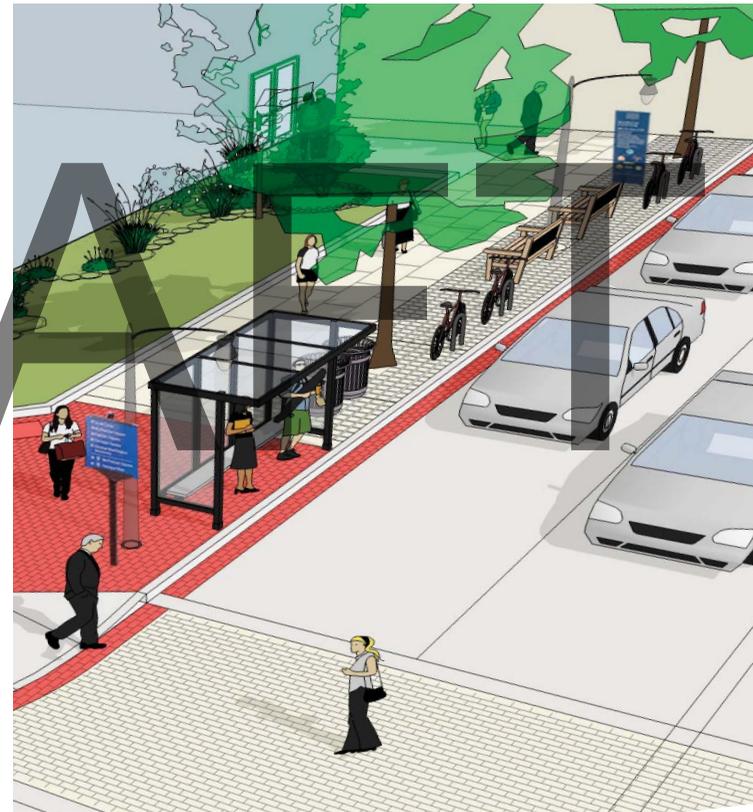
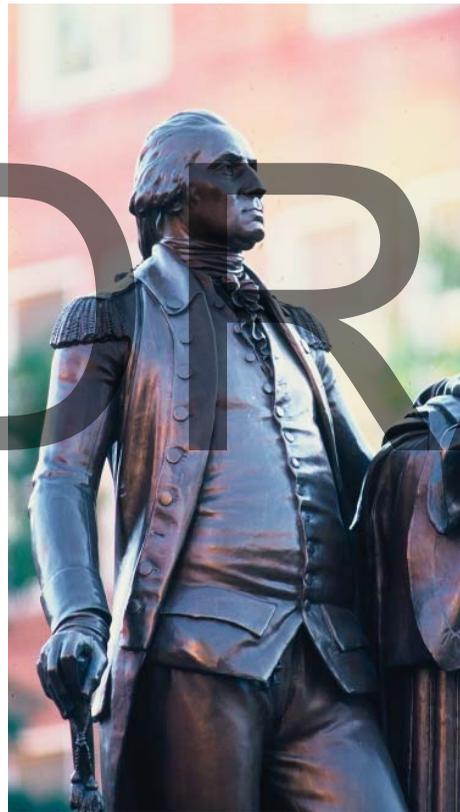


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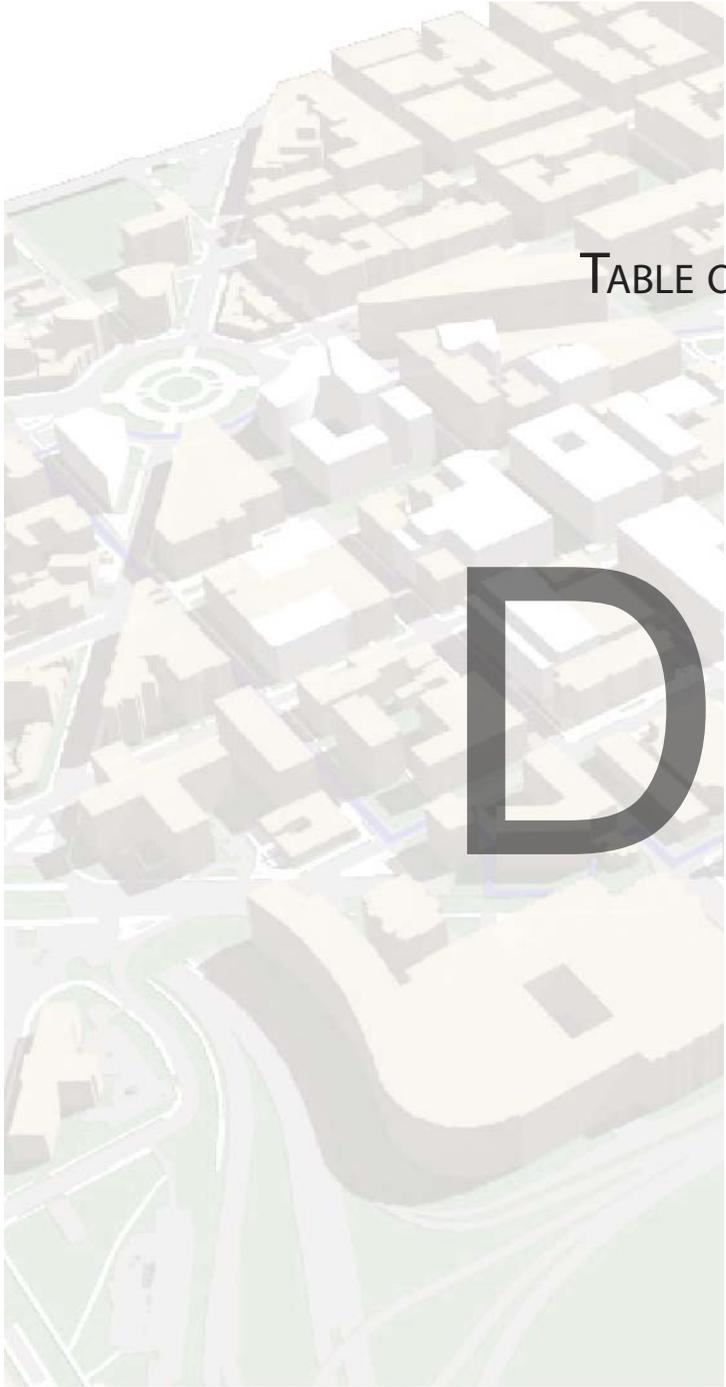
# STREETScape GUIDELINES

THE GEORGE WASHINGTON UNIVERSITY  
FOGGY BOTTOM CAMPUS, WASHINGTON DC



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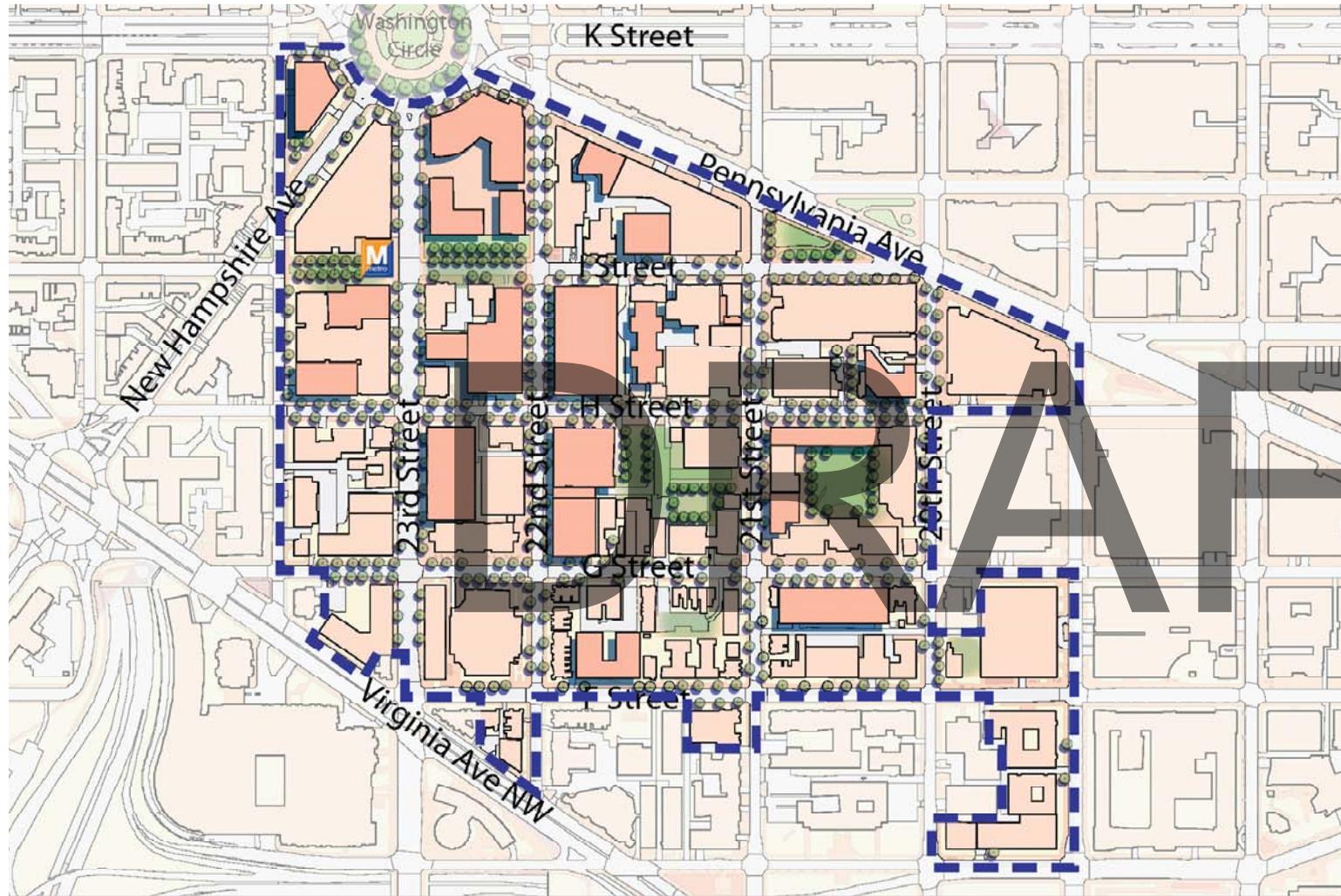
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# 2007 FOGGY BOTTOM CAMPUS PLAN



The 2007 Foggy Bottom Campus Plan is the guiding document for growth of the campus. The concepts of this Streetscape Plan were developed and approved (in concept) by the Zoning Commission.



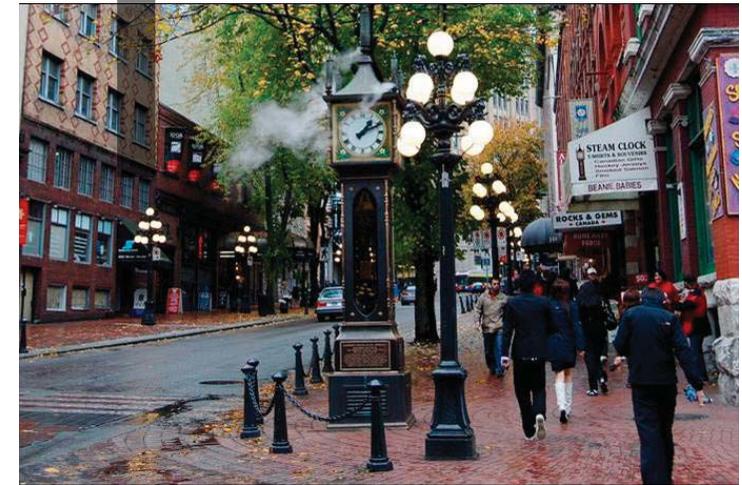
# THE STREETScape PLAN

This Streetscape document for The George Washington University builds on the concepts approved as part of the University's 2007 Foggy Bottom Campus Plan and the Streetscape Plan of 2003.

The document references global best practices in the design of streets. Contemporary ideas on the design of streets cater to multiple modes, emphasize the need for a sense of identity for the cities, neighborhoods, campuses and places they are situated in, and promote a balance between the needs for mobility and access.

In creating a legible streetscape plan for The George Washington University, five important components were developed :

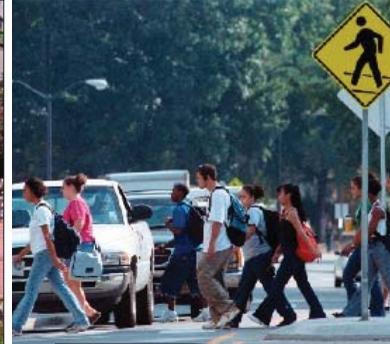
1. A set of Design Principles, that build on the University's 2007 Foggy Bottom Campus Plan and that guide the future design and re-construction of Streets within the Campus.
2. A clear distinction between East-West Street and North-South Streets.
3. Distinct zones within the Streets, that cater to the demands placed on them by various constituents.
4. Three distinct "layers" which guide the deployment of streetscape elements such that the intensity of streetscape enhancements reflect the intensity of the adjacent university uses
5. A "kit-of-parts" that the University will use as the many Streets within the Campus are built, over time. This "kit-of-parts" builds on the Streetscape Plan of 2003



and incorporates current best management practices in environmentally friendly construction techniques for streets.

