# **Chapter 10** Sidewalks



Sidewalks are a part of nearly every New York City neighborhood. In some historic districts, sidewalks aesthetically unify the streetscape. In these districts, sidewalk paving materials and location are considered significant features. Protection of historic sidewalks and uniform streetscapes in historic districts serves as the basis for LPC's rules for repairing and replacing sidewalks (see LPC Rules, Section 2-19, available on our website, www.nyc.gov/ landmarks).



Landmarks Preservation

# In This Chapter, You Will Find:

#### ()

This chapter explains LPC's rules for repairing and replacing sidewalks. Our goal is to help you submit a fully completed permit application for work that conforms to the LPC Rules so you can get your permit more quickly.

#### ()

**Note:** Businesses that want to install an outdoor dining setup will need to get a permit from the NYC Department of Transportation (NYC DOT). As long as the outdoor dining setup complies with the siting and design criteria adopted by the Dining Out NYC program, no LPC permit will be required.

An LPC permit is required for any elements of the setup which attach to the building, storefront, or sidewalk paving (including awnings, light fixtures, signage, conduit, etc.).

Sidewalks may need to conform to other applicable rules, requirements, and guidelines of the NYC Department of Transportation (NYC DOT), the NYC Department of Parks and Recreation, and in some cases, the Public Design Commission (PDC). Be sure your proposal meets these requirements, as well.

Section A How to Get Started	10.3
Section B LPC Rules and Criteria	10.5
General Criteria	10.6
Bluestone Sidewalks – Removing Bluestone – Repairing Bluestone – Installing New Bluestone	10.7
Granite Sidewalks <ul> <li>Removing Granite</li> <li>Repairing Granite</li> <li>Installing Granite</li> </ul>	10.9
Concrete Sidewalks	10.10
Repairing or Replacing Sidewalks with Other Materials	10.11
Accessibility Work	10.12
Vault Lights – Installing New Vault Lights – Protecting and Covering Existing Vault Lights – Street Trees, Sidewalk Planting Beds, and Bioswales	10.13
Street Trees, Sidewalk Planting Beds, and Bioswales	10.15
Section C Technical Guidance and Resources	10.16
Historic Districts with Sidewalks Regulated by LPC	10.17
Concrete Tint Specifications	10.18

# Section A How to Get Started

#### (i) Before applying for your permit, you should:

#### Find Information About Your Building

This will help you determine how the LPC Rules apply.

What type of building is it? Search for your building on the Discover NYC Landmarks map to determine how the LPC Rules apply to your specific building type.

Click on your building to find construction date, architect and style, building and landmark type, and a link to the LPC designation report with historical background.

What did your building and sidewalk look like? Find historic tax photos from the 1940s and 1980s, available through the NYC Department of Records & Information Services' <u>NYC Municipal Archives</u> <u>Collections</u>. Additional information, including guidance on finding **historic maps**, can be found in the LPC **Resource Guide** <u>Researching</u> <u>Historic Buildings in New York</u> <u>City</u>, available at <u>www.nyc.gov/</u> landmarks.

**Is the building's sidewalk regulated?** Identify whether your building is in a historic district where LPC regulates sidewalks (paving) because they are considered a significant feature of the streetscape. See *Section C* for a list of historic districts.

Note that sidewalks located adjacent to individual landmarks are typically not part of the designated landmark site and therefore may not require a permit from LPC. Consult the building's designation report for a description and map showing the boundaries of the landmark site.

#### See if Your Work Requires an LPC Permit

Maybe you don't need a permit. A permit is not required for:

Sidewalk paving replacement in a historic district where sidewalk paving is not considered a significant feature of the streetscape, as determined by LPC (See Section C for a list of historic districts where sidewalk paving is considered a significant feature.)

Sidewalk work at an individual landmark outside the boundaries of the landmark site

*Repainting cast iron vault lights black* 

Sidewalk and roadway cafes that comply with the Dining Out NYC program rules and do not include elements that are physically attached to the sidewalk, road, or building

Unsure whether your work requires a permit? Contact LPC at 212-669-7817 or info@lpc.nyc.gov.

