# 4 | PUBLIC REALM ELEMENTS

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## 4.1 CHAPTER INTRODUCTION

The purpose of this chapter is to provide a guide for addressing elements and situations that are common throughout the public realm and not specific to any one street or public space.

## 4.2 SUSTAINABILITY STRATEGIES

Incorporating sustainability strategies into the design of the public realm of the Diamond District will support human health and the health of the environment, improve the quality of life for all users, and help preserve this neighborhood for generations to come. Sustainability strategies aim to reduce some of the negative impacts that urban environments have on the natural environment by improving water, soil, and air quality, promoting biodiversity, treating stormwater in a manner that more closely mimics natural processes, reducing the consumption of materials and resources, and providing for alternative energy strategies. **Sustainability measures shall be incorporated into the design of the public realm to the greatest extent possible.** This includes but is not limited to the following:

- Selecting materials and products with low carbon and sustainable design elements
- Using regionally sourced materials and products
- Using recycled materials and products
- Selecting high durable, low maintenance materials and products.
- Providing electric vehicle charging stations for vehicles and e-bikes throughout the site
- Incorporating green infrastructure techniques to address stormwater
- Harvesting and reusing rainwater and greywater
- Installing pavement with high solar reflectance in sunny areas
- Increasing the urban canopy
- Using native plant species and removing invasive plant species
- Limiting the use of turf grass
- Using LED lighting and solar energy

Specific sustainability requirements can be found throughout this document. Refer to the Richmond Sustainable Design Standards for more information on the city's sustainability initiative.

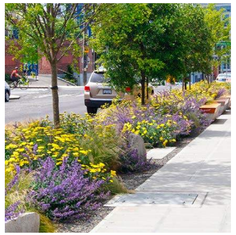
Electric Vehicle Charging Stations

Solar Bench

E-bike Charging Stations

## 4.3 STORMWATER MANAGEMENT

A site wide stormwater management plan shall be created that will include standards and specific locations for bio-retention facilities and vegetated swales in the sidewalk zones, medians, and linear park. Green infrastructure techniques shall be employed to the maximum extend practicable. Green infrastructure may include bioretention basins, green/vegetated roofs, rainwater and greywater harvesting & reuse systems, permeable paver systems, infiltration basins, bioswales, tree box filters, and other practices approved by the City.



Bioretention Planting

Bioretention Planting

Vegetated Swale

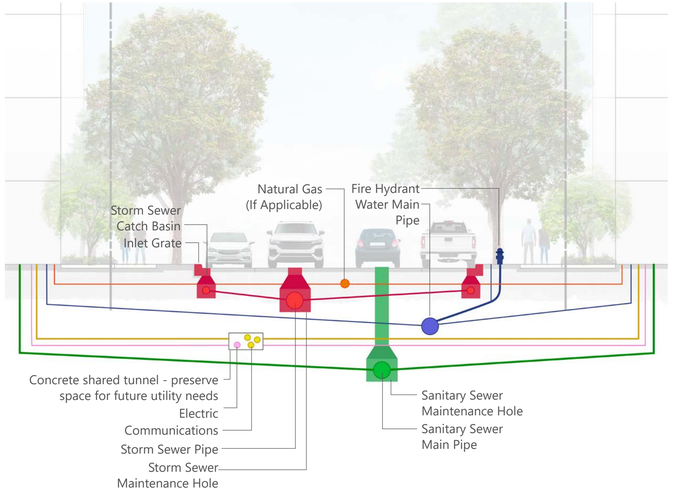
Vegetated Swale

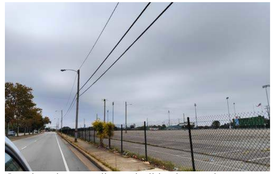




## 4.4 UTILITIES

*Conceptual Utility Section*



Overhead power lines shall be located underground

Discrete utility access cover

Decorative utility access cover

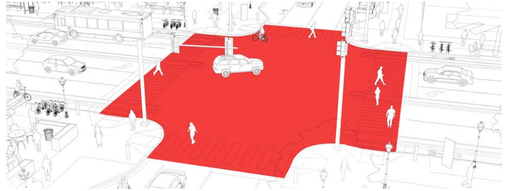
The location of utilities must be carefully planned so that they can efficiently and effectively provide services while minimizing conflicts between the utility and other elements of the streetscape. Potential points of conflict between utilities and street trees must especially be avoided.

### *Design Standards*

1. All utilities shall be located underground.
2. Utilities shall be situated within the roadway; should a utility need to be located within the sidewalk, a root barrier should be provided. Root barriers around laterals to buildings are recommended.
3. The City's Urban Design Guidelines recommend the development of a plan for a phased network of underground cable-ready infrastructure, which would consist of a series of interconnected hollow tubing which could accommodate existing and future wires and cables. Such a plan should be implemented in the Diamond District to 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.
4. All utility lines should be located so that they will not interfere with tree well locations.
5. Gas meters and other development specific equipment must not be located within the right-of-way.
6. Trees shall be pruned or located in a manner to maintain a 6-foot clearance from any streetlight so that the tree doesn't damage the streetlight or interfere with light that is being cast.
7. Transformers and other at grade utility equipment shall be located as unobtrusively as possible, such as in vaults either under the sidewalk or in the Frontage Zone. They shall not be located in the Pedestrian Travel Zone or any pedestrian or bicycle path of travel.
8. Transformers shall be situated strategically to accommodate Level 3 EV charging.
9. Utility access covers and other access points to below-grade equipment located in the public realm shall be metal and finished in a color or pattern that matches or compliments the surrounding pavement.
10. Grates, utility covers, and similar shall all be ADA, baby stroller wheel, and heel appropriate.
11. Mechanical equipment that is visible from the street shall be screened using walls, landscaping, or other materials. See section 7.9 Screening and Fencing.
12. No tree plantings or shrubs greater than 5' in height at maturity are permitted within the existing 20' high pressure gas easement along Robin Hood Road. See section 3.5in Hood Road.

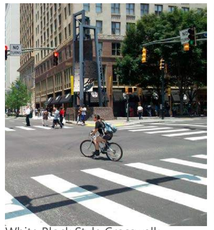
# 4.5 INTERSECTIONS & CROSSWALKS

Intersections are an area where pedestrian, bike, and vehicular traffic converge. It is important that design allows for all users to safely move through the intersection.



## *Design Standards*

1. Intersections should be designed to balance the needs of all road users, notably the most vulnerable users - pedestrians. Better Streets outlines three design principles for improving pedestrian safety and comfort: minimize crossing distance, minimize conflicts with turning vehicles, and provide sufficient signal time to cross the street at signalized intersections.
2. Curb extensions (bulb-outs) shall be used at all intersections where feasible. Curb extensions shall be long enough to ensure that no vehicle can park 20' from edge of crosswalk and 30' from stop sign.
3. Urban curb radii shall be used.
4. Refuge islands the width of the crosswalk shall be provided for streets with 4 or more travel lanes or over 60 feet of distance between curbs.
5. Crosswalks at signal controlled crossings and other crossing locations deemed appropriate by the City Traffic Engineer shall be high-visibility white block style pavement markings that avoid the predominant wheel tracking of the major through movements. Crosswalks at unsignalized crossings should be white transverse parallel lines. Crosswalks should be the same width as the sidewalk feeding them.
6. Crosswalks at unsignalized intersections on the Festival Street shall also be high-visibility white block style pavement markings due to the anticipated pedestrian volume. The use of stamped asphalt at these intersections may be permitted with City approval.
7. Mid-block crosswalks are not permitted without the use of a raised crosswalk or a crosswalk with a pedestrian hybrid beacon.
8. Raised crosswalks are permitted.
9. Pedestrian crosswalk signals shall be installed at all signalized intersections. Include a pedestrian delay on traffic signals.
10. "Two curb ramp crosswalks" where each curb ramp is directly aligned with a crosswalk shall be used at all intersections.
11. Trees at intersections shall be planted at least 25 feet away from the corner to allow for adequate line of sight in all directions. Landscaping placed within site triangles at intersections must not exceed 12 inches in height.
12. Bicycle lanes through intersections must be highly visible through the use of pavement markings and signage.
13. The use of roundabouts may be considered at certain intersections in order to more safely and effectively move vehicular, pedestrian, and bicycle traffic.



