

# Streetscape Manual

Hudson Park and Boulevard  
New York, NY

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# Streetscape Manual

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## **Hudson Park and Boulevard Steering Committee**

Department of City Planning  
Department of Parks & Recreation  
Department of Transportation



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# Introduction

Over the last few years, the City of New York has made a series of infrastructure investments in the Hudson Yards neighborhood to help transform the area into a vibrant, transit oriented extension of the Midtown district. One of the most important of these improvements is the construction of Hudson Park and Boulevard, a midblock park and boulevard that will run between 10th and 11th Avenues from West 33rd to West 39th Streets. Hudson Park will help create a sense of place, provide a much-needed amenity, and ultimately craft a new identity for this emerging district. Hudson Park and Boulevard has been designed to acknowledge the traditions of public space in New York City, while also evoking a new and creative space that belongs both to its neighborhood and to New York City.

This manual aims to offer guidelines that will create a standardized streetscape appearance for the Hudson Yards neighborhood that will provide an aesthetic in keeping with the standards of New York City while offering a slight variation from those standards to infuse the district with its own subtle character.



Figure 1  
View Looking Northeast from the Hudson  
River Towards the Hudson Yards District



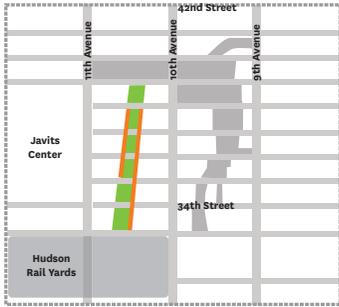
- KEY**
- Park
  - Boulevard
  - Boulevard-Adjacent Side Street
  - District Side Street / Avenue

**Figure 2**  
 Context Plan of the Hudson Yards District, Showing the Three Street Typologies: Boulevard, Boulevard-Adjacent, and District

### Where this Manual Applies

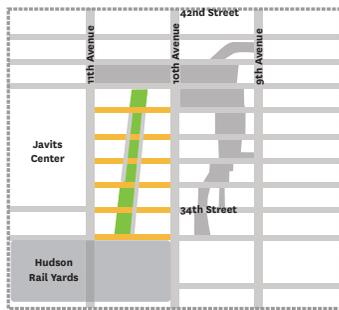
The guidelines in the manual apply within the boundaries of the Hudson Yards District, from 42nd Street down to 30th Street, between 8th Avenue and 12th Avenue. This area is further broken down into streetscape typologies that differ in their proximity to Hudson Park, as follows:

## BOULEVARD



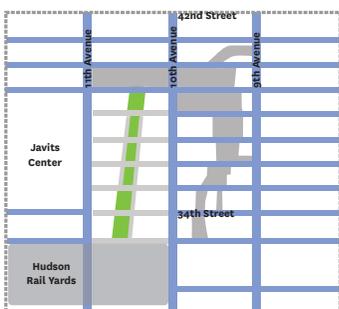
Hudson Boulevard East and Hudson Boulevard West have an identity most closely linked to the park, and they act as a frame for the District's central green spine.

## BOULEVARD-ADJACENT



Boulevard-Adjacent Side Streets are still tied to the identity of Hudson Park and act to draw people into the open space. These streets include 33rd Street to 38th Street, between 10th and 11th Avenues.

## DISTRICT



District Side Streets/Avenues are the least tied to the identity of the park. These streets provide a uniform feel to the Hudson Yards District, while tying it seamlessly into the streets of Manhattan.

### Administration

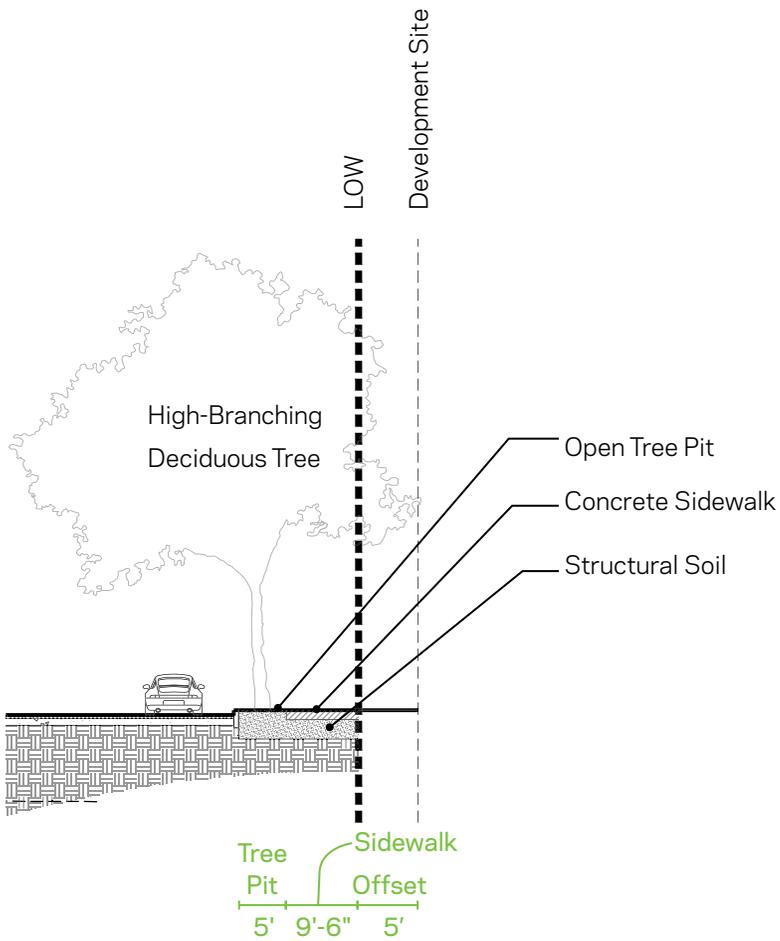
While the guidelines in this manual are voluntary, the BID encourages all developers and tenants to follow the rules so that the aesthetic of the District remains coherent over time.