# What You Will Need

All LPC permit applications and supporting materials are now filed and processed through Portico, the agency's web-based permit application portal. Applications typically require submitting the materials listed below, but additional materials may be required depending on the type of work. See Section B for a list of all materials required for your work type.

#### **Basic Application Materials**

- □ LPC permit application □ An assessment of Form filed on Portico is required for □ **Color photos** of the entire building and close-ups of areas of sidewalk work, including adjacent sidewalks e.g., stone type, tint color for concrete. □ Drawings: and dimensions of paving units Plan of existing sidewalk, if historic, and proposed work showing paving pattern - Section of the proposed a DOB permit. sidewalk if sidewalk is to be stone
  - deteriorated conditions replacement of historic paving or cast iron vaults
  - □ Material specifications,
  - **Department of Buildings** (DOB) filing drawings if proposed work requires

# Section B LPC Rules and Criteria

#### (i) This is how the Landmarks Preservation Commission works:

**The LPC Rules establish criteria** that allow staff to review and approve proposals for certain types of work at landmark properties. Permit applications for work that meets the LPC Rules can be approved faster. If the work does not meet the rules, staff may suggest alternatives that do meet the rules – or your proposal may be presented to the LPC Commissioners for review at a public hearing. LPC staff can guide you through this process. Visit <u>www.nyc.gov/</u> landmarks for more information.

This section explains and illustrates the rules and criteria for the most common types of work involving sidewalks. See LPC Rules, Section 2–19, for more information. LPC Permit Guidebook · 10.5

#### ightarrow In This Section:

#### **General Criteria**

#### **Bluestone Sidewalks**

- Removing Bluestone
- Repairing Bluestone
- Installing New Bluestone

#### **Granite Sidewalks**

- Removing Granite
- Repairing Granite
- Installing Granite

#### **Concrete Sidewalks**

#### Repairing or Replacing Other Sidewalk Materials

#### Accessibility Work

#### Vault Lights

- Installing New Vault Lights
- Protecting and Covering Existing Vault Lights
- Street Trees, Sidewalk
   Planting Beds, and Bioswales

## **General** Criteria

Staff can issue permits approving sidewalk work that meets the following general criteria. Certain types of work may have additional requirements. See criteria by work type for more information.

#### **Identify whether any historic materials remain at the sidewalk,** such as bluestone or granite pavers or curbs, or cast iron vault lights. These features must be retained where feasible.

#### Identify whether any historic

**fabric** remains at adjacent sidewalks. New paving materials must be harmonious with existing adjacent historic paving to lend continuity to the streetscape.

LPC only regulates sidewalk paving replacement within historic districts where paving is considered a significant feature of the streetscape. See *Section C* for a list of historic districts. LPC regulates installing new tree pits or bioswales or expanding existing tree pits or bioswales in all historic districts, as well as guards at the perimeter of these installations.

#### **Required Application Materials**

- □ **Photos** of overall sidewalks
- Photos of specific stone pavers or other distinctive paving (not standard concrete) to be replaced
- Comparative drawings: (You do not need to include existing plans if the present sidewalk is concrete.)
  - Plan drawing of existing conditions and proposed sidewalk, showing paver and joint pattern at the sidewalk and adjacent sidewalks, including curbs and ramps at intersections
- Comparative section drawings of existing and proposed conditions when replacing stone pavers or other distinctive paving, or modifying sidewalks for accessibility
- Material specifications on drawings
- Color tint specifications for tinted concrete paving or patches
- Conditions assessment for historic stone pavers or other distinctive paving being altered, removed, or replaced

If LPC requires additional materials after your application is reviewed, you will receive a Materials Checklist from LPC staff.

# **Bluestone Sidewalks**

Staff can issue permits approving the removal of damaged stone, patching broken areas, and installing new pavers that meet the following criteria:

#### **Removing Bluestone**

Staff can issue permits approving the removal of heavily damaged or crushed bluestone pavers, but intact portions that meet DOT size requirements must be retained. All other bluestone pavers must be preserved.

A minimal amount of bluestone can be removed to accommodate enlarging tree pits to meet city requirements. If feasible, bluestone must be salvaged and relocated for use elsewhere on-site.

**If necessary**, existing pavers may be carefully removed and stored in a dry, secure area so they can later be reinstalled without additional damage.

