

Right-of-Way Improvement Standard

Chapter 1 – Streets Department Design Standards

Design Unit
Right-of-Way Unit
June 2015
Rev. N/A

1.1 General Standards

These Design Standards shall be maintained by the Streets Department's Transportation Design Unit, with ongoing revision coordinated internally between the various units within the transportation divisions.

1.1.1 Changes to Meet Current Standards

Proposed changes to existing pavement markings, traffic control signals & signs, street lighting and pavement markings, including relocation or temporary removal, shall serve as justification for the Streets Department to require upgrades of such infrastructure to meet current standards.

- A. *Signs, Traffic Signals & Street Lights*: Upgrades of traffic signals and street lighting is a matter of policy, and compatibility with the most current standards.
- B. *Pavements*: Streets Department regulations identify pavement restoration requirements for work within the Right of Way. All new pavements must conform to current Streets Department standards, which have been developed in consideration of ADA requirements.
- C. *ADA Compliant Corner Curb Ramps*: ADA ramps shall be upgraded as a matter of regulation. Paving restoration regulations may create instances when paving requirements will trigger upgrade requirements for ramps not within the frontage of a parcel, or near a utility installation.
- D. *Pavement Markings*: As a matter of pavement maintenance, thermoplastic pavement markings must be applied after the street has been repaved.

1.1.2 Park Drives

Improvements on any roadway within the City of Philadelphia with a classification of a Park Drive, as denoted within the Philadelphia Code, and called out on City street signs, are subject to approval by the City of Philadelphia Department of Parks and Recreation. Coordination of any such approvals shall be the responsibility of the developer. Proof of such approval may be requested by the Department of Streets at any time.

1.2 Specifications & Standard Details

Any specifications not included in the list of acceptable construction specifications must be submitted to the Streets Department for review and approval.

1.2.1 Acceptable Construction Specifications

The acceptable construction specifications of the Philadelphia Streets Department are as follows.

- A. *Construction Items*: PennDOT Publication 408 Construction Specifications (most current edition)
- B. *Street Lighting*: Philadelphia Streets Department, Street Lighting and Traffic Division specifications.
- C. *Traffic Signals*: Philadelphia Streets Department, Street Lighting and Traffic Division specifications.

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- D. *Special Provision*: Special Provisions, not included within the PennDOT Publication 408, will be developed and maintained by the Streets Department's Design Unit.

1.2.2 Standard Details

Streets Department standard details will be the standard for all roadway construction in the City of Philadelphia. Where no current standard exists, the most recent edition of the PennDOT Roadway Construction Standards and Design Manuals will apply. A list of all current Streets Department Standard details is available in the appendix.

1.2.3 Availability of Standards

Streets Department details and specifications are available online, as discussed within the preface.

1.3 Roadway Construction Plan Standards

1.3.1 Existing Conditions

- A. *Recently Constructed Non-Conforming Conditions*: There is no obligation for the Streets Department to approve anything constructed without approvals being given. Applications for all such projects may be subject to rejection, and are considered as the lowest possible priority.
- B. *Existing Driveways*: For projects involving existing driveways, where no record of approval exists, a Streets Department review is performed as part of any review where existing driveways are noted. There is no guarantee of approval for any existing driveways, their use, or limits upon the controls that may be required to obtain approval by the Streets Department.
- C. *Street Trees*: Trees not conforming with current standards, may be required for removal. In most instances, however, our policy is to request they not be replaced, should they be damaged and removed during construction. The final determination in all cases is related to the impacts of trees upon the visibility and accessibility of vehicles and pedestrians within the Right of Way. Approval by the Department of Parks and Recreation's Urban Street Tree Division is required for the planting of all streets trees.