# Design Standards

Standards for sidewalks, curbs & pedestrian ramps, street lights, street trees, utility covers, mechanical equipment & vaults and furnishings are subsequently described for the three streetscape typologies in the Hudson Yards District.



**Figure 3**  
View East Along 34th Street with the  
Hudson Yards District in the Foreground

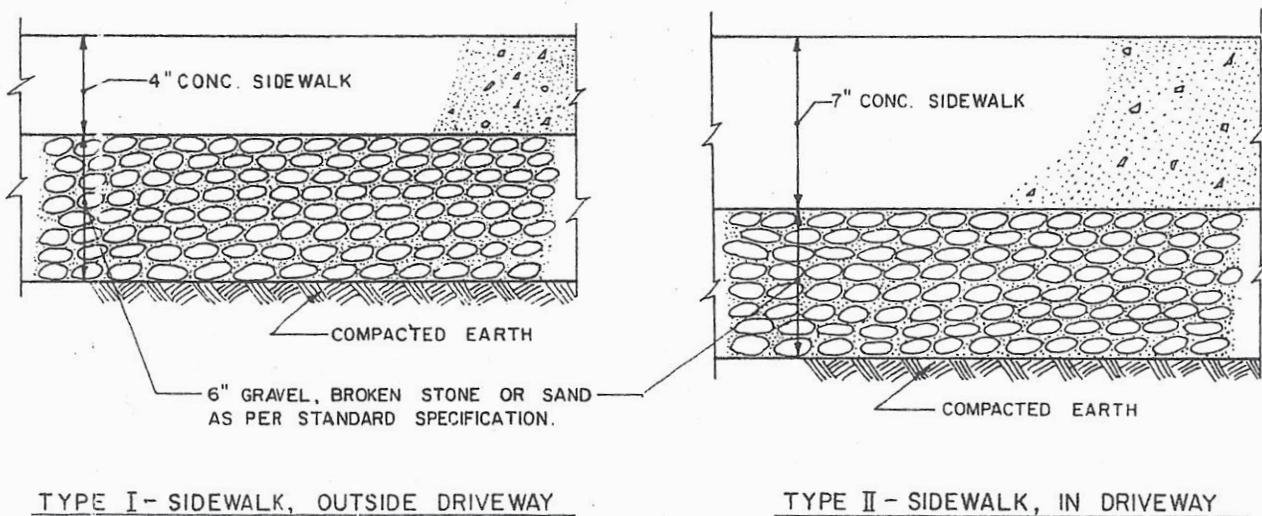


**Figure 4**  
Section Through Hudson Boulevard East,  
Showing Typical Dimensions for the  
Boulevard

The Boulevard sidewalks frame Hudson Park and are where the main entrances and groundfloor retail on neighboring properties lie.

**Sidewalk widths** on the Boulevards should conform to those laid out in the Special Hudson Yards District Zoning Text Amendment and the Official Filed Map for New York City.

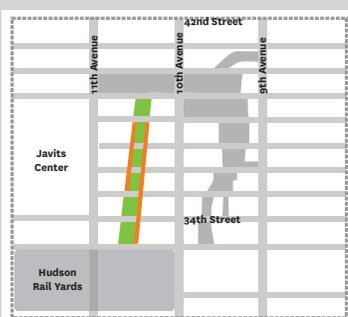
The **sidewalk materials** should be a standard NYC DOT concrete sidewalk (see detail below). The use of this material connects Hudson Park to the adjacent Boulevards.

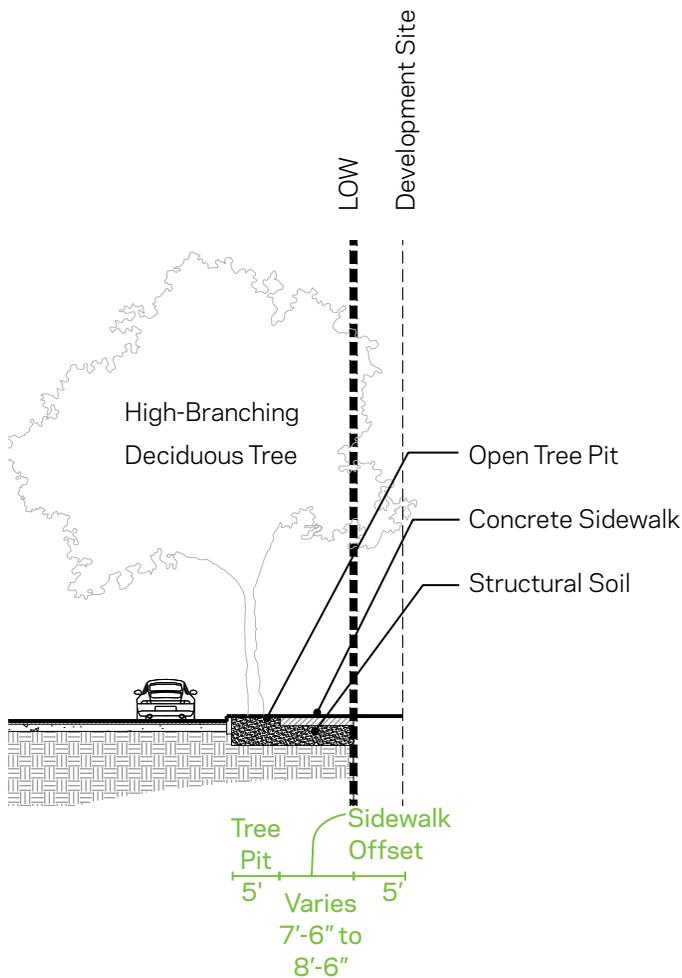


**Figure 5**  
DOT Standard Concrete Sidewalk Profile  
(NYCDOT H-1045)

# SIDEWALKS: DIMENSIONS & MATERIALS

## BOULEVARD





**Figure 6**  
 Section Showing Typical Dimensions  
 for the Boulevard-Adjacent Side Streets.  
 The Sidewalk Width Varies Slightly  
 from Street to Street, as Reflected in the  
 Official Filed Map.

