

Chapter 242

Article IV

LID

Table of Contents

242-50 Purpose	1
242-51 Objectives	1
242-52 Applicability	1
242-53 Definitions	1
242-54 Procedure	5
242-55 Submission Requirements	5
A. Project Narrative.....	5
B. Project Contacts and Qualifications.....	6
C. Project Plans Contents.....	6
D. Submittals related to Infiltration Performance Standard	6
242-56 Performance Standards.....	7
242-57 Waivers.....	10
242-59 Severability and Conflicts	11
242-60 Authority	11

Chapter 242

Article IV

Low Impact Development

242-50 Purpose.

- A. The Purpose of this Article is to provide for the health, safety, and general welfare of the citizens of the Town of Cumberland through review and approval of Low Impact Development Strategies for New Development and Redevelopment.
- B. This article establishes performance standards for Low Impact Development in order to comply with minimum control measure requirements of the Federal Clean Water Act, of federal regulations and of Maine's small municipal separate storm sewer systems general permit.

242-51 Objectives

The objective of this Article is to minimize the adverse effects of New Development and Redevelopment on the environment.

242-52 Applicability

The LID Performance Standards contained in this Article apply to any Project for which an application for subdivision or site plan approval is filed with the Town on or after 7/1/2024, that:

- a. Results in Disturbed Area of one or more acres of land, or
- b. Results in Disturbed Area that is less than one acre of land if the Construction Activity creating Disturbed Area is less than one acre of land and is part of a larger Common Plan of Development or Sale that as approved or amended would create Disturbed Area of one acre or more, or
- c. Requires Planning Board Site Plan Review as identified in Chapter 229
- d. Requires Subdivision Approval as identified in Chapter 250

242-53 Definitions

Buffers – Means all three kinds of buffers listed below unless a subset of the three is specifically called out:

- **Stormwater Vegetative Buffer** – a buffer constructed in accordance with Appendix F in Chapter 500 for the purposes of providing pollutant removal.
- **Shoreland Zoning Setback Buffer** – A buffer required by the Chapter 260 Shoreland Zoning Ordinance to protect a water of the State.
- **General Buffer** – Means:
 - A Buffer as defined in Chapter 250 Subdivision of Land or
 - A Landscape Buffer as defined in Chapter 315 Zoning.

Chapter 500 – Means Chapter 500 of the Maine Department of Environmental Protection's Rules ("Stormwater Management Rules").

Chapter 502 - Means Chapter 502 of the Maine Department of Environmental Protection's Rules ("Direct Watersheds of Lakes Most at Risk from New Development, and Urban Impaired Streams").

Climate Resilient Northeast Native Vegetation – Means plants identified as native to the Northeast as identified by the Northeast Regional Invasive Species & Climate Change (RISCC) Network or a Maine Licensed Landscape Architect.

Common Plan of Development or Sale - Means a "subdivision" as defined in Title 30-A M.R.S. §§ 4401 *et seq.* (the Maine Subdivision statute) and in Chapter 250 Subdivision of Land.

Construction Activity – Means any activity on a Site that results in Disturbed Area.

Discharge - Means any spilling, leaking, pumping, pouring, emptying, dumping, disposing or other addition of pollutants to the Waters of the State, other than groundwater.

Disturbed Area - Means all land areas of a Site that are stripped, graded, grubbed, filled, or excavated at any time during the site preparation or removing vegetation for, or construction of, a Project. Cutting of trees, without grubbing, stump removal, disturbance, or exposure of soil is not considered Disturbed Area. Disturbed Area does not include routine maintenance but does include Redevelopment and new Impervious Areas. "Routine maintenance" is maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Paving impervious gravel surfaces provided that an applicant or permittee can prove the original line and grade and hydraulic capacity shall be maintained and original purpose of the gravel surface remains the same is considered routine maintenance. Replacement of a building is not considered routine maintenance of the building and is therefore considered Disturbed Area.

Drainageway – Means the same as "Drainageway" defined in Chapter 500

General Permit – Means the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) approved October 15, 2020, and modified November 23, 2021, and any amendment or renewal thereof.

High Intensity Soil Survey – Means a Class A survey defined by the March 2009 Guidelines for Maine Certified Soil Scientist for Soil Identification and Mapping, prepared by the Maine Association of Professional Soil Scientists.

High Permeability Soils – Means hydrologic soil groups A or B as determined by on-site soil testing by a certified soil scientist using a High Intensity Soil Survey.

