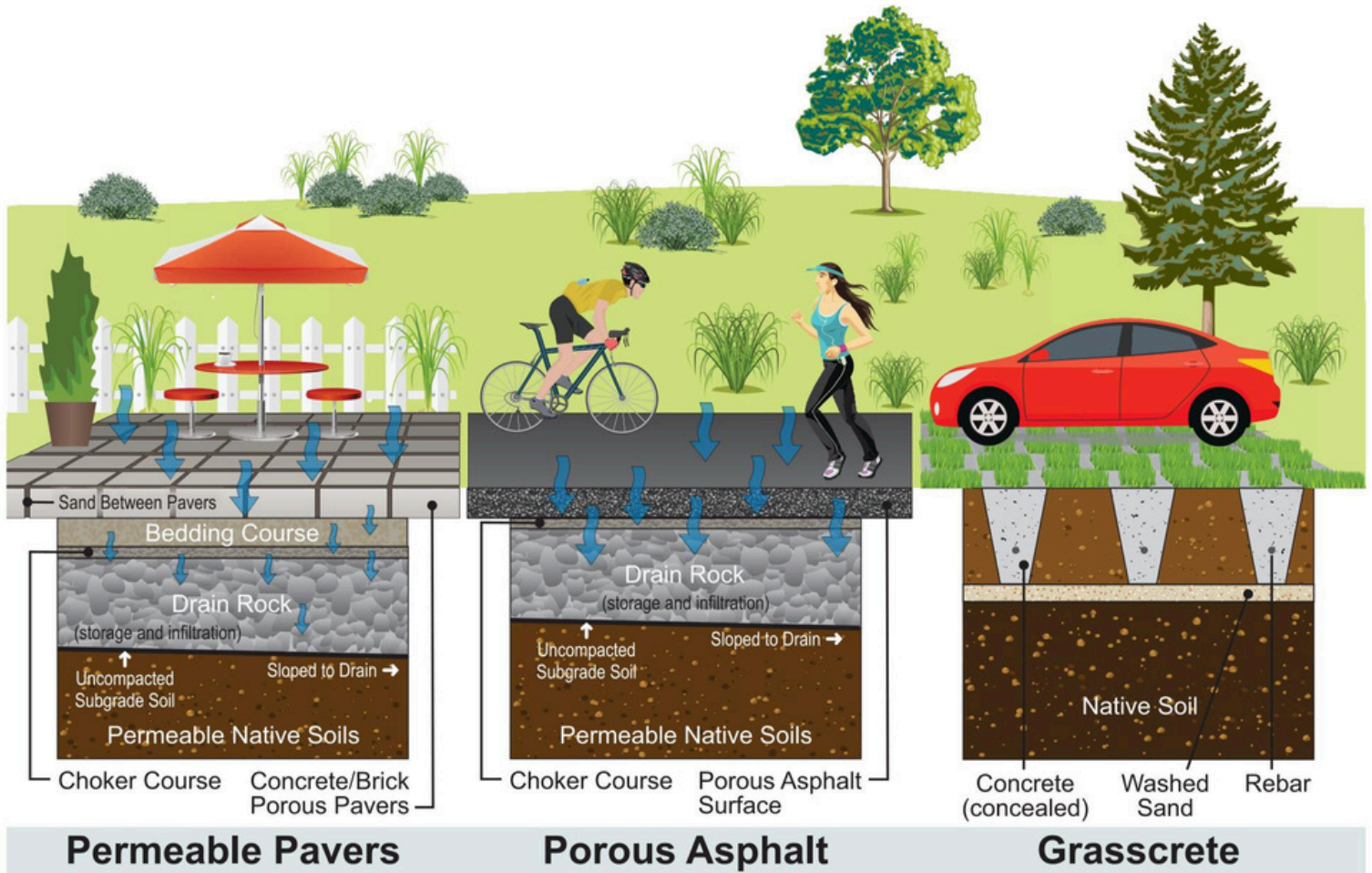




POROUS PAVEMENT

Maintenance Guideline



What is Porous/Permeable Pavement and what does it do? Why is it important?