# THE STREETScape PLAN

## DESIGN PRINCIPLES



Develop a vocabulary of standardized University elements to form the “kit-of-parts” for future streetscape development.

Identify “special places” on campus where enhanced streetscape embellishments could occur.

Promote an environment which provides ease of movement and safety for (and minimizes conflicts between) pedestrians and vehicles.

Design University way-finding, building identification & gateway signage to be clearly visible from the perspective of the pedestrian and the driver.

Maintain existing street trees where possible and provide tree boxes in the furnishing zone that facilitate healthy growth and easy maintenance.

Provide streetscape and landscape design elements that are sustainable, enhance context, and are consistent with applicable District standards.

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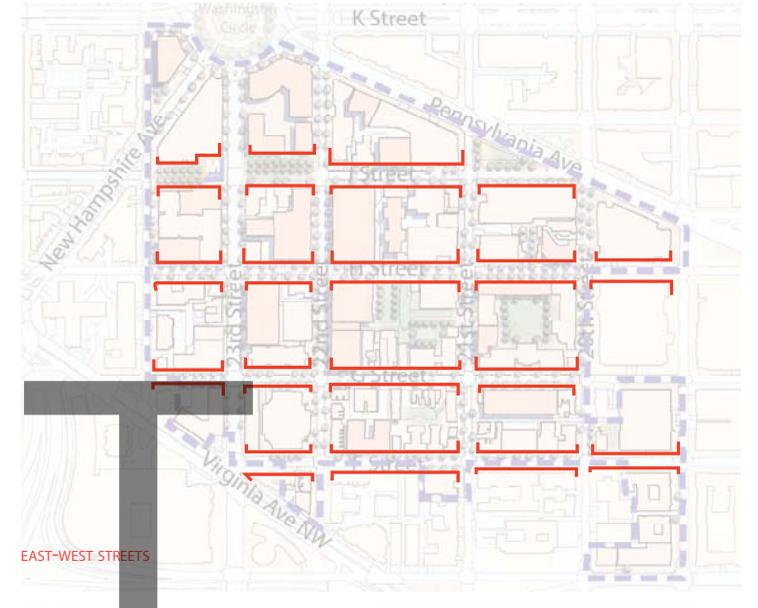
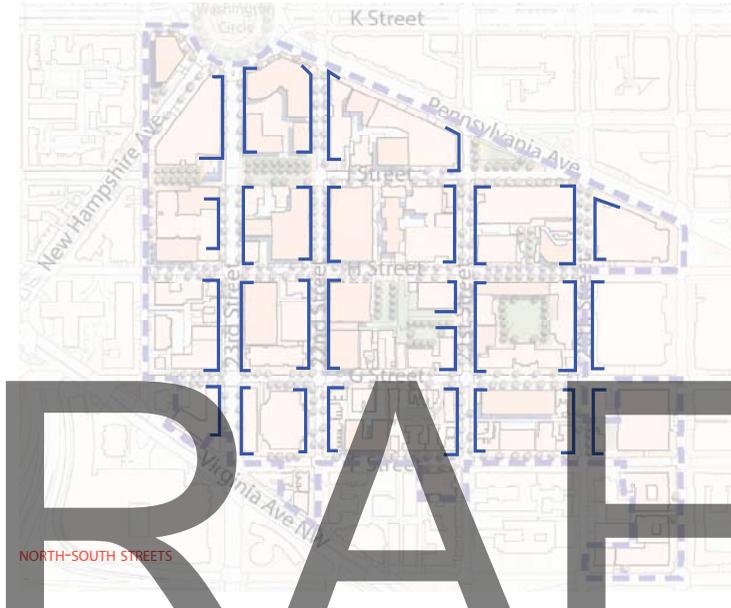
# THE STREETSCAPE PLAN

## STREET HIERARCHY

The Plan recommends a clear hierarchy of streets, that addresses the University's dual role with respect to the City and neighborhood it is situated in, and its own need for a clear identity. This has been achieved by identifying two distinct types of streets: North-South Streets and East-West Streets.

The major North-South Streets that pass through the Campus link it with the Downtown areas to the north and the Federal areas to the south. These Streets are also carriers of high traffic volumes, relative to the East-West Streets. The primary recommendations, included in the Streetscape Elements Matrix, are with regard to making a distinction between the paving materials and the street lighting fixtures. The Plan recommends concrete paving and cobblestone on sidewalks for the North-South Streets.

This Plan recommends that the East-West Streets sidewalks be paved with brick and cobblestone, which provides a smaller module that responds to the higher levels of pedestrian traffic along the East-West Streets. It also recommends the Globe #16 streetlight for use along the East-west Streets.

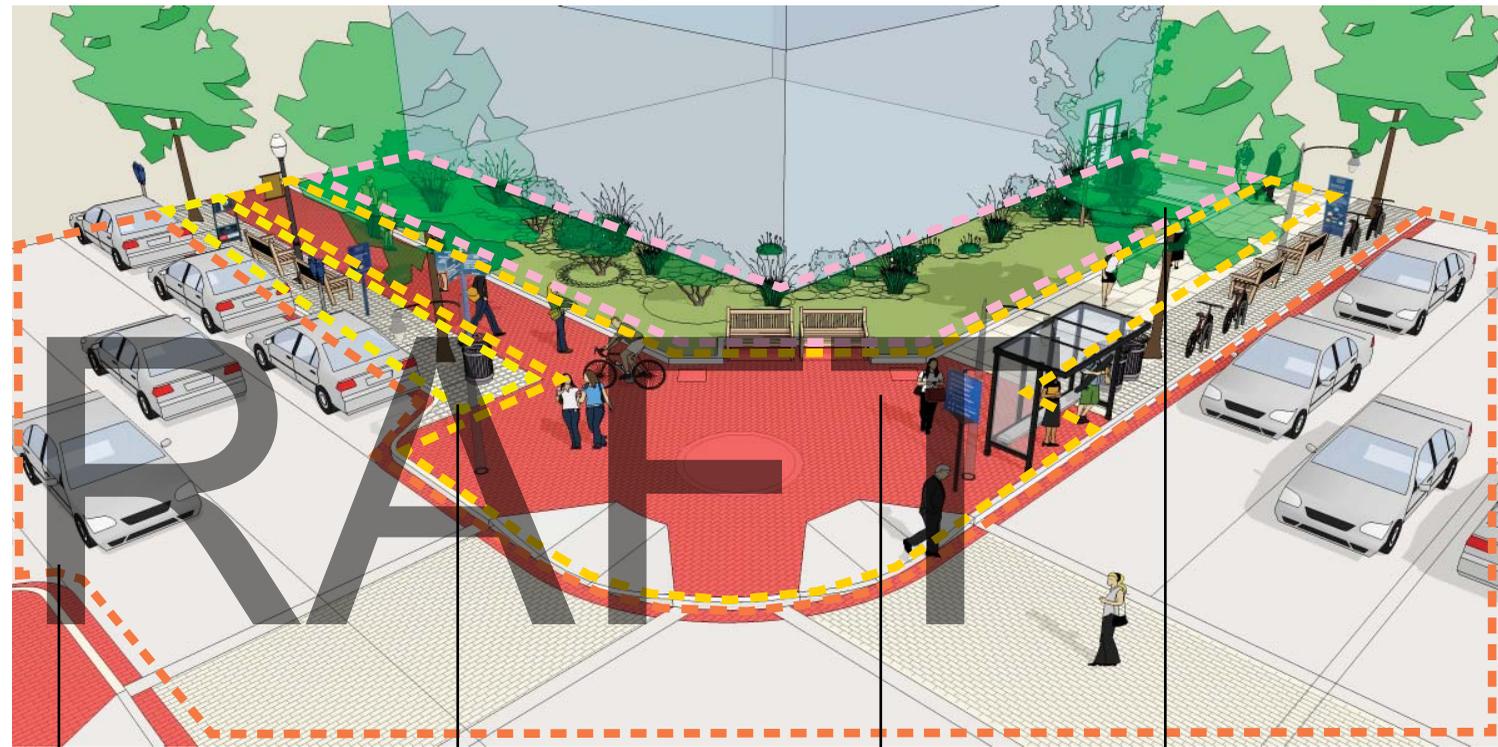


# THE STREETScape PLAN

## STREETScape ZONES

Clear zonal distinctions have been identified within the street rights-of-way, based on balancing vehicular and pedestrian mobility needs with essential elements of a legible street - such as signage, lighting, street trees and public art. The street zones include:

1. The Roadway, where vehicular, transit, bike movements and parking are accommodated.
2. The Furnishing Zone, where important streetscape elements are placed.
3. The Clear Walkway, where pedestrians are accommodated.
4. The Planting/ Setback Zone where landscape elements, important way finding elements and building identifiers are placed.



**ZONE 1.  
ROADWAY**

**ZONE 2.  
FURNISHING ZONE**

Recommended width - 5'  
Minimum width to satisfy ADA  
compliance - 4'-6"

**ZONE 3.  
CLEAR WALKWAY**

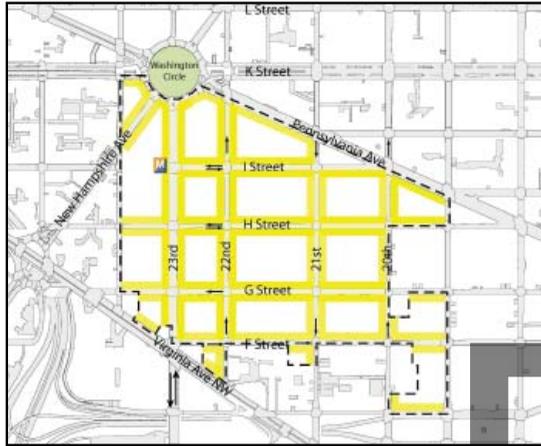
Minimum recommended width - 5'

Note: At certain locations on the campus existing conditions (particularly in areas of historic significance where retaining walls are common) do not permit a 5' width for the clear walkway. In these cases GW will use best efforts to create maximum feasible clear area.

**ZONE 4.  
SETBACK ZONE**

# THE STREETSCAPE PLAN

## STREETSCAPE LAYERS



**BASE LAYER**

**Building Identifiers**

- Building Flags
- Placards
- Awnings
- Building Engravings

**Street Furniture**

- Benches
- Trash Receptacles
- Recycling Bins
- Bike Racks
- Emergency Stations

**Way-finding Elements**

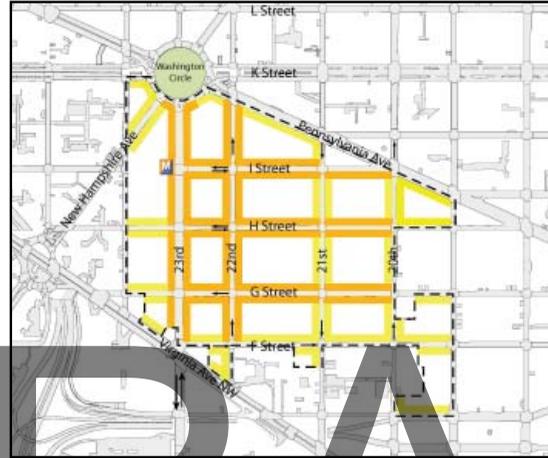
- Vertical Way-finding Elements

**Paving**

- Furnishing Zone
- Clear Walkway

**Street Lighting**

**Planting**



**ENHANCED LAYER**

**Paving**

- Special Intersection

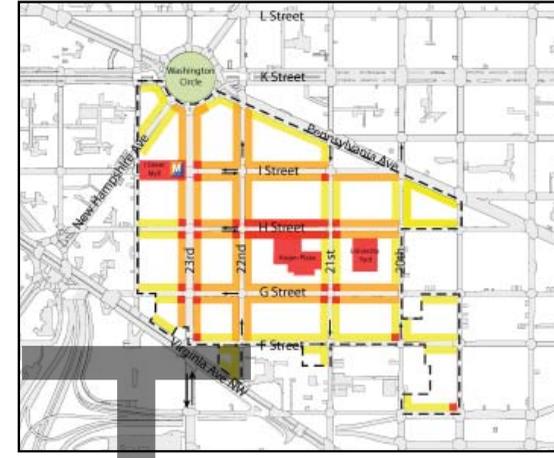
**Street Trees**

- LID Tree Pits along furnishing zones

**Streetlight Banners**

**Way-finding Elements**

- Campus Maps
- Interpretive Signage



**PREMIUM LAYER**

**Distinctive Design Elements**

- GWU Busts
- Integrated Public Art
- Artifacts
- Plaques
- Clocks
- Chess Tables
- Notice Boards
- Sidewalk Art
- Paving Medallions

**Planting**

- LID Elements integrated within major open spaces

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# STREETSCAPE ELEMENTS

The Streetscape Elements “Kit-of-Parts” is intended to guide future design and construction efforts. It consists of a material and fixture palette that has been evolved through a consensus-building process that involved the University, members of the Foggy Bottom community and the District Department of Transportation.

