12.46	0.25	134,568	2.00	1,085,515
D. Foxwood Place, The Fields	19.08	0.67	556,072	1.26	1,045,940
E. Van Dorn Plaza	10.87	0.24	111,321	0.75	355,123
Total Town Center	102.10	0.42	1,866,705	1.22	5,417,334
F. Landmark Terrace	7.98	0.67	233,120	1.25	434,511
G. EOS-21	40.65	0.78	1,376,880	1.24	2,200,942
H. Edsall Road	10.94	0.70	333,870	1.23	587,988
I. Koons Collision	13.86	0.15	93,474	0.75	452,806
J. Edsall/Pickett/Van Dorn	23.25	0.55	552,085	0.96	978,071
K. Auto Dealer	6.10	0.27	71,908	0.63	166,150
L. Mini Storage	2.43	0.31	32,689	0.75	78,939
M. Gateway II	7.80	0.53	181,166	0.75	254,751
Total Pickett Place	113.01	0.58	2,875,192	1.05	5,154,158
N. Summer's Grove	11.57	0.70	352,688	3.00	1,512,360
O. Metro Parking	5.50	0.00	0	3.00	718,590
P. Metro Station	2.08	0.00	0	0.50	45,223
Total Metro	19.15	0.42	352,688	2.73	2,276,173
Total Planning Area	234.26	0.50	5,094,585	1.26	12,847,665

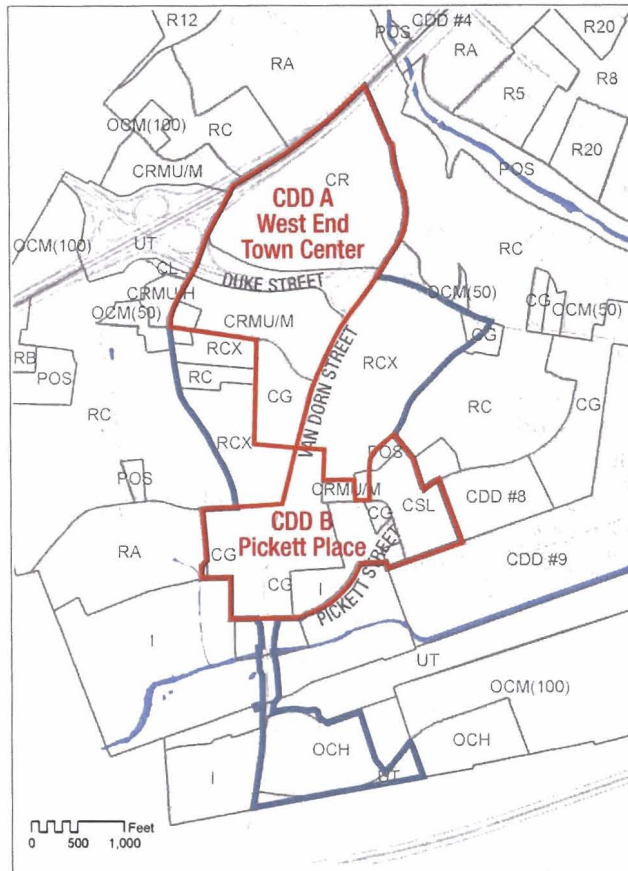


Figure 4-12. Proposed CDD Zoning. Areas proposed for CDD zoning are outlined in red. Two new Coordinated Development District zones are proposed, one for West End Town Center, and one for Pickett Place. Rezoning would be considered on application by property owners, and would be subject to approval of a detailed development and implementation plan reflecting the recommendations and design guidelines of the Landmark/Van Dorn Corridor Plan.

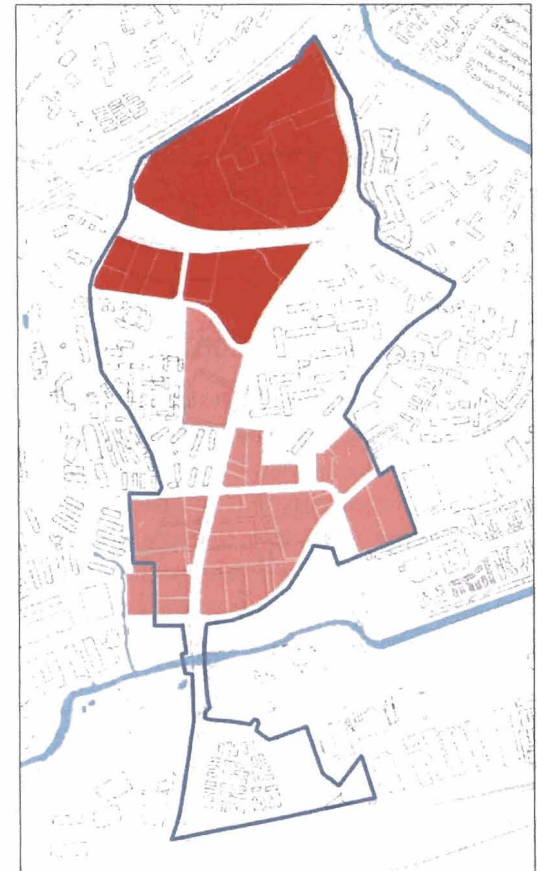


Figure 4-13. Proposed Floor Area Ratio (FAR) with CDD Rezoning. The maximum floor area ratio proposed for West End Town Center parcels north of Stevenson Avenue is 2.5. For parcels south of Stevenson Avenue, proposed CDD floor area ratio is 2.0.

4.5. Other Land Use Issues

Several additional land use concerns were raised by participants during the planning process and are addressed below:

- Retain and provide affordable housing
- Ensure that capacity is available or will be provided in the sanitary sewage collection and treatment system.

Affordable and Workforce Housing

The years since 2000 have seen housing costs in the Washington, D.C. metropolitan area rise much faster than incomes, causing a substantial reduction in the number of housing units affordable to low- and moderate-income households in Alexandria. From 2000 to 2007, annual incomes have increased 14% from \$82,800 to \$94,500. However, the average monthly rent for a two-bedroom apartment in Alexandria increased by 47% from \$1,034 to \$1,519. The changes in the housing market also resulted in the conversion of a number of the City's more affordable apartments to condominiums, further restricting affordable housing choices. In 2000, Alexandria had 18,218 housing units that were affordable to households earning at least 60 percent of the median income. In 2007, there were only 8,456 units affordable to households in that income bracket. This shift in housing affordability will challenge the City's ability to sustain the economic and cultural diversity that is important to the vision for Alexandria and important to the character of the West End.

In 2007 and 2008, housing prices in Alexandria stabilized, and in some cases declined. However, price reductions were greater for homes priced above the City median, and housing affordability is only modestly improving for households earning at or below the area median income. For the future, the continued growth of the national capital region, and the City's advantageous location within that region, is likely to make it increasingly difficult to maintain a significant share of affordable housing without public regulatory or financial intervention. If prices and rents increase faster than incomes,

the City stands to lose much of its remaining economic and cultural diversity over the next decade.

The definitions of "affordable" and "workforce" housing can vary. At the recommendation of the City's Affordable Housing Initiatives Working Group, the City Council adopted these definitions in June, 2008:

Rental housing is affordable when households earning up to 60 percent of the area's median income can afford the monthly rent, and it is considered workforce housing when households earning up to 80 percent of the area's median income can afford the monthly rent.

For-sale housing is affordable when households earning up to the mathematical 80 percent of the area's median income can afford the monthly mortgage payment, and it is considered workforce housing when households earning up to 120 percent of the area's median income can afford the monthly mortgage payment.

Virginia law prohibits the City from enacting the broad inclusionary housing requirements available to cities in many other states. Inclusionary housing laws can require all developers to include a substantial share of affordable housing in new development projects. Virginia law permits the City to request voluntary affordable housing contributions from developers and to offer increased density as an incentive for developers to provide affordable housing. The City's affordable housing formula outlines developer contributions for three situations, or "tiers:"

The preservation or replacement of existing assisted and/or market rental units is the primary emphasis of the Landmark/Van Dorn affordable housing strategy, in an effort to maintain the current level of assisted housing and to prevent further losses of market affordable housing. Workforce housing is also a desirable element of mixed-income redevelopment, and is a secondary element of the affordable housing strategy, to be achieved only when financially feasible to do so in addition to meeting the affordable rental housing goals.

In cases where the developer is not requesting additional density, the formula calls for a voluntary contribution of \$1.50 per square foot of new commercial development and rental housing and \$2.00 per square foot of new for-sale housing.

In cases where the developer is requesting a density increase allowed with a Special Use Permit or increase through rezoning to densities recommended in an area plan, the formula calls for a voluntary contribution of \$4.00 per square foot of increased density.

In cases where the developer is requesting a density bonus over and above the densities allowed with a Special Use Permit (or in this context, recommended in an area plan) the formula calls for one-third of all bonus units in the project to be affordable units.

Not all locations in Alexandria are appropriate for the density bonus program (Tier 3), since most of the City's permitted residential densities were established before the state law was enacted and allowing additional height and density may not be appropriate based on adjacent uses and available infrastructure. When preparing new area plans, there is greater certainty for both residents and developers if the plan recommends that density increases be achieved through rezoning (Tier 2), rather than through the bonus density program.

It is the intent of this plan that the current formula be followed while the area is in Phase I, with contribution requirements to be increased, successively, as it enters Phases II and III. Particularly after the area enters Phase II, affordable housing contributions are likely to be requested in the form of units preserved in an existing affordable property, possibly through partnerships with non-profit organizations or other property owners. New, on-site housing would be requested only when such units could be provided in substantial numbers and/or could be deemed replacement units for current affordable units, including public housing units.

The apartments and condominiums in Landmark/Van Dorn provide a substantial resource of affordable and

workforce housing for Alexandria. Figure 2-22 shows the distribution of household incomes for Landmark/Van Dorn's three census block groups that include existing residential units in 1999, the most recent year for which data is available. Of the 2,355 households living in the planning area at the time of the 2000 census, 1,758, or 75%, had year 1999 household incomes lower than the median household income for the Washington, D.C. metropolitan area and the City of Alexandria as a whole.

The existing market rate housing in the Landmark/Van Dorn Corridor planning area consists of multi-family rental housing and townhouses:

- The EOS 21 garden apartment complex was built in 1967 and consists of 1,180 units, of which just over half are one-bedroom, for which rents range from \$1,175 to \$1,430 per month. There are 236 efficiencies (\$1,000 to \$1,115) and 340 two-bedroom units (\$1,505 to \$1,740). Units at the northern edge of the complex were converted to condominiums; in 2007 sales prices ranged from \$158,500 to \$325,763.
- Foxwood Place was built in 1973 and consists of 76 efficiencies renting from \$985 per month, 133 one-bedroom units renting from \$1,230 per month, and 19 two-bedroom units renting from \$1,775 per month.
- The Landmark Terrace apartment complex was built in 1964 and consists of 224 units, of which 96 are efficiencies renting from \$1,050 per month, 113 are one-bedroom units renting from \$1,300 per month, and 15 are two-bedroom units renting from \$1,600 per month.
- The Fields at Landmark garden apartment complex was built in 1965 and consists of 290 units, of which 3 are efficiencies renting for \$825 per month, 99 are one-bedroom units renting for \$950 per month, 134 are two-bedroom units renting for \$1,150 per month, and 54 are three-bedroom units renting for \$1,188 per month. All of these units are

1999 Household Income, Landmark/Van Dorn Plan Area
Census 2000, by Block Group

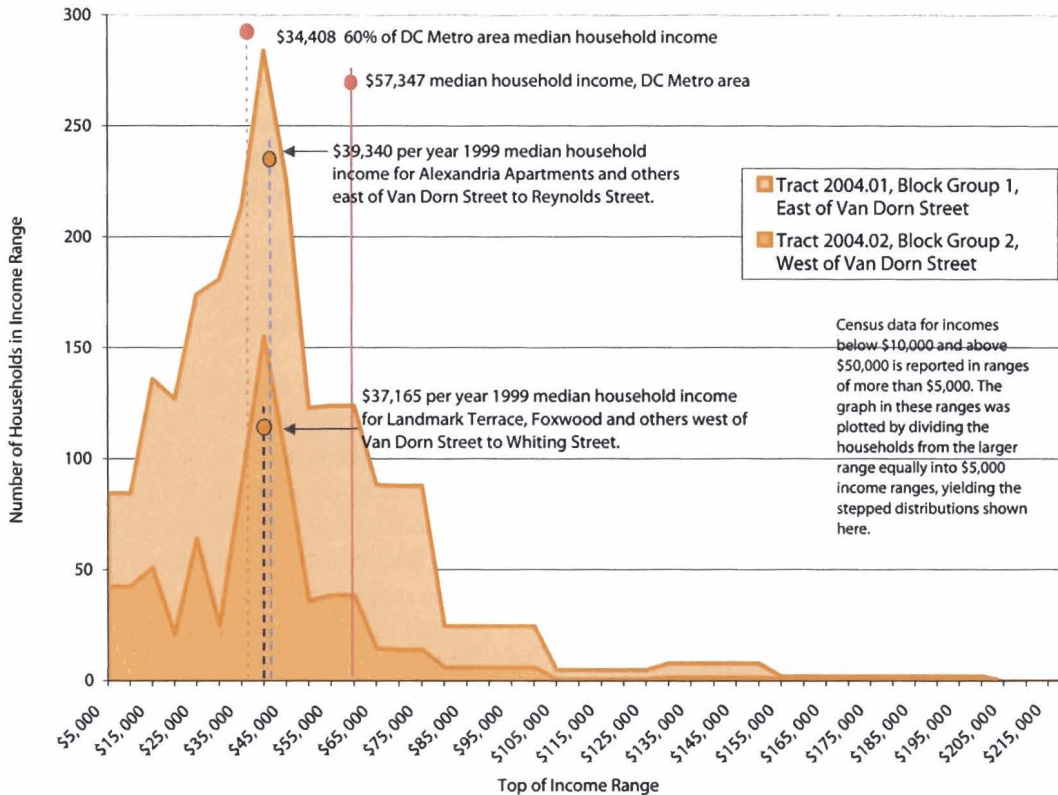


Figure 4-14. Household Incomes in the planning area, Census 2000. This graph illustrates that the housing in the planning area provides housing for households with incomes substantially below the areawide median. While both rents and incomes have changed substantially since 1999, the housing stock in the area continues to provide housing for households with moderate incomes. This housing is a valuable resource to the City in meeting its objective to be a community that is economically diverse.

currently assisted under the Low Income Housing Tax Credit Program.

- Brent Place, formerly known as Essex House, a mid-rise apartment building built in 1975, consists of 207 units. Of these, 50 are one-bedroom units renting for \$995 per month, 105 are two-bedroom units renting for \$1,195 per month, and 52 are three-bedroom units renting for \$1,474 per month. This property was built as assisted housing under

the Section 236 program, and is now assisted under the Low Income Housing Tax Credit Program.

- The Reynolds Street public housing scattered site (a portion of the Braddock/Whiting/Reynolds development) consists of 18 units on South Reynolds Street, constructed in 2005. Residents of this development pay 30 percent of their incomes for rent. The companion Whiting Street scattered site is located immediately to the west of the plan area.

- The Summers Grove townhouse community was built in the mid-1990s near the Van Dorn Metro and consists of 192 homes. In mid-2008, home prices averaged \$450,000.

The majority of the City of Alexandria's "affordable housing" stock is privately owned and rents at market rates. While this stock has been rapidly dwindling citywide, the West End is home to a large percentage of the City's privately-owned market-rate affordable and workforce housing. The West End has 53% of the City's total housing units. The West End has 66% of the City's market rate rental units (in complexes of 10 units or more), and 63% of the City's market rate affordable rentals. Affordable means affordable to households earning no more than 60% of the area median income.

According to the Office of Housing, within the planning area there are 965 housing units affordable to households earning up to 80 percent of the area's median income. Of these, 204 are affordable to households earning 60% or less of the area's median income.

Surrounding the planning area, there are 4,005 housing units affordable to households earning up to 80 percent of the area's median income. Of these, 187 are affordable to households earning 60% or less of the area's median income.

The apartments and condominiums in Landmark/Van Dorn provide a substantial resource of affordable and workforce housing for Alexandria. The majority of the City of Alexandria's "affordable housing" stock is privately owned and rents at market rates. While this stock has been rapidly dwindling citywide, the West End is home to a large percentage of the City's privately-owned market-rate affordable and workforce housing. In view of this fact, the Plan does not encourage the redevelopment of the existing affordable housing and proposes no change to the current zoning or land use designation of these sites. These sites are included within the boundaries of the plan to ensure that the area is comprehensively planned, to identify these sites as targets for preservation of affordable and workforce housing, and to

indicate that there is a requirement for new framework streets and smaller blocks through these properties in the unlikely case that redevelopment is proposed that conforms with existing densities and zones. The Plan strongly acknowledges these sites as potential opportunity sites for fulfillment of developer affordable housing contributions through preservation of existing units.

With regard to the provision of new housing as part of mixed-use developments, the Plan recommends a phased approach to developer contributions that could include a cash contribution, preservation of existing affordable units, and new on- or off-site units. The City will also seek opportunities to secure public housing units within private development proposals. See Chapter 9.0, Implementation, for more details.

The City is about to undertake a Housing Master Plan to comprehensively address housing issues and policies throughout the City. As the Housing Master Plan is developed, the City will develop strategies and tactics to preserve existing affordable and workforce housing that will be applied in the plan area. In addition, a new task force is being established to make recommendations on developer contributions to affordable housing. If new citywide policies or guidelines are adopted, they may supersede those in adopted small area plans, although it is expected that these efforts will take into account the small area plan recommendations for Landmark/Van Dorn and other plan areas.

Retention of Local Businesses

Residents expressed a desire to continue to provide an opportunity for small, local businesses in the Landmark/Van Dorn Corridor that makes the area unique and gives it an international character. Residents are concerned that redevelopment of the area will bring higher rents in new centers, and that existing independent retailers and restaurants will be forced out due to higher rents or developer preferences for national tenants that can afford the space.

Both the replacement of local businesses by franchises and national retailers and the replacement of industrial users by office, retail or other uses that generate higher returns for landowners are driven by private market trends that are difficult to influence through public sector action. The new retail space provided within mixed-use developments will likely command rents that are difficult to afford for smaller businesses compared to space in older or more marginal shopping centers. The Plan recommends that a portion of space within new developments be reserved for small and local businesses, an approach that has been successfully used in the District of Columbia. Another possibility is outreach to owners of successful local businesses to consider opening establishments (e.g., a second restaurant location) within redevelopment in the Landmark/Van Dorn Corridor. Business operators are encouraged to work with the Alexandria Economic Development Partnership (AEDP) and the Small Business Development Center (SBDC) so that the strongest businesses are able to stay through the redevelopment process.

Community Facilities

Beyond the immediate boundaries of the planning area, a number of community facilities are available to residents, including the Charles E. Beatley, Jr. Central Library and several public schools. However, during the planning process residents voiced a concern that there is a lack of community facilities within the planning area. The Landmark/Van Dorn Corridor lacks community facilities, parks, and public open space within easy walking distance. The Department of Recreation, Parks and Cultural Activities (RPCA) has identified the need for a multi-generational community/recreation center in or near the planning area to serve West End residents, and the Plan recommends that a community/recreation center be provided within the Landmark/Van Dorn Corridor.

A study to identify specific needs and feasibility of the community/recreation center is recommended as an early implementation measure so that the City can take advantage of redeveloping sites, such as the Landmark

Mall. The redevelopment of the Mall offers an opportunity to partner with the private sector to build the new center and the Plan recommends that, should the feasibility study support the location of the center at the Mall, the floor area of the new center would not count against the proposed 2.5 FAR at the Mall site.

Public Schools

After years of relatively stable enrollments, Alexandria City Public Schools has in the past two years experienced relatively rapid enrollment growth. Total enrollment decreased from 11,345 students in fiscal year (FY) 2001 to 10,332 in FY 2007. However, between FY 2007 and FY 2009, enrollment increased 8.6 percent to 11,225.

It is not clear at this time whether the recent enrollment increase will continue, and if so, at what pace. Although the long-term school capacity needs are not certain, the Plan provides recommendations to meet the potential need for additional school capacity to serve student enrollment generated by the additional residential development called for in this Plan, increases in student enrollment from existing residential development, and capacity needs that may be created by changes in policies (such as class size) and programs.

The challenge of higher enrollments is most acute at the elementary school level, with more than half of the elementary schools at or near capacity.

The Landmark/Van Dorn Corridor planning area is within the service boundaries of two elementary schools, Samuel Tucker and Patrick Henry. Samuel Tucker's boundary encompasses all of the plan area south of Duke Street while the Patrick Henry boundary includes the current site of Landmark Mall. Currently, the number of elementary students living within the boundary of Samuel Tucker Elementary School exceeds that school's capacity. However, there is some capacity for additional enrollment at Patrick Henry.

The type of residential development envisioned by this plan typically attracts few families with student-age children. Although for economic reasons more families with children may be living in multi-family housing than before, the overall student generation rate for multi-family housing is quite low. Moreover, families with children are much more likely to choose an existing garden-style apartment than a new building of 5 stories or more. Using standard student generation multipliers, the number of elementary students that can be expected to be generated by the residential development in this Plan could be accommodated by eight to twelve additional classrooms. As new residential development projects are

approved, the City should determine if developer contributions toward new school capacity are needed, commensurate with the expected additional enrollment. The Implementation chapter of this Plan provides guidelines for developer contributions for school capacity increases.

Alexandria City Public Schools prefers that elementary schools not exceed 600-650 students, with class sizes limited to approximately 20. In order to accommodate enrollment growth in the area, there are expansion opportunities at Patrick Henry and at James Polk, which is also nearby. The number of elementary students that would be generated by planned residential development in the Landmark/Van Dorn Corridor planning area could possibly be accommodated by the expansion potential at Patrick Henry and James Polk. However, Alexandria City Public Schools has not yet determined if additions to those schools are appropriate (if, for example, the core facilities of the schools can support additional classrooms) and if so, if those expansions might be needed to meet generally increasing enrollment.

With regard to additional sites for school facilities, the Landmark/Van Dorn planning area has few obvious options that meet the traditional criteria for a new public school. Over the life of this Plan, Alexandria City Public Schools' school site requirements may evolve as the City, and the West End, becomes more urban. If so, one or more sites within the Plan area may become suitable for a school or a school use. As the City reviews development applications for major parcels in the area, this Plan recommends that Alexandria City Public Schools be involved in evaluating the potential for that project to include a school site or contribute to school facilities.

The Plan does not encourage the redevelopment of the EOS21 apartment complex. Over the long term, if redevelopment of this complex moves forward, it could potentially provide land for public uses.

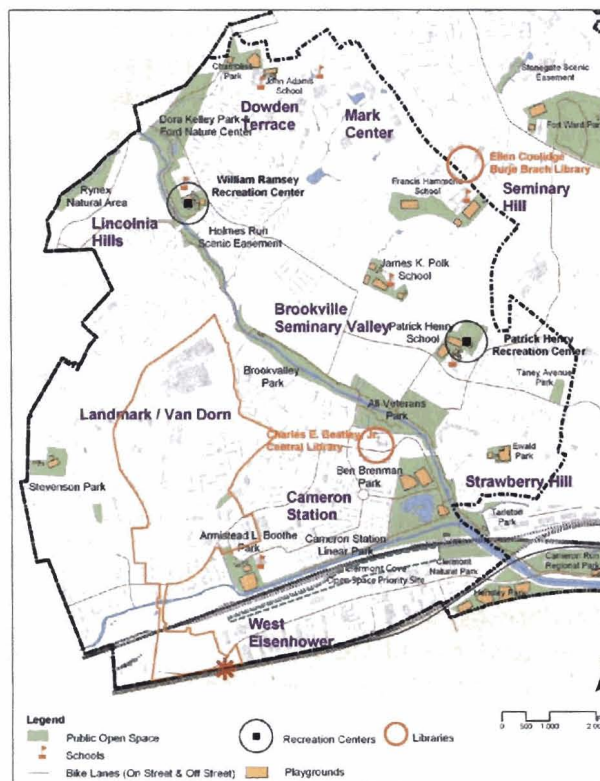


Figure 4-15. Community Facilities in the Landmark/Van Dorn Context Area. This figure shows parks, recreation centers, schools and libraries in the City in an area within about one mile of Landmark Mall.

Sanitary Sewer Capacity

The sanitary flow from this study area drains into the Holmes Run Trunk Sewer which carries the sanitary sewer effluent to the Alexandria Sanitation Authority Wastewater Treatment Plant. The City has conducted preliminary analyses of the sanitary capacity needs associated with the proposed redevelopment in this plan. These capacity needs have been analyzed with respect to the following systems:

- Available conveyance capacity within the local collection system.
- Available conveyance capacity in the Holmes Run Trunk Sewer.
- Available treatment capacity at the Alexandria Sanitation Authority Wastewater Treatment Plant.

Local Collection System

The City's local sanitary collection system in the immediate study area was analyzed using available GIS data relating to pipe sizes and slopes. This preliminary analysis showed that there may be areas within this local collection system that are surcharged for the projected sanitary flows and may need to be upgraded. Because much of this local system may be replaced through the normal redevelopment process, and since more accurate survey data relating to the collection system will provide more accurate results, each development application will be required to analyze the local system to determine if on-site and/or off-site improvements will be required to convey the proposed sanitary flows.

Holmes Run Trunk Sewer

The Holmes Run Trunk Sewer (HRTS) conveys sanitary flows from a large part of the City to the Alexandria Sanitation Authority Wastewater Treatment Plant (WWTP). The existing HRTS is currently surcharged at the lower end, near the WWTP. The City analyzed the HRTS with the projected sanitary flows associated with this redevelopment plan. This preliminary analysis indicates that the surcharging in the HRTS will increase

due to this proposed plan. The City and the Alexandria Sanitation Authority (ASA), owner of the HRTS, are currently studying alternatives for increasing the conveyance capacity in the HRTS. Current options being studied include, but are not limited to, increasing the diameter of the HRTS, constructing a parallel relief sewer, and constructing storage capacity along the HRTS alignment. Redevelopment projects within this study area will be expected to contribute to these capacity improvements to the extent that the projects contribute to the increase in surcharging within the HRTS.

Wastewater Treatment Plant

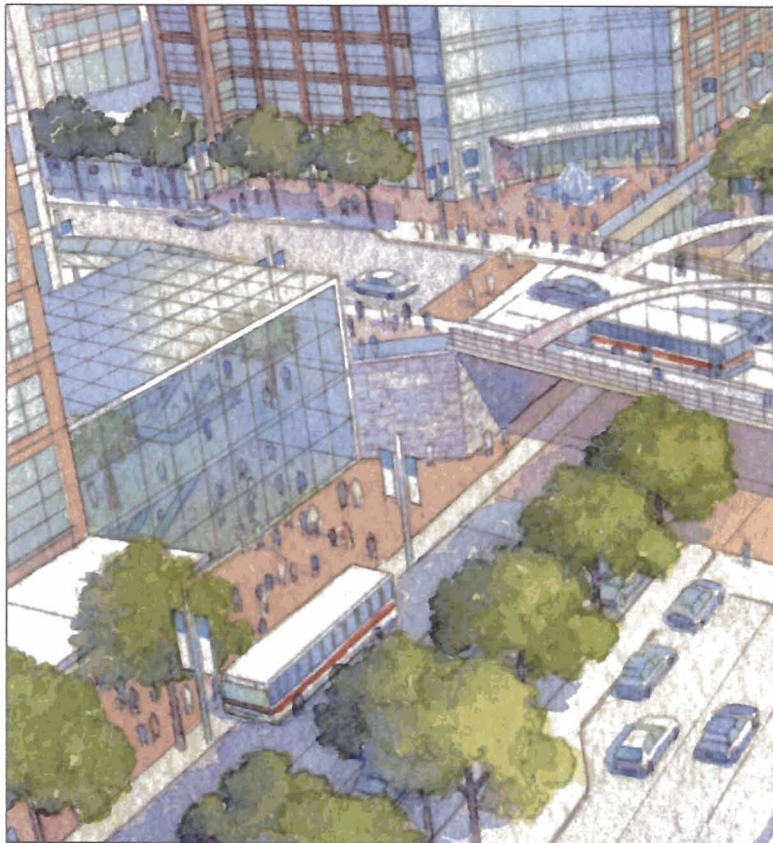
The City and the Alexandria Sanitation Authority have analyzed city-wide redevelopment projections which include this study area. These projections indicate that the existing WWTP does not have sufficient long-term capacity to accommodate the City's projected redevelopment. Additional capacity will be needed with regard to both effluent flows and nutrient removal requirements. The City and ASA are studying alternatives for accommodating these additional capacity needs. These alternatives include, but are not limited to, installation of low-flow devices in new development, sanitary effluent/water reuse, partial on-site sanitary treatment, nutrient discharge trading with other treatment facilities and capacity upgrades at the WWTP. Redevelopment projects within this study area will be expected to participate in and/or contribute to any technologies that the City determines to be appropriate for providing the necessary treatment capacity to accommodate this plan.

This plan recognizes that sufficient long-term sanitary sewer capacity does not exist to accommodate the projected redevelopment. Preliminary analyses have indicated that there is insufficient capacity in the local sanitary collection system, the Holmes Run Trunk Sewer (HRTS) conveyance system and treatment capacity at the wastewater treatment plant (WWTP). As discussed previously, the City is currently evaluating improvements and technologies to address these capacity needs. Appropriate solutions have not yet been determined and construction cost estimates are not available. However,

these improvements may likely include off-site improvements to the local collection system and the HRTS as well as on-site technologies to reduce flows to the WWTP. Redevelopment projects will be expected to provide improvements as part of the project approvals and/or contribute to improvements that will be implemented by the City. In addition, the City will be evaluating its sanitary sewer connection fee with regard to the level of funding necessary to construct the necessary sanitary sewer improvements. Redevelopment projects will be responsible for paying the connection fee that is in place at the time of the development plan approval.

Transportation

5



5.1. Existing Transportation Conditions

Regional Context

The Landmark/Van Dorn Corridor is located at a transportation crossroads. Two interstates (I-395 and Capital Beltway), a commuter line rail, a heavy rail line, and two major arterial streets (Van Dorn Street and Duke Street) provide access to and through the Plan area. These major transportation corridors create regional access; however, regional through trips and spillover traffic during congestion on the regional expressway system can severely impact local traffic within the Plan area. The Van Dorn Metro Station is located in the southern section of the Plan area.

The regional demand for travel from points south in Virginia, to employment centers in Arlington and Washington, DC is substantial. The combined traffic on I-395 and US Route 1 is over 200,000 vehicles per day. As an alternative, many commuters use the north-south access of Van Dorn Street, which is the only non-interstate north-south route between Backlick Road and Telegraph Road, a distance of 6 miles. Therefore, the traffic volume along Van Dorn Street is very high during peak hours. When the I-395 and Capital Beltway function without congestion, through traffic has a high speed alternative to Duke Street or Van Dorn Street. However, when the interstates experience heavy congestion, through traffic spills onto Duke and Van Dorn streets.

Transit

The Plan area is served by both commuter rail and regional and local bus service. Transit usage for commuting is well above the region as a whole. As reported in the 2000 Census, 18.2% of those commuting from the Plan area used public transportation, compared to 16.4% for Alexandria as a whole and 9.3% for the Washington, D.C. metropolitan region.

The Plan area is served by Metro rail service at the Van Dorn Street Station on the Metro Blue Line. However, Backlick Run and the Norfolk-Southern rail line are barriers between the station and the rest of the Plan area.

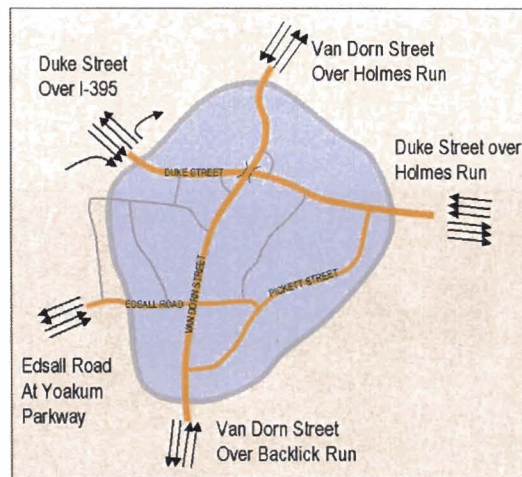


Figure 5-1. The existing street system limits access to the core of the planning area to five points, four of which are over bridges.

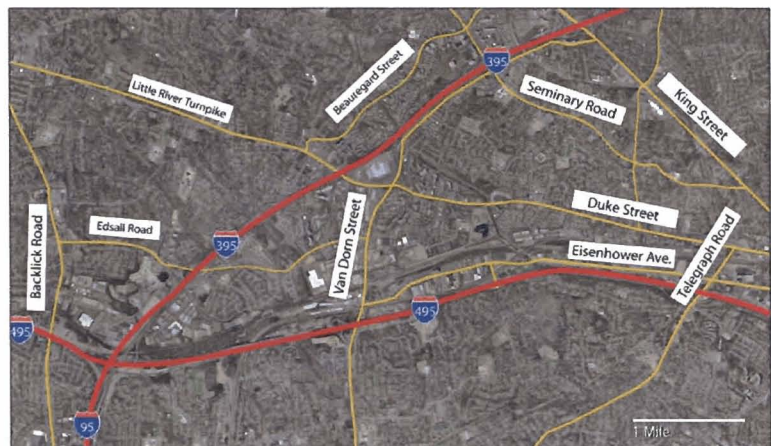


Figure 5-2. This figure illustrates the limitations of the local arterial roadway and expressway system in handling north-south traffic. Van Dorn Street is the only north-south link across the Capital Beltway between Telegraph Road and Backlick Road, a distance of six miles. Its location makes it a desirable short-cut for I-395 traffic to and from southeastern Fairfax County or across the Woodrow Wilson Bridge.



DASH bus at Van Dorn Street Metro Station



Backlick Run, industrial uses and rail lines separate the Van Dorn Street Metro Station from the Landmark/Van Dorn area.



Bus stop on Pickett Street has minimal amenities for riders.



Metro bus 25B on Pickett Street destined for Van Dorn Street Metro Station

Although the nearest residents of Cameron Station are less than 2000 feet from the Metro station, the walking distance to the station is more than a mile over the Van Dorn Street bridge. An average of 3,910 daily boardings was reported at the Van Dorn Street Metro in the 2005 Metro statistics. This is less than half the average of all Metro stations in the system, and is more typical of an outer suburban station.

There is an abundance of bus service, with three systems serving the Plan area directly. Fairfax Connector buses stop at Landmark Mall, on a route that connects George Mason University and the Pentagon along Braddock Road and I-395. The Washington Metropolitan Transit Authority (WMATA) operates five lines through the Plan area. Alexandria's DASH system operates four lines that serve the Van Dorn Street Metro Station and Landmark Mall with connections to Old Town and the King Street Metro Station along different east-west streets. The DASH long-range plan expects two additional lines to be added in this area.

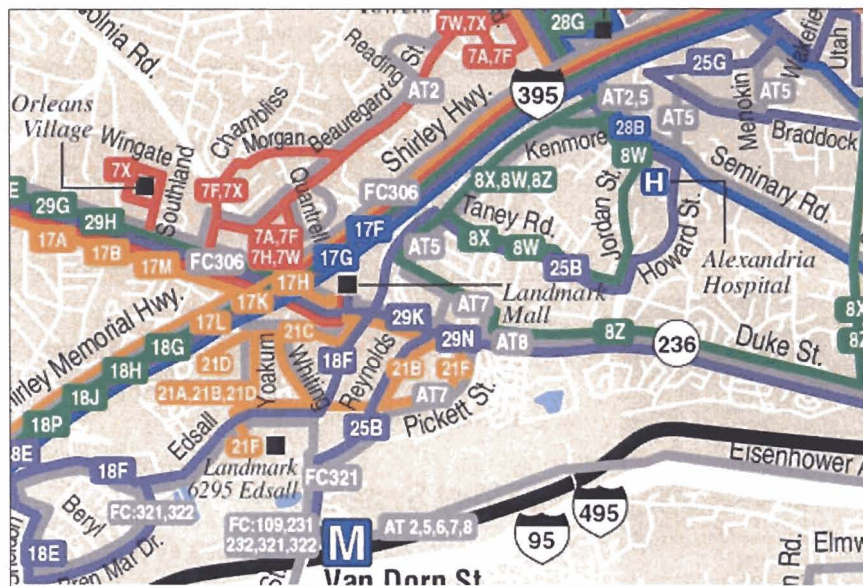
However, bus service has long headways and is generally uncoordinated. Peak-hour commuter service on each DASH bus route is typically every 20 to 30 minutes, providing 10-minute headways in many areas served by multiple routes. 30-minute to 1-hour headways are typical through the remainder of the day from 5:30 A.M. until 10:00 P.M. or later. WMATA and Fairfax Connector buses in the Plan area run less frequently. Service on all lines is less frequent on weekends. Landmark Mall is currently the most-used non-Metrorail station transit location in the City of Alexandria, reflecting its importance in the public transportation system as both a transit destination and a transit transfer point.

Street System

The street system in the Plan area is a classic suburban design characterized by a few major arterials that handle most traffic, a series of disconnected local streets, and "superblocks" that feature low intensity development, considerable surface parking, and multiple curb cuts.



Metro rail system. Because the Van Dorn Street Metro Station is near the end of the Metro Blue Line, Metrorail does not provide service in the area where many of those who work in Alexandria live. Metrorail provides good access to employment in the core of the Washington, D.C. metropolitan area for residents of the planning area.



Bus Service in the Landmark/Van Dorn Area includes DASH, WMATA and Fairfax Connector buses. The area has many bus routes, but frequent service is limited to peak commute hours.



Figure 5-3. Existing street system serving the planning area.

The two major arterials are Van Dorn Street and Duke Street which cross at separate grades. Because the two arterials are not supported by a network of parallel streets, both through traffic and local traffic must use these two roads to travel through the area. Blocks are two to five times as long as traditional blocks in Old Town.

Street access to Landmark Mall is counter-intuitive and awkward, particularly the "flyover" from eastbound Duke Street into the Mall, which also creates a barrier between the mall and the rest of the Plan area and is a particular barrier to pedestrians. Access is further complicated by the need to accommodate considerable mall-bound traffic arriving from nearby I-395 as well as traffic exiting the mall bound for I-395. Circulation within the Mall is complicated, and it is difficult for first time visitors to navigate.

Currently, the area experiences traffic congestion during peak hours, with reduced speeds and longer wait times at signalized intersections. Under normal circumstances, traffic continues to flow and most signals clear during a normal cycle.

Pedestrians and Bicycles

The development pattern and transportation network in the Plan area places pedestrians at a disadvantage. Roadway characteristics, especially along Duke Street and Van Dorn Street, include wide vehicle travel lanes, wide turning radii and free right-turn lanes. These conditions lengthen the time needed by pedestrians to cross the street, put pedestrians out of drivers' zones of vision, and encourage high-speed turns that are a hazard to pedestrians.

The presence of the large superblocks means long distances between crosswalks (as much as 1/4 mile on Van Dorn Street and 1/2 mile on Duke Street) and long-way-around walks to local destinations. Compounding the problem of superblocks are parking lots located between the street and the building. The result is that pedestrians

must often walk substantial distances in driveways or through parking lots to reach residences or businesses from the street.

The sidewalk network is discontinuous, with examples Pickett Street in front of industrial uses in the southern part of the Plan area and across the Van Dorn Street Bridge over Duke Street. Where sidewalks do exist, they are often narrow, cluttered with utility poles and guy wires, and not well-maintained. These conditions further impede pedestrian access to the Van Dorn Metro.

The Plan area is less than 1.5 miles in length. While a lengthy walk, this distance is easily covered by bicycle in less than 15 minutes. However, the lack of bicycle infrastructure and the hilly terrain in the Landmark/Van Dorn Plan area create obstacles to bicycle and pedestrian travel. Relatively steep grades on north-south streets such as Van Dorn Street make operating bicycles in traffic more difficult on these routes. Holmes Run along the area's eastern edge does provide one dedicated bicycle route that is used mostly for recreational riding.



Bikes at Van Dorn Street Metro Station

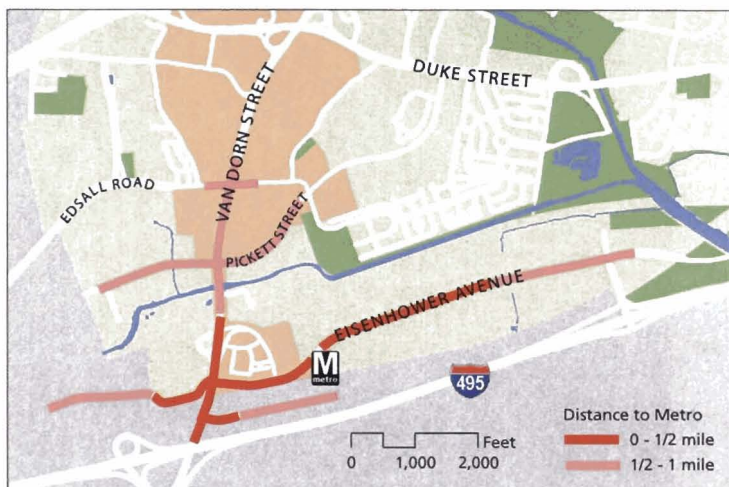


Figure 5-4. Walking distance to Metro. This map shows the walking distance to the Van Dorn Street Metro Station for distances up to one mile. Only within one-half mile can a substantial share of workers or residents be expected to walk to a metro rail station as part of a commute trip. None of development sites in the planning area are within one-half mile of the station on foot.

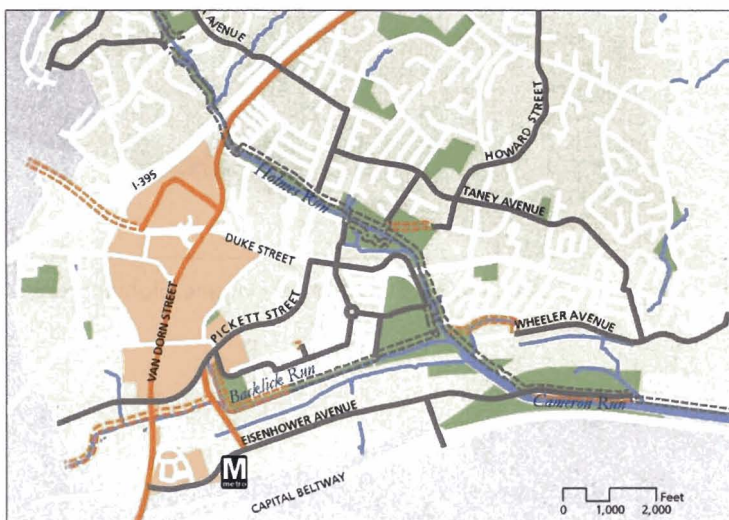


Figure 5-5. Bicycle Paths in the Landmark/Van Dorn Area. This map shows the existing and proposed bicycle paths from the City's *Bicycle Circulation and Multi-Use Trail Master Plan*.





A wheelchair user negotiates three adjacent driveways on Van Dorn Street north of Pickett Street.



Pedestrians using the Van Dorn Street overcrossing of Duke Street must walk in the street.



Pedestrians must walk in the driveway to reach the Giant store at this site entrance from Van Dorn Street.



The intersection of Van Dorn Street and Pickett Street shows the gauntlet of high-speed right-turn lanes, large curb radii and driveways that challenge pedestrian travel.



Pedestrians have worn their own path to this auto-oriented restaurant set back from the street. From the other corner of the site, pedestrians enter via the driveway and cross one parking aisle and a passenger drop-off lane to reach the entry door.

Transportation Issues and Challenges

The following existing conditions make walking, bicycling, riding transit and driving challenging:

- Automobile-oriented development pattern of strip commercial and warehouse buildings with expanses of surface parking
- Large superblocks without controlled pedestrian crossings or pedestrian breaks mean long walks are required to nearby locations.
- The need for Landmark Mall access in the relatively short distance between I-395 and Van Dorn Street.
- Steep grades on parts of Van Dorn Street and Whiting Street make walking more difficult.
- Lack of a street grid means relying on busy arterial streets to make most local trips.
- Arterial streets with a high volume of traffic create a barrier to walkability
- Limited access into and out of the area helps manage through traffic, but means few choices if a route is slow because of accidents or construction.
- Proximity to I-395 provides a high degree of automobile accessibility, challenging the goal of a greater share of trips being made by transit.

5.2. Vision, Goals, and Principles

City of Alexandria Vision

In April 2008, the City adopted a comprehensive revision to its Transportation Master Plan. The Master Plan defines the City's vision and policies in six sections including Transit, Pedestrian, Bicycle, Streets, and Parking. The final section, Funding and Implementation, identifies process and policies to fund and implement the Plan.

As articulated in the Transportation Master Plan, the City of Alexandria envisions a transportation system that encourages the use of alternative modes of transportation and reduces dependence on the single-occupant vehicle. This system will lead to the establishment of transit-oriented, pedestrian friendly village centers, focused on neighborhood preservation and increased community cohesion, forming a more urban, vibrant and sustainable Alexandria. The City promotes a balance between travel efficiency and quality of life, providing Alexandrians with transportation choice, continued economic growth and a healthy environment.

Community Goals for Transit and Transportation in Landmark/Van Dorn

The Landmark/Van Dorn Advisory Group developed the following goals for transit and transportation in the Plan area:

- Create a more connected, urban grid system, with walkable blocks, to increase mobility for both pedestrians and vehicles.
- Increase transit ridership through reliable, convenient and coordinated transit services, with an emphasis on effective transit service on Van Dorn Street between Landmark Mall and the Van Dorn Street Metro Station
- Provide safe, convenient and attractive pedestrian and bicycle access to all transit nodes, centers and stations

- Provide off-street, dedicated pedestrian and bicycle paths to connect transit, activity centers, neighborhoods, open space, and community facilities.

Transportation Planning Principles

Based on the community's goals, the Advisory Group formed the following principles to guide the development of a multi-modal transportation system in the Landmark/Van Dorn area that will provide safe and convenient options for vehicles, pedestrians, bicyclists and transit:

- Address vehicular mobility through targeted capacity improvements and by developing a more interconnected street system.
- Develop a safe, pedestrian-friendly environment with walking connections from neighborhoods to activity centers.
- Develop a system of on-street lanes and off-street paths for bicyclists.
- Provide more frequent, reliable regional and local transit service, with connections to and between activity centers and the Van Dorn Street Metro.
- Ensure that the location and design of parking facilities support the transformation of Landmark/Van Dorn from a suburban, automobile-oriented to an urban, pedestrian-oriented environment:
- Place parking below grade to the greatest extent possible to minimize barriers to pedestrian movement, decrease the mass and bulk of buildings, and provide more ground-level open space.
- Locate any above-grade structured parking within a block lined with active uses.
- Limit surface parking where feasible to on-street parking or green parking courts.