The sidewalks of Boulevard-Adjacent Streets contribute to the identity of Hudson Park and, through the use of a similar design vocabulary, help to draw people into the park.

**Sidewalk widths** on the Boulevard-Adjacent Streets should conform to those laid out in the Special Hudson Yards District Zoning Text Amendment and the Official Filed Map for New York City.

The **sidewalk materials** should be a standard NYC DOT concrete sidewalk (see detail on facing page).

## STRUCTURAL SOIL

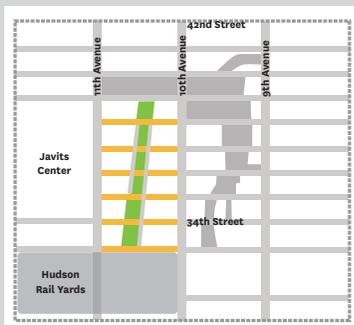
Street trees require at least 1,200 cubic feet of soil volume for optimal health and longevity as well as to allow for the growth of a mature tree canopy in the District. The soil volume possible with a standard 3'-deep 5'x10' tree pit is 150 cubic feet. To increase the soil volume without increasing the tree pit size, structural soil can be placed adjacent to the tree pit, underneath the sidewalk. This special soil provides sufficient support for the sidewalk above and gives the tree additional space for its roots to expand. (See Figure 13 for a plan showing the extent of Structural Soil under the Boulevard sidewalk).

District Street sidewalks give a unifying feel to the Hudson Yards area, while also tying the area into the rest of the city.

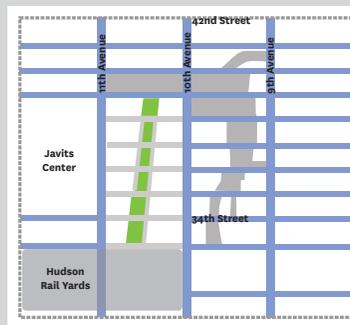
**Sidewalk widths** on the District Streets should conform to those laid out in the Special Hudson Yards District Zoning Text Amendment and the Official Filed Map for New York City.

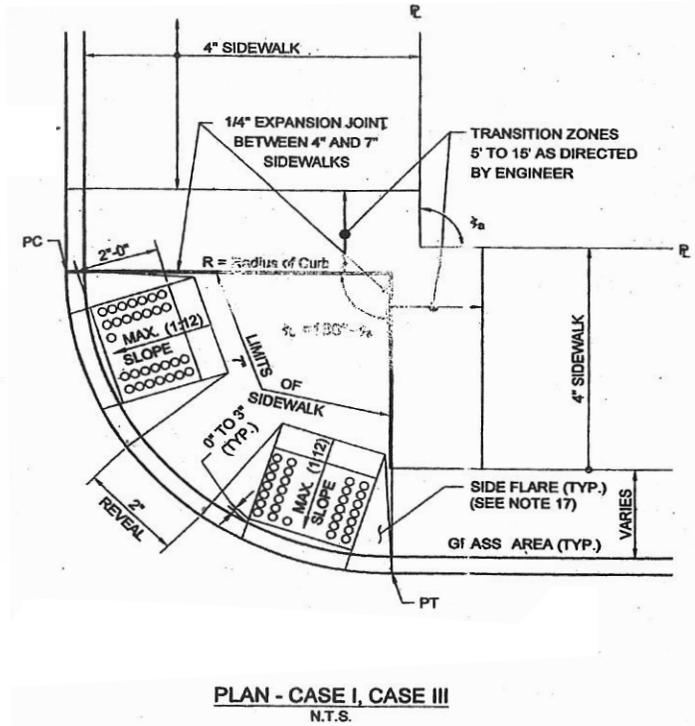
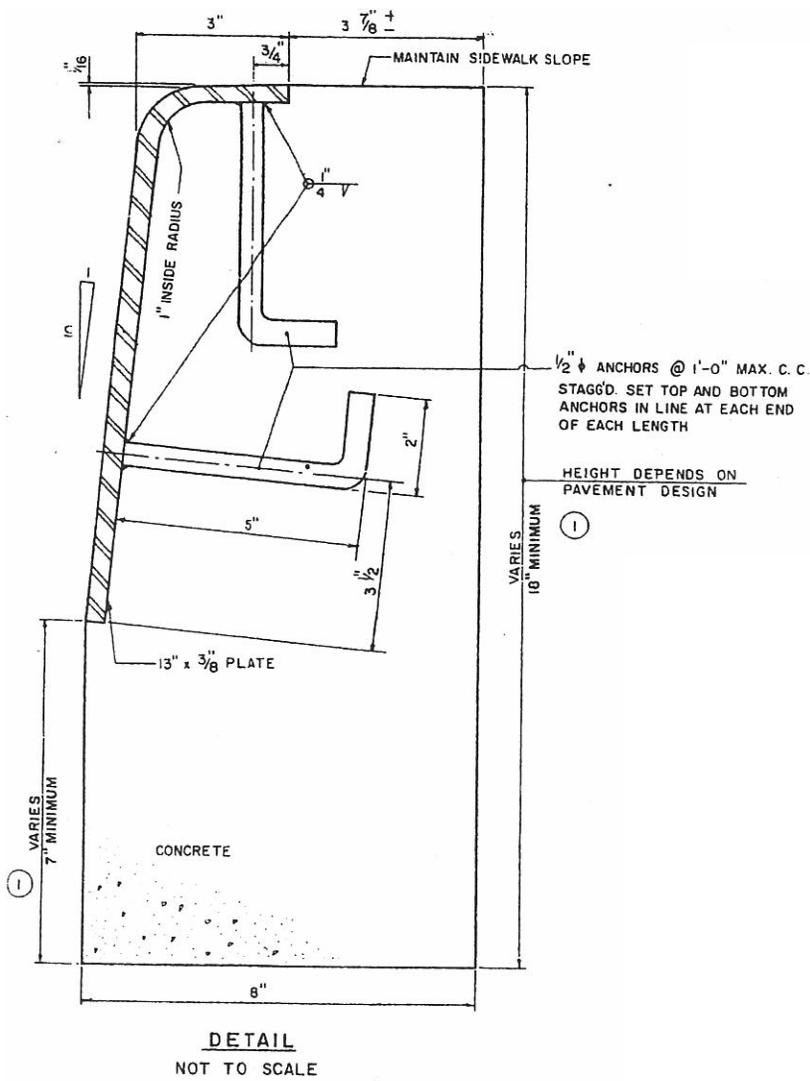
The **sidewalk materials** should be a standard NYC DOT concrete sidewalk (see detail on facing page).