1.3.2 Utility Plans

- A. *PA One Call*: All developers and contractors will comply with the Underground Utility Line Protection Act, PA Act 287 (1974, and as amended). Designers are required to provide this information to demonstrate compliance with State Law, provide adequate conflict resolution and demonstrate conformance with Departmental restoration requirements. The PA One Call System is accessible at www.pa1call.org, and via telephone (dial 8-1-1).
- B. *Preferred Drafting Standards*: While not required, the preferred drafting standard to denote underground utilities is the City Standard (also known as PWD Standard, and Highway Supervisor Standard), and PennDOT DM3 (Publication 14M).
- C. *Temporary Drains (As coordinated with the PWD, Office of Watersheds)*
- The standard for temporary drains, as permitted by Section 11-205 (Temporary Drains), will be considered to include underdrains for foundation drains, and rainwater collectors. All such drains shall conform with the Plumbing Code. Responsibility to mark out and maintain any

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such temporary drain shall be the sole responsibility of the property owner.

- Only the Philadelphia Water Department shall be permitted to infiltrate stormwater runoff within the subgrade soils within the Right of Way. No temporary drain may include stone or geotextile fabric, except for the purpose of collecting groundwater for drainage to an onsite collection system, or as may be permitted by the PWD.
- Barrels, Cisterns and Planters, when installed upon the street and used for the purpose of retaining stormwater runoff, are considered temporary drains, provided they can be disconnected on a seasonal basis, do not overflow onto any paved surface, and can be removed when necessary. When employed within the right of way, all such encroachments are required to abut the street line, and may not encroach upon the walking zone of the sidewalk.

D. Prohibited Utilities

- No utility line may be placed within the Right of Way without first obtaining an ordinance of City Council, or a Right of Way Use License (Philadelphia Code §11-702). The following are considered as utilities, and are therefore prohibited without the approval(s) listed above:
 - Irrigations Lines
 - Street tree aerators
 - Underdrains for storm water infrastructure (bio-retention systems, and planters)
 - Service connections for newsstands, or other structures within the ROW, such as police lobbies.
- Per §11-203(1) of the Philadelphia Code, “No person shall open, break or tunnel any street for the purpose of making a connection with or repairing any sewer or water pipe or other underground service, unless he has obtained a permit from the Department of Licenses and Inspections. Tunneling will not be permitted without the written approval of the Chief Highway Engineer.”

1.3.3 Grading Plans

Plans must include and conform to the dimension, cross slope and gutter slope requirements of Standard Details SC0101, SC0105, SC0112, and PP0102. Curb P.C., P.T. and P.I. locations and elevations, surveyor’s benchmarks, horizontal measurements (U.S. or District Standard) and vertical datum (City Datum) must also be identified and shown on the plans. These requirements set a universal, safe and constructible standard for the Right of Way. Grading plans should be presented in accordance with City of Philadelphia Standard Detail PP0102.

1.3.4 Landscaping Plans / Street Trees

- A. Landscaping or site plans must include dimensions showing conformance to the requirements of Standard Detail FZ0202 (Street Tree Planting Diagram).
- B. Tree Grates
 - a. The use of tree grates and cages must be pre-approved by the Philadelphia Department of Parks & Recreation, due to the long term impacts upon tree health by such devices.
 - b. When used, tree grates will be heavy duty cast iron, and cast to a form that is ADA compliant.

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- C. The placement of curb, fencing, railing, or other encroachments within a tree pit shall be regulated by the Department of Parks & Recreation. Tree pits are therefore not considered as walkable space by the Streets Department.
- D. The Streets Department recognizes the requirements set forth in the Philadelphia Zoning Code, §14-705(2) (Street Tree Requirements), and particularly, §14-705(2)(c)(.2)(.a). The Street Tree Planting Diagram, Standard Detail FZ0202, was developed in cooperation with the Departments of Parks & Recreation, Water and Streets, and is therefore the governing standard.

1.3.5 Roadway Geometry

Roadway geometry for new streets shall be governed by the Philadelphia Zoning Code, Section 14-708(5), (Subdivision Street Standards), AASHTO, and PennDOT standards for geometric roadway design.

1.3.6 Roadway and/or Footway Cross Sections

Roadway and/or Footway cross section, complying with following City standards, as also called out in Standard Detail SC0101 and SC0112. In all cases, the replacement of materials will be “in-kind”, with restoration requirements for existing conditions superseding current standards, when such conditions exceed current standards.

