



Urban Mixed Use Master Zoning Plan , North Woodbridge Summary Report



EDAW

PREPARED FOR
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DESIGN, PLANNING AND ENVIRONMENTS WORLDWIDE

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Contents

1.0 Introduction	1-2
Background	1-2
Planning Process	1-2
2.0 Existing Conditions	2-2
Land Use and Ownership	2-2
Natural Conditions	2-4
Transportation System	2-6
Market Conditions	2-10
Opportunities and Constraints	2-14
3.0 Proposed Alternatives	3-2
Alternative A	3-2
Alternative B	3-2
4.0 Master Zoning Plan	4-2
Proposed Street Network	4-6
Traffic Impact	4-6
Proposed Urban Design Framework	4-8
Proposed Open Space and Pedestrian Framework	4-10
Proposed Typical Cross-Sections	4-12
Land Use Bay Designations and General Development Standards	4-14

List of Figures

Figure 1.1 Study Area Location	1-1
Figure 2.1 Existing Land Uses	2-1
Figure 2.2 Existing Natural Resources	2-3
Figure 2.3 Existing Transportation System	2-5
Figure 2.4 Opportunities and Constraints	2-13
Figure 3.1 Alternative Concepts	3-1
Figure 4.1 Master Zoning Plan (Illustrative)	4-1
Figure 4.2 Proposed Land Uses	4-3
Figure 4.3 Proposed Street Network	4-5
Figure 4.4 Urban Design Framework	4-7
Figure 4.5 Open Space/Pedestrian Framework	4-9
Figure 4.6 Typical Cross Sections	4-11
Figure 4.7 Proposed Land Use Bays	4-13

Appendix

Appendix A: Market Analysis (Separate Document)	
Appendix B: Traffic Impact Study (Separate Document)	

1.0



Figure 1.1: Study Area Location



Gateway location along the U.S. Route 1 corridor



Older commercial corridor in need of a facelift



Land available for redevelopment

1.0 Introduction

The North Woodbridge Urban Mixed Use Master Zoning Plan is a land use strategy for the redevelopment of approximately 164 acres of land that is located along the U.S. Route 1 corridor in eastern Prince William County, Virginia (see Figure 1.1). In an effort to establish a clear vision towards redevelopment, the County designated this area as an Urban Mixed Use Zone in its amendment to the Comprehensive Plan in 2004. The current plan is a step towards implementation of the initial idea developed in the Comprehensive Plan amendment – one where the North Woodbridge area would redevelop as a mixed use waterfront community.

Background

The North Woodbridge area is a critical northern gateway within the ‘Potomac Communities,’ an area that extends along the U.S. Route 1 corridor from Stafford to Fairfax Counties. The U.S. Route 1 corridor is reflective of an older commercial corridor that is in need of a facelift.

In 2002, the County initiated its effort to revitalize the corridor and adjacent communities and identified the following vision for the Potomac Communities:

“the Potomac Communities is an alliance of individuals, neighborhoods, businesses, community organizations and local government maximizing every opportunity afforded them – rich historical ambiance, increasing diversity, a strong military presence, unparalleled waterfront and natural

assets, excellent transportation access, and varied, numerous civic assets – so that their community will evolve into a premier residential, business, and visitor location on the Potomac River.”

This study aims to build upon that vision by creating a master zoning plan for North Woodbridge, a key gateway area along the U.S. Route 1 corridor.

Planning Process

In October 2004, the County retained the consultant team, led by EDAW, Inc., to prepare the Master Zoning Plan for the North Woodbridge area. EDAW was responsible for conceptualizing the physical framework plans for redevelopment, and was supported by Robert Charles Lesser and Co., LLC (RCL) and Kimley-Horn and Associates (KHA). RCL conducted a market study to determine the level of development that could be supported by the market, while KHA conducted an assessment of the traffic impacts related to the proposed redevelopment of the study area.

The study consisted of three distinct phases:

- *Project Understanding:* In the first phase, the EDAW team met and conducted phone interviews with property owners within the study area to understand their perceptions of community issues, and their visions for the future of their properties. Simultaneously, the team conducted an analysis of the existing site and market conditions, and identified opportunities

and constraints towards redevelopment. The team presented their findings to the property owners at a public meeting in February 2005.

- *Redevelopment Alternatives:* In the subsequent months, the EDAW team prepared several redevelopment scenarios for the North Woodbridge area. These scenarios sought to balance the County’s goal of creating an urban mixed use area, with the level of development supported by the market, and the impact of potential redevelopment on the area’s transportation network. These scenarios were developed as two distinct alternatives and presented to the property owners at a public meeting in May, 2005. The meeting was followed by a workshop where the property owners interacted with the County staff and the EDAW team to provide their reactions and suggestions on the two alternatives.
- *Master Zoning Plan:* The third phase consisted of preparing the preferred plan for the North Woodbridge area. The EDAW team and County staff presented this plan to the Board of County Supervisors and the property owners at two public meetings in October 2005.

The EDAW team provided their final recommendations on the Master Zoning Plan, summarized in this study, to the County. The County staff developed zoning recommendations for the North Woodbridge area that are based on these recommendations.

2.0

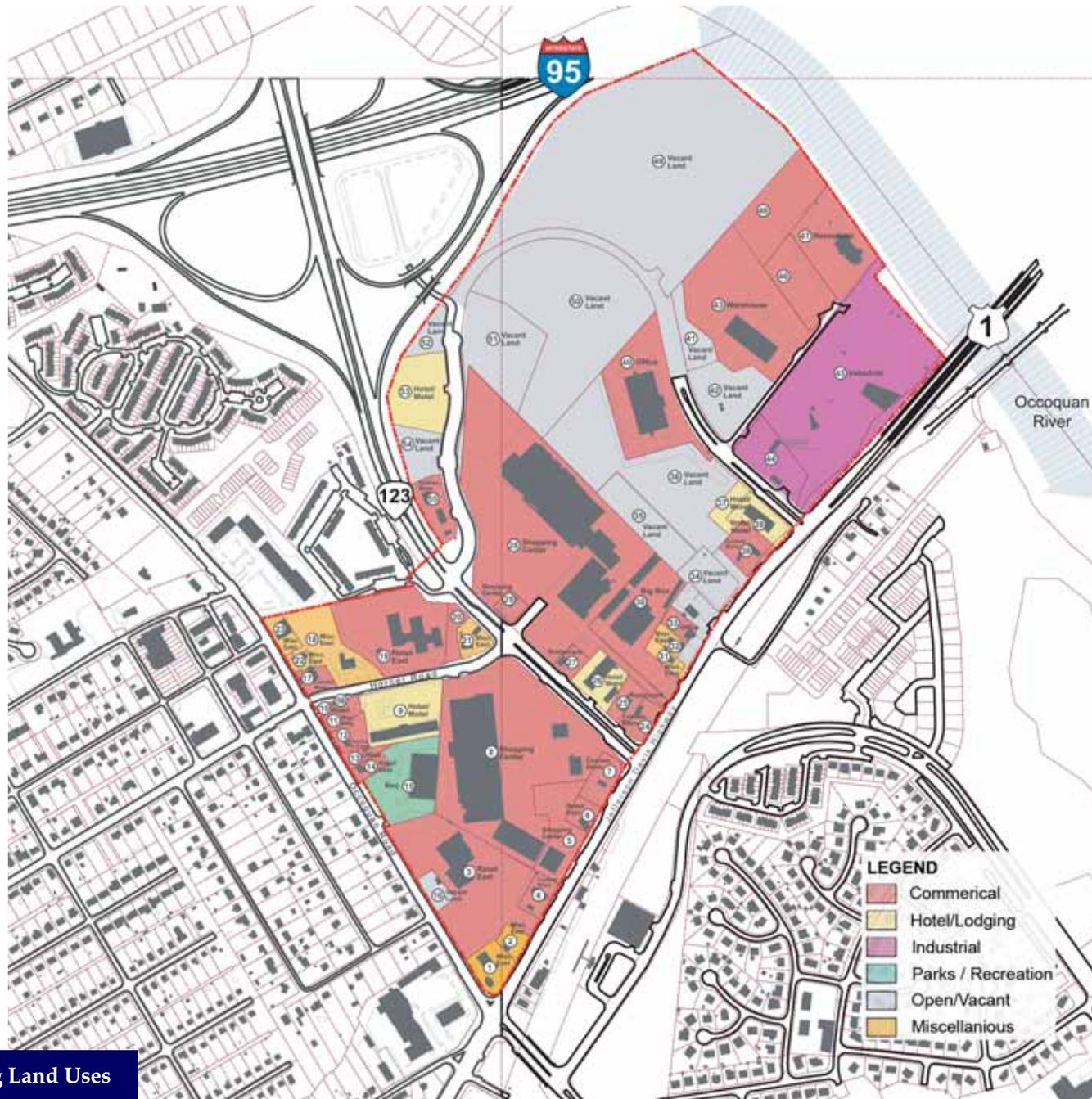


Figure 2.1: Existing Land Uses

2.0 Existing Conditions

Land Use and Ownership

The study area consists of 164 acres, encompassing 56 parcels that are controlled by 37 property owners. Existing uses largely consist of typical highway-related commercial uses such as shopping plazas, strip commercial centers, and motels. Most of the commercial uses can be described as 'lower-end' with high levels of turnover. Stable uses within the study area include an office use (General Dynamics), a concrete plant (Virginia Concrete), and a marina. A large portion of the study area is also vacant (see Figure 2.1).