## BOULEVARD-ADJACENT



## DISTRICT





**Figure 7**  
DOT Standard Sidewalk Pedestrian Ramp (NYC DOT H-1011), above

**Figure 8**  
DOT Standard Steel Faced Curb (NYC DOT H-1010), at left



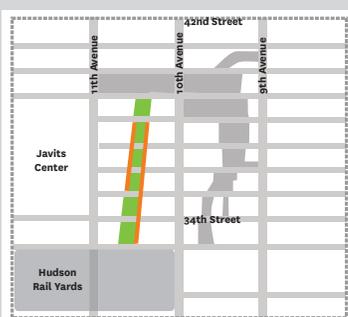
**Figure 9**  
Standard NYC Materials on a Street Corner: Asphalt Roadway, Steel-Faced Curb, and Concrete Sidewalk

**Curbs** on the Boulevards should be the NYC DOT standard steel-faced concrete. Although steel-facing is generally used on streets with heavy traffic, it is used on both the Boulevards and Boulevard-Adjacent Streets to create a consistent look for the area near Hudson Park.

**Pedestrian ramps** should be NYC DOT standard, with detectable warning units.

# CURBS & PEDESTRIAN RAMPS

## BOULEVARD



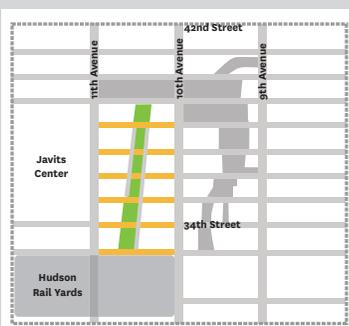
**Curbs** on the Boulevard-Adjacent Streets should be the NYC DOT standard steel-faced concrete. Although steel-facing is generally used on streets with heavy traffic, it is used on both the Boulevards and Boulevard-Adjacent Streets to create a consistent look for the area near Hudson Park. (See detail on facing page).

**Pedestrian ramps** should be NYC DOT standard, with detectable warning units. (See detail on facing page).

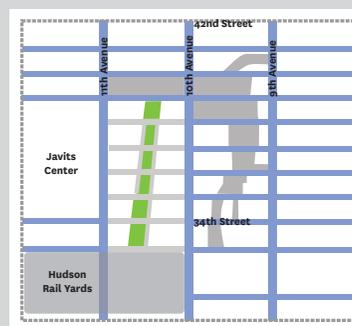
**Curbs** on the District Streets should be NYC DOT standard concrete. Steel-facing should be used on heavy-traffic streets, or as determined by DOT.

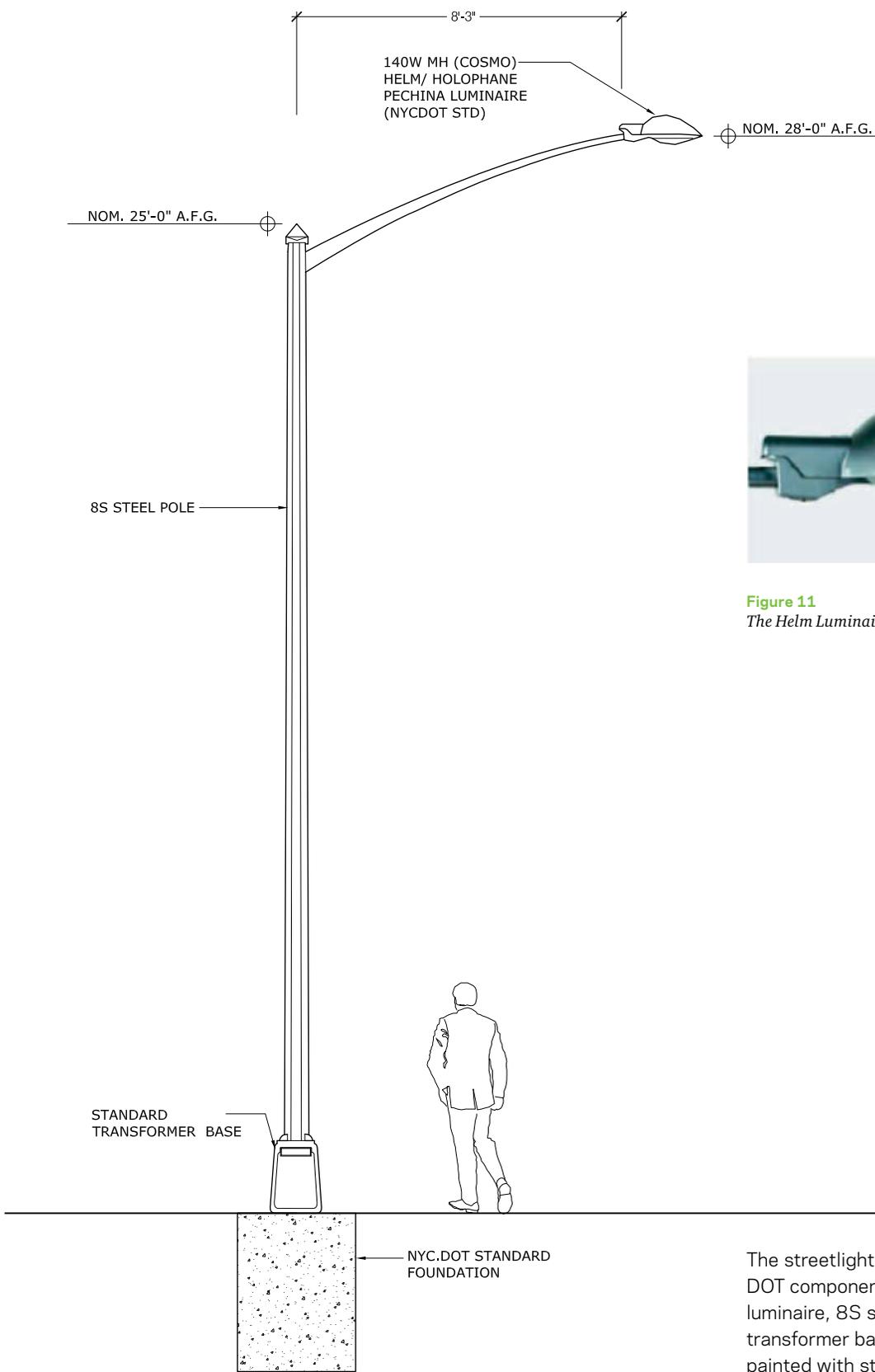
**Pedestrian ramps** should be NYC DOT standard, with detectable warning units. (See detail on facing page).

