City of Richmond Urban Design Guidelines Revisions 2021

This document is not the final revision and is text only. Formatting, graphics, and organization will be updated after UDC approval.

Background

- Urban Design Committee expressed interest in updating the document to include new and modern design practices
- Urban Design Guidelines were initially developed in the mid-1990's
- Used as a tool for applicants to be aware of what the UDC expects
- Used by the committee as a reference, so consistent determinations on project types can be made
- Staff has worked with the Urban Design Committee and other City agencies over the past year to revise and update the document

Next Steps

- Staff receives any comments from Planning Commission by **December 6th, 2021**
- Staff incorporates Planning Commission suggestions into document
- Staff presents final revisions to the Urban Design Committee for adoption at the **December 9th, 2021 meeting.**
- Staff formats new document and publishes to City website

INTRODUCTION

The Richmond Urban Design Committee (UDC) is a ten member advisory committee created by City Council in 1968. Its purpose is to advise the City Planning Commission on the design of City projects and private encroachments in the public right-of-way and large-scale private development projects approved through a Community Unit Plan. The UDC reviews projects for appropriateness in "location, character, and extent" and for consistency with the City's Master Plan. Following review, the UDC forwards recommendations to the City Planning Commission. The following design guidelines are used by the UDC and its staff in reviewing applications. These guidelines may also assist the applicant in understanding the Committee's design expectations. In a sense, these guidelines are an articulation of the Committee's design goals for the City.

The intent of these guidelines is not to be overly specific or to dictate certain designs or styles. Not all guidelines will apply, given the infinite number of possible design situations. These guidelines are intended to provide a general design framework for the various types of applications reviewed by the Urban Design Committee to ensure high quality, well designed projects for the City of Richmond.

These guidelines do not attempt to address historic preservation goals. For properties located in City Old and Historic Districts, National Historic Districts, or which are historic in character, the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings should be consulted. The City's Commission of Architectural Review has additional helpful publications that offer design assistance. It is important to note that these guidelines are recommendations only and should not be interpreted as regulations. The guidelines are supplementary to the requirements of the City's zoning ordinance, its building codes, and all other city, state and federal regulations. If in any instance a guideline is contrary to a regulation, the regulation prevails.

GENERAL LOCATION, CHARACTER, AND EXTENT

Each proposed project should be reviewed for consistency with the City's Master Plan in "location, character, and extent." (Richmond City Charter, Section 17.07) If the project is not consistent or if the project is not addressed in the Master Plan, the sponsoring City agency should explain in detail the need for the project and its relationship to an overall plan.

The "extent" of the project should be reviewed for appropriateness. This includes all project details, the proposed end result, and the impact of the project on other urban design elements. It should be clear that the project will meet the needs of the user agency. Are there any more reasonable alternatives to achieving the end result? Can the timing of the end result be coordinated with any other projects for cost savings and other benefits? Once these and any other questions are answered, the design details of the proposal should be examined for appropriateness in "location and character."

Location (actual siting of the design plan components);

Character (the aesthetic nature of the design plan components);

Extent (the scope of the design plan components as they may address quality of life aspects in the public realm such as sustainability, preservation, etc.)

TRANSPORTATION

The City's Master Plan states that the long-range transportation policies and strategies for the City of Richmond, such as the Vision Zero Action Plan and the Better Streets Manual, are designed to enable the City to be a safe transportation network expanding frequent public transit regionally and providing a parity of transportation choices that serves all transportation users on city streets through a complete streets approach. The urban design guidelines that relate to transportation elements should further these long-range transportation strategies set forth in the City's Master Plan to achieve Vision Zero and Complete Streets policy objectives.

~~function as an integral element of a safe and efficient regional multi-modal public transportation network; maintain a safe, effective and comprehensive roadway network; and develop appropriate alternative modes of transportation. The urban design guidelines that relate to transportation elements should further these long-range transportation strategies set forth in the City's Master Plan, ensuring that the City maintains a safe and efficient transportation network.~~

Guidelines in this document relating to transportation include paving and surface materials, on and off-site parking, street design, multimodal transportation, traffic management, and accessible ramps.

PAVING AND SURFACE MATERIALS

Selection. The selection of appropriate paving materials should be based upon the following: desired visual image, heat impact, sustainability, compatibility with adjacent paving materials, performance, durability, maintenance requirements, and cost. Demonstration of consideration should be given to the massing of impervious material, the heat impact of paving material, and the stormwater runoff caused by paving material. Landscaping should be used to break up and soften large expanses of impervious paving material.

Impervious material on a site should be minimized to limit stormwater runoff and the heat island impact. Preference should be given to pervious pavement materials that allow for stormwater recharge, especially in minimally used parking areas. Pervious pavement materials that allow for stormwater recharge should also be considered for the areas used for parking in parking lots, as opposed to the travel lanes in parking lots. Consideration should be given to a pervious pavement technologies max weight limit, and ability to support vehicles when utilized in parking areas. Examples of pervious pavement materials include permeable interlocking concrete pavers, concrete grid pavers, plastic reinforced grid pavers, pervious concrete, turf, turf pavers, and porous asphalt.

Simpler paving designs are more compatible with diverse building styles and better unify the various design elements found on City streets. The color of brick and concrete pavers should coordinate with building architecture and adjacent streetscape pavements.

Colored concrete is not recommended for sidewalks. Weathering makes it nearly impossible to match colored concrete when sidewalk repairs are necessary.

Materials that have an uneven surface should be avoided in pedestrian areas. However, historic features, such as existing cobblestone streets and alleys and stone crosswalks, shall be preserved and restored. In some instances an uneven, historic material must be altered or replaced with a uniform surface to allow for accessibility. In these instances, creative solutions should be considered that remove

the least amount of historic material as possible, allowing for accessibility while retaining historic character.

Provision of New Sidewalk. New development should provide sidewalks, landscaping, and other amenities to improve pedestrian connectivity and safety along both sides of streets where there are currently no sidewalks or where ~~sidewalks in disrepair~~ improvements are needed.

Curb Material. Existing granite curbing and stormwater inlets should be retained. Any new granite curbing should match existing curbs. Curbing should not be painted or striped. Other traffic control measures, such as signs, should be considered instead.

Accessible Ramps. The number, size, and location of accessible ramps should be examined for potential conflicts with pedestrian and vehicular circulation. The material of new accessible ramps should match the adjacent sidewalk material, except for tactile warning surfaces as required by the Americans with Disabilities Act (ADA). Accessible ramps should be located at intersections. Mid-block curb cuts for ADA compliance are discouraged.

UDC encourages the review of the Public Right-of-Way Accessibility Guidelines (PROWAG) for projects that include ADA improvements.

PARKING

Well-designed and appropriately located parking resources are a critical element of the City's transportation system.

Location. Parking should be relegated to remote areas of the site so that the orientation of buildings can be given a direct connection to the public right-of-way. Off street parking should be located behind a building and to the rear of the property or within the building. On street, curb parking should be retained, however considered for removal when other curbside management solutions are proposed in place of parking such as bike lanes, transit stops, etc. ~~wherever possible.~~

Parking areas should have adequate signage to safely and efficiently direct traffic movement in and around the parking area.

Design. All parking spaces should be usable, safely and conveniently arranged, and well-marked. Accessible parking spaces should be provided in large parking areas and be properly marked. The design of parking and internal circulation should give deference to existing historic and natural features in and around the site. The design of parking areas should also provide for clearly marked pedestrian routes through and around the parking area.

Site development should minimize large expanses of impervious surface. Pervious paving materials should be used whenever possible for parking areas. Landscaped islands with well-maintained native shade trees or native shrubs are encouraged to soften large paved parking areas and break large expanses of asphalt. The selection of landscaping materials should reflect the hierarchy of the circulation system within the site and context. All parking areas are subject to the landscaping requirements put forth by Article VII, Division 2.1 on the City of Richmond's Zoning Ordinance.

Parking areas and incompatible adjacent uses, such as vacant lots, blank walls and other unattractive streetscape features, should be effectively screened with evergreen landscaping or landscape features.

Security cameras should be installed in new parking areas, as a means for deterring crime.

Parking garages adjacent to the public-right-of way shall have pedestrian friendly design and uses on the street level.