The sizes of parcels within the study area vary, with 50-percent of the parcels smaller than one acre and seven parcels larger than five acres. Most of the smaller parcels are located along U.S. Route 1, VA Route 123, or Occoquan Road. The properties are currently zoned either B-1, General Business, that allows community scale retail; M-1, Heavy Industrial, that allows heavy and intensive industrial uses with limited service and retail uses; or RM-1, Quality Multi-family Residential, that allows six to 16 dwelling units per acre. The current Floor Area Ratio (F.A.R.) within the study area is 0.08.

In the course of this study, several property owners were contacted for their opinions regarding redevelopment. All of them indicated some willingness to redevelop. In some cases, the owners had even been contacted by developers seeking to redevelop their properties. In other instances, the owners mentioned that they would be willing to sell their properties for redevelopment provided they were able to relocate current uses elsewhere.



Existing shopping plaza



Existing concrete plant



Existing marina



Figure 2.2: Existing Natural Resources



Natural Conditions

TOPOGRAPHY

The study area generally slopes north towards the Occoquan River. There is a difference in elevation of 80 feet between the high point (85 feet above mean sea level) located to the south of VA Route 123 and the low point (five feet above mean sea level) located at the edge of the river. Approximately 12-percent of the study area consists of steep topography with slopes exceeding 15-percent. These steeper areas are located towards the northern portion of the study area, while the areas to the south are predominantly flat (see Figure 2.2).

WATER RESOURCES

Due to its proximity to the Occoquan River, the study area includes sensitive areas such as flood plains, resource protection areas, and potential wetlands. Approximately 14-percent of the study area consists of these sensitive areas. As illustrated in Figure 2.2, these sensitive areas are located at the northern portion of the study area adjacent to the river.



The study area includes lands with steep topography



Existing stream channel that flows through the area



Resource protection areas adjacent to wet areas

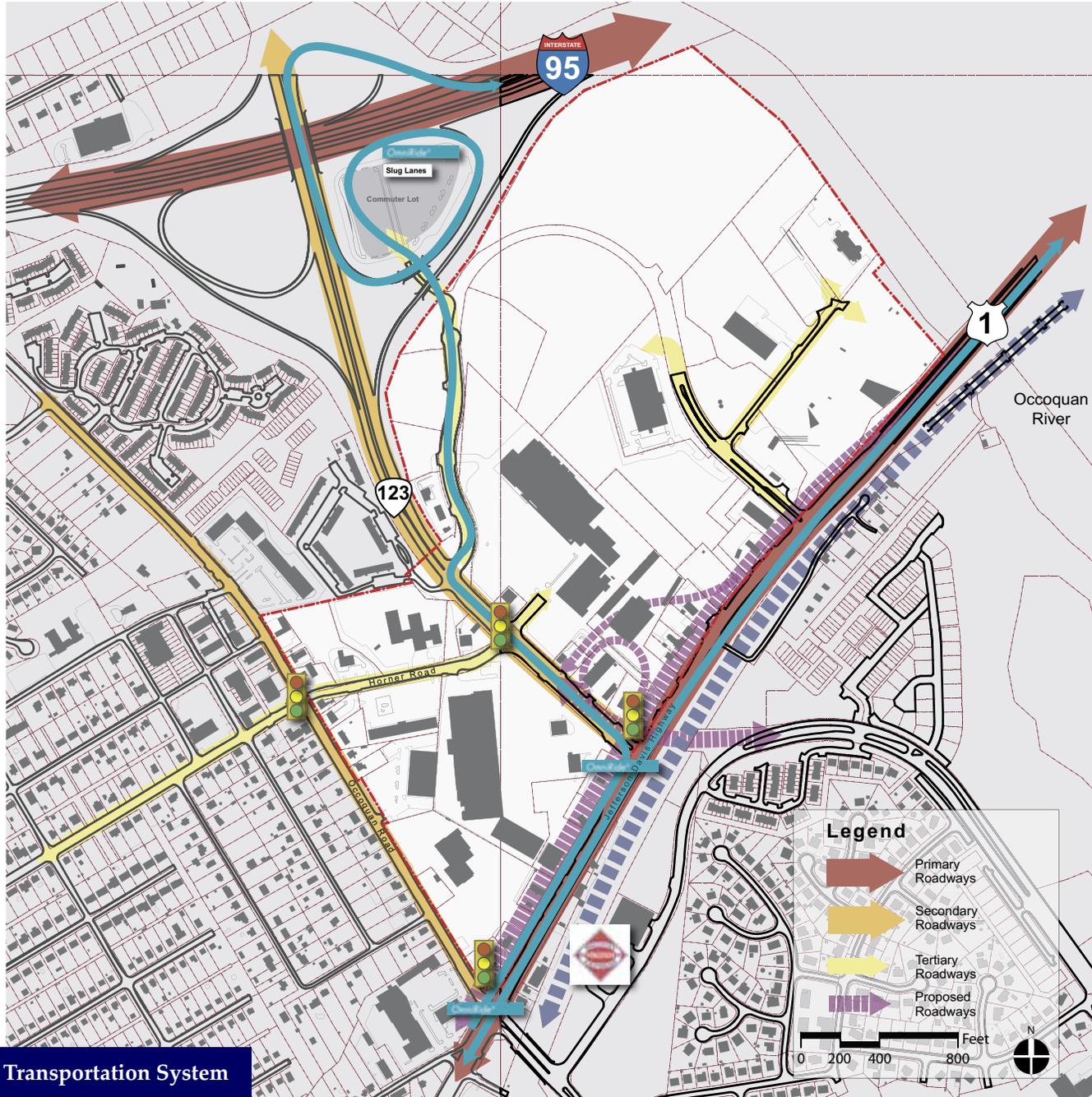


Figure 2.3: Existing Transportation System

Transportation System

EXISTING AREA ROADWAYS

Five roadways traverse the study area: Jefferson Davis Highway (U.S. Route 1), Gordon Road (VA Route 123), Occoquan Road, Horner Road, and Annapolis Way. These roadways function as through commuter routes for drivers typically commuting between residential areas in Prince William County and counties to the south and work locations in Fairfax County, Arlington County, and the District of Columbia. The roadways also serve existing employment and commercial centers in the study area.

Jefferson Davis Highway (U.S. Route 1): This major north-south arterial roadway runs parallel to the I-95 corridor through central and northern Virginia. U.S. Route 1 connects Prince William and Fairfax Counties in the project vicinity. Adjacent to the study area, U.S. Route 1 is a four-lane divided arterial, with signalized intersections at VA Route 123 and Occoquan Road.

Gordon Boulevard (VA Route 123): This major arterial roadway serves as an outer ring road to the Washington, DC metropolitan area and traverses Prince William and Fairfax Counties in Virginia. VA Route 123 in the project vicinity begins at U.S. Route 1 and provides a connection to I-95 at a partial cloverleaf interchange, and continues north providing a connection to the Fairfax County Parkway, Lee Highway, Little River Turnpike, and I-66.

Through the study area, VA Route 123 is a four-lane roadway with signalized intersections at U.S. Route 1, Horner Road, and Annapolis Way.

Occoquan Road (VA Route 906): This collector road serves as a north-south connection from U.S. Route 1 in the Woodbridge area to the Occoquan area to the northeast. Occoquan Road in the project vicinity begins at U.S. Route 1 to the west, travels underneath I-95 (without an interchange) into downtown Occoquan. Through the study area, Occoquan Road is a four-lane undivided roadway. The study intersections of Jefferson Davis Highway and Horner Lane are signalized.

Horner Road: This collector serves as a north-south connection between residential property to the west of the study area with VA Route 123 and commercial property. Through the study area, Horner Road is a four-lane roadway with sidewalks on both sides and signalized intersections at VA Route 123 and Occoquan Road.

Annapolis Way: This collector serves as a connection between the North Woodbridge area and the commuter lot located in the I-95 loop ramp. Annapolis Way is a four-lane roadway that drops to two lanes under the I-95 loop ramp bridge. Sidewalks are provided along both sides of the roadway.