#### **Repairing Bluestone**

Staff can issue permits approving the installation of small amounts of cementitious patching at voids or other areas that have cracked. The patch must be tinted to match the color of the existing bluestone.



Heavily damaged or crushed bluestone pavers can be removed and replaced with new bluestone or tinted concrete to match.



A new bluestone sidewalk and curb in the Cobble Hill Historic District matches the adjacent historic bluestone pavers in dimension, color, and paving pattern.

#### Installing New Bluestone

Staff can issue permits approving the installation of new bluestone pavers if the work meets the following criteria:

New bluestone pavers can be installed if the existing sidewalk is missing one or more bluestone pavers or they are deteriorated beyond reasonable repair. New bluestone pavers can also be installed if the existing sidewalk is concrete but the historic district was historically characterized by bluestone sidewalks.

Bluestone pavers must be set

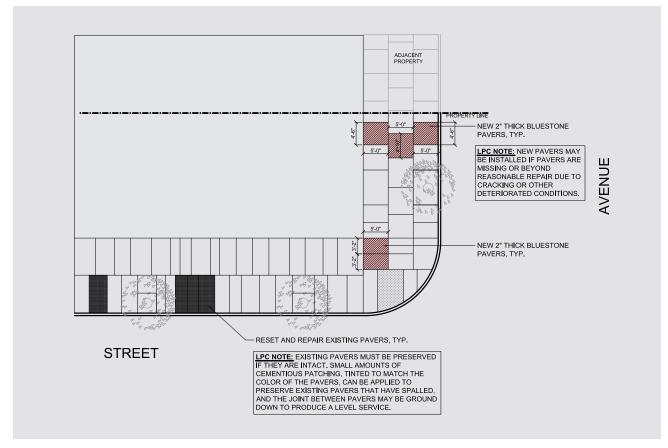
**on a level**, non-cement base with very thin joints (1/8 to 3/16 inches wide).

New bluestone pavers must match existing or adjacent historic bluestone pavers in terms of dimension, color, and paving pattern. Most bluestone sidewalks with two rows typically had staggered joints along the center line, as opposed to a uniform grid.

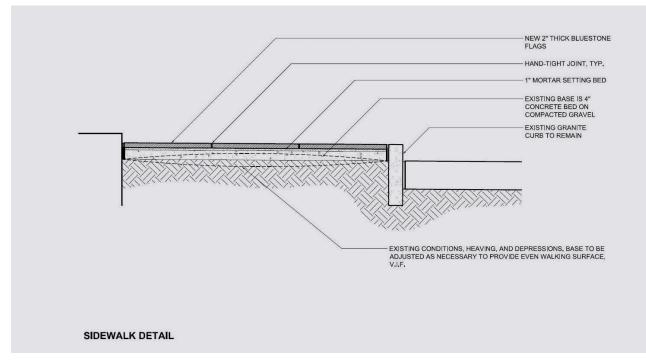
(1)

#### See Concrete Sidewalks

for situations in which concrete pavers tinted to look like bluestone can be installed.



A plan drawing showing the location and dimensions of new bluestone pavers in relation to existing bluestone.



A section drawing showing new bluestone pavers set on a level, non-cement base.

# Granite Sidewalks

Staff can issue permits approving granite repairs and installing new granite pavers that meet the following criteria. When working on granite sidewalks, reserve or consolidate as many intact granite pavers as possible.

#### **Removing Granite**

Staff can issue permits approving the removal of portions of granite sidewalks if the maximum number of intact granite pavers will be maintained or consolidated within the property lines.

#### Repairing Granite

Small amounts of cementitious patching, tinted to match the color of existing granite, can be installed at voids or other areas that have cracked.

**Existing granite pavers** can be horizontally sliced to a minimum three- to four-inch thickness if the footprint of each is maintained and the paver reinstalled in approximately the same location.



A new granite sidewalk installed next to cast iron vault lights.

#### Installing Granite

New granite pavers can be installed if the existing sidewalk is missing one or more granite pavers or they are deteriorated beyond reasonable repair.

New granite pavers must match existing or adjacent granite pavers in terms of dimension, color, and edge treatment, and must have a slip-resistant finish. (i)

#### See Concrete Sidewalks

for situations in which concrete pavers tinted to look like granite can be installed.