A. *Curb Standards*

- Standard section: eight (8) inches wide (concrete) six (6) inches wide (granite), and eighteen (18) inches deep (concrete and granite).
- Double wide section (for narrow streets): sixteen (16) inches wide, and eighteen (18) inches deep
- Standard curb reveal: four (4) inches (minimum) eight (8) inches (maximum), six (6) inches preferred
- 6 " x 14" of PennDOT 2A stone must be installed under curb
- Concrete and granite are preferred for all curb
- Granite curb joints will be set into concrete chairs

B. *Footway Standards*

- Cross slopes: 1.0% (min), 2.0% (max), except as noted by Standard Detail SC0101
- Concrete sidewalk sections will be:
 - i. Subgrade, as prepared per PennDOT Pub 408 Standards
 - ii. Four (4) inches of PennDOT 2A stone subbase, compacted per PennDOT Pub 408 Standards
 - iii. Four (4) inch thick concrete sidewalk (standard)
 - iv. Six (6) inches thick concrete sidewalk (all corners and narrow streets)
- Sidewalk sections for various bricks and pavers will be:
 - i. Subgrade, as prepared per PennDOT Pub 408 Standards
 - ii. Four (4) inches of PennDOT 2A stone subbase, compacted per PennDOT Pub 408 Standards
 - iii. Four (4) inch thick plain cement concrete base.
 - iv. Bricks and Pavers, at corners: set in thin set mortar
 - v. Bricks and Pavers, mid-block: set in one (1) inch sand bed
- Sidewalk pavement width(s) will meet the minimum walking zone requirements, as defined within the Complete Streets Handbook.

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- Walking Zones in any legal footway (as shown on the City Plan) will be paved, or upgraded to conform to current footways standards, as defined within this section. Redevelopment sites will require certification by a licensed design professional to establish where existing conditions conform to current standards.
- Furnishing and Building Zones may be paved in accordance with this section, or be vegetated with grass in accordance with PennDOT specifications. Any encroachment related to landscaping will conform with Section 1.8.
- The use of non-standard sidewalk pavements is discouraged by the Department, due to the difficulty associated with replacement of non-standard sidewalk pavements. The Streets Department will not be responsible for resolving conflicts related to replacement due to construction activity.

C. Cartway Standards

- Cartway restoration standards will be in accordance with the Streets Regulations Governing Street Openings, Excavations & Restoration (1-9-2015, and as revised).
- Cross slopes: 1% (min), 2.0% (preferred)
- Gutter slopes: 0.75% minimum (repaving), 1% minimum (new roadways)
- Cartway cross sections will generally be crowned, though reverse crowns may be considered on an individual bases on roadways with either steep topographies, or of a narrow width.
- Standard asphalt roadway sections will be:
 - i. Subgrade, as prepared per PennDOT Pub 408 Standards
 - ii. Six (6) inches of PennDOT 2A stone subbase on geotextile, compacted per PennDOT Pub 408 Standards
 - iii. Eight (8) inch thick plain cement concrete base course (10 inches on State and Bus Routes, or as otherwise directed).
 - iv. Two and one half (2.5) inch asphalt super-pave binder course
 - v. One and one half (1.5) inch asphalt super pave wearing course
- Streets being widened to meet City Plan widths shall conform with these cartway standards, regardless of existing pavement sections.

D. Material Restrictions

The following materials are not permitted for use in the public Right of Way.

- Pavement iron/steel reinforcement (curb, footway, or cartway)
- “Modified” versions of the PennDOT 2A stone, as specified in PennDOT Publication 408
- Structural soil, and any soil with an acceptable organic content.
- Asphalt base, without the written approval of the Chief Highway Engineer.

1.4 Traffic Engineering Standards

1.4.1 General Standards

- A. Except as noted herein, the traffic engineering standards for the City of Philadelphia generally defer to the most current standards within the Manual on Uniform Traffic Control Devices (MUTCD) and PennDOT standards.
- B. Contractors are responsible for coordinating new sign replacement with the Streets Department, Traffic Engineering Unit, prior to placement of new footway pavements.

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1.4.2 Lane Widths

- A. Parking Lanes: Eight (8) feet (preferred), seven (7) feet (min), both sides of the street
- B. Travel Lanes: Ten (10) to Twelve (12) foot travel lanes (min, based on road type)
- C. Bike Lanes: 5'-0" (min), 6'-0" (preferred).