EXISTING AREA TRANSIT SERVICE

Existing transit service in the study area includes the nearby Woodbridge Virginia Railway Express (VRE) station, OmniRide bus service, OmniLink bus service, and Metro-Direct bus service.

The Woodbridge VRE station is located on the west side of Express Drive (just east of U.S. Route 1) and can currently be accessed from the study area by Dawson Beach Road (across from Occoquan Road). The station provides 738 free public parking spaces (150 surface spaces and 588 structured parking spaces) for passengers. During morning commuter hours, the VRE provides northbound service to employment areas in eastern Fairfax County, the City of Alexandria, Crystal City in Arlington County, and Washington, DC. During afternoon commuter hours, the VRE provides the returning service southbound extending past Woodbridge to Fredericksburg. Bus connections at the Woodbridge VRE station include OmniLink and OmniRide.

Bus service in the project vicinity includes the OmniRide, OmniLink, and Metro Direct. OmniRide is a commuter bus service (weekdays only) with stops throughout Prince William County. OmniLink is a local demand responsive bus service that operates during the weekday in eastern Prince William



Intersection of U.S. Route 1 and Occoquan Road



Intersection of Horner Road and Occoquan Road



VDOT Commuter Parking Lot

County and Manassas. Metro Direct provides weekday service for eastern Prince William County and the U.S. Route 1 corridor with a connection to the Franconia-Springfield Metro station. Bus stops for these services in the study area are located at the I-95 commuter parking lot and the intersection of U.S. Route 1 and VA Route 123.

There is a commuter lot located in the northbound I-95 loop ramp to northbound VA Route 123. This commuter lot can also be accessed from the study area by Annapolis Way. This commuter lot features OmniRide bus stops as well as access to the HOV lanes on I-95. The commuter lot is also accessible by sidewalks along Annapolis Way.

PEDESTRIAN AND BICYCLE ACCESS

There is currently no comprehensive network of pedestrian or bicycle amenities (multi-use trails, bicycle lanes, etc.) in the study area. Sidewalks exist sporadically throughout the study area, including locations along Annapolis Way, Horner Road, Occoquan Road, and a few locations along VA Route 123 and U.S. Route 1 in front of commercial development. In general, the sidewalks are narrow (approximate 4 feet in width), and in need of repair. Curb cuts and other features meeting the American with Disability Act (ADA) are also sporadic or under-designed.

Just outside the project vicinity, there are several bicycle and multi-use trails. Interstate Bike Route 1, the major East Coast north-south bicycle route, traverses the area west of the study area along Route 640. The Potomac Heritage National Scenic Trail (PHNST), authorized by Congress in 1983 as a component of the National Trails System, is a developing network of locally-managed trails between the mouth of the Potomac River and the Allegheny Highlands. Within Northern Virginia counties, there are almost 40 miles of existing trails and another 76 miles planned. Studies have been endorsed by local jurisdictions demonstrating the feasibility of completing planned segments of the PHNST between Locust Shade Park in Prince William County and White's Ferry in Loudoun County.



Existing marina at the Occoquan River



Abundance of unattractive parking areas



Generally, lower-end retail uses

Market Conditions

The development opportunities in Potomac Communities area will be driven by the relative market strengths and challenges of the existing market condition. The existing market condition is not intractable, as market conditions can change substantially over time, but the current market condition is highly predictive of type and amount of development activity that can be captured within the Potomac Communities area in the future. The existing market condition is determined by a number of critical location factors: regional location, economic and demographic trends, proven market performance, access and visibility, quantity and quality of existing services, aesthetic appeal, and development opportunities, among others.

MARKET CONDITION STRENGTHS

- *Infill Location:* The rapid growth and geographical expansion in the Washington, DC region in the past decade has changed the regional context for eastern Prince William County – from the suburban fringe to a close-in, infill location. The infill location provides excellent access to employment cores and service and retail concentrations. An infill location is also able to support higher level of densities and a more substantial mixture of uses.
- *Accessible and Visible:* The Potomac Communities area is bounded by I-95, U.S. Route 1 and VA Route 123, and thus is highly visible and accessible, with the planned interchange of U.S. Route 1 and

VA Route 123 likely to improve vehicular access. The presence of a VRE stop nearby further improves access to and from the site.

- *Natural Beauty and Charm:* The natural beauty of the Occoquan River can be leveraged throughout the Potomac Communities area by tying waterfront development to the inland parcels. The charm of nearby historic Occoquan and an existing system of trails in eastern Prince William County should also be fully leveraged.
- *Development Activity and Demographic Change:* The U.S. Route 1 corridor has already proven a strong market for high-value residential development, including higher-density housing at the nearby Belmont Bay community. A significant volume of recently delivered and planned residential developments along the U.S. Route 1 corridor is significantly changing the demographics of the corridor, with higher-income households driving future demand for better retail and Class A offices to serve the local market.
- *Fort Belvoir, Quantico, and BRAC:* The near- and long-term impact of the recently-completed Base Realignment and Closure (BRAC) process is not yet fully known, although it is clear that many sensitive federal agencies – and their private contractors – will be required to move to more secure office space. Fort Belvoir, and

perhaps Quantico, could absorb thousands of federal jobs, which may spin off a private office market in nearby areas, and at the very least, would increase housing demand in eastern Prince William County.

MARKET CONDITION CHALLENGES

- *Lack of Aesthetic Appeal and Services:* The Potomac Communities area is currently characterized by an abundance of unattractive asphalt parking, failing retail centers, aging housing stock and heavy traffic congestion. The area has no sense of place, and the local-serving retail and service options are poor, especially for higher-income households that would populate new housing developments.
- *Traffic Congestion and Lack of Pedestrian Orientation:* During peak hours, traffic congestion is a problem, especially for local residents who cannot avoid the rush of commuters through the area. Vehicular travel is the only realistic option in the area, as the area offers very limited pedestrian connectivity, including limited pedestrian connections to and from the VRE station.
- *Not in Path of Class A Office Growth:* While the impact of BRAC may prove to be a significant driver of demand, the Potomac Communities area is not in the “natural” path of growth for Class A office development. The vast majority of Class A office space in Northern Virginia has occurred along the I-66 corridor, and this trend is



Potential competition from other 'great places'



Multiple properties and parcel sizes



Existing natural beauty and waterfront amenity

expected to continue in the near- and long-term.

- *Potential Competition from Other “Great Places:”* The creation of a vibrant, mixed-use “place” is challenging in many ways, but it the greatest challenge may arise from similar planned projects in other parts of the eastern Prince William County. Most notably, a large, mixed-use lifestyle center adjacent to Potomac Mills and a planned town center in the Harbor Station development may draw demand from Potomac Communities.
- *Development Constraints:* The Potomac Communities area is comprised of a number of parcels of varied size and fractured ownership. Implementing a vision for the entire area will require some consensus and cooperation among the multiple property owners, especially since much of the by-right zoning does not allow or promote the vision of a vibrant, mixed-use urban core. There are also significant parts of the area with wetland and slope constraints.

SUMMARY OF EXISTING MARKET CONDITIONS (SEE APPENDIX A FOR MORE DETAILS)

The Potomac Communities area’s existing market condition is supportive of higher-density, mixed-use development in the near- and long-term. The U.S. Route 1 corridor already has experienced the increasing development pressures for high-end housing, and these demand pressures will continue to

escalate as a growing regional household base searches for infill locations with good access to jobs, services, natural beauty, and amenities. The demand for high-end housing will drive demand for higher-end retail, and although the Potomac Communities area is not in the historical path of growth for Class A office, the location between Fort Belvoir and Quantico may drive spin-off demand from relocating federal workers. Near-term market challenges do exist in the area, particularly the existing built environment which is aesthetically unattractive, provides little sense of place, has significant traffic concerns and offers few pedestrian connections. However, these existing negative market conditions can be overcome through effective land and transportation planning. The redevelopment of a few, larger sites – while challenging in it owns right given multiple land owners, environmental constraints, and potential competition elsewhere – will also act as a catalyst for improving existing market conditions.