The Streetscape Elements Matrix, on the facing page, provides a summary of the palette. It is organized by street zones and streetscape layers. The Matrix is also a reference guide to the detailed technical information provided on the following pages. Using the Matrix is a 3-step process:

Step 1 - Locate the streetscape elements by Zone - Roadway, Furnishing, Clear Walkway or Planting/ Setback.

Step 2 - Refer to the Element Code column.

Step 3 - Turn to the page with the referenced element Code number. The page provides information for each streetscape element and explains the purpose, location and relevant guidelines/standards.

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# STREETSCAPE ELEMENTS - MATRIX AND "KIT-OF-PARTS"

GW Streetscape Plan: Matrix of Streetscape Elements						
Streetscape Element	Element Code	Page	Base Layer	Enhanced Layer	Premium Layer	
<b>ZONE 1. ROADWAY</b>						
Intersection	1.1	11	NA	Stamped Concrete in certain locations	Bump outs on H street	
Midblock Crossing	1.2	12	NA	NA	H Street	
<b>ZONE 2. FURNISHING ZONE</b>						
Paving	2.1	13	Cobblestone, 4"x4" Tumbled Concrete Paver	Same with the Base Layer	Same with the Base Layer	
Bench	2.2	14	GWU Standard: Hyde Park 5' Bench, by Kingsley Bate	Same with the Base Layer	Same with the Base Layer	
Streetlight	2.3	15	DC Standard: Washington Globe(#16)	Same with the Base Layer	Same with the Base Layer	
		16	DC Standard: Twin-20, locations per DC Streetlight Grand Plan (2005)			
		17	DC Standard: Tear Drop Pendant at all intersections			
Tree	2.4	18	Maintain Existing, NewTree Species per DC Forester List; some LID techniques may be incorporated	Same with the Base Layer	Same with the Base Layer	
Tree Box	2.5	19	DC Standard: Recommended 5'x10' Minimum size, with Metal Tree Fence	Same with the Base Layer	Same with the Base Layer	
Bicycle Rack	2.6	20	DC Standard: U-Shaped Bike Rack	Same with the Base Layer	Same with the Base Layer	
Trash Can/Recycling	2.7	21	GWU Standard: Victor-Stanley, Blue with University Signage, Green Recycling	Same with the Base Layer	Same with the Base Layer	
University Branding Elements	2.8	22	NA	GWU Standard: Building flag poles (varies), Streetlight Banners (18"x24")	Same with the Enhanced Layer	
Way finding Signage	2.9	23	DC Standard: Pole Mounted Signage (Refer to Public Realm Design Handbook)	Same with the Base Layer	Same with the Base Layer	
Campus Map	2.10	24	NA	NA	GWU Standard: Illustrated GWU Maps, (2'6" x 7'6")	
Building Identifier	2.11	25	GWU Standard: Pole mounted Signage, with directional arrow	Same with the Base Layer	Same with the Base Layer	
<b>ZONE 3. CLEAR WALKWAY</b>						
Paving	3.1	26	Buff-colored Concrete, 2'x2' score lines, with appropriate slope to prevent ponding	Same with the Base Layer	Same with the Base Layer	
		27	Red Brick, laid on slab, with appropriate slope to prevent ponding			
Public Art (Horizontal)	3.2	28	NA	NA	Custom sidewalk art installations at select, high-visibility locations	
Sub-Soil Treatment	3.3	29	Structural Soil, 24" to 36" recommended depth	Same with the Base Layer	Same with the Base Layer	
		30	Silva Cells, with minimum 30" Sub-soil Strata			
<b>ZONE 4. PLANTING ZONE/SETBACK</b>						
Tree	4.1	31	Maintain Existing	Same with the Base Layer	Same with the Base Layer	
Understory Planting	4.2	32	Maintain Existing	Same with the Base Layer	Same with the Base Layer	
LID Opportunities	4.3	33	NA	LID Tree Pits in certain locations	LID Elements integrated with major Open Space	
Building Identifier	4.4	34	NA	Maintain Existing, 2' x 7'	Same with the Enhanced Layer	
Emergency Station	4.5	35	Talk A Phone WEBS-MT/R-OP411/ Code Blue CB 1-s	Same with the Base Layer	Same with the Base Layer	
Interpretive Signage	4.6	36	NA	GW Standard	Same with the Enhanced Layer	
Public Art	4.7	37	NA	NA	Customize	
Campus Map	4.8	38	NA	NA	GWU Standard: Illustrated GWU Maps, (2'6" x 7'6")	

# ZONE 1 ROADWAY

## 1.1 Intersection



### STAMPED CONCRETE

**Purpose:**

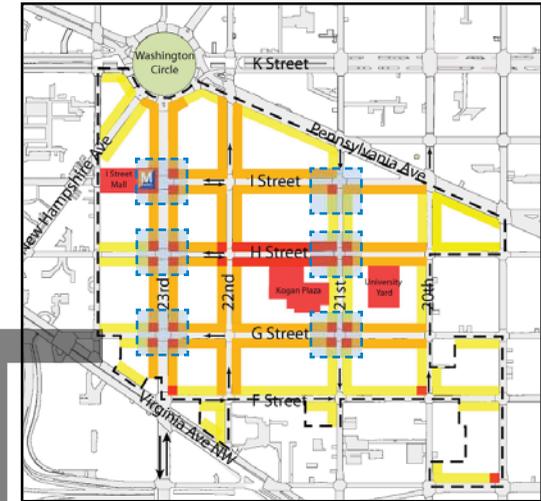
- Enhance pedestrian safety
- Traffic calming

**Recommended Location:**

- I & 21st (south crosswalk)
- I & 23rd
- H & 21st
- H & 23rd
- G & 21st
- G & 23rd

**Standards/Guideline:**

- Per District Standard (Chap 31, Para 31.6.4, D.C. Department of Transportation - design and Engineering Manual, and the District of Columbia Public Realm Design Handbook, Pg. 31)
- Stamped concrete should be used for intersection paving; some locations could feature custom design for crossing, based on DDOT approval
- The maintenance of paving materials which are not part of DDOT standard material palette will be the responsibility of GW



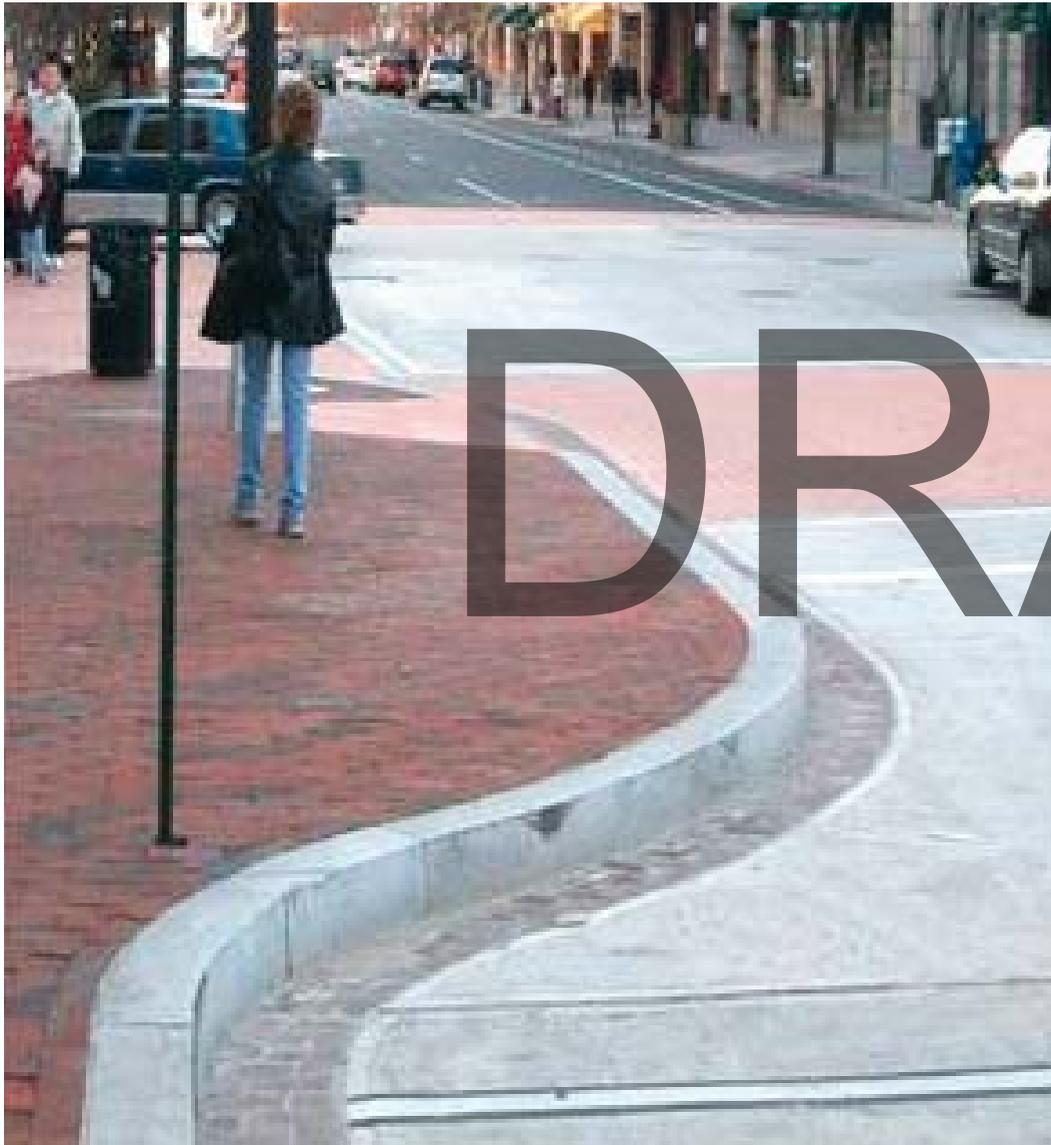
Base Layer

Enhanced Layer

Premium Layer

# ZONE 1 ROADWAY

## 1.1 Intersection



### BUMP OUTS

**Purpose:**

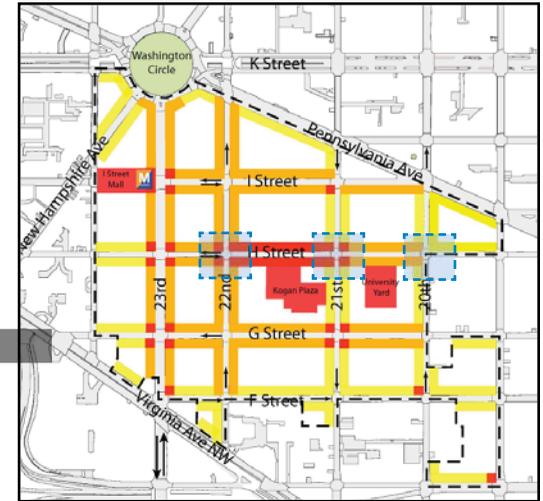
- Facilitate pedestrian crossing at key University locations

**Recommended Location:**

- H & 20th
- H & 21st
- H & 22nd (west side)

**Standards/Guideline:**

- Per District Guidelines, DDOT approval
- Width of bump-out to not exceed width of parking lane
- Bump-outs should only be installed on streets with dedicated parking lanes



- Base Layer
- Enhanced Layer
- Premium Layer

# ZONE 1 ROADWAY

## 1.2 Mid-block Crossing

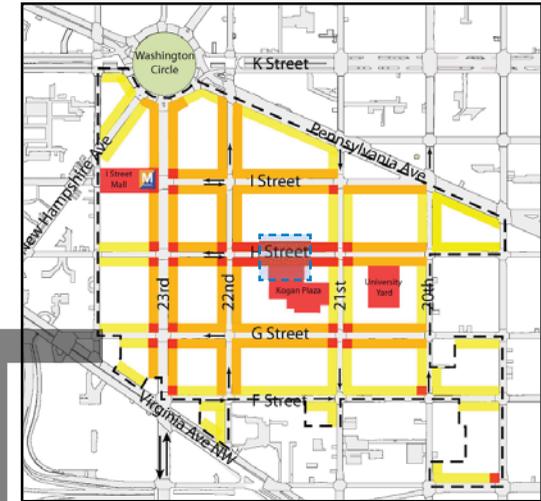


**Purpose:**

- Facilitate pedestrian crossing at key University locations

**Location:**

- Kogan Plaza



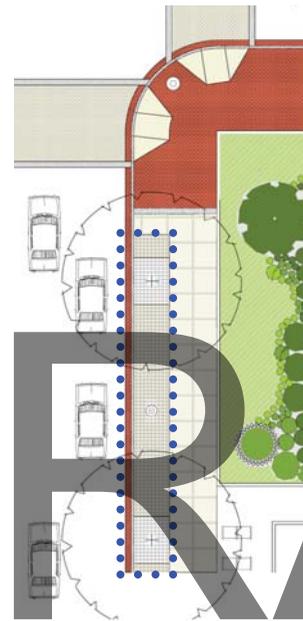
- Base Layer
- Enhanced Layer
- Premium Layer