White Block Style Crosswalk

Stamped Asphalt

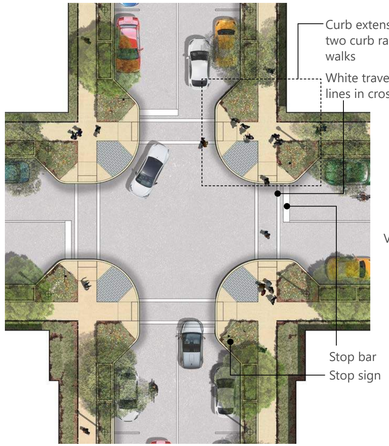
Raised Crosswalk

Curb Extension

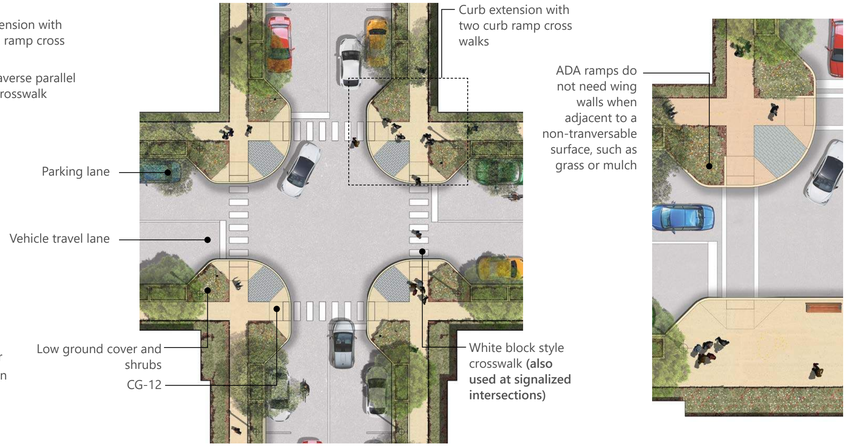




*Conceptual Intersection Plan - Unsignalized Intersection with Curb Extensions*




*Conceptual Intersection Plan - Festival Street Unsignalized Intersections*



# 4.6 CURBSIDE MANAGEMENT

Activity along the street generated by adjacent land uses places demands on the curb that require effective curbside management strategies. Limited curb space is increasingly in demand by competing factions. The growing list of curbside activities in the Diamond District may include:

- Long term and short term on-street parking for personal vehicles.
- Parking for emergency vehicles and police
- Passenger pick-up and drop off
- Parking for parcel and food delivery
- Parking for commercial delivery
- Transit stops
- Parking spaces with electric vehicle charging stations
- Parking for vendors and food trucks
- Stormwater management
- Curb cuts for driveways and alleys
- Parklets/curbside dining

EV Charging Station


Fire Lane Markings

Food Trucks

Curbside Dining

## *Design Standards*

A curbside management plan that corresponds to activities associated with adjacent land uses shall be developed for each block within the Diamond District. A wide variety of curbside management strategies that may be employed include:

- Using the same space for multiple designated curbside activities such as combining passenger pick up and drop off with parcel and food delivery zones, all of which are short term uses.
- Allocating permitted curbside uses by the time of day based on the needs of surrounding land uses.
- Dividing blocks into different zones with each zone accommodating a different curbside activity.
- Placing time limits or fees on certain activities at peak use times.
- Assigning specific spaces for specific activities or restricting the type of activities that are permitted.
- Implementing a curbside reservation system.
- Designating certain curb space for parking by permit only.

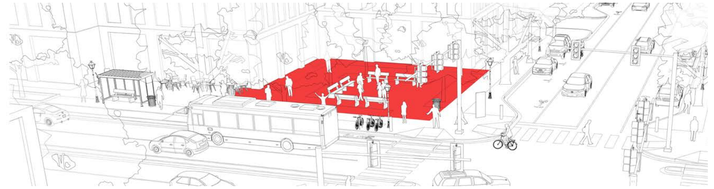
The following design standards apply to the Diamond District:

1. Curbside regulations, including permitted and prohibited activities, shall be clearly communicated to users via signage and proper street markings.
2. Emergency vehicle parking shall be located adjacent to the ballpark and shall be marked with signage and special asphalt paint pattern.
3. Fire Lanes shall be marked with signage and red indicator paint on the curb for the extent of the fire lane. Fire Lanes shall be pre-planned so that street parking can be maximized.
4. A high turnover/loading on-street parking spot shall be provided at the end of every block on both sides of the street when street parking is provided. High turnover locations shall be marked with signage and a special asphalt paint pattern. High turnover locations shall be signed as 15-minute parking or rideshare/delivery parking.
5. On-street parking shall be provided on both sides of the street as often as possible.
6. Parking spaces with electric vehicles supply equipment shall be provided throughout the Diamond District. A mix of Level 2 and Level 3 chargers shall be provided throughout the site.
7. Curbside space along the Festival Street shall be designed to accommodate vendors and food trucks during special events.





# 4.7 PUBLIC GATHERING SPACE CONSIDERATIONS



Special treatment at street corner

Gathering space in the buffer zone

Well planned public gathering spaces can encourage activity and draw people to the Diamond District year-round. Spaces should offer a wide range of activities and meet a wide range of users needs. Careful consideration should be given to how each space will be used. The elements that will tie each space together and make it recognizable as being part of the Diamond District will be the landscape palette, hardscape materials, and site furnishings.

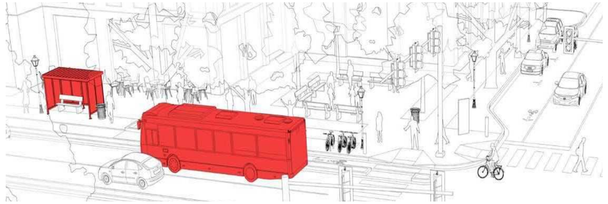
## *Design Standards*

1. Gathering spaces shall be visually and physically connected to the street network via a network of tree lined sidewalks, shared use paths, and other pedestrian and bicycle circulation routes.
2. A variety of gathering spaces shall be incorporated into the public realm; spaces for active and passive recreation, large and small groups, and people of various ages and abilities. Programmed activity areas as well as flexible use spaces that can be adapted for a variety of uses and activities shall be provided.
3. Public gathering spaces must be compatible with adjacent land uses.
4. Gathering spaces shall contain the appropriate levels of seating, lighting, shade, plantings, and other amenities to make them desirable places in which to spend time.
5. Pedestrian scale lighting shall be provided throughout gathering spaces.
6. Large gathering spaces shall have numerous entrances and exits.
7. The pedestrian path of travel shall be a minimum of 8' wide and clearly delineated within a gathering space.
8. Gathering spaces shall be buffered from Street Zone through the use of street trees, landscaping, and planters. Bollards may be used with City approval. See section 7.8 Bollards & Planters for more information.
9. Incorporate existing natural features and utilize sustainable design practices to the extent possible.
10. Seating and spaces for vendor kiosks shall be incorporated into the Buffer and Frontage Zones at key locations through the Diamond Site.
11. At least one community garden shall be located within the Diamond District near residential areas.
12. **A 10' wide pedestrian path of travel from the main game day parking garage(s) to the ballpark must be provided.**

# 4.8 PUBLIC TRANSIT CONSIDERATIONS

## *Design Standards*

1. New or relocated transit stops shall be determined via a collaborative effort between the Greater Richmond Transit Company (GRTC) and the City's Department of Public Works (DPW).
2. Transit stops shall not be located mid-block unless adjacent to a crosswalk with a pedestrian hybrid beacon or raised crosswalk.
3. Transit stops shall be located within curb extensions for any stops on the interior of the Diamond District site. Curb extensions shall not be used along N. Arthur Ashe Boulevard, Hermitage Road, or Robin Hood Road.
4. Areas around transit stops should be well lit to provide greater visibility and safety at night.
5. See section 7.11 Essential Transit Infrastructure for information on transit shelters and other transit infrastructure.




Curb Extension At Transit Stop

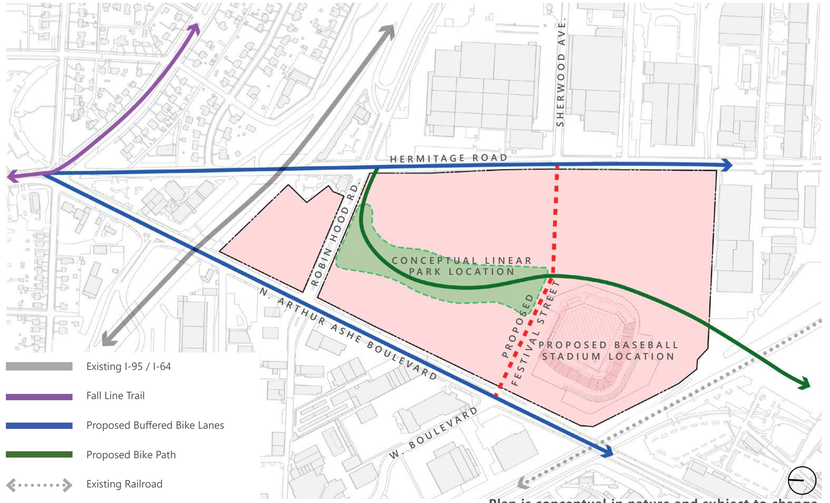

Pulse Transit Stop





# 4.9 BICYCLE CONSIDERATIONS

*Conceptual Bicycle Circulation Routes*




**Plan is conceptual in nature and subject to change.**

Bicycle facilities within the Diamond District that connect to the greater city wide bicycle network should be provided along with associated bicycle amenities.