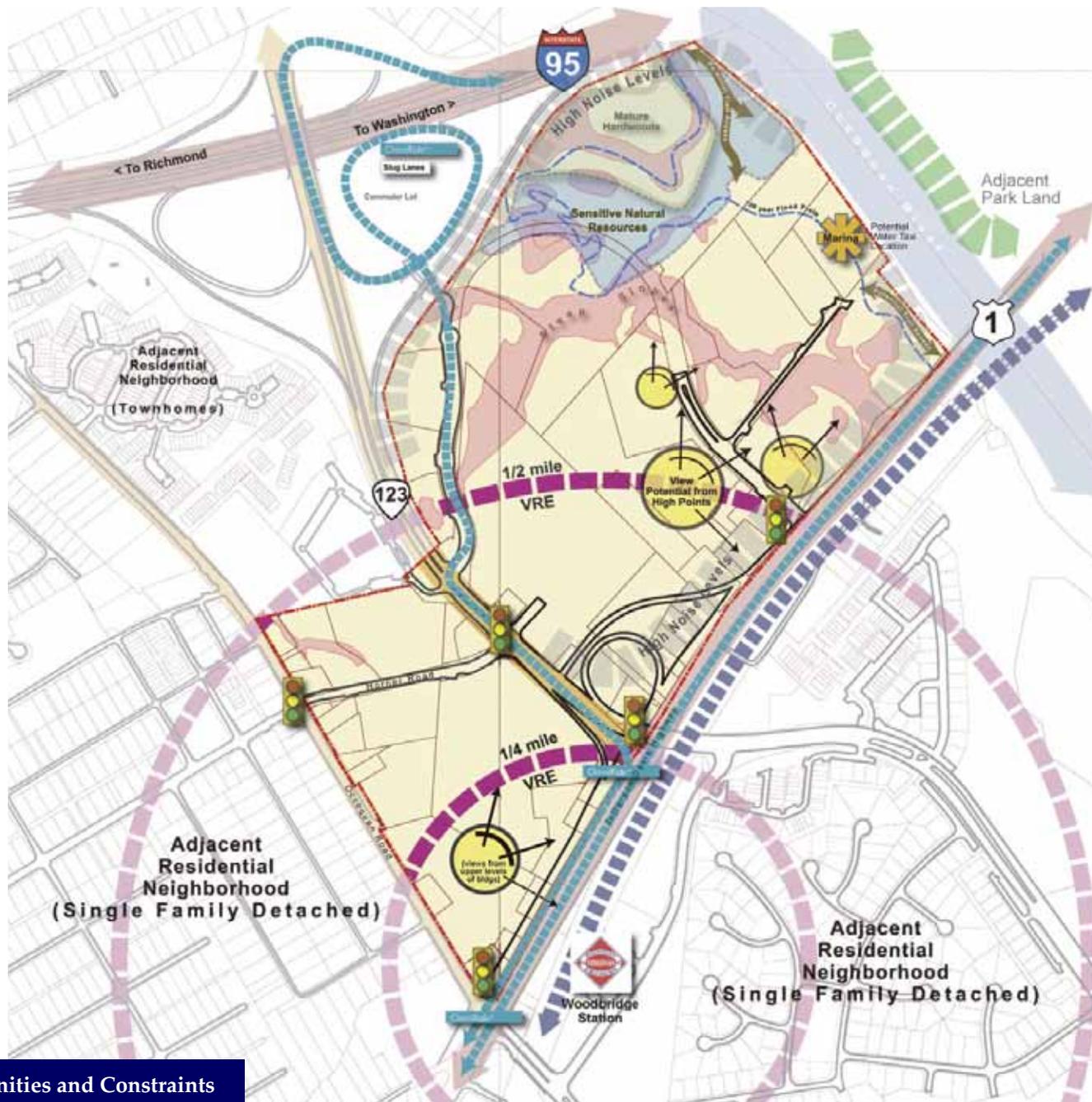


Figure 2.4: Opportunities and Constraints

Opportunities and Constraints

Redevelopment of the study area would be affected by several key constraints and opportunities. These include the following:

Physical Conditions

OPPORTUNITIES

- *Gateway location:* The study area is located at the entrance to Prince William County from the north along the Interstate 95 and U.S. Route 1 corridors. Due to existing natural conditions, where the existing land slopes up from the Occoquan River, the study area is highly visible along these corridors.
- *Proximity to VRE:* Even though the VRE has limited service, it provides an alternative mode of transportation for commuters. The study area's proximity to the VRE provides an opportunity for a higher density of development that could benefit from adjacency to the transit service.
- *Proximity to VDOT Commuter Parking Lot:* Proximity to the VDOT commuter parking lot provides an opportunity for future residents to walk to the lot and access the OmniRide service or connect with other commuters who use the HOV lanes on I-95.
- *Proximity to the Occoquan and Potomac Rivers:* Both rivers provide a visual amenity to properties within the study area. The study area also provides access

to the Occoquan River for recreational purposes, which could be developed further.

In the future, if a regional water taxi system is developed, the study area's location on the Occoquan River could provide an opportunity for establishing a connection to that system.

- *Proposed Roadway Improvements:* The proposed widening of U.S. Route 1 and the proposed new interchange between U.S. Route 1 and VA Route 123 indicate public investment towards improving infrastructure in the area. These changes would improve access for most properties within the study area, and could provide an impetus for private redevelopment.
- *Potential connection to PHNST:* The PHNST is a proposed national trail system that is anticipated to connect to Prince William County along the U.S. Route 1 corridor. The study area could connect to this trail system, potentially linking local development to the region through a non-motorized transportation and recreational link.

CONSTRAINTS

- *Natural Resources:* The presence of sensitive natural resources will limit development within the study area. These include areas with slopes greater than 15-percent, as well as areas within the resource protection areas, including the 100-year flood plain,

which are located towards the northern portion of the study area.

- *Highway Noise:* Areas adjacent to Interstate 95, U.S. Route 1, and VA Route 123 experience high levels of traffic-related noise. Any redevelopment adjacent to these thoroughfares would require noise attenuation measures, which could add to the cost of redevelopment.
- *Multiple ownership and parcel sizes:* The study area includes 56 parcels that are under the control of 37 property owners. Due to the multiple ownership and varying parcel sizes, redevelopment is likely to occur in a piece-meal manner, where the timing of redevelopment would be dependent on the interest of each individual owner to redevelop.
- *Barriers to pedestrian movement:* Pedestrians cannot easily cross U.S. Route 1 between the study area and the VRE station. Similarly, VA Route 123 limits pedestrian movement between the northern and southern portion of the study area.
- *Limited VRE service:* VRE service at the Woodbridge Station runs on a limited schedule. On a weekday morning, trains provide service for a limited duration in one direction, towards Washington DC. In the afternoons and evenings, the service is limited to the southbound direction.



..... From To



Potential Opportunities

Market Conditions

There is a market opportunity to transform the Potomac Communities area from a failing suburban land use model into a vibrant, mixed-use gateway entering eastern Prince William County. In order to create this vibrant place, the redevelopment of the Potomac Communities area must:

- Leverage the strength of the existing residential market to push for achievable higher densities;
- Offer more attractive retail and service options to support the growth of households with higher incomes in and around the Potomac Communities area;
- Capture the existing market for Class A/B local-serving office space and set the stage for the future capture of regional Class A office space, including demand driven by federal employment relocation; and,
- Leverage the natural beauty and views of the riverfront, and enhance these natural amenities by planning public parks and passive open spaces, and extending the existing regional trails system.

The redevelopment will likely be driven first and foremost by the residential development opportunities, but a mixture of uses will be critical to creating a sustainable, vibrant place. Riverfront parcels are already able to support a very high level of density, but inland sites will need to step up the densities

and complexities of mixed-use development over time, as the market matures and the local market conditions improve.

RESIDENTIAL MARKET OPPORTUNITIES

Residential development will most likely drive redevelopment in the near term. There is strong market support for a variety of residential product types, with higher densities supportable along the Occoquan River, and lower-density in more appropriate inland locations adjacent to established single-family and townhome neighborhoods. On the inland sites, achievable densities will increase over time as the sense of place is established and the overall market matures. In the first phases of development, prices/rents will support the construction of mid-rise (four to five stories) housing with wrapped structured parking.

The redevelopment area will likely be developed with a mix of for-sale and rental housing. In today's marketplace, for-sale condominiums are the strongest product type, but this will likely change over time. An increase in interest rates, the rapidly escalating prices of for-sale condominiums, and an overbuilding of the condominium market may tip the market balance towards luxury rental housing. The higher density product – whether for-sale or rental – will target a variety of market segments, with the largest being seniors and empty nesters, mature singles and young professionals.

RETAIL MARKET OPPORTUNITIES

A critical element of a vibrant mixed-use environment is an attractive retail experience. There is an opportunity to develop a varied retail experience in the Potomac Communities area, one that will serve a variety of market needs, including:

- A small amount of destination retail, in particular restaurants and boutique shops, along the waterfront to leverage the natural beauty and charm of this location.
- A grocery-anchored neighborhood center that immediately upgrades the local services in the area and helps market the location to affluent households. This neighborhood center could be oriented to act as the first phase of a retail main street for the area.
- As a second phase of a retail main street, a collection of restaurants, boutique retailers, and smaller anchors, will be supported by new residents to the Potomac Community and the surrounding market area. An active retail and restaurant destination will create a vibrant streetlife which would make other development projects in the Potomac Communities more viable, and will also establish the area as a unique retail and entertainment destination for residents of eastern Prince William County.