**Standards/Guideline:**

- Per City Standards
- Minimize impact on existing street parking
- "Stop for Pedestrian" signs and in-street flexible pylons on approaches to the mid-block crosswalk should be installed per DDOT standards

# ZONE 2 FURNISHING ZONE

## 2.1 Paving



### COBBLE STONE

**Purpose:**

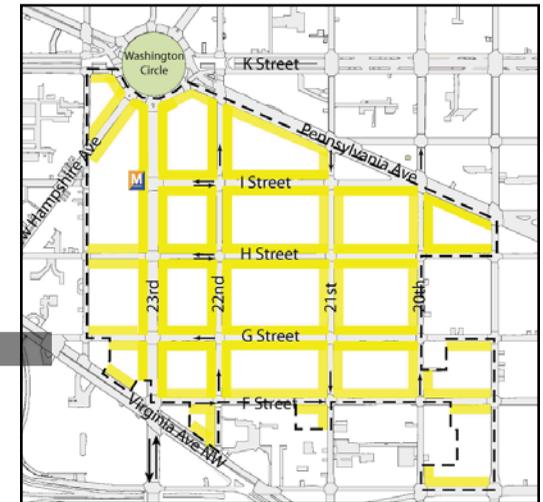
- Define Furnishing Zone
- Create a pervious surface that allows local catchment of storm water

**Location:**

- Furnishing zone along all streets

**Standards/Guideline:**

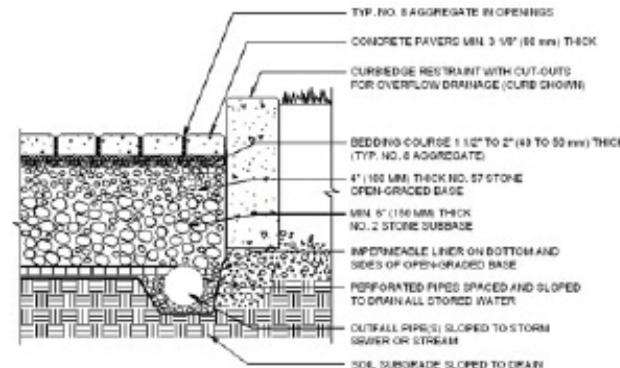
- Pervious Joints
- Material: tumbled concrete paver
- Recommended Size "4x4"
- Texture: to allow ADA access
- Color: Buff color on N/S city streets, to compliment concrete sidewalks
- Coordinate with other DDOT installations of cobble stone



Base Layer

Enhanced Layer

Premium Layer



# ZONE 2 FURNISHING ZONE

## 2.2 Bench



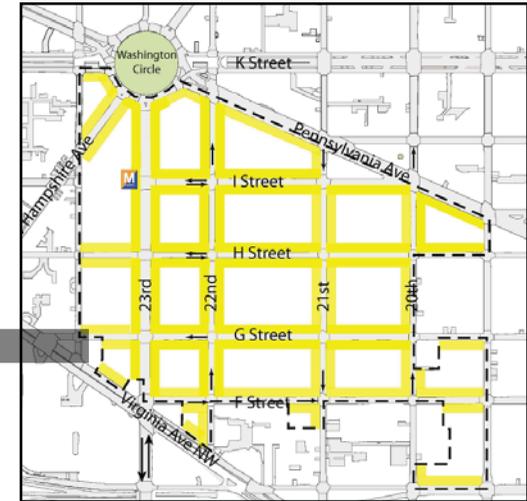
### GW STANDARD: HYDE PARK 5'

**Purpose:**

- A street amenity for the GW community

**Location:**

- Furnishing Zone as appropriate
- Planting Zone as appropriate
- Important open spaces (Kogan Plaza, University Yard, etc.)



Base Layer

Enhanced Layer

Premium Layer

**Standards/Guideline:**

- Make: Hyde Park 5'
- Manufacture: Kingsley Bate



**WASHINGTON GLOBE (#16)**

**Purpose:**

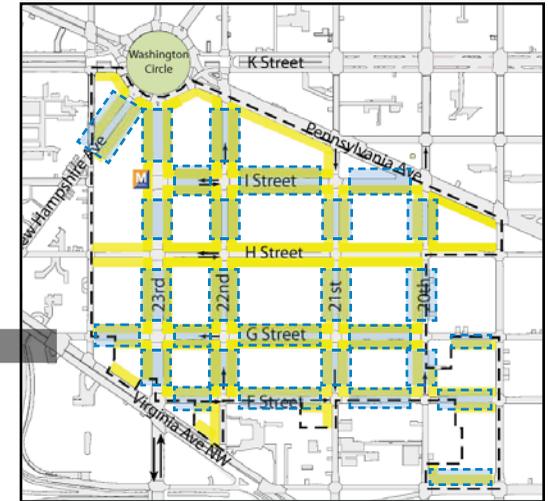
- Light fixtures provide lighting at mid-block locations to enhance pedestrian and vehicular safety

**Location:**

- Mid block lighting, not for use at intersections

**Standards/Guideline:**

- Recommended 60' spacing, placed in an offset arrangement
- Streetlight poles should be black in color
- Refer to DC Streetlight Grand Plan for additional information on hardware and fixtures



Base Layer

Enhanced Layer

Premium Layer

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# ZONE 2 FURNISHING ZONE

## 2.3 Streetlight



### TWIN-20

#### Purpose:

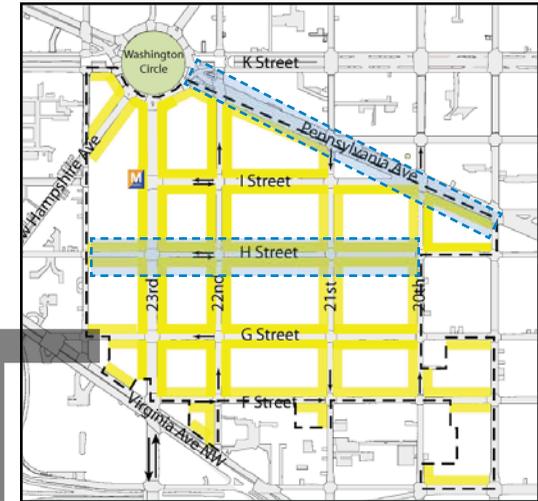
- To provide quality lighting at mid-block

#### Location:

- The use of Twin-20 globes should be restricted to streets as outlined in the DC Streetlight Grand Plan adopted in March 2005, or those streets on which an exception is granted by DDOT
- Twin-20 globes should be installed on H Street NW and Pennsylvania Avenue NW
- Mid-block lighting, not for use at intersections

#### Standards/Guideline:

- Recommended 60' spacing, placed in an offset arrangement
- Streetlight poles should be black in color
- Refer to DC Streetlight Grand Plan for additional information on hardware and fixtures



Base Layer

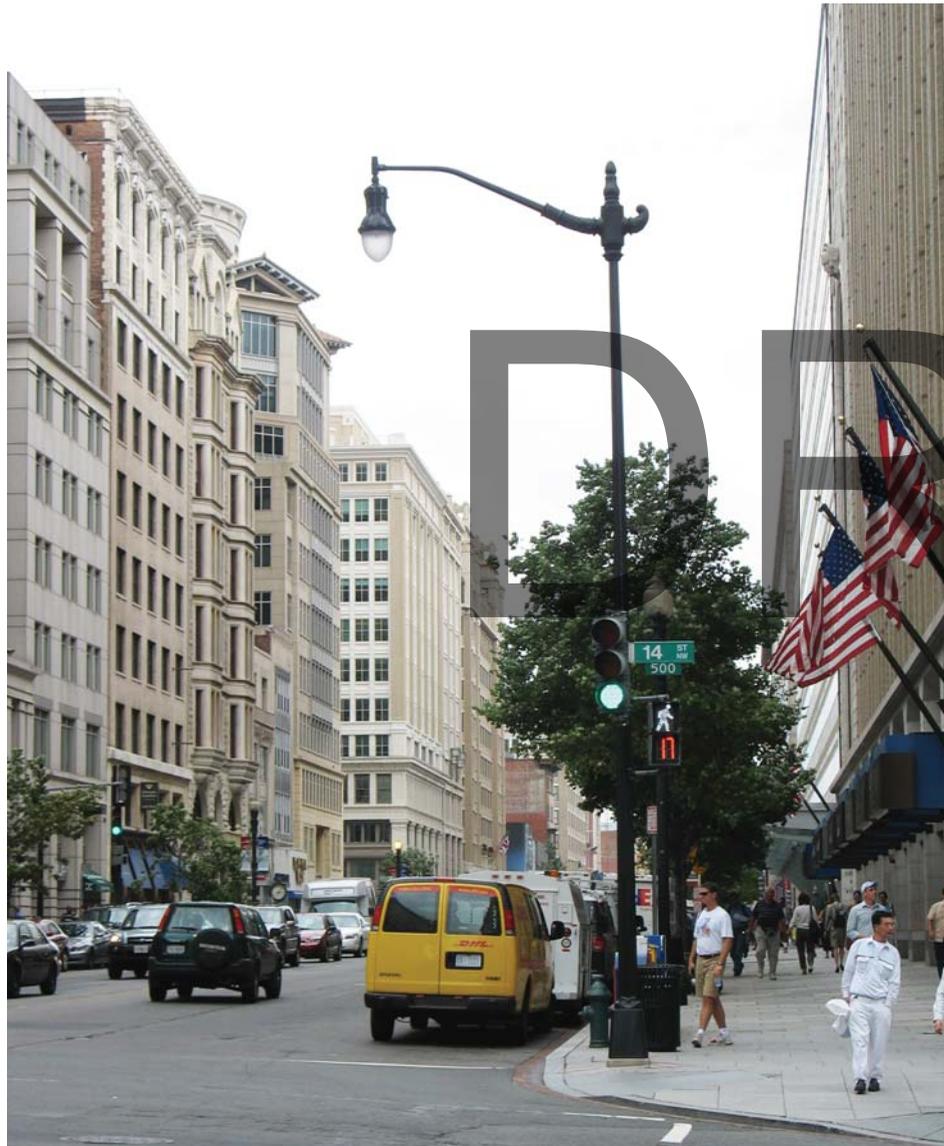
Enhanced Layer

Premium Layer

DRAFT - Contents Subject to Change  
Anacostia Watershed Management Program

# ZONE 2 FURNISHING ZONE

## 2.3 Streetlight



### TEAR DROP PENDANT

**Purpose:**

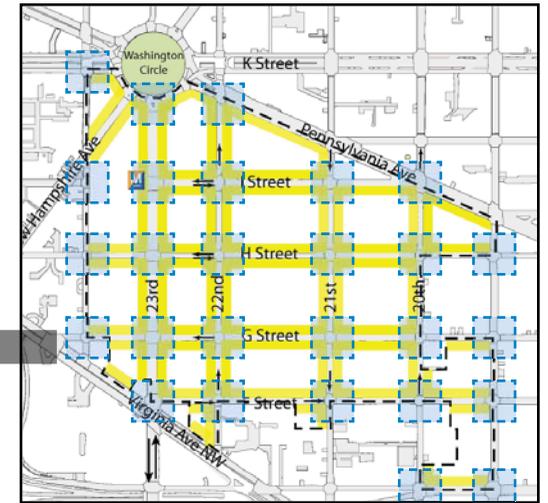
- To provide lighting at intersections for pedestrian and vehicular safety

**Location:**

- Intersection (all streets)

**Standards/Guideline:**

- Streetlight poles should be black in color
- Refer to DC Streetlight Grand Plan for additional information on hardware and fixtures



Base Layer

Enhanced Layer

Premium Layer

# ZONE 2 FURNISHING ZONE

## 2.4 Tree



### Purpose:

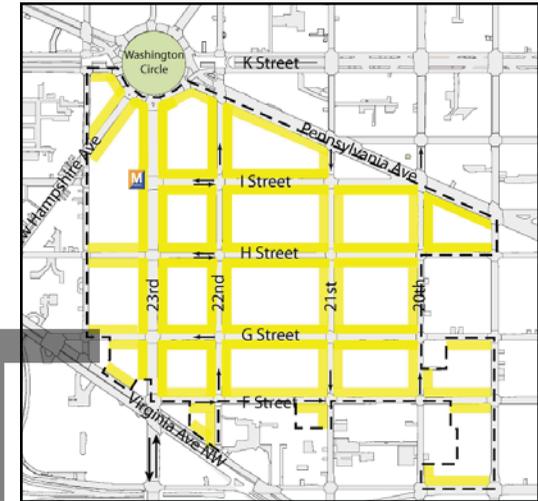
- Shade
- Define street edge

### Location:

- Furnishing Zone

### Standards/Guideline:

- Per DC Arborist / Urban Forester
- Recommended 30' spacing
- Recommended bi-species tree planting for new street trees
- Trees must be planted such that they do not obstruct sight lines for moving vehicles