5.3. The Landmark/Van Dorn Corridor: Transportation and Transit Vision for 2030

With this vision for the future, the Landmark/Van Dorn Corridor is a great place to walk. New streets connect the West End Town Center with new mixed-use neighborhoods in Pickett Place. Streets, squares and parks are busy with residents, workers and shoppers out for a stroll or for lunch at a local restaurant.

Those commuting to work have a variety of routes and modes of travel to choose from, and many walk, bike or take transit. Traffic speeds on tree-lined boulevards are kept moderate. Excellent regional rail and express transit service reduces through traffic on local arterials, and dedicated transit lanes make transit an efficient way to travel to destinations within and beyond the area.

Building a New Kind of Place

Consistent with the goals, principles, and vision for the Plan area, the Landmark/Van Dorn plan's land use and urban design framework seeks to create a more pedestrian-oriented environment, minimize vehicular trips generated by new development, reduce vehicular trips generated by existing development, and minimize the effect of individual vehicle travel on the performance of the street network.

These measures include:

- Require neighborhood-serving retail uses to be included in both residential and office projects so that many trips for convenience goods and services do not require a car.
- Maintain a balance between jobs and housing within the City, with special attention to preserving and providing workforce housing, to minimize the need for long commutes to jobs in other areas.
- Encourage a mix of employment and residential uses in higher-density areas so that peak-period trips are balanced by direction.
- Focus new development and redevelopment at higher density in areas with the best transit service.

- Design new developments around the pedestrian, with orientation of buildings to the street, convenient walking connections, and a safe, comfortable and interesting pedestrian environment.

The land use plan for the Landmark/Van Dorn Corridor anticipates substantial new development in the period from now until 2030. Approximately 5,000 residential units and several million square feet of non-residential development are proposed. Mixed-use development will help reduce the growth in peak-period travel demand from these new uses by providing opportunities for residents and office workers to shop on-site or nearby without having to drive. Local shuttles and regional transit operating in dedicated lanes will bring employees to the area and take residents to work. A denser pattern of both employment and residences will mean more opportunities for people to work in the same area where they live. A grid of local streets will provide options for local circulation without driving on Duke Street or Van Dorn Street.

5.4. Improve the Street System

The Plan recommends the creation of a walkable, urban environment with a well-connected local street system that supports driving, transit, bicycling and walking within the Plan area and to adjacent neighborhoods and the Van Dorn Metro station.

Street network improvements in the Landmark/Van Dorn Plan are intended to make the existing street network more efficient for individual motor vehicles and transit by addressing existing bottlenecks and improving connectivity. These improvements are not intended to increase the capacity of the street system for through travel. Instead, they provide better connectivity and more choices for local mobility so that travel time and distance are reduced. A result of this emphasis on local connectivity is that through traffic in the Landmark/Van Dorn area is minimized

The grid of urban streets will be created over the long term as properties are redeveloped by their owners. In the short term, pedestrian circulation can be improved immediately by apartment and shopping center owners who open up pedestrian connections through their sites to benefit their tenants and their tenants' neighbors.

Town Center Access over Duke Street

Improving access between the Landmark Mall site and the rest of the Plan area was a strong theme of issue

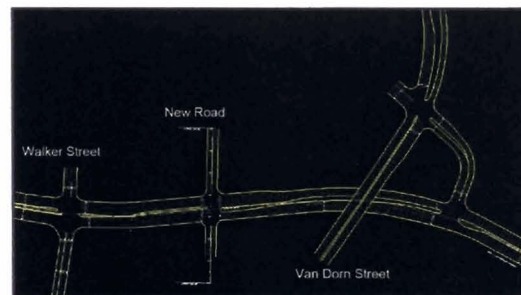


Figure 5-6. At-grade alternative. Alignment of Duke Street and New High Street with at-grade intersection as main entrance to Landmark Mall site. Alignments would be similar with a bridge connecting the two sides at an upper level, with the at-grade entrance used to access below-grade parking.

identification and design exploration by the Landmark/Van Dorn Advisory Group and local residents in community workshops. A number of potential design solutions for access to the mall site were explored during the planning program including the following:

- A "Dupont Circle" model in which a large traffic circle and open space feature was located at the Van Dorn Street overcrossing of Duke Street, with local access on frontage roads on Duke Street at the upper level and through traffic below
- A bridge over Duke Street between the main at-grade mall entrance and Walker Street.
- A bridge over Duke Street above a lower-level entrance to the mall site, located opposite the ramp from Eastbound Duke Street up to Van Dorn Street.
- An at-grade intersection opposite the ramp from eastbound Duke Street.
- Pedestrian bridges at one or more of the bridge locations.
- A bridge incorporating retail development.
- Direct access from I-395 ramps into the mall site.

All of these options included removal of the existing flyover ramp and substantial pedestrian improvements at the existing Van Dorn Street bridge over Duke Street to

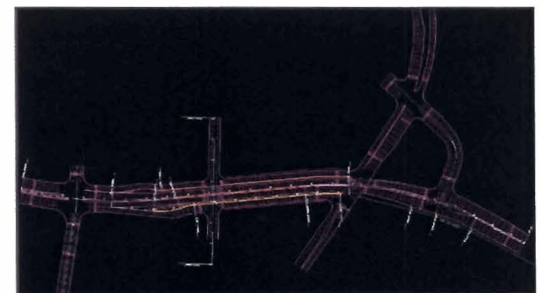


Figure 5-7. Frontage roads alternative. Alignment of Duke Street and New High Street with frontage roads along Duke Street at plaza level and through traffic operating at a lower level at the existing grade of Duke Street.

provide a safe and comfortable experience for pedestrians crossing to the mall site.

Important design criteria identified during the evaluation included the following:

- If a street is to have a continuous retail frontage, the grade should not exceed two percent. This element is a factor when comparing the at-grade mall entrance option with the option that includes a bridge over Duke Street, because the at-grade option produces grades well in excess of what is optimal for a retail street. This element is also a factor in designing the interior street network of the town center on the mall site.
- In order to provide adequate clearance for a bridge structure, the roadway surface of the bridge should be at least 25 feet above the roadway surface below. This requirement significantly limits options for locating the new bridge over Duke Street. The new bridge cannot be located much west of the ramp from eastbound Duke Street to Van Dorn Street ramp without causing the streets approaching the bridge to exceed a 2% grade.
- The changes in grade along Duke Street present significant challenges for entering and exiting ramps, requiring long transition areas for ramps serving more than one lane of traffic.
- Proximity to the I-395 interchange requires careful treatment of vehicular traffic arriving to and departing from the town center. The existing flyover ramp is counter-intuitive for drivers and creates a barrier for pedestrians.
- The changes in grade along Duke Street creates an opportunity to cut the parking costs for the redevelopment with a parking structure that, because of the topography, functions as underground parking.

These factors point strongly toward the preferred option, which is a bridge over Duke Street that is sited approximately at the location of the existing ramps to and from eastbound Duke Street at Van Dorn Street. This option

is preferred because it creates the functional retail and walking street that is needed to connect each side of the Town Center, because it allows the two transit lines to cross each other without conflict, and because it enables cost-effective underground parking solutions which may be needed to bring the redevelopment project to fruition.

An at-grade crossing at this location was determined to be an acceptable but significantly inferior option to make the connection because it does not provide any of the three benefits described above, and because the high traffic volumes, significant turning movements and dedicated transit lanes at this location would make it very difficult for pedestrians to cross Duke Street. In addition, the steeper grades would likely eliminate the possibility for retail along the cross street, further discouraging pedestrian use of that street. Pedestrian improvements to the Van Dorn Street bridge further east, while desirable, are not an effective substitute for the new bridge because the Van Dorn Street bridge is located on the edge, rather than in the center, of the new Town Center.

The concept of a bridge option with frontage roads along Duke Street (the "Dupont Circle" option) with bridge proved to be expensive to construct. It was also a less effective link between north and south because the frontage roads add to the perceived width of Duke Street

New High Street

"New High Street" is a major piece of new infrastructure that will connect the core of the Landmark Mall redevelopment to the balance of the West End Town Center across Duke Street. It then continues south to Pickett Street as a local-serving alternative to Van Dorn Street. Along the way, it greatly improves local connectivity while creating considerable market value for the adjacent parcels that will have additional street frontage. North of Stevenson Avenue, New High Street will also accommodate dedicated lanes for the new Van Dorn Street transit line as it makes its way through the core of the West End Town Center.

This new street is affectionately called “New High Street” in this Plan (there is already a High Street in Alexandria) because the term “high street” is sometimes used as a synonym for “main street” and because the street will cross one of the highest points in the Plan area.

New High Street may cross Duke Street on the new bridge or at grade. While the bridge is the preferred option, the at-grade option works for vehicular traffic but is problematic for pedestrians.

This street is intended to be used for transit, local traffic and for walking, a much calmer alternative to Van Dorn Street. Through traffic will be discouraged by narrow widths, on-street parking, and traffic controls.

Adding a Grid Network of Streets

While the street network of Landmark/Van Dorn will never resemble that of Old Town, the advantages of a grid network of streets can be achieved in the Plan area, which is critical to realizing the multiple transportation objectives of this Plan. In general, the new grid street pattern will emerge as part of the redevelopment process, as many of the new streets are either wholly contained or adjacent to parcels that are expected to redevelop. Of these, three are especially notable:

Pickett Place Main Street: This new main street will form the east-west spine for the Pickett Place neighborhood. In contrast to Van Dorn Street, this street will be relatively flat and ideal for a retail-lined walking street. The street intersects Pickett Square, halfway along its length, and is terminated to the east by a triangular plaza and the Armistead Boothe Park. To the west, the street is terminated by Van Dorn Street, where office buildings may be located, to take advantage of the exposure offered by the high traffic volumes along Van Dorn Street.

Metro Street: This new street runs perpendicular to Pickett Place Main Street and forms an important part of the overall street grid, by offering an alternative to Van Dorn Street for local traffic, and linking up

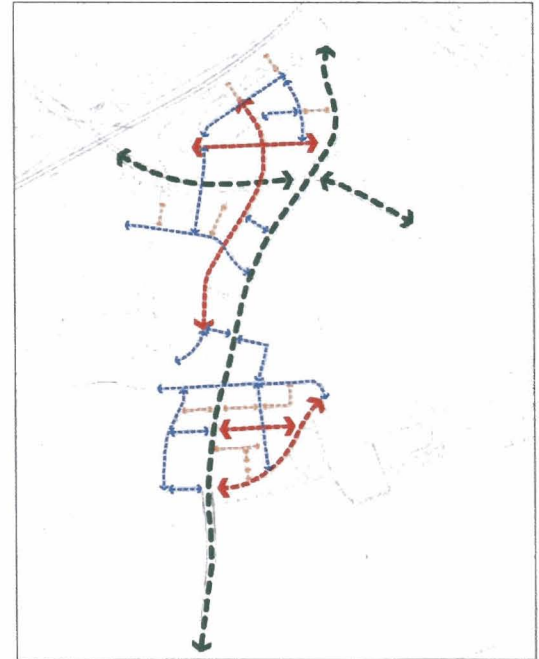


Figure 5-8. Red and blue lines show how additions to the local street network can provide alternatives to arterial streets (in green) and improve pedestrian connections throughout the planning area. with a multi-modal bridge to the south that crosses over Backlick Run to connect to the Van Dorn Metro. The design intent for this street is for it to be a major pedestrian link to Van Dorn Metro, and in the future to a recovered Backlick Run. The street also offers access to Pickett Place Main Street and Pickett Square, the neighborhood's major retail and open space amenities. In this area, the intersection of Edsall Road and Pickett Street has an awkward alignment and redevelopment provides an opportunity to improve the intersection's geometry.

Landmark Mall Main Street: This new street connects from Van Dorn Street to Walker Street through the current Landmark Mall site, and serves as the primary retail shopping street for the north part of the West End Town Center. This street provides a parallel street to Duke Street to the north for local circulation and local transit within the Town Center.



The graphics showing the location of the new streets are illustrative and actual design will be finalized at the time of redevelopment. The Plan recommends that new streets provided through the development process be public streets. Exceptions are subject to the review, and require the approval, of the Director of Transportation and Environmental Services.

Reconstructed Duke Street and Van Dorn Street

Later in this chapter is a discussion of recommendations to reconstruct Duke Street and Van Dorn Street to become transit boulevards with enhanced bicycle and pedestrian. The success of these reconstructions will depend on developer and City commitments to both changing the character of development (from suburban to transit-oriented) and substantially enhancing transit service. The reconstruction projects will also require phased implementation to accommodate locations where structures or parking now occupy the space where bus lanes and sidewalks are proposed.

Additional Access to West End Town Center

The Landmark Mall site abuts an entrance ramp to northwest-bound I-395. The Mall's structured parking is immediately adjacent to the ramp. There is potential for a right-in, right-out access point along the entrance ramp to the mall site. This Plan recommends that this option be pursued during the redevelopment process because a significant fraction of the Mall's visitors arrive via I-395 and this access point would allow some of them to avoid adding to congestion of Duke Street.

Bicycling Enhancements

In addition to separated bicycle lanes along Van Dorn Street between the dedicated bus lane and the pedestrian sidewalk, this Plan recommends developing Backlick Run Trail as a regional multi-use trail connecting the Holmes Run Trail to Turkeycock Run in Fairfax County.

To further support bicycle use, all new development will be required to provide safe, secure on-site bicycle parking, and non-residential redevelopment projects within the Plan area will be required to include shower facilities for bike commuters.

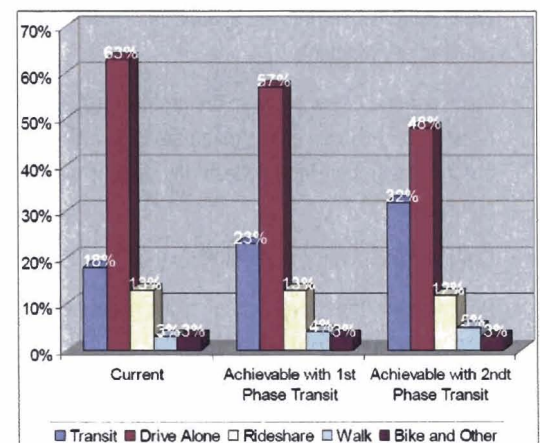


Figure 5-9. Travel mode share under existing conditions and future conditions estimated using regional transportation model.

5.5. Creating a Pedestrian Environment

Lack of walkability is the greatest obstacle to choice of modes in the Landmark/Van Dorn area. The pedestrian circulation plan for the Plan area will improve local access to local goods and services and transit, allowing residents and workers in existing and new developments to walk to services and transit easily. Design principles to achieve this objective include distributing local services better, providing pleasantly walkable neighborhood shopping areas, direct pedestrian connections, and minimizing conflicts between pedestrians and vehicles.

The principles for developing a pedestrian-oriented environment in the Plan area include the following:

- Develop a safe, pedestrian-friendly environment with convenient walking connections within neighborhoods and from neighborhoods to activity centers. Provide mid-block controlled pedestrian crossings on Van Dorn Street every 250-400 feet.
- Provide sufficient density and an appropriate mix of uses to ensure a high level of pedestrian activity in daytime and evening hours.
- Locate and design parking and parking access so that it does not interfere with walking, to support the transformation of Landmark/Van Dorn from a suburban, automobile-oriented to an urban, pedestrian-oriented environment.
- Place parking below grade to the greatest extent possible to minimize auto storage areas as an obstacle to ground-level pedestrian activities and connections.
- Limit surface parking to on-street parking.
- Provide pedestrian-level lighting along major pedestrian walkways and on retail streets.
- Provide regular, convenient pedestrian connections across streets.
- In retail and residential areas, design for low vehicle speeds and provide curb parking so pedestrians feel safe walking and crossing.

Figure 7-1 shows the proposed enhanced circulation grid in the Plan area, indicating both areas that have significant potential to redevelop in the short term, and areas that may or may not redevelop over the time horizon of the plan.

The pedestrian circulation system emphasizes the development of new streets that parallel Van Dorn Street and are located in the center of residential and in new mixed-use neighborhoods. These streets connect public open spaces and neighborhood shopping areas and provide a pedestrian focus for each neighborhood away from the traffic of Van Dorn Street. Regional pedestrian circulation and linkages between trail corridors are provided along Van Dorn Street in the enhanced boulevard setback area.

In the multi-family residential areas along Van Dorn Street and Whiting Street where redevelopment in the short term is unlikely, opportunities exist to substantially improve pedestrian connections. These pedestrian connections pass through existing garden apartment developments but are typically blocked by walls or fences at property lines. With the cooperation of property owners, these pedestrian barriers could be eliminated, providing greatly enhanced pedestrian access to transit and local destinations. The Plan recommends working with property owners to secure pedestrian access easements and to remove barriers to pedestrian movement.

The Plan recommends the following improvements to increase access and connectivity and pedestrian mobility:

- A new bridge over Duke Street between the Landmark Mall site at its new main entrance and the property now occupied by BJ's to the south will connect over Duke Street at a point where the street is approximately 20 feet below the current floor elevation of the stores on either side.
- Add sidewalk to existing Van Dorn Street bridge over Duke Street. The Van Dorn Street bridge currently does not provide space for pedestrians to cross the bridge safely, requiring them to take a half-mile

detour down to Duke Street at Walker Street or Ripley Street to cross. Pedestrian ways on both sides of the bridge, with well-marked pedestrian crossings of the ramps to Duke Street, are recommended.

- Multi-modal bridge from Eisenhower Avenue (near Van Dorn Street Metro Station) to Pickett Street. This link will connect the Metro station and activities on Eisenhower Avenue with Cameron Station and development along South Pickett Street.
- Ensure controlled pedestrian crossings every 300-500 feet along all streets.

5.6. Improved Regional and Local Transit

Another transportation principle expressed by the Advisory Group was the desire for more frequent, reliable regional and local transit service, with connections to and between activity centers and the Van Dorn Street Metro.

On average, 18% of those commuting from the planning area use transit. This is substantial for a non-urbanized area and higher than the 9% transit share in the region, however it is much lower than what could be achieved with higher density, transit oriented development and well-placed and reliable transit service. The recommendations in this Plan result in up to 27% share of commuters using transit in the Landmark/Van Dorn Corridor.

Consistent with the City's Transportation Master Plan, the Plan proposes dedicated transitways on Duke Street and Van Dorn Street. The Plan also encourages citywide improvements such as smart stations, real time information and more frequent service.

The City Transportation Master Plan has designated Duke Street and Van Dorn Street as dedicated transit corridors for a Primary Transit Network (PTN). This service will operate within dedicated lanes, it will have short headways, and it will run most of the day. It will be convenient, reliable and heavily used. The Duke Street line will travel from Old Town Alexandria to the City of Fairfax on Duke Street and Little River Turnpike. The Van Dorn line will travel from the Kingstowne area of Fairfax County to the Pentagon, utilizing Van Dorn Street and Beauregard Street in Alexandria. The corridors are depicted below:

The Duke Street transit line is coordinated regionally with the Transportation Planning Board (TPB) and the Washington Metropolitan Area Transit Authority (WMATA). It is included in TPB's Constrained Long Range Plan and is a "priority corridor" for WMATA, which means that it is recognized as a regional priority. The Van Dorn transit line is also included in regional plans for HOT lanes

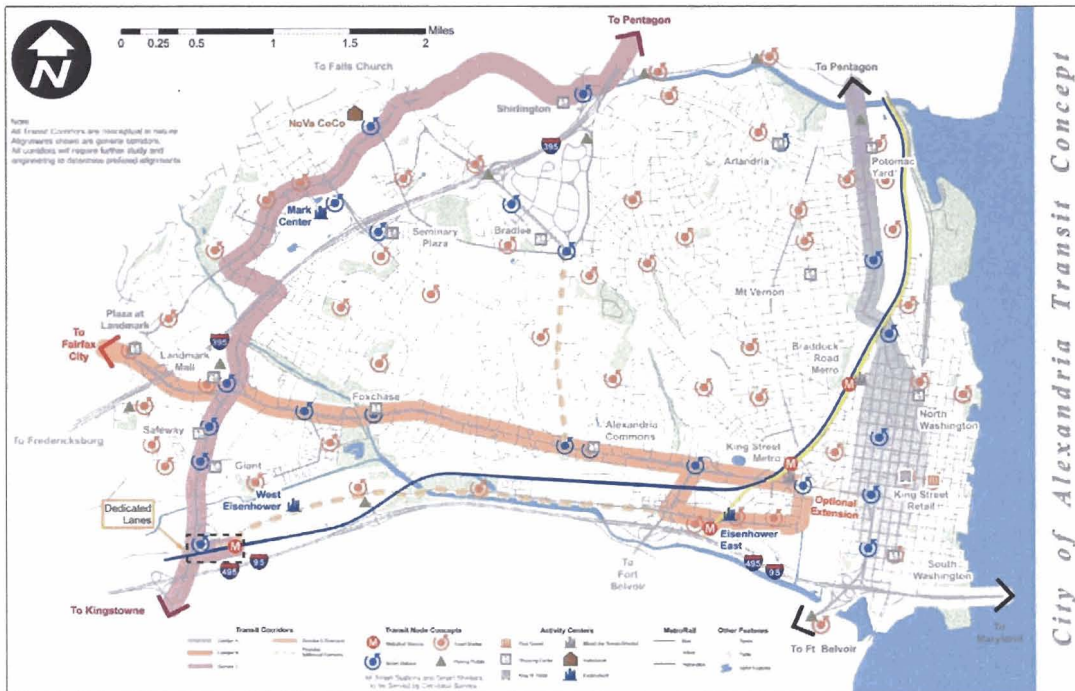


Figure 5-10. The recently adopted Transportation Master Plan provides for three transit corridors with dedicated lanes. Two of these corridors meet at Landmark Mall in the planning area.

on I-95/I-395, developed by Virginia's Department of Rail and Public Transportation and is indicated to be an emerging corridor in WMATA's "priority corridor" plan. The operating costs and equipment for the Van Dorn transit line will come from the High Occupancy Toll (HOT) lanes project.

The City is about to begin a study to determine how feasible exclusive transitways are on all three corridors listed in the City's Master Transportation Plan, including Duke Street from Old Town to the City boundary. This study will examine the technology or type of vehicle (light rail, bus, or other type) that will be used in these corridors. It will closely examine all engineering and community impacts of these services and will review possible technologies. This work will be closely coordinated with the adjoining jurisdictions through which the services will pass and with the transit agencies which may operate the service.

Van Dorn Street Transit Boulevard

The future transit service will travel on dedicated lanes in a mixed-mode corridor (see typical section). In addition to providing transit improvements, the landscaped boulevard will create a strong image for the Van Dorn



Figure 5-11. A local transit circulator could make stops at a number of employment and residential locations to take residents, employees and shoppers between Landmark Mall and the Van Dorn Metro station.

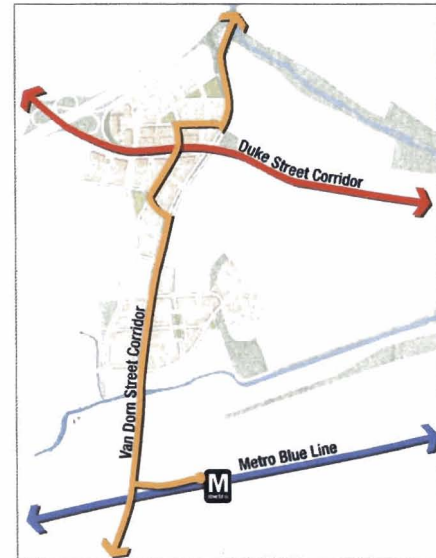


Figure 5-12. The primary transit network includes Metro and proposed transit service in dedicated lanes. Primary transit service is frequent and operates for extended hours both daily and on weekends.

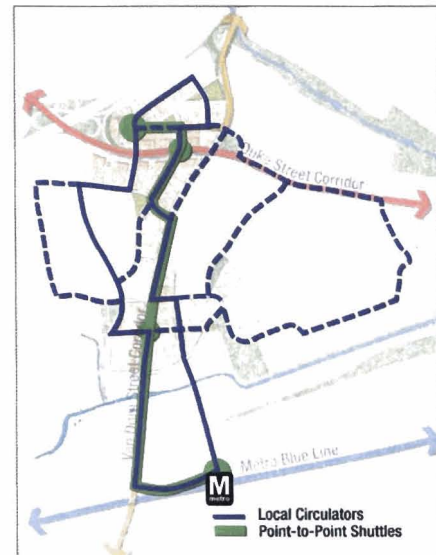


Figure 5-13. Secondary transit network. The secondary transit network provides local connections to employment, residential and retail centers, and connects to the primary transit network.

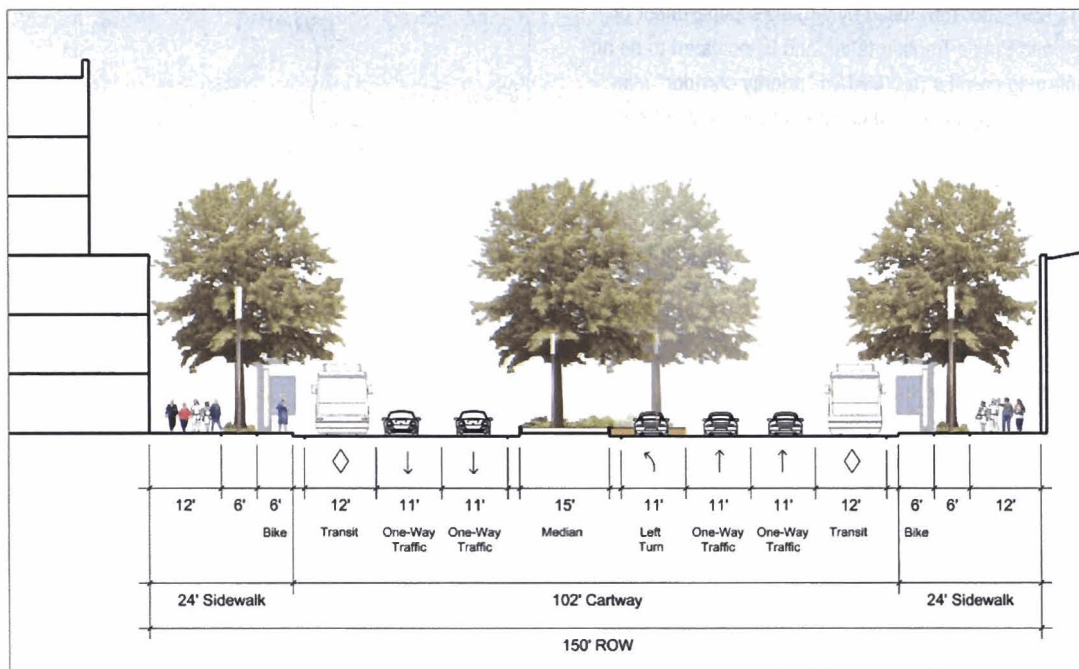


Figure 5-14. Van Dorn Street Transit Boulevard. This figure shows the proposed cross-section of Van Dorn Street north of Edsall Road with full development as a transit boulevard. The section is 10 feet wider south of Edsall to provide a second northbound left-turn lane at Edsall Road.

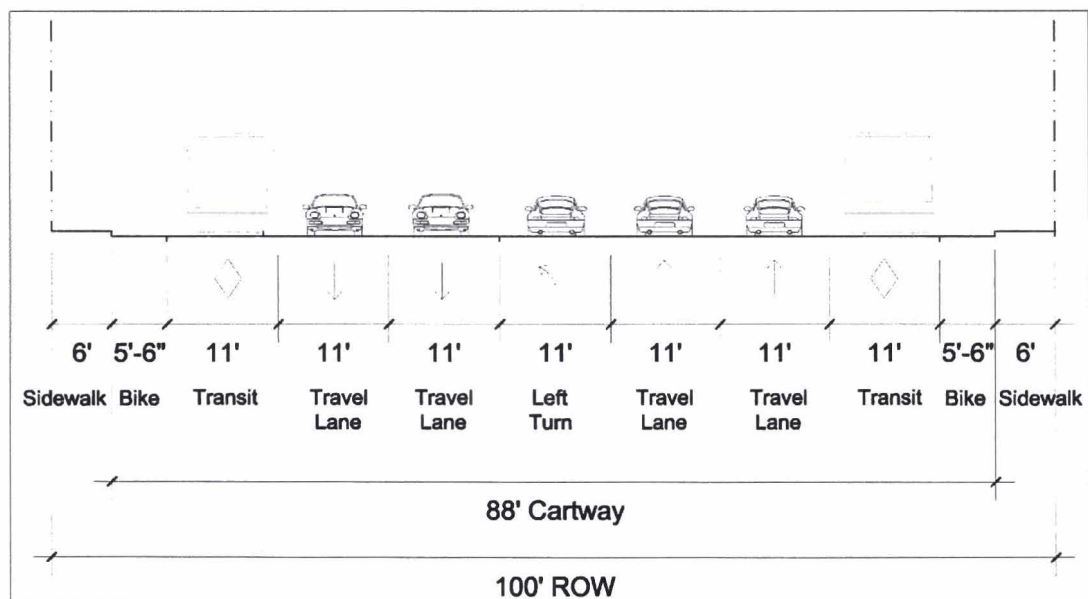


Figure 5-15. Dedicated transit lanes could be added within the existing street cross-section on Van Dorn Street if the median were eliminated and power lines relocated.

Street corridor from the Capital Beltway, as viewed along Van Dorn Street and from cross streets at intersections.

Because the travel lanes and median needed to create this strong boulevard appearance cannot fit within the existing 100-foot right-of-way, additional space on each side of the street is required for sidewalks and landscaping. To create an urban boulevard as a character-defining street for the area, a 25-foot setback area for sidewalks, bike lanes, street trees, landscaping and street-side activity spaces is proposed. The Plan envisions that completion of improvements in this setback area will occur at the time of site redevelopment.

Phased Implementation: It would be possible to add dedicated transit lanes within the existing 88-foot curb-to-curb width of Van Dorn Street, except where dual left-turn lanes are required. If dedicated transit lanes are to be provided in this phase, the existing median would need to be demolished and the overhead power line would be relocated. These changes, although limited, would require an expensive reconstruction of Van Dorn Street and the desired boulevard appearance would not be achieved. New developments along Van Dorn Street will be expected to dedicate right-of-way to accommodate the ultimate widening with a boulevard median, proposed transit lanes and boulevard setback at the time of redevelopment. The street would again be reconstructed with a median and widened to the new curb-to-curb width when the necessary right-of-way is obtained through a significant continuous section of the street.

Single Reconstruction Option: An alternative program would involve only one reconstruction of Van Dorn Street. Under this option, the new transit system would operate in mixed traffic on Van Dorn Street until the street is reconstructed to the full curb-to-curb width of just over 100 feet north of Edsall Road and just over 110 feet south of Edsall Road.

Because not all parcels along Van Dorn Street are expected to redevelop during the planning horizon, the City will need to reconstruct the street through much of the

Plan area in order to develop the dedicated transit lanes. In order to minimize cost and disruption to existing residential areas, a reduced sidewalk setback without bike lanes could be used along those parcels until they are redeveloped. Figure 5-11 shows the anticipated interim section and implementation strategy for Van Dorn Street. Along Van Dorn Street, there is expected to be at least one left turn lane at every median opening.

Transit Transfer Center

There is presently an ad hoc transit transfer center at Landmark Mall that serves local DASH and regional buses allowing riders to transfer between DASH, WMATA and Fairfax Connector buses to access a number of regional destinations. Direct bus service is provided to the regional transit center and Metro station at the Pentagon. Buses currently use the rear of the mall for the transit stop, requiring a circuitous route through the parking structure to reach the stop and adding substantial time to schedules.

An important goal of this Plan is to take full advantage of the opportunity created by the intersection of two new dedicated transit lanes at the core of the new West end Town Center. The Plan recommends a new, centrally-located transfer station to accommodate local, regional and future dedicated transit service, and that this station be constructed near the proposed bridge over Duke Street. A transit transfer location at this location will support redevelopment at both the Landmark Mall site and on the Bluffs. It will provide convenient access to and from Duke Street and Van Dorn Street, reduce the travel time on bus routes that stop at Landmark Mall, and make transfers more convenient for passengers. The center should be located such that transit riders have a comfortable place to wait and access to convenience retail areas while waiting for transfers

While the details of transit center design will be determined at the time of development and further investigation of the system to serve the dedicated transit corridors, a concept for the local transit center was developed by Alexandria Transit Company. This concept

includes 2,500 square feet of interior space to accommodate present and future transit needs, with room for 8 to 10 individual bus bays. Amenities for transit riders should include a heated and ventilated enclosed waiting area with seating for 30-40 passengers, 700 square feet of retail space for an on-site transit store to provide transit information and sell fare media, customer restrooms, real-time bus information displays, safety and security features, and a public address system. A covered outdoor seating area should also be included, as should covered spaces for bike racks.

Current service alone would result in 400 daily bus departures from the center. The center should be located as close as possible to the location for transfers between the dedicated transit corridors. A conveniently located center easily accessed by local buses from the intersection of Van Dorn Street and Walker Street could save five minutes or more of travel time per trip for each of these departures, improving transit travel time for a significant number of transit riders and providing operational savings for the transit providers and the City.

Local Transit Circulators

The DASH Draft Long Range Plan identifies expanding local transit circulator routes to a number of areas in the City, including the Landmark/Van Dorn Area. Local transit circulators running regular short loops between Van Dorn Street Metro, residential areas, Landmark Mall, and other local destinations have the potential to reduce



The Old Town Trolley is a popular local circulator that serves King Street from the waterfront to the King Street Metro Station.

total travel times for trips by DASH by 5 to 20 minutes compared to scheduled DASH service from locations within the Plan area. Transit circulators can provide nonstop trips to the Van Dorn Street station from key trip generators and the proposed transit transfer center, and can provide more frequent service to supplement DASH and Metro buses along neighborhood routes. Local transit circulators can be funded by an area wide Transportation Management Program in which a number of stakeholders participate.

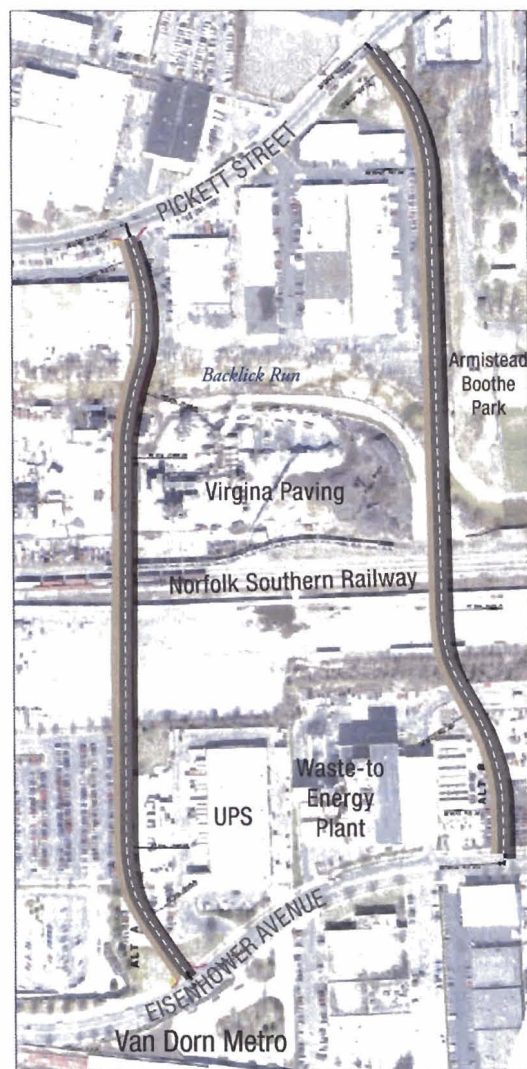
DASH may replace some current fixed route bus service serving the residential areas in and near the Plan area with a Van Dorn – Landmark Area Circulator. Cost savings from fixed route transit operations may help offset the cost of circulator service. An increased level of local DASH service could provide much of the benefit of circulators.

Multi-modal bridge connection to Van Dorn Street Metro

This proposed walkway and auto/transit bridge located at or just west of Armistead Boothe Park would cut the current one-mile walk from the western end of Cameron Station to the Van Dorn Street Metro Station in half. Some Cameron Station residents have expressed strong support for this bridge. The location away from Van Dorn Street would provide a much quieter and more pleasant pedestrian and bicycle route than the existing sidewalk on the Van Dorn Street bridge. This connection could also be developed as a pedestrian/transit bridge with either one lane or two lanes for buses. If a bus connection is provided, transit circulator buses could avoid Van Dorn Street during congested periods to provide local circulation to Metro.

Figure 5-16 shows two possible conceptual alignments for the bridge that were investigated in the transportation analysis. The final design and alignment would be determined through a feasibility analysis and conceptual design study prior to construction.

Figure 5-16. Alternative routes for connecting bridges between Pickett Street and the Van Dorn Street Metro Station. The western alignment would link pedestrians to the existing concourse under Eisenhower Avenue and connect directly to the new north-south street through Pickett Place. The eastern alignment is adjacent to Armistead Boothe Park and would provide more convenient access from Cameron Station and other areas to the east, and could be designed to connect directly to Pickett Place Main Street. The eastern alignment could join Cameron Station Boulevard as an alternative to directly intersecting Pickett Street. These alternative alignments are conceptual and not final. The final location will be determined at a later date after further study.



5.7. Expected Transportation System Performance

Although the Plan area will make alternatives to the auto both available and desirable, many trips will still be made by individual motor vehicles, and through traffic will continue to grow in the region as outlying areas continue to be developed. A transportation analysis of existing and expected future conditions was conducted by Burgess & Niple to develop and verify the effectiveness of the street system, transit, and travel demand management initiatives proposed in the plan.

Travel demand was estimated and trips distributed to major regional destinations and the transportation network using the Metropolitan Washington Council of Governments' regional transportation model. This model provides the estimates of growth in through traffic and has the ability to assign trips to the streets providing the best travel times. The model also can be used to estimate transit share based on transit system performance characteristics.

A measure of the impact of both regional travel and local demand is the total number of trips using the Plan area. Using the regional model, the estimated 24-hour trips using the Plan area was 210,306 under the 2008 base case, 249,017 with buildout of existing zoning by 2030, and 288,105 with buildout of the Plan by 2030. The Plan buildout resulted in 15.7% more trips than the existing zoning, and 37.0% more trips than the existing condition.

Trips through the Plan area without a local origin or destination accounted for 110,731 trips in existing conditions, but only 96,726 in the 2030 case with

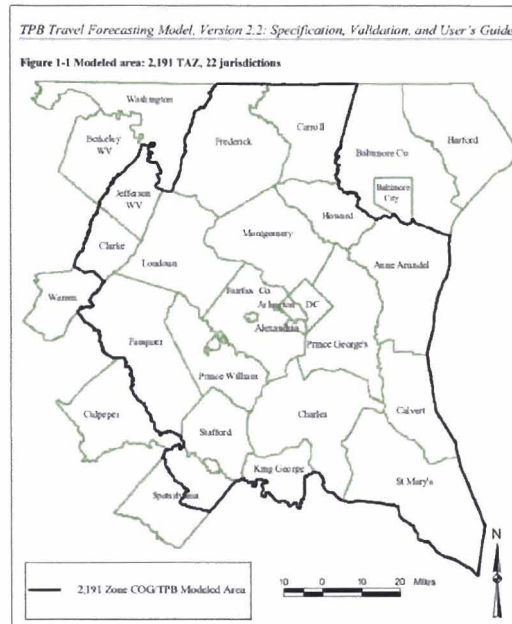


Figure 5-17. The regional transportation model considers development and travel patterns throughout the entire region when routing employees and residents to and from the planning area today and in the future.

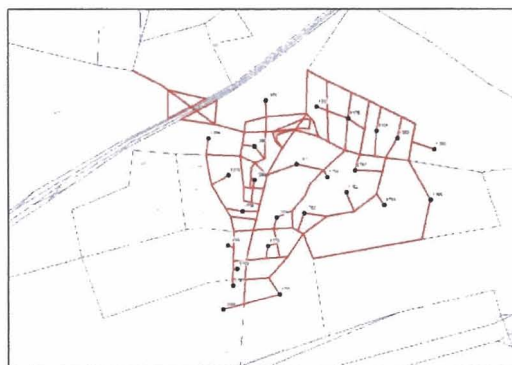


Figure 5-18. The planning area was divided into a number of subzones, and additional links were added to the street system for analysis of future conditions.

Table 5-1
Trips In Transportation Planning Area

24-Hour Trips	Existing	2030 With Current Zoning	2030 With Plan
Daily Trips	210,306	249,017	288,105
Through Trips	110,731	113,366	96,726
% Through Trips	53%	46%	34%

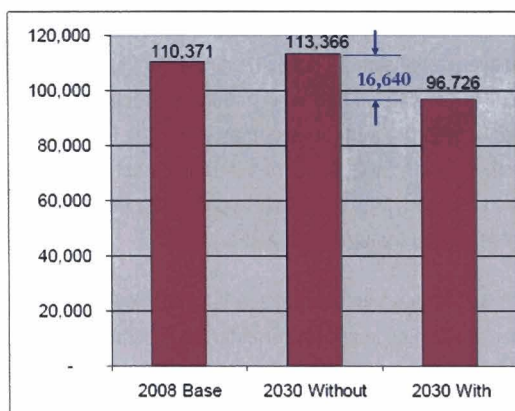


Figure 5-19. Through trips for existing and future conditions. The total number of trips through the area without a destination here rises under the zoning buildout option, and falls slightly under the proposed plan.

the proposed plan, a reduction of 15%. It is likely that through travel was reduced because of the substantial increase in local travel in the Plan area. Through travelers usually have a number of options in selecting routes, while those with a local origin or destination must travel in the Plan area.

Transit share of commute trips is estimated to increase from 19% in the 2008 base condition up to 27% in the

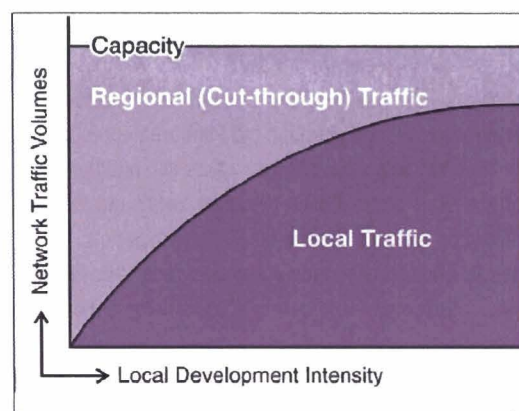


Figure 5-20. Local traffic forces out through traffic, which has choices of ways to get around the area, as local traffic grows.

2030 condition with improved transit and development under the Plan.

Once these trip assignments were balanced in the local system, a micro-simulation model that simulates the behavior of individual drivers and produces a realistic visual output was used to observe how the system would be expected to function, to identify potential problems and explore alternative solutions.

Table 5-2
Changes In Travel Time From Existing Conditions Under Future Alternative Development And Circulation Plans

Street Segment	Travel Time (Minutes:seconds)		
	Existing	2030 Zoning Buildout	2030 Plan Buildout
Duke Westbound	2:14	2:16	3:16
Duke Eastbound	3:24	4:57	5:39
Van Dorn Northbound	3:26	4:21	4:23
Van Dorn Southbound	4:08	4:58	7:29

Duke Street: Between South Pickett Street and Walker Street

Van Dorn Street: Between South Pickett Street and Holmes Run Parkway

Travel time on the major through routes was used as an indicator of the performance of the street system. Travel times increase for two reasons. First, the new more urban street system on both Duke Street and Van Dorn Street has new intersections that may require vehicles to stop where they did not before, and an increased emphasis on pedestrians may increase the stop time at signals. Second, increased traffic volumes on some segments mean increased delays at some intersections and slower travel between them. Table 5-2 shows the street system performance for the PM peak period of the street system. Travel times in the segments of Duke Street and Van Dorn Street increased by about a minute in the non-peak travel direction and up to two and a half minutes in the peak travel direction as a result of these changes.

While these increases in travel time are a substantial percentage increase from today's conditions, they involve a maximum of an additional three minutes and 21 seconds to travel through the Plan area in the peak travel direction on Duke Street, where two additional intersections are proposed to handle traffic into the Landmark Mall site. During the A.M. peak period, intersection levels of service improve under this Plan for three intersections and decline for four intersections. Intersection levels of service improve for one intersection (Van Dorn at Pickett) and decline for the other major intersections during the P.M. peak. Only one intersection in the A.M. peak period (Duke and Pickett) and one intersection in the P.M. peak period (Van Dorn and Edsall) is expected to operate with an average delay of greater than 120 seconds. It is in part this increase in travel time that results in the expectation that fewer drivers will choose to travel through the Plan area on longer regional trips.

This level of performance is achieved without providing additional vehicular lanes on Duke Street or Van Dorn Street except for dedicated lanes for transit vehicles.

Adding through lanes on Duke Street and Van Dorn Street for cars would be likely to result in lower future intersection delays and shorter future travel time through the area than estimated for the proposed arterial street sections. However, higher speeds would attract substantially more through traffic and would further compromise the ability of pedestrians to move comfortably across and along these arterial streets. Adding through lanes would be contrary to the objectives of creating a walkable place and encouraging transit as an alternative to the individual motor vehicle.

Although travel times will increase on the major arterials through the Plan area, transportation choice will be substantially increased for residents, employees and others using the Plan area, consistent with the City's Transportation Master Plan. A combination of additional modes of travel and a walkable local environment with greater availability of goods and services for residents

and employees at mixed-use sites will provide alternatives to the single-occupant vehicle. An improved network of parallel and interconnected streets will provide alternatives for local trips within the Plan area without using Duke Street or Van Dorn Street. Access to the Landmark Mall site will be significantly improved for pedestrians, transit riders, and drivers.

These improvements in transportation choice will support a vital Landmark Town Center and Landmark/Van Corridor that provides substantial employment, interesting shops and recreational and cultural activities, and a quality mixed-use residential environment. Transportation mobility and accessibility will be typical of successful urban places throughout the region.