Screening. Large parking areas should be broken up into smaller areas and screened from the public right-of-way and neighboring properties. Appropriate screening may include landscaping, walls, fences or berms.

Lighting. Off street parking should be well lit with an even distribution of a minimum of .5 to 1.0 foot candles. Lighting in parking areas should be focused downward, in order to respect adjacent properties and to effectively provide light for the safety of both the pedestrian and vehicular users of the parking area. It is important that the entrances and exits to parking areas are well lit.

Additional Guidance. All new parking areas and lots are subject to the off-street parking improvement requirements and landscaping standards found in Article VII, Division 2.1 of the City of Richmond's Zoning Ordinance.

MULTIMODAL TRANSPORTATION

One of the major objectives stated in the City of Richmond's Master Plan is to increase street-level pedestrian activity, while safely and efficiently moving people and goods into and out of the City; and encouraging the use of public transit, biking, walking, etc. ~~and alternative means of transportation~~ through a multimodal transportation system. In order to have a safe and efficient multimodal transportation network, it is integral to design with all modes of transportation in mind. These modes include walking, biking, public transit, as well as motor vehicles ~~vehicular~~. It is the priority of the UDC to support all modes of transportation, ~~give deference~~ giving deference to pedestrians, vulnerable transportation users, and land use designation ~~pedestrians~~ over other modes of travel. For projects involving elements of transportation, both public transit and non-motorized transportation (walking, biking, etc.) should be considered in the design and planning of all projects.

Bike Routes. Where feasible, all new roadway segments should be constructed to include bikeways. Appropriate signage should demarcate designated bikeways and delineate the bikeways from lanes of automobile traffic. Bike racks should be installed throughout the City and bike facilities such as showers, restrooms, air pumps, etc., should be incorporated into the design of any new public facilities. Roadways with bike routes should be enhanced with street trees or appropriate landscaping.

Pedestrian Facilities. All transportation projects should have adequate provisions to address the needs of the pedestrian in a safe and efficient manner. Streetscape elements, such as native street trees, street lighting, and seating should be used to encourage pedestrian activity.

Striped crosswalks, pedestrian crosswalk signals, and other improvements that enhance safety should be installed as a standard amenity at all signalized intersections.

GRTC Transit Stops. A comfortable, safe, and quality environment should be created at transit stops. The elimination of transit stops without replacement should be discouraged, unless addressing frequency. The standard bus shelters and other bus stop furniture that have been approved by the UDC, the City Planning Commission, and GRTC should be used at GRTC transit stops with high ridership. Benches installed at transit stops should have arm rests in the middle of the bench for the comfort of riders and to discourage its use for activities other than a short-term wait for the bus.

STREET DESIGN

The design of a street contributes to the perception of an area and the manner in which individuals interact with the built environment. While street design incorporates numerous details regarding geometrics and construction materials which are beyond the scope of this document, this section provides general guidance on lane widths, on-street parking, medians, pedestrian crossings and intersections. Appropriate treatments within the design of an individual project should be considered based upon the purpose and function of the street. Streetscapes, which include the furnishings, sidewalks, and landscaping contained within the right-of-way outside of the vehicle travel and parking lanes, are addressed in the Community Character chapter.

Lane width. The width of a street should respond to the volume of traffic it carries. Streets classified as local and collector should generally have widths that are narrower than arterial roadways. The provision of on-street parking, bike lanes, or traffic calming measures may impact the amount of pavement from curb to curb, but the lane widths on local and collector streets should be between 9 and 10 feet. These lane widths may also be appropriate for some arterial streets, depending on the function. Greater lane widths could be considered on local streets in instances where a queuing design, or a “give way street" is used and the travel lane is shared. An 11 foot travel lane should only be utilized along corridors designed for speeds in excess of 40 mph.

On-street parking. On-street parking is important for not only providing for some of the parking needs of adjacent uses, but also as a means of defining the character of a corridor or neighborhood. On street parking encourages ~~creates~~ pedestrian activity, providing ~~and provides~~ a buffer between ~~those~~ pedestrians and moving traffic, and can be used as a buffer between the travel lane when a bike lane is placed between the curb and street parking. The width of on-street parking lanes should be between 7 and 8 feet. ~~Wider parking lanes of 12 feet could be considered in situations where the lane is combined with a bicycle route. On-street parking is appropriate in both residential and commercial districts.~~

Medians. Medians can provide both aesthetic benefits and operational utility within the street network. Landscaped medians provide context, can support birds and pollinators, and can assist in signaling the entrance to an area; and thus should be strongly considered in any gateway project. Neighborhood or commercial district markers and landscaping in medians should be appropriately scaled to ensure the safety of both pedestrians and motorists. Raised medians with curbs are the standard in urban areas, but depressed medians that provide water infiltration should be considered where appropriate. A maintenance plan associated with depressed medians is necessary to ensure the long-term functioning of its storm water capacity, as well as its aesthetic appearance.

Pedestrian crossings. Pedestrian crossings should generally be confined to the corners of blocks and at signalized intersections. Midblock crosswalks should be discouraged, except for instances of extremely long distances between intersections (block lengths of greater than 600 feet ~~400 feet~~, for example). Pedestrian crossings should be clearly marked and refuge islands should be provided where the crossing distance is 60 feet or greater.

Intersections. Intersections should be designed to serve pedestrians, bicyclists and motorists in a safe manner. The capacity of an intersection should be designed to accommodate traffic reflective of its use (e.g. a local street versus an arterial ~~truck~~ route). Curb radii should be small in urban areas and the use of curb extensions, or bulb-outs, is recommended where appropriate. Channelized turn lanes should only be used where absolutely necessary and should include provisions for the safe passage of pedestrians ~~and bicyclists~~ such as highly visible painted and striped crosswalks and appropriately

coordinated pedestrian crossing signals. Roundabouts should be considered in certain situations as an alternative to the traditional intersection.

Additional guidance.

Detailed guidance regarding each of the issues contained in this section is provided in the City of Richmond's *Better Streets Manual*. Applicants are strongly encouraged to consult studies and other guidance regarding context sensitive design for roadways such as Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities, Institute of Transportation Engineers, 2006.

TRAFFIC MANAGEMENT

The Urban Design Committee supports the traffic calming ~~management~~ techniques outlined in the Neighborhood Traffic Management Program developed by the City of Richmond. Traffic calming ~~management~~ techniques should slow traffic, decrease un-safe driving practices, as well as minimize cut-through traffic. Traffic calming ~~management~~ techniques should be used to improve conditions for pedestrians and bicyclists and enhance neighborhood character. Traffic calming elements, when necessary, should be well designed so that they provide for an aesthetic contribution to the urban character of the neighborhoods in which they are placed.

Additional Guidance. The 2004 Neighborhood Traffic Management Program developed by the City of Richmond provides guidance on various traffic speed and volume reduction traffic management strategies.

Also see the Right-of-Way Design Manual developed by the Department of Public Works.

Accessible curb ramps should be located at intersections. Mid-block accessible ramps are strongly discouraged. Accessible Ramps should include detectable ~~tactile~~ warning surfaces as required by the Americans with Disabilities Act.

Additional Requirements. All accessible curb ramps must meet the Americans with Disabilities Act (ADA) requirements.

UDC encourages the review of the Public Right-of-Way Accessibility Guidelines (PROWAG) for projects that include ADA improvements.

Graphic Sources.

Main Street Guidelines publication by the National Trust for Historic Preservation entitled "Keeping Up Appearances, Storefront Guidelines"

Glendale Redevelopment Area Urban Design Guidelines published by ELS Design Group

GRTC/City of Richmond Bus Shelter Program and "Design for Maximum Access" published by London Borough of Richmond upon Thames

Richmond's Fan District by Drew St. J. Carneal published by the Historic Richmond Foundation in 1996

New Urbanism Comprehensive Report and Best Practices Guide by Robert Steuteville, Philip Langdon and Special Contributors published by New Urban News in 2003

ENVIRONMENT

The City's Master Plan emphasizes Richmond's commitment to accommodate high quality development with community enhancement and environmental quality in mind. The ability to maintain a high quality of urban life, thereby attracting and retaining businesses and residents, depends on how well the City preserves and protects the unique natural resources within its urban environment. Urban greening through the provision of open space is encouraged in both public and private projects throughout the City. Guidelines in this document relating to environmental quality include design guidelines for public parks, landscaping and stormwater management. Guidance regarding Crime Prevention through Environmental Design (CPTED) is included in Appendix 1.