Summary of Market Opportunities

Use	Opportunity	Depth of Demand
Residential	High	5,000 to 6,000 units
Retail	Moderate - High	350,000 to 400,000 SF
Office	Moderate - Low	150,000 to 250,000 SF, plus potential large GSA tenant
Recreation	High	Leverage river/marina & regional trails

Market Phasing Opportunities

Land Use	Phase I (1 - 3 years)	Phase II (4 - 7 years)	Phase III (8 - 12 years)
Residential	1,000 to 1,100 units MR and HR waterfront condos, townhomes, urban wrap condos, garden apartments, live-work units	1,650 to 1,700 units MR and HR waterfront condos, urban wrap condos, mid-rise condos, urban wrap apartments, live-work units	1,800 to 1,900 units HR waterfront condos, mid-rise and high-rise condos, mid-rise apartments, live-work units
Retail	175,000 to 200,000 SF Grocery-anchored neighborhood town center, waterfront retail	150,000 to 200,000 SF Main street retail, waterfront retail	Small amount of street front retail under residential and office buildings
Office	30,000 to 50,000 SF Small Class A/B	50,000 to 75,000 SF Small Class A/B, Potential GSA tenant	75,000 to 100,000 SF Small Class A/B

- Although the near-term opportunity for larger-scale, lifestyle retail anchored by larger developments is limited, some of the retailers that are more appropriate in an urban setting, such as bookstores, small cinemas, etc., may be located in a second or third phase of the retail main street development.

OFFICE MARKET OPPORTUNITIES

There is an opportunity over the life of the redevelopment effort to serve the high end of the local-serving professional office market, while setting the stage for larger Class A tenants, including federal tenants and their contractors. High-end residential growth will continue to drive demand for local-serving office space, and many of these tenants will desire an office space location in a vibrant, mixed-use environment. These office development opportunities can be mixed with the retail main street, either as stand-alone buildings on the main street or on nearby parcels, or as above ground-floor retail.

The potential movement of a large number of federal employees to Fort Belvoir and Quantico could create significant demand for additional off-site federal and private contractor office space. There will be significant competition for these users within the corridor and regionally, so attracting these types of Class A office users to the Potomac Communities area will remain a challenge. There is also the significant challenge of fitting new buildings serving federal tenants and private contractors into a more urban,

mixed-use land plan, as the new building requirements stress security, and therefore require gated perimeters and significant building setbacks. Over time, if a truly unique place is created within the communities, larger private sector office users not directly tied to federal employment may choose the Potomac Communities area as a headquarters location. Given these market conditions, the large-scale office opportunities should be planned for parts of the site with a longer redevelopment timeframe.

RECREATIONAL OPPORTUNITIES

Given the location adjacent to the Occoquan River and its potential to act as a unique retail and entertainment destination for eastern Prince William County, the Potomac Communities area should effectively integrate natural amenities and recreational opportunities (both public and private) into the mixed-use land plan. The strongest recreational opportunities include leveraging the existing marina and riverfront, creation of small, urban public spaces throughout the area, and creating a trail network that connects to the regional trail system. Eastern Prince William County will likely require for a public event space that can host larger events. In the retail environment, private and public recreational and entertainment uses (health club, dance studio, skate park, bowling alley ice rink, etc.) should be considered.

3.0



Alternative Concept A
(Requires some assembly of parcels)



Alternative Concept B
(Requires substantial assembly of parcels)

Figure 3.1: Alternative Concepts

3.0 Proposed Alternatives

Two conceptual alternative plans were developed for the study area as part of the planning process. These plans were discussed with the property owners in a meeting and subsequent workshop. The alternative concepts helped with the following:

- Test development capacity of the site;
- Illustrate the site's relationship to surrounding areas;
- Understand the capacity of transportation networks; and
- Most importantly, build consensus for a common vision amongst the property owners.

Generally, both alternative concepts laid out a plan for similar densities of development. The main difference was the following:

- Alternative A focused on maintaining existing configuration of many large parcels.
- Alternative B explored a concept that required a substantial assembly of parcels.

The master zoning plan was developed based on the feedback that was received on these alternatives from the property owners and other stakeholders .



Alternative Concept A (3D Simulation)

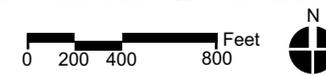


Alternative Concept B (3D Simulation)

4.0



Figure 4.1: Master Zoning Plan (Illustrative)



4.0 Master Zoning Plan

The Master Zoning Plan provides a vision for North Woodbridge as a mixed use area consisting of the following:

- A retail 'Main Street' that would lead people towards the Occoquan River;
- Medium- to high-density residential development that would be distributed throughout the North Woodbridge study area;
- Medium- to high-density office development that would be concentrated in specific locations; and
- Preserved open space in large contiguous areas that include sensitive natural resources, as well as pocket parks throughout the study area.

A key design idea is to extend Horner Road to Marina Drive to provide a strong connection between the study area properties and the Occoquan River (See Figure 4.1).

The proposed plan envisions that the retail component along this key street would consist of boutique shopping, restaurants, grocery, and neighborhood serving stores. The residential component would consist of medium- and high-density condominiums and apartments, along with townhouses in transitional areas. The office component would consist of local serving Class A and Class B offices.



Master Zoning Plan (3D Simulation)