# **Concrete Sidewalks**

Staff can issue permits approving the installation of concrete sidewalks that meet the following criteria:

#### Material

If no bluestone or granite exists at the sidewalk or the sidewalk was historically paved in concrete, the new sidewalk can be paved in concrete.

#### Color

If the sidewalk **is adjacent to** bluestone, granite, or concrete tinted to match the historic stone **on either side of the property**, new concrete pavers must be tinted to match the historic stone.

If the sidewalk **is not adjacent to** historic paving, it can be either untinted concrete to match adjacent sidewalks or tinted concrete to match the historic stone, consistent with the character of historic sidewalks in the historic district.

#### Scoring

Concrete pavers must be scored to match the size of pavers on adjacent sidewalks, with saw-cut joints that give the appearance of bluestone or granite flags if they are matching those materials.

If the concrete sidewalk at the building once had a decorative scoring pattern or this feature is characteristic of buildings of the same type, e.g., hotels, large apartment buildings, or club buildings, staff can issue permits approving a new scoring pattern – if it does not detract from significant architectural features of the building or streetscape.



A decorative terrazzo (concrete and marble chips) sidewalk designed by artist Alexander Calder in the Metropolitan Museum Historic District.



An example of concrete pavers with a decorative scoring pattern.

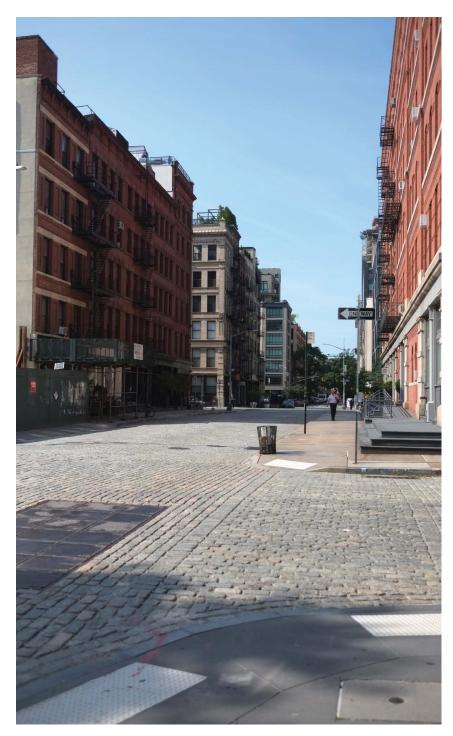


A new concrete sidewalk with saw-cut joints, tinted to match the adjacent historic bluestone.

# Repairing or Replacing Other Sidewalk Materials

Staff can issue permits approving repairing or replacing sidewalks and curbs in-kind that are made of materials other than bluestone, granite, or concrete, such as Belgian block, brick, or special concrete aggregates, provided the material is typically found in the district or represents a significant historic alteration or feature, e.g., brick pavers in front of a carriage house entrance.

All existing bluestone and granite curbs must be retained whenever possible. If necessary, curbs can be replaced with bluestone, granite, or tinted or untinted concrete to match adjacent curbing or replaced inkind to match existing curbing.



An intersection with tinted concrete paving, granite curbs and detectable warning units next to Belgian block streets.



A sidewalk with a variety of paving materials.

# Accessibility Work

### Staff can issue permits approving accessibility work

on sidewalks that meets the following criteria. All accessible sidewalk work must comply with applicable federal, state, and city codes and requirements. See *Chapter 9* for more information on barrier-free access installations.

#### On concrete sidewalks,

pedestrian ramps at sidewalk intersections must be made of concrete tinted to match the color, texture, and scoring of adjacent or predominant sidewalk paving.

#### On bluestone or granite

**sidewalks**, pedestrian ramps can have pavers cut to form the slope and flared sides of a ramp or be replaced in-kind to accommodate a ramp.

#### Detectable warning units,

designed to alert people who are vision impaired, can be embedded or applied on top of concrete or stone paving at intersections.

#### A portion of the sidewalk can be

sloped to make a store or space accessible. Change in grade must not damage historic paving or result in concealment of any significant architectural features of the base of the building.