## *Design Standards*

1. Buffered bike lanes shall be provided along Hermitage Road.
2. Buffered bike lanes shall be provided along N. Arthur Ashe Boulevard.
3. An off street bicycle path shall be provided through the linear park. Off street bicycle facilities shall be a minimum of 10' wide.
4. Bicycle lanes, including direction of travel, must be clearly marked with pavement markings and signage. Bicycle lanes through intersections must be made highly visible through the use of pavement marking and signage.
5. Bike crossings shall be signalized.
6. See section 03 Street Network & Streetscape Standards information regarding N. Arthur Ashe Boulevard and Hermitage Road.
7. See section 7.6 Bicycle, E-Bike, & Scooter Amenities regarding bike storage and other bike related amenities.

# 4.10 BRANDING CONSIDERATIONS

The Diamond District will be a special neighborhood destination within the City of Richmond. A recognizable branding campaign linked to a greater strategy of marketing the development shall be undertaken. A recognizable branding theme shall celebrate and promote the aspects of the Diamond District that make it unique place within the city - particularly the ballpark and the linear park. Successful branding can contribute to making the Diamond District a vibrant and economically successful community by:

- Generating excitement about the Diamond District, thus drawing the attention of potential residents, businesses, and visitors to the District
- Encouraging a sense of belonging and community pride
- Encouraging community collaboration efforts

## *Design Standards*

1. A logo and slogan for the Diamond District shall be developed that can be consistently applied to elements throughout the public realm.
2. The Diamond District logo shall be applied to banners, benches, wayfinding, and interpretive signage.
3. Gateway features shall be used to market the District and define its edges.
4. Banners shall be placed on light poles along streets to promote the Diamond District as a whole and to promote special events and festivals within the DIstrict.
5. Sidewalk medallions that promote the Diamond District at key locations may be installed.
6. Artwork or murals that celebrate the Diamond District may be installed.
7. See section 7 - Site Furnishings and Amenities for more information on signage, wayfinding, gateways, banners, and public art.

*Examples of Community Branding*

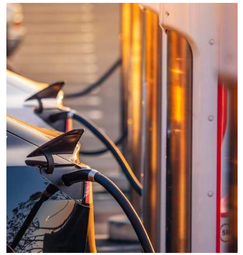








# 4.11 SMART CITY ELEMENTS



Per the City of Richmond Smart Cities Initiative Vision Statement, "The City of Richmond envisions a future where digital solutions integrate seamlessly into operations, infrastructure, and services, optimizing efficiency, accessibility, and sustainability. By prioritizing citizen engagement, collaboration, and urban planning, we create a resilient, vibrant city."

The City of Richmond is in the process of developing a Smart City plan. In the absence of a city wide Smart City plan, some Smart City elements that may be included in the Diamond District are:

- Public Wi-Fi
- Charging stations for electronic devices, which may be located in seating throughout the community
- Smart adaptive LED lighting
- Environmental sensors
- Smart parking for daily use and event use
- API to link together various smart technology solutions

In the future, a larger city wide smart city planning initiative may determine other ways Smart City elements can be used in the Diamond District.

- **NEED MORE SPECIFICS FROM THE CITY**

# 5 | PAVING & SURFACE MATERIALS

Credit: F11Photo

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## 5.1 CHAPTER INTRODUCTION

Paving materials and patterns in the Diamond District should be used to define spaces within the public realm, add beauty and texture, draw attention to special features, and provide visual cues to help pedestrian, bicycle, and vehicular traffic safely navigate the Diamond District. It is important that materials and patterns are well coordinated throughout for a cohesive, comfortable environment. The use of too many paving materials or patterns can be distracting or unsettling, detracting from the outdoor spaces by competing with other elements of the public realm. Too few materials and patterns, and the hardscape becomes a bland background that doesn't serve the aforementioned purposes. Paving should serve as a neutral surface with simple patterns and clean lines to help highlight and enhance other aspects of the public realm including the landscape, amenities, and site furnishings. Paving selections may vary from street to street provided that there is a seamless transition between streets. Paving in the public realm shall be selected based on durability and performance, maintenance requirements, cost, aesthetics, compatibility with adjacent materials and landscaping, and environmental considerations.

# 5.2 THE SIDEWALK ZONE

The Sidewalk Zone consists of the Frontage Zone, the Pedestrian Travel Zone, and the Buffer Zone. Each Zone serves a different purpose. The Frontage Zone serves as a buffer between pedestrians in the Pedestrian Travel Zone of the sidewalk and activities associated with adjacent buildings, including opening doors, storefront seating, and outdoor dining. The Pedestrian Travel Zone is reserved for active pedestrian use and must be free of all impediments. The Buffer Zone provides a safe separation between pedestrians in the Pedestrian Zone and vehicles in the Street Zone. Paving shall be used to differentiate each zone of the sidewalk.

## *General Design Standards*

1. Poured concrete shall be natural in color. Dyed or stained concrete is not permitted.
2. Stamped concrete is not permitted.
3. All joints in poured concrete shall have a tooled edge. Decorative joints in poured concrete shall be hand tooled.
4. Poured concrete shall have a broom finish perpendicular to the direction of travel.
5. Concrete pavers shall be natural color or gray tones.
6. Pavers shall be square edge pavers with hand tight joints.
7. Paving shall have a slip resistent surface.
8. Differences in materials and scoring or paving patterns shall differentiate the Frontage Zone, the Pedestrian Travel Zone, and the Buffer Zone. Materials and patterns should be complimentary to each other to create a cohesive environment.

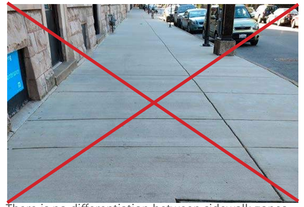
Scoring pattern differentiates the Buffer and Pedestrian Travel Zones

Materials and paving patterns differentiate the Buffer and Pedestrian Travel Zones

Diamond scoring pattern

Plank style pavers

Dyed and/or stamped concrete is not permitted.

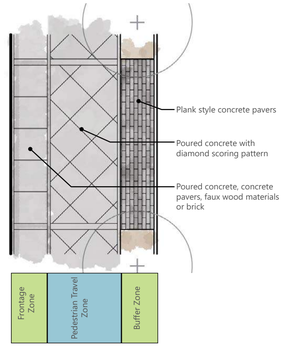


There is no differentiation between sidewalk zones.

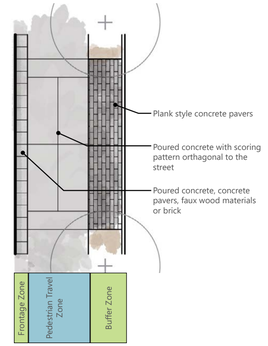




*Conceptual Paving Pattern - Festival Street*




*Conceptual Paving Pattern - Typical Street*




## *Frontage Zone Design Standards*

1. Poured concrete, concrete pavers, faux wood materials or brick may be used in the Frontage Zone.
2. Paving materials and patterns in the Frontage Zone shall be coordinated with the hardscape within the setback to create a seamless transition.

## *Pedestrian Travel Zone Design Standards*

1. Paving in the Pedestrian Travel Zone shall be poured concrete with a consistent scoring pattern no tighter than 3' x 3'. An occasional strip of concrete or concrete pavers with a varied scoring pattern tighter than 3' x 3' may bisect the Pedestrian Travel Zone to emphasis a significant feature, such as an important buildings entrance or open space.
2. Scoring or paving patterns shall be looser in the Pedestrian Travel Zone than in the Frontage or Buffer Zones so as to clearly delineate the pedestrian realm.
3. A diamond scoring pattern shall be used in Pedestrian Travel Zone of the Festival Street. A scoring pattern that is orthgonal to the streetshall be used on all other streets.
4. Paving shall continue across driveway aprons and service entry drives that cross the Pedestrian Travel Zone to maintain a consistent streetscape material for the length of the sidewalk. A distinguishing band of material or change in scoring pattern shall clearly highlight the edge of the drive, visually marking the transition from the sidewalk to the driveway crossing.

## *Buffer Zone Design Standards*

1. Paving materials in the Buffer Zone shall be poured concrete or concrete pavers.
2. Plank style pavers shall be used
3. The use of permeable paving systems shall in used in the Buffer Zone as often as possible. Selected permeable pavers must be able to receive winter treatment.
4. Balance paving selection and construction with the installation needs of street trees and landscaping to allow for trees to flourish and hardscape to remain in good condition.
5. Special paving treatment at significant street corners, such as a special paving pattern, is encouraged.