## BOULEVARD-ADJACENT



## DISTRICT





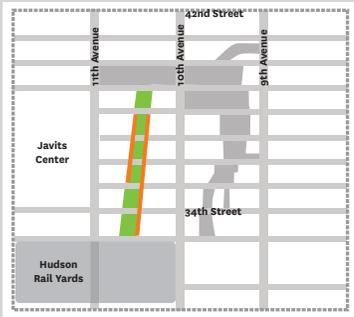
**Figure 11**  
*The Helm Luminaire*

The streetlights are composed of standard DOT components, including: the Helm luminaire, 8S steel pole, and a standard transformer base. The entire pole should be painted with standard DOT silver insulating paint.

**Figure 10**  
*The Streetlight for the Hudson Yards District*

# STREET LIGHTS

## BOULEVARD



## LIGHT SOURCES

Although NYC DOT's standard high pressure sodium (HPS) light source is prevalent throughout many areas of New York City, DOT has permitted the use of new white light sources (either CosmoPolis Metal Halide or Light Emitting Diode (LED)) within Hudson Park and Boulevard area that would also be appropriate within the district at large. Both of these sources offer advantages including more accurate color rendering (appearance of people and plants); improved nighttime visibility; long average rated source life; and energy savings. CosmoPolis light sources are being used along the Boulevard and Boulevard-Adjacent Side Streets and it would be ideal to use this same technology throughout the District, if permitted by DOT, to ensure a consistent look. Since white light from LED and CosmoPolis does not look the same, the preference is to only use CosmoPolis sources throughout the District. The streetlights to be used throughout the District are capable of utilizing any standard DOT light source (with minor modification) in the event that NYC DOT adopts a new white light source other than the preferred CosmoPolis.

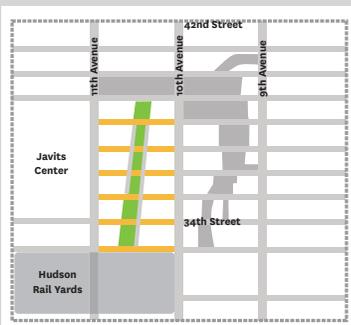
The same streetlight used on the Boulevards should also be used on the Boulevard-Adjacent Streets. (See detail on facing page). The entire pole should be painted with standard DOT silver insulating paint.

Streetlights along Boulevard-Adjacent Streets should be located to minimize disruptions to the line of street trees, and conform to DOT requirements.

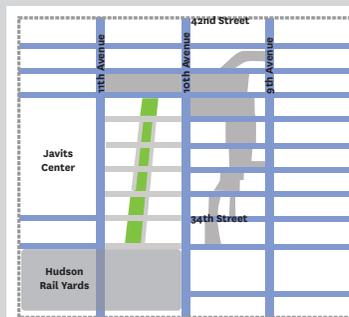
The same streetlight used on the Boulevards and Boulevard-Adjacent Streets should be used throughout the District. (See detail on facing page). The entire pole should be painted with standard DOT silver insulating paint.

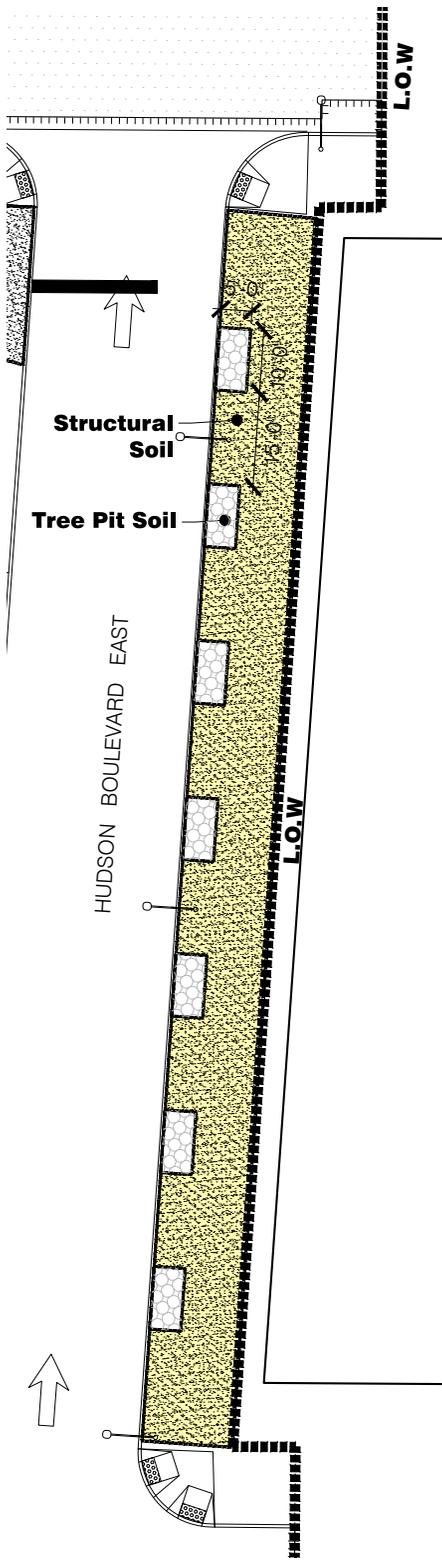
Streetlights along District Streets should be located to minimize disruptions to the line of street trees, and conform to DOT requirements.

