

Title 11 – Streets and Sidewalks

Chapter 11.01 - Definitions

Low Impact Development (LID) - A stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices or (LID BMPs) - Distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, minimal excavation foundations, vegetated roofs, and water re-use.

Permeable pavement – Pervious concrete, porous asphalt, permeable pavers or other forms of pervious or porous paving material intended to allow passage of water through the pavement section. It often includes an aggregate base that provides structural support and acts as a stormwater reservoir.

Stormwater - Runoff during and following precipitation and snowmelt events, including surface runoff and drainage. that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater facility - Facilities including, but not limited to: pipes, swales, ditches, open channels, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, storage basins, infiltration devices, catch basins, manholes, dry wells, oil/water separators, biofiltration swales, sediment basins, bioretention, permeable pavements and vegetated roofs.

Stormwater Manual - The Stormwater Management Manual for Western Washington, which is the 5-volume technical manual prepared by the Washington State Department of Ecology Water Quality Program, December 2014, Publication No. 14-10-055 (a revision of Publication No. 12-10-030), 5 volumes, and as hereafter amended.

Stormwater Permit - The City of Vancouver’s National Pollutant Discharge Elimination System (NPDES) Western Washington Phase II Municipal Stormwater Permit issued August 1, 2013, and modified January 16, 2014 by the Washington State Department of Ecology.

Chapter 11.02 – Purpose and Authority

Section 11.02.010 Purpose.

It is the purpose of this Title 11 VMC to provide for the orderly use of public rights-of-way by establishing clear guidelines, standards and timeframes for use of the public rights-of-way.

(M-4026, Added, 10/15/2012, Sec 2-Effective 11/15/2012)

Section 11.02.020 Authority.

Title 11 VMC is intended, in conformity with Article 11, Section 11 of the Washington State Constitution and the laws of the state of Washington, to provide the city with the broadest power permitted by constitutional and statutory authority to preserve the public peace, health, safety and welfare.

(M-4026, Added, 10/15/2012, Sec 2-Effective 11/15/2012)

Section 11.02.030 Low Impact Development

No requirement of this title shall be interpreted or applied in such a way as to impose a barrier to Low Impact Development. All requirements of this Title that have an effect on use of Low Impact Development may be met using functionally equivalent Low Impact Development practices as specified in the Stormwater Permit, the Stormwater Manual, or any Low Impact Development general specifications adopted by the City.

Section 11.02.0340 General duty.

Nothing in this Title 11 VMC is intended to create a cause of action or claim against the City of Vancouver or its officials, employees or agents running to specific individuals. Any duty created by the ordinances codified in this chapter is a general duty running in favor of the public.

(M-4026, Added, 10/15/2012, Sec 2-Effective 11/15/2012)

Chapter 11.20 – Newsracks

Section 11.20.050 Limitations on Newsrack Placement.

C. Newsracks shall not be placed, installed, or maintained:

15. Within a Low Impact Development facility

Chapter 11.50 – Utilities in the Right of Way

Section 11.50.050 General conditions and requirements.

B. Location.

4. Where existing utilities or storm water drains facilities are in place, new utilities must conform to this chapter as nearly as practical and yet be compatible with the existing installations.

Section 11.50.060 Specific requirements - Underground utilities.

B. Underground Utilities – Cover.

4. For streets and sidewalks constructed with permeable materials, in addition to item 11.50.060B1, utilities shall maintain a minimum one (1) foot separation from the bottom of the permeable storage section.

Chapter 11.60 – Street Use Permits

Section 11.60.040 Right-of-way use permit required.

B. Exemptions. The following activities are exempt from the requirement to obtain a permit under this chapter:

11. A homeowner may temporarily store landscaping materials for up to 72 hours without a permit in compliance with the following:

a. The homeowner may only store materials on right-of-way on a non-arterial street abutting the homeowner's home provided the street and/or sidewalk is not constructed of permeable material;

Section 11.60.060 Types of right-of-way use permits.

5. Type E – Material Encroachment Permit.

a. Type E permit uses include, but are not limited to, communications and cell towers; permanent structures including, but not limited to, any use of the right-of-way for a building foundation, private stormwater facilities or other essential appurtenant infrastructure or structure that could not practicably be altered or removed without significantly impacting the use or value of the property served; or, if removed, would cause the underlying use to violate any condition of approval of a development permit.

Chapter 11.80 – Street and Development Standards

Section 11.80.010 Purpose.

This chapter establishes minimum standards for public and private streets constructed or improved in the City of Vancouver. This chapter sets forth the minimum standards for full and half-width street improvements within the

right of way, including but not limited to street pavement, curb and gutter, sidewalk, drainage improvements stormwater facilities, lighting, landscaping, signals, signing, pavement markings, and right of way dedication for the development or improvement of properties abutting City streets.