Porous or permeable pavement comes in many forms: porous concrete, permeable asphalt, permeable pavers, permeable flow through pavers, interlocking pavers with porous voids, grasscrete, etc. By design, all these types essentially function the same by removing harmful pollutants while allowing stormwater to infiltrate into the surface and underlying soil like it would naturally. These facilities help prevent pollutants such as phosphorus, nitrogen, and heavy metals from entering our beloved Deschutes River and underground drinking water supplies while also helping to prevent localized flooding. They can also reduce glare and improve visibility in a rain event.

Why is it important to maintain your Porous Pavement?

Without proper maintenance, porous pavement will clog and become less effective at removing pollutants and allowing stormwater infiltration. In Bend, our stormwater facilities serve an important function and property owners are required to keep and maintain them per Bend Code Title 16. Just remember, a few things will go a long way in the effort to keep our waters clean and to prevent localized flooding.

What tools do you need?

For routine maintenance, all you need is a broom and dustpan to collect sediments and debris off the surface. For more intensive maintenance, vacuum sweeping followed by high pressure hosing is needed to free up pore spaces on the surface. Regular inspection of the porous pavement surface to watch for signs of wear and spalling, which may be caused by high traffic or sedimentation, is important. Carrying the attached checklist, a pen, and a copy of your site plan is a good way to ensure a complete inspection is performed.



Bad Example

Avoid road salts in areas of permeable pavement to help prevent spalling.

Damaged Pavement.
Replace/repair pavers per manufacturer specifications.

Sediment accumulation has clogged pore spaces. Vacuum sweeping followed by high pressure hosing needed to free voids in pavement.

Good Examples

Landscaping area is well maintained. Ensure landscaping material stays off porous pavement.

Pavement area is free of debris, sediment and trash. Routine sweeping and inspection is important to keep porous pavement in functioning condition.







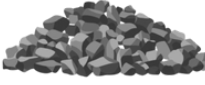
Porous Pavement Inspection and Maintenance Checklist

Property Address: _____ Property Owner/Responsible Party: _____

Facility Name/ID: _____ Date of Inspection: _____

Type of Inspection: ☐ Pre-rainy Season ☐ Monthly ☐ Quarterly ☐ Annual ☐ Re-inspection

Inspector(s): _____ Email: _____ Phone Number: _____

| Defect | Conditions when maintenance is needed | Maintenance needed? Yes/No | Comments ¹ | Results expected when maintenance is performed |
|--|---|----------------------------|-----------------------|---|
|  Debris, organic matter & sediment | Porous pavement clogging due to debris, organic matter, and sediment | | | Vacuum sweep porous asphalt or concrete systems (with proper disposal of removed materials), followed by high pressure hosing to free pores on the surface and result in no clogging |
|  Contaminants and pollution | Any evidence of oil, gasoline, contaminants or other pollutants | | | No contaminants or pollutants present Spills must be vacuumed immediately and followed by jet washing |
|  Erosion | Soil from adjacent areas washed onto pavement | | | Landscaped areas that are well maintained should prevent soil from eroding onto pavement |
|  Overflow Devices | Trash and debris accumulated on overflow devices | | | Trash and debris removed from overflow devices |
|  Vegetation | When the planted vegetation becomes excessively tall; when nuisance weeds and other vegetation start to take over | | | Vegetation mowed per specifications or maintenance plan, or nuisance vegetation removed so that flow is not impeded Clippings removed from the porous pavement and disposed of appropriately |
|  Structural components | Cracked or moving edge restraints Cracked or settled pavement | | | Repair or replace cracked or shifted components per manufacturer specifications Prevent large root systems from damaging structural components |
|  Filter medium | Aggregate loss in pavers from settling or power washing | | | Replace paver pore space with aggregate from original design |

¹Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done

Source: Central Oregon Stormwater Manual

Additional Resources

City of Bend
Stormwater Home Page



City of Bend
Standards and Specifications



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Accommodation Information for People with Disabilities

To obtain this information in an alternate format such as Braille, large print, electronic formats, etc., please contact the City of Bend Stormwater Program at stormwater@bendoregon.gov or 541-317-3000 ext. 2.