Base Layer

Enhanced Layer

Premium Layer

### Recommended Tree Species:

- Shumard oak (*Quercus shumardii*)
- Nuttall oak (*Quercus nuttallii*)
- Overcup oak (*Quercus lyrata*)
- European hornbeam, columnar form (*Carpinus betulus* 'Fastigiata')
- Chinese Elm (*Ulmus parviflora*)
- Accolade Elm (*Ulmus* 'Morton')
- Blackgum (*Nyssa sylvatica*)
- Hackberry (*Celtis occidentalis*)
- American sycamore (*Platanus occidentalis*)

# ZONE 2 FURNISHING ZONE

## 2.5 Tree Box



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**Purpose:**

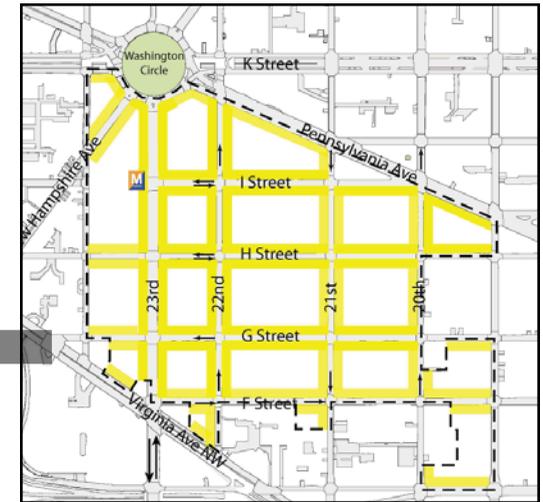
- Tree protection

**Location:**

- Furnishing Zone (all streets)

**Standards/Guideline:**

- Per City Safety Standard.
- Minimum recommended dimensions - 5' x 10'.
- Metal fencing for tree box should be three-sided to allow doors of vehicles parked in the adjacent parking lanes to be opened.
- Metal fencing for tree boxes should not have a metal base plate, in order to facilitate storm water run-off.
- LID techniques may be incorporated.



Base Layer

Enhanced Layer

Premium Layer

## ZONE 2 FURNISHING ZONE

## 2.6 Inverted U Bicycle Rack



### Purpose:

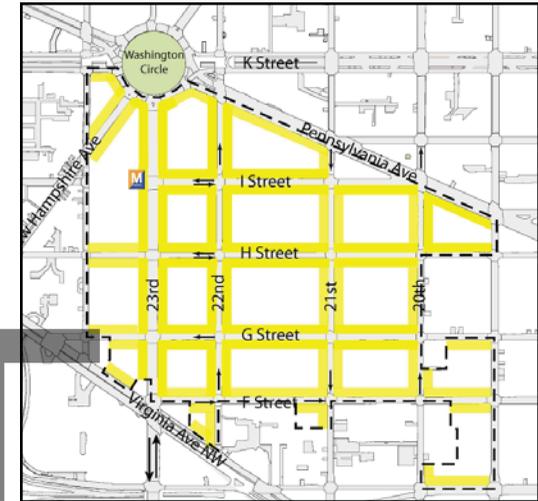
- Provide adequate facilities to encourage biking

### Location:

- Furnishing Zone
- Open space
- Near building entrances
- Coordinate location of bike racks with DDOT Bicycle Program

### Standards/Guideline:

- Bike racks should be placed perpendicular to the curb line
- Should sidewalk width not permit perpendicular placement of bike racks they may be placed parallel to the curb
- Bike rack placement rules (DDOT standards)-
  - At least 5' from Fire hydrants
  - At least 5' from Crosswalks
  - At least 4' from - Loading zones
  - At least 4' from - Bus stops
  - At least 4' from - Bus shelter
  - At least 4' from - Bus bench
  - At least 2' from curb
  - At least 3' from other street furniture



Base Layer

Enhanced Layer

Premium Layer

# ZONE 2 FURNISHING ZONE

## 2.7 Trash Can and Recycle



### Purpose:

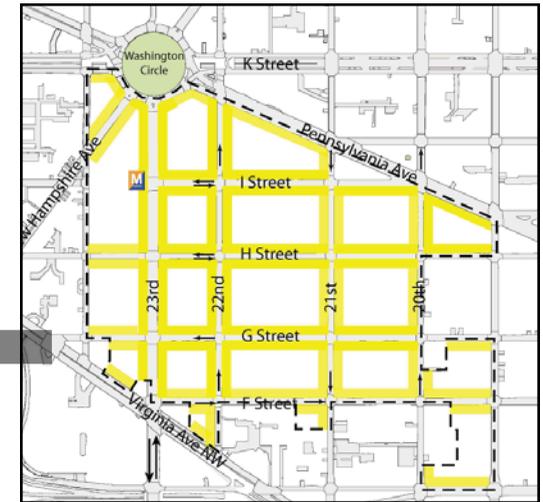
- Trash receptacles and recycling shall be installed along public rights-of-way. Receptacles shall be installed along highly visible and utilized locations, including but not limited to transit stops, public parks and plazas, and critical intersections

### Location:

- Furnishing Zone, at intersections
- Near bus stops, transit entrances, building entrances

### Standards/Guideline:

- Victor-Stanley
- Trash cans should be placed in a manner such that sight lines for traffic on adjacent roadways are maintained.



Base Layer

Enhanced Layer

Premium Layer

# ZONE 2 FURNISHING ZONE

## 2.8 University Branding Elements



**Purpose:**

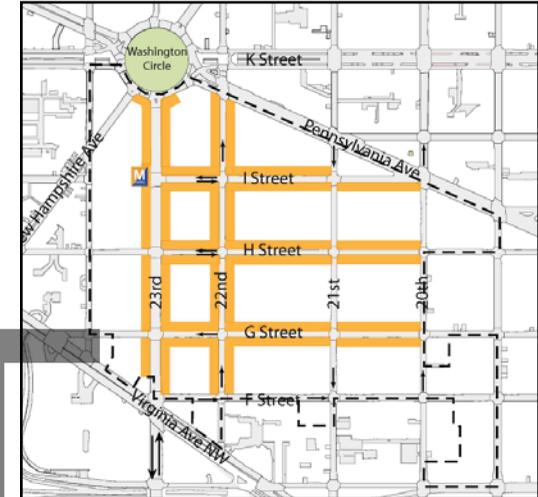
- To reinforce the University's presence in the area

**Location:**

- Furnishing Zone, on streetlight poles
- Above building entrances

**Standards/Guideline:**

- GW Standard Building Flags. Size varies with buildings -
  - 30"W x 78"H
  - 42"W x 125"H
  - 42"W x 153"H
  - 42"W x 186.5"H
- GWU Standard Streetlight Mounted Banners (18"W x 24"L)



Base Layer

Enhanced Layer

Premium Layer

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# ZONE 2 FURNISHING ZONE

## 2.9 Way-finding Signage

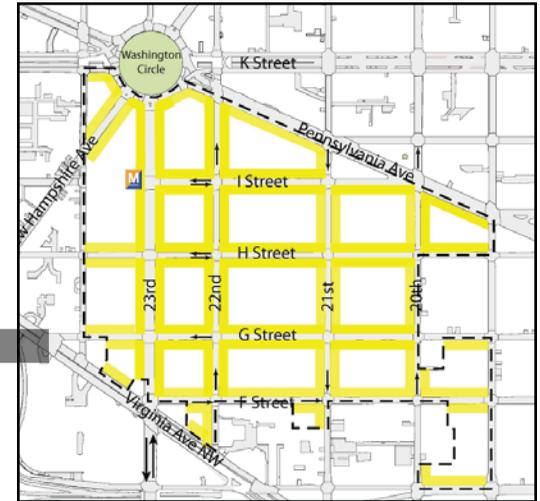


### Purpose:

- To guide the GW community, visitors and neighborhood residents to important destinations

### Location:

- Furnishing Zone



Base Layer

Enhanced Layer

Premium Layer

### Standards/Guideline:

- Per City Standards for approved design of Way-finding Sign
- Reference: pg.24-25, Public Realm Design Handbook, [http://www.ddot.washingtondc.gov/ddot/lib/ddot/information/publicrealm/publicrealmhandbook\\_2008.pdf](http://www.ddot.washingtondc.gov/ddot/lib/ddot/information/publicrealm/publicrealmhandbook_2008.pdf)

# ZONE 2 FURNISHING ZONE

## 2.10 Campus Map



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### Purpose:

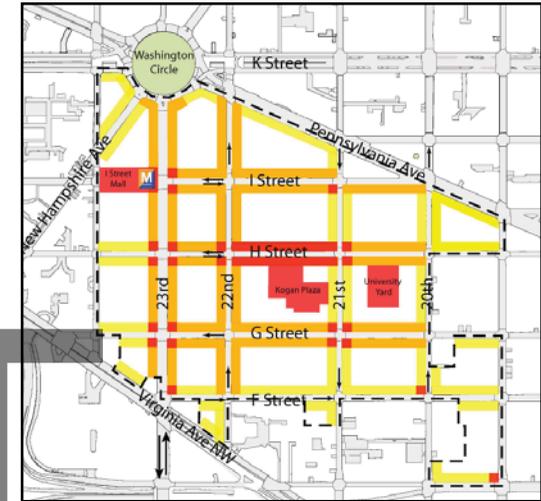
- To enhance way-finding for the GW community, visitors and neighborhood residents

### Location:

- Furnishing Zone, as appropriate
- At prominent locations: near transit entrances, bus stops, parking garages

### Standards/Guideline:

- Per GW Standards



- Base Layer
- Enhanced Layer
- Premium Layer

# ZONE 2 FURNISHING ZONE

## 2.11 Building Identifier



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**Purpose:**

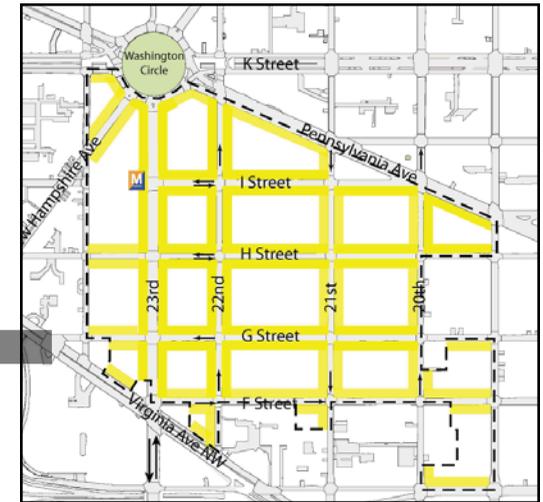
- To identify prominent building entrances

**Location:**

- Furnishing Zone

**Standards/Guideline:**

- Per GW Standards (typical building identifier size – 2’W x 7’H).
- Care should be taken to ensure building identifiers are not installed within intersection sight lines.