PUBLIC PARKS

Public parks are integral to the quality of life found in any urban landscape. Parks should respond to the environment in which they are located and should be designed in accordance with their intended use. The design of small neighborhood parks will vary from the design of large regional parks. Passive natural parks should have adequate trails and access to accommodate intended users. Active parks should have adequate facilities (i.e. sports fields, trash receptacles, benches, running paths, etc.) to accommodate intended users. It is important that the design of public parks facilitate programming that furthers placemaking, or the creative patterns of use that leverage physical, cultural, and societal identities to define a place.

Universal Design. Public park design should incorporate design elements that ensure equal access to all users. Site limitations should be evaluated, and access to all sites and site features should be universal. To eliminate potential social limitations, accessible ramps and other physical accommodations should be components of the overall design of a space and not a separate feature, protecting the dignity of all users. Access limitations of each site should be evaluated and informed by public engagement during the design phase of projects.

General Characteristics. Successful public parks, both small and large, active or passive, share certain qualities, which include the ability to attract and entertain visitors, access and connectivity to surrounding areas, and safety and comfort. Specific design will vary from park to park, but should respond to all of these general characteristics.

Design Considerations. Certain design considerations should be addressed in any project, regardless of the type of park. Historic elements should be surveyed and preservation should be considered for both facilities and landscapes. Impacts to the natural landscape should be assessed and should generally be minimized when constructing man-made elements. A preference should be given toward materials and construction techniques which improve energy efficiency and water/soil quality. Lighting and landscaping should allow for surveillance and policing activities, but should be designed primarily to accommodate the intended use of the park. On-site signage should be consistent in style and convenient to visitors, but should be inconspicuously integrated into the overall landscape.

Maintenance. All park projects should include a maintenance plan which addresses all phases of the project, including both landscaping and facilities.

Additional Guidance. Design recommendations for incorporating accessibility for all users into public spaces are available through MixDesign (www.mixdesign.online)

Case studies, research, and guidance on park design are available through The Project for Public Spaces (www.pps.org).

LANDSCAPING

Design. Plantings should be compatible with and relate to surrounding landscapes. Site landscaping should complement and soften new construction and building architecture. Plant materials should create spaces by providing walls and canopies in outdoor areas. Landscaping should not only provide a sense of scale and seasonal interest, but should also be designed to minimize human impact on the environment. Designs that include conservation landscaping, strategically minimize the Urban Heat Island effect, or decrease stormwater runoff should be strongly encouraged.

Proposed improvements located within an area covered by an approved streetscape plan should be consistent with that plan. A listing of City plans with urban design components is provided in Appendix 6.

Species Diversity. Landscape plans should include a diverse palette of native plant species that include evergreen, flowering and shade tree species combined with shrubs, ground covers and annual and perennial plantings. Planting a diverse set of street trees will help protect against disease and enhance biodiversity and landscape health. Some streets, such as prominent boulevards, gateway corridors, or ones with historic significance may be better suited for landscape plans that include a limited tree selection, using only a few species to create a specific pattern of planting that helps combat the spread of diseases and creates visual interest and uniformity.

Trees for pedestrian comfort should be the predominant plant material in an urban setting and chosen according to the context of the street (i.e. utility lines, architecture, etc.). Trees that produce suckers should be strongly discouraged as they require constant trimming to maintain their character. Plant species should encourage pollinator diversity. Additionally, preference should be given to retain mature, healthy, ~~non-invasive~~ native plant material, this should be applied especially to trees.

The City of Richmond's Arborist should be encouraged to present at least once a year to the Urban Design Committee, with any updates to the City of Richmond's planting lists and yearly goals. The Urban Design Committee should consult with the City Arborist on projects, specifically on proposed species and how they may impact surrounding biodiversity.

Plant Selection. Plant materials should be native, adaptable to existing soils, climatic and lighting conditions, and be disease resistant. Native plant species are encouraged, particularly local ecotypes. ~~however~~. Invasive plant species as identified by the Virginia Department of Conservation and Recreation (VA DCR) are prohibited. Listings of native and invasive plant species for this region and other Mid-Atlantic States are provided in Appendix 5.

Maintenance. Maintenance should be considered when selecting landscaping materials. A maintenance agreement and/or plan should be in place for the life of the planting design. If a maintenance plan includes pest and weed control, the Urban Design Committee strongly encourages that only organic, chemical-free treatments be utilized. Synthetic pesticides and herbicides can be dangerous to humans as well as other mammals and pollinators and enter our stormwater polluting the James River and drinking water.

Significant healthy trees should be preserved and maintained whereas hazardous, dead, or dying trees on City-owned property should be removed and replaced. Trees on public and private property should be appropriately trimmed around utility lines.

The Urban Design Committee supports the City Planning Commission's Resolution, dated April 2, 1991, which requires the submission of an analysis of required maintenance for landscape materials for all City Capital Projects. (see Appendix.2) The Urban Design Committee also supports programs in which citizens or organizations can participate in the maintenance of landscapes on City-owned property. Such programs may include adopt-a-tree, adopt-a-spot, and adopt-a-park. In addition, the Urban Design Committee supports contests and award programs that recognize achievements in urban design.

Additional Guidance. Additional guidelines are provided in the Broad Street Streetscape Design Guidelines.

GREEN SITE DESIGN

The utilization of outdoor space and green elements that supports human and environmental health, specifically as it relates to eco roofs, raised courtyards and stormwater management practices including planter beds and bioretention areas, should be used to meet a portion of landscaping requirements.

Stormwater Management and Low Impact Development

Concept. Low Impact Development (LID) is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Almost all components of the urban environment have the potential to serve as part of the storm water management process in a Low Impact Development. This includes not only open space, but also rooftops, streetscapes, parking lots, sidewalks, and medians.

Design. Site development should take measures towards conservation of natural resources. Where feasible, developments should also promote impact minimization techniques through alternative stormwater management practices. When rain and snow fall on surfaces like roads or sidewalks, they can pick up pollutants like dirt, nutrients, bacteria, or chemicals, which then flow into our waterways resulting in stormwater pollution. Site design should locate stormwater facilities outside of streams and wetlands, maintaining natural drainages, and preserving riparian buffers; preserve the natural cover on as much of the site as possible; minimize the overall impervious cover, locate impervious areas on less permeable soils, and have runoff from impervious cover, drain to pervious cover, i.e. downspouts draining to the yard, not the driveway; increase the travel time of water off of the site; utilize soil management/enhancement techniques to increase soil absorption; revegetate all cleared and graded

areas; use “engineered swales” and bioretention areas for conveyance in lieu of curb and gutter where appropriate; and utilize level spreading of flow into natural open space.

Additional Guidance. The Master Plan Environmental Element and Chapter 6 of the City’s Master Plan (Natural Resources and the Environment) provide guidance on the preservation and enhancement of the City's natural environment. Projects located within Chesapeake Bay Preservation Areas must comply with the requirements of the City's Chesapeake Bay Preservation Program. Additional guidance is provided in the Chesapeake Bay Preservation Program's Public Information Manual.

All new parking areas and lots are subject to the off-street parking improvement requirements and landscaping standards found in Article VII, Division 2.1 of the City of Richmond’s Zoning Ordinance (Section 114 of the Richmond City Code).

Graphic Sources.
City of Richmond’s Zoning Ordinance (Section 114 of the Richmond City Code)

Low Impact Development; A Tutorial and Toolkit from Virginia Department of Conservation and Recreation and http://www.urbannature.org/landuse/low_impact_development.htm

Dwell Magazine, June 2001

Old Richmond Today with photography by Richard Cheek and published by the Historic Richmond Foundation in 2004

Green Infrastructure

The Urban Design Committee encourages the use of Green infrastructure in site designs. Green Infrastructure improves community resilience by capturing and filtering stormwater before it enters our rivers and streams and also helps mitigate the urban heat island effect, all while providing habitat for wildlife. Green infrastructure practices include street trees, bioretention areas, and permeable paving. Native plants that are tolerant of extended dry periods and periodic inundation, typically grasses, perennials, shrubs, and trees should be utilized within green infrastructure. Plants absorb soil nutrients, support biological growth, and maintain soil porosity.