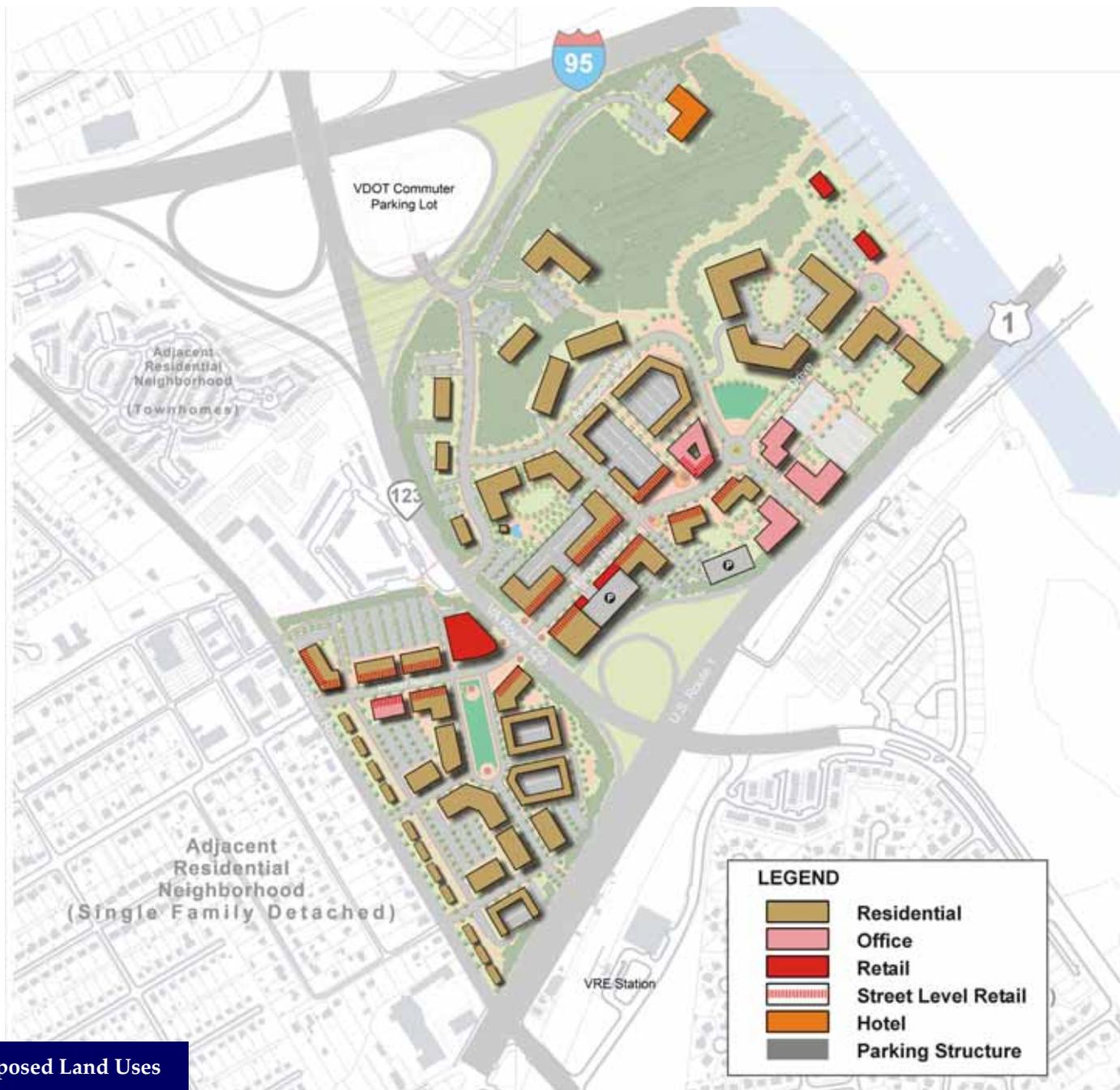


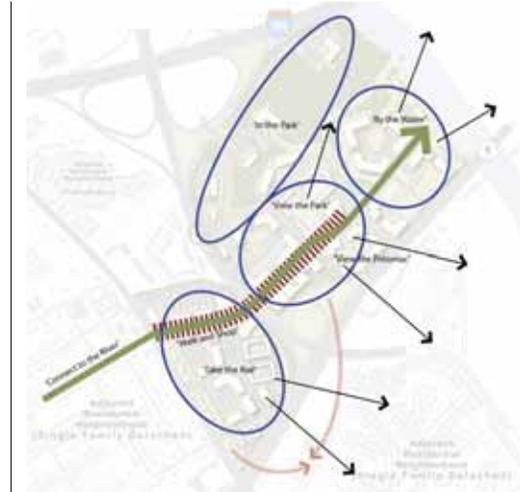
Figure 4.2: Proposed Land Uses

Under the Master Zoning Plan, the study area is configured into four 'neighborhoods' as described below.

- *“Take the Rail:”* Located between VA Route 123 and Occoquan Road, redevelopment in this area should take advantage of proximity to the VRE station, as well as connect to adjacent neighborhoods. This area should be developed with a combination of high density residential and some office uses that would benefit from proximity to the VRE, townhouses along Occoquan Road to provide a transitional area between the existing neighborhood and proposed development, retail along Horner Road to serve the existing and proposed neighborhoods, and pocket parks to provide a neighborhood recreational amenity.
- *“View the Park!”/“View the Potomac:”* Located between VA Route 123 and Annapolis Way, this area offers views of the Potomac River and the proposed preserved open spaces, and provides frontage along U.S. Route 1. Its central location is an important component of providing a link to the riverfront. Therefore, development in the area should include high density residential to benefit from views of the Potomac River and the proposed preserved open space, offices to benefit from high visibility and to help establish a gateway along U.S. Route 1, street front retail to create a ‘main street’ environment that would extend Horner Road towards the riverfront, and pocket

parcs/civic space to enhance the pedestrian environment.

- *“By the Water:”* Located between Annapolis Way and the Occoquan River, this area overlooks the river, the proposed preserved open space, and provides frontage along U.S. Route 1. Redevelopment in this area would be critical in creating a destination along the water. Development here should include high density residential to benefit from views of the Occoquan River and the proposed preserved open space, offices to benefit from high visibility and to help establish a gateway along U.S. Route 1, waterfront retail to provide a public destination, and a linear park to provide a public recreational amenity along the river.
- *“In the Park:”* Located between the reconfigured Annapolis Way, I-95 and VA Route 123, this area consists of large portions of sensitive natural areas that are proposed to be preserved. This area also has high visibility from I-95 and is near the VDOT commuter parking lot. Development here should include high density residential to benefit from being located amongst preserved open space, as well as being near the commuter lot and a hotel use to benefit from high visibility from I-95.



Master Zoning Plan - Design Idea



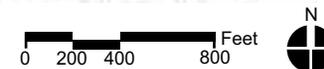
Example of potential civic space along Horner Road



Example of potential mixed use development along Horner Road



Figure 4.3: Proposed Street Network



Proposed Street Network

The Master Zoning Plan recommends the following changes to the street network within the study area:

EXTEND HORNER ROAD TO MARINA DRIVE

Horner Road currently terminates at VA Route 123. Extending it north to Marina Drive would connect the neighborhoods to the south of Occoquan Road with the riverfront, as well as provide greater riverfront access to properties within the study area.

RECONFIGURE MARINA DRIVE AS A PUBLIC STREET

Marina Drive is currently a private street. Converting it to a public roadway would ensure that there is continuous public access to the riverfront area. Also, public acquisition would ensure that Marina Drive is redesigned and constructed up to the County's roadway standards.

REALIGN ANNAPOLIS WAY RIGHT-OF-WAY

Annapolis Way currently extends for approximately 450 feet to the west of Marina Drive, beyond which it is a paper street. Most of the unbuilt portion of the Annapolis Way right-of-way (R.O.W.) passes through environmentally sensitive areas that include steep topography and resource protection areas.

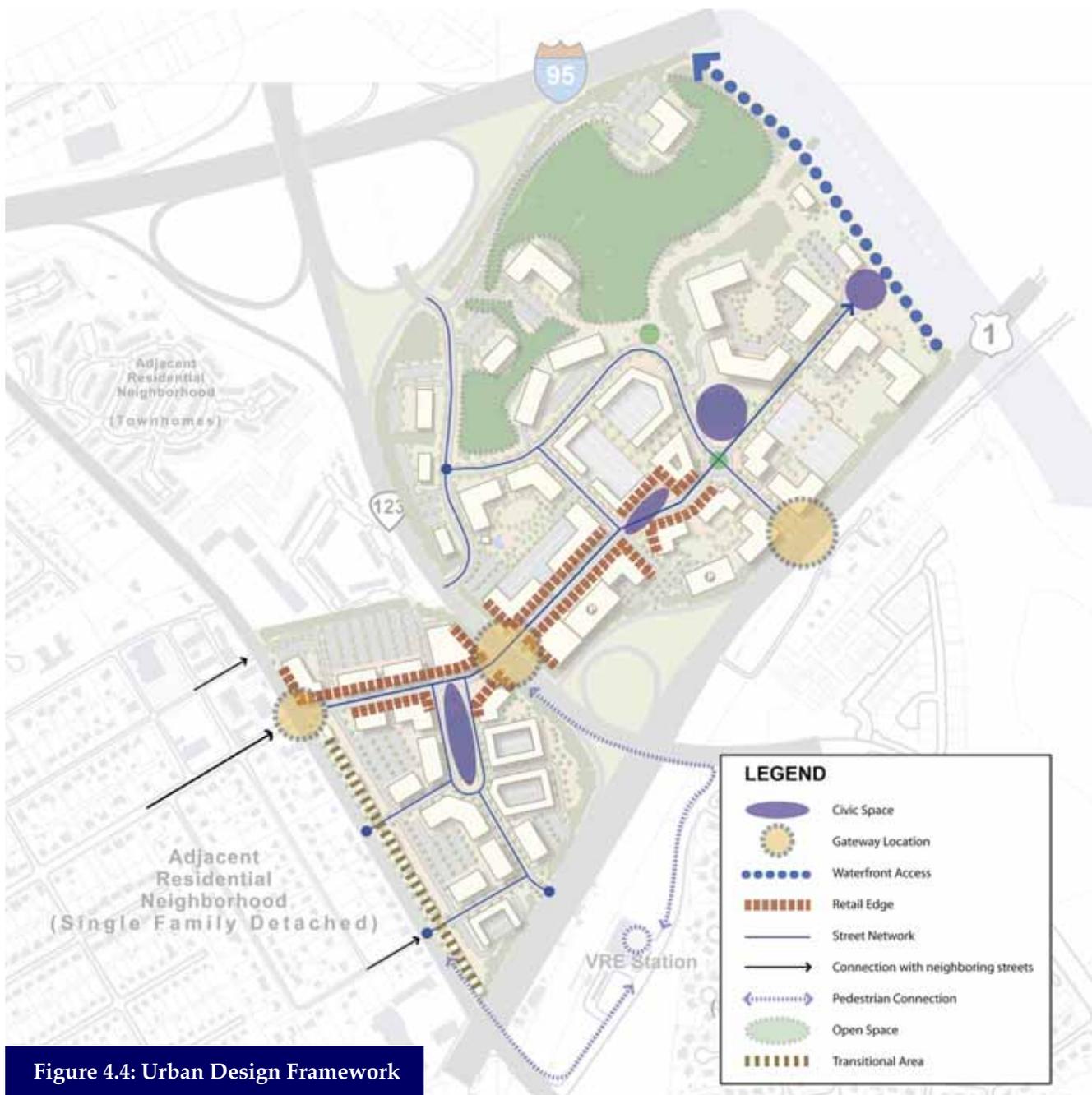
Realign the street ROW to avoid the environmentally sensitive areas while still providing a connection with portion of Annapolis Way that connects to the commuter parking lot.