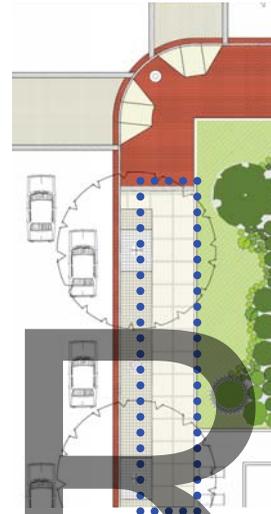
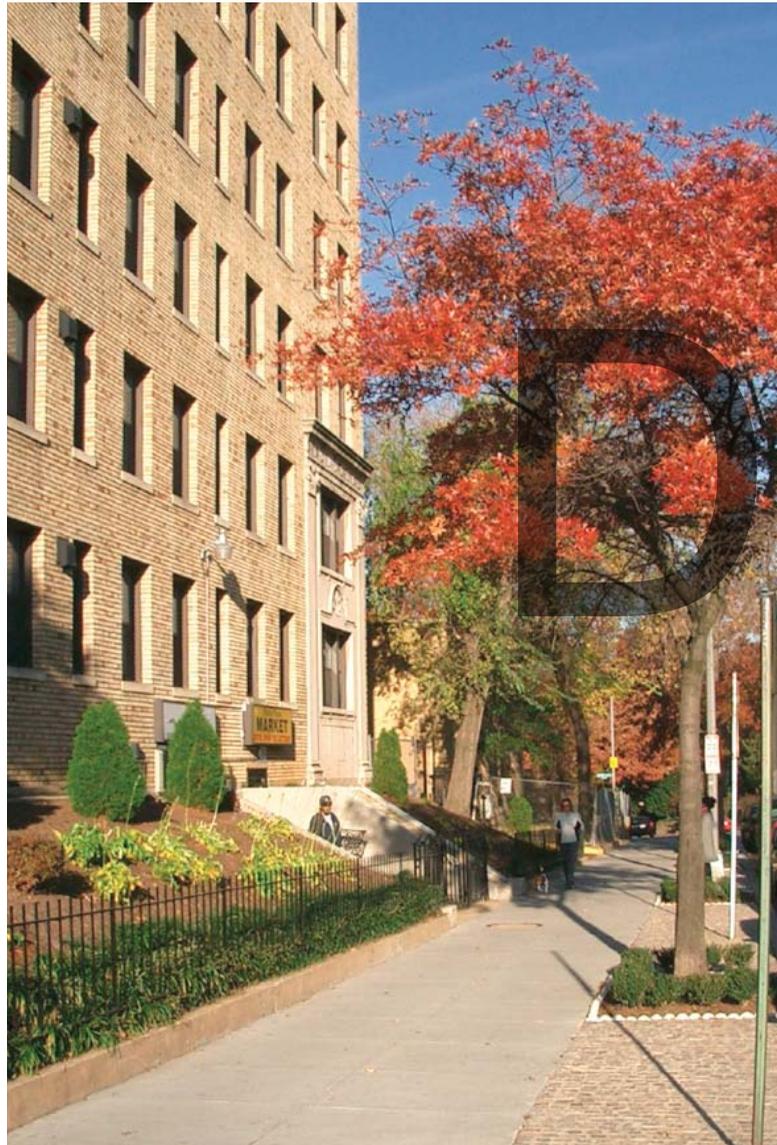
Base Layer

Enhanced Layer

Premium Layer

# ZONE 3 CLEAR WALKWAY

## 3.1 Paving



### CONCRETE

**Purpose:**

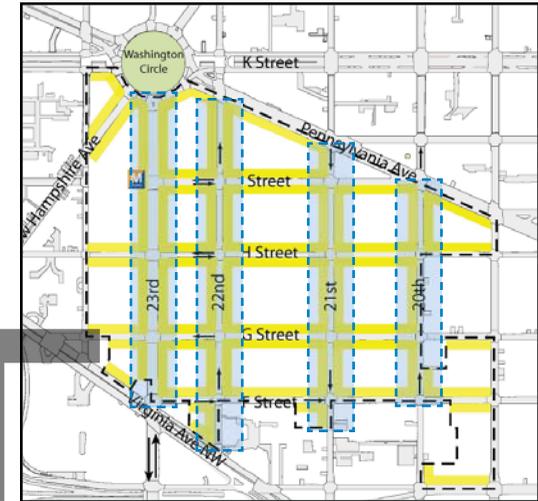
- To highlight city streets that are within the campus

**Location:**

- Clear walkway on city streets

**Standards/Guideline:**

- 2'x2' score lines recommended
- Color to closely match sidewalk installed along Harvard Street NW, between Columbia Road NW and Argonne Place NW (Refer photo to left)



Material	Source	Amount Per Cubic Yard
CEMENT, lbs.	LAFARGE (Type 1 / II)	339
COARSE AGGREGATE, SSD lbs.	MILLVILLE # 57	1950
FINE AGGREGATE, SSD lbs.	SILVER HILL SAND	1165
WATER lbs./ gallons	CITY / WSSC	267 / 32 Max
WATER REDUCER, oz.	SIKA (PLASTCRETE 161)	17.0
HIGH RANGE WATER REDUCER, oz.		
AIR ENTRAINING AGENT, oz.	SIKA (AEA-14)	4.0
OTHER (specify)	LAFARGE (NewCem)	226
UNIT WEIGHT OF PLASTIC CONCRETE, pcf		146.2

Description	Coarse Aggregate	Fine Aggregate	Portland Cement Concrete
DRY RODDED. pcf	103.5	105.1	
BULK DRY SP. GR.			
BULK SSD SP. GR.	2.83	2.61	
ABSORPTION, %	0.6	0.9	
FM		2.87	
% air			6
SLUMP, IN.			3" MAX
UNIT WEIGHT OF PLASTIC CONCRETE, pcf			146.2

Base Layer

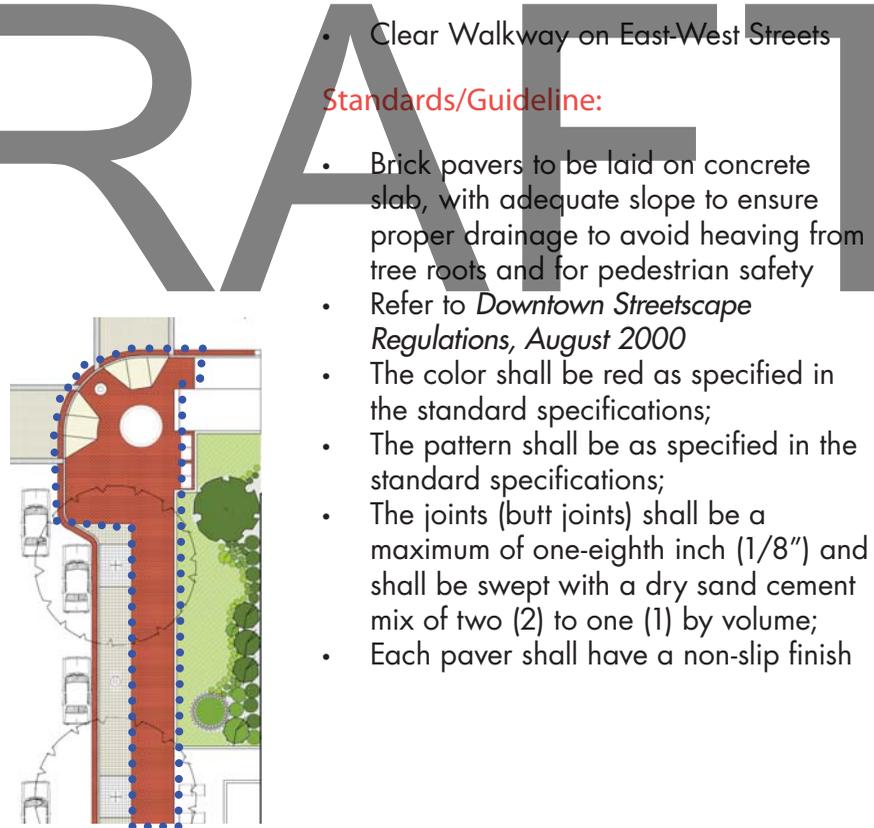
Enhanced Layer

Premium Layer

Note: Prior to any major reconstruction, GW will consult with utility companies. Conversely, any work that utility companies are doing on the GW campus should be coordinated with respect to paving materials since GW standard for concrete score lines is 2'x2' while DC standard for concrete score lines is 3'x3'.

# ZONE 3 CLEAR WALKWAY

## 3.1 Paving



### BRICK

**Purpose:**

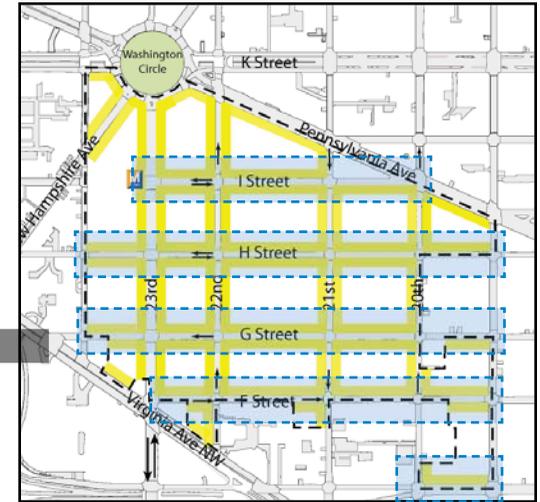
Use on East-West Streets to better define the campus

**Location:**

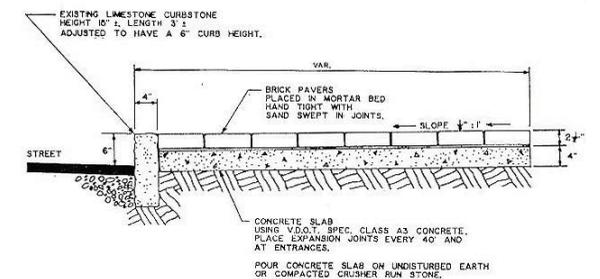
- Clear Walkway on East-West Streets

**Standards/Guideline:**

- Brick pavers to be laid on concrete slab, with adequate slope to ensure proper drainage to avoid heaving from tree roots and for pedestrian safety
- Refer to *Downtown Streetscape Regulations, August 2000*
- The color shall be red as specified in the standard specifications;
- The pattern shall be as specified in the standard specifications;
- The joints (butt joints) shall be a maximum of one-eighth inch (1/8") and shall be swept with a dry sand cement mix of two (2) to one (1) by volume;
- Each paver shall have a non-slip finish



- Base Layer
- Enhanced Layer
- Premium Layer



# ZONE 3 CLEAR WALKWAY

## 3.2 Public Art (Horizontal)



### Purpose:

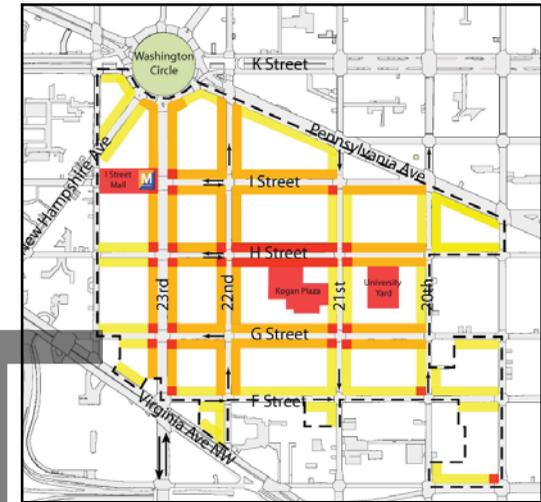
- To establish University presence & provide opportunity for public art

### Location:

- H Street
- I Street Mall

### Standards/Guideline:

- Custom designed
- Must meet ADA compliance for surface texture



Base Layer

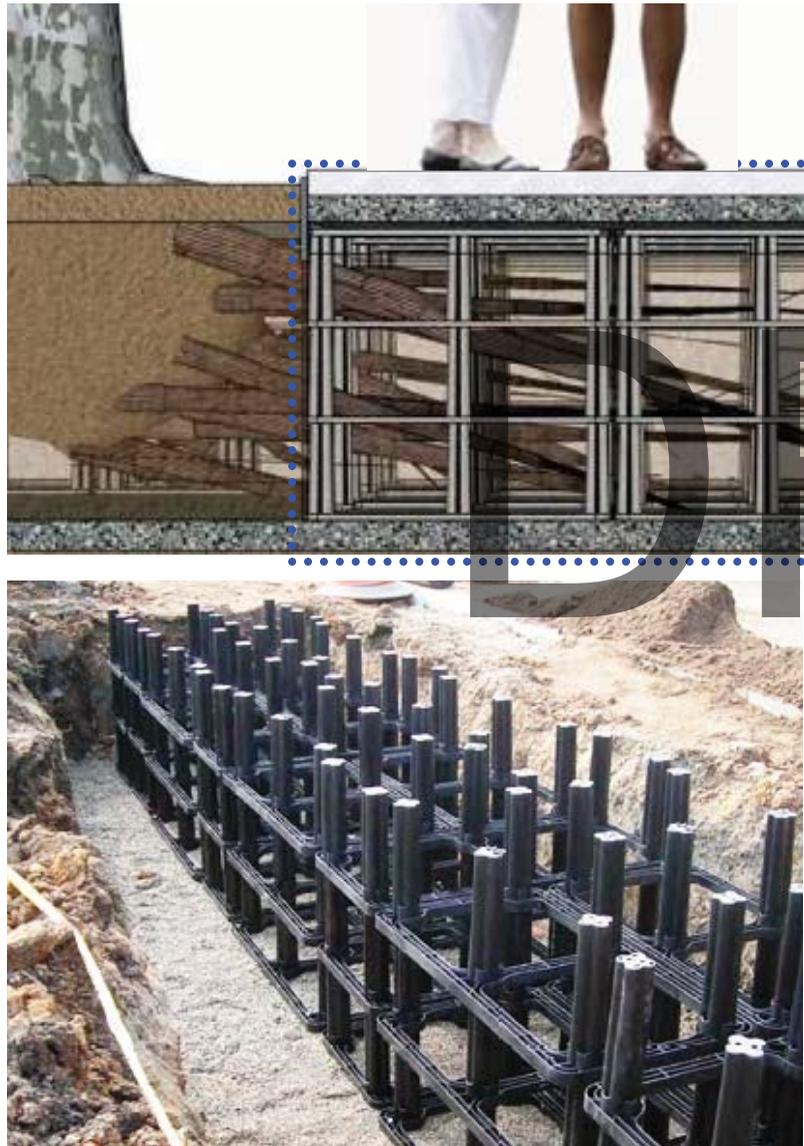
Enhanced Layer

Premium Layer

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# ZONE 3 CLEAR WALKWAY

## 3.3 Sub-Soil Treatment



### OPTION 1: SILVA CELLS

**Purpose:**

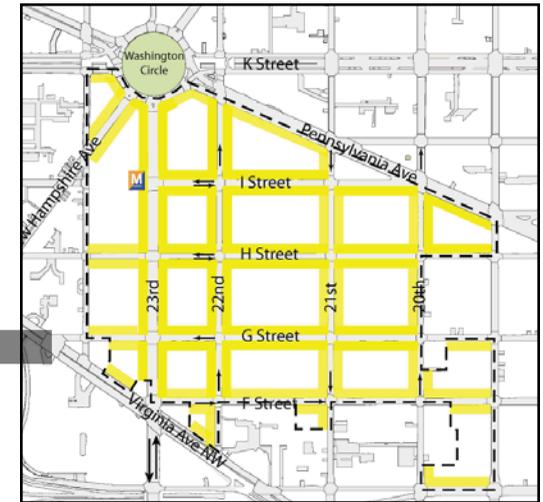
- To substantially increase the volume of soil available for tree roots by allowing expansion underneath the clear walkway, without causing the paving to heave
- Where sub-soil treatment is proposed and appropriate two options may be considered - Silva Cells or structural soil. Other root zone treatment techniques may be considered based on current best practices