5.8. Transportation Demand Management

Transportation Demand Management (TDM) is a set of specific strategies that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve a maximally efficient and sustainable use of transportation facilities, along with other Alexandria goals such as promoting access for all transportation system users, improving mobility, and minimizing the negative impacts of vehicular travel.

For the past twenty years, the City of Alexandria has had a program called the Transportation Management Plan (TMP) program which expressly identifies and funds TDM projects in new developments. In order that the impacts of vehicles only occupied by a driver can be mitigated during the peak hour, the City's TMP ordinance states that all developments larger than specific sizes have to incorporate TMP plans. These plans set specific goals for the percentage of single-occupant vehicles originating from or going to the development. An annual amount of money is raised by the development which must be used to fund individually tailored programs to meet the TMP goals. Some of the activities include subsidizing existing transit use, providing preferential parking for car and van pools, subsidizing shuttles to rail stations, promoting carsharing, and encouraging people to use the programs of the region's Commuter Assistance Program, run by the Washington Metropolitan Region Council of Governments, such as the Guaranteed Ride Home program. Progressed towards this goal is gauged by annual surveys of occupants of these developments and funding reports. In addition to this program, the City offers the services of its Transportation Demand Coordinator to assist those living and working in TMP projects in meeting their goals.

The City has recently been reviewing the effectiveness of the TMP program, and has determined that the existing approach of developing individual TMPs for projects as they are constructed is not an optimal way to advance TMP goals in subareas of the City. Since this is a large area, which is likely to be completely rebuilt over the next 20 to 30 years, it is important that a TMP district be

set up for the Landmark/Van Dorn area. The TMP district would be re-sponsible for:

- Developing a program of TDM strategies for implementation by district employers and residential developments.
- Developing performance measures, including annual modal share targets, on which to evaluate effectiveness of TDM strategies;
- Collecting travel data via surveys and evaluate compliance with the modal share targets;
- Adjusting strategies, including allocation of transportation impact fees, based on results;
- Marketing the program's intents and benefits to all district employers, utilizing websites, printed materials, and on-site training and information sessions; and
- Assisting employers in identifying demand-management strategies for achieving performance measures.

The City will use all of the current methods of trip-reduction such as guaranteed ride home, ridesharing, car sharing, and transit subsidy programs and will work with members of the TMP district to aggressively promote these and other TMP actions to mitigate the impact of new developments on the performance of the areas streets.

Participation in a coordinated TMP district would be a condition of approval for redevelopment in the Plan area.

5.9. Right Size Parking

The price and availability of parking are important factors in any individual's choice of travel mode. The following strategies, therefore, can be used as a way to make optimal use of the existing parking supply, and to manage demand for additional parking generated by future growth.

Charging the right price for curb parking near commercial land uses.

Most areas in the Study Area currently have ample on-street parking at all times of day. Future growth may put pressure on this supply, especially where commercial development will occur to support mixed-used areas. Managing parking prices to ensure that there are available curb parking spaces at all times of day is an important strategy for reducing search traffic.

Updating parking requirements.

Requiring development to provide off-street parking plays a powerful role in increasing the number of vehicle trips and worsening traffic congestion. Minimum parking requirements worsen traffic congestion through a simple three step process:

- Minimum parking requirements are set high enough to provide more than enough parking even when parking is free, even at isolated suburban locations with little or no transit.
- Parking is then provided for free at most destinations, and its costs hidden.
- Bundling the cost of parking into higher prices for everything else skews travel choices toward cars and away from public transit, cycling and walking.

Reducing the existing minimum off-street parking requirements to meet local conditions, instead of general standards, reduces the effects of providing excess parking. Utilization becomes more efficient and travelers investigate all travel options.

Table 7-1 in Chapter 7 outlines existing and proposed parking standards tailored for mixed-use projects in

redevelopment areas for use as a short-term local parking policy. For initial phases, parking is proposed to be somewhat reduced from current standards because of the potential for mixed-use development and greater pedestrian traffic to reduce parking needs for convenience retail uses. Uses competing regionally, such as mid-box stores or larger shopping centers, will need more parking initially in order to compete with other centers in the region.

Once improved transit is available, further reductions in parking will be possible because employees, residents and shoppers will become increasingly reliant on transit for travel. In addition, as new streets are constructed, new on-street parking will be provided, thereby increasing the supply of on-street parking over what exists today.

In addition to the benefit of reducing travel demand, reducing the number of parking spaces permitted has a number of other benefits for the Plan area. Lower parking ratios make it less expensive for developers to provide parking for projects, making it more possible to provide other community benefits including open space. Fewer parking spaces means it is easier for developers to provide parking underground rather than reducing the floor area to accommodate parking, or building above-grade structures that contribute to building mass and create obstacles to retail continuity and pedestrian circulation.

Unbundling parking costs.

Parking costs in the Study Area are typically subsumed into the sale or rental price of housing and commercial space. But although the cost of parking is often hidden in this way, parking is never free, and hiding its cost results in higher vehicle ownership and more traffic.

To reduce the number of unneeded vehicles housed within the Study Area, the full cost of providing parking can be "unbundled" from the cost of multifamily housing units (both rental and condominium); commercial space;

and from the costs of other goods and services, with limited exceptions.

Parking cash-out as a TDM strategy

The majority of employers in the Study Area provide free or reduced price parking for some employees as a fringe benefit. Under a parking cash-out requirement, employers are allowed to continue this practice on the condition that they offer the cash value of the parking subsidy to any employee who does not drive to work. While the cost of providing parking may currently be very low in areas with a large supply of under-utilized parking, the value of this benefit may increase if future growth creates demand for more parking.

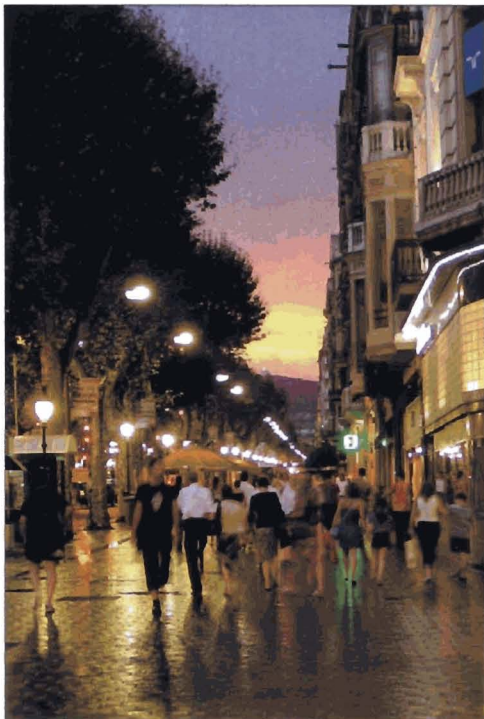
5.10. Conclusion

The vehicular traffic expected from 20 years of future development in the Landmark/Van Dorn area can be expected to slow arterial traffic in peak periods to speeds more typical of successful urban areas, pushing out through traffic and creating an environment more friendly to pedestrians and bicycles. A new network of local streets, a mix of uses, improved transit service and transportation demand management strategies will work together to provide more and better choices of destination, route and travel mode for residents, and will support the walkable, attractive environment desired by the community.

Urban Design

The Landmark/Van Dorn Area is expected to be redeveloped over a number of years by many different owners and developers. In order to achieve the plan's vision and planning principles, the plan requires a coordinated approach to the layout and development of streets, parks and infrastructure, and to the design of buildings.

The urban design principles outlined here are critical to achieving the goals set out in the plan. The principles include creating three distinct subareas, providing an urban mix of uses, dividing large tracts into walkable blocks, creating a street framework with a hierarchy of street functions, and creating a coordinated open space network.



6.1. Urban Design Principles

A series of design principles resulted from the analysis of the planning area which are intended to guide future development in the Landmark/Van Dorn corridor. These principles define Landmark/Van Dorn's place and role in the City and at a more localized level, what the place should look and feel like within its neighborhoods, blocks and streets. They lay out the concept for the pedestrian environment, and for public access to and the experience of the public open spaces. This chapter establishes the principles to guide the transformation of an automobile-dominated landscape into sustainable, mixed-use neighborhoods and districts that each have distinctive character, are well connected to the city at large via transit, and that offer residents, workers, shoppers and other visitors a human-scaled, pedestrian-oriented environment.

6.2. Creating New Blocks – Urban Street Grid

An important role of the street grid is to create appropriate-sized blocks. Block dimensions are of critical importance because they establish the physical parameters and conditions for appropriate development. Development in a pattern of blocks provides for incremental redevelopment as conditions change.

The Plan requires that wherever permitted by site conditions, blocks are to be limited to a maximum length of 350 to 500 feet and a maximum width of 300 feet. Block dimensions are of critical importance because they set up the physical parameters and conditions for appropriate development. The blocks created with the street grid establish the framework for a quality street environment which also enables pedestrian-scale buildings and streetscapes. The streets will have generous sidewalks, street furniture, and pedestrian-scale street lights. The blocks are oriented with the long dimension on Van Dorn Street and Duke Street to provide the opportunity for continued and varied uses and building types. Most interior neighborhood blocks are oriented east to west, following the contours of terrain. The blocks in the West End Town Center are configured to incorporate larger building footprints for large anchor stores and typical office building floor plates.

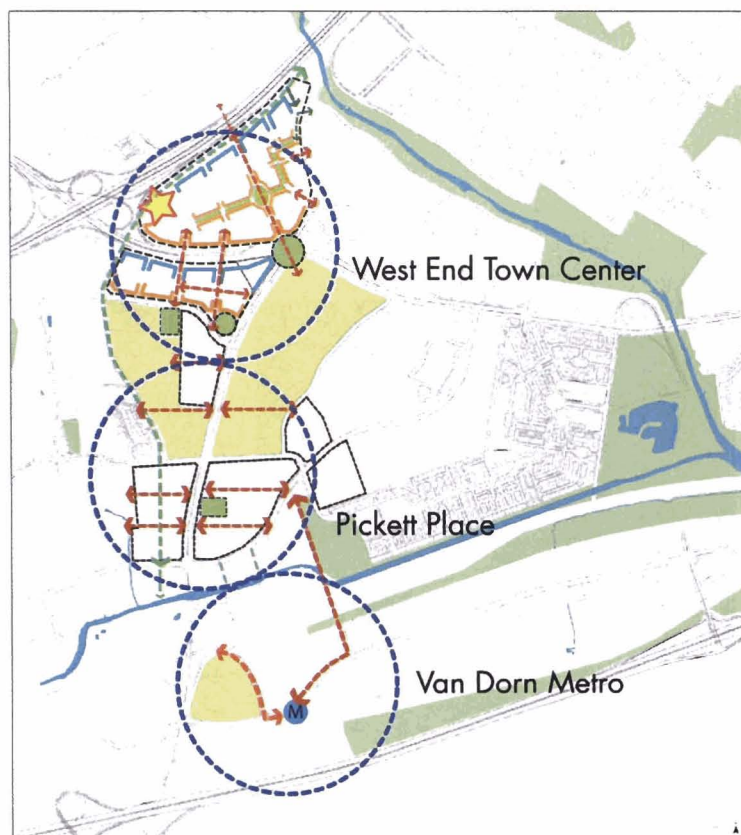


Figure 6-1. Three distinct districts were identified within the planning area in community workshops. This diagram summarizes the common design features from three breakout groups. All three groups emphasized the importance of linkages across Duke Street and linking the Van Dorn Metro to the rest of the planning area.

6.3. Street Framework



Figure 6-2. New blocks and existing parcels.

The plan includes a compact framework for streets that promotes walkability, creates convenient access to the Landmark Mall site, and provides for a multi-modal transportation system. The street framework includes two important bridge connections – one across Duke Street to link Landmark Mall with the parcels to the south of it, and one from Pickett Street to Van Dorn

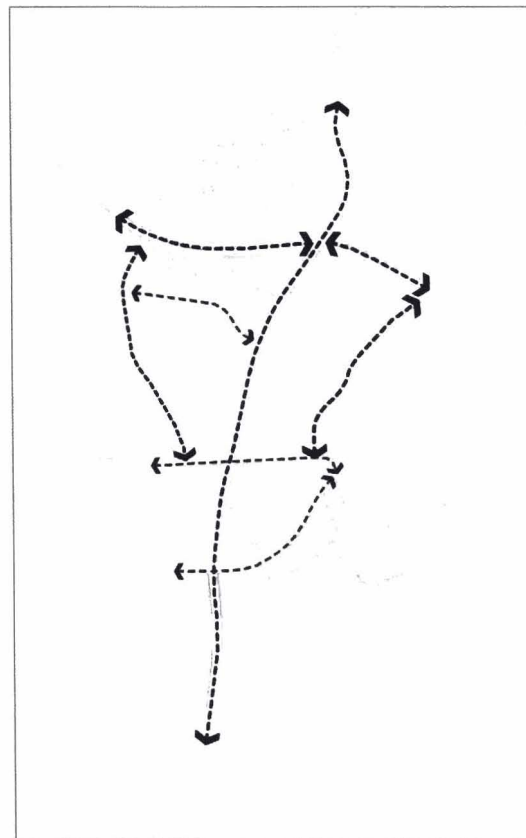


Figure 6-3. The current street pattern is coarse grained, with large blocks that pose barriers to movement by all travel modes.

Metro, in order to create convenient access to this major transportation asset.

At its simplest, the proposed street grid consists of two new north-south streets that run parallel to Van Dorn Street, a new east-west retail street for Pickett Place that runs perpendicular to Van Dorn Street, and a new east-west shopping street in Landmark Mall that runs parallel to Duke Street. Additional streets supplement this framework at regular intervals to provide convenient connections and pedestrian access throughout the planning area. The grid also includes reconfiguring the right-of-way along Duke Street and Van Dorn Street to create new boulevards that are more visually attractive,

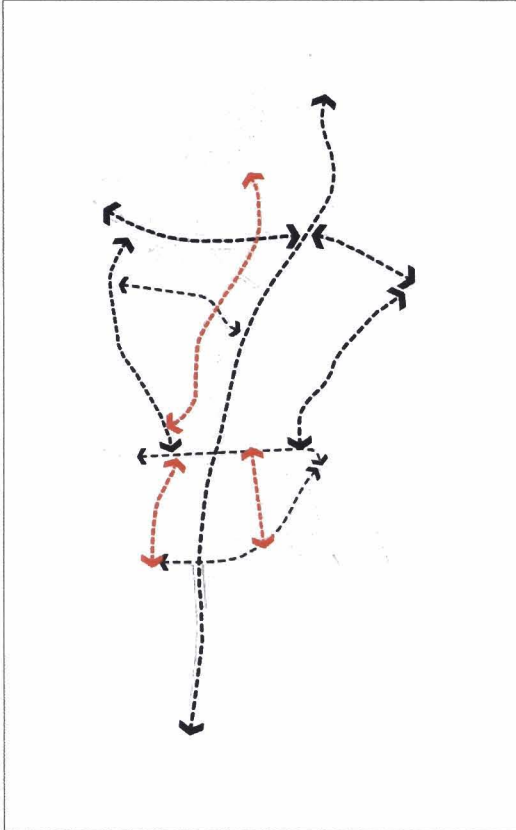


Figure 6-4. New north-south parallel streets provide options for local circulation without competing with through traffic on arterial streets.

are more comfortable for pedestrians both to walk along and to cross, and which accommodate improved transit.

Some flexibility will be needed in locating some street linkages. However, to ensure coordinated development of streets between property owners and across streets, certain streets are required to be constructed generally as shown in Figure 6-6, Street Framework. The Framework Plan shows New High Street originating in Landmark Mall and continuing south across Stevenson Avenue to an ultimate connection with Whiting Street; the exact location of New High Street between Duke Street and Whiting Street will be determined during the development process Whether developed under CCD

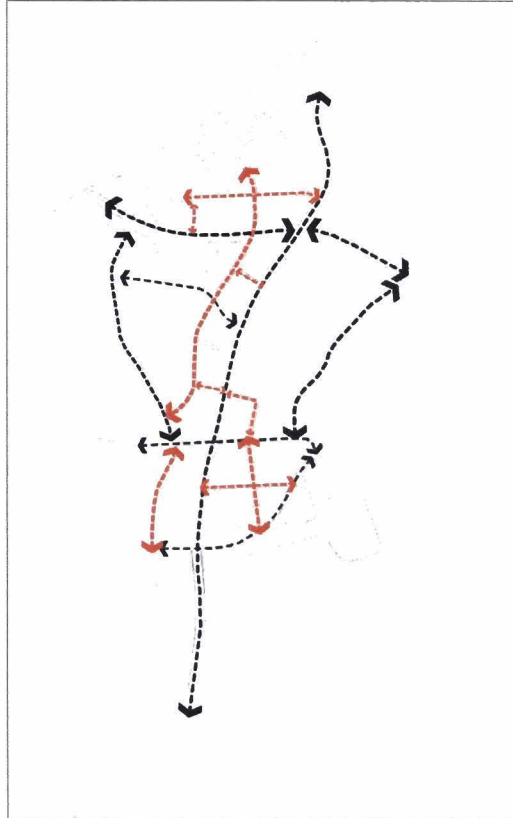


Figure 6-5. Additional streets are added in areas expected to redevelop to create blocks that have walkable dimensions and human scale.

zoning or under existing zoning, new development on all parcels in the planning area is required to accommodate and provide the street framework. The location of the remainder of the streets within each block will be evaluated and approved as part of the development approvals for each block, based on the principles of the plan.

The street framework illustrated shows key elements and general locations, but is not intended to depict the details. Detailed engineering analysis will be conducted at the time of development of each building and block.

Two major infrastructure elements have been recommended to complete the street grid:

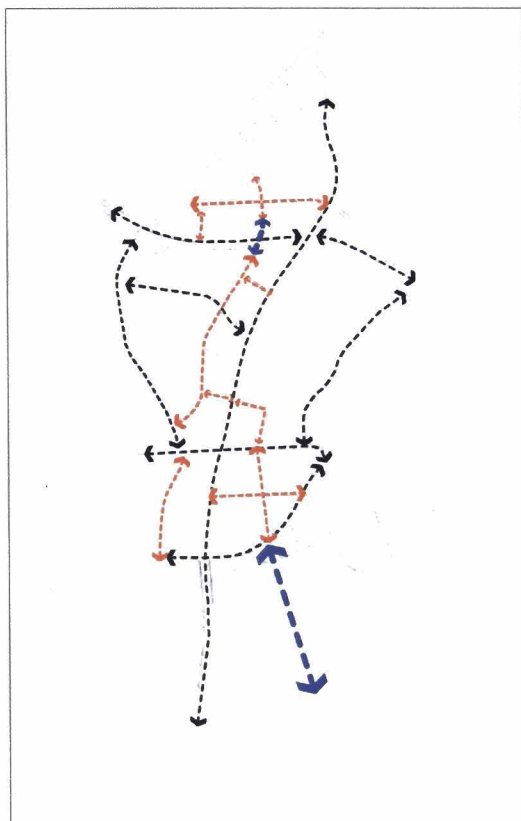


Figure 6-6. Bridges to Landmark Mall and Van Dorn Metro complete the links to interconnect the planning area conveniently for all travel modes.

1. A New High Street bridge across Duke Street that provides convenient access between Landmark Mall and the rest of the West End Town Center.
2. A bridge near Pickett Place that spans over Backlick Run, the Virginia Paving site, and the Norfolk-Southern railway tracks that connects the new street east of Van Dorn Street to the Van Dorn Metro Station.

6.3.1. Street Hierarchy

A hierarchy of streets has been developed to maintain a high-quality street environment and offer a variety of streets – from the most important to those streets which provide parking access and service access.

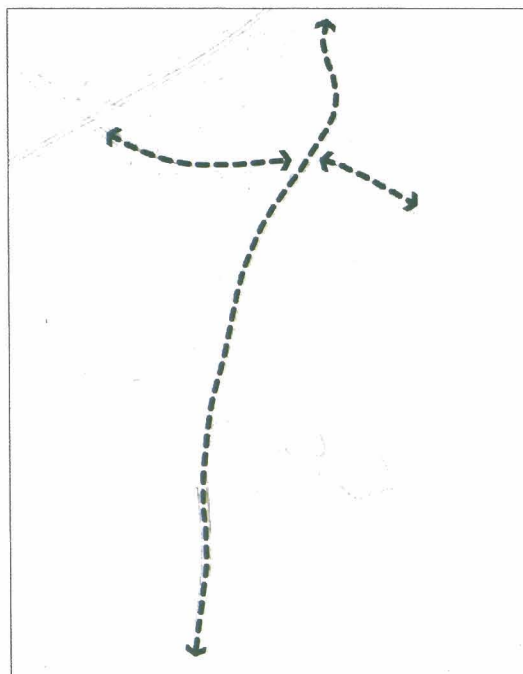


Figure 6-7. A1 streets are the most significant streets, providing regional connections and creating the image of the area for through travelers.

A-1 and A-2 Streets

“A” streets are important circulation elements and are also important character-defining features of the community. These streets are important in establishing the character of adjacent districts and neighborhoods.

Design Principles for “A” Streets

“A” Streets include Duke Street, Van Dorn Street, New High Street north of the point where retail frontage ends south of Stevenson Avenue, the Landmark Mall main shopping street, and Pickett Place Main Street.

These streets form the major front doors for each district and offer access to important commercial addresses. The rights-of-way of these streets have been allocated to encourage pedestrian activity. Curb cuts, entrances to parking garages and service bays are in general pro-

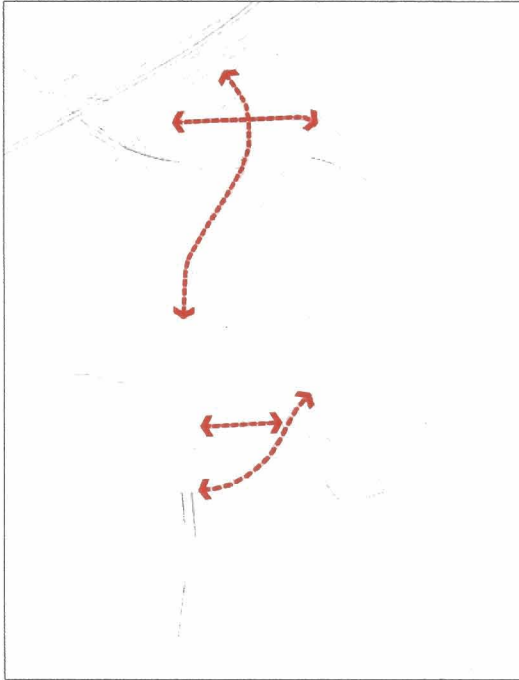


Figure 6-8. A2 streets are significant community streets, with important image-creating roles within districts and neighborhoods.

hibited, and the streets are subject to the highest design standards.

- Generous sidewalks should be provided, that allow for wide tree planting zones and space for pedestrians, and for bicycles if not provided in the travel lanes.
- Buildings shall front these streets.
- Main pedestrian building entries shall be located along “A1” street frontages to the greatest extent possible.
- Active uses shall be located on all street frontages.
- The highest quality of architectural façade and streetscape treatment shall be used.
- No permanent curb cuts or service alleys shall be permitted along “A” street frontages with the

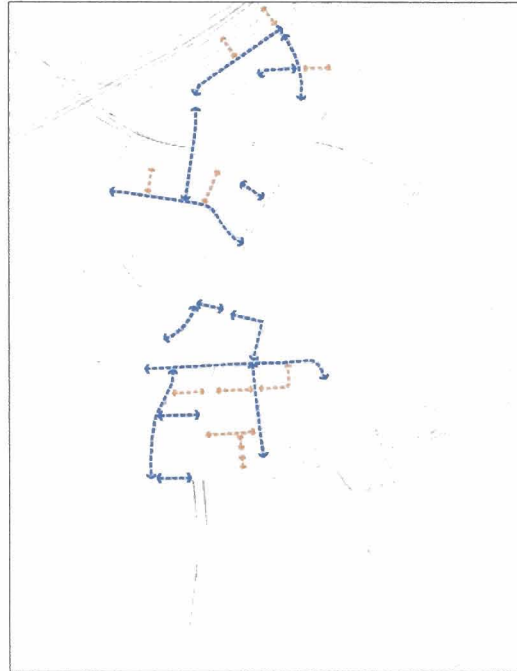


Figure 6-9. B and C Streets provide local access and service access. These streets complete the network and provide access to all parcels.

exception of parking structure entrances under the proposed New High Street bridge.

Design Principles for “B” Streets

“B” streets are the secondary streets of each neighborhood. They connect primary streets to each other and to service streets, and provide access options through each of the neighborhoods for vehicles, pedestrians and bicycles. Bicycles are typically accommodated in shared lanes.

- Buildings shall front the street.
- Active uses shall be located on each street frontage.
- One curb cut per block shall not be exceeded on both sides of the street.

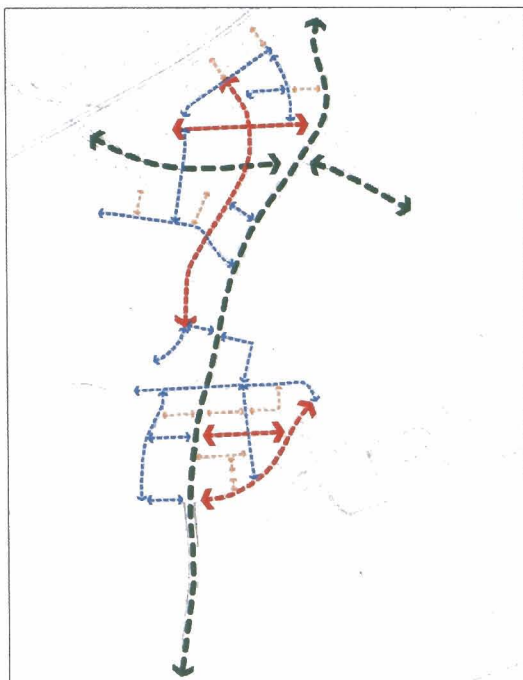


Figure 6-10. The complete street hierarchy for the Landmark/Van Dorn corridor. Design principles protect functions and help communicate street roles in the hierarchy.

- Main building and pedestrian entrances shall be located along B street frontage unless adjacent to a higher category street.
- A high quality of architectural façade treatment shall be used.

Design Principles for “C” Streets

“C” streets provide a means of access and service entries to parking as well as tertiary streets through the neighborhood. They are the least public in nature of all of the streets and, therefore, the least restrictive in design. The “C” streets allow the “A” and “B” street frontages to function as more public primary streets. Bicycles use travel lanes.

- Curb cuts, alleys and garage entrances shall be located on “C” streets.

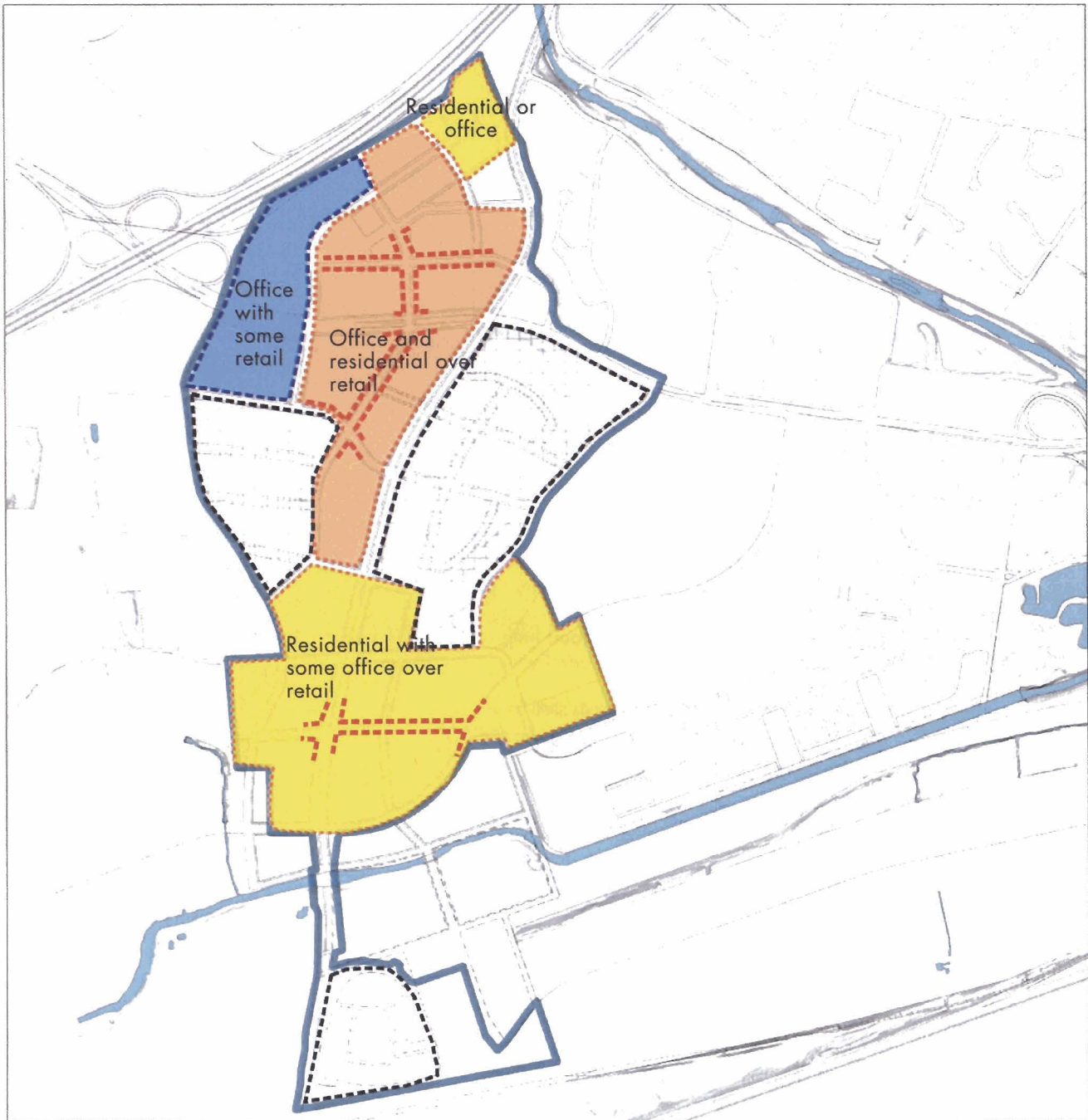


Figure 6-11. The mix of uses varies within the planning area based on the potential market for various uses and the character sought for each district. Uses with regional markets including a significant employment center and regional retail center are concentrated in the West End Town Center district. Red dashed lines show retail frontages that provide the core of the retail districts in the West End Town Center and Pickett Place.

6.4. A Mixed-Use Development

To ensure an urban character, office, residential and retail uses are located within each subarea, and are not built as large, single-use complexes. Mixed-use development can substantially reduce vehicle travel compared to single use complexes, since many trips for convenience goods and services can be made on foot within the block. With the variety of activities encompassed in mixed-use areas, street life is sustained throughout the daytime and evening hours.

While there is a significant concentration of office development within the West End Town Center, those uses are balanced with the retail and residential uses and open space within the neighborhood.

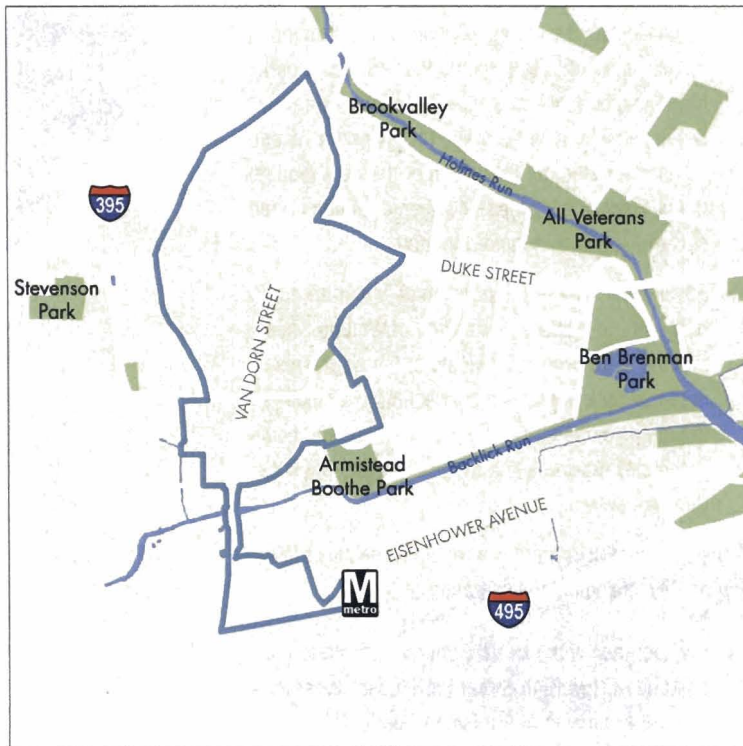


Figure 6-12. Existing open space. The nearby area includes five City parks with a total area of 134 acres. Holmes Run is a major regional open space corridor, with a multi-use trail connecting to Fairfax County. A similar trail connection is planned for Backlick Run.

6.5. Creating a Connected Open Space Network

There is a regional network of parks with greenway connections within a mile of most parts of the planning area. These parks and their associated facilities include:

- All Veterans Park (9.6 acres): memorial park, picnic areas, sitting areas, trails for walking, biking, and jogging, and a dog exercise area parallel to Pickett Street.
- Armistead Boothe Park (15 acres): lighted softball / soccer field, a picnic pavilion with grills, restrooms, a playground area with play equipment, two tennis courts, a combination tennis / basketball court, and pedestrian and bike trails.
- Ben Brenman Park (50 acres): softball field, little league baseball field, soccer field, tot lot, lake with gazebo and fountains, restrooms, pedestrian bridges, picnic pavilion, pedestrian and bike trails, fenced dog park, and a small amphitheater.
- Brookvalley Park (50 acres): community park, scenic natural area, biking and walking, playground, exercise area, sitting and picnic areas, ball field, community garden plots, and the Bicentennial Tree (oldest tree in Alexandria). Brookvalley Park is connected by trail to Holmes Run Scenic Easement to the north, All Veterans Park to the southwest, and Tarleton Park to the southeast.
- Stevenson Park (9.5 acres): Little League baseball, lacrosse practice and games, soccer practice, basketball court, volleyball, playground, sitting area and park shelter, and summer camp program site.

These parks comprise approximately 134 acres of parkland for 21,240 people residing in the three census tracts that encompass Landmark/Van Dorn. This is approximately 6.3 acres of open space per 1,000 people. The Open Space Plan recommends a target of 7.5 acres of open space per 1,000 people.

Open Space Connections

The Holmes Run Trail is part of a regional multi-use trail system that runs along Holmes Run from where it joins Cameron Run in to Fairfax County to the west. The Holmes Run Trail connects Ben Brenman, All-Veterans and Brookvalley parks, which form a continuous open space corridor from Cameron Run to where the trail crosses under I-395.

Ben Brenman and Armistead Boothe parks are along Backlick Run. A trail is proposed along Backlick Run in the Open Space and Trails Master Plan that would connect to a trail system along Turkeycock Run in Fairfax County. Implementation of this trail system depends on acquisition or agreements with private property owners along the run.

Proposed Open Space Network

As density is increased and an urban environment is established, office, retail and mixed-use areas will require additional internal open space to maintain human scale and character. The plan recommends new urban parks within both the West End Town Center and Pickett Place to provide nearby public open space for new mixed-use developments. These parks should be designed primarily as passive landscaped parks. They have an area ranging from half an acre to over two acres, and are typically defined on at least three sides by streets. A central “town green” is also recommended as a space for community gatherings and civic events for the Landmark Mall site. Large open spaces and natural areas need to be at the periphery and in interconnected open space corridors where they do not break up the critical continuity of pedestrian-oriented activity.

- Landmark Mall at West End Town Center – an approximately 3 ½-acre open space network that extends across the site, with terraced open space with frontage along Van Dorn Street sloping into the middle of the site and connecting to the new green boulevards, open space and squares that incorporate

sustainable design elements. Major features include Landmark Plaza, the town green central to the site, and Terrace Garden, connecting to Van Dorn Street.

- New High Street Park – an approximately 0.5 - 1.0-acre of parkland with frontage along Stevenson Avenue between Van Dorn Street and Walker Street. The park would provide passive open space for residents and workers in the area.
- Pickett Square – an approximately one-half-acre urban square in the heart of the Pickett Place neighborhood. Modeled after successful active urban open spaces, the square would be bounded by retail uses at the ground level with residential uses on the upper floors.
- Pickett Plaza – approximately one acre of land could be consolidated with the existing park to expand the existing Armistead Boothe Park to create park frontage along Pickett Street. The site is currently developed with a self-storage facility and a vacant lot used for storage. Expansion of the park requires the consent of the property owner, or action on the part of the City to acquire the land.
- Edsall West Park – an approximately one-acre park between the proposed extension of Whiting Street and the South Port apartments to the west. This potential park provides a connection to a small drainage course that joins Backlick Run, and could potentially provide a link to the proposed Backlick Run trail system.

Implementing this system will require proactive efforts by the City, including consideration of:

- Collaboration with private owners to facilitate the creation of New High Street Park, Edsall West Park and the expansion of Armistead Boothe Park;
- Establishment of an open space fund for developer contributions to acquire, design and construct High Street Park, Edsall West Park, Pickett Square and Pickett Plaza. These contributions would be

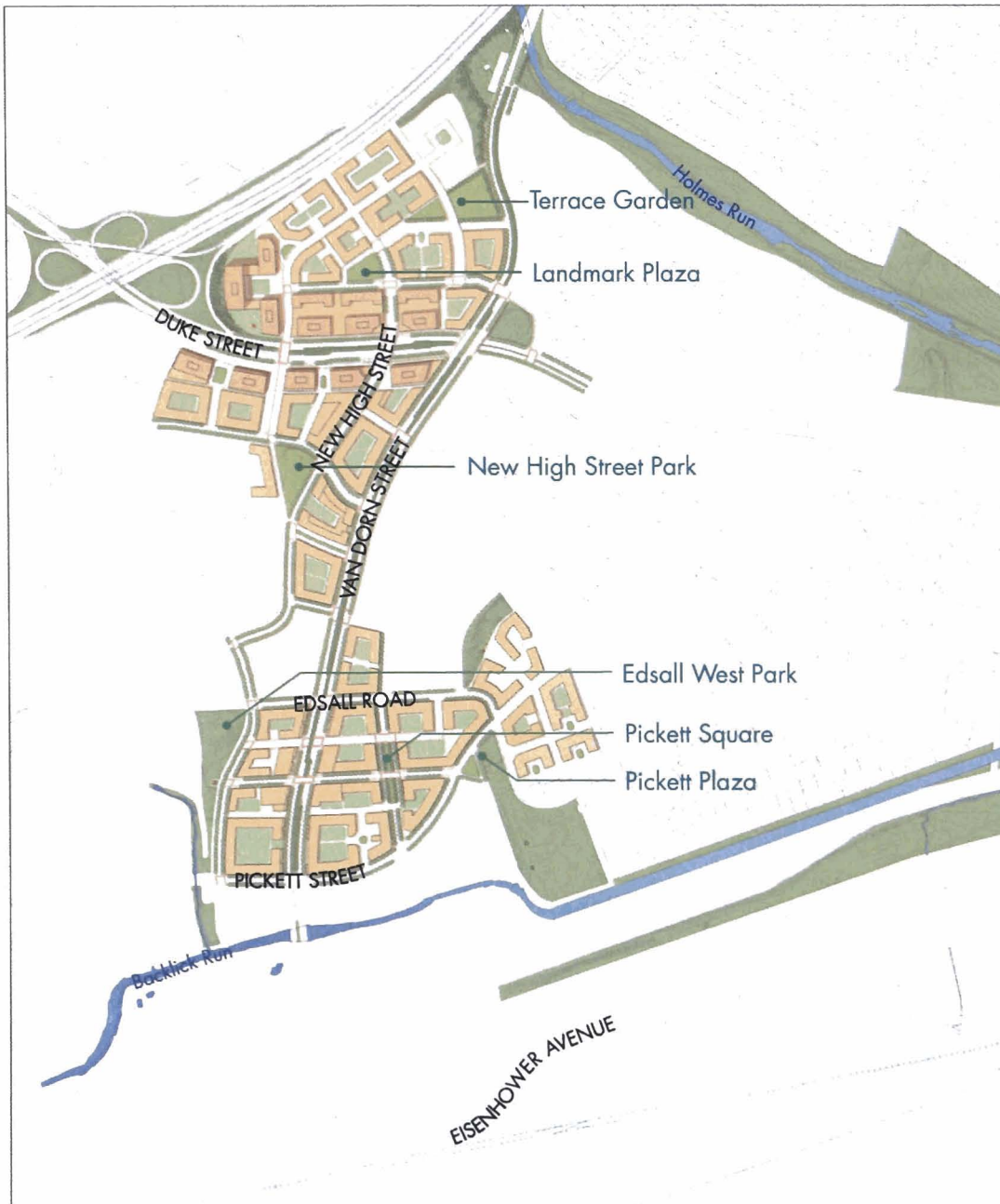


Figure 6-13. Open Space Plan. A number of small urban parks will provide nearby open space for new mixed-use developments. All areas within new mixed-use developments are within an easy walk of one of these public open spaces.

required at the time of redevelopment, with rates of contribution based on expected acquisition costs.

The plan recommends that in all projects 25% of the site area excluding streets be provided as ground-level open space.

As part of future planning efforts, the plan encourages the evaluation of the potential reuse of the Virginia Paving site to meet stormwater management needs and as an open space asset connecting Backlick Run and the Clermont Cove property, which is currently on the City's open space priority list.

6.6. Density and Massing

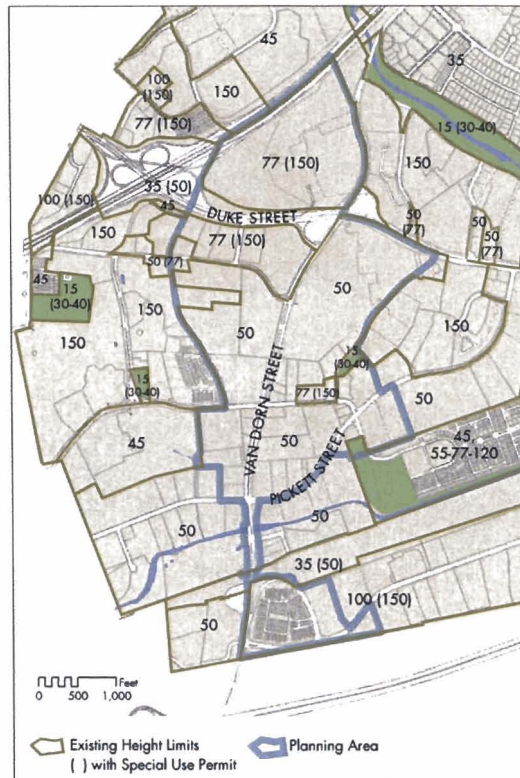


Figure 6-14. Building heights permitted by existing zoning in and near the planning area. A height of 150 feet is now permitted in most of the West End Town Center area.

The heights of buildings, site coverage, and the character of building tops define the skyline of each neighborhood from a distance. The width of streets from building face to building face, building setbacks, and the continuity of the setback and street wall establish the character of each neighborhood. The character and articulation of the facades refine the street character at the individual block and pedestrian level.

Figures 6-14 and 6-16 show the existing and proposed building height limits in feet within the planning area and nearby areas. The existing height limits are derived from the existing zoning designations. In the case of the Commercial Residential Mixed Use Medium and High (CRMU-M and CRMU-H) Districts, the existing zoning calls for building heights to conform to the limits set

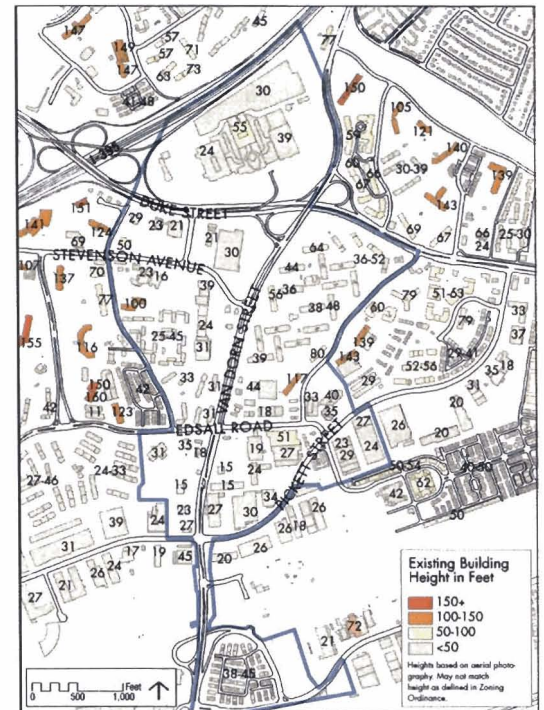


Figure 6-15. The heights of existing building heights in the planning area and immediate surroundings are shown, with buildings more than 100 feet tall shown in orange. All existing buildings taller than 100 feet are residential.

in the Landmark/Van Dorn Small Area Plan adopted in 1992. The heights of existing buildings in and near the planning area are shown in Figure 6-15.

As shown in Figure 6-16, building heights within the West End Town Center neighborhood are proposed for a range of 85 to 250 feet. Height ranges have been proposed within this neighborhood to provide variety in heights and transition into adjacent areas. Heights ranging from 150 to 250 feet are proposed on the frontage of Duke Street. Heights up to a maximum of 250 feet are proposed along I-395 north of Duke Street to allow for a signature building or complex at this prominent gateway location. All building heights within this neighborhood will be subject to approval through the development special use permit (DSUP) process, with varied heights,

transitions, and high quality architecture being required. Exceptional architectural design and building quality will be required for the taller signature buildings.

Building heights within Pickett Place are proposed to range from 65 to 120 feet, with the maximum 120 foot height restricted to the central portion of the activity center. A maximum of 65 to 85 feet would be allowed along the frontage of Van Dorn Street at the new neighborhood main street, and along a segment of Pickett Street. Buildings in the 65 to 85 feet range are proposed at key locations to provide variety in scale and transition into nearby neighborhoods with similar heights. Actual building heights will be subject to approval through the development review process.

Proposed building heights east of Pickett Place at the intersection of Edsall Road and Pickett Street range from 65 to 85 feet, with the higher heights located along Pickett Street and lower heights adjacent to existing residential neighborhoods. In all cases, a variety of heights is proposed, and heights will transition to lower heights when near existing residential neighborhoods with lower buildings.