ESTABLISH A NEW INTERNAL STREET GRID TO THE SOUTH OF VA ROUTE 123

Access to the existing properties to the south of VA Route 123 is currently provided by U.S. Route 1, VA Route 123, Horner Road and Occoquan Road. Establish an internal street grid to reconfigures the area into smaller redevelopable parcels with greater street access.

Traffic Impact

In addition to these recommended changes to the street network, the Traffic Impact Study conducted as part of this plan (see Appendix B) recommends improvements at specific intersections within the study area. These improvements would allow the adjacent roadway network to function at Level of Service (LOS) 'D' or better with the proposed redevelopment. The only exception would be the intersection of US Route 1 and Occoquan Road, which would operate at LOS 'E' during the AM peak hour, a condition that is projected to occur regardless of the proposed redevelopment.



Example of mixed use development with retail at the ground level and main entrances off the main street



Example of a parking structure that maintains a continuous and interesting street edge



Example of an anchor retail at a prominent street intersection

Figure 4.4: Urban Design Framework



Proposed Urban Design Framework

ESTABLISH PUBLIC ACCESS TO THE RIVERFRONT WITH A CONNECTION TO THE PHNST

Currently access to the riverfront is restricted by properties that are located adjacent to the Occoquan River. These include the marina and the concrete plant. Marina Drive that provides access to both these properties is a private street, although available to the general public for accessing the marina.

Create a public street, with both vehicular and pedestrian access that connects to the waterfront to encourage more people to take advantage of the recreational amenity provided by the river. Enhance public access adjacent to the river by providing a waterfront trail that connects to the proposed PHNST and explore connecting the trail to the historic Occoquan Village to the west.

ESTABLISH HORNER ROAD AS A 'RETAIL MAIN STREET'

The current pattern of development within the study area encourages vehicular traffic. One of the main foci of this plan is to create a walkable environment where residents from the adjacent neighborhoods, as well as future residents of this area, can walk to multiple amenities.

To create a walkable environment, redevelopment along Horner Road should seek to establish a Main Street environment, and should adhere to the following guidelines:

- Buildings should face Horner Road, with retail uses and main entrances at the ground level;
- Ground floors should be visually open and inviting to the pedestrian with retail frontage incorporating a significant amount of transparency;
- There should be minimal setback of the building from the street ROW, and sidewalks should generally extend to the face of the buildings;
- Sidewalks should be wide to allow activities such as outdoor seating for restaurants and display of wares to create an interesting pedestrian environment.
- Most parking should either be located in surface lots behind the building, along the street, or in structures that provide an interesting and continuous street edge.

ESTABLISH AN OFFICE GATEWAY ALONG U.S. ROUTE 1

U.S. Route 1 is a heavily traveled road that acts as a gateway to Prince William County from the north. To benefit from the high visibility and to announce arrival into the County, encourage development of parcels adjacent to Annapolis Way as offices with signature buildings. The buildings should emphasize their gateway location and affirm the revitalization of the Potomac Communities.

ESTABLISH A COMMERCIAL GATEWAY ALONG VA ROUTE 123

VA Route 123 is also a heavily traveled road that bisects the study area. The intersection of VA Route 123 with the proposed extension of Horner Road will be one of the most prominent intersections within the study area. The parcels at the four corners should include anchor retail. Buildings should be designed to provide a continuity along Horner Road across VA Route 123, as well as to emphasize the entrance into the revitalized areas off this prominent arterial.

REDEVELOP TRANSITIONAL AREAS WITH DEVELOPMENT THAT IS SENSITIVE TO ADJACENT NEIGHBORHOODS

The existing neighborhoods to the south of Occoquan Road and to the west of Horner Road predominantly consist of single- and multifamily residences at a low to medium density. Within the study area, redevelopment should be sensitive to these uses. For example, along Occoquan Road, redevelopment should consist of medium density residences such as townhomes that would relate to the development pattern that currently exists to the south.



Figure 4.5: Open Space/Pedestrian Framework

Proposed Open Space and Pedestrian Framework

ENCOURAGE LARGE CONTIGUOUS ENVIRONMENTALLY SENSITIVE AREAS TO BE RETAINED AS OPEN SPACE FOR PASSIVE RECREATION

Due to its proximity to the Occoquan River, the study area includes environmentally sensitive areas such as floodplains, stream channels, RPAs, in addition to steep topography. Redevelopment of the area should take into consideration these sensitive areas, and where possible, these should be preserved from being developed. Incorporate these preserved areas into an area-wide trail system where these could provide passive recreational amenities for residents and employees.

CREATE A 'WALKABLE' ENVIRONMENT

Currently, people drive to uses within the study area. As the area gets redeveloped with higher density residential, office and retail uses, encourage a pedestrian environment where people could walk between various uses within and adjacent to the study area. This would reduce the number of vehicular trips that would otherwise be generated, in addition to providing recreational and health benefits to residents and employees living or working in the area.

To create a walkable environment, encourage the following:

- Establish a continuous pedestrian network using trails and tree-lined sidewalks to connect various land uses within the study area, and to the VRE Station and VDOT commuter parking lot.

- At street intersections, both within and adjacent to the study area, ensure pedestrian connectivity by using special paving within crosswalks to clearly demarcate pedestrian paths.
- Encourage the development of a waterfront trail along the Occoquan River to provide a destination for pedestrians. Provide a connection between the waterfront trail and the proposed Potomac Heritage National Scenic Trail. Also, explore connecting the waterfront trail to Occoquan Village.
- Provide destinations such as civic spaces and/or pocket parks at key locations within the pedestrian network.
- Connect the study area with the adjacent neighborhoods through either improving existing, or adding new pedestrian connections.



Example of passive recreational amenity within preserved open space



Example of a pocket park amidst mixed use development



Example of special paving at street intersections to clearly demarcate pedestrian paths

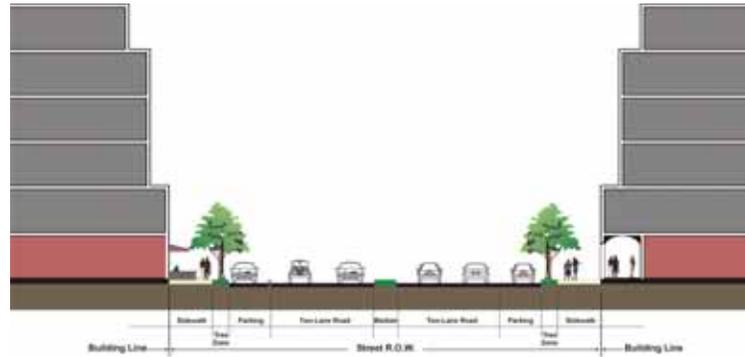


Figure 4.6a - Horner Road



Example of wide sidewalks with landscaping along a 'main street'

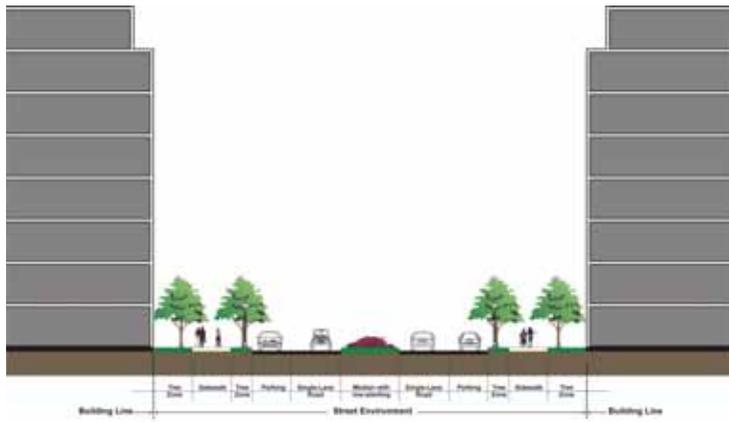


Figure 4.6b - Marina Drive



Figure 4.6c - Riverfront



Example of a waterfront promenade



Figure 4.6d - Side Street



Example of a wide sidewalk with areas to sit for pedestrians

Figure 4.6: Typical Cross Sections

Proposed Typical Cross-Sections

The illustrations in Figure 4.6 show typical cross sections that are proposed along key segments within the study area to create the physical environment envisioned in this plan:

HORNER ROAD

Encourage Horner Road to be developed as a 'main street' with retail at the street level and residential or office uses above (see Figure 4.6a). To promote a pedestrian-friendly environment along the street, encourage the typical street cross-section to include the following:

- A Street Right-of-Way (ROW) of 100- to 120-feet to allow for wide sidewalks and landscaped areas.
- Provision for on-street parking for shoppers that could also act as a traffic-calming measure.
- Approximately 15- to 20-feet wide sidewalks, including four- to six-foot wide tree zone and special paving, to encourage walking. The wide sidewalks would also provide space for sidewalk activities such as outdoor seating for restaurants.
- Buildings located at the edge of the street ROW with maximum retail frontage and a significant amount of transparency to create an interesting experience for pedestrians.