Curbside Strips within the Sidewalk. In the built environment, green infrastructure practices are commonly utilized along streets and sidewalks to capture and filter stormwater runoff. Continuous or noncontiguous curbside strips that accommodate street trees are a very common green infrastructure practice in the City of Richmond. Curbside strips can also accommodate bioretention areas, including bioswales and rain gardens, and should provide safe pathways for pedestrians to move along sidewalks.

Curb Extensions and Planter Beds. Curb extensions and planter beds can be utilized to add green infrastructure in streetscapes. Curb extensions and planter beds can help slow the speed of vehicular traffic and are appropriate at busy intersections and between on-street parking spaces in certain locations.

Medians. Depending on the grading of the street and underground conditions, green infrastructure practices can be utilized within the side or central medians along roadways. Medians can help manage stormwater runoff from adjacent impermeable surfaces.

Green Alleys. Green alleys are a green infrastructure practice that use permeable materials to capture and filter stormwater runoff in alleys. Green alleys fall under the purview of the Department of Public Utilities and should be implemented when feasible.

Examples: Street trees**,** Bioretention areas**,** Rain gardens**,** Bioswales, Curb extensions, Planter beds, Permeable paving (green alleys)

PUBLIC FACILITIES

Service to the citizens of the City of Richmond is provided through a vast array of public facilities including schools, libraries, parks, recreation centers, fire stations, police precincts, public assembly and meeting spaces, and offices and complexes housing the general functions of City government. The City of Richmond's Master Plan states that it is important that these facilities are convenient, attractive, and accessible. The quality, design, and condition of all public facilities sets the image of the City, and sends a message about the values placed upon the services provided. Concentrations of large, formal buildings, which are typical of government, civic, and institutional uses, can have a positive effect on the image of the City. Green building practices, which minimize the environmental impact of buildings both in the construction phase and throughout the life of the building, should be considered in the construction of new public facilities as well as in the adaptation of existing public facilities. In general, public facilities should be designed to promote street activity and interaction with surrounding uses. Guidelines in this document relating to the goals for public facilities found in the City of Richmond's Master Plan and Zoning Ordinance include guidelines for building orientation, building setback, site features, building proportion, building mass, building height, roof form, modular units, telecommunication towers, building materials, building colors, architectural details, windows, facade design, and Accessible ramps.

General Site Design

BUILDING ORIENTATION

A building should be oriented toward the primary street that borders the site. Its facade should face the roadway and not appear to turn its back on the public right-of-way. A building sited on a corner lot should face the larger or more traveled of the two streets. It may be appropriate for a building's design to respect more than one street frontage. A building's entrance should be easily recognizable.
The main entrance into a public building should be at ground level, which facilitates public access and makes it easier to accommodate all users.

Energy efficiency should be considered when deciding building location and orientation. The utilization of solar studies and other means may yield opportunities to leverage existing environmental conditions for more efficient design.

BUILDING SETBACK

A new building should have the same or similar setback as existing buildings on the same street. There will be situations, however, where a different setback would be appropriate for the type of building and the desired environment. Examples would include larger public buildings, such as schools and recreation centers, located within urban residential areas. In certain cases, a new infill building should have a greater setback than existing buildings where sidewalks are narrow. The Urban Design Committee encourages a set back of a new building that would allow for the development of usable public space and landscaping, which would overall enhance the streetscape. ~~should be constructed with a minimal setback to reinforce the traditional street wall.~~

SITE FEATURES

The site should respond to its users through its design and by providing an appropriate array of amenities to serve those users. Circulation within the site should be geared toward pedestrian movements, not vehicular. Connectivity from the site to adjacent areas should be considered during the design phase and include accommodations for non- motorized means of transit such as bicycle parking and other micro-modal transportation.

The use of materials and the creation of features that increase sustainability, improve air and water quality, energy efficiency, and reduce heat island impact are encouraged. Public facilities should strive to capture as much stormwater on site as feasibly possible through the implementation of stormwater management practices. Practices including the use of green roofs, bioretention areas, permeable pavement and pavers, and planter beds are encouraged. Conservation landscaping with an emphasis on a diverse palette of native plant species is encouraged.

Facilities required for the ongoing operation of the building, such as loading docks, maintenance sheds, or HVAC equipment, should be to the rear of the site and screened from view. Screening should also be used for parking areas, which should be located to the rear of buildings as well.

The provision of plazas adjacent to buildings serving the public is encouraged. The design of such plazas should avoid large changes in grade from the street. Plazas should provide a pleasant transitional environment for pedestrians from the street to the building(s) it serves. Public plazas should use landscaping, public art, and historic preservation to create inviting spaces. Adequate seating, lighting and trash receptacles should also be provided in the design of plazas. The incorporation of Low Impact Design (LID) or sustainable design is highly encouraged.

Building Design

BUILDING PROPORTION

The relationship of building width to height should be compatible with neighboring buildings along the same street. Building height, width, and relationship to adjacent structures should appear balanced. Public buildings, such as hospitals, schools, libraries and community centers, may require larger proportions than adjacent buildings. To minimize the visual impact on a neighborhood with smaller scaled structures, the public building should incorporate design techniques which strengthen its design relationship to adjacent buildings.

Techniques may include: stepping back the building as it increases in height, varying the surface planes of the building, and breaking up the roof line to create smaller components.

BUILDING MASS

A building's mass should relate in shape and size to neighboring buildings. However, public buildings may have larger masses than adjacent buildings. In this case, larger scaled buildings should be designed sensitively to not overpower smaller adjacent structures.

Techniques include: stepping back the building as it increases in height, varying the surface planes of the building, and breaking up the roof line to create smaller components. The width and type of street may impact the considerations for building mass and stepbacks.

BUILDING HEIGHT

The height of a new building should be compatible with neighboring buildings. A corner building may be taller than adjacent buildings to define a primary entrance point to the block.

ROOF FORM

A building's roof form should relate to neighboring buildings. There may be instances, however, when this is not necessary. This may be the case if there is no general design theme in the neighborhood or if neighboring buildings have been significantly or inappropriately altered over time, then a building's roof form should not relate to neighboring buildings. A building's roof form should be proportional to the building and its facade. A corner building may use its roof form to define an entry point location to the block.

Larger scaled buildings should have varied roof forms and roof lines in order to minimize monolithic visual impacts. Roof materials and colors should blend with building materials and colors. Roof designs and lighter colored materials that address the reduction of heat island impact and also help manage stormwater are strongly encouraged, LEED may provide helpful resources and suggestions.

MODULAR UNITS The Urban Design Committee does not review modular school buildings. Modular school buildings will be directly reviewed by the City Planning Commission in accordance with City Planning Commission Resolution 2016-76 (CPCR – 2016-76).

All other uses of modular units that will remain stationary beyond two years shall be reviewed by the Urban Design Committee as a permanent building.

TELECOMMUNICATION DEVICES

Whenever possible, new telecommunication devices shall be located on existing infrastructure. Telecommunication devices that are able to be co-located on existing towers are encouraged. Though new poles for telecommunication devices are discouraged, new poles located in the public right-of-way should not be installed in front of doorways or residential dwellings. All telecommunication towers are subject to Article VI Division 11 of the City of Richmond's Zoning Ordinance.

Building Design Detail

BUILDING MATERIALS

Selection. New building materials should be compatible with and complement the vernacular of the neighborhood. New materials should be appropriate for the size and architectural style of the building. For older buildings, inappropriate building materials or inferior materials which have been added over time and detract rather than add to the character of the building should be removed. For significant older buildings, original building elements, materials, and features should be retained and repaired, as feasible. Building materials and elements from an earlier time which are not appropriate for the architecture of the building should not be added to create a false historical appearance. New construction that utilizes architectural elements that reference the past should do so with durable materials.

The UDC may request comment from the Commission of Architectural Review when reviewing projects that consist of older buildings.