Similar heights are proposed west of Pickett Place along the west side of Van Dorn Street between Edsall Road and Pickett Street.

Chapter 7.0 provides additional criteria and design principles for placement of buildings and building heights within the activity centers.

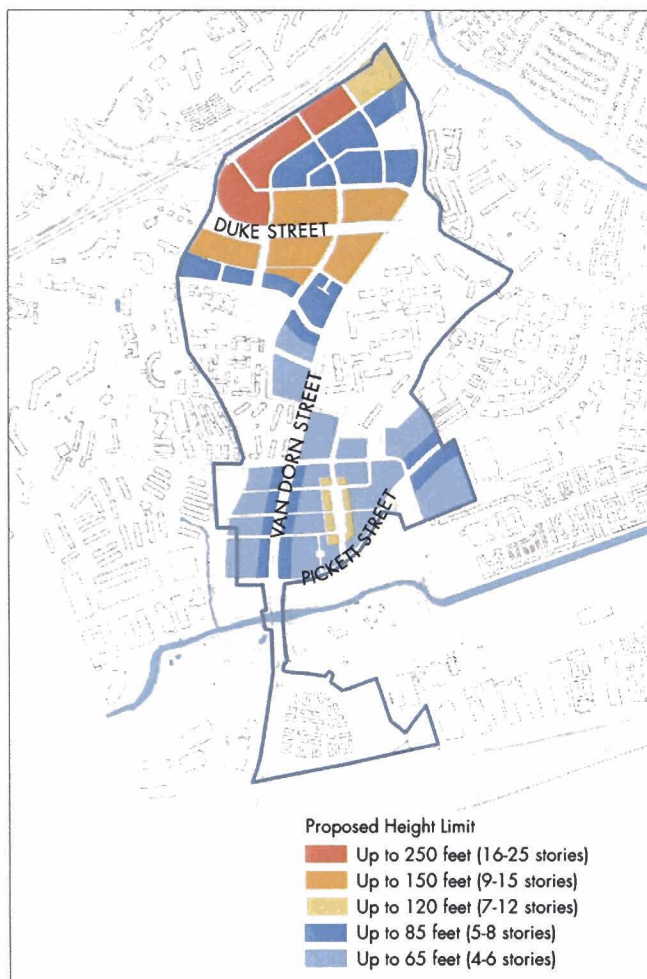
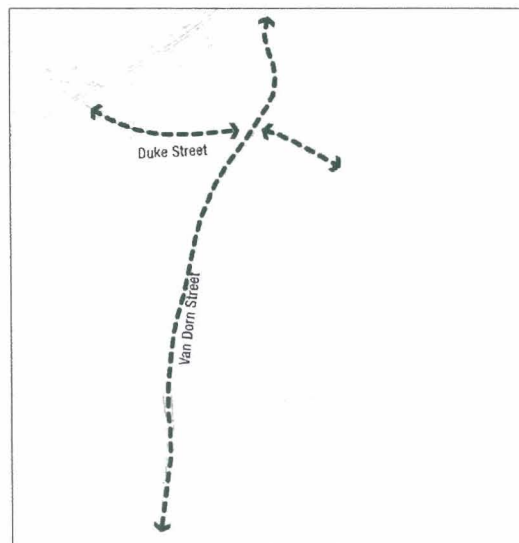


Figure 6-16. Proposed building height limits provide for taller buildings than today's zoning in image-defining locations along I-395 and in the core of the Pickett Place district.

6.7. Summary of Urban Design Principles

6.7.1. General Principles

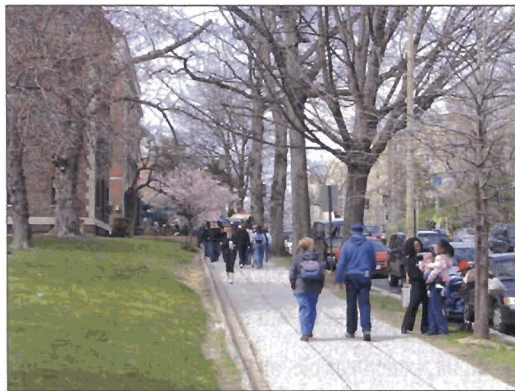
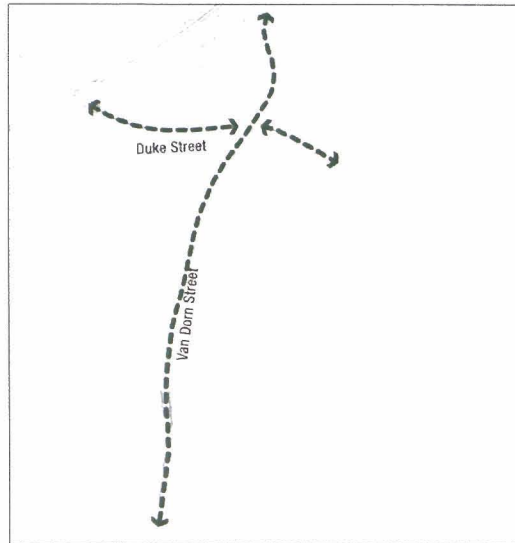
- Create compact pedestrian-friendly mixed-use neighborhoods.
- Organize development by a modified orthogonal grid of interconnected streets.
- Establish convenient, multi-modal, at-grade connections to the Town Center at Walker Street, at the BJ's Site, and at the Van Dorn/ Duke Street crossing; and create smaller, walkable blocks at the BJ's, CompUSA and Safeway sites
- Create smaller, walkable blocks between Edsall Road and Pickett Street
- Connect to Holmes Run by using a green spine that links through the Town Center, and takes advantage of viewsheds to the south
- Create a central main street that connects Van Dorn with Pickett
- Create new urban parks within each of the districts of the plan and connect to the citywide system of open space and natural corridors.
- Create a park between Walker and Van Dorn, off Stevenson Avenue
- Create a "four corners" retail intersection at Van Dorn and the new Pickett Place Main Street
- To the extent feasible, all parking should be located below grade or lined with an active use
- Plan for a new street connection from Pickett Place to Van Dorn Metro
- Leverage high visibility along Duke Street and I-395 by creating distinctive skylines and building tops along both major arterials
- Create a central gathering place or Town Green within the West End Town Center.
- Establish strong regional office and retail presence at West End Town Center, while maintaining a fine-grained mix of uses



6.7.2. Strategies for Areawide Organizing Features

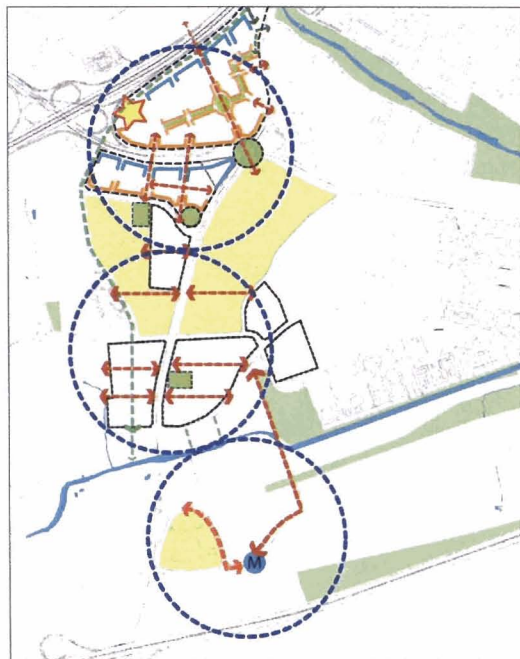
Establish Van Dorn Street and Duke Street as Tree-lined Transit Boulevards

Tree-lined boulevards with broad medians provide a strong organizing element to the areas through which they pass. The boulevard's character ties areas along it together and gives them a shared identity. The boulevard can humanize the hostile environment of high-capacity roadways and create a much more appealing front door to the community.



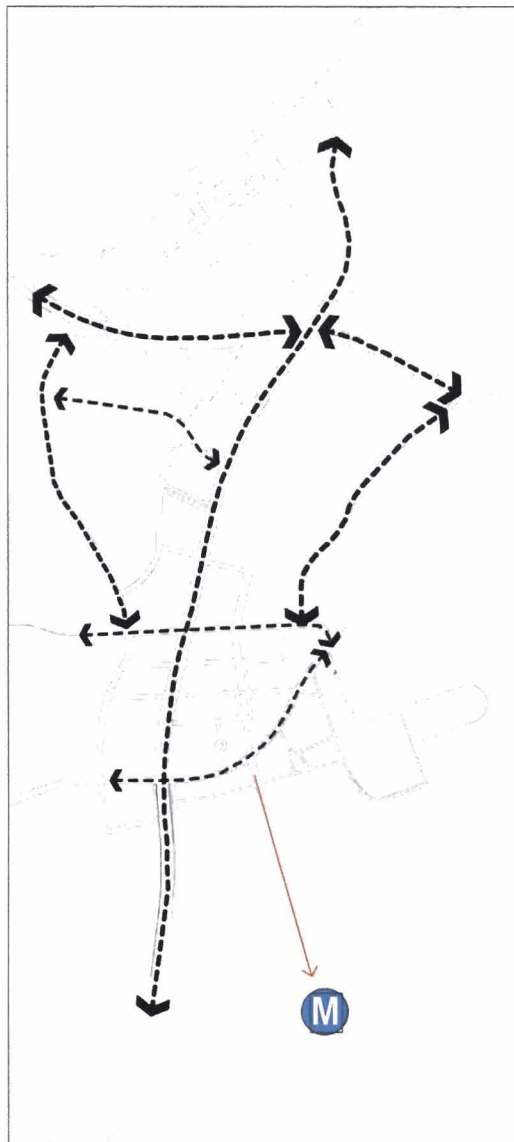
Create a distinctive character for each neighborhood and district within the planning area

Establishing a sense of place and unique identity is important to creating a feeling of being in a particular neighborhood or community. This uniqueness and identity can be encouraged by giving each neighborhood identifying features in its public areas and open spaces, by creating a different feel to each area through proportions of streets and buildings, and development of unique character particularly at gateway locations with architectural features and public art.



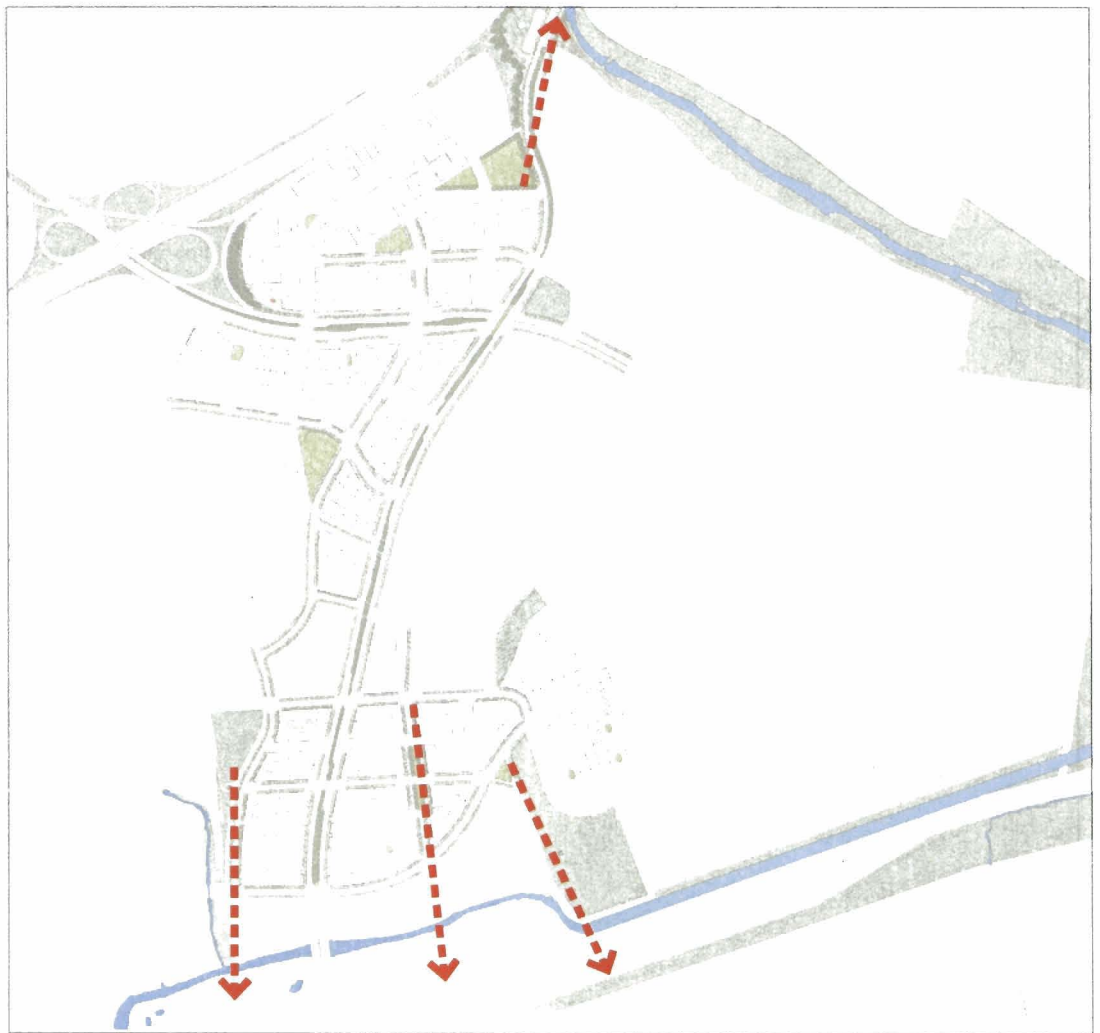
Establish a framework for convenient future connections to Van Dorn Street Metro

Anticipating the ultimate development of a bridge connection to the Van Dorn Metro means locating and designing Metro Street so that it provides good connections through Pickett Place and to Edsall Road to improve Metro access for areas east of Van Dorn Street.



Enhance and connect the area's natural assets, such as Holmes Run and Backlick Run

These natural features provide identify and connected-ness for the entire planning area to other natural areas throughout Alexandria and into surrounding areas of Fairfax County. Backlick Run in particular is underutilized as a natural asset today. Its long-term potential for open space, trails and potential stream restoration for storm-water quality enhancement and natural habitat should be further evaluated.



6.7.3 Urban Design Principles for West End Town Center

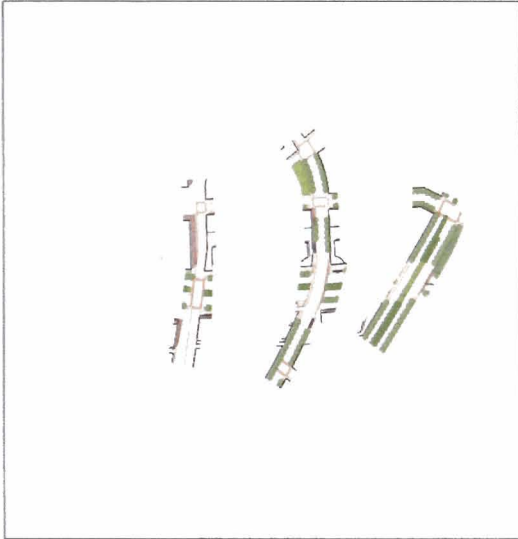


Figure 6-17. Establish convenient, multi-modal, at-grade connections to the Town Center at Walker Street, at New High Street, and at the Van Dorn Street bridge over Duke Street. Create smaller, walkable blocks at the Saul Centers/Passport, Choi and Van Dorn Plaza sites.



Figure 6-18. Connect to Holmes Run by using a green spine that links through the Town Center, and takes advantage of viewsheds to the south.



Figure 6-19. Leverage high visibility along Duke Street and I-395 by creating distinctive skylines and building tops along both major arterials.

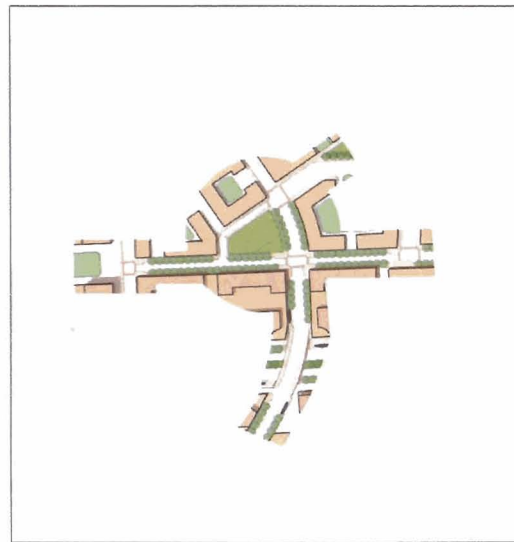


Figure 6-20. Create a central gathering place within the Town Center for Alexandria's West End



Figure 6-21. Create a park between Walker Street and Van Dorn Street, off Stevenson Avenue.

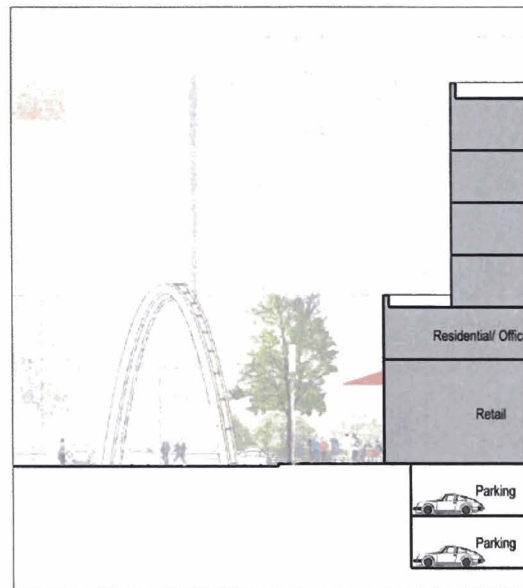


Figure 6-22. To the extent feasible, all parking should be located below grade or lined with an active use.

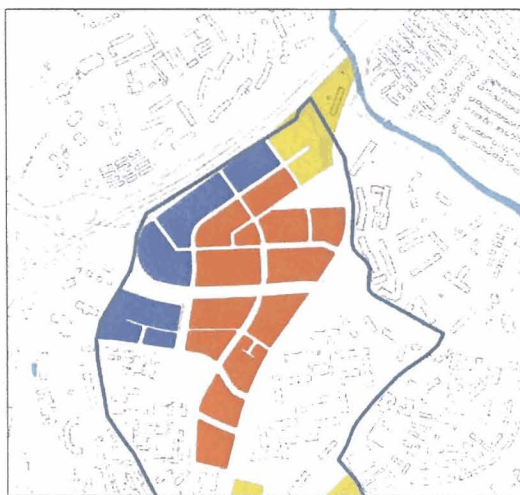


Figure 6-23. Establish strong regional office and retail presence at West End Town Center, while maintaining a fine-grained mix of uses.

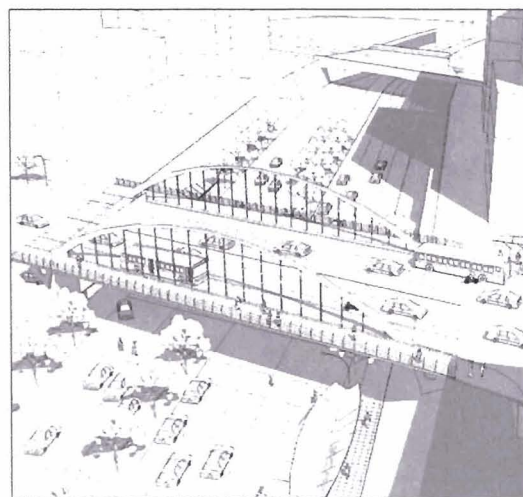


Figure 6-24. Create a strong and direct pedestrian and vehicular connection to link both sides of Duke Street at New High Street, preferably with a grade separation.



Figure 6-25. West End Town Center. This view looks toward the west from along the main shopping street in West End Town Center. Landmark Plaza is the open square on the right, with tall buildings along I-395 past the plaza. Retail frontages line the main street, with office buildings and residences stepped back above.

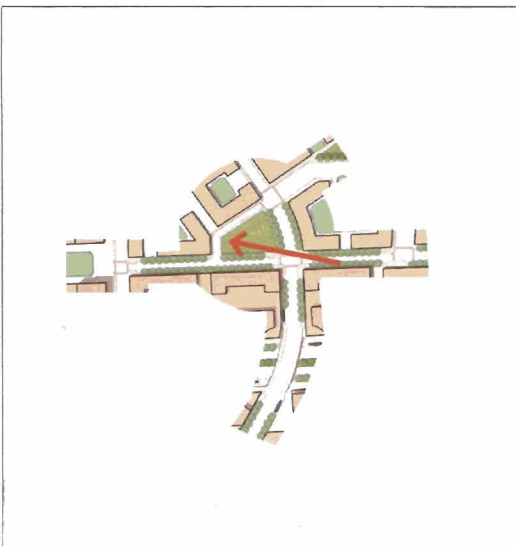




Figure 6-26. West End Town Center, looking east along Duke Street by the New High Street Bridge. The Van Dorn Street bridge is visible near the top of the rendering. The bridge connecting the north and south sides of Duke Street at New High Street is an important link to make the north and south sides of the Town Center function as a single place. Transit on the bridge is connected to transit on Duke Street below.

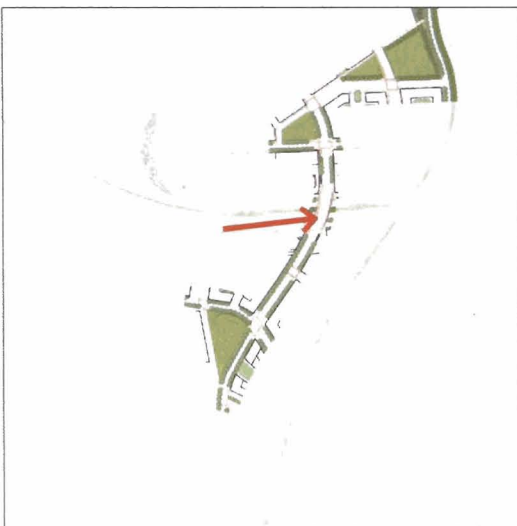




Figure 6-27. New High Street Park. This scene shows the view up New High Street from south of Stevenson Avenue with the taller buildings at Duke Street in the distance and buildings framing the park on Stevenson Avenue and New High Street.



6.7.4. Urban Design Principles for Pickett Place

This district includes the part of the Plan area between Edsall Road and Pickett Street, and includes several parcels on either side of Van Dorn Street, the major arterial that serves this area, that are likely to re-develop in the near term. The proximity to existing developments such as Cameron Station and the EOS-21 apartments, the natural resource of Backlick Run along with the community's vision for the sub-area present an opportunity to develop an "Urban Village" that is distinct from the West End Town Center to the north. This urban village will be centered on a Main Street that forms a retail spine, and have good access, in the future, to a recovered and enhanced Backlick Run. A compact street grid, created by adding three new streets, along with well-integrated retail uses and open spaces will give special character to West End's new urban village. The Pickett Place district is imagined as a mixed-use community center, developed to a lower intensity than the town center further north, but is still a magnet for residents of and around it. A new Main Street forms the spine for this district, while a new north-south Metro Street will eventually link to a bridge over Backlick Run and the Norfolk Southern rail line.



Figure 6-28. Create smaller, walkable blocks between Edsall Road and Pickett Street.



Figure 6-29. Create a central main street that connects Van Dorn Street with Pickett Street.

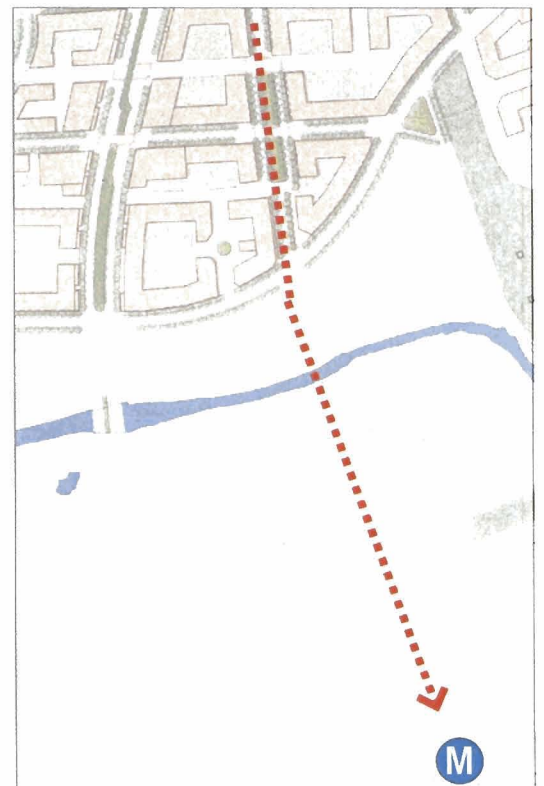


Figure 6-30. Plan for a new street connection from Pickett Place to Van Dorn Metro.



Figure 6-31. Pickett Place Main Street at Pickett Square. Looking east along Pickett Place Main Street, the wide median park of Pickett Square is visible. Retail buildings line the main street, while a tall residential building with retail use on the ground floor fronts Pickett Square.



Development Guidelines

These guidelines are established to ensure that the character of the Landmark/ Van Dorn corridor reflects the vision and guiding principles that are the foundation of this plan as the planning area is developed and infrastructure is constructed.

The guidelines provide rules for the area's streets, buildings and open spaces. In addition, they promote establishment of identity for the area as a whole and for distinct districts within it by providing guidance on public art, elements of the streetscape, and design of building facades and infrastructure.

Graphics in these guidelines and throughout the plan are in general illustrative and not prescriptive, and where illustrations and text conflict, the text governs.



7.1. Blocks

West End Town Center

West End Town Center includes Blocks A, B, C and E in the planning area. These blocks are all currently developed primarily with retail uses at varying intensities of development. The Land Use Plan, Chapter 4, identifies the land use strategies for the Town Center and outlines the development requirements for each block in Table 4-4. The development programs outlined here require CDD rezoning and approval of a development special use permit.

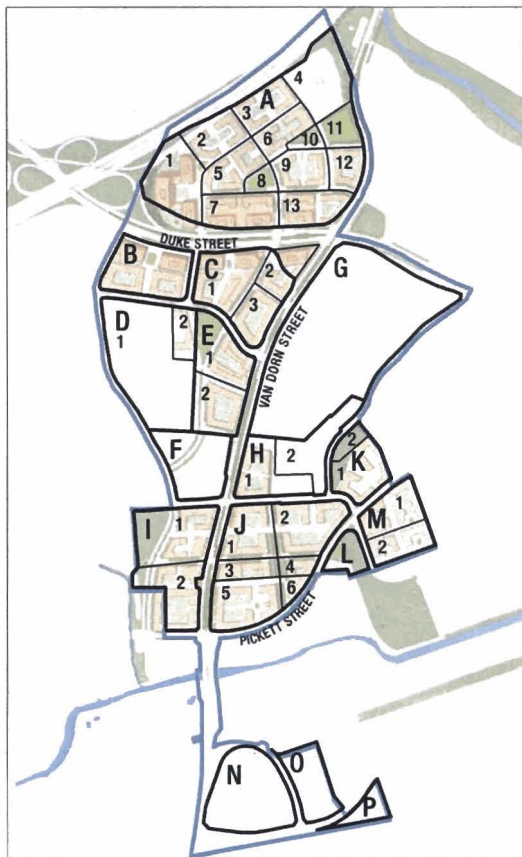


Figure 7-1. Major development blocks and sub-blocks are shown.

Block A. Landmark Mall

Landmark Mall at 51.5 acres is the largest development block in the planning area. Because of its size, it can create its own unique environment that can give it a regional market.

The plan for the West End Town Center requires that the sites be configured in an urban pattern of blocks. The plan recommends a minimum of 13 blocks, though the final block configuration will be determined through the development process.

Overall, the development program for the Mall site consists of a minimum of 2.5 million square feet of office use, a minimum of 800,000 square feet of retail use, a major hotel, a minimum of 1,000-1,200 dwelling units and 3.5 acres of open space. The actual development program within these guidelines will be determined through the development review process. A minimum of 5,000,000 square feet of development is required, with a maximum of 5,606,000 square feet potentially permitted.

I-395 blocks. (Blocks A1 - A4) The west end of the mall site (Blocks A1, A2 and A3) is designated for office as the primary use. Most of the minimum of 2.5 million square feet of office development required on the site is expected to be developed within these three blocks. These blocks also provide for the tallest buildings on the site, with a maximum height of 250 feet, appropriate for a concentration of office uses. These blocks would be expected to have the highest concentration of floor area on the site, with a net floor area ratio of 3.5 to 5.0 or more, substantially greater than the 2.5 average gross FAR for the site. Block A4 is proposed for residential use because of its greater distance from I-395, from the core of the mixed-use center at the Landmark Mall site, and from the proposed dedicated transit corridors. Retail uses on the ground floor and hotel use may be incorporated in the development program on any of these blocks.

The market study conducted for the plan identified the Landmark Mall site as one of the few locations in the planning area that has the combination of access and visibility that can make it an attractive location for Class A office development. With the amenities of a new mixed-use retail and residential center on the site, this location could be inviting to office developers looking for sites inside the Beltway in the I-395 corridor. Therefore the development plan for this site must provide sites for and commit to construction of substantial office space. If the market does not support office development in the short term, these sites should be reserved for office use in the long term. Ground-floor retail frontage is required for those buildings sited along the main shopping street in Block A1.

Because the I-395 face of the site is proposed primarily for service access and potentially for access from I-395 ramps directly into the site, pedestrian movement to and along I-395 in this area is primarily utilitarian. The area between the street on the south side of these blocks and I-395 is not proposed for a high level of pedestrian improvements, though this street itself is an important pedestrian street to provide access to uses along it and to provide transit access to these blocks. These uses may also have substantial retail use as part of the regional retail center.

There is potential in the long term for pedestrian access across I-395 or to an in-line transit station for HOV lanes in the center of the expressway, so preserving one quality pedestrian access point through this group of blocks at a logical point to connect across I-395 is required. It is important that the development plan not present an uninterrupted wall of office buildings and parking along I-395. The face presented to I-395 should make obvious the presence of a lively, active center full of people and inviting things to see and do, and any above-grade parking must be screened in a manner and with materials consistent with the remainder of the building.

Duke Street Blocks. (Blocks A7 and A13) These blocks are along the south side of the main retail shopping

street for the Landmark Mall site. Office use is also appropriate along the south side of the site, where visibility from Duke Street, the convenient access to transit and the objective of framing this street as a City gateway all make office use an appropriate part of the mix. Heights of up to 150 feet provide the potential for substantial office space. Where Duke Street meets New High Street, this important gateway to the site and regional transit connection demands a special focus, with active uses and unique attractions that are visible to those traveling on New High Street and Duke Street. This intersection should be a site of both daytime and nighttime activity. Special sculpturing of building faces and active frontages are required.

Main Shopping Street Blocks. (Blocks A5, A7, A8, A9, A12 and A13) In the interior of the mall site, focusing on New High Street and the town center Main Street, retail uses and a variety of attractions are required. The core of the mall site closest to Duke Street and extending most of the length of the main shopping street forms the core of the regional retail center, attracting shoppers from throughout the region to a unique environment with unique stores, restaurants and entertainment.

A beautiful tree-lined street with broad sidewalks and seating connecting green spaces and other attractions forms a central promenade.

It is anticipated that anchors will be located on either end of the main shopping street. Nearly continuous retail frontage on both sides of the street along its length is required to encourage pedestrians to circulate the full length of the street. The anchors for this street could include department stores, an entertainment complex with movie and live theaters and restaurants, a cluster of unique shops, an active outdoor space or other attraction that would draw a large percentage of regular visitors throughout the year.

Landmark Plaza, an active urban open space, is proposed in block A8 at the intersection of Main Street and New High Street. This intersection is expected to have

substantial transit activity where local and regional transit connects, and will be the connection into the site for many transit users. An alternate location for Landmark Plaza in Block A5 would put this open space at the intersection of the principal interior east-west retail streets, would provide greater retail continuity in the core of the site at New High Street, and could provide a larger open space.

Lower buildings with residential uses and some office uses above retail are proposed within the center of the mall site to preserve the retail focus and to maximize light and air on important shopping streets. A green connection with tree-lined streets and active and passive open spaces connects the retail center to Van Dorn Street and the regional green corridor of Holmes Run. New High Street and Main Street are proposed for dedicated transit lanes as part of the Van Dorn Street dedicated transit corridor.

New High Street Blocks. (Blocks A7, A-8, A-9 and A-13) The block faces along New High Street from the Duke Street transit center to and along Landmark Plaza are required retail frontages that will create a strong pedestrian connection to and across Duke Street to link the Landmark Mall portion of the Town Center to office, residential and retail uses to the south. New High Street requires continuous retail frontage from Landmark Plaza to Stevenson Avenue to reinforce this connection. Except when crossing the bridge over Duke Street, continuous retail frontage with a variety of openings and activities is required along these blocks to create an attractive walking environment.

Terrace Garden (Blocks A10-11) Approximately 2.5-acre open space provided along the Van Dorn Street frontage of the site. The park will provide passive recreational opportunities and link to Holmes Run. To the greatest extent possible, the park should be designed with the natural slope and terrain, and to take advantage of the topography and views, an overlook towards Holmes Run should be incorporated in the design of the park. Public art is strongly encouraged.

Northeast Quadrant Blocks. The portion of the Landmark Mall site to the north and east are less well connected to regional transportation and are less the focus of high levels of activity and attractions. This area includes the green spaces linking to Van Dorn Street, which create an attractive location for residential uses. These areas are appropriate for either residential or office uses above retail, and in the areas most distant from the center and with the least connections to the exterior circulation system, may be appropriate for residential or office use at the ground floor. Sites in this area along the periphery at I-395 and Van Dorn Street, where terrain prevents connections to outside the site, may be appropriate for above-grade parking structures. This area may also be appropriate for regional attractions such as specialized museums or entertainment uses that could draw visitors from throughout the region who might not visit the area for shopping, but do not depend on being in the center of the shopping district. Civic uses such as a community or recreation center could also locate in these areas of the site.

Transit Center. The Landmark Mall site is an important transit transfer center that will take on an increased role with implementation of transit in the City's Duke Street and Van Dorn Street dedicated transit corridors. The transit center currently serves DASH, Fairfax Connector and Metro buses. Facilities for the convenience and comfort of transit riders, routing to minimize transit travel times, and location for convenient transfers are required. Landmark Mall is a timed point for a number of lines and is expected to be a terminus for some lines in the future. Stops for interline transfers, transfers to and from the dedicated transit corridors, and layover locations for local and regional transit services are also needed.

Block B. Choi Property.

At 250 feet above sea level and 20 to 25 feet above Duke Street, Block B has the highest elevations in the planning area, more than 20 feet higher than the highest elevations on the Landmark Mall site and Block C to the east.

The site's high elevation makes it visible for a long distance along I-395, providing it the high visibility needed for Class A office development. Because of this potential, a minimum of 500,000 square feet of the floor area of this site must be reserved for office development. Up to 300,000 square feet of residential development is permitted. 10,000 square feet of retail use is required to ensure that office employees and residents have convenience retail and service uses such as a deli, coffee shop and convenience market immediately available.

Terrain and the street network make this site more difficult to connect to the rest of the Town Center than Block C. Pedestrian connections along Stevenson Avenue and the walkways along New High Street Park are the ways this block is connected into the pedestrian network. It is expected that the developer will contribute to an open space fund to create the new park.

With 8.21 acres of land, this site supports 895,000 square feet of development at 2.5 FAR. A minimum of 2.0 FAR, or 715,700 square feet, is required.

Block C. Saul Centers/Passport Property.

This block is the current site of BJ's Wholesale Club and the Passport Chrysler dealership. With an area of approximately 12.5 acres, this block has a potential for up to 1,356,000 square feet of development. Additional development could be permitted if the City determines that all or part of the area of the existing ramps from Duke Street to Van Dorn Street is no longer needed for the street network or other public use. Up to approximately 1.7 acres depending on the configuration of Duke Street and whether access to Van Dorn Street is provided could be sold or exchanged and become part of the development area. In adding this area to the Town Center, floor area permitted should be established to maintain approximately 30% residential and 70% nonresidential uses within the Town Center.

Block C is a pivotal one in the concept for the West End Town Center and its link to the rest of the Landmark/Van Dorn Corridor and surrounding residential areas.

The plan shows New High Street extending south from Landmark Mall through this block, creating a new retail street that requires continuous retail frontage from Duke Street to Stevenson Avenue. A minimum of 125,000 square feet of retail development is required on this block, focused on providing this continuous retail connection. Substantially more retail development is possible and encouraged. Upper levels along Duke Street are most appropriate for office use, with taller buildings to frame Duke Street and reinforce the importance of the overcrossing of New High Street over Duke Street.

The Van Dorn Street frontage needs to provide an attractive front with articulated building surfaces and landscaping for a pleasant walking environment, and a comfortable pedestrian environment along Van Dorn Street. Either residential or office frontage on Van Dorn Street is appropriate, with a maximum of 445,000 square feet of residential use, or about 400 to 450 dwelling units, permitted.

New High Street through this block is proposed to be the route of the Van Dorn Street dedicated transit corridor outlined in the Transportation Master Plan. Adequate provision for transit lanes, transit stops and shelters, and local transfers is needed.

Block D. Whiting Street properties

The Plan does not call for the redevelopment of this block. A portion of up to 1.5 acres of the Northern Virginia Juvenile Detention Home property and adjacent property in Block D may be developed as part of the development of Block E. Development of east-west public pedestrian walkways through this parcel would improve pedestrian access to the Van Dorn Street corridor.

Block E. Van Dorn Plaza.

Van Dorn Plaza is now a neighborhood retail center with its primary market area in the City east and south of I-395 and west and south of Holmes Run.

In the Framework Plan, this block anchors the south end of the retail portion of New High Street that begins within

the current Landmark Mall site. The recommended 100,000 square feet of ground-floor retail development continues the strong neighborhood retail role of this center. Additional ground-floor retail use would be appropriate within this block. Either office or residential development is appropriate above retail uses.

The framework plan shows New High Street continuing south across Stevenson Avenue through this site to an ultimate connection with Whiting Street.

The framework plan shows an option for a park in the northwest portion of the site adjacent to Stevenson Avenue. Although the park will be generally located along Stevenson Avenue between Van Dorn Street and Walker Street, the location and configuration will be determined during the development review process for this and adjacent blocks.

Block F. Landmark Terrace Apartments.

The plan does not call for the redevelopment of this parcel. The extension of New High Street through this parcel to Whiting Street is proposed. Prior to the construction of New High Street, a public pedestrian pathway through this parcel would improve pedestrian access throughout the Van Dorn Street corridor.

Block G. EOS-21 Condominiums and Apartments.

The Plan does not call for the redevelopment of this block. The development of public pedestrian pathways through this block would improve pedestrian access in the Van Dorn Street corridor.

Pickett Place

The Plan calls for a total of 4.8 million square feet of office, residential and retail uses for Blocks H-M that make up the Pickett Place neighborhood in the planning area. Pickett Place is proposed as a mixed-use community center providing a substantial retail center with office and residential development with open space in a pattern of walkable urban blocks.

Block H. Edsall North Side.

Block H on the north side of Edsall Road between Reynolds Street and Van Dorn Street is currently occupied by restaurants, auto service businesses, convenience stores, service businesses, and residential uses. The residential uses are not expected to redevelop under the plan, and the area where CDD rezoning is provided for includes only the 5.35 acres of nonresidential parcels.

Block H has relatively steep terrain between Edsall Road and the EOS-21 apartments to the north, making continuation of the north-south street grid challenging. While the Framework Plan shows Metro Street continuing north of Edsall Road and connecting to Van Dorn street just south of the EOS-21 property, the terrain on both this block and the EOS-21 site make constructing the street as shown on the framework plan difficult. While this street should extend into the site opposite the intersection of Metro Street from the south with Edsall Road, the connection of this street with Van Dorn street is not required except as a pedestrian pathway.

It is envisioned that development on this block would include a mix of office and residential uses with some ground-floor retail use.

Block I. Koons Collision and Penske Block.

This block fronts Van Dorn Street between Edsall Road and Pickett Street. On Edsall Road, adjacent properties to the west are developed with garden apartments in the South Port and Edlandria residential complexes. On Pickett Street, adjoining parcels to the west are industrial.

The Framework Plan shows the extension of Whiting Street south through this block to Pickett Street, creating a continuous new street parallel to Van Dorn Street from Pickett Street to Landmark Mall. Where the extension of Whiting Street creates a triangular parcel defined by the continuation of New High Street south of Edsall Road to Pickett Street, a new park designated as Edsall West

Park is proposed to serve nearby residents and potential new residents in the Van Dorn Street corridor. A minimum of one acre of open space is required in this block.

The Pickett Street Main Street is required to be extended through this block, with the corners on Van Dorn Street required to be developed with ground floor retail use. A total of 45,000 square feet of retail use is required to continue the neighborhood retail street. Intersection improvements are proposed to provide a strong statement of the continuity of Main Street crossing Van Dorn Street.

Office development above retail use at the intersection with Van Dorn Street is appropriate, and building heights up to 85 feet on the Van Dorn Street frontage for up to half the depth of the block from Van Dorn Street to the future extension of Whiting Street are proposed. No office development is required on this block, but the intersection of Pickett Place Main Street with Van Dorn Street would be an appropriate office location.

Because of the 20% or more of the area of this block required to provide the Edsall West Park and the extension of Whiting Street, the remaining development area is expected to be developed at relatively high intensity, with heights up to 85 feet along Van Dorn Street and lower buildings to the west.

Block J. Edsall/Pickett/Van Dorn Street Block.

The block bounded by Edsall Road, Pickett Street and Van Dorn Street includes 23.25 acres of land, sufficient for just over 2.0 million square feet of development at the proposed 2.0 FAR. A minimum of 1.5 FAR, or 1.5 million square feet of development, is required. A minimum of 250,000 square feet of retail development is proposed on this block in order to create a substantial community-scale center or lifestyle center combined with retail and office uses. 250,000 square feet of office development must be provided for in the development plan. Retail development is to be focused on a new neighborhood main street that runs east-west through the parcel and crosses Van Dorn Street to continue

its main street function to intersect the extension of Whiting Street in Block I. Space for mid-box stores, a large grocery or other uses along this main street can be provided within the depth of the blocks. Some retail use could extend up to Edsall Road, which also provides a level walking path for shoppers. Either office or residential use could be developed above the ground-level retail use. Because of the slope of the site from Edsall Road down to Pickett Street, parking can be tucked into the slope in this block.

The intersection of Pickett Place Main Street and Metro Street is proposed as the location for a long park in the median of Metro Street designated Pickett Square in this plan. The park consists of approximately one-half acre in two parts and should include public art. The plan anticipates taller residential buildings of up to 120 feet along this square.

A minimum of 500,000 square feet of residential development, or 400 to 500 dwelling units, is required to create a mixed-use environment with a significant resident population. Additional residential development is expected, consistent with meeting the minimum required nonresidential development outlined.

Block K. Auto Dealership.

Block K, on the north side of Pickett Street just east of its intersection with Edsall Road, has a development area of 5.09 acres with a total development potential of 443,000 square feet. Because Block K is at the periphery of the community center, continuous retail frontage is not required. A total of 12,000 square feet of convenience retail is required, and will provide on-site convenience shopping. Residential, retail, office or other commercial use is permitted for the remaining floor area. A building height of up to 65 feet is permitted, with a height of up to 85 feet on the Pickett Street frontage.

Block L. Pickett Plaza

The plan for this block anticipates the expansion of Armistead Boothe Park to provide a green space at the eastern edge of Pickett Place, designated Pickett

Plaza in the plan. Public art should be included in the expanded park. Funds to acquire, design and build the park will come from developer contributions to the open space fund.

Block M. Gateway Holding II.

The Gateway Holding II site is proposed for residential development with a convenience center for residents of the project and nearby residential and employment areas. The site has 7.8 acres of land and will support between 509,500 and 669,000 square feet of development. A total of 550 to 660 dwelling units would be expected with a minimum 12000 square feet of convenience retail and service uses oriented to Pickett Street or the central east-west street. Additional office and retail development is also permitted

The site is directly adjacent to the Cameron Station neighborhood, which has an alley providing access to garages along the boundary between the sites. Careful design of the development adjacent to Cameron Station will be required, including stepping down in height and providing a façade that has visual interest and articulation and some open space. Access through the block east-to-west paralleling Pickett Street is required in anticipation of future development of the Trade Center shopping center immediately to the east. If possible, access through the site from Cameron Station should be provided.

The maximum building height for this block is 85 feet along the Pickett Street frontage for a depth of up to 120 feet. The remainder of the block has a height limit of 65 feet.

7.2. Streets

The developers of each block will be responsible for the construction and dedication of streets required by the plan within or adjacent to each project site. The City in conjunction with developer contributions will participate in implementing the improvements for Duke Street and Van Dorn Street. Developers of parcels adjacent to Duke Street and Van Dorn Street will be required to dedicate any additional right-of-way needed for the street improvements on these streets. The added right-of-way should in general be taken equally from both sides of Van Dorn Street. Along the EOS-21 property the current centerline location is expected to be retained but the width of the sidewalk setback and possibly the added right-of-way on the east side may be reduced to minimize the height of any retaining wall required.

The street guidelines and standards outlined and streets mapped in the framework plan are conceptual. While the streets, street sections and blocks shown are intended to meet the plan's objectives for connections, appearance, support for adjacent land uses, and multimodal circulation requirements, they have not been engineered. The precise location and geometry for streets, street sections and intersections will be determined through the development review process or at the time of design of public improvements.

In general, all framework streets should be public streets in order to ensure appropriate design, construction, operation and maintenance over the life of development. Under the City's current practices, private streets must be approved by the Director of Transportation and Environmental Services.

Street names for new streets and names for new parks used in the plan are for convenient reference in the plan only. The City's standard naming process will be used to name new public streets and parks.