## BOULEVARD-ADJACENT

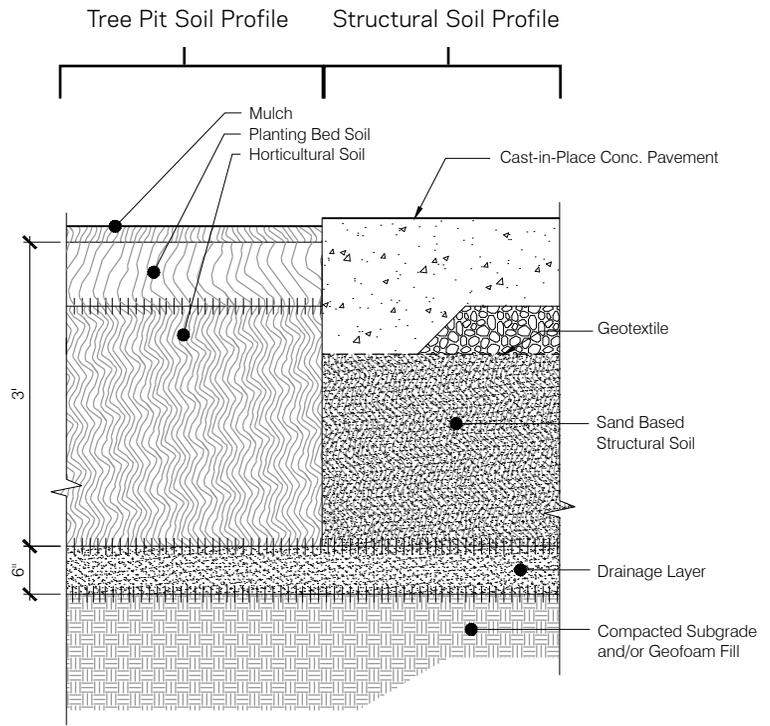


## DISTRICT





**Figure 13**  
Street Tree Spacing, Tree Pit Dimensions, and Structural Soil Locations along the Boulevard



**Figure 12**  
Typical Tree Pit Soil Profile Showing Mulch, 3' of Soil and a Drainage Layer and Typical Structural Soil Profile Adjacent

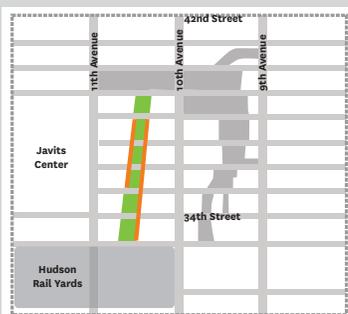
The Boulevards should be priority zones for street trees. An uninterrupted line of trees should stretch along both Boulevards, framing Hudson Park. Infrastructure (i.e. vaults and loading docks) that may interfere with the placement of street trees on the Boulevard should be sited on Boulevard-Adjacent Streets.

Tree pits should be 5' x 10', and have no grating at the surface. Each tree should have a minimum of 1,200 cubic feet of soil volume. To accomplish this along the Boulevard, there needs to be structural soil underneath the entire sidewalk. The specified soil for tree pits allows for efficient nutrient cycling, drainage, and air flow. Tree pit soil (as well as any Structural Soil) must have adequate drainage and this should be tested for an ensured during initial planting.

Trees along the Boulevards are spaced 25' apart.

## STREET TREES: LOCATION, DIMENSIONS & SOIL

### BOULEVARD



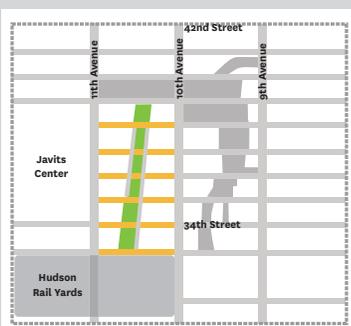
Boulevard-Adjacent Streets will have fewer opportunities for continuous rows of street trees than on the Boulevards. Lines of trees will be interrupted by loading docks and vaults, which should be located on these streets rather than along the Boulevards.

Tree pits should be 5' x 10', and have no grating at the surface. Each tree should have a minimum of 1,200 cubic feet of soil volume. This could be accomplished through the use of structural soil underneath the sidewalk. (See facing page for planting and soil details). Tree pit soil (as well as any Structural Soil) must have adequate drainage and this should be tested for an ensured during initial planting.

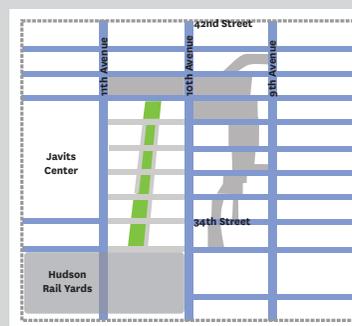
Trees along the Boulevard-Adjacent Streets should be spaced 25' apart.

Tree pit spacing and dimensions must conform to the Department of Parks & Recreation's (DPR) Tree Planting Standards.