Durability and Maintenance. Building materials should be aesthetically and structurally durable, of high quality, and require little maintenance. Where appropriate, substances which resist graffiti should be applied to building materials to reduce maintenance requirements. Additionally, a life-cycle analysis of all materials may help in determining appropriate applications.

In most cases, synthetic reinforced stucco is not an appropriate exterior building material, because of its lack of durability and maintenance requirements. Synthetic reinforced stucco should not be used on the first floor of buildings where it is subject to wear and tear and vandalism. Super-reinforced synthetic stucco, however, may be appropriate for the first eight feet of building above grade.
Building textures and their combinations should add continuity and not conflict or detract from each other. Textures should be appropriate for the size, proportion and architectural style of the building and its surroundings. Reflectivity, durability and color of the texture should be considered.

ARCHITECTURAL DETAILS

Architectural details may include cornices, roof overhangs, lintels, sills, molding, brick patterns, shutters, entrance decoration, chimneys and any other decorative indentations, projections or additions. These details add materials, textures and colors to the architecture, create shadows or highlight building focal points, and divide or define structural masses. Detailing is encouraged to be designed, implemented, and/or maintained at a human scale.

The number, size, style and type of windows should be appropriate for the architecture of the building and appear intentional in terms of rhythm, patterns, and ratio of walls to windows. Window design can also be influenced by exsiting fenestration patterns and window design of the surrounding architecture. ~~Window design is also influenced by and should be compatible with details such as sills, sashes, lintels, depth of reveal, decorative caps and shutters.~~ If shutters are proposed, they should fit the window opening. The color of the window glass and its reflective quality should be carefully considered for its overall effect on the design. Highly reflective glass is not appropriate at street level. Clear glass is encouraged for its tendency to increase visual connectivity from the inside of a building to the outside and vice versa, and creating a sense of security.

Window openings should not be filled in with brick because of the difficulties in matching brick and mortar colors. If the filling of openings is unavoidable, the filled surface should be recessed from the original wall surface.

Energy efficiency should be considered in window design. The UDC may request comment from the Commission of Architectural Review when reviewing projects that contain older architectural elements such as windows.

Bird safe glass should be considered where a building is located next to a park, streetscape, or highly vegetated or landscaped area, or greater than 45 feet tall. This can be done by reducing the reflectivity and amount of glazing used on a building. Glass that reflects the surrounding landscape and/ or sky can increase the chances of collision for migrating birds.

FAÇADE DESIGN

A building should have an easily recognizable, inviting and accessible entrance on its facade. The use of special exterior paving, lighting and landscaping is encouraged to highlight a building's entrance.

A building's facade at ground level is paramount in establishing the vitality of a commercial district. Ground level design should be comfortable to the pedestrian. For example, there should be appropriate architectural detailing and windows at eye level. Display windows are encouraged to provide interest along the commercial streetscape.

Large expanses of blank, undifferentiated wall are not appropriate building elevations, especially at the street level. Windows, projecting cornices, and architectural details, such as decorative masonry bands in an accent color, may be used to break up flat building planes. Service areas should not be located along the front elevation of the building.

ON-SITE ACCESSIBLE RAMPS AND WALKS (also see Accessible Curb Ramps ~~Cuts~~ in Transportation Chapter p.8)

Where possible, accessible ramps should be located so that they are sensitive to primary building elevations. The design of accessible ramps should relate to building architecture and exterior building materials. A ramp's base and its railings should be of an appropriate material and finish to complement the adjacent building. Unpainted wooden ramps are not acceptable. Landscaping may be planted adjacent to accessible ramps for screening. A preference is given to grade modifications that allow for Accessible access through the building's primary entrance, as opposed to separate ramp facilities.

Additional Requirements. All accessible ramps must meet Americans With Disabilities Act (ADA) requirements.

UDC encourages the review of the Public Right-of-Way Accessibility Guidelines (PROWAG) for projects that include ADA improvements.

The City of Richmond's Zoning Ordinance specifies different height, setback, and orientation requirements for buildings in each of the City's Zoning districts.

Graphic Sources.

Main Street Guidelines publication by the National Trust for Historic Preservation entitled "Keeping Up Appearances, Storefront Guidelines"
Glendale Redevelopment Area Urban Design Guidelines published by ELS Design Group and Draft Lawrence, Kansas Downtown Design Guidelines
Old Richmond Today with photography by Richard Cheek and published by the Historic Richmond Foundation in 2004

COMMUNITY CHARACTER

Good urban design can help create lively spaces with distinctive character. High-quality urban design can also create streets and public spaces that are safe, accessible, pleasant to use and human in scale. The design of everyday details, such as lighting, signs, and site furnishings, is an integral part of what defines a community's character. According to the Master Plan, Richmond's urban character and cultural resources can be a strong incentive to retain existing residents and attract new residents, businesses, and visitors. Guidance in this document relating to the goals for community character found in the City of Richmond's Master Plan include guidelines for streetscapes, lighting, signs, site furnishings, walls, fencing, and screening.

STREETSCAPES

Streetscapes can be defined as the space between the buildings on either side of a street that defines the street's character. Streetscapes are the principal link between public and private spaces. It is important that streetscapes are designed to reflect the character of the neighborhood and to offer a safe, comfortable environment for pedestrians. The elements of a streetscape that can be used to create such environments include building facades, landscaping, sidewalks, street paving, street furniture, signs, awnings, street lighting, and other technologies that can enhance the health of vegetation and reduce the Urban Heat Island Effect.

Design. Entrances and pedestrian walkways should enhance the streetscape and delineate an edge between pedestrian walkways and the street. Appropriate landscaping should be used to clearly define entrances and pedestrian walkways. In order to create attractive streetscapes, service and utility lines should be located underground if at all possible. Overhead utilities can be problematic for new street trees. When new street trees are proposed in a location where overhead utilities are present, undergrounding of those utilities is encouraged. If undergrounding of utilities is not feasible, a street tree species should be selected that will not grow to a mature height that will be impacted by the overhead utilities.

Sidewalk Paving Material. Simpler paving designs are more compatible with diverse building styles and better unify the various design elements found on City streets. The color of brick and concrete pavers should coordinate with building architecture and adjacent streetscape pavements. Colored concrete is not recommended for sidewalks. Weathering makes it nearly impossible to match colored concrete when sidewalk repairs are necessary.

Materials that have an uneven surface should be avoided in pedestrian areas. However, historic features, such as existing cobblestone streets, alleys, stone crosswalks, and granite curbing shall be preserved and restored.

Provision of New Sidewalk. New development should provide sidewalks, landscaping, and other amenities to improve pedestrian connectivity and safety along both sides of streets where there are currently no sidewalks or improvements are needed.

When possible, permeable pavers or other forms of paving technology should be used to enhance stormwater drainage. Additionally, lighter color materials for paving should be considered when possible to further reduce urban heat island impacts.

Stormwater Management and Green Infrastructure. New development should strive to capture as much stormwater on site as feasibly possible through the implementation of stormwater management practices. Practices including the use of green roofs, bioretention areas, permeable pavement and pavers, and planter beds are encouraged. Conservation landscaping with an emphasis on a diverse palette of native plant species is encouraged.

Tree Wells. Soil volumes for tree wells should range from a minimum of 1,000 CF for smaller trees with a required 3' depth, to a minimum of 1,500 CF for larger trees that require 4' depth. Additionally, it is recommended that continuous tree trenches be used whenever possible to provide the most CF of soil. When possible, individual tree wells should be larger than the current City Standard size of 3' by 5' feet in order to provide the adequate amount of CF of soil to support tree development.

Alternatives to metal tree grates are encouraged, however existing tree grates should be regularly maintained. Expansion rings should be removed as the tree trunk grows. Hardy ground covers such as grasses, should be planted under street trees where it is determined that the CF of soil available in the tree well is adequate for companion planting. Ground covers should be well maintained. Pea gravel alone is not an appropriate material under street trees. Proposed development located within an area covered by an approved streetscape plan should be consistent with that plan. A listing of City plans with urban design components is provided in Appendix 4. (Updated Planting List).

To promote healthy root development, planting methods that utilize structural cells, suspended soil, and suspended pavement are encouraged. Oftentimes, street trees do not receive adequate irrigation. The incorporation of stormwater infrastructure into new tree well design is encouraged. This can be done by directing storm water from the gutter into a tree's root zone through drains or curb cuts. A maintenance plan that specifies the entity responsible for irrigation and upkeep should be provided with all street tree plantings.