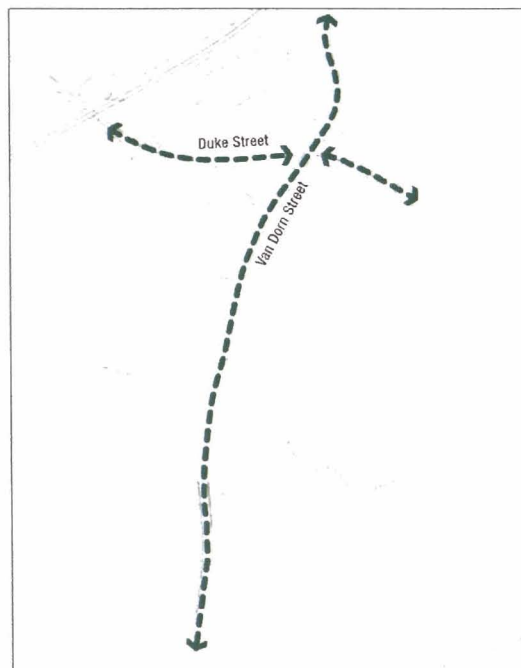


Figure 7-2. Duke Street and Van Dorn Street are designated A-1 streets.

7.2.1. A1 Streets

Van Dorn Street

This street is the major roadway that passes through the study area. Currently, it is a carrier of large traffic volumes. A substantial share of this traffic is through traffic without a destination in the planning area. The street also serves as a major address for a number of businesses along it. Duke Street and Van Dorn Street provide the primary regional connections to and through the planning area.

The street has two distinct characters – North and South of Edsall Road – largely due to the dual left turn lanes at Edsall Road from northbound Van Dorn Street. In order to reinforce Van Dorn Street's boulevard character, a minimum 15-foot median is recommended along the length of the street in the places where dual left-turn lanes reduce the median, with a wider median in other locations. Dense street tree cover along the edges of the

street is also proposed. The intent of these planting areas and street tree plantings is to perceptually limit the significant width of the street, and to provide adequate pedestrians refuge areas within the median.

While the significant changes in grade on Van Dorn Street, particularly from Edsall Road to north of Stevenson Avenue, are not conducive to successful retail frontage along the street except at select locations, the street could become a major boulevard, with prominent residential frontage, much like upper Connecticut Avenue in northwest Washington DC.

Van Dorn Street has been designated in the Transportation Master Plan as a dedicated transit corridor. The street sections in this plan have been prepared

to depict a multi-modal boulevard along Van Dorn Street with dedicated transit lanes. The sidewalks have been allocated in three distinct zones – a 6-foot zone along the curb for bikes, a 6-foot tree planting zone, and a 12-foot zone for pedestrians. Construction of the desired street section will require a phased construction strategy, since the available 100-foot right-of-way is not sufficient to provide these lanes with a boulevard median.

Design Guidelines for Van Dorn Street

- Sidewalks – 24 feet wide, with a 6-foot bike path, a 6-foot tree planting strip and a 12-foot “walkway zone” for pedestrians. The 6-foot tree planting zone may accommodate low impact development (LID) elements. Pedestrian-scale lighting should be

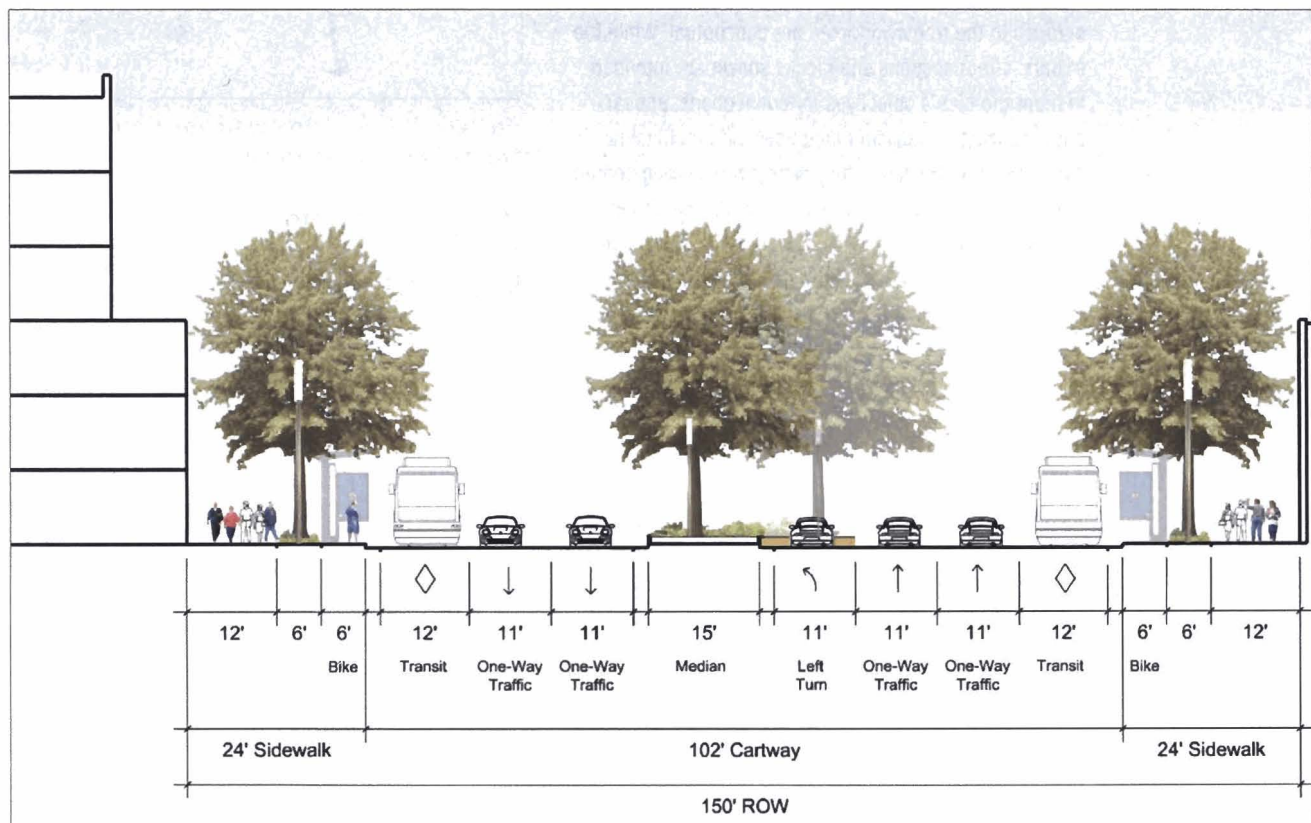


Figure 7-3. Van Dorn Street North of Edsall Road. This section shows the addition of dedicated curbside transit lanes on both sides of Van Dorn Street. A retaining wall is shown on the east side of Van Dorn Street adjacent to the EOS-21 Apartments.

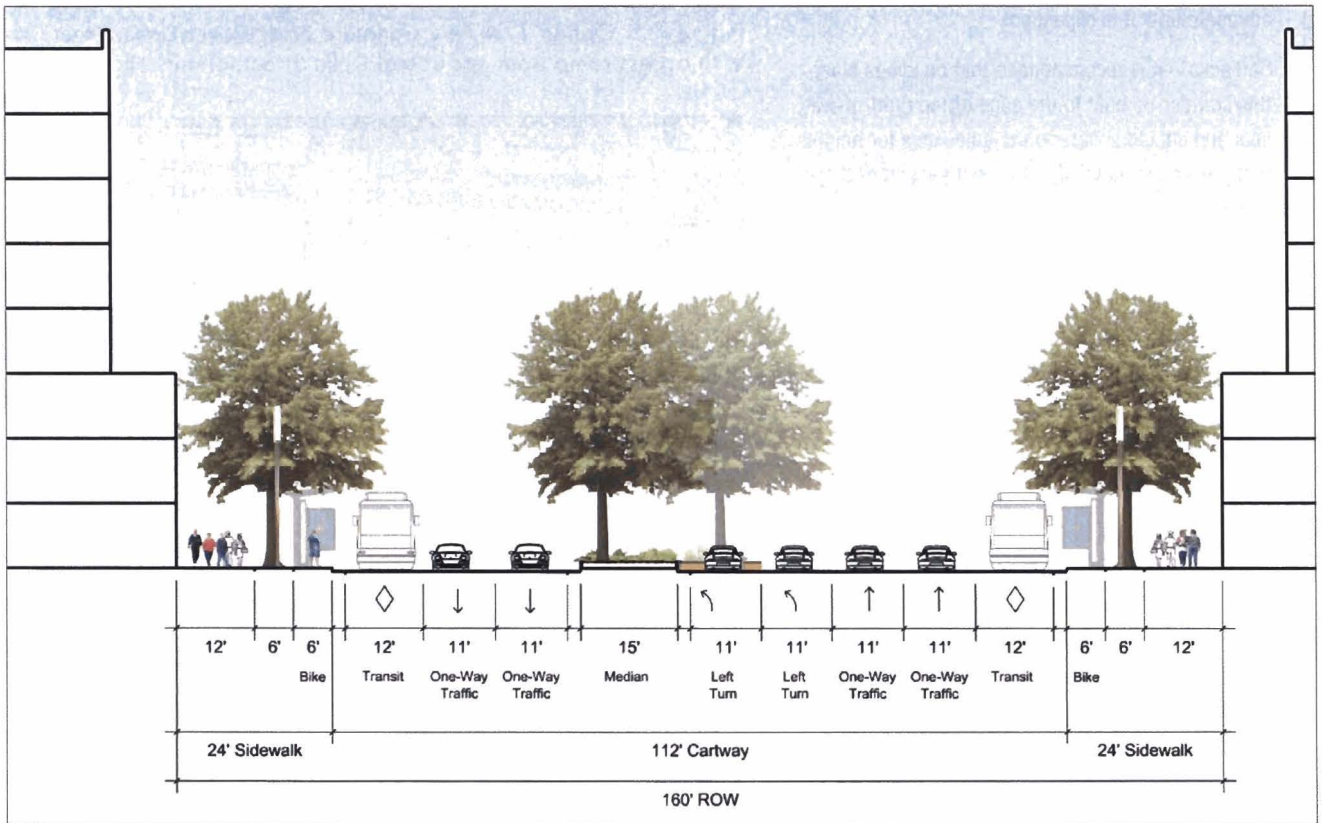


Figure 7-4. Van Dorn Street South of Edsall Road. Dual northbound left-turn lanes at Edsall Road mean a wider cross-section is required in order to retain the boulevard median. Bike lanes are outside of the cartway but may be within it depending on ultimate design. If bike lanes are as shown, bikes will be routed around transit shelters to prevent conflicts.

considered for locations where substantial pedestrian traffic is expected.

- Right-of-way expansion – the existing street right-of-way is 100 feet wide. However, the plan calls for an expanded right-of-way – 150 feet north of Edsall Road and 160 feet south of Edsall Road. The added right-of-way should in general be taken equally from both sides of Van Dorn Street. This additional right-of-way will be acquired from properties that front on Van Dorn Street as these sites redevelop. As an interim strategy, the various modes of transportation may be accommodated within the 100-foot existing right-of-way. Preliminary studies indicate that if transit vehicles run in shared lanes, along with other modes of traffic, the existing right-of-way will be adequate until it is expanded.
- Setbacks – it is recommended that buildings along this corridor be built to the edge of the right-of-way line, and should adhere to the guidelines for heights that have been outlined in the next section of these guidelines.
- Green edges to create a transition zone, to the extent feasible, between new residential development and the public right-of-way.
- Curb cuts – Apron and pedestrian walkways should be treated in a manner consistent with adjacent areas of the sidewalk. Curb cuts should be minimized.
- Medians – Cross-sections were developed to provide a minimum 15-foot median width, subject to future engineering design, to provide adequate pedestrian refuge area, and space for a prominent street trees to be planted. The intent is that the median be seen as a consistent green element within the right-of-way to reinforce the boulevard character of the street
- Tree Cover – generous tree planting zones have been provided so that trees with dense canopies may thrive, to soften the impacts of the high traffic volumes on Van Dorn Street.

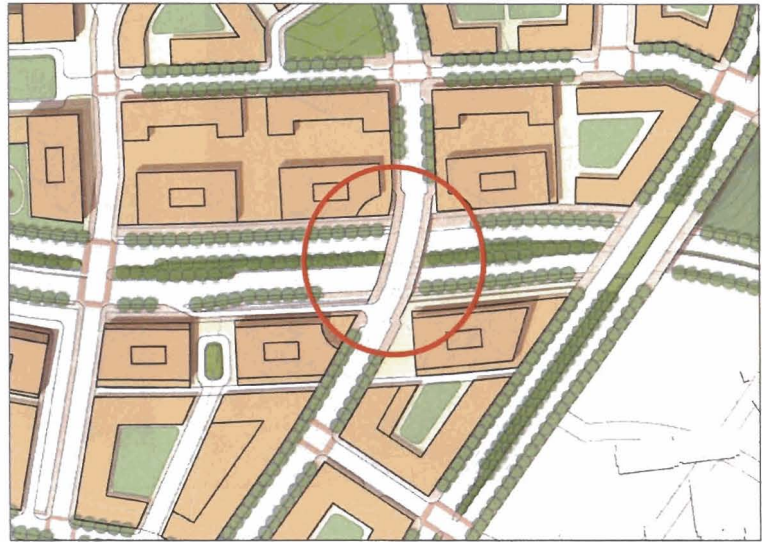


Figure 7-5. Option 1. A new signature bridge over Duke Street with access ramp from eastbound Duke Street to New High Street.



Figure 7-6. Option 2. At-grade intersection with dual left turn lanes.

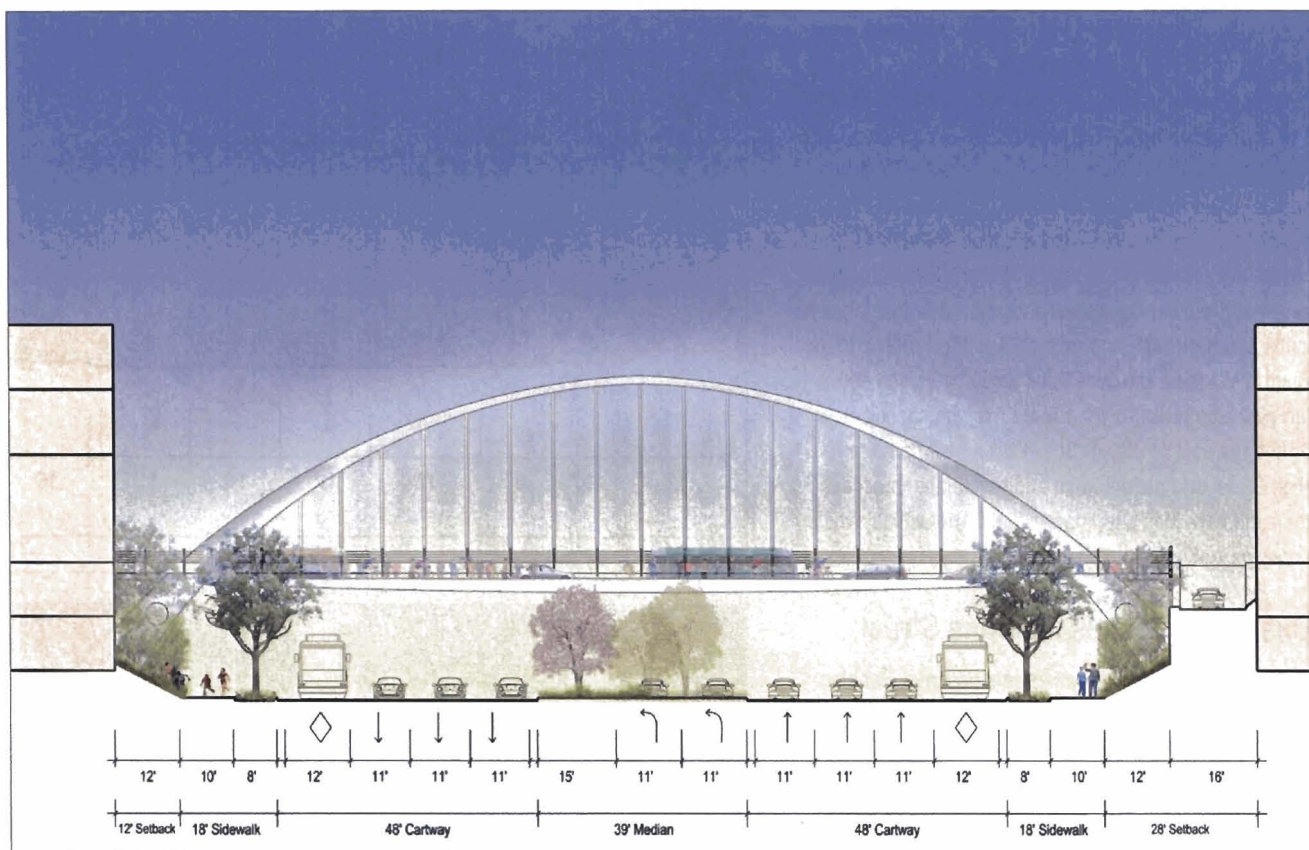


Figure 7-7. The proposed cross-section for Van Dorn Street provides for a substantial landscaped area along each side, with a multi-use trail for bicycles and pedestrians. Dedicated transit lanes are proposed to be added in the stretch of Duke Street from I-395 to Van Dorn Street.

- Transit facilities – should be well designed, in visible locations, with adequate signage and lighting. Where the bike paths would intersect with transit stops, special provision to route bikes around the stops will be required.

Duke Street

Duke Street today is a major arterial street that links the West End with Alexandria's historic Old Town. It is a major vehicular thoroughfare as it passes through the study area. The presence of interchanges with I-395 and Van Dorn Street on **opposite** sides of the planning area on Duke Street **has rendered** the section of Duke Street **between these interchanges** inhospitable to **pedestrians**.

However, on either side of this major street are large parcels that are likely to redevelop in the near to mid term. Of special significance is the expected redevelopment of Landmark Mall, bordering the north side of the entire quarter-mile length of Duke Street between these two interchanges.

For the city, there is an opportunity here to link the two sides of Duke Street and create a true "Town Center" for the West End. The City's Transportation Master Plan locates one of three regional dedicated transit corridors along Duke Street.

The proposed cross-section of Duke Street consists of a boulevard with a wide median, a generous sidewalk on

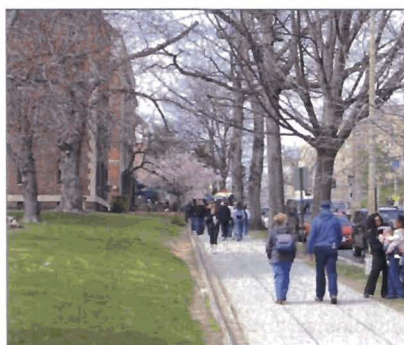
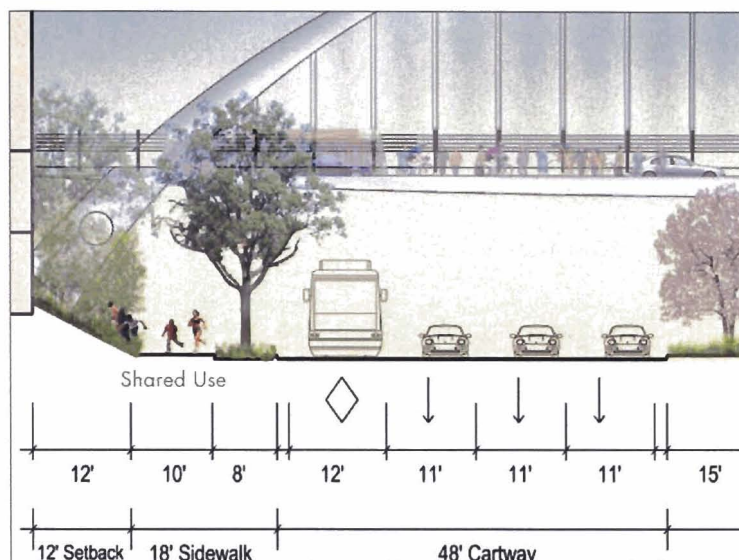
either side of the street including space for street trees and a multi-use path accommodating bicycles and pedestrians, and a landscaped area between the sidewalk and the building edge. The high traffic volume along this major thoroughfare has been accommodated in three general travel lanes each direction. Curbside dedicated transit lanes are proposed to be added. In order to facilitate access to the Landmark Mall site, left-turn lanes have been provided at three locations, with dual left-turn lanes at a new main entrance at New High Street. In the event that the bridge over Duke Street is implemented, the plan also provides for a ramp from eastbound Duke Street just east of Walker Street taking traffic up to New High Street and providing an additional lane to access the Landmark Mall site above Duke Street which avoids opposing traffic on Duke Street.

Design Guidelines for Duke Street

The design guidelines for all streets describe planning objectives for design and function of streets. While the overall right-of-way width has been established in an effort to ensure that the street sections described can be constructed meeting the objectives outlined, these street sections have not been engineered for the specific locations proposed, and the street system and intersections shown in the framework plan are conceptual. The details of design will be developed through the design review process or at the time of feasibility analysis and engineering design of infrastructure improvements.

Guidelines for Street Cross Section

- **Sidewalks** – 18 feet wide, with an 8-foot tree planting strip, that also serves as a buffer between pedestrians and vehicular traffic. A 10-foot multi-use path is provided for pedestrians and bicycles. The 8-foot tree planting zone may accommodate low-impact development elements. Pedestrian-scale lighting should be considered in areas where substantial pedestrian traffic is expected.
- **Setback areas** – Minimum 12-foot width, to accommodate sloped, landscaped berms that serves



as a transition between the sidewalk and building facades; these berms should adhere to a 1:2 slope, to ensure that healthy trees grow.

- Medians – Cross-sections were developed to provide a minimum 15-foot width, subject to future engineering design, to provide adequate pedestrian refuge area and a strong statement of the boulevard character of the street.
- Curb cuts – Apron and pedestrian walkways should be treated in a manner consistent with adjacent areas of the sidewalk. Curb cuts should be minimized.
- Tree Cover – generous tree planting zones have been provided so that trees with dense canopies may thrive, to soften the impacts of the high traffic volumes on Duke Street.
- Transit facilities – should be well designed, in visible locations, with adequate signage and lighting.
- Special Intersections – The intersection of Duke Street and New High Street will likely be a transit interchange area, in either an at-grade or grade-separated configuration, the intersection should provide prominent crosswalk treatments and be designed for convenient and easy pedestrian crossings in all locations needed to transfer between transit lines and to access all portions of the Town Center.

7.2.2. A2 Streets

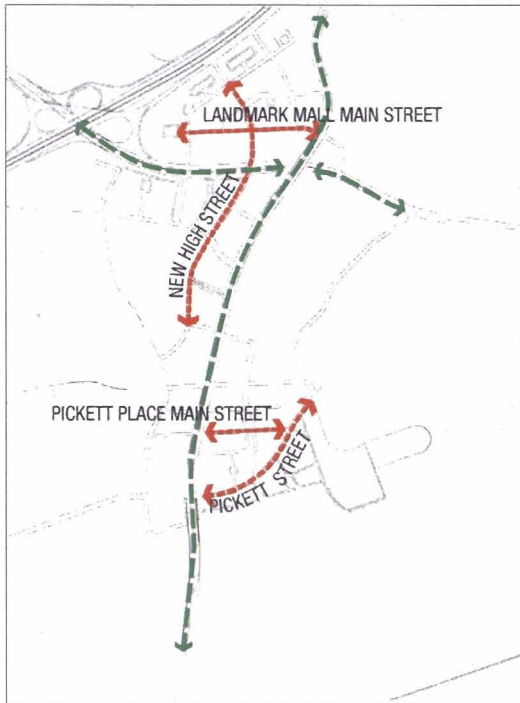


Figure 7-8. A2 streets are important local image-creating streets for the Town Center and Pickett Place.

New High Street

New High Street connects across Duke Street from the "Bluffs" at West End to the Landmark Mall site, and will ultimately extend southerly to Pickett Street over time as redevelopment occurs.

This street is a major piece of new infrastructure that will become the north-south spine for the West End Town Center, and a major new retail street. New retail shops are envisioned along the street frontage creating an activity node south of the Duke Street and providing a direct connection to the Landmark Mall site. The street section north of Stevenson Avenue to the main shopping street at Landmark Mall is proposed to accommodate dedicated lanes for transit that will link the Town Center with Van Dorn Metro Station via Van Dorn Street.



This street is the major new entry to the Landmark Mall site for pedestrians, bicycles, transit riders and vehicular traffic. The right-of-way includes 20-foot sidewalks, a dedicated transit lane and one shared travel lane for cars and bicycles in each direction, with curb parking to support retail use. The bridge across Duke Street will serve as a major gateway to Alexandria, adding much value to the parcels on either side of Duke Street. The bridge is intended to be a multi-modal facility that maximizes access to the Landmark Mall site for pedestrians, bicycles, motor vehicles and transit riders. In order to

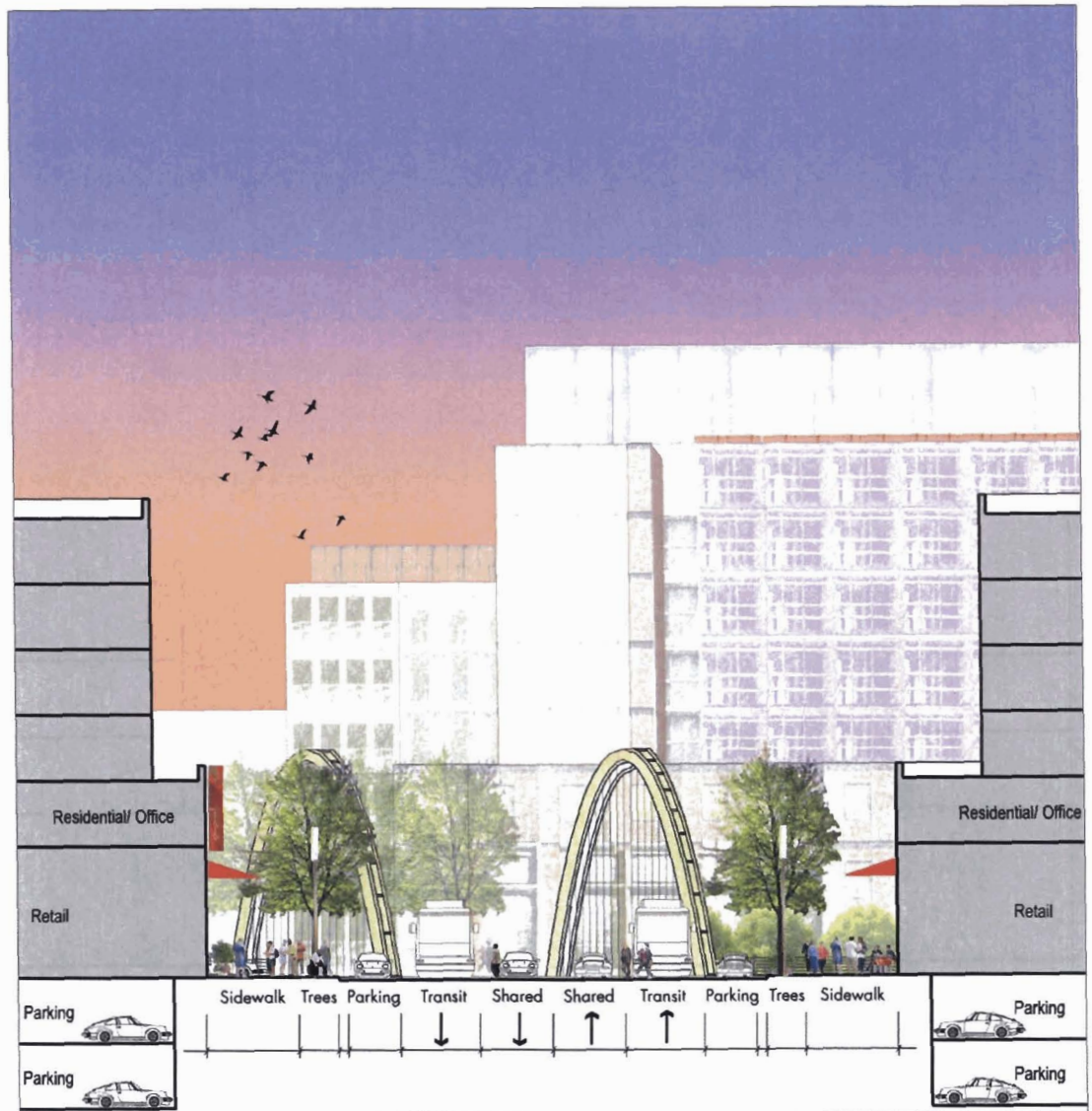


Figure 7-9. New High Street. The cross-section for New High Street north of Stevenson Avenue includes dedicated transit lanes and a broad sidewalk area.

minimize width of the bridge, parking lanes are not expected to be provided on the bridge itself.

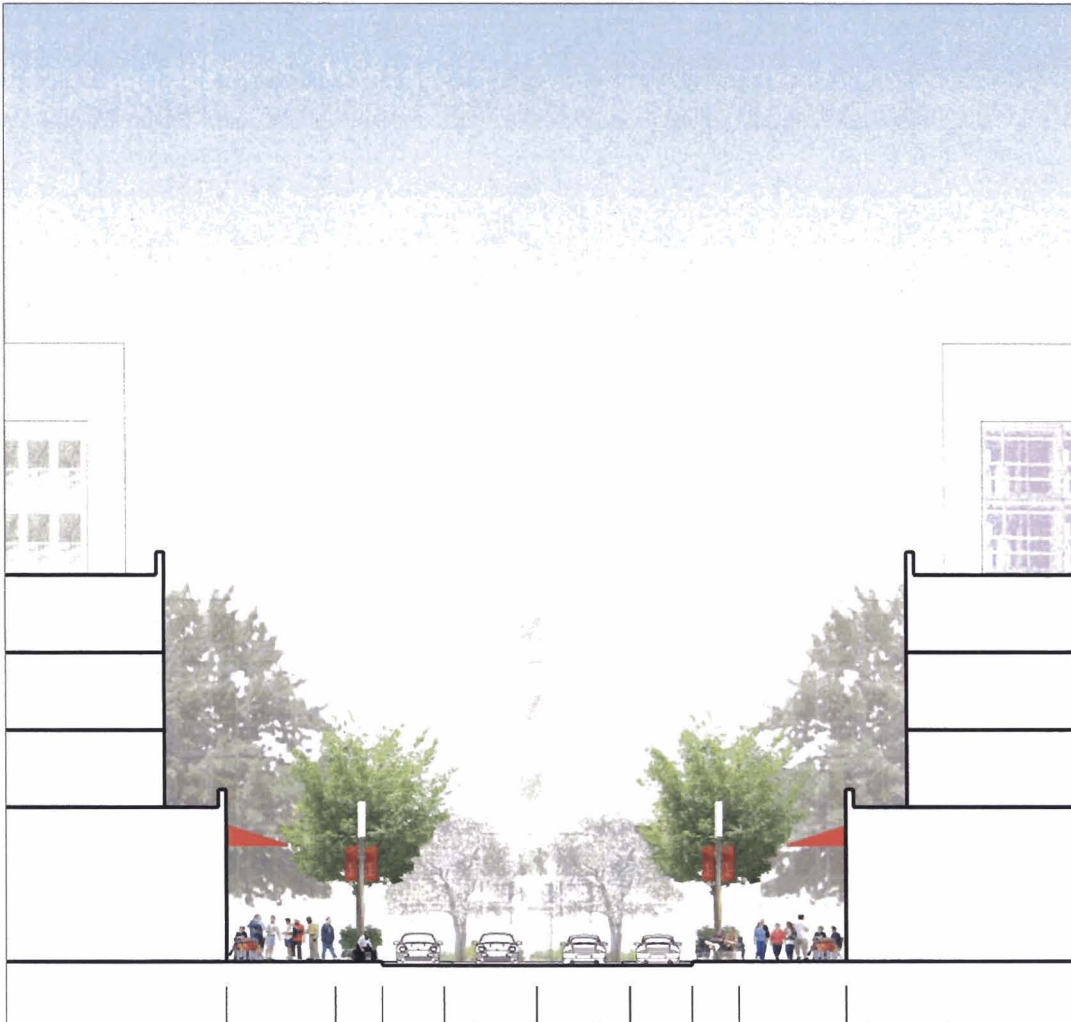


Figure 7-10. Pickett Place Main Street provides one moving lane for traffic and bicycles in each direction, parallel parking and broad sidewalks for retail stores.

Pickett Place Main Street

This new main street will form the spine for the Pickett Place neighborhood. The street intersects Pickett Square, half-way along its length, and is terminated to the east by a triangular plaza and the Armistead Boothe Park. To the west, the street is terminated by Van Dorn Street, where office buildings may be located, to take advantage of the exposure offered by the high traffic volumes and future dedicated transit service along Van Dorn Street.

The street cross-section was developed to maximize exposure for the retail tenants that line the street's edges. The 80-foot right-of-way should be designed to calm traffic with an emphasis on creating a pedestrian-friendly environment with slow-moving traffic and wide sidewalks with pedestrian amenities such as benches. The recommended width for the cross-section was developed with the intent to provide a 20-foot wide sidewalk with a 6-foot wide tree planting zone and a 14-foot wide zone for pedestrian circulation and spill-out



Figure 7-11. Pickett Square and Metro Street. A generous median provides a neighborhood park.

areas for the retail tenants. Traffic has been accommodated within a single shared vehicle-bicycle lane, in each direction, with on-street parking. At intersections, sidewalk extensions should be provided to facilitate easy pedestrian crossing..

Metro Street

This important street runs perpendicular to Pickett Place Main Street and forms an important part of the overall street grid, by offering an alternative to Van Dorn Street for local traffic. Metro Street is proposed to ultimately

link to the Van Dorn Metro by a multimodal bridge over Backlick Run and the Norfolk Southern railroad line.

The design intent for the street is for it to be a major pedestrian link to the Van Dorn Metro and to Backlick Run. The street also offers access to Pickett Place Main Street and Pickett Square, the neighborhood's major retail and open space amenities.

The right-of-way is intended to favor pedestrian circulation. Wide, well-shaded sidewalks offer a pleasing environment to walk in, and a single lane of traffic in

each direction with on-street parking allows slow-moving vehicular circulation.

Special Intersections

These include –

- Main Street and Metro Street
- Main Street and Picket Street
- New High Street and Stevenson Avenue
- New High Street and Landmark Street

Special attention should be paid to the detailed design of these intersections. They accommodate important public open spaces, and should have prominent crosswalks. Street furnishings, landscape elements and lighting should be used to create pleasing pedestrian environments.

Design Guidelines for A2 Streets

- Sidewalks - a minimum width of 20 feet should be provided where possible. This includes a 6-foot tree planting and street furnishing zone and a 14-foot zone for pedestrians and spill-out space for retail tenants. Care should be taken in the future to maintain a minimum 6-foot wide walkway area for pedestrians within this zone. Pedestrian-scale lighting should be considered in all retail areas and in other areas where substantial pedestrian traffic is expected.
- Parking - all A2 streets should accommodate on-street parking.
- Curb cuts. Curb cuts are strongly discouraged along A2 streets.
- Transit facilities. Transit facilities should be well designed, in visible locations, with adequate signage and lighting.
- Bicycles should generally use shared lanes on A2 streets.

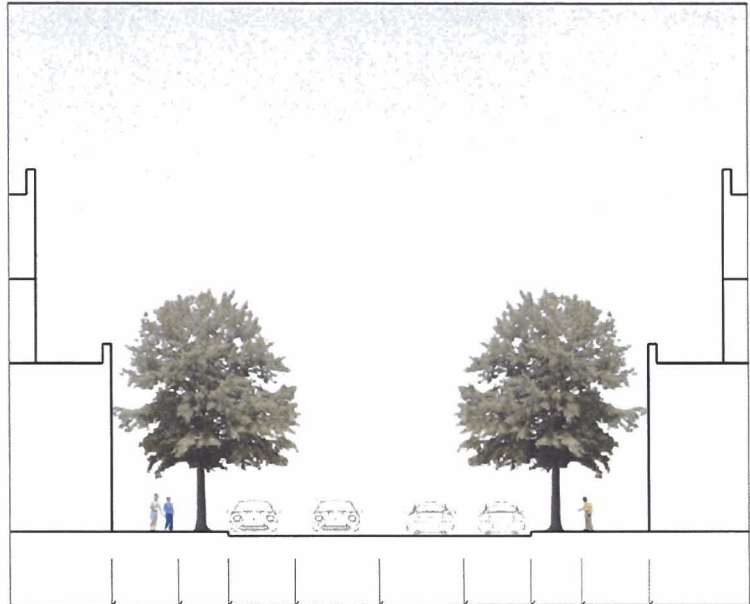


Figure 7-12. Residential streets provide two shared lanes for cars and bicycles, with two parking lanes, a planting strip and sidewalk.

7.2.3. Residential Streets

- Sidewalks. A minimum width of 14 feet should be provided. This includes a 4- to 6-foot tree planting/street furnishing zone and an 8- to 10-foot zone for pedestrians. A minimum 6-foot-wide walkway for pedestrians should be provided within this zone. Pedestrian-scale lighting should be considered on residential streets that are expected to be primary pedestrian circulation routes.
- A building-face-to-building-face distance of 66 feet should be maintained.
- Bicycles and motor vehicles share moving lanes on residential streets.
- Parking. All residential streets should accommodate on-street parking.
- Intersection bulbouts should be provided, with ADA accessible ramps.

7.3. Land Use

Primary Use

Figure 7-1 shows general land use categories for development above the first floor throughout the planning area. The areas mapped are intended to provide for the minimum floor area required by Table 4-5 in each land use category and to locate principal uses to take advantage of conditions such as view, access, and proximity to other synergistic uses that make each use appropriate in the locations mapped.

Required Retail Use

Retail development has very specific location criteria that are important to retail success and define where retail tenants will locate and how developers will structure a retail center. Among these criteria are slope of retail streets, availability of immediately adjacent parking, availability of nearby supplemental parking, visibility and convenience of access from major roadways, location of competitive centers and stores and other stores in the same chain, and mix of resident population and household incomes in the perceived market area.

Retail space has specific design requirements that must be met if a space is to be occupied by retail stores or restaurants. These requirements include minimum and preferred store depth and shape, with a minimum depth of 80 to 100 feet for typical in-line shops, and minimum floor-to-ceiling height of 15 feet and preferred floor-to-ceiling height of 20 feet.

Figure 7-12 shows required and preferred retail floor area in the planning area based on these criteria. Required retail space must be developed to industry standards for occupancy by retail stores and restaurants. Preferred retail space indicates areas that are appropriate for retail use and provide areas to increase retail floor area to meet or exceed the minimum required for each development block. These areas are appropriate places to expand the depth of retail frontage to accommodate larger users with store sizes of 20,000 to 50,000 square feet or more. If street alignments change

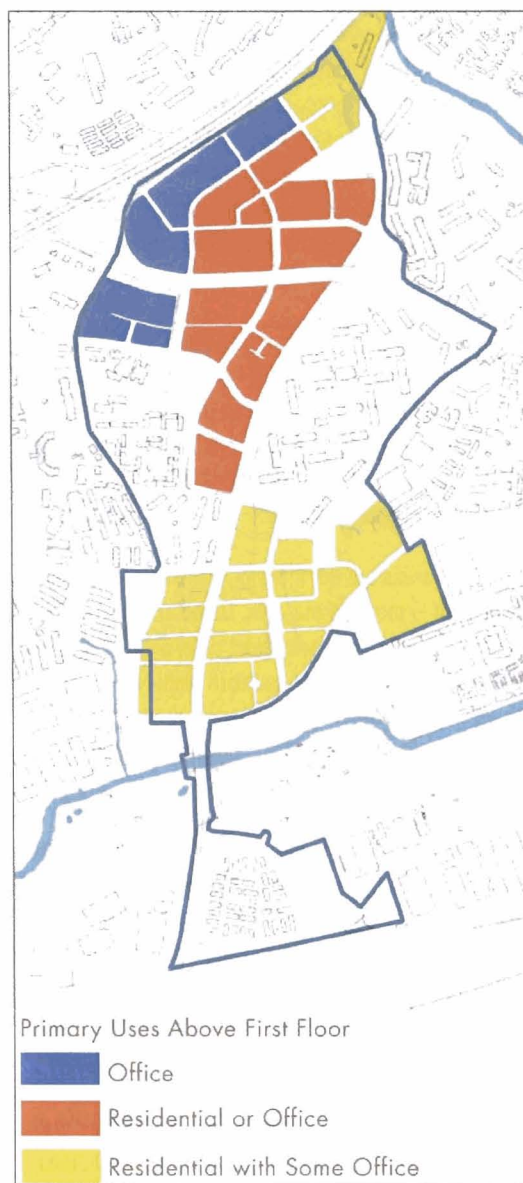


Figure 7-13. Generalized Land Use. This figure shows the predominant land use above the first floor for the areas expected to redevelop under CDD rezoning.

through the development review process, retail frontage may be reconfigured.

The amount and continuous frontage of non-retail uses at the ground floor may be limited through the CDD Special Use Permit in key areas of this required retail area, such as along proposed Pickett Place Main Street, in order to ensure a continuous retail frontage without gaps so that shoppers are encouraged to continue to explore the entire street by interesting store windows and retail signs ahead.

In addition to areas that must be developed to meet requirements for occupancy by retail tenants, certain prime retail locations are required to be occupied only by retail tenants. These include key corner locations that indicate the presence of a retail center and help anchor the ends of shopping streets.

Three key areas are the focus of ground-floor retail development in the planning area. These are Main Street at West End Town Center, the street paralleling Duke Street in the current location of Landmark Mall; New High Street from Landmark Mall to just south of Stevenson Avenue; and Market Street, the neighborhood main street for Pickett Place.

Town Center Main Shopping Street. The main shopping street parallel to Duke Street is the focus of retail development for a revitalized Landmark Mall. This main shopping street should be anchored at each end by important retail destinations such as major department stores, stores both familiar and unique to the region, an outdoor dining plaza with a variety of restaurants, theater complex, or other attractions that would encourage a significant percentage of visitors to continue their walks for the full length of the street. Secondary retail areas are long the angled streets connecting to Main Street and the major cross streets, and around the central space of Landmark Plaza. A minimum of 800,000 square feet of retail development is required for the Landmark Mall blocks focusing on Main Street.

New High Street. New High Street is the principal link through West End Town Center from Landmark Mall to the surrounding community. Creating a continuous retail

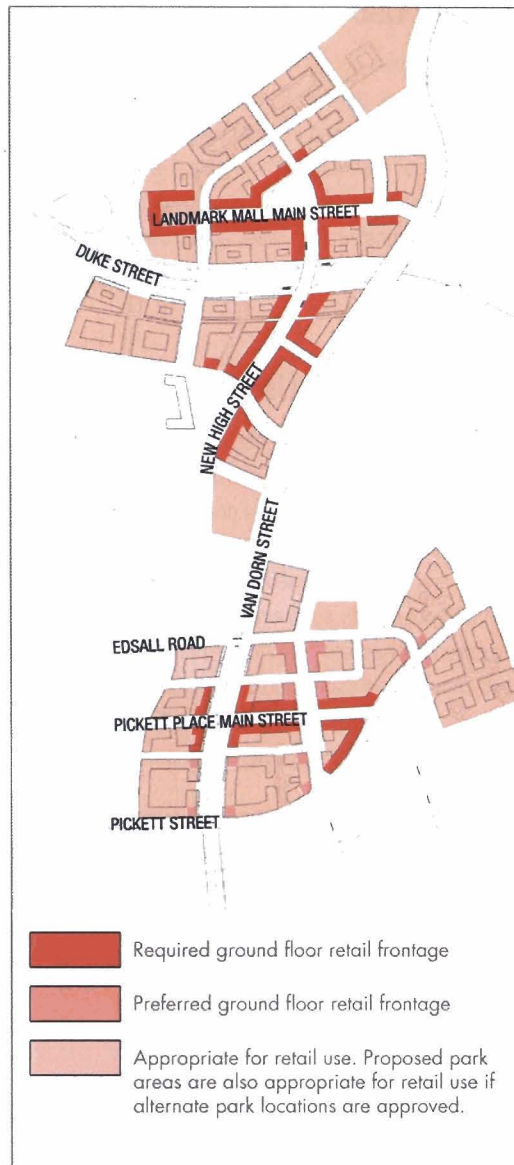


Figure 7-14. Retail Use.

street connecting the regional retail development at the Landmark Mall site to Stevenson Avenue is a primary objective of the plan and key to making Town Center one place. Continuous retail use along New High Street from Duke Street to Stevenson Avenue is required, with a minimum retail floor area of 100,000 square feet required in the block south of Duke Street. The

potential to expand the depth for larger stores as needed is shown by preferred retail locations along New High Street. Some stores may include a presence along Van Dorn Street as a means of attracting customers at locations where pedestrians or vehicles can reach New High Street from Van Dorn.

Picket Place Main Street is a new east-west retail street proposed as the retail focus for a community-scale shopping center or lifestyle center conveniently accessible on foot from Cameron Station and the residential neighborhoods on Reynolds Street, Van Dorn Street, Whiting Street and Edsall Road. A minimum retail floor area of 250,000 square feet within the block bounded by Edsall Road, Pickett Street and Van Dorn Street makes this a significant retail center. Continuous retail frontage along Market Street with anchor retail tenants where Market Street meets Van Dorn Street and Pickett Street will create a pleasant shopping environment on a relatively level street. Crossing Market Street is the proposed Metro Street, which could ultimately link the center to the Van Dorn Metro. Metro Street is proposed to have a wide median plaza, designated Pickett Square, as an attractive urban park that can serve both shoppers and residents within this mixed-use area.

7.4. Density and Floor Area Ratio (FAR)

Residential density is not regulated under the proposed CDD zoning. Intensity of development is regulated by limits on floor area ratio, the ratio of total site area to the floor area of buildings on the site. Figure 7-3 shows the floor area ratio permitted with a CDD rezoning. The base area used to calculate floor area is the total area within today's property lines plus any property that may be added (such as by the vacation of a street). The potential floor area resulting from areas that may be dedicated for streets or public parks within a parcel can be built on other parts of the parcel or site, subject to the other conditions that apply to development. If an existing parcel or multi-parcel development site is divided into blocks by new streets, the floor area ratio may vary among the newly created blocks, provided that the overall minimum and maximum floor area ratio for the major development block (Blocks A, B, C, etc. in Table 4-5) is maintained.