# 5.3 PUBLIC GATHERING SPACES

Public gathering spaces can include plazas, parks, mews, courtyards, etc. Public gathering spaces will include pedestrian circulation routes and even bicycle circulation routes as well as gathering spaces. Paving can be use do define these spaces, much as it is used to differentiate the three different Sidewalk Zones.

## *Design Standards*

1. Pedestrian circulation routes must be at least 8' wide through public gathering spaces. They shall be poured concrete or concrete pavers with a consistent scoring pattern no tighter than 3'x3'. An occasional strip of concrete or concrete pavers with a varied scoring pattern tighter than 3' x 3' may bisect the pedestrian circulation routes to emphasis a significant feature, such as a building entrance or a fountain or to differentiate the gathering space where it meets the Sidewalk Zone.
2. Paving materials used outside of pedestrian circulation routes shall be poured concrete or concrete pavers.
3. Poured concrete shall be natural in color. Dyed or stained poured concrete is not permitted
4. Stamped concrete is not permitted.
5. Poured concrete used in pedestrian circulation routes should have a broom finish perpendicular to the direction of travel.
6. All joints in poured concrete shall have a tooled edge. Decorative joints in poured concrete should be hand tooled.
7. Concrete pavers shall be natural color or gray tones.
8. Paving patterns should be well thought out and designed to draw attention to significant features, such as an important buildings entrance, pubic art, or a fountain. Variations in hardscape along with landscaping should be used to differentiate "rooms" within a gathering space or outdoor seating areas. Paving materials and patterns shall be complimentary to each other to create a cohesive environment. Landscaping should be used to break up and soften large expanses of paving in public gathering spaces.
9. The use of permeable paving systems shall in used in public gathering spaces as often as possible. Selected permeable pavers must be able to receive winter treatment.
10. Paving shall have a slip resistent surface.
11. Pavers shall be square edge pavers with hand tight joints.
12. Balance paving selection and construction with the installation needs of trees and other landscaping to allow for trees to flourish and hardscape to remain in good condition.










# 5.4 BUFFERED BIKE LANES & SHARED USE PATHS

## *Design Standards*

1. Bike lanes located within the Sidewalk Zone, such as on on N. Arthur Ashe Boulevard and Hermitage Road, shall be poured concrete. Asphalt is not permitted.
2. Bike paths and shared use paths that are located in an independent right-of-way or easement separate from the Sidewalk Zone shall be poured concrete. Permeable plank style pavers may be used with City approval. Asphalt may be used with City approval. Additional surface materials may be used with approval if wetlands or fragile eco-systems are present.
3. Bike lanes and shared use paths shall be clearly marked with lane stripping and arrows to show the direction of travel and to differentiate between pedestrian and bike circulation.
4. Crosswalks where bike lanes or shared use paths intersect with vehicular traffic shall be properly marked.
5. The use of porous asphalt is not permitted.

# 5.5 THE STREET ZONE

The Street Zone is located within the right-of-way between the two opposite curbs. The Street Zone consists of the Parking Lane and the Travel Lane. The Street Zone is for vehicle and bicycle travel, parking, and other curbside activities.

## *Design Standards*

1. Vehicular Travel Lanes shall be asphalt.
2. A permeable concrete paving system may be used with approval for Parking Lanes in the Street Zone and in alleys. Selected permeable pavers must be able to receive winter treatment. Concrete pavers shall be natural color or gray tones.
3. Pavers shall be square edge pavers with hand tight joints.
4. Bike lanes located in the Street Zone shall be asphalt. Bike lanes should be properly marked with directional signage and to differentiate them from vehicular travel lanes. Asphalt paving may be painted solid green or with green stripes to draw attention to bike lanes at areas where bike and vehicular traffic may conflict such as intersections.
5. The use of porous asphalt is not permitted.
6. Grass block or turf block pavers are not permitted.
7. See section 4.5 Intersections & Crosswalks for information regarding materials in crosswalks.
8. See section 3.6 Festival Street for information regarding the treament of the Street Zone in the Festival Street.
9. Any coatings applied to asphalt, such as lane markings, street murals, shall have a reflective coating.


Poured concrete bufferd bike lane


Poured concrete bike path


Permeable pavers in parking lane


Permeable pavers in parking lane


Porous asphalt is not permitted

# 6 | LANDSCAPE

Credit: F11Photo

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## 6.1 CHAPTER INTRODUCTION

A well designed urban landscape should define outdoor spaces, soften the public realm, and positively effect the environment, wellbeing, and safety. A landscape that changes with the seasons will add beauty and visual interest year round. Lush landscaping will provide people with a connection to nature which promotes relaxation and lowers stress. It should also bring the scale of a place to the pedestrian level and add value to adjacent properties. Trees and plants in an urban setting can reducing storm water runoff, improving air quality, provide habitats for animals, and reduce the heat island effect. Landscaping should provide shade and act as a buffer from traffic, making a street feel more comfortable thus encouraging people to walk and gather outdoors rather that drive. Choosing the right plant palette, proper installation and soil volume, and on-going maintenance are all critical components for achieving the benefits of the landscaped environment within the Diamond District.

# 6.2 STREET TREES

The inclusion of consistently spaced street trees on both sides of the street are a priority for all streets within the Diamond District. They provide shade and beauty and act as a natural buffer between pedestrians in the Pedestrian Travel Zone and vehicular traffic in the Street Zone. Street trees also reduce the negative effects of urban heat islands. Street trees placed within the Buffer Zone and along pedestrian walkways in public gathering spaces help define the Pedestrian Travel Zones, providing a feeling of safety and comfort. Street trees can also have a traffic calming effect by slowing driving speeds and creating a visual wall that helps keep drivers on the road.

## *Design Standards*

1. Street Trees shall be consistently spaced along the street within the Buffer Zone. The location of utilities shall be secondary to tree placement. When large street trees are used, they shall be spaced a minimum of 40-45 feet apart. Medium street trees shall be spaced 30-35 feet apart, and small street trees shall spaced a minimum of 25 feet from each other. Adjustments in spacing is expected to accommodate for certain conditions such as drop inlets, underground utilities, pedestrian lights, signage, and driveway entrances/curb cuts, etc. Locations may have to be adjusted to provide adequate building access for fire trucks. Trees should not be planted within 25 feet of an intersection or 15 feet of a curb cut.

2. Street trees shall be appropriate for the street conditions they are placed within. When choosing a street tree, consider the adjacent land uses, the scale of adjacent buildings, the street width, the sidewalk width, available sunlight, the direction of the sun and shadows that will be cast, and the surrounding landscape, a well as the ultimate height, form, growing needs of the tree, and available soil volume.
3. Street trees shall be centered in tree wells. When possible, street trees shall be at least 3 feet from the back of curb. Individual tree wells shall be a minimum of 6' x 10'. The use of tree grates over tree wells is prohibited.
4. Raised curbs around tree wells and planting strips are prohibited.
5. Tree wells and planting strips shall extend to the back of curb.
6. In as much as possible, street trees of the same species shall be planted along a single block face of a street for consistency and to maximize visual impact. Where circumstances may prohibit the use of the same species for the entirety of a block face (i.e. overhead utilities), a second species of a similar texture and form should be used. A different street tree species may be used to highlight intersections. Street tree species may vary by block.
7. Coordinate alignment between trees on both sides of the street and maintain that alignment as much as possible.
8. Street trees shall be chosen from the Street Tree Palette provided. Final plant selection must be approved by the City of Richmond.
9. Street trees must be deciduous, draught tolerant, and wet foot tolerant. All plants listed on the Virginia Department of Conservation and Recreation Invasive Plant Species are prohibited.
10. Tree well surface shall be permeable and covered with mulch. If adequate soil volume is available, street trees may be combined with low level plantings such as hardy ground cover or grasses to help to soften the streetscape. Pea gravel is not permitted under street trees.
11. Street trees shall be planted along pedestrian routes / trails in public gathering spaces to the maximum extent practicable.
12. Choose smaller street trees from the plant palette where overhead utilities are present to prevent trees from impacting the utilities.