Urban Street Tree Placement. Street tree placement should respect building storefronts and signs. Trees at intersections should be planted at least 25 feet away from a corner to allow for adequate line of sight in all directions. Generally, new small street trees should be located a minimum of 25 feet from each other; new medium street trees should be located a minimum of 35 feet from each other; and new large street trees should be located a minimum of 45 feet from each other. All street trees should be a minimum of three feet from the back of the curb. The distance between a street tree and a street light will depend on the type of light. Generally, a street tree should be no closer than 12 feet from a streetlight.

~~When possible, there should be demonstrated consideration for the utilization of suspended pavement to enhance the health of trees.~~

Tree Selection. Street tree species should be selected to help address climate change and for performance in urban situations. For example, the root structure should be conducive to urban conditions. The height of the tree at maturity should respect any overhead utility lines. The tree's branching tendency and leaf size should be considered. Tree species that drop berries or fruit or have thorns are generally not recommended. Native tree species are preferred. A listing of recommended street trees for this region is provided in Appendix. To create a uniform tree-lined street, generally no more than two species of street tree should be used along a single block face of a roadway. A different tree species may be used to highlight intersections, where appropriate. If two tree species are selected, they should uniformly alternate along the street.

Other Streetscape Plantings

Large Street trees are the main priority for street plantings in the City of Richmond, however other plantings such as ground covers and small shrubs and bushes may be used within the streetscape. For areas that have existing significant canopy coverage by healthy trees, additional planting areas for these types of plants to add color, texture, and interest to the streetscape are encouraged. These plantings can be located in portions of the sidewalk that are converted into planting strips, or between healthy, mature street trees where 4-5 feet of clear soil can be maintained. A Maintenance Plan that specifies the entity responsible for irrigation and upkeep should be provided with all streetscape plantings. Low maintenance plantings are preferred.

Plant Selection. Refer to Plant Selection under Environment.

LIGHTING

Lighting Plan. The goal of the general lighting plan should be to achieve uniformity of light coverage, type and color of lighting, location, fixture style, appropriate lighting levels, the correct height and angles of lights, the benefits of horizontal or vertically mounted lights, and light trespass or pollution. A general lighting plan is required for plans of developments, community unit plans, and any comprehensive streetlight project. The lighting plan should differentiate in the scale of lights required for roadway (vehicular) and for walkway (pedestrian) lighting. Light height and spacing is generally determined by the lamp output and the desired average illumination on the roadway and pedestrian walkway. Exterior lighting should be well-conceived and properly installed according to a general lighting plan. Exterior lighting should also avoid light pollution by directing light downward and, in some instances, include caps as part of the design. Proposed lighting improvements located within an area covered by an approved streetscape plan should be consistent with that plan. A listing of City plans with urban design components is provided in Appendix 6.

Location. The roadway and/or pedestrian lighting should illuminate circulation and activity zones and facilitate safe pedestrian and vehicular movement, being located outside of the Pedestrian Travel Zone as defined by the City of Richmond's Better Streets Manual. Appropriate illumination should be provided at points of decision, such as intersections, crossings, bus stops, steps, arrival points and other special features. Building facades, important architectural details, and site features, such as specimen plantings, art work and freestanding signs, may be highlighted by appropriate facility lighting. The location of street trees may affect the consistency of illumination along the streetscape. The distance between a street tree and a street light will depend on the type of light. Generally, the center of a street tree should be no closer than 12 feet from a streetlight. The selection of lighting fixtures and street trees should be consider in conjunction with one another. Off street parking should be well lit with an even distribution of a minimum of .5 to 1.0 foot candles. For pedestrian areas, pedestrian light fixtures should be 10 to 15 feet above the ground. The pedestrian light poles should be placed 40 to 60 feet apart, depending on the desired light level and the photometric characteristics of the light fixture. For vehicular areas, light fixtures should be 20 to 35 feet high, but should not be taller than the adjacent buildings, where possible.

Illumination. Consistent levels of illumination should be maintained in public areas. Safe and comfortable circulation depends more on the consistency of illumination than on the level or brightness

of the lighting. All light sources should be shielded or diffused to reduce glare, spill light, up lighting, and wasted light. Lighting in commercial areas should not spill over onto adjacent residential areas. The color temperature of a light source should not exceed 3000K. High pressure sodium lighting is discouraged.

Fixture Design. Building, site, and parking lot light fixtures should be coordinated and compatible with the architecture of the building. The design of streetlights should reinforce the character of the street. Simpler fixture styles are recommended to be compatible with the many different architectural styles found on City streets. Where compatible, City standard poles, luminaries and accessories should be used for public spaces. New light fixtures may be affixed to existing metal or concrete utility poles, for cost effectiveness and to reduce clutter on the sidewalk. Lighting fixtures should be consistent with existing fixtures in the surrounding area. Fixture consistency shall be determined by a minimum of a three block radial survey of the area surrounding the proposed project for smaller projects. For larger lighting projects, a general lighting plan shall be required with documentation of the lighting fixture design in areas surrounding the project. The finish on street lights and site furnishings should coordinate. The replacement of cobra-head light fixtures is encouraged by the UDC. When not replaced, the older cobra-head light fixtures and metal poles may be painted to match the site furnishings. The City standard color is DuPont Hunter Green PFG-509-S8.

When possible, there should be demonstrated consideration for LED and other energy efficient lighting.

Additional Requirements. Proposed lighting improvements located within an area covered by an approved streetscape or lighting plan should be consistent with that plan. All outdoor lighting is subject to Section VI, Division 8 of the City of Richmond's Zoning ordinance. A list of recommendations for using LED lighting is provided in Appendix 7.

SIGNS

Placement and Size. A sign should fit the architecture of the building. A sign should not be too large for a building or overwhelm its architecture. Signs should not obstruct architectural elements and details that define a building's design. Signs should be placed so that they are sensitive to the signs of adjacent businesses. Freestanding signs should also relate to the architecture of the building. The sign's base may be constructed of like building materials. Additional traffic signs should be coordinated with existing or new poles to avoid additional clutter.

Message. A sign's message should be easy to read and direct. It should not contain too much information. The message should clearly relate to the use of the building. The use of "sponsor" advertising should be discouraged. This type of advertising has an assembly line appearance, sends a confusing message, and does not promote individual store identity.

Lettering. Generally, sign lettering should be 4 to 14 inches high and should be in proportion to the area in which it will be displayed. One inch should be added to the lettering height for each additional 50 feet between the sign and the viewer. The lettering style should be easy to read and should reflect the image of the business it represents.

Color. Sign colors should relate to and complement the materials and color scheme of the building, including accent highlights and trim colors. The stronger the color contrast between the lettering and the background, the easier it is to read the sign. For example, light colored lettering will read better against a dark colored background.

Illumination. Internally illuminated signs are not appropriate in or adjacent to residential areas. Internally illuminated signs should have light lettering and dark, opaque backgrounds for improved readability and minimal glare. For indirectly illuminated signs, the spotlights should be shielded to minimize glare. All lighting and electrical parts should be concealed from view. Signs should not contain elements that could be visually distracting.

Additionally, electronic signage and its display will be dictated by current zoning.

Landscaping. Freestanding signs should be landscaped with appropriate native deciduous evergreen shrubs, ground cover planting, annuals and/or perennials.

Additional Requirements. All signs are subject to the applicable sign requirements set forth in Article V of the City of Richmond's Zoning Ordinance. For signs that encroach into the public right-ofway, additional guidance may be found in the “Encroachment” chapter of this document.

SITE FURNISHINGS

Design. Site furnishings, such as benches and trash receptacles, should be appropriately styled and scaled to complement building architecture and to reinforce the character of the streetscape. Streetscape furnishings and streetlights should coordinate with each other in style, color and finish. Simpler forms are recommended to be compatible with the many different architectural styles found on City streets. The design of the furnishing should support its function. For example, a trash receptacle should be large enough and be easy to dump. Benches should be designed for comfortable seating and not for sleeping. Decorative streetscape planters are not recommended, unless they will have plantings in them year-round and be well maintained.