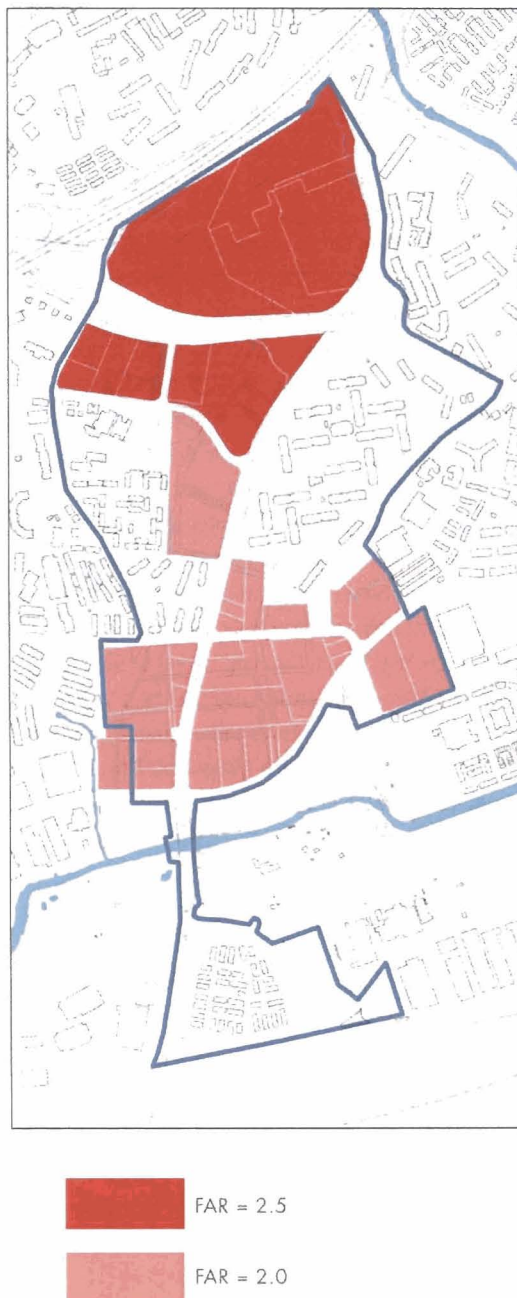


Figure 7-15. Floor Area Ratio.

7.5. Building Height

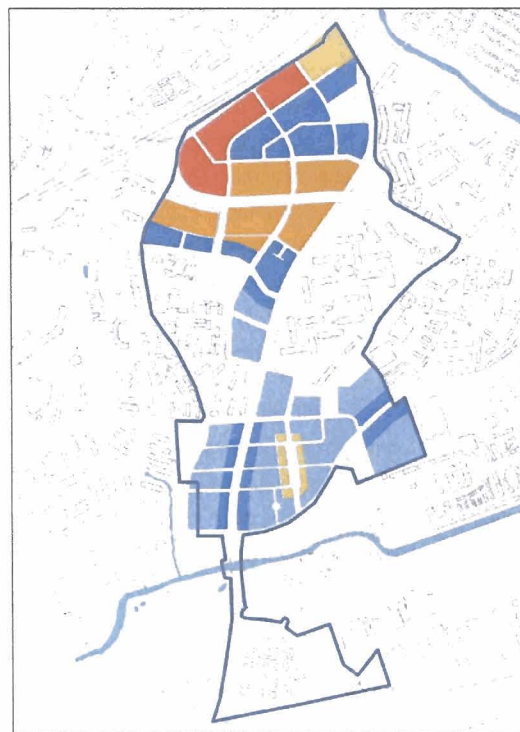
Figure 7-14 shows the maximum building height permitted for each part of the planning area where redevelopment in accordance with a CDD rezoning is anticipated. Heights in other areas, or heights for development without a CDD rezoning, are limited by zoning. Building heights are mapped in general areas where the tallest heights permitted by the range of heights are appropriate. A range of building heights and articulation of heights to create an interesting skyline is expected within each height district. Building shoulders are expected along streets.

Height Districts

The Height Districts map shows the variation in heights that this plan seeks to achieve. In general, the West End Town Center allows heights in the range of 80 feet to

250 feet. The proximity of I-395 to this area offers a high degree of visibility, which is especially valuable for office and hotel buildings. The high traffic volumes along Duke Street imply the same, though to a lesser degree than along I-395 – heights of up to 150 feet (permissible under current zoning) are recommended. The area is also host to several existing high-rise residential buildings, which makes this heights strategy in keeping with the surrounding context.

Pickett Place allows for heights in the range of 65 feet to 85 feet along Van Dorn Street, with buildings up to 120 feet allowed around Pickett Square.



Summary of Heights

Along I-395	–	Up to 250'
Along Duke Street	–	Up to 150'
Along Van Dorn Street	–	Up to 85'
New High Street in Town Center	–	80' to 250'
High Street in Pickett Place	–	Up to 65'
Pickett Main Street	–	65' to 120'

Red	up to 250' (16-25 stories)
Orange	Up to 150' (9-15 stories)
Yellow	Up to 120' (7-12 stories)
Dark Blue	Up to 85' (5-8 stories)
Light Blue	Up to 65' (4-6 stories)

Figure 7-16. Building Height. Maximum building heights are shown for areas expected to redevelop under CDD rezoning. Variation in height is expected throughout the planning area within the height limits. Number of stories is provided for information. Number of stories for a given height will vary depending on floor-to-floor heights appropriate for intended uses.

The over-all massing concept attempts to create a transition in heights that is sensitive to the surrounding context. Along I-395, taller buildings are permitted, with a gradual step down towards the east, transitioning into the city. Along Duke Street, taller heights are permitted, (up to 150 feet), transitioning down towards Stevenson Avenue.

- All heights should be measured from the center of sloping streets, not from the highest elevation point of the street.
- While the Heights District Plan recommends maximum heights, the intent of this plan is to ensure that there is a variety in heights within each Height District.
- To that end, these guidelines call out specific locations at important street corners, open spaces, high visibility locations and special streets where enhanced building design standards, variation in heights and roof form and material treatment should be pursued.
- All buildings should have a "shoulder" no less than 25 feet above the street level. The setback for this shoulder should be between 8 feet and 12 feet.

7.6. Parking

Parking is to be provided in accordance with the parking requirements table, Table 7-1.

Phase-In Requirements for Reduced Parking

The Plan recognizes the sensitivity of parking requirements, the consequences of requiring too few or too many spaces, and allows for specific review of the requirements for retail, office uses other than professional, such as medical offices, and hotels during the development review process. Any increases or decreases from the ratios identified below shall require approval of a special use permit.

Once improved transit is available, further reductions in parking will be possible because employees, residents and shoppers will become increasingly reliant on transit for travel.

Projects with unique potential for shared use, such as offices with weekday daytime demand only, and retail uses with highest demand on weekends and evenings, may have specific shared parking conditions that provide for lower parking ratios than those in the table. These will be determined as development projects are reviewed by the City. As new streets are constructed, new on-street parking will be provided, thereby increasing the supply of on-street parking over what exists today.

In addition to the benefit of reducing travel demand, reducing the number of parking spaces permitted has a number of other benefits for the Plan area. Lower parking ratios make it less expensive for developers to provide parking for projects, making it more possible to provide other community benefits including open space. Fewer parking spaces means it is easier for developers to provide parking underground rather than reducing the floor area to accommodate parking, or building above-grade structures that contribute to building mass and create obstacles to retail continuity and pedestrian circulation.

Above-Grade Parking Structures

While underground parking is preferred for new development for these reasons, there may be circumstances where the limited use of above-grade parking may be permitted subject to specific criteria and design review. Above-grade parking may be permitted subject to the following criteria, with development special use permit review and approval:

- Above-grade parking for retail or office use may be allowed for a block which includes retail or office uses with a combined gross floor area of at least 100,000 square feet as part of a CDD DSUP. This provision shall apply only to projects constructed during the first or catalyst phase of development as described in Chapter 9, Implementation.
- Underground parking with a gross floor area equal to the area of the project site for which parking is being

provided shall be required before above-grade parking is permitted. The site area for this calculation does not include area dedicated for streets, parks or other public uses.

- Floor area of at- or above-grade parking structures shall be counted as floor area for the purposes of calculating the total FAR of the development.
- Above-grade parking shall be lined with active uses when visible from any public right-of-way or screened from non-public rights-of-way to the satisfaction of the Director of Planning and Zoning.

Parking Requirements for Renovation of Existing Housing Units

When existing multi-family residential development projects undergo substantial renovation, Section 8-200(f) (1-4) of the zoning ordinance requires that the City's current parking standards be met, although an owner

Table 7-1
Existing and Proposed Parking Requirements

Land Use	Current Standards (minimum)		Proposed Standards (maximum) ¹	
	Existing Parking District 3	Existing Parking District 6 (near Metro)	Initial	Later phase, improved transit in place
Residential	1 br: 1.3/unit 2 br: 1.75/unit 3 br: 2.2/unit Single-family: 2/unit	1 br: 1.3/unit 2 br: 1.75/unit 3 br: 2.2/unit Single-family: 2/unit	1.725/unit ²	1.15/unit ²
Office	2.1/1000	1.67/1000	2/1000	1.5/1000
Hotel	1/room, 0.5/room for buildings over three stories	1/room, 0.5/room for buildings over three stories	0.7 per room	0.7 per room
Retail – convenience, neighborhood in mixed-use projects	5.2/1000 ground floor 3.64/1000 other floors	4.35/1000	3/1000	2/1000
Retail – regional, community	5.2/1000 ground floor 3.64/1000 other floors	4.35/1000	4/1000	3/1000

1. The parking ratios indicated here are allowable "by right." The parking ratios for development projects with unique parking requirements may be modified through the Special Use Permit process. Medical offices and restaurants are uses that typically require more parking than would be permitted under their general use classes.
2. 15% of residential parking spaces must be allocated to visitor parking which may not be assigned to units or used by residents. Residential visitor parking may be shared with other uses if approved by special use permit.

can seek a special use permit for a parking reduction. Providing parking is expensive, and the special use permit process can add time and cost to the approval process.

Maintaining the existing supply of market-rate affordable housing units is an objective of the plan. Constraining the supply of parking meets plan objectives for minimizing vehicle trips. Rehabilitation of these existing units can mean that they remain on the market as affordable housing for a longer time, and is often preferable to demolition and reconstruction. In order to minimize obstacles to rehabilitation of these units, the Plan recommends that the requirement to increase parking to current standards be waived for renovation of multi-family housing in the planning area. Waiving the requirement will remove this hurdle for properties that do not have land area to provide additional parking for a population that tends to have lower rates of car ownership.

Bicycle Parking

The City is developing bicycle parking requirements, which are expected to be implemented through the zoning ordinance. The proposed parking standards include requirements for short-term and long-term bicycle parking spaces for residential, hotel, retail, restaurant, and office uses. This Plan recommends that development in the Plan area provide bicycle parking in accordance with the proposed standards until or unless they are superseded by adopted standards.

7.7. Building Design

The character, image, and marketability of the Landmark/Van Dorn area will be shaped in large part by the quality of its architecture. Employing the best of contemporary design and the latest environmentally sustainable building technologies; incorporating elements of building design that relate to Alexandria; emphasizing pedestrian experience, detail, and the design will create a distinct identity for each of the neighborhoods. Design decisions made with “neighborhood-building” in mind suggest a kind of architecture that goes beyond incremental block-by-block developments to carry out multi-block concepts, such as high-performance building design, green roofs, and many other concepts laid out in this vision and development strategy.

The varied urban settings that feel so authentic successfully combine an area’s inspiring, indigenous buildings and infrastructure with quality, new design by both local and nationally renowned architects. In Landmark/Van Dorn diverse new architecture can strive for a lively urbanity, with expressive features, sculptural forms, color, and dynamic roofscapes – perhaps achieved by using traditional materials in unconventional ways or unconventional materials in traditional ways. Special focus on design emphasis, and/or architectural detail at the lowest 3 levels of buildings will intensify the pedestrian experience. Excellent ground floor design and materials will contribute to each of the neighborhoods success in attracting sustainable concentrations of retail and neighborhood services and realizing the safe, walkable streets that will attract office and residential tenants.

Building Design Guidelines

The forms of individual buildings should work collectively to define streets, parks, and other open spaces as spaces clearly bounded on two or more sides. This approach enables each building to contribute its intrinsic form and use to help shape the form and use of the larger neighborhood. The edges of public streets and parks should be defined by creating a clearly visible alignment of facades from building to building within use zones.

Spatial Definition

- Orient primary façade elements to be parallel to the street.
- At least 75% of a building’s façade length should meet a consistent setback or build-to line shared with adjacent buildings.
- Landscaped areas may intervene between buildings, but relationships from one building to the next should remain apparent.

Occasional deep setbacks of buildings to create landscaped front courtyards, street corner plazas and similar open spaces can be appropriate, but only if they represent a distinct, isolated condition relative to a well-defined and predominant build-to line.

Gateway sites and other locations of special prominence within the street network shall feature buildings and/or public art of high architectural quality celebrating their landmark presence.

Create a human-scaled setting at street level through careful proportioning of architectural massing, bays and details.

Scale and Proportions

Street Wall

Define a walkable street scale with appropriate and consistent building heights. Buildings along streets shall create a street edge at their lower floors that is tall enough to create an urban quality at ground level but not so tall as to make pedestrians feel they are in a “canyon” substantially out of scale with typical context buildings and street trees.

Building “Shoulders”

Greater heights, where allowed by zoning, are permitted for portions of buildings that are set back from this street edge a sufficient dimension and at sufficient height above ground that they are perceived as only a secondary street edge subsidiary to that created at

ground and initial floors. At the same time, heights less than two to three stories are discouraged as providing too little spatial street definition and too little continuity with taller context buildings.

Scale and Articulation

The unbroken horizontal length of any façade plane shall be minimized. Intervals of set-back or projected façade area may be used to permit longer building lengths. For larger projects and developments, consider composing facades as a series of smaller adjacent facades resembling separate buildings to reduce the perceived horizontal mass and scale.

Buildings shall incorporate elements of intermediate scale between human scale and that of the whole building. At minimum, this shall be accomplished through a “base/middle/top” compositional strategy that defines at least three zones from base to top of the building façade. Additional important intermediate scale elements include bay windows extending through multiple floors, building wings, areas of consistent material, and other larger elements that are still subsidiary to the overall building form. Facades should include horizontal lines of expression (such as string courses, cornices and window alignments) that correspond to the height of adjacent context buildings.

Buildings shall incorporate elements responding to human scale. Traditionally these have included windows, doors and bays.

Building Tops

Building tops and other skyline elements that rise above context buildings deserve special attention as prominent elements in the public realm. Many of the new buildings will be visible from the adjoining neighborhoods. As these taller buildings take their place in the cityscape, their tops will begin to play an important role in redefining the character and scale of the area, both as seen from the streets immediately below, and as recognizable and memorable parts of the skyline as a whole. Building

tops should be both designed as attractive landmarks with special forms and materials, and limited in scale so as not to appear bulky compared to context scale nor to block views excessively. Special treatment of upper floors where a building meets the sky creates a sense of drama, helps to make a memorable place, aids in wayfinding, and conveys the message that the building was designed with care, keeping its relationship to its surroundings in mind. The Design Principles for the City of Alexandria require that new buildings be designed using the principles of base/middle/top; create scale transitions that are sensitive to the surrounding building fabric; and employ articulated tower tops to create an interesting skyline, allow views between buildings, and help sunshine to reach lower building levels and public open spaces. This strategy will help to reinforce and add to the vitality of the Landmark/Van Dorn neighborhood, while taking advantage of the opportunities offered by transit-oriented development.

Pedestrian Relationship

Use of simple geometric shapes in plan and elevation is encouraged, to simplify perception of buildings and help visually integrate them with built context.

Utilize vertically-proportioned fenestration; use no strip/ribbon windows.

Ground-floor building use and design should engage pedestrians. Retail, office and institutional uses all can and should provide a high level of engagement. In residential buildings, including multifamily buildings, ground-floor units shall include individual street entrances and yards wherever possible.

Buildings with frontage on public streets should locate any engaging uses—such as entrance doors and lobbies, accessory office space, and windows into actively used space—along as much of the public sidewalk as possible.

For retail and other active ground-floor uses, provide transparent glazing for approximately 75% or more of façade area. At corner retail sites, ground-level storefront windows shall extend at least 20 feet along the side street, and both the architecture of the building and the storefront design should address and articulate the corner. The ground floors of all new buildings along street frontage designated for potential retail use should have a floor-to-floor height of at least 15 and no more than 25 feet to ensure the potential for quality retail space.

Ground-level retail storefronts are encouraged to have exterior awnings that are coordinated with the design of the storefront and the overall building. Awnings should not overwhelm or obscure the architectural and decorative features of buildings. Awnings should not be backlit. In mixed-use buildings, differentiate expression of the ground level from that of floors above.

The ground floor façade of live/work units should be composed of at least 50% transparent glazing. At residential uses, transparent glazing area shall be limited to 50% of facade area where “punched” windows predominate in adjacent context.

Mixed-use buildings should include a high degree of transparency at ground floor commercial uses and a distinctly different façade treatment on upper residential floors, typically expressing bay dimensions of rooms and dwelling units.

Provide entrances to retail, office and other active ground level uses at least every 100 feet along the sidewalk where possible. The primary pedestrian entrance should front directly along the sidewalk or corner and, wherever possible, shall provide the primary access to parking. In multiunit residential buildings provide individual entrances for ground-level units and prominent lobby entrances. Townhouses should have a walk linking the front entrance to the sidewalk. Entries should be prominently expressed with canopies, awnings, bay windows, balconies or similar elements.

To the extent feasible new residential development should create a compact “green edge” transition zone between residential buildings and the public sidewalk. The build-to line for residential buildings shall be located 5 to 15 feet back from the sidewalk to provide space for individual unit yards, plantings, fences, stoops and similar elements creating a privacy buffer between public space and private dwelling interiors. Ground-floor levels should be elevated at least one foot above sidewalk level where accessibility requirements allow.

Building Context Transitions

The new building must also incorporate a significant change or articulation in material or plane along the horizontal extent of walls facing the residential parcel. Where a new building is located closer to the street edge than an adjacent existing one, the portion of the new building façade that faces the setback of the existing building shall be designed to be consistent in its materials and architectural composition with the main building façade(s) facing public streets.

- Utilize high-quality building materials such as brick, stone, precast or metal. Locate heavier materials closest to the ground and highest quality materials and details at the pedestrian level.
- Utilize stone, metal or similar durable material for trim.
- Use materials to help express base, middle and top sections of buildings.
- Balance glass and solid surfaces to create predominantly solid facades with windows placed within the wall. Except on retail frontages, glazing shall not exceed 50% of the overall façade where this proportion is typical of existing context.
- Use no reflective or darkly tinted glass.
- Integrate HVAC and mechanical equipment unobtrusively into the overall building design.
- Civic buildings shall stand out from all others by undisguised building mass, prominent lot placement,

scale and importance of unique ornament. Civic buildings should not necessarily imitate the architectural scale of their built context; rather, it may be especially appropriate for them to stand out distinctly from the prevailing scale as community landmarks.

- Multifamily and townhouse - Units that do not have direct access from a public street are prohibited. Any unit side wall that abuts a public street shall include windows and other façade details in size and quantity matching the expression of the front entrance façade.

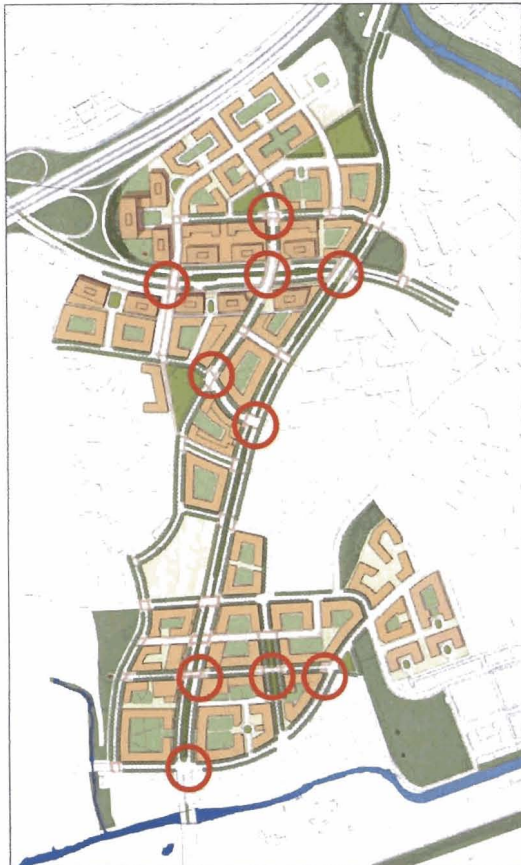
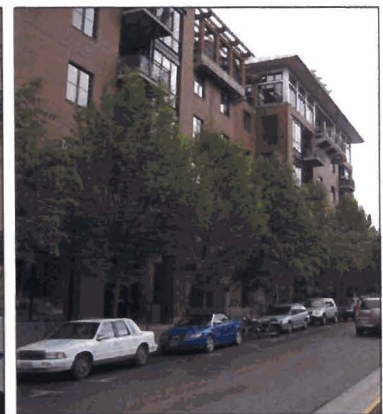
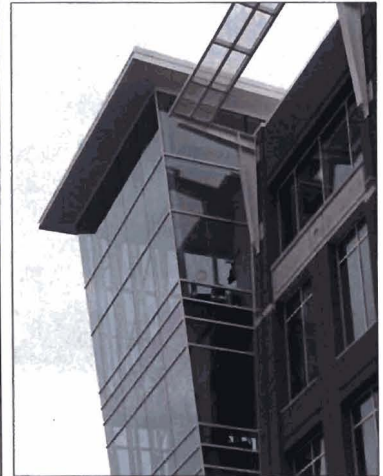


Figure 7-17. Corners and open spaces.



Prominent building frontages at corners and open spaces

The plan encourages prominent building frontages at strategic street corners, along open spaces, and at locations of high visibility. Within each subarea there are specific areas where higher design standards for façade, massing and materials should be pursued.

Facades should be well articulated, and given special design consideration at the following corner locations -

West End Town Center

- Walker Street and Duke Street
- The intersection of Duke Street and New High Street

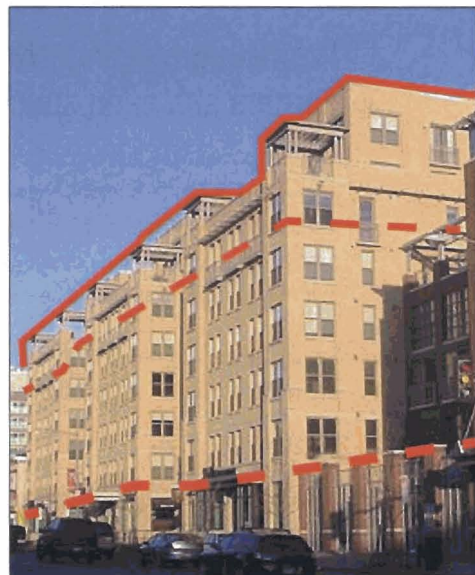
- Duke Street and Van Dorn Street
- Town Center Main Shopping Street and New High Street
- New High Street and Stevenson Avenue
- Stevenson Avenue and Van Dorn Street

Pickett Place

- Van Dorn Street and Pickett Street
- Van Dorn Street and Pickett Place Main Street
- Pickett Place Main Street and Metro Street
- Pickett Place Main Street and Pickett Street

Building facades facing the following open spaces should be given special design consideration -

Defining Street Edges



Roof Forms and Skyline Articulation





Figure 7-18. Open spaces call for special attention in building design.

- Landmark Plaza
- Terrace Garden
- New High Street Park
- Pickett Square
- Pickett Plaza

The Signature building at the northwest corner of the Landmark Mall site

- The building should rise up in gradual steps, and be the subject of the greatest design attention.



The plan calls for an office building, with mid-sized floor plates, that accentuate the vertical dimension of the building.

Guidelines for Buildings Fronting on Duke Street

Through the course of several meetings, community members were concerned that special steps should be taken to ensure that Duke Street is not subject to a "canyon" effect. This often happens when tall buildings meet a street in a straight line, with no setbacks or step-backs. The recommended right-of-way width for Duke Street is 170 feet, with additional setbacks to accommodate landscape elements and frontage streets. This is a wide cross-section, and with some careful modulation of building mass, Duke Street will not emulate the canyon-like environment of other corridors, such as Route 1.

The following guidelines should be observed for buildings fronting Duke Street –

- A minimum setback of 12 feet from the street right-of-way should be provided. This minimum setback consists of a berm that is sloped gently enough to allow trees to grow.
- At the four corners of Duke Street and New High Street, a setback at a datum level should be maintained. The datum line should occur no more than 50 feet above Duke Street, measured from the center of the street between cross streets. The building setbacks at the datum line should be between 15 feet and 20 feet.
- Building massing above the datum level should ensure that the taller mass of the building is perceived as a secondary street edge. Surface articulation and variation in material should be used to break down horizontal length of any building face.
- 80% transparent facades are recommended for the corners that are below bridge level along Duke Street. This treatment of mass and façade should be extended far enough along Duke Street to ensure that pedestrians and transit users perceive an active, well-lit building edge at the corners. Uses such as health clubs may be located at these corners, to achieve the desired results. The corner treatment for mass and façade should be similar in either option – the bridge option or the at-grade option.
- Beyond this zone, where parking garages or other inactive building edges face Duke Street, the buildings should be designed to include the same materials, fenestration and articulation as the remainder of the building for this visually prominent frontage.
- The corner of Walker Street and Duke Street should be given special attention, since this location has high visibility to traffic merging to and from I-395.
- Public art should be located to supplement the generally higher standard for buildings and the public realm along this important arterial.



These guidelines are intended to ensure that the environment along Duke Street does not feel like a canyon, and that is the tree canopies that become the defining characteristic for this street. More in-depth evaluation should be carried out in future design exercises for development plans to ascertain the extent to which buildings need to step back to maintain the desired street character.

Sustainable Buildings

The Landmark/Van Dorn Neighborhoods can become a model of sustainability in its planning, infrastructure, and building design. There is an opportunity to introduce a range of environmentally- sustainable best practices to the large amount of proposed new development. With potential build-out over the next 10-20 years, the Landmark/Van Dorn area can improve the environment by relying on market-based and strategic actions that have been used successfully elsewhere. It could be used as a model for responsible and sustainable development in the City. Designing for sustainable development, reduced energy costs, and healthier environments is increasingly important in the real estate development and construction industries. The US Green Building Council's Leadership in Energy and Environmental Design rating system (LEED) provides and other nationally and regionally recognized certification tools exist and will continue to evolve to enable the creative use of sustainable and green practices for the building but also the site. It is critical the sustainable elements and approaches be identified early in the development review process for each block.

7.8. Open Spaces

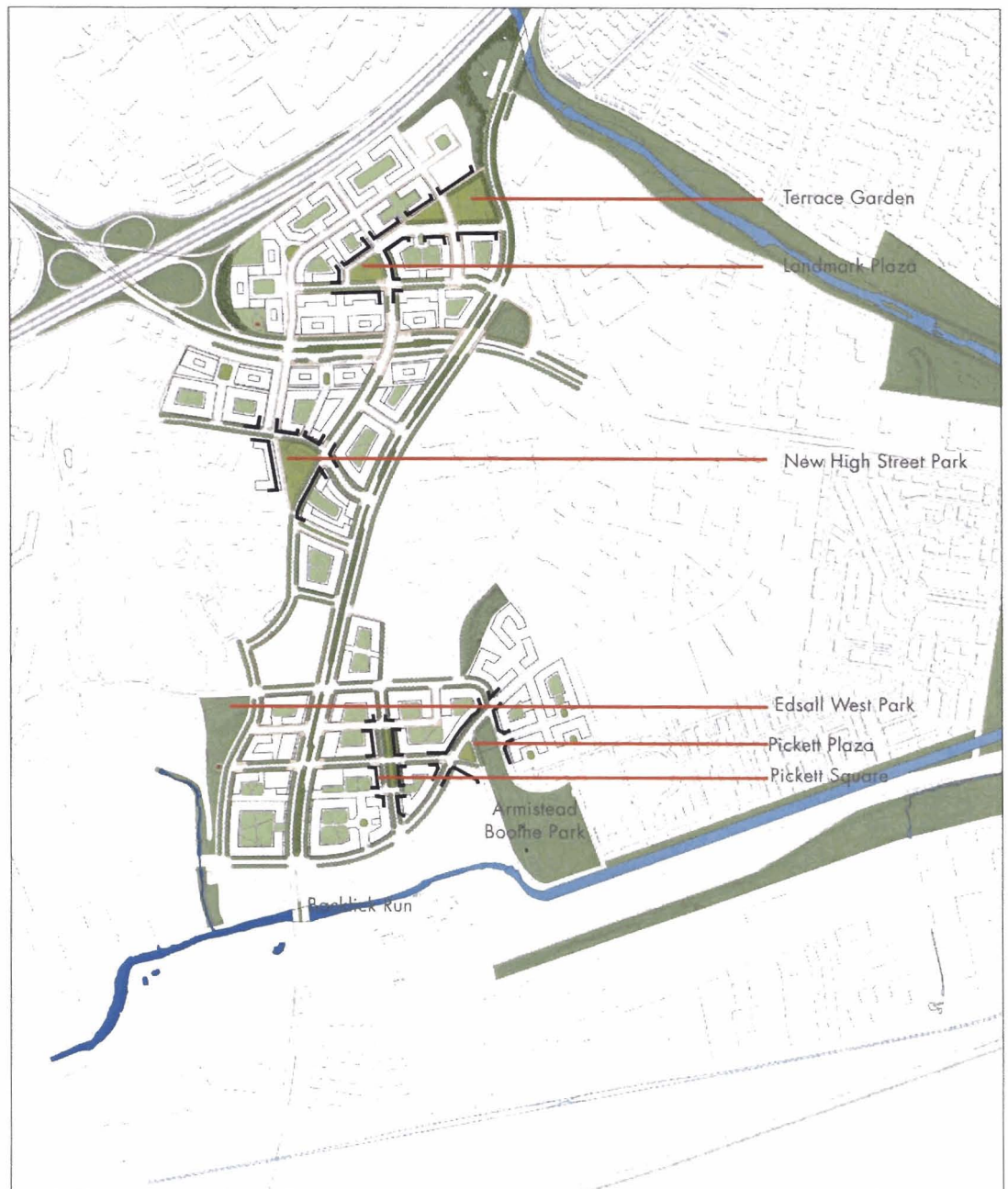
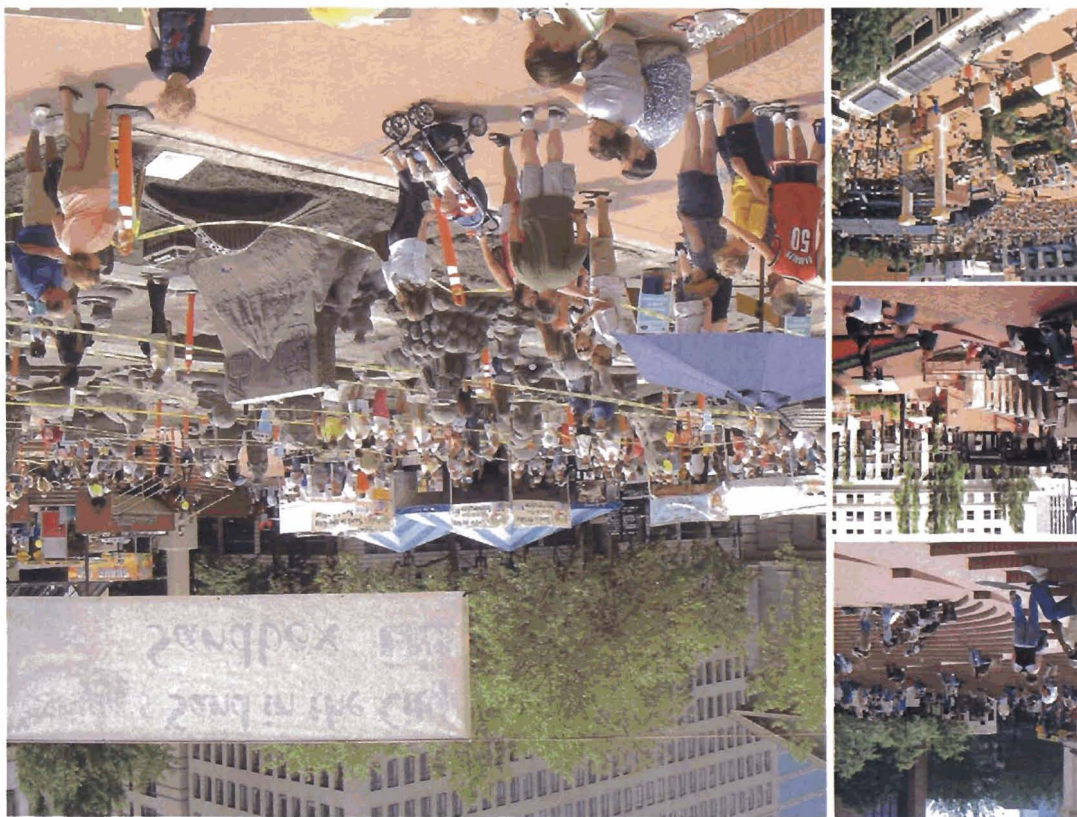


Figure 7-19. Open Space Plan.

Landmark Plaza

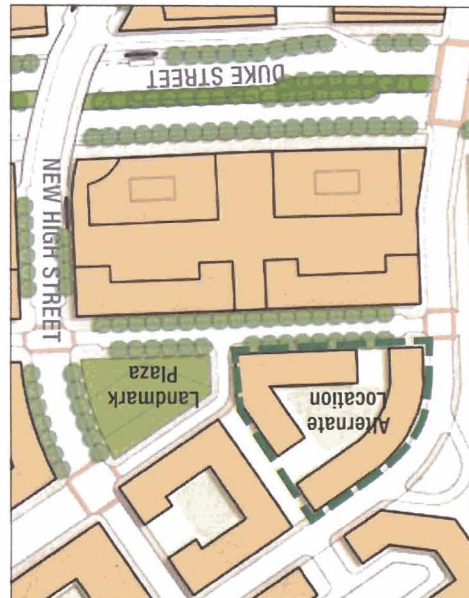
Area – Approximately 30,000 square feet.

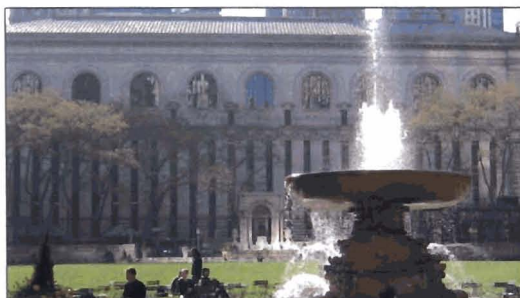


Precedents include Pioneer Square, in Portland. This space is meant to be a central gathering place for residents of and visitors to the West End Town Center, and the residents of surrounding neighborhoods.

Care should be taken to ensure that the plaza's horizontal surfaces are predominantly landscape (up to 80%). Changes in grade should be integrated into the overall design for the plaza to create places to sit, much like Pioneer Square.

Lighting should be designed to foster activity throughout the day. Special signage standards should be evolved for the space, and public art should be incorporated. All crosswalks that allow pedestrian access to the plaza should be enhanced, with paving patterns and/or changes in materials.



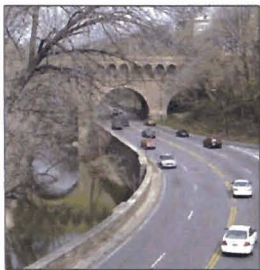


New High Street Park

- Area – Approximately one-half to one acre
- Precedents include Bryant Park, in New York City. This space is meant to be an amenity for the residents who live around the park, and the retail patrons of stores along High Street. The space should also be able to accommodate larger crowds, for community events.
- The park's horizontal surface should be split between softscape and hardscape. As a guide, hardscape should be no more than 30% of the park surface. The park slopes down at a 5% grade, from north to south. Subject to cost and maintenance considerations, options for stormwater management techniques should be explored to collect run-off at the lower points of the park and create a small water body as an amenity.
- The Park enjoys good visibility from New High Street, especially for pedestrians and motorists coming from the south. Public art should be placed in a prominent position – preferably at the higher points of the park.



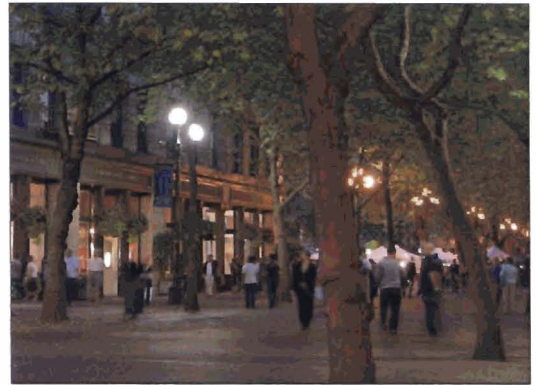
The park is located at the beginning of the retail district along New High Street. Signage should be designed accordingly, in the form of streetlight banners and wayfinding signs.



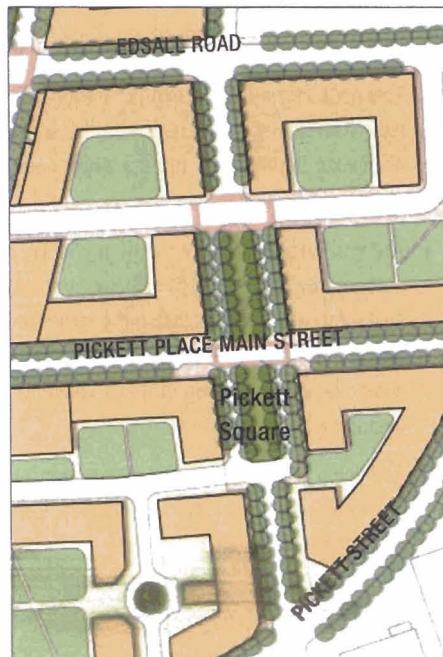
Terrace Garden

- Area – Approximately 2 – 2.5 acres
- This Garden is meant to make a visual and physical connection with Holmes Run Park to the North.
- Trails should be incorporated with the design of the garden – this presents some challenges, since the garden slopes down at a steep grade, from west to east. Efforts should be made to run trails parallel to natural contours, to minimize disturbances to the natural slope and the heights of retaining walls.
- The garden should be predominantly softscape, with some hardscape elements that include pedestrian ramps, steps and trails.
- Where the Garden passes under the bridge, care should be taken to ensure that clearances are maintained, sightlines for pedestrians below the bridge are maintained and there is sufficient light below the bridge.





Pickett Square



- Area – Approximately one-half acre
- This space forms the center for the Pickett Place subarea, and features a wide 60-foot median, with slow moving traffic and a parking lane on either side.
- Precedents for this square include Occidental Avenue, in Seattle.
- The median should be well lit, with seating along the edges. Elements such as a trellis, or other shading devices, should be incorporated within the design of the square. Public art may be integrated within the design of these elements or may be incorporated as free- standing elements. Water features may also be incorporated.
- Accent lighting that highlights public art and other features should be incorporated.
- Crosswalks **should be enhanced**, and the street **should be designed to slow traffic to reflect the open space character of the median.**



Pickett Plaza and Armistead Boothe Park Extension

- Area – Approximately 36,000 square feet.
- This space forms the terminus for Pickett Place's new Main Street, and serves as a transition to the Armistead Boothe Park and the larger natural water-course of Backlick Run.
- The horizontal surface of the triangular plaza should be primarily hardscape, to serve as a spill-out space for retail patrons, while the larger rectangular parcel that currently houses the mini-storage facility should be a combination of hardscape and softscape elements.
- Additional studies related to stormwater management should be conducted, to determine whether a water body can be included here.

Edsall West Park

- Area – Approximately one acre
- This park provides open space for nearby residential neighborhoods and an open space link to the natural corridor of Backlick Run along the RPA of a small drainage
- The park should include a small play and picnic area, but emphasize the natural environment and the linkage along New High Street between open spaces from Landmark Mall to Pickett Street and Backlick Run. Options for stormwater management techniques should be explored to treat runoff at the lower points of the park and to use water as an amenity.



7.9. Placemaking

Places

Figure 7-18 summarizes the locations of the key features and significant places throughout the Landmark/Van Dorn corridor that will establish the area's identity and help create a unique place within the City and the metropolitan area. These places will be key features for wayfinding, places people meet, places people remember. They will create important addresses. Among the factors that can reinforce community and identity in these important places are:

- Public art.
- Naming with historic or symbolic names that relate to a common theme for the area.
- Special architectural features on buildings that frame streets or entry points.
- Small urban open spaces or gathering places.
- Unique landscape features such as gardens, clumps of trees, rocks, streams, fountains.
- Activity spaces for play, performance, art or cultural display, public markets, promenades, outdoor dining or other activities.

Public Art

One of the most impressive ways in which a city can express its community spirit is through its public art. Through color, texture, shape, sound, scent, and performance, a community's spirit can be conveyed to all. Public art, including publicly accessible art in private development, adds visual and cultural interest to the public realm, offering opportunities for community members to express individual and collective identity and help shape their own environment.

Many everyday items along sidewalks, in parks and other public areas—from pavers and fences to bus shelters and pedestrian bridges—offer possibilities for collaboration with artists. Sculptures, fountains and other public art and publicly accessible art in private development

are important elements, providing neighborhood focal points and objects of interest, places to meet and gather, and accessibility to art that some people might not otherwise have.

When each redevelopment project is implemented in the Landmark/Van Dorn Corridor planning area, the City and the applicant should evaluate this important civic element to determine where art could best serve the planning area and the surrounding community, celebrating the neighborhoods and their cultural diversity, recalling the area's rich history, creating a sense of place, and providing opportunities for animation and celebration of seasonal activities and special events. Public art should be used to create artistic gateways into the City and serve as visual markers of major entries and exits, crossing points, and neighborhood transitions.

Public art should be used as a means for achieving some of the goals recommended in this plan:

- promotion of uses and activities which make the Landmark/Van Dorn Corridor and its surrounding neighborhoods a more lively area, including during evening hours;
- creation and reinforcement of a strong and inviting streetscape and a traffic pattern that relates the area visually to Landmark/Van Dorn;
- revitalization of the Landmark/Van Dorn corridor using flags, banners and enhancement of the gateway identity and diverse character of the area; and
- better use of the open space available in the Landmark/Van Dorn area so that it is an attractive and an active place that draws people to enjoy the outdoor environment.
- The Plan recommends incorporating art in the Landmark/Van Dorn Corridor in the following ways:
- Preferred art locations include the Landmark Mall in the West End Town Center, the public spaces in Pickett Place, and gateway locations




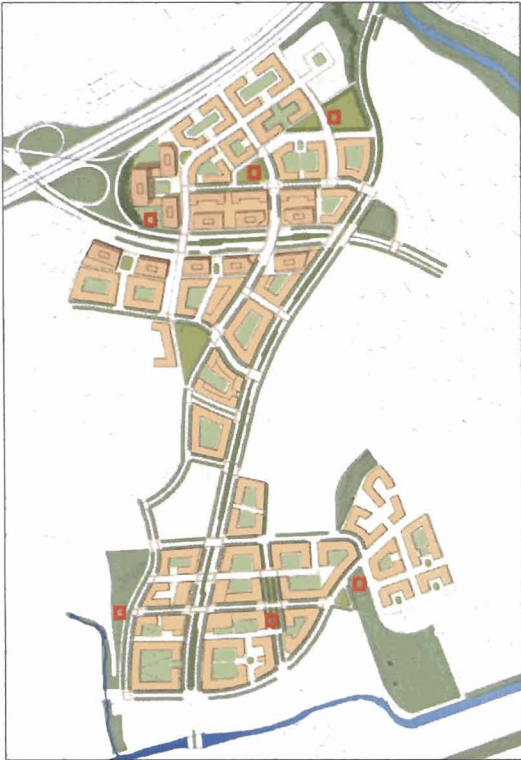
-  Gateways
-  Public Art
-  Signature Building

Figure 7-20. Key places in the Landmark/Van Dorn Corridor Plan area.





■ Public Art

Figure 7-21. Recommended locations for public art. While many locations are appropriate for public art, these locations are along street axes at important places where major art installations would have high visibility.

- The parcels anticipated to redevelop shall make a monetary contribution to the City for the commissioning, design and creation of each piece of art; or provide on-site art, as determined by the City during the development review process; and
- The plan strongly encourages art that reflects the area's history and that local artists be commissioned to create public art.

Because the exact placement of the art is not specified, the Plan, consistent with the established City Policy on Acquired Art, recommends that art installed on pub-

lic land be reviewed and approved by the Alexandria Commission for the Arts.

For art that may be installed on privately owned but publicly accessible land, the Plan recommends that the developer, community, and City work together to identify the location and type of art to be installed. This approach has been successfully implemented in recent installations of publicly accessible art in private development projects.



Figure 7-22. Signature Building.

Signature Building

The building or buildings located on the north side of Duke Street on Block A1 is expected to be the most prominent building in the West End Town Center because of its visible location along I-395 and at the gateway to the West End as travelers come across I-395 into the Town Center. This prominent location requires a building that is of exemplary design, shows sensitivity in its attention to appearance in the landscape and as a landmark feature, and is appropriate in character and quality of materials and finishes as a gateway to the West End and to the City of Alexandria.

Signature Bridge

The bridge of New High Street over Duke Street, if implemented, will be a prominent feature to those entering the City along Duke Street, and will be an important landmark identifying the West End. Its design and construction should reflect its prominence and symbolic role as a gateway into Alexandria and as an important feature that ties the Town Center together feature. This bridge should be exemplary in its design and appearance along Duke Street and New High Street.