Impervious Area - Means the total area of a Parcel covered with a low-permeability material that is highly resistant to infiltration by water, such as asphalt, concrete, or rooftop, and areas such as gravel roads and unpaved parking areas that will be compacted through design or use to reduce their permeability. Common Impervious Areas include, but are not limited to, rooftops, walkways, patios,

driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and macadam or other surfaces which similarly impede the natural infiltration of stormwater. Pervious pavement, pervious pavers, pervious concrete, and under drained artificial turf fields are all considered impervious. For the purpose of determining whether a Site exceeds the Impervious Area thresholds requiring conformance to LID performance standards, the municipality may exclude these from calculation of Impervious Area if these are designed to be infiltration Stormwater Treatment Measures.

Lot – Means the same as it is defined in Chapter 315 Zoning.

Low Impact Development (LID) - Means a broad approach to site planning that preserves natural resources, processes, and habitat, defines what portions of the Site are suitable for development and then utilizes Stormwater Treatment Measures to manage Runoff from the proposed developed impervious areas. In LID, Stormwater Treatment Measures using natural processes such as vegetated buffers are given preference over constructed treatment Stormwater Treatment Measures. The goals of LID are to minimize the environmental impacts of the development.

Maine Licensed Landscape Architect – Means a person who has an active Landscape Architect license from the Maine Board of Licensure for Architects, Landscape Architects, and Interior Designers.

Maine Native Vegetation – Means vegetation including grass seed mixtures, identified as native to Maine from lists maintained by: US Department of Agriculture Hardiness Zones by the Maine Cooperative Extension, Wild Seed Project, Regional Soil and Water Conservation District, Maine YardScaping Program, or a Maine Licensed Landscape Architect.

Municipal Separate Storm Sewer Systems (MS4) - Means a conveyance or system of conveyances designed or used for collecting or conveying Stormwater (other than a publicly owned treatment works (POTW), as defined at 40 CFR 122.2, or a combined sewer), including, but not limited to, roads with drainage systems, municipal roads, catch basins, curbs, gutters, ditches, human-made channels or storm drains owned or operated by any municipality, sewer or sewage district, Maine Department of Transportation (MDOT), Maine Turnpike Authority (MTA), State agency or Federal agency or other public entity that Discharges to Waters of the State other than groundwater.

Municipality – Means the Town of Cumberland.

New Development – Means the same as "New Development or Construction" defined in the General Permit.

Parcel – Means the same as "Tract or parcel of land" as defined at 30 M.R.S. §4401.6 *et seq.*

Permitting Authority - Means the Code Enforcement Officer, Building Inspector, Planning Board, or other official or body authorized by State law or the Municipality's ordinances to approve Development or Redevelopment of Sites.

Project – Means Construction Activity undertaken for New Development or Redevelopment, both as defined in the General Permit, located on a Site that will Discharge Stormwater to a Small MS4 located partially or entirely within the Urbanized Area.

Protected Natural Resource - Means coastal sand dunes, coastal wetlands, significant wildlife habitat, fragile mountain areas, freshwater wetlands, community public water system primary protection areas, great ponds, or rivers, streams or brooks as defined in the *Natural Resources Protection Act* at 38 M.R.S. §480-B.

Redevelopment – Means the same as “Redevelopment” defined in the General Permit.

Regulated Small MS4 - Means any Small MS4 authorized by the most recent, in-force General Permit or the general permits for the Discharge of Stormwater from MDOT and MTA Small MS4s or state or federally owned or operated Small MS4s including all those located partially or entirely within the Urbanized Area.

Runoff – Means the part of precipitation from rain or melting ice and snow that flows across a surface as sheet flow, shallow concentrated flow or in Drainageways.

Small MS4 - Means any MS4 that is not already covered by the Phase I MS4 stormwater program including municipally owned or operated storm sewer systems, state, or federally owned systems, such as colleges, universities, prisons, military bases and facilities, and transportation entities such as MDOT and MTA road systems and facilities. See also 40 CFR 122.26(b)(16).

Significant and Essential Wildlife Habitats – Means the areas identified as Significant or Essential Habitats of endangered or threatened species as identified by the Maine Department of Inland Fisheries and Wildlife either on the Beginning with Habitat viewer or in consultation with the Maine Department of Inland Fisheries and Wildlife.

Site - Means the portion of a Lot, Parcel, or Common Plan of Development which is proposed for Construction Activity, including open space, Stormwater Treatment Measures, and Disturbed Area, subject to this Article.

Stormwater- Means the part of precipitation including Runoff from rain or melting ice and snow that flows across the surface as sheet flow, shallow concentrated flow, or in Drainageways. “Stormwater” has the same meaning as “storm water”.