Street furnishing should be consistent with existing street furnishing in the surrounding area. Street furnishing consistency shall be determined by a minimum of a three block radial survey of the area surrounding the proposed project. Proposed site furnishings located within an area covered by an approved streetscape plan should be consistent with that plan. A listing of adopted City plans with urban design components is provided in Appendix 6.

Placement. Site furnishings should be conveniently located for the pedestrian, but should not obstruct pedestrian circulation. Furnishings should be located where people congregate, such as at bus stops, in front of major attractions, and in parks and plazas. The placement of furnishings should not create visual clutter on the streetscape. Furnishings may be grouped together, where appropriate. However, trash receptacles should be placed in the vicinity of bench groupings, but not directly adjacent, because of wasps and other insects in summer months. Inappropriate existing furnishings should be removed, prior to locating new furnishings. Site furnishings can also be integrated into a site design as part of the proposed architecture such as walls and steps used as seating.

Durability and Maintenance. Site furnishings should be durable, both in construction and finish, and be easy to maintain and to install. Site furnishings should have vandal-resistant features. Replacement parts or components should be readily available and easily installed. Finish colors should be easily matched.

WALLS, FENCING, AND SCREENING

Design. The design of walls or fences and screening should be consistent with the design, materials, colors and textures of the adjacent buildings. Rooftop mechanical equipment should be screened by the building's roof line, with walls constructed of matching wall or roof material, or may be painted to match the roof color.

All trash receptacles, dumpsters, fuel tanks and significant building mechanical equipment on the exterior of a building should be screened.

Material and Color. When considering the design of new fences, materials, colors and finishes should be chosen that complement the materials, colors and finishes of the building. Masonry walls with iron gates are acceptable screening materials. Maintenance requirements should be considered when selecting fencing or screening materials. The Urban Design Committee strongly discourages the use of vinyl fencing materials.

Landscaping. Evergreen tree and/or shrub plantings should be located adjacent to walls and fences to strengthen their screening ability. Vertical gardens and green walls should be considered when possible. Evergreen trees and/or shrubs should also be planted adjacent to large screening enclosures to improve their appearance. Native plant species are preferred.

Chain Link Fencing. Chain link fencing is not an appropriate fencing material. It is the policy of the City Zoning Administration not to accept chain link with blinds as an appropriate screening material. The blinds are not durable and often disappear. If chain link is required, however, for safety or security purposes, the entire structure (fabric, posts and railings) should be coated with a dark colored vinyl, preferably black, and supplemented with sufficient evergreen landscaping. Barbed wire and razor wire are not appropriate fencing materials in most situations.

ENCROACHMENTS

Encroachments are any legal use of the public right-of-way by a private entity. There are many existing encroachments within the City of Richmond. Any new encroachments should be examined carefully and permitted sparingly because when allowed, they privatize the use of public space. The encroachment process for the City of Richmond is administered by the Department of Public Works (DPW). Changes implemented in December 2004 have streamlined the process for better customer service. There are two types of encroachments based on the type of work proposed; ones that can be administratively approved, and those that only City Council can authorize. The Urban Design Committee (UDC) provides an aesthetic recommendation to the DPW in regards to a number of types of above-grade administrative encroachments. The UDC requires its application process be followed, and reserves the right to require additional information if so needed. Encroachments preexisting 1954 are not subject to UDC review. The UDC reviews the application and makes a recommendation. When City Council is required to review an encroachment, the UDC reviews and provides a recommendation to the City Planning Commission, which then provides a recommendation to City Council. Applications for encroachments are initiated through the permitting process.

SIGNS (for additional guidance see Community Character Section)

Signs encroaching into the public right-of-way should be compatible in scale, style, and composition with the building or storefront design as a whole. Signs should not obscure a building's important architectural features and details that define a building's design, particularly in the case of older buildings. Signs should be placed so that they are sensitive to the signs of adjacent businesses. Freestanding signs should also relate to the architecture of the building. The base of signs may be constructed of building materials similar to the building to which it relates. Durable materials and quality manufacturing should be used for all signs. If a sign projects more than four inches into the public right-of-way, it must allow for a minimum clearance of eight feet above grade.

Additional Requirements. All signs are subject to the applicable sign requirements set forth in Article V of the City of Richmond's Zoning Ordinance.

LIGHTING (for additional guidance see Community Character Section)

Exterior building and accent lighting can be used to highlight architectural features and bring buildings to life in the evening. Exterior building and accent lighting can also improve the pedestrian environment by helping to light the sidewalk.

Design. Building-mounted light fixtures should not extend more than eighteen inches into the public right-of-way. If a fixture projects more than four inches, it must allow for a minimum clearance of eight feet above grade. Light fixtures should be shielded to prevent glare for pedestrians, motorists, adjacent businesses, residents, or tenants. Projected light or logos from canopies should be limited to shine only directly under the canopy or marquee. Moving, blinking, or strobe lights are discouraged for any light fixture encroaching into the public right-of-way. The uplighting of trees is supported by the UDC in cases where it is respectful of the context. Lighting in tree wells should be modest in scale and not ascend beyond the crown of the tree.

Additional Requirements. Proposed lighting improvements located within an area covered by an approved streetscape plan should be consistent with that plan. All outdoor lighting is subject to Section VI, Division 8 of the City of Richmond's Zoning ordinance. A list of recommendations for using LED lighting is provided in Appendix 7.

DOOR SWINGS

The Urban Design Committee does not support the encroachment of door swings into the public right-of-way. Recessed entries are encouraged. When a recessed entry is not feasible, the encroachment of the door swing into the public right-of-way should be minimized as much as possible.

SKY-WALKS ~~PEDESTRIAN BRIDGES~~

The Urban Design Committee does not support the use of sky-walks ~~pedestrian bridges~~ connecting buildings that span over the right-of-way. If they are used, the sky-walk ~~bridge~~ should span no more than the width of the right-of-way. Sky-walks ~~Pedestrian bridges~~ should be level, with little to no incline. The materials used for the construction of sky-walks ~~pedestrian bridges~~ should not be opaque or made of reflective material, so as to minimize the obstruction across the public right-of-way.

OUTDOOR DINING ENCROACHMENTS

Outdoor dining facilities can add life and vibrancy to the streetscape. However, they can also obstruct the public right-of-way and become a safety hazard. Outdoor dining facilities that encroach into the public right-of-way should only be considered when there is adequate sidewalk width to accommodate both the dining facilities and the pedestrian. Outdoor dining facilities should be maintained at street level; any change in grade between the sidewalk and the outdoor dining facility should be minimized. Outdoor dining facilities must be clearly delineated by vertical elements or fences when alcohol is served, in order to comply with the State of Virginia regulations for serving alcoholic beverages and to prevent the restaurants from spreading beyond their designated areas. Any barriers around the outdoor dining facilities should not be entirely solid or opaque.

The City currently has two types of outdoor dining categories: Sidewalk Café or Outdoor Dining Encroachment. A barrier must surround any outdoor dining space when alcohol is served, this applies to either Sidewalk Cafes or Outdoor Dining Encroachments. Furthermore, barrier access points must be controlled by the restaurant establishment. It is highly recommended that the outdoor dining furnishings should reflect the character of the restaurant while respecting the spirit of the street design.

Sidewalk Café. A Sidewalk Café is any group of tables, chairs, or other seating fixtures and all related appurtenances maintained within the public sidewalk and intended for the purpose of consumption of food or beverage by patrons, when such is located adjacent to a food or beverage service establishment having the same operator. A sidewalk café shall not be considered an "encroachment" as defined in Article I of Chapter 90 of the City of Richmond Code of Ordinance so long as all outdoor facilities related thereto are temporary in nature, are not permanently affixed so as to extend below, on or above the sidewalk, involve no penetration of the sidewalk surface, are not attached to any building and are readily removable without damage to the surface of the sidewalk. These temporary dining areas occupy part of the public right-of-way during eating establishment hours.

Sidewalk Cafes have their own guidelines which can be found here: http://www.richmondgov.com/PlanningAndDevelopmentReview/documents/Sidewalk_Cafe_GuidelinesRVA1.7.14.pdf

Outdoor Dining Encroachment. An Outdoor Dining Encroachment functions similar to a Sidewalk Café but does not need to be removed outside of eating establishment hours, thus encroaching into the public right-of-way in perpetuity. This type of outdoor dining category is reviewed as an encroachment where the UDC makes an aesthetic recommendation to DPW.