Section 11.80.030 City streets - standard specifications and reference documents.

3. Standard details, plans, and design criteria, including pavement design requirements, prepared by the City, available at www.cityofvancouver.us.

Section 11.80.040 Public roadway functional classifications.

1. Design Criteria – The design criteria shown in Table 11.80.040.C-1 are adopted as a portion of the City’s standard plans and specifications. These criteria are intended for normal conditions. The Director may require higher standards for unusual site conditions; these may include topographic features, sight distance constraints, and adopted subarea plans. These higher standards may include, but are not limited to, additional right of way or easements to enhance safety or facilitate maintenance.

Table 11.80.040.C-1 Design Table

Street Type/ Standard Plan		Minimum ROW Width (ft)	Design Speed (mph)	Design Volume (ADT)	Minimum Full Access Intersection Spacing (ft)	Minimum Intersection Radius (ft)	Applicable Standard Plan	
Arterial	Principal	6-lane w/ CTWLT* & bike lanes	120	50	40,000	600	35	T10-04
		6-lane w/ CTWLT	110	50	40,000	600	35	T10-05
		4-lane w/ CTWLT & bike lanes	100	50	24,000	600	35	T10-06
		4-lane w/ CTWLT	90	50	24,000	600	35	T10-07
	Minor	4-lane w/ CTWLT & bike lanes	100	40	24,000	500	35	T10-08
		4-lane w/ CTWLT	90	40	24,000	500	35	T10-09
		4-lane w/ bike lanes	90	40	18,000	500	35	T10-10
		4-lane	80	40	18,000	500	35	T10-11
		3-lane w/ bike lanes	70	40	16,000	500	35	T10-12
		2-lane	60	40	12,000	500	35	T10-13
	Collector	3-lane w/ bike lanes	70	35	16,000	275	35	T10-12
		2-lane	60	35	12,000	275	35	T10-13
	In	Principal	5-lane	80	40	12,000- 24,000	275	50
3-lane			60	40	8,000- 12,000	275	50	T10-21
Secondary		2-lane	60	35	8,000- 10,000	275	45	T10-22

Access	Local	2-lane	50	25	<2,000	N/A	45	T10-23
	N ^h ood Circ	2-lane	54	25	<2,000	125	25	T10-14
	Local Access	2-lane	50	25	<1,000	N/A	20	T10-15A/B
	Cul-de-	2-lane	50	25	250	N/A	20	T10-16

Note 1: LID facilities may require additional right of way and/or easement dedication

*ROW = right of way; CTWLT = center two-way left-turn lane

Section 11.80.050 Private streets.

L. Additional Private Street Requirements.

3. Stormwater management is required per VMC Chapter 14.25.

Section 11.80.060 Infill Streets.

F. Internal Driveways and Roadways.

1. At a minimum, infill development is subject to the internal private roadway standards listed in Table 11-80.060.F-1.

Table 11-80.060.F-1 - Minimum Internal Driveway and Roadway Standards

	Total Number of Dwelling Units Served			
Minimum Standards	1 - 4	1 - 4	5 - 20	More than 20
Road Length (ft)	150 or fewer	More than 150	More than 150	More than 150
Road Width (ft)	12	16	20	24

2. Asphalt concrete surface and rock base will vary by soil type as defined in the City’s transportation standard details – private street standard plan. Roadways constructed as LID facilities shall meet the requirements of VMC Chapter 14.25.

3. In addition, private access roads serving infill developments must:

f. Stormwater management is required per Chapter 14.25.

Section 11.80.070 Circulation/connectivity.

7. Public Streets – Turnaround Requirements.

d. Cul-de-sacs will be constructed according to Table 11.80.070.C-1 and Table 11.80.070.C-2.

Table 11.80.070.C-1 - Local Street Cul-de-Sac

Maximum Length	Radius to Right of Way	Radius to Face of Curb
200 feet	36 feet	30 feet
400 feet	44 feet	35 feet

600 feet	54 feet	45 feet
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Note 1: LID facilities may require an increased cul-de-sac radius and right of way/easement dedication

Table 11.80.070.C-2 - Industrial Street Cul-de-Sac

Maximum Length	Radius to Right of Way	Radius to Face of Curb
600 feet	66 feet	60 feet

Note 1: LID facilities may require an increased cul-de-sac radius and right of way/easement dedication

D. Pedestrian Circulation.

2. Pedestrian Accessways.

b. Design. Accessways will consist of a 10-foot minimum public easement and may be entirely hardscaped. All surfaces will be designed to drain stormwater run-off to the side or sides of the accessway unless constructed as an LID facility. Accessways must comply with ADA standards.