Stream Crossing - Means the mechanism by which any road, sidewalk, or other structural feature of a Site will cross or pass over or through a Water of the State which has a stream bank full width of 6 feet or less.

Stream Crossing designed in accordance with Maine Stream Smart Principles – Means a Stream Crossing designed by a Maine Professional Engineer who has completed the Maine Audubon Society Stream Smart Workshops (Parts I and II), which includes the standards recommended by that program’s

stream span, elevation, slope and skew and substrate to promote passage of fish and other organisms and to limit road-damaging flows from extreme weather.

Stormwater Treatment Measure – Means a Stormwater management system or innovative treatment measure as described in Chapter 500 4.c.(3) Types of treatment measures allowed. These measures include wet ponds, vegetated soil filters, infiltration, buffers, or innovative treatment measures. For purposes of this Article these are cumulatively referred to as Stormwater Treatment Measures, or individually referred to as Stormwater Treatment Wet Pond, Stormwater Treatment Vegetated Soil Filter, Stormwater Treatment Infiltration Measure, Stormwater Treatment Buffer, or Stormwater Treatment Innovative Measure.

Time of Concentration – Means the same as “Time of concentration” defined in Chapter 500.

Urbanized Area - Means the area of the Municipality so defined by the inclusive sum of the 2000 decennial census and the 2010 decennial census by the U.S. Census Bureau.

Waters of the State – See 38 M.R.S. §361-A (7).

242-54 Procedure

All sites triggering this ordinance will require Planning Board review and approval will be concurrent with Planning Board review.

242-55 Submission Requirements

When a Project is subject to this Article, the applicant shall provide the following items listed in this Section as follows:

- For Site Plan Review – with the Application
- For Major Subdivisions – with the Final Plan submittal
- For Minor Subdivisions with the Minor Subdivision Application

A. Project Narrative

The applicant shall provide a Project narrative describing:

- the overall approach to Stormwater management at the Project Site,
- a listing of Stormwater Treatment Measures that will be in use, stating which will be maintained privately and which will be offered to the Municipality for acceptance and operation,
- how they have prioritized protection of the sensitive areas from disturbance as required in the performance standards of this Article, and
- a rationale for any requested waivers from performance standards contained in this Article.

B. Project Contacts and Qualifications

The applicant shall provide contact information (i.e., name, company if applicable, phone number, physical address, and email address) as described below:

- Maine Licensed Landscape Architect
- Maine Certified Soil Scientist
- Maine Professional Engineer

C. Project Plans Contents

The applicant shall submit Project Plans which shall consist of a graphic representation of the Site at a scale no smaller than 1 inch = 100 feet showing:

- Waters of the State and their associated Shoreland Protection areas
- Protected Natural Resources
- Predevelopment drainage areas, Drainageways and associated Time of Concentration
- High Permeability Soils
- Maine Native and Climate-Resilient Northeastern Native Vegetation in General Buffer areas and Shoreland Zoning Buffer areas
- Significant and Essential Wildlife Habitats
- Limits of disturbance
- Post-development drainage areas, Drainageways and associated Time of Concentration
- Locations of snow storage areas
- Locations and details for Stormwater Treatment Measures to be used

D. Submittals related to Infiltration Performance Standard

The applicant shall submit the following to permit review of the Project application under the LID Performance Standards for infiltration:

- Information required by Chapter 500 Section (7)(D)(5)(c) Infiltration Submittals including a plan for use of de-icing materials, pesticides, and fertilizers within the drainage area of any infiltration Stormwater Treatment Measures.
- Locations of any Maine Uncontrolled Hazardous Substance Sites, Maine Voluntary Response Action Program sites, federal Resource Conservation and Recovery Act ("RCRA") Corrective Action sites, or Petroleum Remediation sites on or adjacent to the Site.

242-56 Performance Standards

To show conformance to the MS4 General Permit Requirements, we have included information about which LID Measure from Table 1 Appendix F of the 2022 MS4 General Permit the performance standard addresses. We have also included information where the Cumberland Ordinances already contain these standards (and so they will not be adopted in this Article).