PARKLETS

Parklets are small platforms that take the place of two or more on-street parking spaces, converting curbside road space into public gathering space. Typically, parklets are sponsored by the business or organization that it is adjacent to due to the extent of maintenance that is required. The City of Richmond Urban Design Committee encourages the use of parklets as a unique way to incorporate public gathering spaces into existing, built-out urban settings throughout the city. Individuals interested in installing a parklet should refer to the City of Richmond's parklet Design Guidelines, which outline the approval process and design options. All parklets must be review by the Department of Public Works, the Department of Public Utilities, and the Department of Planning and Development Review.

The City of Richmond Parklet Design Guidelines can be found here: http://www.richmondgov.com/PlanningAndDevelopmentReview/documents/Parklet_Design_Guidelines.pdf

NEWSPAPER BOXES

One or more newspaper vending machines can create an eyesore or visual clutter in the streetscape. Therefore, newspaper vending machines should be consolidated into newspaper/utility enclosures or racks.

PLANTERS

~~Both hanging planters and planters placed on the ground are discouraged in the public right-of-way. Planters and the materials planted in them must be maintained at all times.~~ All planters must be removable for periodic maintenance and include a maintenance plan. Planters should be constructed of durable materials, which do not harm the streetscape. Treated wood and plastic are discouraged.

SECURITY GATES

Roll-down security gates are strongly discouraged. Security gates can have a negative impact on the character of urban shopping areas. If security gates must be used they should be located in the interior of the window in order to avert encroachments into the public right-of-way. The UDC supports the October 2, 1995 resolution of the City Planning Commission regarding a policy statement for security gates and door encroachments. This resolution can be found in Appendix 3.

BOLLARDS

Bollards in the public right-of-way and in tree wells are discouraged. If bollards must be used, they should be constructed of durable materials and should complement the architectural character found in the adjacent buildings without detracting from the harmony of other streetscape elements such as benches, street lights, trash receptacles etc. Bollards should not be placed in the travel way of on-street bike lanes, but should be used to protect the bike lane from vehicle traffic. Shared-use paths or greenways may implement bollards as a tool if there is ambiguity between motor vehicle travel-way and trail crossing.

AWNINGS AND CANOPIES

Type. Awnings and canopies should respect the shape of the storefront, door or window opening. Generally, fixed or retractable, sloped awnings are the traditional awning type and are appropriate for older buildings.

Size and Placement. Awnings and canopies should fit within the storefront, door or window opening. They should complement the scale of the building and should not overwhelm or dominate its facade. The size, type, and placement of awnings and canopies should not interfere with signs or distinctive architectural features and should not damage or obscure existing materials. Mounting hardware should be installed into mortar joints to avoid damaging existing masonry. The bottom of the valence of awnings shall be no less than 7’-0” above grade.

Material. The recommended material is canvas or vinyl-laminated polyester. The material should be flame retardant and should resist fading. Reflective or plastic-like fabrics are not recommended for traditional buildings or areas.

Color. Awning color should be coordinated as part of the building's overall color scheme. Buildings with complex color schemes should use subtle hues for awnings so not to overwhelm other details. Simple, unadorned buildings may use brighter colors to highlight the facade. Harsh or gaudy colors that compete for attention and detract from the building's overall image should be avoided.

Signage. Professionally applied lettering may be added to the valance area of an awning or canopy. Usually 4 to 8 inch high lettering is sufficient. The lettering should be silk-screened, heatcolor transfer or hand-painted. Spray painting is not recommended, as it tends to fade more rapidly, and self-adhesive vinyl is not durable, because the adhesive loses its bonding quality over time. Sign color should complement the awning or canopy color.

Illumination. The illumination, up-lighting or backlighting, of awnings and canopies may be supported as long as they are in compliance with Dark Sky design regulations. A lighting plan, that might include a

rendering and information on the type of light fixtures included, shall be submitted to the UDC administrative review.

Maintenance. The building owner should understand maintenance requirements. Fabric awnings generally last 5 to 7 years, and should be cleaned on a regular basis.

Additional Requirements. Design regulations are set forth in the Code of the City of Richmond, Chapter 26.1, entitled "Streets, Sidewalks and Public Ways."

Awning and canopy signage is subject to the applicable signage requirements set forth in the City's zoning ordinance.

BANNERS

The Urban Design Committee, at the request of the City Administration, is the review agency for all banners proposed to be erected in the public rights-of-way. The purpose of the City's Banner Program is to enhance the visual and aesthetic character of the City. ~~Advertising of for-profit commercial operations, political statements, and personal messages will not be considered as acceptable proposals. Each proposal will be reviewed on its own merit.~~

Location. Banners will only be allowed in certain commercial areas and only within the City rights-of-way. Banners located on private property are not subject to review by the Urban Design Committee, unless such banners encroach into the public right-of-way. Banners will be allowed on City-owned utility poles, only after it is determined that emergency access, overhead wires, sight lines, traffic signal conflicts, vehicle clearance, etc. will not be a factor. Banners proposed on utility poles which are not owned by the City must also be reviewed by the Urban Design Committee, if such banners will encroach over the public right-of-way. The Urban Design Committee or its designee must review the proposed banner locations and the number of banners at each location.

Message and Graphic Content. No personal messages, political messages, or any other form of advertisement will be allowed, with the exception of event banners in use no longer than 30 days. Such event banners may list sponsors. The character and design suitability of geometry, shape, pattern, color, and rhythm must be reviewed by the Urban Design Committee or its designee. Written messages on banners may not exceed 40% of the surface area of the banner. No arrows or other graphic techniques used to provide direction or "trail blazing", or other traffic control measures will be allowed.

Design. Rectangular banner shapes are preferred. However, other shapes may be considered, if secure mounting can be provided. The minimum width of any single banner panel is 10 inches. The maximum width is 2-1/2 feet. The minimum length of any single banner panel is 3 feet. The maximum length is 10 feet. The maximum area of a single banner is 25 square feet. The maximum total area of all banners on a

pole is 50 square feet. No more than two banners are allowed per utility pole. No colors, color combinations or designs are expressly prohibited. Each proposal will be reviewed on its own merit.

Materials and Maintenance. No materials are expressly prohibited. However, all banners must have wind relief cuts or feature similar techniques to minimize flapping, waving, and other wind load induced stresses. All banners must be maintained in an acceptable manner, regarding mounting height and security, orientation, plumb, rigidity, etc. The City shall have the right, at any time, to remove and dispose of any banner that becomes damaged, torn, stained, discolored, faded, or otherwise in such condition that the intent of the Banner Program is not being served. Each banner installation request must specify both installation and removal dates. No banner may remain in the same location for more than 12 consecutive months.

Mounting. The lowest point of any banner or mounting hardware must not be less than 12 feet above the ground level. At a minimum, the proposed mounting system must include a double rod bracket securing the proposed banner at the top and bottom. The mounting system must be safe for the public, must be removable from the utility pole with normal hand tools, and must in no way weaken or alter the physical characteristics of the utility pole. The Department of Public Utilities will determine compliance with the mounting criteria.

Additional Requirements. The regulations for the Banner Display Program, applicable to certain areas of the City, can be found in the Code of the City of Richmond, Section 90-256.

OVERHEAD WIRE AND CABLE ENCROACHMENTS

The Urban Design Committee supports the City Planning Commission's Resolution, dated February 6, 1995, which discourages new overhead wire and cable encroachments in the public right-of-way. (see Appendix 4.) All new wires and cables should be placed underground, as feasible. The Committee advocates that all existing overhead utility wires and cables should be relocated underground, as feasible, especially in neighborhood business and residential areas. The Committee encourages the development of a plan for a phased network of underground cable-ready infrastructure. This infrastructure would consist of a series of interconnected hollow tubing which could accommodate existing and future wires and cables. Implementation of such a plan would minimize the impact of overhead wires and cables on the visual environment, facilitate the placement of existing overhead wires and cables underground, and accommodate future wires and cables in an appropriate manner.