1.4.3 Line Striping

- A. If vehicular traffic is permitted in two directions, install (2) 4" yellow lines, spaced one (1) foot apart (double yellow) dividing directional traffic flow as follows:
 - If roadway width is equal to or less than 34 feet, install 50 feet of double yellow at every intersection from the stop bar or point of curvature. Install double yellow around curves.
 - If roadway width is greater than 34 feet, install double yellow on the full length of the roadway.
- B. Crosswalks and stop bars to conform to Standard Detail PM0101 (Typical intersection Pavement Marking Detail)
- C. Install 20 foot long parking boxes (four (4) inch wide white markings) as required.
- D. Thermoplastic pavement markings are required on all asphalt roadways. Markings on concrete surfaces shall consist of approved high contrast materials, and will be approved on a case by case basis.

1.4.4 Street Name Signs

- A. Show the installation of back to back metro street name signs at appropriate locations. Signs must be in accordance with Standard Detail SN0101. Sign details, specific to corridor, must be shown on the plan. In addition, a 2-sign assembly should be used for an intersection where only the minor street is stopped and a 4-sign assembly should be used for an intersection that has an all-way stop.
- B. Street signs for driveways will be white with green lettering, and otherwise match standard metro street sign specifications.

1.4.5 Regulation Signs

- A. Stop signs will be installed on both corners of the approach.
- B. 'One Way' signs will be installed on near-side right and far-side left of the approach when appropriate.
- C. 'Do Not Enter' signs are only used when street direction is changing. They are not used to denote a one way traffic condition.
- D. If parking is restricted, include 'No Parking Anytime' signs
- E. Utilize existing poles for sign placement when available.

1.4.6 Traffic Impact Studies

Traffic Impact Study will be required in accordance with PennDOT Policies and Procedures for Traffic Impact Studies Related to Highway Occupancy Permits (Jan 2009, and as revised). Development sites meeting any of the following criteria require Traffic Impact Studies:

- 3,000 trips/day (1,500 vehicles/day)
- 100 trips/peak hour (entering)
- 100 trips/peak hour (exiting)
- 100 additional trips/peak hour (entering and exiting a redevelopment site)
- As required by the Streets Department, determined during review, or as listed below:

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- New, redevelopment, relocation, or expansion of schools (K-12).
- As required by other City agencies (ex. Air Management or Zoning) or PennDOT.

Projects required to submit a Traffic Impact Study for any reason are subject to §11-900 of the Philadelphia Code (Complete Streets Approval).

1.4.7 Parking Standards

- Onsite Parking Standards are established by §14-803 of the Philadelphia Zoning Code, as shown in Table 14-803-1.
- The Streets Department, Traffic Engineering Unit is the point of contact for all changes to parking restrictions on City Streets.

1.4.8 Acceptable Driveway Locations

A. New driveways will conform to the following dimensional standards, as measured from the property corner to the outer edge of the curb cut (excludes flare). Driveways within the areas listed below are subject to review by Streets Departments Traffic Engineering Unit, as shall be coordinated by the Right of Way Unit:

- 120 feet from the approach to a traffic signal
- 30 feet from the approach to a stop controlled or uncontrolled intersections
- 30 feet from the exit (downstream corner) of any intersection

B. The Streets Department is not obligated to approve the location of any existing curb cuts at any site subject to redevelopment.

C. Existing curb cuts may not serve as placeholders for future development, and must be removed wherever the driveway it served will, or has been, removed.

1.4.9 Driveway Sight Distances

Sight distances for driveways will be prepared in accordance with PennDOT Form M-950S, Driveway Sight Distance Measurements.

1.5 **Driveway and Ramp Design Standards**

The Streets Department does not issue driveways permits, but rather approves curb cuts for zoning purposes, and issues permits for construction. As such, our approval is strictly technical. Acceptable placement of driveways is covered in Section 1.4.8.

1.5.1 Acceptable Driveway Designs

A. Non-Signalized Driveways: Concrete aprons, in accordance with the latest revision of Standard Detail SC0105.

- Detectable warning surfaces (DWS) shall be required at all heavy duty driveways, and as determined necessary by the Streets Department.
- 10'-0" is the minimum desired spacing between curb cuts, though a minimum 6'-0" separation may be considered on a case by case basis.