Detectable warning units embedded in a concrete pedestrian ramp.



This concrete sidewalk has been sloped towards the storefront to make it accessible.

# Vault Lights

Vault lights are cast iron panels perforated with circular glass

**lights**, historically designed as skylights for spaces beneath the sidewalk. These elements are significant features of districts that were historically manufacturing or industrial in character, such as the SoHo, NoHo, and Tribeca Historic Districts.

### Installing New Vault Lights

Staff can issue permits approving the installation of new vault lights if the work meets the following criteria:

#### Installation

**If existing vault lights** (uncovered or covered by diamond plate steel or concrete) are beyond reasonable repair, they can be replaced with new vault lights.

**If no vault lights currently exist**, new vault lights can be installed to restore missing vault lights.

If no vault lights exist under existing diamond plate steel, diamond plate steel can be replaced in-kind or replaced with new cast iron vault lights.

#### Design

Design of new vault lights must be based on photographic or physical evidence of previous vault lights at the building or adjacent buildings, or buildings of similar age, style, and type. Design must match the approximate panel size and overall footprint, material, finish, and details of existing or historic vault lights.

New vault lights can either be set flush with the existing sidewalk over metal framing or concrete substrate, or be on a metal platform if the historic condition was raised above grade.



Staff can issue permits approving the installation of new vault lights in a sidewalk that had them historically.



Vaults lights, seen here, on steel risers and at grade, are a significant feature of districts historically manufacturing or industrial in character.

### Required Application Materials

- Photos of overall sidewalks
- Photos of specific cast iron vault lights to be replaced, including underside of vault lights as seen from within the vault
- Historic 1940s tax photos, if available (See Section A for more on how to obtain tax photos.)
- □ Comparative drawings:
  - Plan of existing and proposed vault light panel and joint pattern, including borders and steps, and / or existing diamond plate cladding
- Comparative sidewalk section drawings, showing existing and proposed conditions
- Material and color specifications on drawings
- Conditions assessment for historic cast iron vault lights being replaced

If LPC requires additional materials after your application is reviewed, you will receive a Materials Checklist from LPC staff.

#### Protecting and Covering Existing Vault Lights

Existing uncovered vault lights that are deteriorated and no longer watertight can be protected by covering them with steel diamond plate with a dark painted finish. Existing vault lights at vertical surfaces and lower traffic areas, such as steps and landings, must remain uncovered whenever possible.

If the historic district is not characterized by vault lights and/or steel diamond plate, staff can issue permits approving the replacement of steel diamond plate with concrete to match adjacent concrete.



Deteriorated historic vault lights can be covered and protected by steel diamond plate with a dark painted finish, as seen here.

# Street Trees, Sidewalk Planting Beds, and Bioswales at All Sidewalks

The presence of street trees and their associated planting pits is commonplace in historically residential areas, and in some cases commercial areas, and has existed since the blocks were developed or shortly thereafter. Street trees, sidewalk planting beds, and bioswales provide important environmental and social benefits, including providing shade and cooling, cleaning the air, and absorbing rainwater and runoff, which have important functions in addressing climate change impacts in urban and suburban settings.

LPC does not typically regulate the trees or plantings, only the physical change to the sidewalk to accommodate them. Every application to expand or install a new tree pit or planting area in the sidewalk area must also be approved by the New York City Parks Department.



Two tree pits combined into one continuous tree pit.

Staff can issue permits approving enlarging existing tree pits and sidewalk planting beds, or installing new tree pits, sidewalk planting beds, and bioswales, that meet the following criteria:

Existing tree pits or planting beds abutting the street curb may be enlarged by the minimum amount necessary as determined by an arborist, to accommodate tree roots or otherwise provide additional area for planting beds and bioswales.

Up to two (2) tree pits, planting beds, and bioswales can be joined or connected continuously across adjacent properties.

The enlargements should be limited to the area of paving parallel to and bordering the sidewalk curb and street.

### Modification of curbs for bioswales

If the work affects existing curbs, they should be replaced in-kind or retained where feasible, except that a portion of the curb can be removed or lowered if it is necessary for the installation or operation of a bioswale.