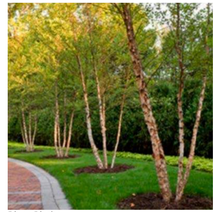




## *Street Tree Palette*

- Horsechestnut (Aesculus hippocastanum)
- River Birch (Betula nigra)
- Beech (Fagus grandifolia)
- Ginkgo (Ginko biloba)
- Fruitless Sweetgum (Liquidambar styraciflua 'Rotundiloba')
- Cucumber Tree (Magnolia accuminata)
- Tupelo (Nyssa sylvatica)
- Persian Ironwood (Parrotia persica)
- London Planetree (Platanus acerifolia)
- Oak (all species)
- American Linden (Tilia americana)
- Littleleaf Linden (Tilia cordata)
- American Elm (Ulmus americanus)
- Lacebark Elm (Ulmus parvifolia)


Horsechestnut


River Birch


Beech


Ginko


Fruitless Sweetgum


Cucumber Tree


Tupelo Tree


Persian Ironwood


London Planetree


Oak Tree


American Linden


Littleleaf Linden


American Elm


Lacebark Elm


Low level plantings under street trees

# 6.3 OTHER TREES & PLANTS

Besides street trees, additional landscaping in the Diamond District should be used to further enhance the street environment and define spaces or "rooms" within the public realm as places for gathering, playing, or just relaxing. Trees and plants should be used to provide shady areas of respite. Planted areas shall contain a diverse mix of plant species to add color and visual interest year round. Landscaping shall also be used to frame points of interest along the streetscape, and call attention to building entrances. A hierarchy of trees and plants should be used in planting beds to provide texture and dimension, Including deciduous trees, evergreen trees, shrubs, perennials and ground cover.

## *Design Strategies*

1. Where space allows, landscaping in the Frontage Zone is encouraged whether in raised planters or planting beds. Trees and plants shall be used to identify building entrances, provide shade for outdoor dining, and further define the Pedestrian Travel Zone.
2. In addition to street trees, shrubs, perennials, and ground cover may be used in the Buffer Zone to further delineate the Pedestrian Travel Zone, add beauty to the street, and define gathering spaces where their is sufficient space.
3. Trees, shrubs, perennials, and ground cover shall be grouped together in well composed planting beds rather than in individual, scattered locations. Landscaping shall include a diverse palette of plant species.
4. A planting palette shall be chosen that provides year round beauty and visual interest.
5. A similar palette of tree and plant species shall be planted along the length of the block for consistency and to maximize visual impact.
6. Trees and plants shall be appropriate for the street conditions they are placed within. When choosing a plant palette, consider the adjacent land uses, the scale of adjacent buildings, the street width, the sidewalk width, available sunlight, the direction of the sun and shadows cast, and the surrounding landscape, a well as the ultimate height, form, and growing needs of the selected trees and plants.
7. Trees and plants shall be chosen from the Plant Palettes provided. Final plant selection must be approved by the City of Richmond.
8. Trees and plants must be draught tolerant, and wet foot tolerant. All plants listed on the Virginia Department of Conservation and Recreation Invasive Plant Species are prohibited.
9. Plant materials shall be adaptable to existing soils, climatic and lighting conditions, and be disease resistant.
10. Trees that produce suckers are not permitted.
11. Edible landscaping may be used near residential uses.
12. Large and medium evergreen trees may be used for screening or as a consistent background with deciduous trees and plants planted in the foreground. See section 7.9 Screen & Fencing for further information.
13. Trees selected from the Tree Palette provided shall be used instead of street trees in medians and roundabouts.
14. Large areas of mulch without plant material are prohibited.
15. Landscaping placed within site triangles at intersections must not exceed 12 inches in height.
16. The use of edible landscaping may be used where appropriate.
17. Landscaping shall allow for surveillance and policing activities. Avoid using high hedges and landscaping that block visibility.









## *Tree Palette (not street trees)*

- European Hornbeam (Carpinus betulus)
- American Hornbeam (Carpinus caroliniana)
- Eastern Redbud (Cercis canadensis)
- White Fringetree (Chionanthus virginicus)
- Kousa Dogwood (Cornus kousa)
- Hawthorne (Crataegus)
- Carolina Silverbell (Halesia caroliniana)
- Southern Magnolia (Magnolia grandiflora)
- Sweetbay Magnolia (Magnolia x soulangeana)
- Ornamental Cherry (Prunus serrulata / Prunus yedoensis)

## *Shrubs Palette*

- Callicarpa americana (American beauty berry)
- Ceanothus americanus (new Jersey tea)
- Cornus sericea (Red twig dogwood)
- Euonymus americanus (heart's-a-bustin')
- Ilex glabra (inkberry)
- Ilex vomitoria (yaupon)
- Itea virginiaca (Virginia sweetspire)
- Junperus horizontalis (creeping juniper)
- Morella cerifera (Wax Myrtle)
- Viburnum acerfolium (maple-leaved viburnum)

## *Ferns Palette*

- Dryoptersis marginalis (marginal wood fern)
- Polystichum acrostichoides (Christmas Fern)

## *Grasses Palette*

- Andropogon ternarius (splitbead bluestem)
- Eragrotis spectabilis (purple love grass)
- Panicum virgatum (switchgrass)
- Muhlenbergia capillaris (muhly grass)
- Schizachyrium scoparium (little bluestem)
- Chasmanthium latifolium (river oats)

## *Vines Palette*

- Gelsemium sempervirens (Carolina jessamine)
- Lonicera sempervirens (coral honeysuckle)

## *Forbs Palette*

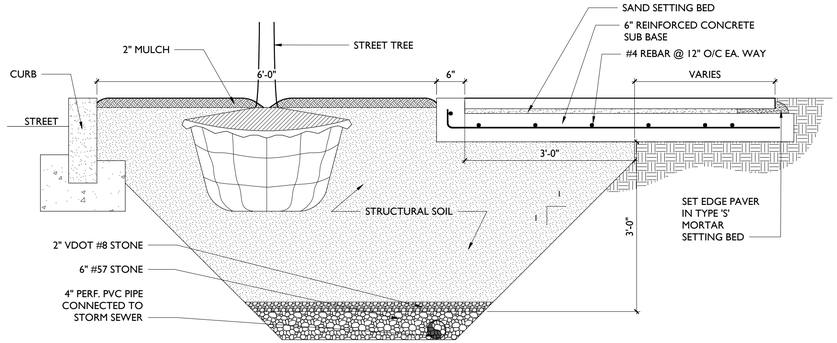
- Achillea millefolium (yarrow)
- Agastache rugosa (Butterfly mint)
- Amsonia illustris (Ozark bluster)
- Asclepias syriaca (common milkweed)
- Asclepias tuberosa (butterfly weed)
- Aquilegia canadensis (columbine)
- Baptisia australis (false indigo)
- Coreopsis tinctoria (plains coreopsis)
- Coreopsis verticillata (threadleaf coreopsis)
- Conoclinium coelestinum (blue mistflower)
- Eutrochium fistulosum (hollow Joe-pye weed)
- Heliopsis helianthoides (smooth Oxeye)
- Heuchera (coral bells)
- Hypericum prolificum (St John's-wort)
- Liatris Pilosa (gayfeather blazing star)
- Liatris spicata (dense blazing star)
- Monarda fitulosa (wild bergamot)
- Phlox divaricate (woodland phlox)
- Pycanthemum muticum (clustered mountain mint)
- Pycanthemum tenuifolium (narrow-leaf mountain mint)
- Rudbeckia fulgida (orange coneflower)
- Rudbeckia hirta (black-eyed susan)
- Salvia lyrate (lyre-leaf sage)
- Symphyotrichum novae-angliae (New England Aster)
- Symphyotrichum novi-belgii (New York Aster)
- Verbena hastata (Blue Vervain)
- Vernonia noveboracensis (New York Ironweed)
- Waldsteinia fragarioides (barren strawberry)
- Yucca filamentosa (common yucca)
- Zizia aurea (golden Alexanders)

# 6.4 PLANTING & INSTALLATION DETAILS

## *Design Standards*

1. Soil volumes for tree wells should range from a minimum of 45 cubic feet (CF) for smaller trees with a required 3' depth, to a minimum of 180 CF for larger trees.
2. A continuous tree trench should be used whenever possible to provide the most CF of soil.
3. All street trees shall in planted in tree wells that are at least 6' x 10'.
4. Cantilevered (suspended) pavement system or a structural soil cell systems shall be used for all tree wells.
5. Tree wells should be fully excavated and backfilled with clean, debris free soil to ensure maximum tree viability.
6. The design of new tree wells should incorporate stormwater infrastructure by directing stormwater from the gutter into a tree's root zone through drains or curb cuts.
7. Hard ground cover such as gravel or pavers is not permitted in tree wells.
8. Street trees shall be 2 1/2" caliper at the time of planting.
9. Structural soils shall be used when trees are surrounded by hardscape.
10. Planting beds shall be mulched with a 2 or 3-inch layer of brown shredded bark except where shrub and ground cover plants provide a solid mass.
11. Automatic drip irrigation shall be provided whenever possible, particularly when ideal planting conditions cannot be met. A drip ring design is preferable over a flood bubbler design to reduce risk of root disease issues. All irrigation systems shall be commercial grade equipment and piping. Systems shall be provided with soil moisture sensors and rain check gauges to prevent unnecessary water use. Backflow preventers and controllers shall be screened from public view. All irrigation systems shall have controllers which automatically turn the system on and off. All irrigation systems shall be installed by qualified irrigation contractors. Zones shall be provided that account for the varying water needs of different plant types, species, and lawn areas.