Section 11.80.080 Development requirements.

I. Plan Submittal Requirements. All streets must be properly related to special traffic needs, such as industries, business districts, and the pattern of existing and/or proposed commercial, residential and multi-family land uses.

3. Improvement Plans. The improvement plan must include the street alignment at a scale of not less than 1 inch to 50 feet (preferably 1 inch to 20 feet), showing bearings on centerline, curve data on all horizontal curves, right of way lines, relevant topography, existing and proposed utility location, street names in and adjoining the development, typical street section, existing and proposed ~~drainage, structures, water quality appurtenances~~ stormwater facilities, and such further data as the Director may require.

J. City Street Design Specifications.

4. Alternate Surface ~~Treatment Materials~~. Alternate surface ~~treatment materials~~ treatment materials may be used only with the written approval of the Director. The engineer shall supply the Director with a pavement design, specifications for materials, and application rates as part of the approval.

8. Stormwater and Drainage. Stormwater management is required per VMC Chapter 14.25.

O. Acceptance by the City. Streets ~~and drainage facilities~~ will be accepted for provisional maintenance by the City upon receipt of a workmanship and materials bond (or other secure method) in the amount of 10% of the construction cost ~~and or~~ the recommendation of the Director. The developer shall repair any failure within the ~~1-2~~-year period beginning from the date of final acceptance.

Section 11.80.090 Frontage improvements.

G. ~~Street Drainage. Stormwater Facilities~~. Abutting ~~street drainage~~ stormwater facilities shall be designed to meet the requirements of Chapter 14.25 and sufficient to prevent water damage or impairment from normal rain flow or surface water. Erosion control pursuant to Chapter 14.24 shall be provided during construction to maintain the streets such that mud and debris are kept to a minimum.

1. Grades and ~~Drainage Structures~~ Stormwater Facilities. Drainage Stormwater structures, ~~drainage~~ details, and street centerline profile grades must be shown on the construction plans and be approved by the Director. The engineer must follow the requirements and recommendations of Sections 14.24 and 14.25. Centerline profile street grades may not be less than 1% unless an integral curb and gutter section is used, in which case the minimum grade may not be less than 0.3%. If any grading or filling of lots or other areas outside the streets is to be done which exceeds the amounts specified in Chapter 70, Uniform Building Code, an overall grading plan must be submitted and approved by the Director as part of the plans.

Section 11.80.100 Street restoration standards.

B. Cutting Prohibition. For 5 years after a street has ~~been constructed, reconstructed, overlaid, or seal coated, received final acceptance for construction, reconstruction, rehabilitation or preservation treatments~~ a street cut prohibition will be in effect. Streets constructed with permeable materials will have a street cut prohibition for the life of the street. Pavement cuts may be allowed if a more reasonable alternative for service delivery does not exist and alternative engineering and trenchless construction methods (e.g., pushing, boring or bore-pulling) have been explored.

The Director may allow cutting of a street under ~~moratorium, a street cut prohibition~~ and may set restoration conditions based on the type and impact of the work proposed, the age and condition of the street, and traffic volumes and patterns. To request the cutting of a street under ~~moratorium~~ a street cut prohibition:

C. Pavement Restoration Requirements. The provisions for pavement cutting are a function of the pavement type and its functional classification, orientation (transverse or longitudinal), and pavement (or resurfacing) age.

1. Pavement Type

c. Permeable Pavements

Regardless of functional classification, the requirements for backfill and surfacing restoration will vary depending on the original pavement design, surface material type, and size and location of the cut. For pervious concrete, unless otherwise approved by the City, full panels shall be removed and replaced. In no case will any approved cut be greater than one-half a full panel in size without full panel replacement.

D. General Restoration Requirements for All Utility Cuts. The following general requirements apply to all utility cuts in paved roads and paved shoulders. Utility cuts in permeable street surfaces shall be as provided in 11.80.100 (C) (c).

E. Warranty requirements

2. Right of way permit holders must warranty street cut restoration work for a period of 2 years on residential streets and 5 years on arterial, industrial and permeable streets.

Chapter 11.90 – Construction in Right of Way

Section 11.90.060 Closeout.

If required by the City, after all the work and the final inspection, the permittee must submit a reproducible set of plans in hard copy and an approved electronic format for all improvements showing all construction changes, such as location of culverts, alignment and grade changes, added and deleted items, changes to street and sidewalk pavement (type, width, and section depth), pedestrian curb ramps, medians, signing, striping, street lighting, trees and plantings, location of utilities, water valves, sewer connection, etc. The as-built plans may be required to be prepared and stamped by a licensed engineer and submitted prior to final acceptance of all improvements. Failure to file as-built plans when required is a violation of the permit.