MARINA DRIVE

Marina Drive would be a key link between the retail 'main street' and the Occoquan River. Encourage the typical cross-section to include the following:

- A minimum eight-foot wide median with low planting to provide a view of the Occoquan River.
- Approximately 15- to 20-feet wide sidewalks, including a four- to six-foot wide tree zone, to provide a comfortable walking environment between Horner Road and the riverfront.
- Buildings setback a minimum of 15-feet from the street ROW with a landscape buffer in between.

OCCOQUAN RIVERFRONT

Encourage the riverfront to be developed as a public area with a continuous promenade along the river. Encourage the typical cross-section to include the following:

- Approximately 15- to 20-feet wide promenade (that could include a boardwalk) that extends along the riverfront and potentially connects beyond the study area to the Occoquan Village waterfront.
- Seating areas along the promenade that allow people to rest and enjoy activities along the promenade and in the river.

SIDE STREET

Encourage tree-lined side streets with sidewalks to provide a walking environment. Encourage the typical cross-street to include the following:

- Approximately 10- to 12-foot wide sidewalks including four- to six-foot wide tree zone.
- Buildings setback a minimum of 10-feet from the street ROW with a landscaped buffer in between.

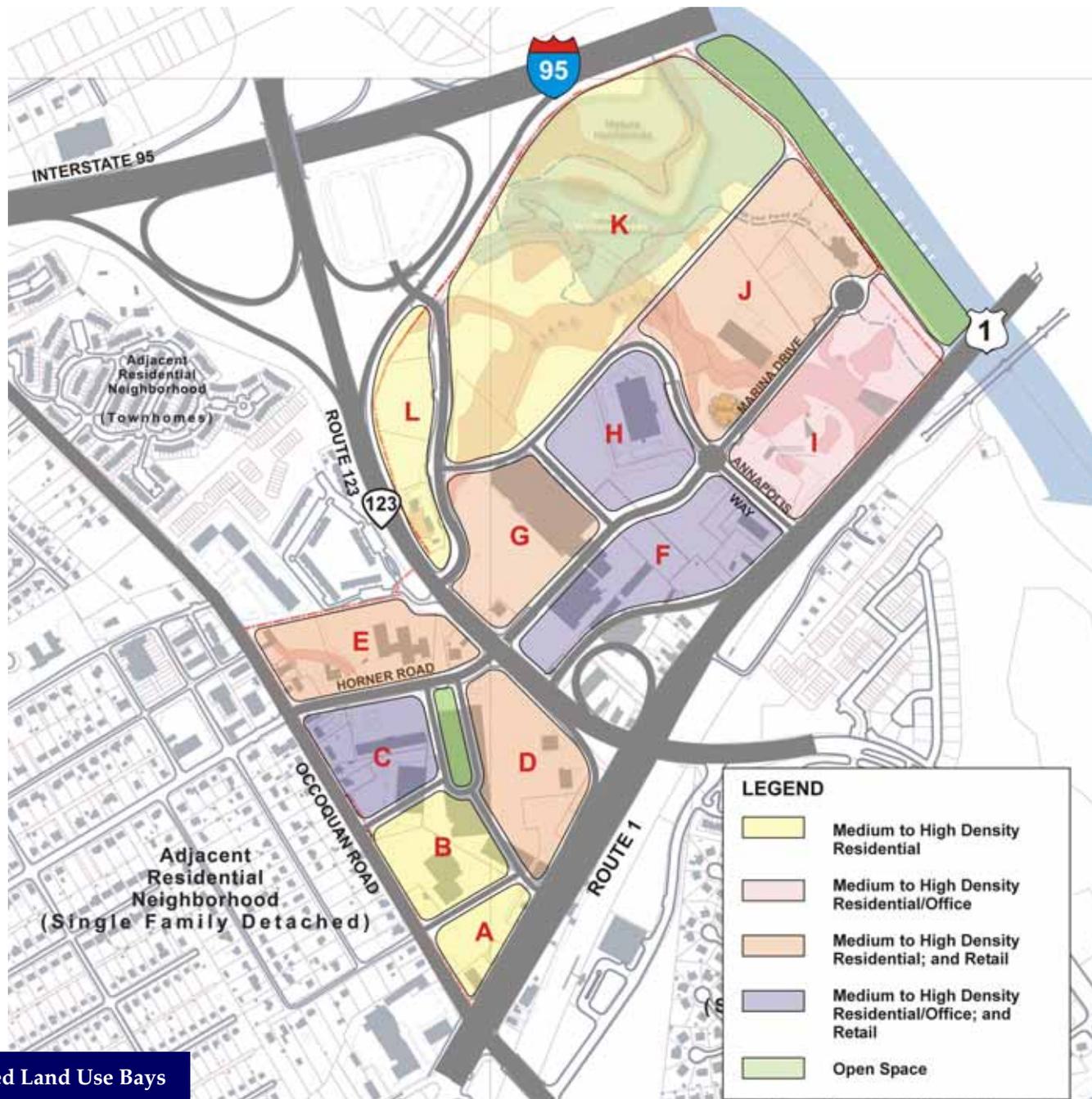


Figure 4.7: Proposed Land Use Bays

Land Use Bay Designation and General Development Standards

The amount of development proposed in the Master Zoning Plan was based on the demand identified in the market analysis, Traffic Impact Analysis conducted for the Master Zoning Plan alternatives, and ‘placemaking’ frameworks developed for the study area. Overall, the amount and type of development recommended within the study area is as follows:

- 3,300 Residential Units (mix of condos, apartments and townhomes)
- 760,000 GSF Office Development
- 375,000 Leasable SF Retail Development
- 300 Suite Hotel

Under the Master Zoning Plan, the study area has been divided into 12 ‘land use bays’ (see Figure 4.7). The land uses and general development standards for each bay are described below:

LAND BAY ‘A’

- Preferred Use = Residential
- Residential Density = 20-30 units/gross acre
- Maximum Height = 45-feet adjacent to Occoquan Road; otherwise 75-feet

LAND BAY ‘B’

- Preferred Use = Residential
- Residential Density = 20-30 units/gross acre
- Maximum Height = 45-feet adjacent to Occoquan Road; otherwise 75-feet

LAND BAY ‘C’

- Preferred Uses = Residential/Retail/Office
- Residential Density = 20-30 units/gross acre
- Maximum Retail Development = 20,000 SF (leasable)
- Maximum Office Development = 125,000 SF (gross)
- Maximum Height = 45-feet adjacent to Occoquan Road; otherwise 75-feet

LAND BAY ‘D’

- Preferred Uses = Residential/Retail
- Residential Density = 30+ units/gross acre
- Maximum Retail Development = 25,000 SF (leasable)
- Maximum Height = 100-feet

LAND BAY ‘E’

- Preferred Uses = Residential/Retail
- Residential Density = 20-30 units/gross acre
- Maximum Retail Development = 100,000 SF (leasable)
- Maximum Height = 45-feet adjacent to Occoquan Road; otherwise 75-feet

LAND BAY ‘F’

- Preferred Use = Residential/Retail/Office
- Residential Density = 20-30 units/gross acre
- Maximum Retail Development = 80,000 SF (leasable)
- Maximum Office Development = 150,000 SF (gross)
- Maximum Height = 100-feet

LAND BAY ‘G’

- Preferred Use = Residential/Retail
- Residential Density = 30+ units/gross acre

- Maximum Retail Development = 65,000 SF (leasable)
- Maximum Height = 100-feet

LAND BAY ‘H’

- Preferred Uses = Residential/Retail/Office
- Residential Density = 30+ units/gross acre
- Maximum Retail Development = 55,000 SF (leasable)
- Maximum Office Development = 150,000 SF (gross)
- Maximum Height = 100-feet

LAND BAY ‘I’

- Preferred Uses = Residential/Office
- Residential Density = 20-30 units/gross acre
- Maximum Office Development = 335,000 SF (gross)
- Maximum Height = 100-feet

LAND BAY ‘J’

- Preferred Uses = Residential/Retail
- Residential Density = 20-30 units/gross acre
- Maximum Retail Development = 20,000 SF (leasable)
- Maximum Height = 100-feet

LAND BAY ‘K’

- Preferred Uses = Residential/Hotel
- Residential Density = 20-30 units/gross acre
- Maximum Height = 100-feet

LAND BAY ‘L’

- Preferred Uses = Residential/Hotel
- Residential Density = 20-30 units/gross acre
- Maximum Height = 75-feet

Notes: