Stormwater Management Requirements

The City of Portland requires that stormwater from new and redeveloped impervious areas, such as roofs, parking lots and roads, be managed onsite where it originates. Stormwater created on private property must be managed on private property; stormwater created on public property must be managed on public property. The preliminary land division application must include information that demonstrates how stormwater will be managed in a manner consistent with the City’s Stormwater Management Manual (SWMM) and that adequate space is set aside for necessary stormwater management facilities. See Zoning Code Chapter 33.653 for Stormwater Management approval criteria and standards for land divisions.

What do you need to submit with your Land Division Application?

Minimum stormwater management submittal requirements include:

1. Site Utility Plan (see sample inside for required information);
2. Narrative describing your proposal and how it complies with the Stormwater Hierarchy and;
3. Infiltration test results and sizing calculations using one of the design approaches specified in the SWMM - Simplified, Presumptive or Performance Approach.

Stormwater Hierarchy

Total onsite infiltration of runoff (Category 1 and 2) is required where feasible with vegetated surface facilities and/or subsurface infiltration facilities. When total onsite infiltration isn’t feasible the designer must evaluate the feasibility of Category 3 or Category 4 as suitable.

Onsite Infiltration

Category 1: Requires total onsite infiltration with vegetated infiltration facilities. Examples include infiltration swales, planters and basins.

Category 2: Requires total onsite infiltration with vegetated facilities that overflow to subsurface infiltration facilities. Examples of subsurface infiltration facilities include drywells, soakage trenches and sumps. These facility types are underground injection control structures (UICs) and may require to be registered with the Department of Environmental Quality (DEQ). There are exemptions to the pollution reduction requirements before discharge to an UIC (see chapter one of the SWMM for more information).

Offsite Discharge

Category 3: Requires onsite detention with vegetated facilities that overflow to a drainageway, river, or storm-only pipe. Vegetated facilities (lined or unlined) must meet pollution reduction and flow control requirements to the maximum extent feasible prior to offsite discharge.

Category 4: Requires onsite detention with vegetated facilities that overflow to the combined sewer system. Vegetated facilities (lined or unlined) must meet pollution reduction and flow control requirements to the maximum extent feasible prior to offsite discharge.
The Site Utility Plan must show the following information:

- **Scale**
- **Topography and/or ground elevations**
- All existing development to remain onsite and any development within 10 feet of the site
- Conceptual building footprints and driveway locations for proposed vacant lots
- Existing and proposed stormwater facilities for the individual lots, and Zoning Code requirements, and setbacks to structures and property lines
- Public and private streets and associated stormwater facilities
- Existing and proposed connections to sanitary sewer, storm sewer, and water lines (include water meter locations) for each lot and associated easements
- Existing and proposed cesspools, septic tanks and drainfields
- Trees to remain and their root protection zones, and required landscaping
- Street cross-sections and grading plans for all street improvements (not shown on example)

### Setback Requirements for Stormwater Facilities

- **Infiltration facilities:** 10 feet to structures (on and offsite) and 5 feet to property lines.
- **Splashblocks:** 2 feet from foundation (6 feet from foundation for structures with a basement), 5 feet to property lines, and 10 feet from structures on adjacent property.
- **Lined facilities (no infiltration):** No SWMM setback requirements, however zoning setbacks may apply. Vegetation cannot compromise the integrity of lined facilities and vegetation must meet SWMM and Zoning Code requirements.

See Chapter Two of the SWMM for more detailed information.
What stormwater design approach is right for your site?

The **Simplified Approach** is intended for private small-scale residential development, where:

- The total new or redeveloped impervious area is less than 10,000 square feet; and
- There are no public or private street or alley improvements.

This approach is based on established sizing factors and does not require the assistance of a licensed engineer. Required infiltration testing can be done by the property owner. See Chapter Two of the SWMM for the Simplified Approach Submittal Guide.

The **Presumptive Approach** is intended for:

- Medium to large-scale residential projects (10,000 square feet or more of new or redeveloped impervious area);
- Most commercial projects;
- Projects with public or private street or alley improvements; and
- Projects using pervious paving in shared areas such as private streets and parking areas.
- Smaller projects with specific site conditions that require greater analysis.

This approach uses site-specific data and the Presumptive Approach Calculator (PAC) to determine the size and configuration of stormwater facilities. The required plans and report must be prepared by qualified design professionals and stamped by a licensed engineer or qualified design professional. See Chapter Two of the SWMM for the Presumptive Approach Submittal Guide.

The **Performance Approach** is available for projects that include alternative solutions or have unique circumstances that require analysis that goes beyond the more routine specifications of the other approaches. Detailed engineering calculations must be provided to demonstrate the performance of the proposed design. The required plans and report must be prepared by qualified design professionals and stamped by a licensed engineer. See Chapter Two of the SWMM for the Performance Approach Submittal Guide.


Technical assistance is also available in the Development Services Center (1900 SW 4th Avenue) or by calling BES at 503-823-7761.

For more information visit or call the Planning and Zoning staff at the Development Services Center at 1900 SW 4th Avenue, Suite 1500, 503-823-7526, or visit [www.portlandoregon.gov/bds](http://www.portlandoregon.gov/bds) | select Zoning/Land Use tab

For current Portland Zoning Code visit [www.portlandoregon.gov/citycode](http://www.portlandoregon.gov/citycode) | select Title 33 Planning and Zoning

Information is subject to change.