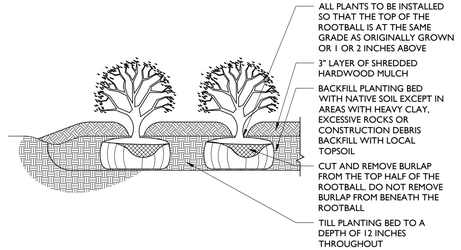
## *Cantilevered Tree Well System*



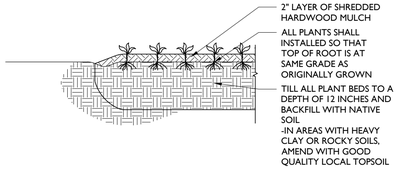





## *Shrub Planting Detail*




## *Ground Cover Planting Detail*




## *Structural Soil Cell System*

# 6.5 TURF GRASS LAWN AREAS

Lawns can provide wide open spaces for play, relaxation, people watching, and gathering for a picnic. While they may be found in limited instances within the public realm of the Diamond District GRASS ONLY IN SOME PLACES

## *Design Standards*

1. The use of turf grass shall be limited to larger, contiguous areas meant for recreation. Turf grass is not permitted in the Sidewalk Zone or medians.
2. Structural soils shall be used for all turf grass areas.
3. Turf grass lawns shall be cool season varieties such as Tall Fescue, Kentucky Bluegrass, or a blend. The use of warm season grasses for lawn areas is discouraged.
4. Where turf grass is used, it is required to be sod.
5. Turf grass shall be irrigated.
6. The use of synthetic turf may be permitted with city approval in specific limited instances such as play areas. Synthetic turf should be green.
7. Turf grass lawns shall be broken up by pedestrian and bicycle paths and areas of landscaping to provide access to the lawn, occasional shade, frame views and add color and visual interest.

# 6.6 MAINTENANCE

Proper maintenance of all landscaped areas is critical for ensuring healthy tree and plant growth and for achieving the benefits the landscaped environment will bring to the Diamond District.

## *Design Standards*

1. A maintenance plan that specifies the entity responsible for upkeep shall be provided with all street trees plantings and landscaping.
2. All tree pruning shall be conducted under the supervision of a certified arborist.
3. Hazardous, dead, or dying trees shall be removed and replaced.
4. Trees shall be trimmed to maintain a vertical clearance of 14-feet where they extend over a roadway and 80 inches where they extend over sidewalks.
5. Trees and shrubs shall be trimmed to maintain a 10' overhead clearance where they extend over bike paths.
6. Trees shall be pruned to maintain a 6-foot clearance from any street light.
7. Trees shall be pruned to maintain a 2-foot clearance from any building facade and building signage.
8. Re-mulch as needed to maintain the appropriate layer of brown shredded bark mulch in mulch beds.
9. Turf grass lawns shall be mowed on a regular basis so as not to exceed 3-inches in height.
10. Turf grass lawns shall be aerated and seeded every fall.
11. Irrigation systems shall be maintained in proper working order.
12. If a maintenance plan includes pest and weed control, only organic, chemical-free treatments shall be utilized.
13. De-icing can negatively effect tree health. De-icing methods that have the least impact on tree growth shall be used.

# 7 | SITE FURNISHINGS & AMENITIES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## 7.1 INTRODUCTION

The integration of site furnishings and amenities plays a pivotal role in enhancing the functionality, aesthetics, and overall user experience of the public realm. These elements, which range from benches, waste receptacles, and lighting fixtures to bicycle racks, planters, and informational kiosks, are fundamental components that contribute to the livability and appeal of urban environments. Site furnishings can transform the public realm into vibrant, welcoming outdoor rooms that encourage community interaction, promote sustainability, and reflect the unique character of the Diamond District.

## 7.2 GENERAL DESIGN STANDARDS

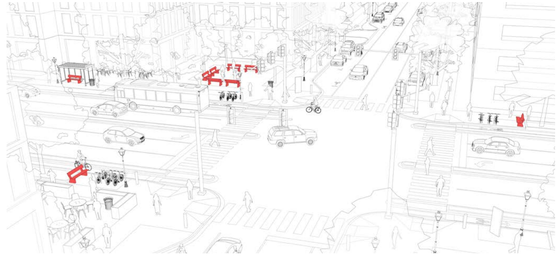
1. Site furnishings shall be located where people congregate, such as at bus stops, along mixed use streets, in front of major attractions such as the ballpark, and in public gathering spaces and recreation areas.
2. The placement of site furnishings should not create visual clutter in the public realm. Furnishings may be grouped together, where appropriate.
3. Site furnishings shall be appropriately styled and scaled to complement building architecture and to reinforce the character of the public realm.
4. Site furnishings may also be integrated into a site design as part of the proposed architecture, such as walls and steps used as seating.
5. Unless otherwise specified, furnishings shall be metal, wood, or resin, appropriate for outdoor use.
6. All exposed metals shall be coated or otherwise treated to withstand oxidation/ corrosion, abrasion, and damage from airborne salts.
7. Wood shall be Forest Stewardship Council (FSC) certified. The use of wood from the “Red List” is not permitted. Avoid the use of treated lumber except where necessary.
8. Choose low carbon, low VOC materials.
9. Use recycled materials as often as possible
10. Use locally sources materials when possible.
11. Site furnishings shall  have vandal-resistant features. Replacement parts or components shall be readily available and easily installed. Finish colors shall be easily matched.
12. Site furnishings and amenities shall be durable and low maintenance

# 7.3 SEATING

Seating is an essential component of the public realm. It should be not only functional, but add to the overall aesthetic. Seating provides a place of respite in the urban environment, as well as a place to socialize or gather for a meal or snack. Properly places seating can help define rooms within the public realm and contribute to a vibrant street life.

## *Design Standards*

1. A variety of seating options shall be provided, from benches that seat just a few people to tables and chairs for larger groups, to swings or lounge type seating. Creative design of seating is encouraged including incorporating seating that functions as permanent sculptural structures in the landscape. Low walls and even grass or turf mounds may be used as seating. Low walls used for seating purposes should be 18 to 24 inches high and a minimum of 18 inches deep.
2. Seating shall be provided at transit stops, entrances to major buildings, at the entry points to parking structures, near vendor kiosks, and at significant views and points of interest. Along mixed use streets, seating clusters shall be spaced no further than 90 feet apart. On residential streets, there shall be a minimum of one seating cluster per block.
3. Seating in the Buffer Zone must be permanently fixed to the ground. Moveable seating, such as tables and chairs that can be reconfigured, may be installed in public gathering spaces.
4. Outdoor seating areas affiliated with private dining establishments is encouraged. Such seating that encroaches into the public right-of-way must comply with all applicable city regulations.
5. Seating shall be constructed primarily of metal or wood. Metal shall be matte or glossy powder-coated. High quality composite wood materials may be used. Wood shall be a natural color or stained, not painted. Wherever possible, street furnishings should be of a contrasting color to the sidewalk to aid pedestrians with visual impairments. Wood shall be FSC certified.
6. Environmental factors such as sunlight, shadow, glare reflection, wind, and rain should be considered in the placement of seating areas. Seating shall be provided in shady areas as well as sunny locations.
7. Seating areas must be sufficiently illuminated. Seating shall not be placed in areas that are hidden from view.
8. Seating should be comfortable and have a backrest and arms whenever possible. Tables may have umbrellas made of durable, stain resistant material. Seating areas that are not located in the Sidewalk Zone may have trellises or other covering made of durable materials.



## *Creative Seating Options*



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## *Metal Bench Specification*

This bench may be used throughout the public realm.

**Manufacturer**: Landscape Forms

**Model**: Parc Vue Bench, Backed Arms

**Color**: Gloss Black

**Length**: 6 ft.

## *Wood Bench Specification*

This bench may be used throughout the public realm outside of the Buffer Zone

**Manufacturer**: Landscape Forms

**Model**: Neoliviano Bench, Backed Arms

**Materials:** Aluminum and Domestically Sourced, Thermally Modified Ash

**Length**: 69"

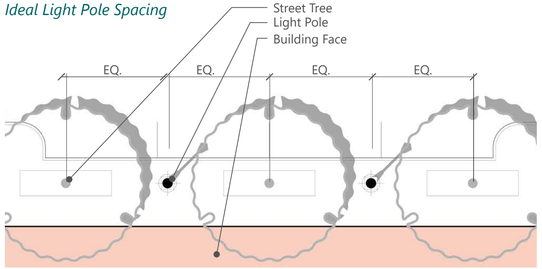
# 7.4 LIGHTING

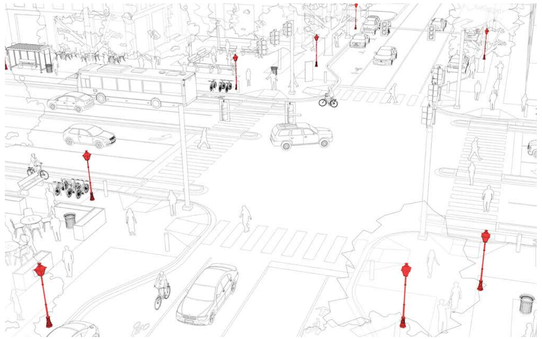
Lighting helps visually define an urban environment at night. Lighting in the Diamond District will include pedestrian scale lighting to illuminate and define pedestrian circulation routes, streetlights to illuminate roadways, and lighting to illuminate landscaping or other site features.