Performance Standard	LID Measure(s) addressed (shown only for informational purposes)	Location of standard in other Cumberland Ordinance.
<p>Prioritize the protection of the following sensitive areas as listed below (highest priority listed first) by not disturbing land in these areas:</p> <ul style="list-style-type: none"> i. Waters of the State and associated shoreland protection areas. ii. Protected Natural Resources iii. Predevelopment Drainageways iv. High Permeability Soils v. Maine Native Vegetation and Climate Resilient Northeastern Native Vegetation in General Buffer areas and Shoreland Zoning Setback Buffer areas vi. Significant and Essential Wildlife Habitats <p>Note that the applicant will need to provide a description in their narrative of how they have prioritized these areas for protection from disturbance. These areas may be counted toward the open space requirements.</p> <p>Waiver: Removal of Maine Native Vegetation and Climate Resilient Northeastern Native Vegetation that is diseased or in poor condition is allowed.</p>	<ul style="list-style-type: none"> 1. Minimize Site Clearing 2. Protect Natural Drainage System 4. Minimize Impervious Area 5. Minimize Effect of Impervious Area 6. Minimize Soil Compaction 	<p>Cumberland Conservation Subdivision Standards contain some of these provisions, but not all. (In effect in RR1 and RR2)</p>
<p>Project Plans shall depict limits of disturbance. Limits of disturbance shall be established on-site prior to disturbance using flagging, fencing, signs or other means to provide a clear indication.</p>	<ul style="list-style-type: none"> 1. Minimize Site Clearing 6. Minimize Soil Compaction 	
<p>Stream Crossings for Waters of the State shall be designed in accordance with Maine Stream Smart Principles to preserve natural pre-development Drainageways.</p> <p>Waiver:</p>	<ul style="list-style-type: none"> 2. Protect natural Drainage System 3. Minimize Decrease in Time of Concentration 	

Performance Standard	LID Measure(s) addressed (shown only for informational purposes)	Location of standard in other Cumberland Ordinance.
Stream Crossings over portions of streams that are artificially channelized are not subject to this standard.		
<p>Projects in LDR, RR1 and RR2 Zones shall preserve the natural pre-development Drainageways on the Site by using the natural flow patterns and pathways for the post-construction drainage system.</p> <p>Waivers are allowed if the Time of Concentration for a predevelopment Drainageway is the same as or shorter than the post-development Drainageway.</p> <p>Waiver: The applicant may submit an “alternative analysis” which demonstrates that this performance standard is impracticable.</p>	<ol style="list-style-type: none"> 2. Protect Natural Drainage System 3. Minimize Decrease in Time of Concentration 	
<p>Projects that have a Disturbed Area of one acre of land or more shall include Stormwater Treatment Measures in accordance with Chapter 500 Section 4.C General Standards, 4.C.(2) Treatment requirements, 4.C.(3) Types of treatment measures allowed, and 4.D Phosphorus standard (for lake watersheds only) and additionally:</p> <ul style="list-style-type: none"> • Individual Stormwater Treatment Measure may not treat more than one acre of Impervious Area • Vegetation used in General Buffer Areas and/or Stormwater Treatment Measures shall be Maine Native Vegetation or Climate Resilient Northeastern Native Vegetation <p>Note that although Chapter 500 General Standards and Phosphorus standard have higher thresholds for developed and Impervious Area, these standards apply to sites within the Urbanized Area of the Municipality at a lower threshold.</p> <p>Waiver: Notwithstanding other provisions in municipal ordinances or state law, requirements to plant “Maine Native Vegetation” or “Climate Resilient Northeast Native Vegetation” shall not be construed as a restriction on the rights of individuals to engage in agricultural practices that are legally protected by the Maine Agriculture</p>	<ol style="list-style-type: none"> 2. Protect Natural Drainage System 5. Minimize Effect of Impervious Area 7. Minimize Lawns and Maximize Landscaping that Encourages Runoff Retention. 10. Stormwater Quality Treatment and Retention Requirements 	

Performance Standard	LID Measure(s) addressed (shown only for informational purposes)	Location of standard in other Cumberland Ordinance.
Protection Act and the "Right to Food" provision in the Maine Constitution (Constitution, Art. I, §25).		
<p>Infiltration Standard: Provide volume control on-site (through infiltration or storage) in accordance with the following:</p> <ul style="list-style-type: none"> • Volume to be controlled = (total area of Impervious Area after New Development and Redevelopment – total area that existed before New Development and Redevelopment) x Rd • Where Rd is the groundwater recharge depth based on the USDA/NRCDS hydrologic soil group as follows: Rd = 0.40 inches or rain for type A soils, 0.25 inches of rain for type B soils, 0.10 inches of rain for type C soils and 0 for type D soils • Stormwater Treatment Measures with liners may not be used to meet the volume requirement via storage. • Restrictions and requirements identified in Sections D(2) through D(4) of Appendix D Infiltration basins, drywells, and subsurface fluid distribution systems; of Chapter 500 apply. <p>Waiver: For Sites in Rural and Suburban areas where infiltration will disrupt the preservation of the predevelopment Drainageways, a Waiver from the infiltration standard will be allowed.</p> <p>Waiver: If any Uncontrolled Hazardous Substance Sites, Voluntary Response Action Program sites, RCRA Corrective Action sites, or Petroleum Remediation sites are on or adjacent to the Site, the Site does not need to meet the volume control standard.</p> <p>Waiver: Municipalities may allow infiltration on an alternate site within the same watershed in-lieu of on-site infiltration.</p>	<ol style="list-style-type: none"> 1. Protect the Natural Drainage System 2. Minimize the Decrease in Time of Concentration 5. Minimize Effect of Impervious Area 	
Minimize Impervious Area and the Effect of Impervious Area from road runoff:	4. Minimize Impervious Area	

Performance Standard	LID Measure(s) addressed (shown only for informational purposes)	Location of standard in other Cumberland Ordinance.
<ul style="list-style-type: none"> At least 70% of roadway Runoff shall be directed into a Stormwater Treatment Measure 	Minimize Effect of Impervious Area	
<p>Minimize Impervious Area from parking areas:</p> <ul style="list-style-type: none"> Vehicle parking stall dimension standard: maximum of 9-foot x 18-foot stall <p>Waivers allowed for public safety</p>	<ol style="list-style-type: none"> Minimize Impervious Area Minimize Effect of Impervious Area 	This standard is already contained in Chapter 229 Site Plan Review and will not be added to this Article.
Runoff from on-site roofs, sidewalks, and peak-use overflow parking Runoff shall be directed into Stormwater treatment Buffers or Stormwater Treatment Infiltration Measures.	<ol style="list-style-type: none"> Minimize Effect of Impervious Area Provide Vegetated Open-Channel Conveyance Systems 	
<p>Construction equipment movement, laydown areas and parking shall be restricted to the Disturbed Area.</p> <p>Areas to be vegetated shall be tilled and the soils amended with organic matter as needed based on the results of soil tests.</p>	6. Minimize Soil Compaction	This standard is being added to Chapter 242 Article III Erosion and Sedimentation Control.
<p>Snow storage areas shall be depicted on site plans.</p> <p>The location of snow storage areas in Stormwater Treatment Measures and Shoreland Zoning Setback Buffers shall be prohibited.</p>	5. Minimize Effect of Impervious Area	

242-57 Waivers

Where the Enforcement Authority finds that there are special circumstances of a particular Erosion and Sedimentation Control Plan that make a particular submission requirement or standard inapplicable, a waiver may be granted, provided that such waiver will not have the effect of nullifying the intent and purpose of this Ordinance. The applicant shall submit, in writing, the reason for the requested waiver. In granting waivers or modifications, the Enforcement Authority may require such conditions that will substantially secure the objectives of the standards so waived or modified.

242-58 Enforcement

- A. **Approval required.** No project subject to this Article shall be constructed within the municipal boundaries unless it has been approved by the Planning Board in accordance with all of the requirements and performance standards set forth nor until such approval shall have been entered on such final plan by the Planning Board.
- B. **Violations and penalties.** Any person, firm, corporation or other legal entity who or which conveys, builds or develops a project other than in strict conformance with the requirements of this Article and his/her approval, including any conditions attached thereto, shall be subject to a civil action seeking injunctive relief to prevent any such violation and restore or repair the land, if appropriate, and be further subject to a civil fine, attorney fees and costs of court as provided under 30-A M.R.S.A. § 4452. The municipality or the Code Enforcement Officer may institute such proceedings.

242-59 Severability and Conflicts

The provisions of this Article are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Article or the application thereof to any Person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions, clauses, sentences, or paragraphs or application of this Article.

Whenever a provision of this Article conflicts with or is inconsistent with another provision of this Article or of any other ordinance, regulation or statute administered by the Municipality, the more restrictive provision shall control.

242-60 Authority

The Municipality enacts this Article for Low Impact Development pursuant to Maine Constitution Art. VIII, Part Second, §1 and 30-A M.R.S. §§3001 et seq. (municipal home rule authority), 38 M.R.S. §413 (the Wastewater Discharge Law), 33 USC §§1251 et seq. (the Clean Water Act), and 40 CFR Part 122 (US Environmental Protection Agency's regulations governing the National Pollution Discharge Elimination System (NPDES)). The Maine Department of Environmental Protection, through its promulgation of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems has listed the Municipality as having a Regulated Small MS4; under this General Permit, listing as a Regulated Small MS4 necessitates enactment of elements of this Article as part of the Municipality's Stormwater management program in order to satisfy the minimum control measures for Post Construction Stormwater Management in New Development and Redevelopment.