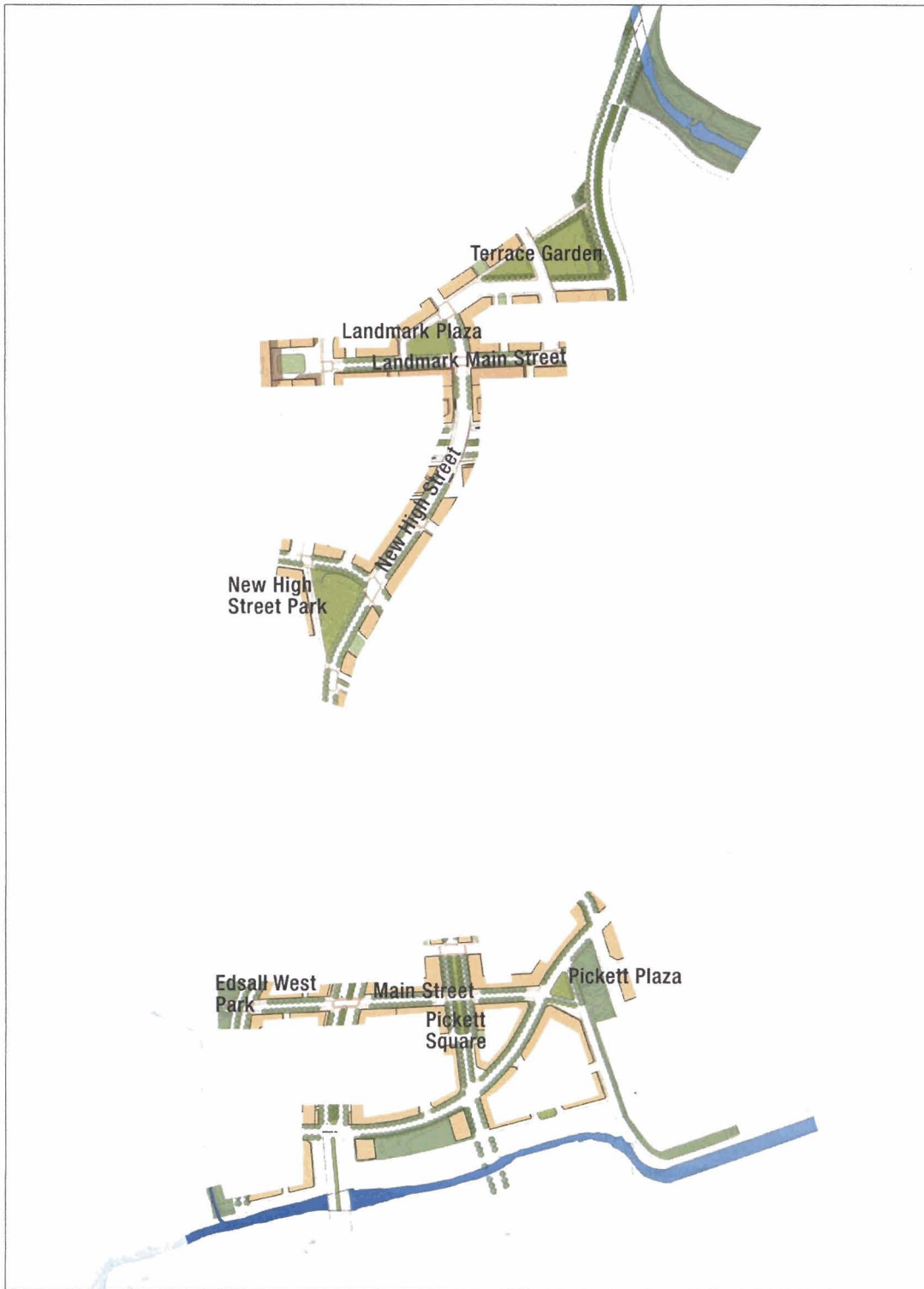


Figure 7-23. Open Space Linkages.

7.10. CDD Guidelines

Two areas are envisioned to be Coordinated Development Districts (CDD). The first area is the West End Town Center which consists of the development blocks identified as "A," "B," "C," and "E" on Figure 7-1. The second area is Pickett Place which consists of the development blocks identified as "H" through "M" on Figure 7-1. CDD regulations will apply on approval of an application for rezoning to CDD with submittal of a master plan for the area to be rezoned. Rezoning should generally be undertaken for the maximum possible area, such as an entire development block or block face. At a minimum, rezoning for an entire contiguous ownership is required.

Each application for CDD rezoning shall be accompanied by a development plan and phasing plan that illustrates the location of streets, open space, and proposed development compliant with the Landmark/Van Dorn Corridor Plan, and indicates how the development will be phased to comply with the minimum intensity of development, land use, development guidelines and other aspects of the plan for the area to be rezoned.

7.10.1. West End Town Center

1. Uses

Allowable uses in the CDD include office, residential and retail uses and uses similar to and supportive of a mix of those uses, including hotels. Public buildings are permitted. The locations of the retail uses shall be consistent with the required and preferred retail diagram in the Plan.

2. Height

Minimum and maximum heights are shown in the Development Guidelines Chapter 7.0.

3. Floor Area Ratio

Maximum floor area ratio shall be 2.5 with development special use permit approval for blocks A, B and C, and

2.0 for block E to encourage regional scale development at this prominent entry into Alexandria.

Full development of this regional activity center is intended to achieve an overall land use mix of approximately 70% office, retail, and related commercial uses and 30% residential uses.

A total of approximately 8.5 million square feet of development is envisioned on the 82 acres of the West End Town Center. Of this, at least 3.75 million square feet must be office and 1.0 million square feet must be retail. A major full-service hotel is required, with potential for additional hotels. A minimum of 1.2 million square feet of residential use (1,000 to 1,200 units) is required to achieve the desirable mix of uses and level of activity. A maximum of 3.1 million square feet of residential use is permitted. All floor areas, density and uses shall be subject to review and approval.

4. Street Grid

Streets shall be extended and created to complete a new street grid consisting of blocks surrounded by publicly accessible streets. New required streets are depicted in Chapter 7.0. The specific location and cross-section of streets may be modified to better meet plan objectives at the time of rezoning or development approval.

5. Parks and Open Space

A minimum of 25% of the site shall be maintained as open space at ground level with permanent rooftop open spaces and terraces provided in residential buildings. A minimum of 3.5 acres of public open space at the Mall shall be provided.

6. Building Design.

Building design shall meet the objectives of Chapter 6 and the specific guidelines of Chapter 7. Building form, location, access, alignment, façade articulation, building tops, fenestration, materials and finishes and other

aspects of buildings are subject to review to meet these requirements.

7.10.2. Pickett Place

Allowable uses in the CDD include office, residential and retail uses and uses similar to and supportive of a mix of those uses, including hotels. Public buildings are permitted. The locations of the retail uses shall be consistent with the required and preferred retail diagram in the Plan.

2. Height

Minimum and maximum heights are shown in the Development Guidelines Chapter 7.0.

3. Floor Area Ratio

Maximum floor area ratio shall be 2.0 with development special use permit approval for blocks F, through M to encourage redevelopment with a mix of uses.

Full development of this community activity center is intended to achieve an overall land use mix of approximately 30% office, retail, and related commercial uses and up to 70% residential uses.

A total of approximately 4.8 million square feet of development is envisioned on the 55 acres of Pickett Place. Of this, at least 250,000 square feet must be office and 364,000 square feet must be retail. A minimum of 500,000 square feet of residential use (400 to 500 units) is required to achieve the desirable mix of uses and level of activity. A maximum of 3,673,000 square feet of residential use is permitted. All floor areas, density and uses shall be subject to review and approval.

4. Street Grid

Streets shall be extended and created to complete a new street grid consisting of blocks surrounded by publicly accessible streets. New required streets are depicted in Chapter 7.0. The specific location and cross-section of

streets may be modified to better meet plan objectives at the time of rezoning or development approval.

5. Parks and Open Space

A minimum of 25% of the site excluding public rights of way shall be maintained as open space at ground level, with permanent rooftop open spaces and terraces provided in residential buildings. Public parks shall be provided as outlined in Section 7.2.

6. Building Design.

Building design shall meet the objectives of Chapter 6 and the specific guidelines of Chapter 7. Building form, location, access, alignment, façade articulation, building tops, fenestration, materials and finishes and other aspects of buildings are subject to review to meet these requirements.

Environmental Sustainability

8

Sustainability is commonly defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. A sustainable community is one that addresses the long-term health of the economy, the environment and social equity, thus preserving the ability of future generations to live and flourish. Particularly in a redeveloping environment like Landmark/Van Dorn, it is critical that the City plan to guide growth and change, addressing all of these principles to create a community that is more environmentally responsible, more economically viable and with a quality of life that attracts and retains residents and workers well into the future. This is the challenge and opportunity for the future of the Landmark/Van Dorn Corridor.

8.1. Introduction

As it exists today, the development pattern of large blocks, expansive surface parking lots, and dependence on heavily traveled arterial streets for nearly all connections make pedestrian and bicycle travel from residential areas or between shops in the Landmark/Van Dorn area long and unpleasant. The unattractive, auto-oriented environment, and confusing vehicular access to Landmark Mall detracts from the overall character and quality of the planning area. Existing multifamily units have been built as individual enclaves, on terraced land, with a disconnected street network. The planning area lacks public parks and public open space within easy walking distance. Stormwater management is limited.

However, opportunities exist to improve the sustainability of the Landmark/Van Dorn area. Much of the planning area will redevelop in the next 20-30 years, including several large parcels (such as the Landmark Mall and BJ's sites) and many parcels that are less than 10 acres in size. There is an extraordinary opportunity to redevelop these sites in a sustainable and innovative way using current best practices. Recognizing the opportunity to incorporate sustainable planning and design as the Landmark/Van Dorn area redevelops, the Advisory Group supported the following community goal:

- An area-wide, comprehensive approach should be established for environmentally sustainable development, including Leadership in Energy and Environmental Design (LEED) standards, best practices in local and regional stormwater management, reduced impervious areas, enhanced water quality, and protection and restoration of habitat areas and natural features throughout the planning area.

During the community workshops in May 2008, community members discussed their vision for the future of the Landmark/Van Dorn Corridor planning area and many expressed a desire to improve the environment, reduce surface parking lots, connect to existing trails and open spaces, and rebuild the area in a sustainable way. Advisory Group feedback also included:

- Preserve and enhance existing green space, natural areas, and features; including neighborhood-oriented open space and parks.
- Place emphasis on green-building techniques .
- Enhance the street grid.
- Improve transit.
- Facilitate walkability.
- Transform Van Dorn Street into a "Green Boulevard."
- Create small pocket parks.
- Improve stormwater runoff.
- Reduce the "Heat Island Effect."
- Create green connections.
- Promote environmental sustainability.

In an urban context with limited permeable surfaces, environmental sustainability may be achieved through a comprehensive approach to land use, open space, transportation, infrastructure, and recreation planning efforts



that consider both impervious “grey infrastructure” and “green assets”; such as parkland, landscape buffers, and conservation areas. This “green infrastructure” approach integrates innovative technology with green assets to address stormwater management, energy consumption, and air and water quality. This approach uses natural systems to mitigate human impact on the land and ecosystem. A comprehensive green infrastructure approach is required to improve the quality of the natural environment in today’s urban communities.

Furthermore, building and planning techniques should encourage the use of both innovative and traditional open space provision (green roofs, rooftop terraces, urban plazas, pocket parks); stormwater management best management practices (BMPs) such as rainwater capture and reuse, bioswales, street trees, permeable pavers; heightened building practices (LEED and Green Building requirements); commitment of public and private resources to improve the condition of local waterways; increased transit use; and accommodations for safe and accessible bicycle and pedestrian circulation.

Because of the strong and direct connection between green infrastructure and environmental sustainability, a Stormwater Master Plan was prepared as part of the Landmark/Van Dorn Corridor planning effort to evaluate the current level of stormwater management, the impact of stormwater on the environment, and to identify opportunities to improve stormwater management through a green infrastructure approach. This chapter of the Plan will conclude with a summary of the findings and recommendations of the Stormwater Master Plan Technical Report.

8.2. City Guiding Documents

A number of existing policies guide the City’s environmental and sustainability goals and principles.

2004-2015 Strategic Plan

The City embraces environmental sustainability and the second goal of the City Council adopted 2004-2015 Strategic Plan envisions an Alexandria “that respects, protects, and enhances the natural environment” and lays the groundwork for many of the sustainability practices now in place across Alexandria. The six objectives of this goal include:

1. Apply greater environmental sensitivity in planning new development and redevelopment and public facilities.
2. Increase the amount of open space, recreation space, and park acreage per resident.
3. Protect and expand the City’s overall tree canopy.
4. Improve appearance of gateways, entrances, and corridors.
5. Increase the number of people who travel in the City by mass transit, bicycle, or walking and become less auto-dependent.
6. Improve the quality of air and water in Alexandria.

Energy Conservation

The City has also signed an agreement to meet or exceed the Kyoto Protocol greenhouse gas reduction targets through the use of local land planning, urban reforestation, public outreach, and other greenhouse gas reduction strategies. The City has committed to reducing the energy used by the City’s existing buildings by 3% per square foot per year through the year 2015, for a total 20% reduction from the 2007 baseline.

Eco-City Alexandria

In June 2008 the City adopted the Eco-City Charter. With regard to stormwater management, the Eco-City Charter has the following goals:

- Use environmentally responsible flood management, stormwater control, and wastewater treatment to protect the public's health and property.
- Promote - through sustainable practices - safe, swimmable, and fishable waterways for its citizens and visitors, and enhance the ecological integrity of its downstream waters, by minimizing stormwater runoff and pollutants draining to the Potomac River and Chesapeake Bay.

Green Building

A significant amount of new development and redevelopment will occur in the City over the next 20-30 years, with a large portion occurring in the Landmark/Van Dorn area. The development presents opportunities to implement some of the City's key environmental policies and recommendations. As part of the Eco-City Charter, the City has embarked on an Environmental Action Plan that has an overall goal of reducing the carbon footprint through improvements and application of technology in transportation, land use and building construction. Additionally, the City's Department of General Services, which oversees the construction of publicly-funded and city-owned buildings, requires all new buildings to obtain LEED silver certification. The City is developing guidelines for use of Green Building techniques in new building design and construction, geared primarily toward energy and water conservation. These guidelines are expected to be implemented through the City's development review process for larger buildings and through an aggressive and comprehensive education and promotional campaign targeted at builders of smaller buildings.

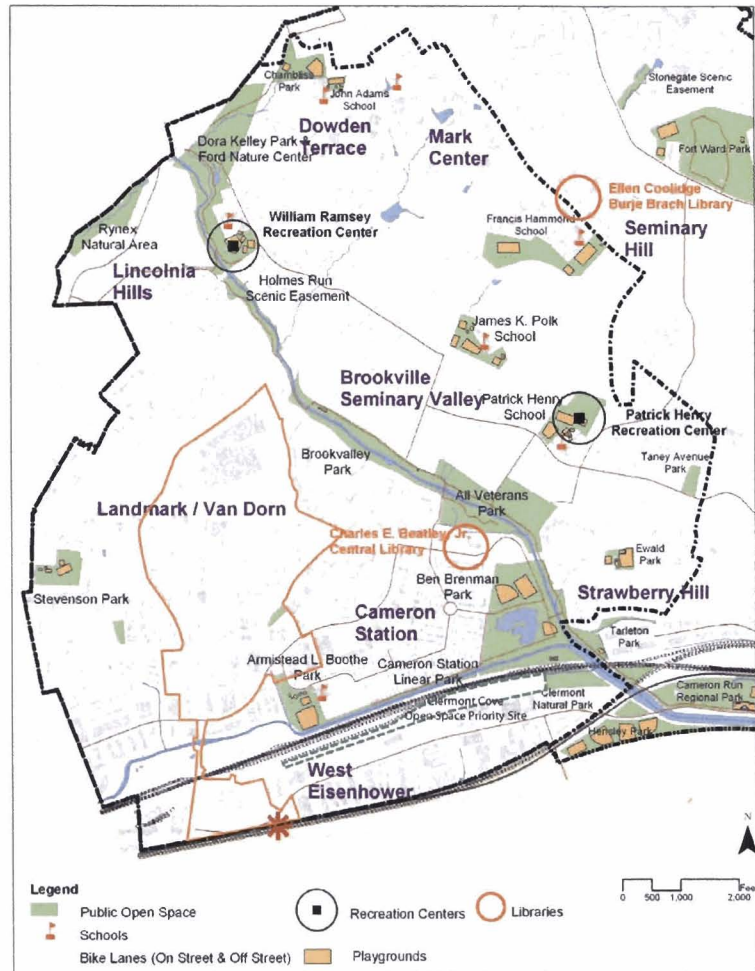


Figure 8-1. Community Facilities and Public Open Space within Context Area

8.3. Public Open Space and Trails

Existing Open Space and Trails

The current zoning regulations require that 40% of the lot area or 400 square feet per dwelling unit for residential uses be reserved as open space, while commercial uses have no open space requirement. In addition to on-site open space required by zoning, the Open Space element of the Master Plan establishes a target of 7.5 acres per 1000 residents for parks and public open space citywide.

Albeit, the planning area lacks public parks and public open space within easy walking distance, there is a network of parks with greenway connections within a mile of most parts of the planning area. Five parks are located near the planning area. These include Brookvalley and Ben Brenman parks which function as community/urban parks, while the other three are smaller, neighborhood parks. The facilities within the five parks include:

- All Veterans Park (9.6 acres): memorial park, picnic areas, sitting areas, trails for walking, biking, and jogging, and a dog exercise area parallel to Pickett Street.
- Armistead Boothe Park (15 acres): lighted softball / soccer field, a picnic pavilion with grills, restrooms, a playground area with play equipment, two tennis courts, a combination tennis / basketball court, and pedestrian and bike trails.
- Ben Brenman Park (50 acres): softball field, little league baseball field, soccer field, lake with gazebo



Armistead Boothe Park



Holmes Run through Ben Brenman Park



Backlick Run



and fountains, restrooms, pedestrian bridges, picnic pavilion, pedestrian and bike trails, fenced dog park, and a small amphitheater.

- Brookvalley Park (50 acres): community park, scenic natural area, biking and walking, playground, exercise area, sitting and picnic areas, ball field, community garden plots, and the Bicentennial Tree (oldest tree in Alexandria). Brookvalley Park is connected by trail to Holmes Run Scenic Easement to the north, All Veteran's Park to the southwest, and Tarleton Park to the southeast.
- Stevenson Park (9.5 acres): Little League baseball, lacrosse practice and games, soccer practice, basketball court, volleyball, playground, sitting area and park shelter, and summer camp program site.

These parks comprise approximately 134 acres of parkland for 21,240 people residing in the three census tracts that encompass Landmark/Van Dorn. This is approximately 6.3 acres of open space per 1,000 people.

The Holmes Run Trail is part of a regional multi-use trail system that runs along Holmes Run from where it joins Cameron Run into Fairfax County to the west. The Holmes Run Trail connects Ben Brenman, All-Veterans and Brookvalley Parks, which form a continuous open space corridor from Cameron Run to where the trail crosses under I-395.

Ben Brenman and Armistead Boothe Parks are adjacent to Backlick Run. A trail is currently planned along Backlick Run that would connect the Holmes Run Trail at Ben Brenman Park to the trail system on Turkeycock Run just west of Alexandria in Fairfax County.

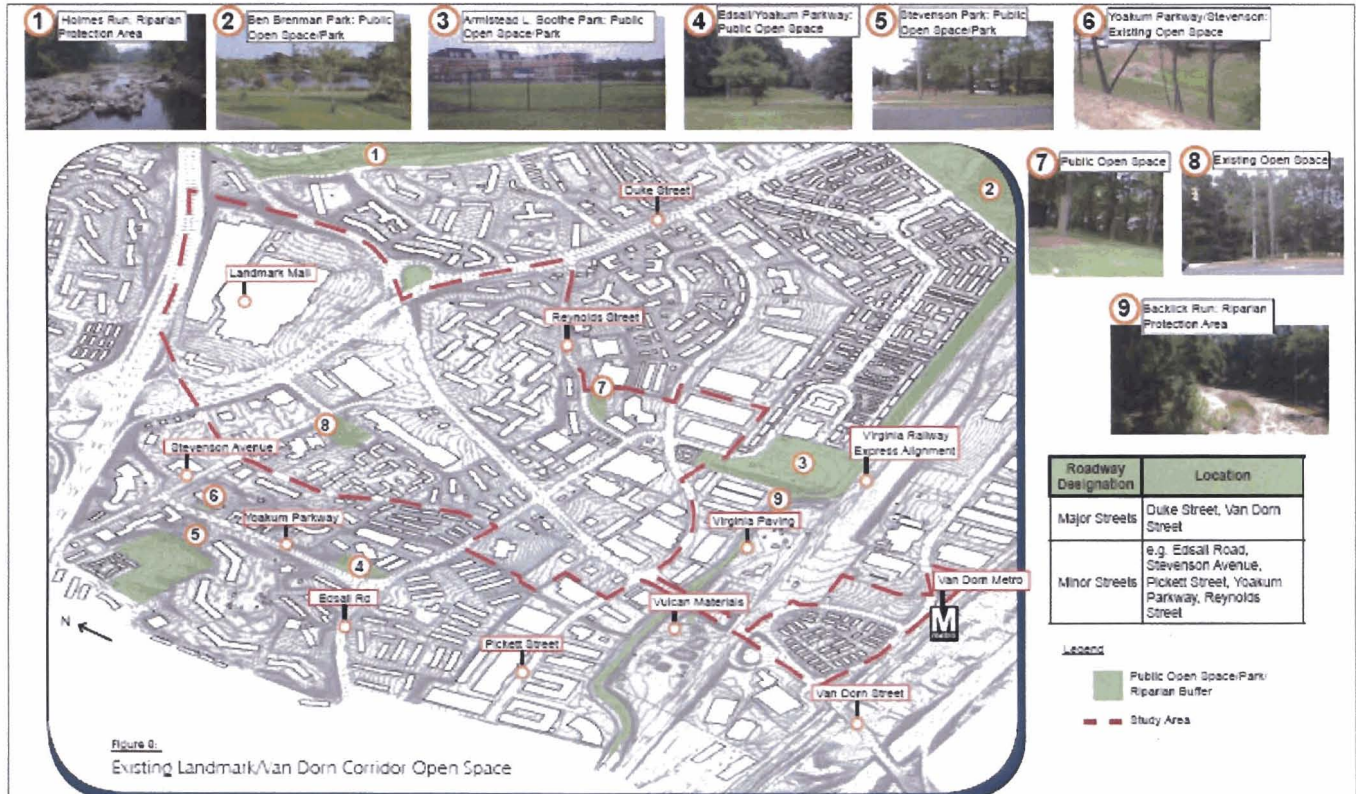


Figure 8-2. Existing open space in the Landmark/Van Dorn area.

8.4. Waterways, Stormwater Management, and Green Infrastructure

8.4.1. Existing Waterways and Stormwater Management

Existing Waterways

The planning area is located within the 42-square-mile Cameron Run drainage area. Immediately to the north and south of the planning area boundary are two watercourses, Backlick and Holmes Run. Much of the northern portion of the planning area drains toward Holmes Run; whereas the area generally south of Duke Street drains to Backlick Run. Areas east of the confluence of Backlick and Holmes Run drain directly into Cameron Run. Both are buffered by a 100 ft Resource Protection Area (RPA), which is an environmentally sensitive corridor that should be preserved in its natural condition. Streams demarcated the planning area until the mid 20th century

and can be important amenities today. RPAs have many environmental benefits such as flood mitigation, bank stabilization, stormwater retention and treatment, and habitat for local riparian species. Under most circumstances new development is prohibited within the RPA.

Existing Stormwater Management Conditions

The goal of stormwater management is to mitigate the impact of the continuous movement of water on, above and below the earth's surface due to changes to the land surface. Highly urbanized areas have great impact on the movement of water by reducing or eliminating the natural stormwater infiltration and storage capacity of the land and speeding precipitation from where it lands to receiving waters such as streams and ponds.

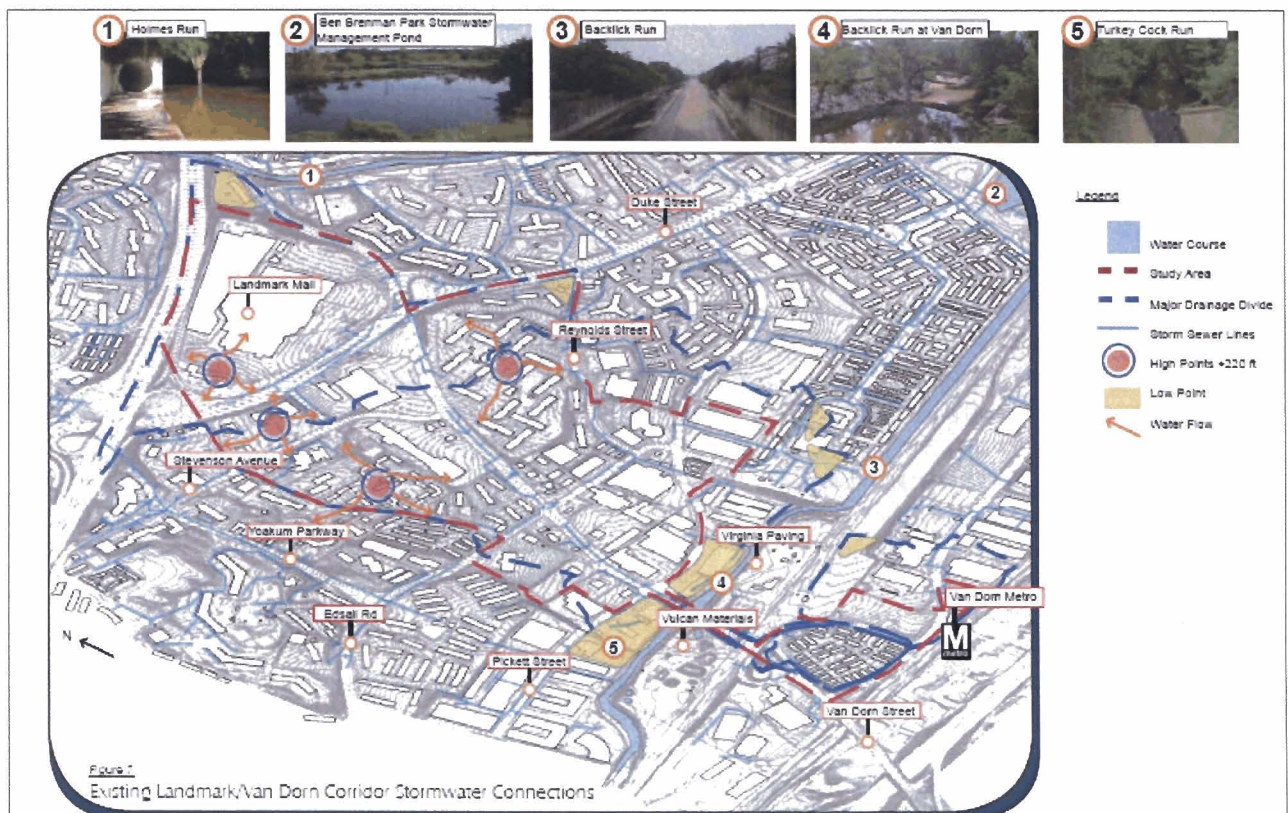


Figure 8-3. Existing stormwater connections in the Landmark/Van Dorn area.

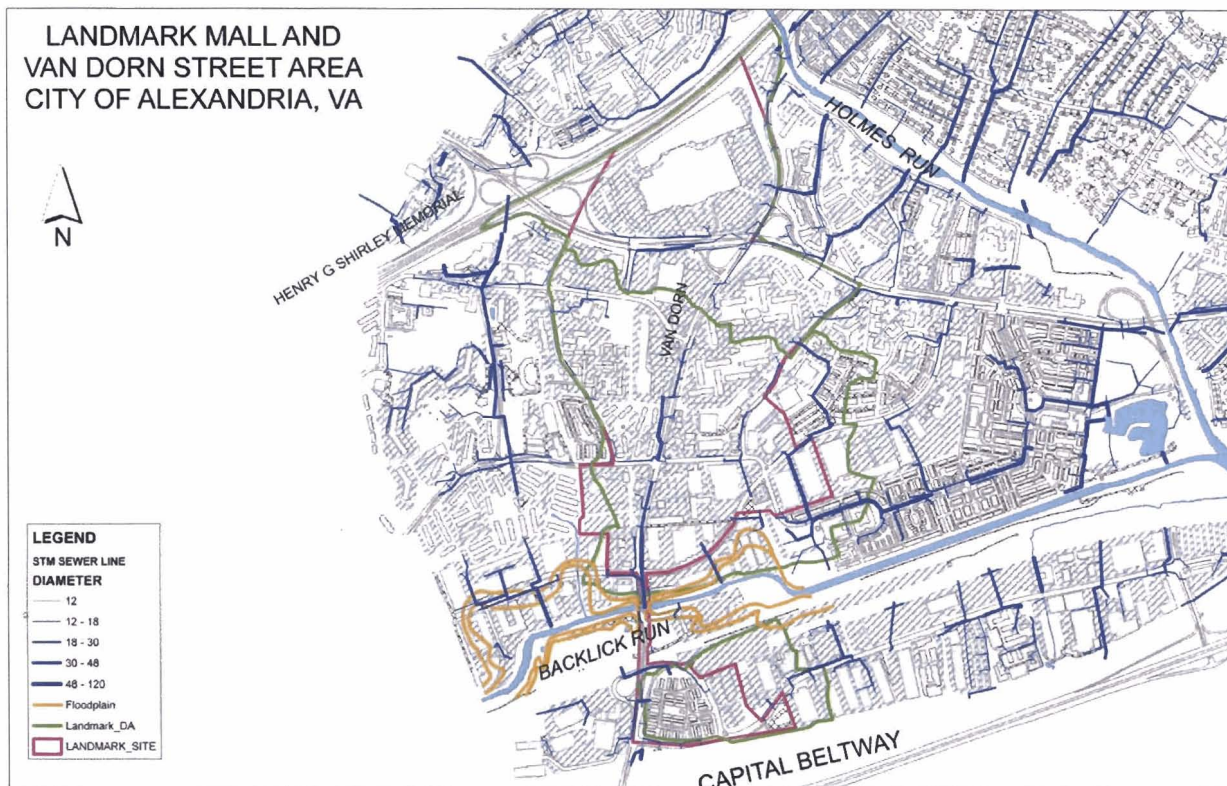


Figure 8-4. Sewer lines in the Landmark/Van Dorn area.

Stormwater in the Landmark/Van Dorn Corridor planning area is mainly managed through an infrastructure system of drainage culverts and storm sewers designed to convey runoff quickly off site. According to the Geographic Information System (GIS) data published by the City in spring 2008, stormwater sewer pipes range from 15 inches to 60 inches in diameter and drain towards the local storm sewer trunk line beneath South Van Dorn Street. The trunk line collects runoff from south of Duke Street and the Van Dorn Street area and discharges to Backlick Run. For the Landmark Mall area, stormwater sewer pipes ranging from 12 inches to 78 inches in diameter drain to the local trunk line beneath Duke Street and discharge into Holmes Run.

The average imperviousness of existing development in the planning area is more than 70%. Development in the planning area occurred primarily before the implementation of stormwater regulations and generally lacks

structural stormwater BMPs at individual sites to control the quantity and quality of runoff. In addition, there are no central BMP facilities, such as regional detention ponds, to treat runoff before it is discharged to receiving waters.

Although the planning area makes up only about 1% of the Cameron Run drainage area, the existing stormwater runoff in the planning area has disproportionately high impacts on Backlick and Holmes Run because of the area's high imperviousness and lack of detention or treatment. Such impacts include acceleration of stream velocities and degradation of stream channels, declining water quality, increase in volume of runoff with higher pollutant concentrations, and damage to stream and aquatic life resulting from suspended solids accumulation.

Existing Stormwater Management Requirements

Stormwater management control measurements can be classified into two categories: stormwater quality control and stormwater quantity control. Many stormwater quality control practices incorporate some stormwater quantity control.

Stormwater Quality Control

As stormwater travels over land it collects pollutants from diffuse sources, which can then negatively impact aquatic ecosystems. Such pollutants include, but are not limited to, suspended solids, trace metals, fecal contaminants, and hydrocarbons. In addition, summer-time stormwater runoff often increases in temperature as it flows over impervious surfaces leading to thermal impacts on receiving water bodies.

The City of Alexandria Article XIII Environmental Management Ordinance sets specific requirements that the entire water quality volume from a redeveloping area be treated. The specific requirements for discharge are defined as follows:

- Post-development pollutant discharge cannot exceed the average City land cover condition of 41 percent imperviousness.

If the existing impervious cover is greater than the 41 percent City average, the following post-development requirements apply:

- If the site is currently served by a stormwater quality BMP, existing pollutant discharge shall not be exceeded
- If the site is not currently served by a stormwater quality BMP, pollutant discharge based on existing conditions shall not exceed the existing discharge minus 10% OR discharge based on the average City land cover condition, whichever is ~~greater~~.

~~Stormwater quality requirements apply equally to new development and redevelopment.~~ All new development

and redevelopment within the region must reduce the post-development phosphorus load leaving the site in stormwater runoff. Phosphorus is important because it is the leading contributor to eutrophication in the Chesapeake Bay which leads to the reduction of the oxygen content in water. This leads directly to loss of species diversity and water quality.

Backlick Run and Holmes Run, to which the majority of the stormwater from the study area drain, flow directly to Cameron Run. State and local monitoring programs have identified pollutants of concern within the Cameron Run watershed. The US Environmental Protection Agency is required to develop Total Maximum Daily Loads (TMDLs) to reduce pollutant loads that degrade a stream below designated uses. (e.g.; recreation, fishing, boating, etc.). A TMDL is a calculation of the maximum amount of a select pollutant that a water body can receive and still safely meet water quality standards. To ensure compliance with the requirements of the approved TMDL implementation plan, water quality goals for the specified pollutants are incorporated by the State into the local Virginia Pollutant Discharge Elimination System (VPDES) and Municipal Separate Storm Sewer System (MS4) program agreement. An approved TMDL implementation plan requires that *Escherichia Coli* bacterial loads be reduced in stormwater runoff to Holmes, Backlick and Cameron Runs.

City of Alexandria's Targets of Opportunity Urban Retrofit Program is a public-private partnership which seeks water quality benefits by controlling pollution from previously developed areas of the City. The program seeks opportunities to reduce unnecessary impervious cover, control stormwater runoff, and increase vegetated open space. Where feasible, within groundwater recharge areas such as Landmark/Van Dorn, it specifically applies a metric of reducing existing impervious surface cover by 20 percent during redevelopment and using stormwater infiltration practices where appropriate. Through this program, it is a City objective to reduce non point source pollution by 10 percent.

Other City ordinances, programs, and codes that affect stormwater quality include the Erosion and Sediment Control Ordinance, Flood Overlay Districts (e.g. Backlick Run, Holmes Run and Cameron Run are flood prone areas), and the Virginia Uniform Building Code. The State plans to authorize new stormwater quality legislation by 2010 that is expected to increase the pollutant load restriction even further. Additional pollutants will also be required to be managed in addition to phosphorus. Figure x (reference needed) provides a summary of the stormwater quality requirements currently in place in the City, which also affect the Landmark/Van Dorn planning area.

Stormwater Quantity Control

Stormwater quantity control manages stormwater runoff volume. Increased peak discharge volumes and quantities increase the likelihood of stream erosion and can cause significant downstream impacts such as flooding. Ideally, control should be implemented so that peak discharge after a site is developed does not exceed peak discharge before development occurred, effectively resulting in no net increase in stormwater quantity.

In accordance with the City of Alexandria Article XIII Environmental Management Ordinance, new development is required to provide site-based stormwater management quantity measures. These state that the post-development peak discharge is not to exceed the pre-development peak discharge for the 2-year and 10-year storm events.

Stormwater quantity control within the City of Alexandria typically applies only to “new” impervious area within a given site. For redevelopment this would mean that stormwater BMPs would ONLY need to manage the quantity of stormwater that runs off from any impervious area at post-development conditions that exceed the impervious area at pre-development conditions. Technically, if a redeveloped site has the same or less total impervious area after development, on-site stormwater quantity measures are not mandatory. As a consequence, the large volume of stormwater runoff that

is generated today by impervious areas will continue to degrade receiving waters.

However, new development must also demonstrate that adequate stormwater outfall conveyance exists for each project, even if the peak discharge does not exceed or is less than the pre-development level. If this outfall capacity is not demonstrated, each development will be responsible for providing any needed off-site improvements to provide this adequate outfall capacity

8.4.2. Proposals for Stormwater Management and Green Infrastructure

A green infrastructure approach to stormwater runoff issues integrates stormwater management goals with other planning efforts, such as open space, land use, transportation, utilities, and recreational planning. For 30 years, Northern Virginia has implemented various regulations to manage stormwater. The focus has evolved from solely concentrating on flood prevention for large magnitude storm events to addressing water quality, stream channel erosion, and habitat degradation. Small storm events, such as the 1- to 2-year flow events, comprise the majority of the water pollution and erosion damage to nearby streams. By decreasing impervious surfaces and capturing runoff from small storm events on-site, water quality and quantity impacts can be significantly reduced.

To address the issues related to flooding, stream degradation, impaired waterways, and to develop innovative techniques to guide the sustainable redevelopment of the area, the City evaluated existing stormwater management practices and requirements and recommends new strategies, requirements, and BMPs to address stormwater quality and quantity in a sustainable manner. In order to successfully integrate BMP techniques within this green infrastructure strategy, it is desirable that they:

- Have stormwater, aesthetic, and landscape value within the planning area;
- Provide pollutant removal for contaminated stormwater;
- Retain or detain increases in stormwater runoff caused by land use change;
- Offer opportunities for stormwater reuse;
- Link stormwater BMPs to provide stormwater connectivity; and
- Develop an integrated stormwater strategy for both public and private land.

Where appropriate, new policies specific to the planning area are recommended. In some cases, these policies may differ from those contained in the City of Alexandria Stormwater Management Plan and Water Quality Management Supplement, and in those cases, the recommendations herein would apply. A desire for enhanced stormwater requirements and standards for the Landmark/Van Dorn area to exceed existing City of Alexandria and Virginia requirements has provided the opportunity to:

- Control both water quality and quantity beyond the minimum levels required today;
- Guide responsible stormwater management, since redevelopment will not trigger current stormwater quantity regulations if impervious surfaces are not increased;
- Treat the stormwater runoff from the large amount of impervious surface within the study area that is presently not receiving any stormwater quantity or quality treatment;
- Support the City's ongoing efforts to restore Backlick, Holmes and Cameron Runs;
- Reduce flooding through and along these streams;
- Support City initiatives (e.g.: **Strategic Plan (2004)**, **Water Quality Management Supplement (2001)**, **Eco-City Charter (2008)**, **Draft Environmental Action**

Plan (2008/2009), **Low Impact Development Design Supplement**);

- Recommend a regulatory framework that can facilitate effective stormwater management for the Landmark/Van Dorn area.

Stormwater Management and Green Infrastructure Recommendations

In order to holistically approach the stormwater management planning effort for the Landmark/Van Dorn Corridor planning area, several stormwater management principles are outlined below. The State is in the process of developing new stormwater management standards. At such time that the standards are promulgated, development and redevelopment shall be subject to the standards shown within this Plan or those of the State, whichever is more stringent.

Stormwater Management Principles

- Minimize impervious surfaces.
- Provide on-site stormwater management controls as reasonable.
- Consider regional stormwater management controls to collect public and private runoff, if feasible.
- Maximize directing stormwater to landscaped areas.
- Seek opportunities to reuse stormwater.
- Promote rainwater capture and reuse.
- Increase public awareness by exposing stormwater management as an attractive feature in the urban environment.

In addition to the stormwater management principles, several planning area techniques to support stormwater management are provided below.

Planning Area Techniques

- Consider regional BMPs to control off-site as well as on-site stormwater.



Figure 8-5. Cisterns For Greywater Re-use, Arlington, VA



Figure 8-6. Bioretention Cells As Part Of Parking Lot Design. Beatley Central Library, Duke Street, City of Alexandria



Figure 8-7. Stormwater Management Pond At Cameron Station. The Pond Located In Ben Brenman Park Collects Runoff From The Cameron Station Development Providing Both Stormwater Management And Aesthetic Benefits

- Provide 30 percent tree canopy coverage within 5 years of occupancy.
- Provide 25 percent open space on private property.
- Evaluate the feasibility of regional pond facility in the lower drainage area.

The Plan recommends two performance standards to improve water quality and quantity. In order to achieve increased stormwater quality management using a phosphorus load removal performance standard, the Plan recommends the following new standards:

Performance Standards for Water Quality and Water Quantity

- Capture at least ½-inch of runoff from a site, pre-dominately from impervious surfaces;
- Reduce phosphorus loads by 40 percent.

In order to achieve increased stormwater quantity management by treating all or part of the post development stormwater volume that would exceed average City conditions, The Plan recommends the following standards be applied to all development in the planning area.

For the 1-year, 24-hour storm:

1. Reduce post development runoff to either: match average City conditions (41% imperviousness); OR provide detention for 50% of difference between post development and average City conditions.
2. The runoff hydrograph from the site shall minimize erosion of the receiving stream (Backlick, Holmes, and Cameron Runs).
3. Peak discharge shall not exceed the peak discharge at average City conditions.
4. Credit will be provided for practices that increase open space or employ cisterns for water reuse, green roofs, or other BMPs.

Best Management Practices

The following BMP techniques listed in Table X and summarized in Fig. X) (check figures) have been selected based upon their appropriateness for integration within the Landmark/Van Dorn Corridor planning area. This list does not represent an exhaustive selection of all BMP techniques currently available, and the possible integration of other BMPs outside of those presented may prove appropriate and should be evaluated on a case by case basis. In addition, it should be noted that the application of several BMP devices in combination with public or private spaces allows for the most effective stormwater management.

The proposed BMPs have been divided into three categories based on site-appropriateness: Category A, Category B, and Category C. Category A includes BMPs that are highly recommended and can be used throughout the planning area. Category B includes BMPs that work best when integrated with open green spaces. Category C includes BMPs that are only appropriate at certain locations in the planning area because site constraints limit their installation widely across the planning area.

CATEGORY A

Highly Recommended For the Entire Study Area

- Shade Tree Planting
- Street Tree Continuous Root Zone
- Aeration Strip Under Sidewalk
- Soil Amendments
- Bioswales, Bioslopes, Bioretention Cell
- Conservation Landscaping
- Vegetated Filter Strip
- Cisterns – Rainwater Capture and Re-use
- Green Roof

CATEGORY B

Highly Recommended For Open Space/Green Space Areas

- Conservation
- Reforestation
- Stormwater Management Pond (integrated with open space)

CATEGORY C

Recommended – Appropriate For Specific Areas Based On

- Porous Pavers
- Permeable Pavements
- Pocket Wetlands
- Stream Daylighting

A number of the BMPs listed in Table X (check reference) are composed of vegetative plantings. These vegetative devices require the right mix of natural components, such as soil, mulch, plant species, and micro-organisms. If the devices are constructed correctly they can create wildlife habitats and valuable green spaces for neighborhoods. The natural components include soil characteristics, plant material selection, and plant material placement.


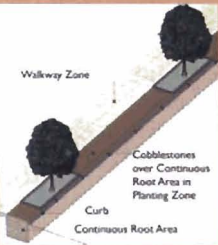



Vegetative BMPs can be an opportunity to create dynamic ecosystems in the urban environment. The current City of Alexandria Landscape Guidelines should serve as the minimum standard. There are a number of design considerations when planning for vegetative BMPs, including:





- Specify native plant materials;
- Create wildlife communities: food, shelter, water, where appropriate;
- Select appropriate vegetation based on the local conditions;
- Identify existing and proposed utilities before placement of plants;





- Do not specify toxic, invasive, or disease prone plant materials; and
- Consider pedestrian traffic and personal safety.




The BMPs recommended herein provide not only stormwater management benefits but contribute to aesthetics, provide open green space, promote innovative building design, support wildlife habitats, decrease “heat island” effect, increase tree canopy, improve air quality, and promote environmental sustainability. All of which, improve the quality of life for residents and visitors of the planning area.