#### What is a bioswale?

Bioswales, or "rain gardens", are small natural areas, typically located in a sidewalk near a stormwater catch basin. They utilize extremely porous engineered soil, a variety of plants chosen for their ability to absorb water and thrive in an urban environment, as well as porous concrete to divert stormwater from streets and draw it into the ground.

# **Section C** Technical Guidance and Resources

This section provides additional guidance and resources to help you understand LPC's rules and criteria in order to submit the correct materials with your application.  $\rightarrow$  In This Section:

Historic Districts with Sidewalks Regulated by LPC

**Concrete Tint Specifications** 

# Historic Districts with Sidewalks Regulated by LPC

LPC regulates sidewalks repair/ replacement in the following historic districts:

Addisleigh Park Historic District

African Burial Ground and the Commons Historic District

Audubon Terrace Historic District

**Bedford Historic District** 

Bedford Stuyvesant/Expanded Stuyvesant Heights Historic District

**Boerum Hill Historic District** 

**Boerum Hill Historic District Extension** 

Brooklyn Academy of Music Historic District

Brooklyn Heights Historic District

Carroll Gardens Historic District

Charlton-King-Vandam Historic District

Chelsea Historic District

Chelsea Historic District Extension

**Clinton Hill Historic District** 

Cobble Hill Historic District

Cobble Hill Historic District Extension (three buildings)

Ditmas Park Historic District

**Douglaston Historic District** 

DUMBO Historic District

Fieldston Historic District

Fiske Terrace-Midwood Park Historic District

Fort Greene Historic District

Gansevoort Market Historic District

Governors Island Historic District

Gramercy Park Historic District

Gramercy Park Historic District Extension

**Greenpoint Historic District** 

Greenwich Village Historic District

Hunters Point Historic District

Jumel Terrace Historic District

Ladies' Mile Historic District

Manhattan Avenue Historic District

Metropolitan Museum Historic District

NoHo East Historic District

NoHo Historic District

NoHo Historic District Extension

Park Slope Historic District

Park Slope Historic District Extension

Park Slope Historic District Extension II

Park Terrace-West 217th Street Historic District

Prospect Park South Historic District

**Riverdale Historic District** 

Sniffen Court Historic District

SoHo-Cast Iron Historic District

SoHo-Cast Iron Historic District Extension

South Street Seaport Historic District

South Street Seaport Historic District Extension

South Village Historic District

St. George/New Brighton Historic District

St. Mark's Historic District

St. Mark's Historic District Extension

St. Nicholas Historic District

St. Paul's Avenue-Stapleton Heights Historic District

Stone Street Historic District

Stuyvesant Heights Historic District

Stuyvesant Square Historic District

Tribeca East Historic District

Tribeca North Historic District

Tribeca South Historic District

Tribeca South Historic District Extension

Tribeca West Historic District

Vinegar Hill Historic District

Wallabout Historic District

## **Concrete Tint Specifications**

The following list of concrete tint specifications can be approved at the staff level. When proposing concrete replacement, provide concrete tint specifications as a part of your application. Please note that these formulas are approximations. For exact color matches, other tints and/or mixed tints can be tested and used pending approval of the sample by LPC staff. To simulate the color of light- to medium-gray granite:

- DAVIS Color No. 884: 1 lb. per 100 lbs. Light Gray Portland Cement and sand, *or*
- LANSCO Color No. 437 "Strong Black": 2.5 lbs. per 94 lbs. Light Gray Portland Cement and 3 parts sand, *or*
- SCOFIELD Chromic Admixture "Cool Black" No. I: 1 5-sack-mix bag per 5 94-lb. bags Medium Gray Portland Cement and sand, *or*
- Other equal sample provided for approval.

To simulate the color of dark gray bluestone:

- DAVIS Color No. 884: 3 lbs. per 100 lbs. Light Gray Portland Cement and sand, *or*
- LANSCO Color No. 437
   "Strong Black": 5 lbs. per 94 lbs. Light Gray Portland Cement and 3 parts sand, or
- SCOFIELD Chromic Admixture "Cool Black"
   No. 4: 1 5-sack-mix bag per 5 94-lb. bags Medium Gray Portland Cement and sand, or
- SCOFIELD "Landmarks Gray" K-157-4, *or*
- Other equal sample provided for approval.