B. Signalized Driveways: Asphalt aprons, with flush/header curbs, ADA compliant ramps and thermoplastic crosswalks.

1.5.2 ADA Accessible Curb Ramps

ADA ramps must be upgraded to conform to the latest ADA standards, as required by Streets Department regulations, or as proposed conditions may warrant. They are required on all street corners, and must be called out, with the ADA Unit's package designation, on all site plans.

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ADA Ramp designs must meet current PennDOT District 6.0 guidelines, and applicable design standards, and are subject to Streets Department approval through the ADA Unit, per Section 2.3.1. The preference of the Streets Department is to install ramps at a minimum length, but with allowable tolerances for construction. All designs must consider the prevention of ponding in proximity to the ramp.

1.5.3 Service Curb Ramps

Service ramps are permitted only for the safe movement of material in and out of a building.

Service ramps will meet all PennDOT ADA design requirements, except for the following:

- No service ramp will be constructed flush with the paved roadway.
- Detectable warning surfaces are not permitted.
- No signing or other devices may be installed that encourage service ramps to be used for the purpose of pedestrian access.

No service ramp will be more than four (4) feet wide, nor be located less than six (6) feet from any driveway or ADA accessible ramp.

1.5.4 ADA and Service Ramps for Buildings (Encroachments)

See Building Zone Encroachments, Section 1.8.4

1.6 Survey Standards

1.6.1 City Datum

The City of Philadelphia maintains its own datum. All vertical elevations will be made on the City datum, or the alternate datum provided for any project involving property lines or street work.

1.6.2 Horizontal Standards

Horizontal dimensions and measurements must be identified as being U.S. or District Standard (D.S.), which are distinct and different. Note: District Standard is a standard of measurement unique to the City of Philadelphia. All property line courses and distances of existing and proposed lots are to be shown in Philadelphia District Standard only. Also include tangent bearings, radii, arc length and degree of curve. Dimensions must be in feet and hundredths of a foot. Consult with the Survey Bureau for additional information.

1.6.3 City Plan

- A. Any changes to the City Plan will be approved prior to construction.
- B. City Plan information must be provided on all plans, and include:
 - *Survey monuments*
 - *Street/ROW & curb lines*
 - *Point of (curb) Intersection (P.I.) elevations*
 - *Slump & Summit (High & Low Point) elevations*
 - *Roadway grades, and break in grade distances*
 - *Confirmation of City Plan Status (Legally Open & On City Plan)*

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1.6.4 Property Plans

Required information

- Point of Beginning of each property as mentioned in deed and dimensioned to nearest legally opened street intersection.
- Areas of existing and proposed lots shown on plan. Show areas in square feet and acres.
- A surveyor's benchmark, set to Philadelphia Datum.
- Horizontal dimensions and measurements must be identified as being U.S. or District Standard (D.S.). Note: District Standard is a standard of measurement unique to the City of Philadelphia. Consult with the Survey Bureau for additional information.
- Rights-of-Way, dedicated or non-dedicated easements of record completely dimensioned. Alleys, driveways, and easements of record mentioned in deed or use, bounding on or across property.
- Engineer or Surveyor's certification that all valves, vents, manholes, inlets and other utility structures have been field verified and will not conflict with proposed curb alignments.

1.7 Encroachments Above the Right of Way

Due to the presence of underground and overhead utilities, the Streets Department may require applicants for overhead encroachments to demonstrate coordination or approval from any utility that may be affected by such encroachment.

1.7.1 Awnings, Canopies & Marquees

As the dimensional requirements within the Philadelphia Code differ between awnings, canopies, and marquees, the language used to identify these encroachments must be made in a manner that conforms to the Philadelphia Code, and not current architectural definitions. Generally, the Philadelphia Code considers:

- Awnings are not permanent, are not supported from the ground or sidewalk, and have dimensional restrictions (Philadelphia Code §11-601(1) and §11-603(1)).
- Canopies are not permanent, are supported from the ground or sidewalk, and have special limitations and approval requirements (Philadelphia Code §11-601(6) and §11-603(2)).
- Marquees are permanent, may or may not be supported from the ground or sidewalk, have no dimensional restrictions, and have special limitations and approval requirements (Philadelphia Code §11-601(7) and §11-603(3)).