## BOULEVARD-ADJACENT



## DISTRICT





Honey Locust  
*Gleditsia triacanthos*

Kentucky Coffee Tree  
*Gymnocladus dioica*

Pagoda Tree  
*Styphnolobium japonicum*

**Figure 14**

*Three Key Tree Species are Used to Line the Boulevards and the Boulevard-Adjacent Streets. This Plant Palette is Expanded to Include Additional Species for the District Streets.*

**TREE SELECTION**

All of the street trees chosen for the Hudson Yards District appear on the NYC DPR 'Street Trees for New York City' list. The specific trees that were selected from this larger list are high-branching deciduous trees with small leaflets that allow for light to filter through to the sidewalk below. The tree species along the Boulevard and Boulevard-Adjacent Side Streets are also used in Hudson Park and they tie the streets and the park together.

Recommended tree species along the Boulevards are high-branching deciduous trees and include Pagoda Tree, Honey Locust, and Kentucky Coffee Tree.

# STREET TREES: SPECIES

## BOULEVARD





Additional Species  
for the District



Ginkgo  
*Ginkgo biloba*

Swamp White Oak  
*Quercus bicolor*

Shingle Oak  
*Quercus imbricaria*



Pin Oak  
*Quercus palustris*

Willow Oak  
*Quercus phellos*

Japanese Zelkova  
*Zelkova serrata*



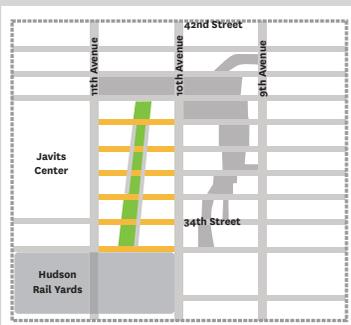
Turkish Filbert  
*Corylus colurna*

English Oak  
*Quercus robur*

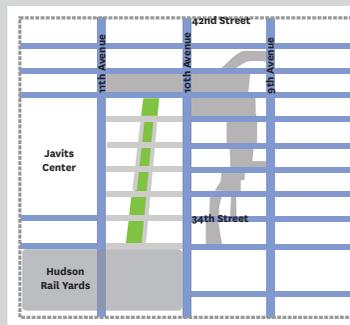
Recommended tree species for Boulevard-Adjacent Streets are the same as those planted along the Boulevard and include Pagoda Tree, Honey Locust, and Kentucky Coffee Tree.

District Streets should be planted with a number of high-branching deciduous trees, selected from the DPR list of Street Trees for New York City. Preferred trees for the Hudson Yards District include Pagoda Tree, Honey Locust, Kentucky Coffee Tree, Ginkgo, Swamp White Oak, Shingle Oak, Pin Oak, Willow Oak, Japanese Zelkova, Turkish Filbert, and English Oak. These trees are all at an appropriate scale for the dense urbanism of the Hudson Yards District.

### BOULEVARD-ADJACENT



### DISTRICT



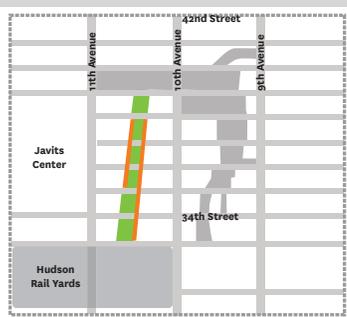


**Figure 15**  
 Existing Sidewalk Utility Vaults in the  
 Hudson Yards District

Utility vaults should not be placed in the sidewalks along the Boulevards, since this would interrupt the continuous row of street trees that is desired here and clutter the sidewalk where the main entrances for new development will be located. Wherever possible, utility vaults should be placed in the side streets instead of the Boulevard.

## UTILITY COVERS, MECHANICAL EQUIPMENT & VAULTS

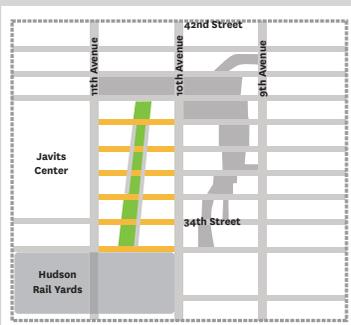
### BOULEVARD



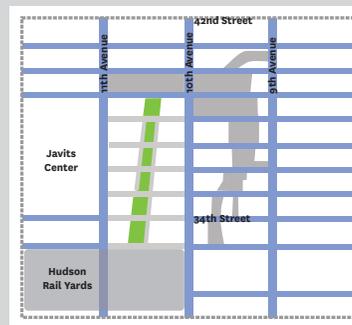
Boulevard-Adjacent Side Streets are the preferred location for utility vaults, rather than the Boulevard. These side streets are the location of loading docks for new development and, as such, are best able to accommodate other service uses such as utility vaults.

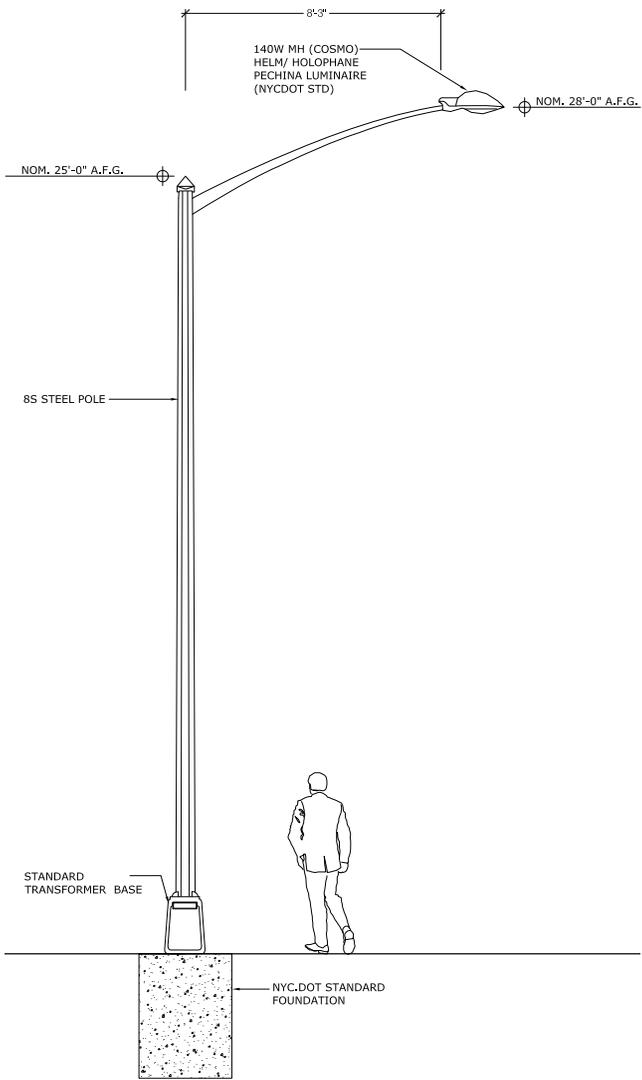
Utility Vaults should be sited on District streets according to DOT and utility company directions.