**Location:**

- Below clear walkway zone

**Standards/Guideline:**

- Per Casey Trees' standards
- Recommended 1,000 cubic feet of sub-surface root zone volume per tree



- Base Layer
- Enhanced Layer
- Premium Layer

# ZONE 3 CLEAR WALKWAY

## 3.3 Sub-Soil Treatment

### OPTION 2: STRUCTURAL SOIL

**Purpose:**

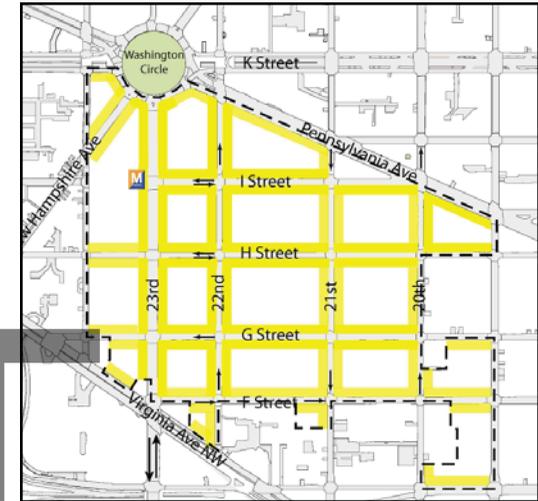
- As an optional treatment for sub-soil installation below clear walkway, to substantially increase the volume of soil available for tree roots by suspending the walkway while providing rooting space for trees
- Option to use Silva Cells, structural soil or other root zone treatment based on current best practices

**Location:**

- Below Clear Walkway

**Standards/Guideline:**

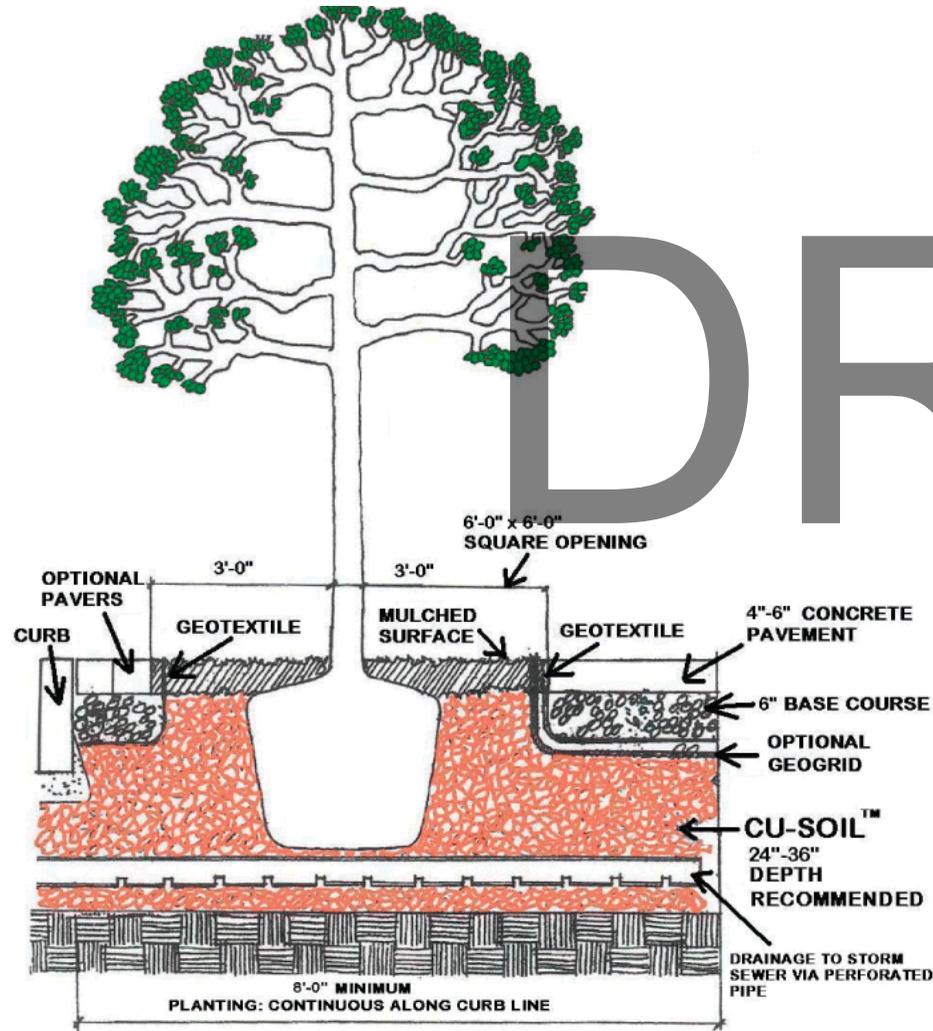
- Per Casey Trees' standards
- Recommended 1,000 cubic feet of sub-surface root zone volume per tree



Base Layer

Enhanced Layer

Premium Layer



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# ZONE 4 PLANTING ZONE/SETBACK

## 4.1 Tree



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**Purpose:**

- Shade
- Define street edge

**Location:**

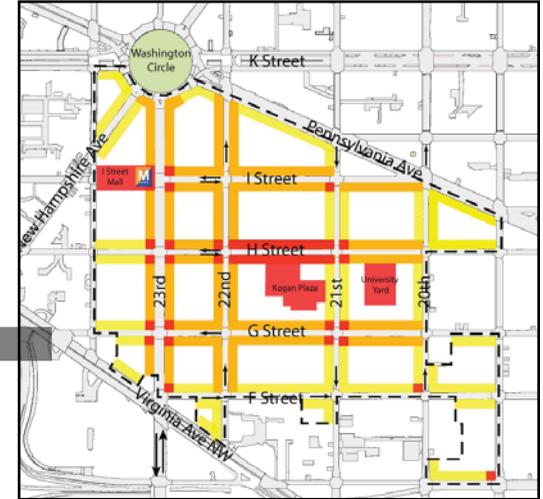
- Planting/Setback Zone

**Standards/Guideline:**

- Per DC Urban Forester, coordinate with Casey Trees
- Recommended 30' Spacing
- Recommended bi-species tree planting for new street trees
- Coordinate with Casey Trees

**Recommended Tree Species include -**

- Shumard oak (*Quercus shumardii*)
- Nuttall oak (*Quercus nuttallii*)
- Overcup oak (*Quercus lyrata*)
- European hornbeam, columnar form (*Carpinus betulus 'Fastigiata'*)
- Chinese Elm (*Ulmus parviflora*)
- Accolade Elm (*Ulmus 'Morton'*)
- Blackgum (*Nyssa sylvatica*)
- Hackberry (*Celtis occidentalis*)
- American sycamore (*Platanus occidentalis*)



- Base Layer
- Enhanced Layer
- Premium Layer

# ZONE 4 PLANTING ZONE/SETBACK

## 4.2 Understory Planting



**Purpose:**

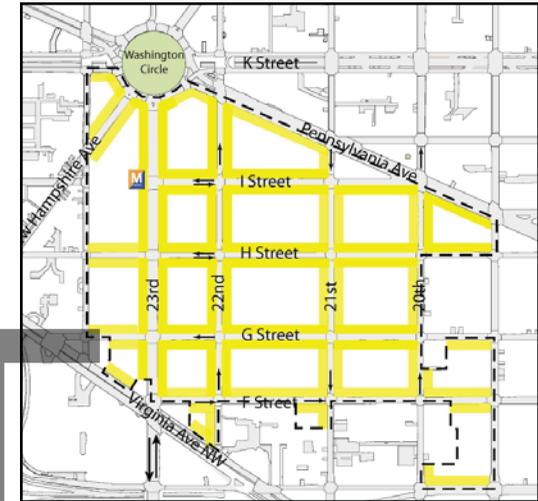
- To discourage pedestrians from walking in tree pits
- Improve the appearance of the Planting/ Setback zone

**Location:**

- Planting Zone /Setback Zone

**Standards/Guideline:**

- Per GW Standards



Base Layer

Enhanced Layer

Premium Layer

# ZONE 4 PLANTING ZONE/SETBACK

## 4.3 LID Opportunities



Permeable Paving



Bioswale

**Purpose:**

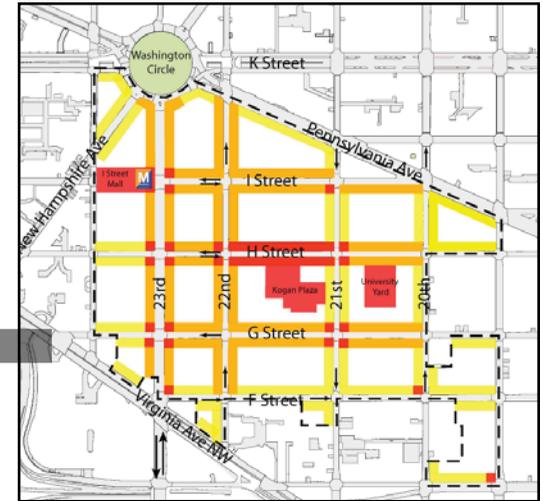
- To increase permeable surface area within the campus

**Location:**

- Planting/Setback Zone
- Note: may also be used in Furnishing Zone for street tree boxes

**Standards/Guideline:**

- Refer AWI Transportation Design Guidelines, Section 5 LID, Pgs, 5-18, 5-27



- Base Layer
- Enhanced Layer
- Premium Layer

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# ZONE 4 PLANTING ZONE/SETBACK

## 4.4 Building Identifier



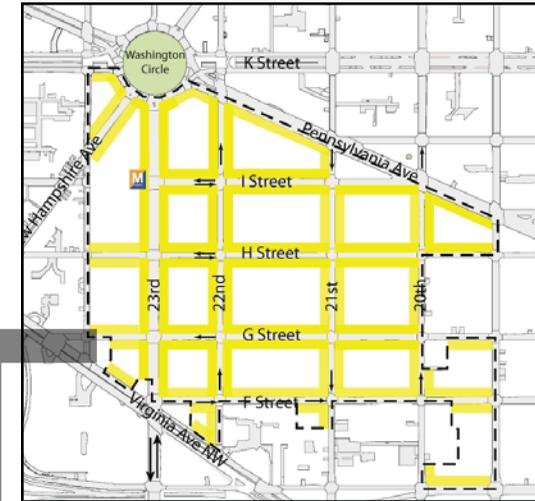
### Purpose:

- To identify prominent building entrances

### Location:

- Planting Zone/Setback Zone

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Base Layer

Enhanced Layer

Premium Layer

### Standards/Guideline:

- Per GW standards (typical building identifier size – 2'W x by 7'H)
- Adequate care should be taken to ensure that building identifiers are not installed within intersection sight lines.

# ZONE 4 PLANTING ZONE/SETBACK

## 4.5 Emergency Station



Talk A Phone



Code Blue

# DRAFT

**Purpose:**

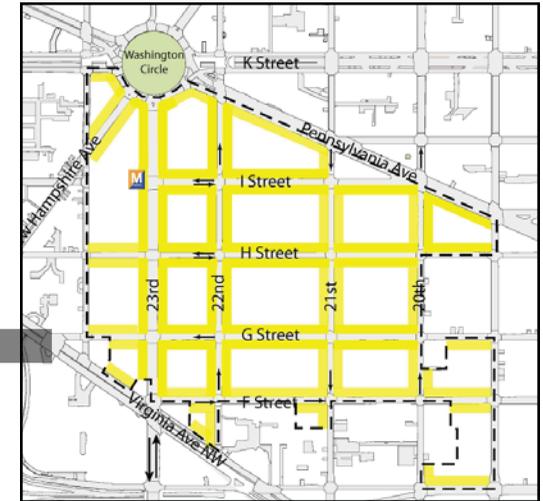
- To enhance campus safety

**Location:**

- Setback Zone

**Standards/Guideline:**

- (Left) Talk A Phone WEBS-MT/R-OP411 11"Width x 12.75" Depth x 124" Height with 2" radius on each corner [H = 160"with PTZ camera option]
- (Right) Code Blue CB 1-s Interactive Voice Communication Unit 12.75"diameter x 9'-1½"height
- Adequate care should be taken to ensure that emergency stations are not installed within intersection sight lines.