1.7.2 Bays, Bay Windows, and Balconies

- A. Bay windows and balconies will be in accordance with §11-603 of the Philadelphia Code. Bays are distinguished from bay windows by increasing the overall floor space of a structure, and as such are not included as permitted encroachments in the Philadelphia Code.
- B. Due to the subtle difference between bays, bay windows, and balconies as relating to added living space, the current standard for bays allows for limited approvals for bays proposed for the second, third and fourth floors, provided they meet the dimensional requirements of a bay window. Bays proposed above the

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fourth floor must be set back out of the public Right of Way, or be subject to legislative approval by City Council, via an encroachment ordinance.

- C. No bay, bay window, or balcony will be installed within ten (10) feet of any overhead utility lines.

1.7.2 Pedestrian Bridges & Tunnels

Pedestrian bridges and tunnels are not permitted by the Philadelphia Code, and are therefore all subject to legislative approval by City Council, via an encroachment ordinance. Additional review of the structure and clearances of all pedestrian bridges is required by the Streets Department, in accordance with the Building Code:

Section B-3104.1.1 Over public way. The installation of a pedestrian walkway over a public way or tunnel beneath a public way shall be subject to the approval of the Streets Department.

The minimum acceptable clearance for any pedestrian bridge is 14'-6", with clearances over 20'-0" preferred.

1.8 **Encroachments On and Under the Street**

Roadway lanes are defined by established parking and travel lanes, for which changes can only be made by ordinance of City Council. In contrast, sidewalk zones are defined by the Pedestrian and Bicycle Plan, per §11-902 of the Philadelphia Code.

1.8.1 General Encroachment Standards

A. *Sidewalk Zones*

The order in which sidewalk zones will be defined as follows:

- *Walking Zone:* Walking zones are the primary zone within the sidewalk, with a width that will be defined as the *greater width* required by roadway type (per Complete Streets Handbook) or 50% of the legal footway (per the City Plan).
- *Furnishing Zone:* Furnishing zone width will be defined by roadway type (per Complete Streets Handbook).
- *Building Zone:* Building zone width may not exceed the difference of the City Plan footway for any given street, less the required walking and furnishing zone widths. In many cases, no building zone may be possible.

B. *Minimum Spacing*

The following minimum spacing generally applies to all street furniture:

- Generally:
 - i. Avoiding conflict with existing underground, surface or aerial street furniture, encroachments, and/or utilities.
 - ii. 3'-0" from vents, valves, manholes & handholes, or as required for access.
 - iii. 3'-0" from fire hydrants, or other street furniture with significant underground components.
 - iv. 5'-0" from traffic signals, street lights, school flashers, SEPTA catenary poles, or other street furniture with foundations.
 - v. 18" to 24" minimum spacing from the face of curb.
 - vi. 14'-0" minimum clearance above underground utilities (all such encroachments remain subject to utility approval).
- On paved surfaces:
 - i. 4'-0" from other street furniture
 - ii. 5'-0" from bus shelters and areas in proximity to crosswalks.

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C. *Visibility*

- Street furniture should be at least thirty (30) inches high, or provided with elements designed to increase visibility and prevent tripping.
- Street furniture cannot impact pedestrian, bicyclist or motorist visibility.

D. *General Restrictions*

Street furniture is generally unacceptable between:

- Lay-by lanes and the street line
- Doors and the curb line

1.8.2 Walking Zone Encroachments

No encroachment within the footway will generally be permitted by the Streets Department that does not maintain the minimum walking zone requirements of section 4.3.2 of the Complete Streets Handbook. Provided a minimum of five (5) feet of passable space remains after installation, the following walking zone encroachments are permitted to encroach two (2) feet into the walking zone:

- Tree pits
- Storm Water Planters (see PWD Green Streets Design Manual)
- Bus shelters
- Bike Share Kiosks & Bicycles

Projects failing to meet these requirements are subject to review in accordance with §11-900 of the Philadelphia Code (Complete Streets). Any such project must submit a checklist and plan demonstrating how pedestrians have been accommodated.

1.8.3 Furnishing Zone Encroachments (Street Furniture)

- A. *Curb or Sidewalk Posts (Bollards)*: Any posts/bollards not conforming to the dimensional and material standards of §11-604(8) will require legislative approval by ordinance of City Council.
- B. *Newsstands*: As permitted by §9-208(4)(b)(.4): Footway (walking zone) space on the sidewalk is at least six (6) feet, with the following additional restrictions:
- The footway (walking zone) space on any high volume pedestrian street is at least eight (8) feet and on any civic/ceremonial street at least ten (10) feet.
 - The Department of Streets may increase the necessary footway (walking zone) space at any location to adjust for increased pedestrian flow. The Department of Streets will designate streets as high volume pedestrian or civic/ceremonial, as appropriate.
- C. *Relocation of Existing Street Furniture*: Relocation of street furniture, structures (bus shelters, newsstands, subway vents), and other various furnishing zone encroachments as may exist, must be resolved during design. Approval documentation from each affected owner will be held as a prerequisite of any form of Streets Department Approval.
- D. *Placement of Street Furniture*: Street furniture will be placed in the furnishing zone, except as may be warranted by the Complete Streets Handbook, or as permitted the Philadelphia Code.

1.8.4 Building Zone Encroachments

- A. *Architectural Embellishments*: Various architectural embellishments, and their dimensional restrictions, are contained within §11-603(5) of the Philadelphia Code. Restrictions for embellishments commonly seen by the Streets Department for encroachment approval range from four (4) to eighteen (18) inches above the street. It is advisable to recognize the

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difference between the architectural terminology within the Philadelphia Code, and those terms that may be in use by modern design professionals.

- B. *Bicycle Racks*: While customarily located within the furnishing zone, bicycle racks may also be located within the building zone, provided such placement does not encroach upon the walking zone.
- C. *Bulk Windows*: Bulk windows will meet the dimensional requirements of §11-603(3).
- D. *Cellar Doors, Steps and Areaways*: Cellar Doors & Steps and Areaways must consider placement to prevent utility conflicts, cover requirements for service connections, and clearly identify connections of any drain(s) to the building or sewer. In all cases, restrictions apply within the Broad Street corridor (Oregon to Cheltenham Avenues) and Center City (Vine to Spruce, river to river), with exemptions, as noted in §11-606.
- Cellar Doors and Steps - §11-604(4): Cellar steps must be either covered with a solid top (ex Bilco doors), or surrounded by a railing and gated. Because the City Code expressly restricts areaways from being protected by rails, the distinction between the two encroachments must be clear on all plans.
 - Areaways - §11-608(1): In all cases, areaways must be protected by a fixed, heavy duty (H-20 rated), ADA compliant or solid metal grate, installed with no railings and flush with the pavement. They are not considered to be walkable surfaces unless they have a solid top.
- E. *Fences & Rails*: Fencing and rails will meet the dimensional requirements of §11-603(5). Any area contained within such enclosure will be compliant with all current ADA standards.
- F. *Fire Escapes (Movable)*: Per §B-3406 of the Philadelphia Building Code, fire escapes, “where located on the front of the building and where projecting beyond the building line, the lowest landing shall not be less than 10 feet or more than 14 feet above grade, and shall be equipped with a counterbalanced stairway to the street. In alleyways and thoroughfares less than 30 feet wide, the clearance under the lowest landing shall not be less than 12 feet.
- G. *Retaining or Parapet Walls*: Retaining and parapet walls are not permitted in the Right of Way. Footings for any retaining wall constructed along the houseline are permitted, except as restricted by §11-608(3).
- H. *Steps and Building Access (ADA) Ramps*: Dimensional requirements, as set forth by §11-604(4), shall apply at all times to steps, and generally to ADA-compliant egress ramps for buildings, except as permitted below.
- For renovations, encroachments beyond the maximum permitted spacing permitted by Philadelphia Code §11-604(4) may be required in order to conform with PA Code Title 34, Sections 47.123 (Ramps), and 47.124 (Entrances). The Streets Department standard for accessible encroachments shall conform with the State requirement as follows:
 - i. Entrance landings shall be five (5) feet wide, and project five (5) feet from the entrance, except where such encroachment reduces the walking zone below the greater width of five (5) feet or 50% of the available footway. Where entrance landings cannot be installed without impact to the walking zone, an ordinance of City Council will be required prior to approval to construct this encroachment.
 - ii. Ramp widths will conform with 11-604(4), and have a running slope not to exceed 10:1 (10%) per the Building Code (*F-1010.1.1 Slope of ramps*). *The governing inside clear minimum ramp width of 32 inches* (PA CODE Title 34, § 47.123. Ramps) exceeds Building Code requirements.
 - iii. Sidewalk within 6'-0" must conform to ADA requirements (5% running slope, 1% minimum & 2% maximum cross slope). A transition zone of up to 15'-0" to meet existing sidewalk grades is permitted for renovations.