## *Design Standards*

1. Consistent levels of illumination shall 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.
2. All lighting fixtures should comply with International Dark-Sky standards. Use only full cut-off fixtures. Uplighting is not permitted.
3. The color temperature of a light source shall not exceed 3000K. High pressure sodium lighting is not permitted. LED lighting is required.
4. Lighting shall incorporate aspects of Smart Cities technologies whenever possible. Solar lighting is strongly encouraged.
5. On major streets, such as N. Arthur Ashe Boulevard, Robin Hood Road, and Hermitage Road, pole mounted streetlights shall be used to illuminated the street. Streetlights shall be mounted at a height of 25 feet and located centrally within the Buffer Zone. Where pole mounted street lights are used, pedestrian-scaled lighting shall also be provided to illuminate the Sidewalk Zone. Pedestrian scale lighting may be mounted on the same pole or on its own pole at a height of approximately 15 feet.
6. On streets that don't require pole mounted streetlights, pedestrian scale light poles shall be installed at regular intervals. Lighting shall be mounted at a height of approximately 15 feet and located centrally in the Buffer Zone. Pedestrian scale light poles shall also be installed at regular intervals along pedestrian circulation routes within gathering spaces. Lighting shall be mounted at a height of approximately 15 feet.
7. Pedestrian scale light poles shall be placed 40 to 60 feet apart, depending on the desired light level and the photometric characteristics of the light fixture.
8. 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 10 feet from a streetlight.
9. If lighted bollards are used,they shall not exceed an overall height of 42 inches. Bollards may also be internally lit, reinforcing the visual separation of pedestrians, bicycle, and vehicular routes. Bollards shall be metal or textured concrete, stone, or a combination of these materials.
10. All electrical wiring for site lighting shall be underground
11. All street light and pedestrian light poles shall include banner equipment.
12. Transformers shall be located in inconspicuous areas away from site and building entrances and screened.
13. Integrate solar options for outdoor lighting where feasible.

*Ideal Light Pole Spacing*





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## *Streetlight Specifications*

**Streetlight**
**Manufacturer**: Lumec by Signify

**Model**: Roadway RoadFocus LED RFM Cobrahead (medium)

**LED Module**: 160W 48LED

**Color Temperature**: 3000K

**Height**: 29 ft.

**Color**: Black

## *Pedestrian Light Specifications*

**Pedestrian Light**
**Manufacturer**: Ligman Lighting

**Model**: Steamer Street USE-90002

**LED Module**: 80 W LED

**Color Temperature**: 3000K

**Height**: 14 ft

**Color**: Black (BLK)

# 7.5 SIGNAGE & WAYFINDING

Signage in the public realm conveys information about a community as a whole. The types of signs typically found in the public realm are: wayfinding signage and street signs to help people navigate, interpretive signs to educate, banners to celebrate a community or community event, and gateway features and neighborhood markers to define a neighborhood's edges and call attention to special spaces or areas within a community. Public signage can help provide a recognizable identity and a unified character for a place.

## General Signage Design Standards

1. Signage should be visually comprehensive and clear with concise messaging. Font size should be clearly legible for the purpose the sign serves.
2. Signage throughout the Diamond District should be a unifying element. The use of the same font styles or complementarily font styles and color schemes on all signage is encourage. Avoid unusual or over-embellished fonts that are difficult to read.
3. Signage should be able to withstand weather conditions and should be constructed from durable materials and replaced as needed to maintain a high quality appearance.
4. Signage shall be clearly visible.
5. The area around signs may be landscaped provided that plantings do not obscure the sign or in the case of wayfinding signage, prevent access to the sign.
6. A Diamond District community logo shall be incorporated into all public banners and wayfinding signage.
7. Refer to the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) for criteria on traffic control devices, including signage.

## Wayfinding Design Standards

1. Wayfinding systems informs people about where they are and what is in their surroundings. Wayfinding may include text base signage, directional help, maps, and other graphics designed to help visitors navigate the Diamond District.
2. Pedestrian oriented wayfinding signage should be placed at regular intervals throughout the Diamond District, especially near transit stops, parking decks, and significant features, such as the ballpark and linear park. Signage should be located in the Buffer Zone or along pedestrians circulation routes within public gathering spaces.
3. When possible, the signage should be interactive and allow one to access online information with up to-date details on events and other relevant activities taking place in the Diamond District.
4. Pedestrian oriented wayfinding signage should not exceed (6) square feet.
5. Vehicular oriented wayfinding signage should be directional in nature, directing visitors to significant locations within the Diamond District, such as the ballpark or linear park. Text should be minimal, clear, and legible from a moving vehicle.
6. Wayfinding and signage cannot interfere with Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) signs.
7. Central points of entrance shall have wayfinding station with map.
8. Signage for the baseball stadium and primary stadium parking garage shall be the same throughout the Diamond District and surrounding streets.

*Wayfinding Signage*




*Interpretive Signage*







## Interpretive Signage

Interpretive signs shall be installed throughout the public realm to educate users about historical events, sustainability strategies in use, natural or landscaped features, and construction techniques. Interpretive signs should be subtle in nature so as to not interfere with the thing they are communicating about.

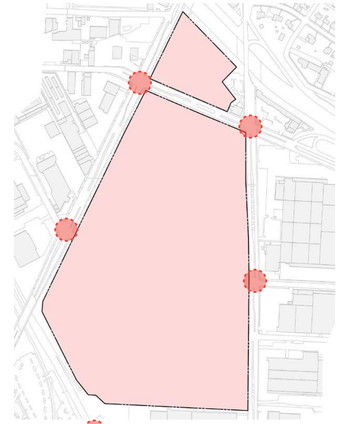
## Banners

1. Banners must comply with the City's Urban Design Guidelines and the Banner Display Program
2. Banners shall only be used to market the Diamond District as a whole or advertise an event taking place within the Diamond District. Banner design should celebrate and promote the Diamond District and convey the community's identity.
3. The lowest point of any banner or mounting hardware must not be less than 12 feet above the ground level.
4. All street light and pedestrian light poles shall include banner equipment.

## Gateway Features & Neighborhood Markers

1. Gateways into the Diamond District can be denoted through the use of signage, distinct landscaping, art, and other visual elements.
2. Gateway design may differ at different gateways, but should be complimentary to each other.
3. Gateway features may be placed in medians. Signage must not impede visibility and must adhere to all applicable codes and ordinances.
4. Gateway features and text should be clearly visible to pedestrians, bicyclists, and those in a moving vehicle.
5. Neighborhood markers shall mark specific places within the Diamond District, such as the ballpark or linear park. All neighborhood markers shall be similar in style and shall be placed at ground level or on poles. Neighborhood markers are not directional in nature, but simply announce that one has arrived in a specific place.

## Proposed Gateway Locations



Proposed Gateway Locations

*Banners*



*Gateway Features & Neighborhood Markers*



# 7.6 BICYCLE & E-BIKE AMENITIES

Bicycle amenities are an essential component of a bicycle network in the Diamond District. With the number of bicyclists in the City ever increasing, bicycle amenities are an important public realm feature that make bicycling a more viable form of transportation.

## *Design Standards*

1. Landscape Forms Ride Back Rack shall be the bicycle rack specified throughout the Diamond District.
1. Bicycle racks and bike repair stations should be placed in locations that are easily visible both to encourage use and for security.
2. Appropriate locations for bicycle parking shall be identified early in the design process so that they are properly integrated into the design of the site. Bicycle racks shall be provided along bicycle facilities and near transit stops. Bicycle racks located in the Sidewalk Zone shall be placed within Buffer Zone or Frontage Zone. A minimum of two bike racks shall be provided on both sides of the street on each block.
3. Bicycle racks shall be located a minimum of 2 feet from the curb face to avoid 'dooring.' Bicycle racks shall be placed at least 5 feet from fire hydrants and crosswalks; 4 feet from loading zones, transit stops, and benches; and a minimum of 3 feet from parking meters, newspaper racks, mailboxes, light poles, sign poles, and other street furniture. In all cases the length of typical bicycle (70 inches) shall be considered. Bicycle racks shall be spaced minimum 3 feet apart
4. Bicycle racks shall be able to withstand hacksaws and hammers. They shall also be resistant to rusting and bending or deformation. Racks shall be securely anchored to the ground.
5. Whenever possible, bicycle racks shall be covered or located where they are protected from the weather.
6. Bicycle racks shall support the bicycle in at least two places, preventing it from falling over and allow locking of the frame and one or both wheels with a U-lock.
7. At least one bike repair station shall be placed in the Diamond District in the linear park close to the new stadium. The location of bike repairs stations may be indicated on wayfinding signage.
8. Several e-bike charging stations shall be located throughout the site in the Buffer Zone or within gathering spaces. An e-bike charging station shall be located near stadium. A solar powered e-bike charging station may be installed.