## BOULEVARD-ADJACENT



## DISTRICT





**Figure 16**  
*The streetlight used on the Boulevard should also be used throughout the District. (See page 12-13)*



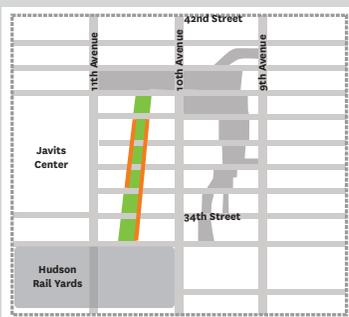
**Figure 17**  
*The standard DOT wire mesh trash receptacle can be used in Hudson Park as well as on the District Streets.*



**Figure 18**  
*The DOT standard bike rack, to be used throughout the District*

# FURNISHINGS

## BOULEVARD





**Figure 19**  
*The Parc Vue bench (from Landscape Forms) should be used on the Avenues and on the Boulevard-Adjacent Side Streets.*

Sidewalk furnishings should not displace street trees. The placement of trees and utility vaults must be coordinated with the furnishings such that the overall tree canopy is not decreased.

Where possible, furnishings such as benches, bicycle racks, and trash receptacles should be placed on the Avenues and not on the Boulevards or the Boulevard-Adjacent Side Streets.

Benches should be used sparingly so as not to crowd the sidewalk and should consist of the stainless steel Parc Vue bench (from Landscape Forms) in silver metallic. (See Figure 19).

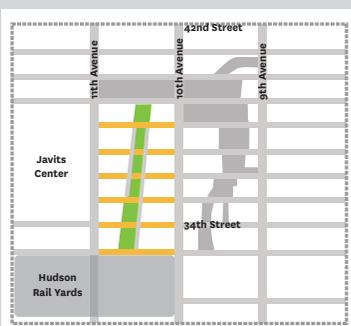
The DOT standard bicycle rack should be used throughout the District (see Figure 18).

The trash receptacles in the District should be standard DOT wire mesh receptacles (see Figure 17).

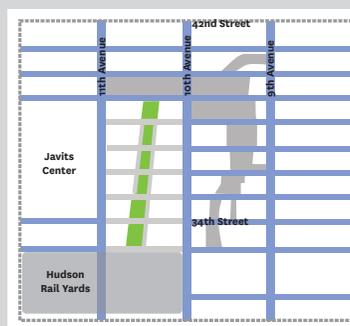
Streetlights throughout the District should be the same as those used along the Boulevard. (See page 12 for detailed information regarding streetlights).

All streetscape furnishings used within the District should be approved as part of the DOT Street Design Manual.

## BOULEVARD-ADJACENT



## DISTRICT



# Conclusion

Prospective developers in the Hudson Yards District should confer with the Hudson Yards Development Corporation (HYDC) or the Hudson Yards Business Improvement District (HYBID). Both of these organizations will refer the developer to this Streetscape Manual for guidance.

For more information, please contact HYDC prior to January 1, 2014 and contact the HYBID after this date.

## References

These documents are important to consult when designing the streetscape in the Hudson Yards District:

New York City Department of Transportation, **"Street Design Manual."** (2009)  
<http://www.nyc.gov/html/dot/html/about/streetdesignmanual.shtml>

New York City Department of Transportation, **"Standard Details of Construction."** (Revised 1999)

New York City Department of Parks & Recreation. **"Tree Planting Standards."** (2009)  
[http://www.nycgovparks.org/sub\\_permits\\_and\\_applications/images\\_and\\_pdfs/tree\\_planting\\_standards\\_2009.pdf](http://www.nycgovparks.org/sub_permits_and_applications/images_and_pdfs/tree_planting_standards_2009.pdf)

New York City Department of Parks & Recreation. **"Species List."** (2012)  
<http://www.nycgovparks.org/trees/species-list>

City Planning Commission of New York City. **"Special Hudson Yards District: Zoning Text Amendment as Adopted by City Council NO40500(A)ZRM."** (January 19, 2005)  
[http://www.nyc.gov/html/dcp/pdf/hyards/zoning\\_text\\_011905.pdf](http://www.nyc.gov/html/dcp/pdf/hyards/zoning_text_011905.pdf)

City Planning Commission of New York City. **"Diagram Showing Zoning Change on Sectional Maps 8b, 8c & 8d Borough of Manhattan: C.C. Reso. #782."** (January 19, 2005)  
[http://www.nyc.gov/html/dcp/pdf/hyards/040499azmm\\_maps.pdf](http://www.nyc.gov/html/dcp/pdf/hyards/040499azmm_maps.pdf)

City of New York Department of City Planning, Borough of Manhattan. **"C.P.C. No. 040507 MMM Showing the Establishment of Hudson Boulevard East and Hudson Boulevard West and Parks."**  
Please contact HYDC for access to this document.

**"Hudson Park and Boulevard: Roadwork & Utilities Package, 100% Conformed Documents."** (Drawings Dated April 9, 2012)  
Please contact HYDC for access to this document.

