

## Permits

### RS – Residential Building

for one or two family dwellings. An RS may also include any required electrical, mechanical, and plumbing permits.

### CO – Commercial Building

for commercial, industrial or multifamily structures. Electrical, mechanical and plumbing permits must be taken out separately by a licensed contractor.

### PT– Plumbing

required for all commercial buildings with new piping or connections. Residential PTs can be taken out by property owners or licensed contractors without getting an RS permit.

### SD – Site Development

for exterior work where no building is altered, moved, or constructed. These permits have specific thresholds\* including:

- Excavations  $\geq 10$  cubic yards
- Creating a cut slope  $\geq 5$  ft. high
- Ground disturbance  $\geq 500$  sq. ft.
- Environmental or greenway overlay
- Property has  $\geq 10\%$  slope
- Fills over 1 foot in depth
- Other conditions may apply

### ZP- Zoning Permit

for newly paved or enlarged driveways or for exterior work in specific development zones.

## Stormwater Facility Retrofit Permit Requirements

Stormwater Facility	Required permits	Potentially required	
Ecoroof or roof garden	RS/CO	PT	PT needed for any piping modifications.
Vegetated Swale		PT; SD; CO	PT required for any underground piping; SD for all commercial and those residential where thresholds are met.* CO if parking lot changes.
Vegetated Infiltration Basin (Raingarden)		PT; SD; CO	
Flow-Through Planter	PT; SD	RS; CO	RS/CO required if attached wall construction (to existing structure) or if wall is greater than 4' tall. CO if parking lot changes.
Infiltration Planter	PT; SD	RS; CO	
Sand Filter	PT; SD	RS; CO	
Drywell	PT	SD; CO	SD required if over excavation, grading, clearing, or erosion control thresholds.* CO if parking lot changes.
Soakage Trench	PT	SD; CO	
Gravel Pit	PT	RS	PT required for any underground piping. (residential scale only)
Pervious Pavers		PT; CO; ZP	PT required for any underground piping; ZP for driveway enlargement. CO and engineering for commercial parking lot changes.
Cistern, Tank, or Vault		PT; RS; CO; SD	RS/CO if internal re-use, if creating structural support, or if underground. See other facilities for overflow requirements.
Rain Barrel		PT	PT required for any underground piping. See other facilities for overflow requirements.
Splashblocks		- -	Permit not required.

\* See SD thresholds

### What to Submit for a Permit

The amount of information and detail required on a plan depends on the complexity of the project and site. Site plans are recommended but are not usually required for stand-alone PT permits.

#### For all site plans, include:

- Scale and North arrow
- Building & pavement footprints
- Surface drainage
- Facility type and sizing calculations
- Cross-section of facility
- Landscaping plans including trees
- Property corner elevations
- Utility piping locations
- Easements
- Erosion control measures
- Infiltration results when required or recommended
- Slope / topography

PortlandMaps.com is useful for initial site plans and approximate utility line locations.

## Pit Infiltration Test

(small scale facilities only)

1. Dig a 2'x 2' hole at the center of the proposed stormwater facility. Depth must be 2 ft. at minimum, or to base of facility.
2. Fill the hole with water once.
3. Let the water drain.
4. Refill the hole with water.
5. Let the water drain, again. Now the soil should be saturated, allowing a true but simple test of permeability.
6. Fill the hole a third time with water. Measure the water level drop at consistent time intervals (every 15 minutes).

Determine the infiltration rate in inches per hour even if the hole does not completely drain. Be sure to have clear notes (include date, prior conditions, when each hole was filled, did they fill quickly, did the hole drain completely each time, etc.). Two inches per hour is generally adequate for disposal.



- Operations and Maintenance agreements are required for commercial facilities and residential surface facilities.
- Underground Injection Control (UIC) registration with Department of Environmental Quality (DEQ) is required for commercial subsurface facilities.

## *A Stormwater Retrofit is:*

The installation of a new facility to treat stormwater from existing impervious area. The retrofit permitting process is distinct from new construction.

## *Stormwater facility retrofits are installed because:*

- Existing facilities may require upgrades due to failure or insufficiency
- Land use changes may trigger new requirements
- Installation of new facilities reduces a property owner's ecological footprint
- On-site stormwater utility charges can be reduced or eliminated

Regardless of the reason, many stormwater facilities require review, permitting, and inspection by the City of Portland. This permitting process was established to protect life, property, and natural resources by promoting compliance with applicable codes and regulations and to contribute to the long-term viability of our community. This brochure provides guidance for stormwater retrofit permitting and inspection.

## *The benefits of on-site stormwater disposal include:*

- *Eliminating stormwater from the public system and therefore, decreasing:*
  - Combined sewer overflows to the Willamette River
  - The number of flooded basements
  - The necessity of sewer upgrades
  - The amount of energy and public funds spent at treatment facilities
- *Creating natural landscaping for community and ecosystem health:*
  - Allows natural recharge of the local groundwater
  - Slows stormwater discharge to local streams
  - Decreases pollutant and sediment loading to streams
  - Decreases erosion
  - Reduces pollutant and heat loading to streams

For information about stormwater management go online to [www.portlandonline.com/bes](http://www.portlandonline.com/bes). Learn about the stormwater utility fee discount at [www.CleanRiverRewards.com](http://www.CleanRiverRewards.com). Facility specifications can be found in the Stormwater Management Manual.

*Information is subject to change.*

## Helpful tips & information

**Bureau of Development Services**  
City of Portland, Oregon  
1900 SW 4th Avenue, Portland, OR 97201  
[www.portlandoregon.gov/bds](http://www.portlandoregon.gov/bds)

**General Office Hours:**  
Monday through Friday, 8:00 am to 5:00 pm  
BDS main number: 503-823-7300

**Permit Information is available at the following location:**  
Development Services Center (First Floor)  
For Hours Call 503-823-7310 | Select option 1  
Permitting Services (Second Floor)  
For Hours Call 503-823-7310 | Select option 4

### Important phone numbers

Main BDS Phone..... 503-823-7300  
Retrofit permitting help ..... 503-823-5471  
Site Services..... 503-823-6892  
Site Services FAX..... 503-823-5433  
Clean River Rewards ..... 503-823-1371  
BDS Erosion Control Hotline ..... 503-823-0900  
Call before you dig ..... 1-800-332-2344  
City of Portland TTY ..... 503-823-6868

### Inspections

The inspection process depends on the types of permits and facilities. Call the Inspection Request Line (IVR) to schedule your inspection.

24-hour IVR Line ..... 503-823-7000

Erosion control inspection is required before breaking ground for SD, RS, and CO permits:

IVR # 200 Pre-construction erosion control

If concrete walls are constructed for planters:IVR # 230 Concrete reinforcing

Plumbing Inspections for RS and PT permits. (Have all piping inspected prior to covering):

IVR # 355 Storm Sewer

IVR # 365 Rain Drains

IVR # 370 Catch Basin

IVR # 390 Drywell

IVR # 395 Soakage Trench

When surface facilities (not drywells or trenches) are completed and planted:

IVR #287 On-site Stormwater Facility

You may need to call in IVR # 399 or IVR # 999 to final the permit.

Visit our Web site  
[www.portlandonline.com/bds](http://www.portlandonline.com/bds)

## Stormwater Retrofits



## Permits and Inspections



City of Portland, Oregon  
Bureau of Development Services