Bike Repair Station


E-bike Charging Stations

## *Bike Rack Specification:*

**Manufacturer**: Landscape Forms

**Model**: Ride Bike Rack, Metro40 collection

**Height**: In-ground embed

**Color**: Silver Metallic



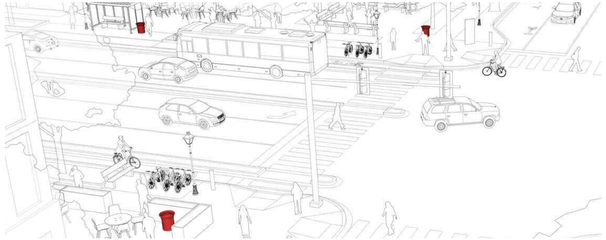


# 7.7 WASTE RECEPTACLES

Trash receptacles placed throughout the public realm will help keep the Diamond District free of litter. Recycling and compost receptacles will help encourage sustainable practices.

## *Design Standards*

1. Trash and Recycling receptacles shall always be placed together.
2. Trash and recycling receptacles shall be located throughout the Diamond District primarily in the Buffer Zone and in public gathering spaces. They shall be visible and conveniently located for pedestrians. On mixed-use streets, they shall be located in high activity areas such as near seating areas, transit stops, and at street corners. On Neighborhood Residential Streets and Linear Park Streets, trash and recycling receptacles shall be placed at street corners. In pubic gathering spaces, they shall be placed near seating areas.
3. Compost receptacles shall be located near residential buildings and community gardens.
4. Other locations for compost receptacles shall be determined in coordination with the City of Richmond Department of Parks, Recreation and Community Facilities.
5. Waste receptacles shall be constructed of durable, high-quality metal such as galvanized steel or cast aluminum. Materials shall be powder-coated to match colors of other furnishings. Recycling receptacles shall be blue or green to distinguish them from the adjacent trash receptacle. Compost receptacles shall be purple.
6. Trash receptacles shall consist of an outer decorative shell and a replaceable, impact-resistant liner.
7. Waste receptacles shall be permanently fixed to the ground.
8. Receptacles shall have a rain guard over the main opening.
9. Receptacles shall be clearly labeled "trash", "recycle", and "compost".



## *Waste Receptacle Specifications*

**Manufacturer**: Landscape Forms

**Model**: Chase Park Litter

**Option**: Side Opening

**Color**: Matte Black for Trash
Loll Sky Blue for Recycling

# 7.8 BOLLARDS & PLANTERS

Bollards and planters introduce plants and decorative and safety elements that can complement the public realm and help define spaces. Lighted bollards can provided an added safely measure at night. Planters offer an opportunity to present vegetation together with architectural detailing. They may also be used to provide privacy for outdoor diners, separating eating areas from pedestrian circulation.

## *Design Standards*

1. Bollards in the public right-of-way are permitted only with approval. If bollards are used, they shall be constructed of durable materials and complement the surrounding architectural character.
2. Bollards shall be cylindrical with a flat top. They shall be quality metal with a durable finish in black.
3. Bollards must not exceed 40 inches in height. Lighted bollards can provided an added safely measure at night. Bollards shall be K-rated
4. Where street trees cannot be provided in an area of the Buffer Zone, the use of bollards or reinforced planters shall be considered. Bollards shall not be placed in tree wells.
5. Bollards may be installed along shared use paths or bike paths near intersections with vehicular traffic.
6. Removable or retractable bollards may be installed where they are intended for intermittent use, such as in multi-functional spaces and on the Festival Street.
7. The use of planter is encouraged at the following Frontage Zone locations: along individual storefronts, perimeter railings of outdoor cafes and dining areas, and at entrances to significant buildings.
8. Planters in public realm must use plants from the plant palette. Planters may be free standing or fixed. Appropriate planting materials for planters includes perennials, ornamental grasses, small evergreen trees, and/or small shrubs. Annuals and other high maintenance landscape materials are not permitted.
9. Planters shall be easy to maintain and of durable material such as stone, freeze proof clay, decorative finished concrete, metal, or appropriate combinations thereof. Treated wood and plastic materials are not permitted.

Black cylindrical bollard with flat top

Lighted black cylindrical bollard with flat top

- **NEED CONSENSUS FROM CoR REGARDING THE USE OF BOLLARDS**





# 7.9 SCREENING & FENCING

Screening and fencing may be used from time to time in the public realm of the Diamond District to screen unsightly objects. Decorative fencing may be to define a sidewalk cafe per the City's Sidewalk Cafe Ordinance.

## *Design Standards*

1. Mechanical item and dumpsters are required by zoning to be screened from view of the public right-of-way. Walls or fences that screen such devices shall be visually opaque.
2. Screening material shall be a masonry wall with a black metal gate for dumpsters and larger mechanical items. Additional evergreen landscaping shall be provided where space permits. Gates shall have a steel framework attached to steel posts and shall be covered in such a manner so as not to be visible from public view or designed in an attractive manner.
3. Smaller items may be screened by evergreen landscaping planted at an interval to fully block the item from view. Vertical gardens and green walls may be used in addition to or in place of evergreen landscaping provided that they fully block the item from view.
4. Chain link fencing is not permitted in the Diamond District except along the rear of the stadium parcel. If provided, the entire structure (fabric, posts and railings) shall be coated with a dark colored vinyl, preferably black, and supplemented with sufficient evergreen landscaping.
5. Barbed wire, razor wire, or similar fencing is not permitted.
6. Vinyl fencing is not permitted.
7. Barriers or fencing around sidewalk cafes must comply with the City of Richmond Sidewalk Cafe Ordinance.

Masonry with metal gate

Green wall

Masonry with metal gate

Evergreen screening

Evergreen screening

# 7.10 PUBLIC ART

The integration of public art into every day life can help build a sense of place and pride in community by personalizing spaces and expressing community identity. The Public Art Commission, along with the Public Art Coordinator, administers the Public Art program for the City of Richmond, overseeing the selection and installation of public art that is funded through the City's Percent for Art Program. The Public Art Commission does not typically fund community-initiated projects like road murals and neighborhood place-making installations or temporary installations on public property, but approval of the Public Art Commission for such installations is required.

## *Design Standards*

1. Art shall be provided over time at the entrance gateways identified in section 7.5 Signage & Wayfinding, in the public space around the stadium, within and adjacent to the linear park.
2. Public art does not always need to be a centerpiece of a space. It can be subtle in nature. Seek opportunities to incorporate artistic elements to areas throughout the public realm, such as sculptural seating and planters, unique paving at significant areas, and at gateways.
3. Public art should be provided at a variety of scales and medias, to be experienced by both pedestrians and drivers, where possible.
4. If public art is to be permanent, maintenance and durability should be considered, particularly if the art will be exposed to the elements.
5. Public art must adhere to the principles laid out in the Public Art Master Plan.

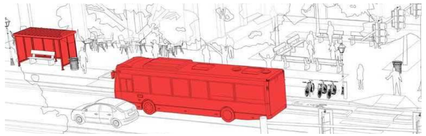





# 7.11 ESSENTIAL TRANSIT INFRASTRUCTURE

## *Design Standards*

1. Transit stops within the Diamond District shall have at minimum a bench and standard GRTC signage displaying route information, and a trash and recycling receptacle . Transit stops with a large volume of user shall also have a transit shelter with seating.
2. Standard GRTC 3-sided transit shelter shall be used.
3. Bus stop shelters require 6" reinforced concrete pads. Benches, trash cans and recycling receptacles may be bolted directly into standard 4" sidewalk.
4. Transit shelters and other transit related furnishing and amenities other shall be located in the Buffer Zone of the sidewalk.
5. For high volume transit stops, additional seating should located in close proximity to those stops either in the Buffer Zone or Frontage Zone.
6. Bicycle parking and wayfinding signage, shall be located within close proximity to transit stops.
7. Areas around transit stops shall be well lit to provide greater visibility and safety at night.
8. Smart City technologies may be incorporated into transit infrastructure, including real time route information as it becomes available.



## *Transit Shelter Specification*

3 sided GRTC transit Shelter, with advertisement space


3 sided GRTC transit Shelter