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- iv. Each ramp shall have a handrail on at least one side or preferably on both sides
 - v. No additional encroachments, except for steps, awnings, canopies or marquees may be included with ramps.
- I. *Wheelchair Elevators*: The Philadelphia Code does not currently provide dimensional restrictions for the placement of wheelchair elevators. Due to the necessity to provide access, the Streets Department will generally approve wheelchair elevators that do not encroach within the walking zone, or propose acceptable accommodations during the plan and Complete Streets checklist review.

1.09 Common Encroachments Not Requiring Streets' Approval

Customarily, the Department of Streets is not requested for permission to place these structures on the footway. Approval from other agencies, such as the Department of Licenses and Inspections may be required, however.

- Elevator Shafts, Transit Agencies (Required by Federal Law)
- Mail/Drop Box, U.S. Postal Service
- Fire/Police/Security Call Boxes
- Fire Hydrants
- Fire Standpipes
- Honor Boxes (per Philadelphia Code §9-211)
- Police Lobbies
- Signs, Projecting
- Signs, Wall
- Take Out Windows
- Telephone Booth or Pedestal
- Vent, Air (Transit Agencies, and Utilities-PECO, Veolia, etc)

1.10 Common Illegal Encroachments

A. *Area Restrictions (per Philadelphia Code § 11-606)*:

- Broad Street. No bulk window, cellar door, coping, enclosure wall, fence, platform, railing, step, terrace, or other obstruction to pedestrian travel, shall be erected or maintained beyond the street line, nor may any portion of the footway be occupied, on Broad Street, from Oregon Avenue to Cheltenham Avenue, except that portion of Broad Street between Fisher's Avenue and Olney Avenue, and the east side of Broad Street, between Spruce Street and Lombard Street.
- Center City. No cellar door or entrance, coping, fence, platform, railing, step, storm door, or other obstruction to pedestrian travel, shall be erected or maintained beyond the street line in the area between the Delaware River and the Schuylkill River, Vine Street and Spruce Street, including both sides of the boundary streets, except that the Department of Licenses and Inspections may allow the maintenance or construction of cellar entrances covered with flush iron cellar doors extending not more than 4 feet 6 inches beyond the building line if, in the opinion of the Department of Streets, they will not interfere with pedestrian travel.

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B. *Restricted Encroachments*: The following encroachments are not permitted by §11-600 of the Philadelphia Code. No City department or agency is authorized to permit these encroachments to be erected above the legal right-of-way without an ordinance of City Council.

- Air Conditioners
- Air Conditioner Compressors
- Automatic Teller Machines (ATM)
- Basketball Pole and Backboard
- Benches
- Clocks
- Drop Box, Private Commercial (such as for UPS, or FedEx)
- Elevator Shafts
- Exhaust Fans
- Fire Escapes (Fixed)
- Flag Poles
- Garages
- Gasoline/Fuel Tanks
- Ground Lights
- Patios
- Planters
- Porches & Verandas
- Posters/Placards on Utility Poles
- Sculptures
- Signs, A-Frame
- Signs, Illuminated
- Stairwell, Enclosed
- Storm Enclosures
- Street Lighting, Privately Owned
- Transit Shelter, Privately Owned
- Vending Machines
- Vehicle Charging Stations (Electric, or other)
- Vestibules
- Waste Collection Baskets, Private

1.11 Pedestrian Enhancements

This section is in development.