Table 8-1. Best Management Practice (BMP) Techniques Analysis

BMP TECHNIQUE	DESCRIPTION	KEY MAINTENANCE ISSUES	CHALLENGES
SHADE TREE PLANTING 	Trees provide a first interception of precipitation to help reduce stormwater quantity and heat island effect	<ul style="list-style-type: none"> Aeration of soil Watering Pruning Fertilizing Root penetration to underground utilities 	<ul style="list-style-type: none"> Space limitations in the urban environment Plant species selection Maintenance and oversight Disease outbreak and conditions of drought Provide adequate root zone for sustained tree growth
 STREET TREE CONTINUOUS ROOT ZONE	Continuous root zones under bricks, pervious pavers or a grid structure topped with a sidewalk help promote healthy street trees allowing for the uninterrupted growth of tree roots.	<ul style="list-style-type: none"> Periodic replacement of missing cobblestones Weeding Sweeping or vacuuming of sediment between joints 	<ul style="list-style-type: none"> Not suitable for sidewalks less than 6 feet wide Plant species selection Proper installation, maintenance and oversight Coordination with utilities and other site services
 AERATION STRIP UNDER SIDEWALK	Perforated sub-surface strip to extend root growth area. Aeration strips enable trees to safely maximize their root zone.	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Proper installation Disruption from future utility work or tree replacement Root penetration into underground utilities
SOIL AMENDMENTS 	The addition of any substance to soil that helps to promote plant growth. Examples of amendments include peat, yard compost, and wood chips.	<ul style="list-style-type: none"> Mechanical aeration Organic amendments Maintain soil stability 	<ul style="list-style-type: none"> Soil compaction Excessive root matting
BIOSWALES 	Broad shallow vegetated channels that convey and infiltrate stormwater.	<ul style="list-style-type: none"> Replacement of dead vegetation Weeding and removal of invasive plants Periodic removal of sediment build-up Trash removal Underdrain monitoring and flushing 	<ul style="list-style-type: none"> Plant species selection Maintenance and oversight Disease outbreak and conditions of drought

BMP TECHNIQUE	DESCRIPTION	KEY MAINTENANCE ISSUES	CHALLENGES
BIOSLOPES 	<p>Bioslopes are slightly compacted vegetative devices that allow stormwater infiltration and prevent erosion from occurring. They can be incorporated in standard slopes or terracing.</p>	<ul style="list-style-type: none"> • Replacement of dead vegetation • Weeding and removal of invasive plants • Periodic removal of sediment build up • Trash removal 	<ul style="list-style-type: none"> • Plant species selection • Maintenance and oversight • Disease and drought outbreaks • Design for slope stability
BIORETENTION CELLS 	<p>Small scale soil and plant based devices located in shallow depressions that promote stormwater infiltration and filtration.</p>	<ul style="list-style-type: none"> • Replacement of dead vegetation • Weeding and removal of invasive plants • Periodic removal of sediment build up • Trash removal • Underdrain monitoring and flushing 	<ul style="list-style-type: none"> • Plant species selection • Maintenance and oversight • Disease and drought outbreaks • Public awareness • Connection to storm sewers
 CONSERVATION LANDSCAPING	<p>A type of landscape that minimizes maintenance and promotes the use of native species to improve air and water quality, create a habitat and enhance species diversity.</p>	<ul style="list-style-type: none"> • Protection and monitoring to prevent vandalism • Periodic watering during drought • Trash removal • Weeding 	<ul style="list-style-type: none"> • Public awareness • Plant species selection • Maintenance and oversight • Disease and drought outbreaks • Availability of plants
 VEGETATED FILTER STRIPS	<p>Dense permanent vegetation with a gentle slope to provide water quality pre-treatment between impervious surfaces and stormwater management devices.</p>	<ul style="list-style-type: none"> • Replacement of dead vegetation • Weeding and removal of invasive plants • Watering and monitoring • Periodic removal of sediment build up • Trash removal 	<ul style="list-style-type: none"> • Check dams and water energy dissipators may be required to mitigate water velocity • Plant species selection

BMP TECHNIQUE	DESCRIPTION	KEY MAINTENANCE ISSUES	CHALLENGES
CISTERNS (GREY WATER REUSE) 	<p>Sub-surface or surface storage tanks designed to accommodate excess stormwater quantity. Water reuse opportunities could include irrigation, toilet flushing or exterior washing e.g. car washing.</p>	<ul style="list-style-type: none"> • Periodic removal of sediment build up • Periodic inspection • Regular use of harvested water is required 	<ul style="list-style-type: none"> • Construction impacts of large underground systems can be disruptive • Initial costs are high
GREEN ROOFS 	<p>Vegetated/planted building roof surface to promote stormwater retention and filtering.</p>	<ul style="list-style-type: none"> • Replacement of dead vegetation • Weeding and removal of invasive plants • Protection and monitoring to prevent vandalism • Periodic watering 	<ul style="list-style-type: none"> • Roof bearing capacity/integrity • Adverse impacts from nearby land uses • Maintenance and oversight • Cost
CONSERVATION 	<p>Land protected from development and generally preserved as green/vegetated space. Public accessibility may be limited due to location of topographic constraints, however the site may serve as visual greenspace/ landscape buffer to surrounding development.</p>	<ul style="list-style-type: none"> • Removing diseased trees and vegetation • Controlling invasive plants • Trash removal • Soil amendments as appropriate 	<ul style="list-style-type: none"> • Acquisition of sites • Adverse impacts from nearby land uses • Maintenance and oversight • Disease and drought outbreaks • Compaction and erosion of soils
REFORESTATION 	<p>Active (planting) or passive (left with only minor maintenance to allow natural growth) reforestation of open spaces.</p>	<ul style="list-style-type: none"> • Protection and monitoring • Periodic watering in early years • Trash removal • Controlling invasive plants • Public awareness to prevent mowing of "untidy" greenspaces 	<ul style="list-style-type: none"> • Site evaluation/constraints criteria need to be defined • Plant species selection • Maintenance and oversight • Disease and drought outbreaks • Compaction and erosion of soils • First year establishment

BMP TECHNIQUE	DESCRIPTION	KEY MAINTENANCE ISSUES	CHALLENGES
STORMWATER MANAGEMENT POND 	Water body designed and located to store stormwater.	<ul style="list-style-type: none"> Replacement of dead vegetation (shoreline and submerged aquatic vegetation) Control and remove invasive species (plants and animals) Protection and monitoring to prevent vandalism Trash removal 	<ul style="list-style-type: none"> Site evaluation/constraints criteria need to be defined Safety concerns Trash removal Acquisition of sites Adverse impacts from nearby land uses Maintenance and oversight Minimize waterfowl population
POROUS PAVERS 	Pavers installed with voids to allow stormwater to infiltrate and reduce runoff.	<ul style="list-style-type: none"> Maintain planting materials away from pavements Sweeping of debris is required to maintain infiltration rates Occasional replacement of joint material and weeding A lower level of winter maintenance is required Underdrain monitoring and flushing 	<ul style="list-style-type: none"> Proper installation Maintain a monitoring system Periodic and consistent maintenance Perform snow removal with care
PERMEABLE PAVEMENTS 	Poured in place pavement surfaces designed with voids to allow stormwater to infiltrate and reduce runoff.	<ul style="list-style-type: none"> Maintain planting materials away from pavements Vacuuming of debris is required to maintain infiltration rates Do not use surface sealants Joint filtering material would need to be replaced occasionally Underdrain monitoring and flushing A lower level of winter maintenance is required 	<ul style="list-style-type: none"> Proper installation Maintain a monitoring system Periodic and consistent maintenance Perform snow removal with care

BMP TECHNIQUE	DESCRIPTION	KEY MAINTENANCE ISSUES	CHALLENGES
<p>POCKET WETLANDS</p> 	<p>Small-scale wetlands, often associated with a stormwater pond.</p>	<ul style="list-style-type: none"> • Replacement of dead vegetation • Weeding and removal of invasive plants • Protection and monitoring to prevent vandalism • Trash removal 	<ul style="list-style-type: none"> • Connection with perennial groundwater • Site evaluation/constraints criteria need to be defined • Public awareness • Safety concerns • Trash removal • Acquisition of sites • Adverse impacts from nearby land uses • Maintenance and oversight
<p>STREAM DAYLIGHTING</p>  <p><small>Photo: Sound Native Plants</small></p>	<p>Restoring a stream that had been enclosed in a stormsewer pipe, culvert, and/or drainage system to an open and more natural channel.</p>	<ul style="list-style-type: none"> • Trash Removal • Water quality monitoring • Weeding and removal of invasive plants 	<ul style="list-style-type: none"> • Managing hydrologic conditions • Costly infrastructure improvement • Competing interest for land • Flooding

Implementation

9

This chapter addresses the rationale supporting the phasing of redevelopment, infrastructure and public benefits, describes each phase of development and the public facilities supporting that phase, the costs and funding options for infrastructure, and the advisory group that will help direct the plan's implementation.

9.1. Implementation Approach: Phased Redevelopment, Infrastructure and Public Benefits

This plan recognizes that the current development market, in the region generally and in the Landmark/Van Dorn area specifically, is not strong enough to make redevelopment financially feasible in most cases.

Future redevelopment is supported with major investments in infrastructure and public facilities, including a redesigned Van Dorn Street, increased street connectivity including a new street paralleling Van Dorn Street and improved connections from the Landmark Mall site to redeveloped areas across Duke Street.

This plan also recognizes that the Landmark/Van Dorn area is an important resource of market-rate housing affordable to low and moderate income and workforce households. Between 2000 and 2007, the City lost thousands of units of market-rate affordable housing. It is a goal of this plan to preserve as much existing market-rate affordable housing as possible in order to slow the expected loss of these units as the market improves. To accomplish this goal, the plan does not encourage redevelopment of the existing residential complexes.

Once the nation and region emerge from the current economic downturn, the Landmark/Van Dorn area has good prospects for attracting redevelopment interest. However, the area is not yet a choice location for commercial or residential development. During the initial phase of plan implementation, the City may look for opportunities to encourage a critical mass of initial redevelopment activity, which will act as a catalyst for future redevelopment. This encouragement can take the form of:

- Lowered expectations for developer contributions for on- and off-site improvements, or contributions for off-site facilities;
- Publicly-funded infrastructure;
- Public-private partnerships, such as tax increment financing or its functional equivalent.

Once a critical mass of development is under way, especially if combined with public investments in planned

infrastructure, the market for redevelopment in the balance of the plan area will improve. The commencement of the redevelopment of Landmark Mall is most likely to be the catalyst event that stimulates demand for additional redevelopment throughout the plan area, but an equivalent amount of redevelopment on other parcels in the plan area could serve the same catalyst function.

As conditions improve, market rents and other factors will begin to support redevelopment that can generate developer contributions toward planned infrastructure, and these, in turn, will reinforce continued improvement in market conditions. This second phase of the plan is called the "Choice Location" phase because it is during this period when Landmark/Van Dorn comes into its own as a preferred location for office and mixed use redevelopment.

The implementation of planned bus rapid transit (or other dedicated transit) lanes in the plan area will further add to the attractiveness of the area for redevelopment. As transit service improvements reduce the need for parking, City expectations for developer contributions, when appropriate, should be high.

This plan has analyzed the market conditions under which development is likely to proceed and the developer-funded contributions that are likely to be financially feasible under those market conditions. The implementation strategy for this plan cannot forecast market conditions, but it can provide expectations for the amount of development in each implementation phase.

9.2. The Three Stages

Phase I – Catalyst

Phase I is triggered by the adoption of this plan and continues until a critical mass of development has begun construction. During this period, development market economics are not likely to support high expectations for developer-provided contributions toward public infrastructure or the City's affordable housing goals and recognition of these economic conditions will be reflected in the City's expectations for developer contributions to public benefits. While this plan envisions that the City will be sensitive to development costs during this phase, it does not expect that the overall quality of the development will be compromised. The City will require projects to meet its standards of high quality construction and urban design, as well as make some level of contribution to public benefit based on the specific project's economics.

Phase II - Choice Location

This phase is triggered when 300,000 square feet of office space, or 750,000 square feet of mixed-use development, of which no more than 50 percent is residential, has begun construction (over December 2008 levels). Achieving this level of development is a strong signal that the market is capable of supporting continued redevelopment in the plan area.

At the beginning of this phase, the City will begin increasing requirements for developer contributions during rezonings unless it determines that market rents for office space, retail space, and rental housing are not yet sufficient to support continued redevelopment and the increased developer contributions.

The ability of individual projects to generate a specific contributions amount cannot be pre-determined by this plan. Based on 2008 analysis, the City should expect at least \$2.80/sf to \$10.60/sf (1.4 percent to 5.3 percent of 2008 average development costs exclusive of parking) to be available for contributions due to "choice location"

effects. These dollar amounts are all in 2008 dollars and should be annually adjusted for inflation.

This is over and above a minimum contribution to affordable housing, specifically the voluntary affordable housing formula set forth in the Final Report of the Developer Housing Contribution Policy Work Group that was accepted by City Council in June 2005, which ranges from \$1.50 to \$2.00 per square foot of gross floor area and \$4.00 per square foot of increased floor area due to rezoning.

As the area matures as a choice location, and market rents or sales prices increase, the availability of funds for contributions should increase.

Phase III – Dedicated Transit Line

This phase is triggered when transit service in the area is sufficiently enhanced so that parking can be reduced. Because parking is a major development cost, reductions in parking increase the potential for development projects to contribute to the infrastructure and other public benefits that support this plan.

This phase is fully realized when the planned bus rapid transit routes on Van Dorn Street and Duke Street are operational, but intermediate transit measures can also increase the non-driver modal split for non-residential development and reduce automobile ownership in residential development projects. Therefore, this phase is independent of Phase II, which means, for example, that reduced parking may be possible – and money for developer contributions made available – before Landmark/Van Dorn becomes a "choice location."

The ability of individual projects to generate a specific proffer amount cannot be pre-determined by this plan. Based on 2008 analysis, the City should expect in 2008 dollars at least \$7.90/sf to \$20.40/sf (4 percent to 10 percent of 2008 average development costs, exclusive of parking, and also to be inflation adjusted) to be available when parking requirements can be dropped to 1 space

per unit for multi-family residential and 2 spaces per 1,000 square feet of non-residential space. Development projects may be able to reduce parking prior to the completion of both dedicated transit lanes due to

Incremental transit improvements (such as circulator buses). Partial reductions in needed parking will yield some increase potential for developer contributions.

Table 9-1
Cost for Major Transportation Projects

Project	Length (feet)	New Lanes or (Rebuilt) lanes	Cost with Moderate Utilities	Cost with Many Utilities
Duke Street at grade	2,100	(6) and 2	\$ 14,800,000	\$ 17,600,000
Duke Street at grade with bridge	2,110	(6), 4 and 2	22,500,000	28,100,000
New High Street	4,500	2	16,500,000	18,400,000
Other new grid roadways*	4,000	2	15,400,000	17,100,000
Long term new grid roadways*	8,375	2	30,100,000	33,600,000
Landmark local roadways*	5,000	2	16,800,000	18,900,000
Van Dorn boulevard, north of Pickett	5,250	(6)	48,500,000	54,900,000
Van Dorn boulevard, south of Pickett	1,750	(6)	18,600,000	23,000,000
Van Dorn bridge widening	335	2	not applicable	2,900,000
Multimodal bridge to Metro	1,950	3	not applicable	22,000,000
Total (combination of public and private funding)			\$ 106,100,000	\$149,400,000
Total (*completely privately funded)			\$62,300,000	\$69,500,000

Moderate utilities: overhead and some underground utilities will need to be relocated.

Many utilities: Expensive relocation of gas, cable, telephone or fiber optic. May be utility-related issue.

Van Dorn Street north: moderate utilities assumes project will stay within existing roadway limits between Edsall Road and just north of Stevenson Avenue.

Notes:

Duke Street at grade	6 lanes west of Van Dorn street, 2 new lanes through new intersection east of Van Dorn Street (not used in totals).
Duke Street at grade with bridge	Same as at grade, add bridge and approaches (this option used in totals).
Other new grid roadways	New north-south east of Van Dorn Street, new east-west south of Edsall Road
Long term new grid roadways	New grid in existing residential areas not proposed for redevelopment
Landmark local roadways	Road network for Landmark Mall site
Van Dorn boulevard north	From Pickett Street to north of Duke Street, complete rebuild, three new intersections.
Van Dorn boulevard south	From Eisenhower Avenue to Pickett Street
Van Dorn bridge widening	Additional lane each direction at Duke Street and at Norfolk-Southern rail crossing
Multimodal bridge	Eisenhower Avenue to Pickett Street, two lanes with wide multi-use trail

9.3. Infrastructure Phasing and Funding

Parking costs are also directly related to the type of parking (surface, structured, underground); for projects receiving a density increase through rezoning, the City's proffer expectations may increase as parking costs are reduced by type of parking, as well as by number of spaces.

Infrastructure and other public amenities are traditionally funded by the City through financing from the General Fund. In the case of some large facilities, partial funding by the federal government and/or the Commonwealth of Virginia is necessary for construction to move forward.

Private development projects after the Plan's adoption are another source of revenue which can be applied toward the capital facilities recommended by this Plan. Revenue from future development includes developer contributions as well as city capital funds that could be financed by additional tax revenue created by new development projects. The City may establish funds to collect developer contributions for specific purposes (e.g., transportation, open space, sewer, etc).

As detailed throughout this chapter, this Plan recognizes that during the initial phase of redevelopment, there may be very limited opportunities for direct developer contributions toward new infrastructure. While the City will continue to expect dedication of land required for open space and transportation, monetary contributions for construction of off-site infrastructure may not be financially feasible. As redevelopment momentum increases, the City's expectations for developer contributions toward off-site infrastructure and amenities will increase.

Because of its special role as a potential catalyst for broad redevelopment, the City would consider tax increment financing or its functional equivalent for Landmark Mall infrastructure, but only if economics warrant such city financial participation.

The public amenities described in earlier chapters of this plan and summarized in the recommendations section of this chapter include a number of major transportation

improvements; the potential need for additional school capacity; several new open spaces, a community/recreation center, and public art; and the potential need for stormwater facilities and expansion of sewerage capacity.

Cost estimates

Cost estimates for transportation infrastructure in the Plan are listed below. Both dedicated transit lanes are regional projects; these costs (which are stated in 2008 dollars) include construction of the dedicated lanes within the Plan area. Operating and capital equipment costs are expected to be funded from other sources. The private sector is expected to construct new grid roadways and other local roads within and adjacent to their development projects. Funding improvements to Duke Street, Van Dorn Street, the New High Street bridge, and the multimodal bridge is likely to involve a mix of both private and public funding.

Revenue estimates

Estimate of Net New Tax Revenues

At full maximum build out of 13.5 million square feet of development, the Landmark/Van Dorn area will produce some \$27.2 million in net new real estate tax revenues, and approximately \$7.4 million in other net new local tax revenues for a total net new tax generation of \$34.6 million annually. Setting aside one-third for service expenditures, the fiscal impact or net new tax generation to the City would be \$23.2 million annually at full build out.

Other local taxes are primarily local taxes generated by retail, hotel and other commercial uses.

The above calculations do not deduct any to-be-determined public participation by the City (tax increment financing, direct capital investment, etc.) in any public infrastructure or facility in the Landmark/Van Dorn area, including Landmark Mall. Any such financing would reduce the positive net fiscal impact to the City to a lower dollar amount.

While the net new tax generation is significant, the increase in tax revenue will occur gradually and likely over several decades depending on the economy, market conditions and other factors, such as when Landmark Mall redevelops.

If one assumes a 20-year buildout with 1/20th of the proposed development constructed in each of the 20 years of that time frame, then the total new tax revenues generated annually would be \$1.73 million (i.e., growing to \$17.3 million in 10 years and \$34.6 million in 20 years), less the cost to the City of providing services over that time period. This impact would be less to the degree that the net tax revenues are allocated towards financing infrastructure (such as roads, BRT, bridges, a school, public facilities, etc.) in the Landmark/Van Dorn area.

The net new revenues after deducting City services and School costs would be \$1.1 million annually, or \$11.0 million in 10 years.

If 20% of the \$23.2 million in net new tax revenues, which total \$4.64 million per year, were allocated towards capital financing such as infrastructure for the Landmark/Van Dorn area, then there would be approximately \$93 million (in 2008 dollars) available for capital investments on a cash pay-as-you-go basis over the next twenty years.

If that same \$4.64 million was utilized to issue bonds and repay those bonds (principal and interest) over a 20-year period, then the amount that could be bonded would be \$81.6 million. Bonding would allow capital investments to be front loaded as major elements as redevelopment occurs rather than spread out over a 20-year period.

Any bonds considered for issuance or any cash capital investment made using existing or new tax revenues need to be considered within the context of the City's overall debt policies and debt ratios, as well as within the context of the economic and City budget and capital funding environment at the time these capital financing considerations are undertaken. In any event, there

should be no expectation on the part of private landowners or developers that public funds will be expended for private, on-site improvements.

Estimate of Potential for Developer Contributions

The potential for developer contributions at each phase of development has been estimated by City's economics consultant as:

Table 9-2
Potential for Developer Contributions
Dollars per Square Foot of Development

Development Phase	Mixed Use		
	Office	Rental Residential	Condo Residential
Near Term	\$ 0.00	\$ 0.00	\$ 0.00
Choice Location	\$ 10.60	\$ 2.37	\$ 5.49
Choice Location + Transit	\$17.29	\$13.71	\$20.39

If one assumes a 20-year buildout with 1/20th of the proposed development constructed in each of the 20 years of that time frame, with "choice location" beginning in 2014, sufficient transit improvements to begin reducing parking by 2019, and reaching the "choice location plus transit" phase by 2024, the estimated potential for developer contributions would be:

Residential:	\$ 53,900,000
Retail:	\$ 11,600,000
Office and other:	\$ 56,000,000
Total:	\$ 121,500,000

Compared to the costs of the transportation improvements that are expected to be publicly funded, the revenues from both sources (tax revenues and cash developer contribution potential) are:

20% of new tax revenues	up to \$ 93 million
Developer contribution potential	Up to \$ 120 million

Table 9-3
Summary of Revenue Sources and Infrastructure Costs

Cost-Revenue Category	Amount
Infrastructure and Amenity Costs	
Transportation (maximum, including \$10 million land acquisition)	\$ 159,400,000
Open Space	16,000,000
Total Costs	\$ 175,000,000
Project-related Revenues, (no bonding assumed)	
20% of new tax revenue	\$93,000,000
Developer contribution potential (90% of estimate)	109,000,000
Total project-related revenue for infrastructure	\$ 202,000,000

The City's goal would be to set aside a sufficient percentage of the increased net tax increment each year so that by the time that 25 percent of the potential increase in development has been completed, the City would have a combination of cash reserves and bond capacity of \$72.5 million. Additional funds necessary to complete the Van Dorn Street dedicated transit lanes within the Plan area and the multimodal bridge could come from state and federal sources, from developer contributions, by minimizing right-of-way needed for the dedicated transit lanes, or by phasing the dedicated transit lanes on Van Dorn street south of Pickett Street to occur at a later date.

Transportation

This Plan recognizes that the current suburban, auto-oriented transportation network is no longer meeting the needs of the Landmark/Van Dorn area. A transformation to an urban-style grid network that serves all modes of transportation – walking, biking, transit and auto – is necessary to restore the economic vitality of the area, to meet the City's transportation and sustainability goals,

and to improve the quality of life for residents, workers, and visitors.

There are three factors that govern phasing of transportation and development:

- Site access: transportation improvements needed by individual development projects to provide access to their site, or within their site;
- Areawide mobility: transportation improvements that are needed to improve the network's support of all modes of travel; and
- Funding: availability of financial resources to fund the improvements.

As is generally the case, the Plan expects that site access improvements will be borne by the developer. These include the new High Street, the interior streets on the Landmark Mall Site, and the new grid roadways in the plan area. However, public financing of some type may be needed on the Landmark Mall site for infrastructure.

Some improvements in the West End Town Center area, most notably the High Street Bridge over Van Dorn Street and improvements supporting the transit lanes, are both site access improvements as well as areawide mobility improvements. For this reason, as well to address the financial feasibility of the Landmark Mall redevelopment, full funding of the bridge by private development may not be possible. The major decisions about the New High Street Bridge, including whether the preferred (bridge) option will be selected and the funding strategy and responsibility, will be addressed when the mall owners submit a development plan for City review.

It is not necessary for redevelopment on both sides of Duke Street to occur simultaneously for the bridge to be built. An access road from Van Dorn Street can provide temporary access to the south side of the bridge until the BF Saul site redevelops and a new street is built to connect the bridge to Stevenson. However, the bridge option, if selected, provides needed access to the Landmark Mall site and should be determined at the time

of the first major development or CDD rezoning on the Landmark Mall block or the BJ's/Passport block.

Roadway improvements that improve areawide mobility include the reconstruction of Duke Street and Van Dorn Street and the multi-modal bridge. The Duke Street reconstruction will require the participation of the developers of the Landmark Mall and BF Saul sites, which will include dedication of land for the increased right-of-way needed. The proposed Van Dorn Street reconstruction will require dedication of land from adjacent property owners as they redevelop, although the bulk of the funds for this project will be from federal, state and City sources. The Transportation chapter shows the anticipated interim section and implementation strategy for Van Dorn Street.

Areawide mobility will also be significantly improved by the completion of the dedicated transit lanes on Duke Street and Van Dorn Street. These two lanes will enable the area to go from an 18 percent transit commuting share to 27 percent, which in turn allows for reduced parking and other benefits. This Plan envisions continued improvements in transit service as the development permitted in the Plan builds out. To meet the Plan's parking and mode share goals, the Plan recommends construction of the Van Dorn Street dedicated transit lanes and the multimodal bridge on or around the time of construction of 25 percent of the increased development permitted in this Plan. The Alexandria Exclusive Transitway Assessment (the study mentioned in Chapter 5 to determine the feasibility of planned exclusive transitways in the City) will inform the phasing of the dedicated transit lanes.

Table 9-4 on the following page illustrates how increments of development can be paced with the delivery of transportation facilities and services. Each increment in this hypothetical situation includes some development in the West End Town Center and in Pickett Place. **It is not possible for this Plan to predict the order in which sites will redevelop, but the table shows the logical order in**

which transportation improvements could be delivered to support buildout of these two districts.

Delivery of the transportation improvement recommendations should be made as quickly as possible and no later than indicated in this table. The phasing in this table should not be construed to suggest that accelerated delivery of transportation improvements is undesirable.

New development approved in the plan area should be required to achieve a 20 percent non-driver mode share prior to the completion of the Van Dorn Street dedicated transit line and a 30 percent non-driver mode share after it is completed. For properties adjacent to Duke Street, the 30 percent non-driver mode share requirement begins when either the Van Dorn Street or Duke Street transit line is completed. During the development review process, the applicant will submit for public approval a plan to meet these mode share goals, which will become conditions of approval.

In addition to the traffic studies required with new development applications, the plan recommends that each development project be required to submit supplemental traffic analyses as part of the required traffic impact study to assess the cumulative transportation effect of the development in the planning area. This will help determine if mode share targets are being met, track net new trips, and determine what transportation improvements are required to accommodate the proposed development and refine the infrastructure needs and phasing identified in the plan.

As part of the development approval process, applicants must present a transportation management plan identifying strategies to meet transit mode share goals. These plans will be regularly monitored and adjusted to meet goals if the target transit shares identified are not met.

The City is reviewing options for revising the TMP ordinance and establishing transportation management districts. When these issues are resolved, the Landmark/Van Dorn area is an excellent candidate for

Table 9-4
Increments of Development and New Infrastructure and Service Elements

Development Increment	Proposed Infrastructure and Service Elements
Development along Pickett Street east of Van Dorn and first phase of Landmark Mall redevelopment (or approximately 25% of Plan increased development potential).	<p>Duke Street Improvements:</p> <ul style="list-style-type: none"> • Upgrade Walker Street intersection. • Remove flyover. • New intersection between Van Dorn and Walker. <p>Van Dorn Street Improvements:</p> <ul style="list-style-type: none"> • Transit lanes (Eisenhower Avenue to north of Duke Street). <p>Grid Roadway System Improvements:</p> <ul style="list-style-type: none"> • Pickett Place Main Street. • Other grid roadways. <p>Transit Service Improvements:</p> <ul style="list-style-type: none"> • Expanded bus transfer facility at West End. • Circulator service with stop at Van Dorn Metro. • Express bus service (predecessor to BRT/LRT). <p>Progress Toward Multimodal Bridge:</p> <ul style="list-style-type: none"> • Realign Pickett/Edsall intersection. • New intersection on Pickett Street. • Completion of bridge.
Development of either BJ's site and adjacent sites south of Stevenson Avenue, and Phase II of Mall redevelopment (or, with previous increment, approximately 50% of Plan increased development potential).	<p>Duke Street Improvements</p> <ul style="list-style-type: none"> • Transit lanes. • New intersection east of Van Dorn Street. • New High Street bridge over Duke Street. <p>Grid Roadway System Improvements:</p> <ul style="list-style-type: none"> • Other grid roadways. <p>Transit Service Improvements:</p> <ul style="list-style-type: none"> • Upgrade express and local service.
90% of full redevelopment.	<p>Grid Roadway System Improvements:</p> <p>Complete grid roadways.</p> <p>Transit Service Improvements:</p> <ul style="list-style-type: none"> • Full Van Dorn LRT/BRT service including outside Plan area. • Full Duke Street LRT/BRT service including outside Plan area.

a transportation management district, and development approvals should require participation in the district once it is formed.

During Phase I (the catalyst phase) of this Plan, structured parking is permitted under certain circumstances. The Development Guidelines chapter provides the conditions under which structured parking may be permitted. Parking structures count against a development project's overall FAR.

Schools

Enrollment increases over the last two years have put pressure on Alexandria City Public Schools, particularly at the elementary school level. If enrollment increases continue, there may be a need for additional classroom capacity to accommodate students from new development in the Plan area. Although future residential development in the Landmark/Van Dorn Plan is of a type that currently generates few elementary school students on a per-unit basis, the total development potential could increase the need for elementary school space by eight to twelve classrooms, or about 4 elementary students for every 100 units, using current student generation rates.

During the catalyst phase of implementation of the Landmark/Van Dorn plan, private development will have a limited ability to provide contributions to public facilities. In later phases, if ACPS adds elementary school expansions, or a new elementary school, to the capital improvements program in order to serve development in the Landmark/Van Dorn area, then requesting a pro-rata share of capacity costs as developer contributions and allocating those funds for school facilities is appropriate.

With regard to additional sites for school facilities, the Landmark/Van Dorn planning area has few obvious options that meet the traditional criteria for a new public school. Over the life of this Plan, Alexandria City Public Schools' school site requirements may evolve as the City, and the West End, becomes more urban. If so, one

or more sites within the Plan area may become suitable for a school or a school use. As the City reviews development applications for major parcels in the area, this Plan recommends that Alexandria City Public Schools be involved in evaluating the potential for that project to include a school site or contribute to school facilities.

The Plan is not encouraging the redevelopment of the EOS21 apartment complex. Over the long term, if redevelopment of this complex moves forward, it could potentially provide land for public uses.

Sanitary Sewers

This plan recognizes that sufficient long-term sanitary sewer capacity does not exist to accommodate the projected redevelopment. Preliminary analyses have indicated that there is insufficient capacity in the local sanitary collection system, the Holmes Run Trunk Sewer (HRTS) conveyance system and treatment capacity at the wastewater treatment plant (WWTP). The City is currently evaluating improvements and technologies to address these capacity needs. Appropriate solutions have not yet been determined and construction cost estimates are not available. However, these improvements may likely include off-site improvements to the local collection system and the HRTS as well as on-site technologies to reduce flows to the WWTP. Redevelopment projects will be expected to provide improvements as part of the project approvals and/or contribute to improvements that will be implemented by the City. In addition, the City will be evaluating its sanitary sewer connection fee with regard to the level of funding necessary to construct the necessary sanitary sewer improvements. Redevelopment projects will be responsible for paying the connection fee that is in place at the time of the development plan approval.

Stormwater

During the preparation of the Landmark/Van Dorn plan, several issues within the plan area, including management of stormwater, suggested that additional natural open space is desirable. Opportunities for such space within the plan area are extremely limited, but parcels south of the plan area and adjacent to Backlick Run should be evaluated and considered for the provision

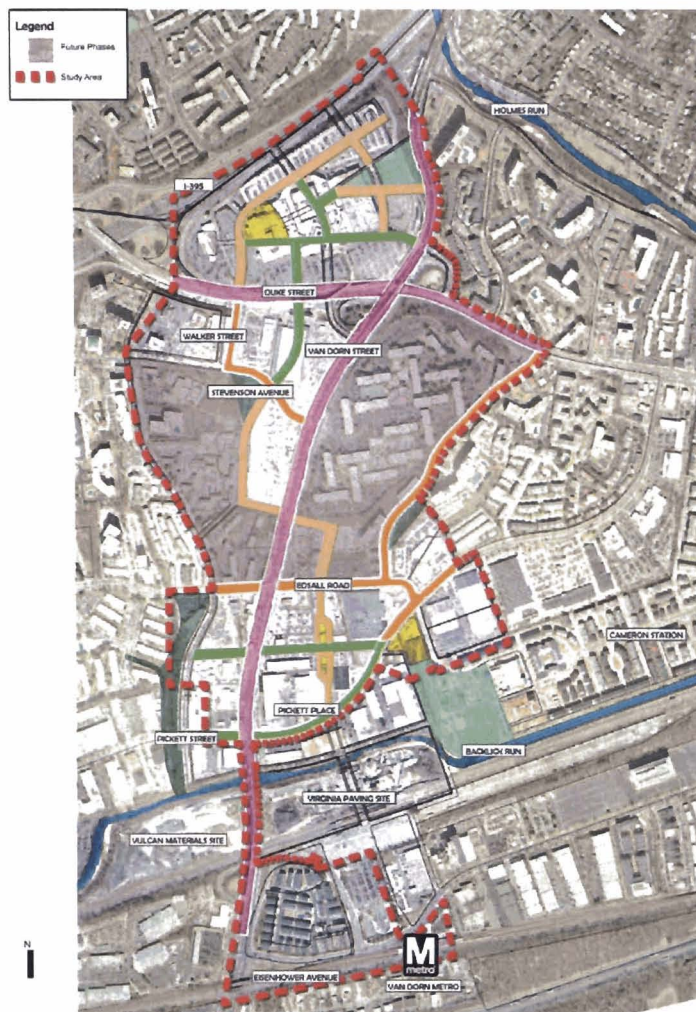


Figure 9-1. Stormwater Management Strategies. This figure illustrates the application of strategies outlined in Table 9-4 on the following page. Color codes in the table show application of appropriate strategies to streets and open spaces.

of such open space. There is potential to create natural space in this location that would mitigate the impact of stormwater from the plan area on Backlick Run. The Plan recommends a feasibility study, in cooperation with the US Army Corps of Engineers restoration study currently underway, to examine the feasibility of realigning Backlick Run to mitigate issues of flooding and for the provision of additional stormwater management benefits. This realignment could also allow the construction of high-rise residential development on the northern side of these parcels, unless that land continues to be a Resource Protection Area.

Public Safety

Existing and planned fire stations are in close proximity to each end of the Landmark/Van Dorn Street corridor. The closest fire station to the plan area (#208) is located on Paxton Street, less than one-half mile from Landmark Mall. The City has identified a need for a new fire station in the West End of Alexandria and selected a site on Eisenhower Avenue near the Covanta plant. A total of \$9.34 million is budgeted over three years for this project in addition to \$1.95 million in prior year monies.

In addition, the Fire Department is currently engaged in a planning effort that includes reviewing the heights of planned development. The Department of Planning and Zoning is working with the Fire Department's consultant and providing requested information. During the "choice location" and "choice location plus transit" phases of this Plan, developer contributions may be used to help fund Fire Department capital needs.

Community Center, Open Space and Public Art

Community Facilities











The Plan recommends that a community/recreation center be provided within the Landmark/Van Dorn Corridor, with the preferred locations being in the West End Town Center and Pickett Place. The Plan recognizes

Table 9-1
Defining Public Space for Stormwater Management Implementation

LINEAR CORRIDORS

	DESCRIPTION	BEST MANAGEMENT PRACTICES	GENERAL PRECEDENTS
MAJOR STREET 	Serve as the main intra/inter neighborhood travel corridors. They connect secondary traffic routes and provide access to commercial, residential and employment centers.	<ul style="list-style-type: none"> • Shade Tree Planting • Soil Amendments • Bioswales • Bioretention Cells • Conservation Landscaping • Vegetated Filter Strips • Porous Pavers • Permeable Pavements • Stream Daylighting 	
MINOR STREET WITH RETAIL USE  	Minor Streets with retail uses provide activities that increase pedestrian traffic. The retail use serves an essential function and contributes to the overall neighborhood character.	<ul style="list-style-type: none"> • Shade Tree Planting • Street Tree Continuous Root Zone • Aeration Strip Under Sidewalk • Soil Amendments • Bioretention Cells • Porous Pavers • Permeable Pavements 	
MINOR STREET  	Minor streets provide access to each parcel of land either directly or through alleys, providing access for productive use of property. Local traffic should be encouraged while cut through traffic should be limited and discouraged.	<ul style="list-style-type: none"> • Shade Tree Planting • Street Tree Continuous Root Zone • Aeration Strip Under Sidewalk • Soil Amendments • Bioswales • Bioretention Cells • Conservation Landscaping • Vegetated Filter Strips • Porous Pavers • Permeable Pavements 	 

NODES

	DESCRIPTION	BEST MANAGEMENT PRACTICES	GENERAL PRECEDENTS
NEIGHBORHOOD PARKS 	Large neighborhood open space area for informal/formal active or passive recreational use. Possible amenities could include community gardens, athletic fields, etc.	<ul style="list-style-type: none"> • Shade Tree Planting • Soil Amendments • Bioswales • Bioslopes • Bioretention Cells • Conservation Landscaping • Reforestation • Stormwater Management Pond • Porous Pavers • Permeable Pavements • Pocket Wetlands • Stream Daylighting 	 
CONSERVATION LAND 	Land protected from development and generally preserved as green/vegetated space. Public use may be limited and the site may serve as a visual greenspace/landscape buffer to surrounding development.	<ul style="list-style-type: none"> • Shade Tree Planting • Soil Amendments • Bioswales • Bioslopes • Bioretention Cells • Conservation Landscaping • Vegetated Filter Strips • Conservation • Reforestation • Stream Daylighting 	
URBAN PLAZA 	An open area used for gathering in a city. This space often has trees, benches, and can be used for formal or informal events.	<ul style="list-style-type: none"> • Shade Tree Planting • Street Tree Continuous Root Zone • Aeration Strip Under Sidewalk • Soil Amendments • Bioretention Cells • Vegetated Filter Strips • Porous Pavers • Permeable Pavements 	 
POCKET PARKS (Not shown) <i>Number and location to be determined during detailed site design phase</i>	Pocket (block) parks are intended to meet the needs of residents or workers within about a tenth of a mile. Pocket parks are less than 20,000 square feet, with no minimum size. No parking is needed. Pocket parks may include such elements as small scale play equipment, public gardens, seating areas, passive open space, landscaped areas, natural features, or trees.	<ul style="list-style-type: none"> • Shade Tree Planting • Street Tree Continuous Root Zone • Aeration Strip Under Sidewalk • Soil Amendments • Bioretention Cells • Conservation Landscaping • Vegetated Filter Strips 	 

the importance of and encourages the establishment of places of worship and health care and wellness facilities as they provide needed and desired community services. Facilities that provide higher education functions should also be considered. Other facilities with regional appeal are also recommended and could include an ice skating rink (if financially feasible), a performing arts theater or other cultural attraction that compliment the mixed use, 18 hour environment envisioned in the plan.

As plans for the redevelopment of the West End Town Center proceed, inclusion of a community or recreation center should be pursued. In addition to meeting community needs, public uses such as a community center add to the vitality of mixed use projects and help reinforce a unique identity for the new development. The City will encourage a developer to agree to provide a community or recreation center within the Town Center by not counting the square footage of the center toward the total FAR of the redevelopment. The City may also consider extending the FAR exemption to other developer-provided facilities that serve a civic function.

Green Infrastructure

A green infrastructure implementation plan for Landmark/Van Dorn is provided in Table 9-3. It corresponds to the Framework Plan that has been presented in previous chapters of the Plan. Open space related nodes and roadway linear corridors are highlighted and recommended BMP techniques are presented in Table X.

Defining BMP techniques based around the Landmark/Van Dorn corridor offers the opportunity to integrate stormwater management early in the pre-design phase of these sites. This will increase the stormwater functionality and aesthetic benefits of integrated BMP techniques. Detailed site studies on the integration of each BMP would need to be examined on a case by- case basis to ensure functional site compatibility. Implementing complementary BMP techniques is recommended to provide comprehensive stormwater ~~quality~~ treatment and greater ~~quantity~~ detention.

To better manage stormwater and to mitigate flood risk associated with Backlick Run, the option of modifying its alignment in the proximity of Van Dorn Street could be considered during future redevelopment. This may provide an opportunity to reinforce existing connections to Van Dorn Metro and provide a more natural stream alignment and landscape condition in this area. This option requires further study for feasibility and costs. The City will soon begin a study of industrial land uses in the Eisenhower Valley, including the Vulcan and Virginia Paving plant at the southern edge of the plan area. This study will provide information to guide decisions about the future of this parcel. If redevelopment of the industrial uses is pursued, an option to evaluate is the realignment of Backlick Run so that it does not jog north around the Vulcan and Virginia Paving Sites and then south again.

Opportunities to integrate stormwater management ponds should be explored within both the lower and upper drainage areas. It is desirable to integrate these with functional open spaces and parkland as neighborhood amenities.

Techniques can be tailored to suit integration within the existing right-of-way through retrofitting (e.g. Van Dorn Street) and also new Major and Minor Streets and open spaces planned for the study area. Creating multi-functional plazas, parks, and streetscapes will link new urban areas to receiving bodies of water both functionally and aesthetically.

A green network of BMPs can capitalize on newly defined open spaces and land uses to reinforce a neighborhood and district character. Specific spaces can be designed to integrate BMP techniques and contribute to wider neighborhood benefits such as a reduction in heat island effect and opportunities to maximize environmental education benefits for the general public.

Open Space

The plans for public open spaces in the Landmark/Van Dorn plan area are expected to be realized through the development process. Proximity to well-designed open spaces adds value to private investment and these spaces reinforce a unique sense of place, while serving as an amenity to residents, workers, and visitors.

The City may establish a plan area open space fund to collect developer contributions toward acquisition and development of open space and parks in the Plan area. Expenditures appropriate for funding by these contributions may include parkland that is not likely to be dedicated through the development process, such as Edsall West Park and Pickett Plaza (both approximately one acre). These funds may also be helpful in implementing the New High Street Park or acquisition of land owned by the Northern Virginia Juvenile Detention Home School, if that option is pursued. Acquisition of approximately 3.4 acres of land in the Plan area is estimated to cost \$10 million with design and construction costs estimated at \$6 million in 2008 dollars.

Public Art

Public art contributes to a sense of place as it is inherently one-of-a-kind. Public art will help the West End Town Center and Pickett Place create an identity that is uniquely Alexandrian, which is among the factors that help ensure continued economic success.

This Plan describes criteria for appropriate locations for public art, and specific locations may be identified during the development process and by the implementation advisory group. When developer contributions are financially feasible, the City should evaluate opportunities for contributions by developers of public art or monetary contributions to the Alexandria Commission for the Arts for public art in the Landmark/Van Dorn plan area.

9.4. Affordable Housing Strategy

As noted in Chapter 4, the preservation or replacement of existing assisted and/or market affordable rental units is the primary emphasis of the Landmark/Van Dorn affordable housing strategy, in an effort to maintain the current level of assisted housing and prevent further losses of market affordable housing. Workforce housing is also a desirable element of mixed-income redevelopment, and is a secondary element of the affordable housing strategy, to be achieved only when financially feasible to do so in addition to meeting affordable rental housing goals.

Rental housing units are affordable housing when households earning up to 60 percent of the area's median income can afford the monthly rent and for-sale housing units are affordable when households earning up to the mathematical 80 percent of the area's median income can afford the monthly mortgage payment.

Rental housing is considered workforce housing when households earning up to 80 percent of the area's median income can afford the monthly rent, and for-sale housing is considered workforce housing when households earning up to 120 percent of the area's median income can afford the monthly mortgage payment.

Phase I – Catalyst

In the catalyst phase, the City would apply the voluntary affordable housing formula set forth in the Final Report of the Developer Housing Contribution Policy Work Group that was accepted by City Council in June 2005. Specifically:

- Commercial: \$1.50 per square foot of gross floor area (gfa)
- Residential
 - Rental: \$1.50 per square foot of gfa
 - For-sale: \$2.00 per square foot of gfa
 - All: \$4.00 per square foot of increased gfa due to rezoning

The City reserves the right to exercise flexibility in the application of the \$4.00 per square foot on the incremental square footage in instances where the applicant demonstrates to the City's satisfaction that the economics of the project will not sustain this level of contribution.

Phase II - Choice Location

During this phase, the City would capture a portion of the increased ability to contribute to public amenities (based on the expectation of increased sales prices and market rents) by requiring increased housing contributions for additional density provided through rezoning. Such contributions are likely to be requested in the form of units preserved in an existing affordable property, possibly through partnerships with non-profit organizations or other property owners. New, on-site housing would be requested only when such units could be provided in substantial numbers and/or could be deemed replacement units for current affordable units, including public housing units.

All of these rates are subject to being changed to adjust for inflation and/or a change in overall City affordable housing contribution policy

Phase III – Dedicated Transit Lines

Housing contributions during Phase III would be further increased above the levels achieved during Phase II, and would be used in the same manner as in Phase II.

Workforce Housing

While the emphasis of the affordable housing strategy for Landmark/Van Dorn will be on the preservation/replacement of existing assisted and/or market affordable rental units, the provision of workforce housing may also be desirable in the context of mixed-income redevelopment. ~~The ability to achieve workforce housing in addition to affordable housing will be addressed on a case-by-case basis.~~

Relationship to Other City Housing Policy Efforts

The City is about to begin a City is about to undertake a Housing Master Plan, and a new task force is being established to make recommendations on developer contributions. New Citywide requirements resulting from these efforts will specifically address the treatment of housing provisions in the Landmark/Van Dorn and other plans, and may or may not result in changes in the strategy set forth in this plan.

9.5. Economic Development and Small Business

With the potential redevelopment of many existing retail areas in Landmark/Van Dorn comes an opportunity to provide a combination of new and enhanced retail businesses to serve current and future residents and workers. A healthy mix of small businesses is important to the vitality and success of the area. Some of these businesses will be allowed as permitted uses under the City's zoning regulations. Others will require a special use permit and will be approved only after going through an extensive public hearing process. Still other uses will be allowed through a hybrid of these two processes, called an administrative special use permit (Admin SUP). These administrative special uses are targeted toward uses that have little or no impact on nearby residential areas and will help enhance existing business areas. Included in these administrative uses are small restaurants. Administrative SUPs are approved by the Director of Planning and Zoning after notice and outreach to neighboring property owners. Another administrative approval being contemplated in this Plan is approval through the development review process. Specific SUP uses identified in a development plan would be pre-approved through the development process and thereafter would not be required to go through a separate SUP approval process. Having an administrative approval process in the Landmark Van Dorn area, whether it be through the Planning and Zoning Director's approval or through the development review and approval process, will provide an important incentive to encourage potential businesses looking to locate or expand in the area.

Retail Retention Strategy

The redevelopment of Landmark/Van Dorn will add a variety of new retailers to the area, and the area will become a more popular retail destination. Redevelopment can have the effect of displacing longtime locally-owned stores and restaurants – businesses that provide both economic opportunity as well as unique destinations. Based on work conducted for this plan area by a retail consultant, this plan recommends that a retail retention strategy be pursued. When an existing retail center is to be redeveloped, this plan recommends that a portion of

the retail space in the new development be reserved for displaced retailers. During the redevelopment process, the City and the developer will work together through its economic development partnership (AEDP) to identify retailers who are the best candidates for retention and to identify opportunities to temporarily locate the displaced businesses that will ultimately be located in the new space. The temporary space may be within nearby existing retail centers or in new retail space that is not yet leased. As these businesses are relocated into the redeveloped space, initial leasing terms should be comparable to the rates paid by the businesses prior to redevelopment.

Implementation Advisory Group

While Alexandria has long embraced community-based planning, this Plan – like the Braddock Metro Neighborhood Plan before it – makes the community a partner with the City in implementation. The Plan provides a framework for the future, but many details will need to be worked out with the community following the Plan's adoption. Therefore, the Plan recommends establishing a Landmark/Van Dorn Plan Implementation Advisory Group (IAG) comprised of area residents, local business owners, landowners, and other committed community members who have been active in the planning effort to oversee implementation of the Plan.

The IAG will directly contribute to the Plan's long-term success through their significant participation in prioritizing the list of identified public amenities to promote improvement of the community, and making direct recommendations to the City about spending priorities and public project phasing. The Group's recommendations regarding funding priorities would then make their way through normal City decision-making channels, such as the preparation and consideration of the City's six-year capital improvement program.

The IAG will make certain design-related recommendations, such as determining the desired species of trees, streetscape and park programming, and the design

and placement of public art. To ensure that public amenities are provided, the group will work with City staff to monitor ongoing development. Finally, the IAG will be expected to contribute to the annual progress report made to Council and work with the City government to help fund amenities within the neighborhood through the City's annual capital improvement program (CIP) development process.