Base Layer

Enhanced Layer

Premium Layer

# ZONE 4 PLANTING ZONE/SETBACK

## 4.6 Interpretive Signage



### Purpose:

- To reinforce University presence & as custom designed public art

### Location:

- Prominent open spaces: University Yard, Kogan Plaza, I Street Mall
- Other locations within the campus, in the Planting Zone

### Standards/Guideline:

- Custom designed, Per GW Standards



Base Layer

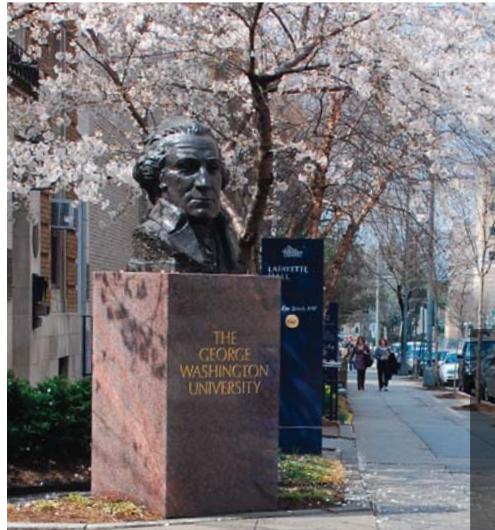
Enhanced Layer

Premium Layer

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# ZONE 4 PLANTING ZONE/SETBACK

## 4.7 Public Art



**Purpose:**

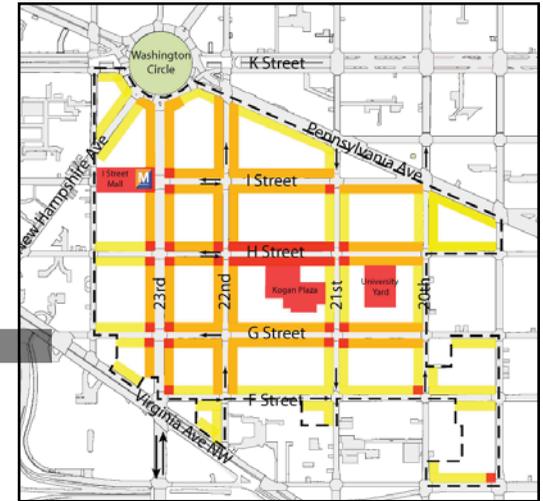
- To establish University presence & provide opportunity for public art

**Location:**

- Key Intersection along H Street
- I Street Mall
- University Yard
- Kogan Plaza

**Standards/Guideline:**

- Custom designed
- Adequate care should be taken to ensure that new installations are not within intersection sight lines.



- Base Layer
- Enhanced Layer
- Premium Layer

## IMPLEMENTATION SCHEDULE

The University has developed the following block by block streetscape implementation plan that provides for appropriate streetscape improvements to be made to all “enhanced” streetfronts to meet the standards set forth in the proposed Streetscape Plan.

### **SQUARE 39**

No specific streetscape improvements to Square 39 beyond existing conditions are contemplated under the proposed Streetscape Plan, however appropriate streetscape improvements will be made in connection with the redevelopment of site 39A.

### **SQUARE 40**

Enhancements to existing streetscape conditions will be made to the west side of 23rd Street between I Street and Washington Circle in connection with the completion of the proposed Square 54 redevelopment (which is the subject of a separate consolidated PUD application).

### **SQUARE 41**

Streetscape improvements consistent with the proposed Streetscape Plan

will be made to the west side of 23rd Street between I and H Streets by the completion of A-2 the development associated with sites 41A and 41B. Specific implementation timing and sequencing will depend on construction logistics and staging requirements associated with the planned development projects.

### **SQUARE 42**

No specific streetscape improvements to Square 39 beyond existing conditions are contemplated under the proposed Streetscape Plan, however appropriate streetscape improvements will be made in connection with the redevelopment of site 39A.

### **SQUARE 43**

Streetscape improvements on Square 43 are already consistent with the proposed Streetscape Plan.

### **SQUARE 54**

Extensive streetscape and public space improvements have been proposed as part of the plan for the redevelopment of Square 54 (which is the subject of a separate consolidated PUD application).

### **SQUARE 55**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to all streetfronts included in Square 55 by the completion of the development associated with sites 55A1 and 55A2. Specific implementation timing and sequencing will depend on construction logistics and staging requirements associated with the planned development projects.

### **SQUARE 56**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the east side of 23rd Street between G and H Streets, the south side of H Street between 22nd and 23rd Streets, and the portion of the west side of 22nd Street between G and H Streets that does not currently meet the standards set forth in the Streetscape Plan in connection with the development of site 56A.

### **SQUARE 57**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the south side of G Street between 23rd and 22nd and on the west

side of 22nd Street between F and G Streets by the end of the term of the proposed Foggy Bottom Campus Plan: 2006 – 2025.

**SQUARE 75**

Enhancements to existing streetscape conditions will be made to the east side of 22nd Street between I Street and Pennsylvania Avenue in connection with the completion of the proposed Square 54 redevelopment (which is the subject of a separate consolidated PUD application). Streetscape improvements consistent with the proposed Streetscape Plan will be made to the north side of I Street between 22nd and 21st Streets in connection with the development of site 75B.

**SQUARE 77**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to all streetfronts included in Square 77 by the completion of the development associated with sites 77A, 77B, and 77C. Specific implementation timing and sequencing will depend on construction logistics and staging requirements associated with the planned development projects.

**SQUARE 79**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to all streetfronts included in Square 79 by the completion of the development associated with sites 79A1, 79A2, and 79A3. Specific implementation timing and sequencing will depend on construction logistics and staging requirements associated with the planned development projects.

**SQUARE 80**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the south side of G Street between 22nd and 21st Streets and to the North side of F Street between 22nd and 21st Streets in connection with the recently approved DCPS/GW School Without Walls joint PUD application. Streetscape improvements consistent with the proposed Streetscape Plan will be made to the east side of 22nd Street between G and F Streets by the end of the term of the proposed Foggy Bottom Campus Plan: 2006 – 2025.

**SQUARE 101**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the north side of H Street between 21st and 20th Streets in connection with the development of site 101A.

**SQUARE 102**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the south side of H Street between 21st and 20th Streets in connection with the development of site 102A, and to the north side of G Street between 21st and 20th Streets by the end of the term of the proposed Foggy Bottom Campus Plan: 2006 – 2025.

**SQUARE 103**

Streetscape improvements consistent with the proposed Streetscape Plan will be made to the south side of G Street between 21st and 20th Streets in connection with the development of site 103A.

## NOTES

1. To the extent possible all sidewalks along new construction on GW parcels should be at least 10' wide (including furnishing zone and clear walkway).

2. Sight triangles must be maintained - any fixture or street furniture placed within sight triangles should not exceed 42" in height.

3. Prior to any major reconstruction, GW will consult with utility companies. Conversely, any work that utility companies are doing on the GW campus should be coordinated with respect to paving materials since GW standard for concrete score lines is 2'x2' while DC standard for concrete score lines is 3'x3'.

4. The maintenance of paving materials and nonstandard fixtures which are not part of the DDOT standard material palette will be the responsibility of GW. GW is to issue a Maintenance Agreement for these materials and installations.

5. Pepco vaults must have a solid cover, if possible, when located in the clear walkway, Furnishing Zone or setback zones. Pepco vaults located in the Planting Zone should be concealed with landscape elements.

6. Alleys are the preferred location for loading/ unloading of delivery trucks.

7. Curb cuts should be minimized; where necessary curb cuts should be treated in accordance with DDOT requirements and in coordination with DDOT.

8. Since the Streetscape Plan will be implemented over many years, it is likely that there will be enhancements to standards for materials and furnishings. As necessary, GW will consult with DDOT when standards are being enhanced.

9. Locations for catch-basins and fire hydrants should be per DDOT standards.

10. Light pylons and building entry markers should not be located within clear walkway zones.

11. Retaining walls and fencing in the Planting Zone will be below 42" high unless otherwise approved by DDOT.

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## PERMITTING

1. The George Washington University and the District Department of Transportation to enter into contract agreement for maintenance, repairs and other routine work in public space.

2. Large scale implementations or renovations associated with The George Washington University development sites to be submitted as part of individual project PDRM.

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## GLOSSARY OF TERMS

**Building Identifier** – A sign, usually mounted on the floor or the external wall of a building that provides information by which pedestrians or motorists may identify a building.

**Campus Plan** – A Plan for the growth of an educational, corporate or other campus. A Campus Plan is usually documented in report format, with graphic and narrative content. This document refers specifically to the 2007 Foggy Bottom Campus Plan authored by The George Washington University.

**Clear Walkway** – A distinct part of a sidewalk which must be left unencumbered for pedestrian passage. In Washington DC the recommended width for a clear walkway is 5’.

**Design Principle** – A summary description of a design idea that is specific to a location and that describes the intended manner of treatment of that location in subsequent efforts.

**Furnishing Zone** – A linear zone located on a sidewalk, usually along the curb, where street furniture such as benches, trash cans, streetlights, street trees may be located. The width of a Furnishing Zone is usually between 4’ to 6’.

**Roadway** – The part of a street located between curb edges where cars, buses, bikes may ply. The roadway typically includes space for cars to park. The roadway is separated from the sidewalk by means of a raised curb (typically 6” in Washington DC) and may be paved with asphalt or concrete.

**Setback Zone** – Typically located along the edge of a building, the planting/setback zone is an area that separates a building from an adjoining sidewalk. This Zone may be treated with landscape elements or in a manner consistent with the adjoining sidewalk. Setback Zones may be owned privately or by a city government.

**Street** – A public thoroughfare, usually paved, in a village, town, or city, including the sidewalk or sidewalks.

**Street Hierarchy** – A system to categorize streets; categories are usually determined by street width, volumes of vehicular, bike or pedestrian traffic, historic prominence, civic use and scenic value.

**Streetlight Banner** – A graphic sign (made of cloth, plastic or other flexible materials) mounted on a streetlight using special fasteners. Banners are typically used to create a sense of distinct identity for a city district, neighborhood or campus.

**Streetscape Elements “Kit-of-Parts”** – An exhaustive description of materials and fixtures that may be used to upgrade or reconstruct a street. The “Kit-of-Parts” offers parameters for the selection and deployment of materials/fixtures.

Streetscape Matrix – A Streetscape Matrix is a table that offers a summary of the Streetscape Elements “Kit-of-Parts.” This document uses a Streetscape Matrix as a snapshot and as a reference tool by which a reader may locate specific materials/fixtures that are part of the Streetscape Elements “Kit-of-Parts.”

Street Furniture – Publicly provided furniture located on a street, typically in a furnishing zone on a sidewalk. Examples include benches, streetlights and trash cans.

Streetscape Layers – A system that categorizes streets by intensity of improvements. For example, the Base Layer in this document establishes minimal changes and requirements for all streets, such that they are safe for use. The Premium Layer is used to designate certain streets for higher levels of investment due either to exaggerated safety concerns or the need to earmark a street that is frequented more often by members of the surrounding community for the purposes of gathering or recreation.

Streetscape Plan – A Plan for the upgradation or reconstruction of one or more streets within a campus, neighborhood or district; typically a Streetscape Plan specifies goals/strategies, re-allocation of the street zones if necessary, materials and dimensional standards to be used in the execution of the Plan.

Way-finding Sign – A sign installed within public space (a street, plaza, courtyard or garden) to guide pedestrians, motorists or bicyclists to prominent destinations within a district, neighborhood or campus.

Zoning Commission - The Zoning Commission (ZC) is an independent, quasi-judicial body. Created by the Zoning Act of 1920, as amended, the ZC is charged with preparing, adopting, and subsequently amending the Zoning Regulations and Zoning Map in a means not inconsistent with the Comprehensive Plan for the National Capital area. Three members of the ZC are residents of the District of Columbia appointed by the Mayor and confirmed by the Council. The fourth member of the ZC is the Architect of the Capitol (or his/her representative). The fifth ZC member is the Director of the National Park Service (or his/her representative).

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**THE GEORGE WASHINGTON UNIVERSITY**  
FOGGY BOTTOM CAMPUS, WASHINGTON DC

# DRAFT

**STREETScape GUIDELINES**  
AUGUST 2010

EHRENKRANTZ  
ECKSTUT  
& KUHN  
ARCHITECTS



THE GEORGE  
WASHINGTON  
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