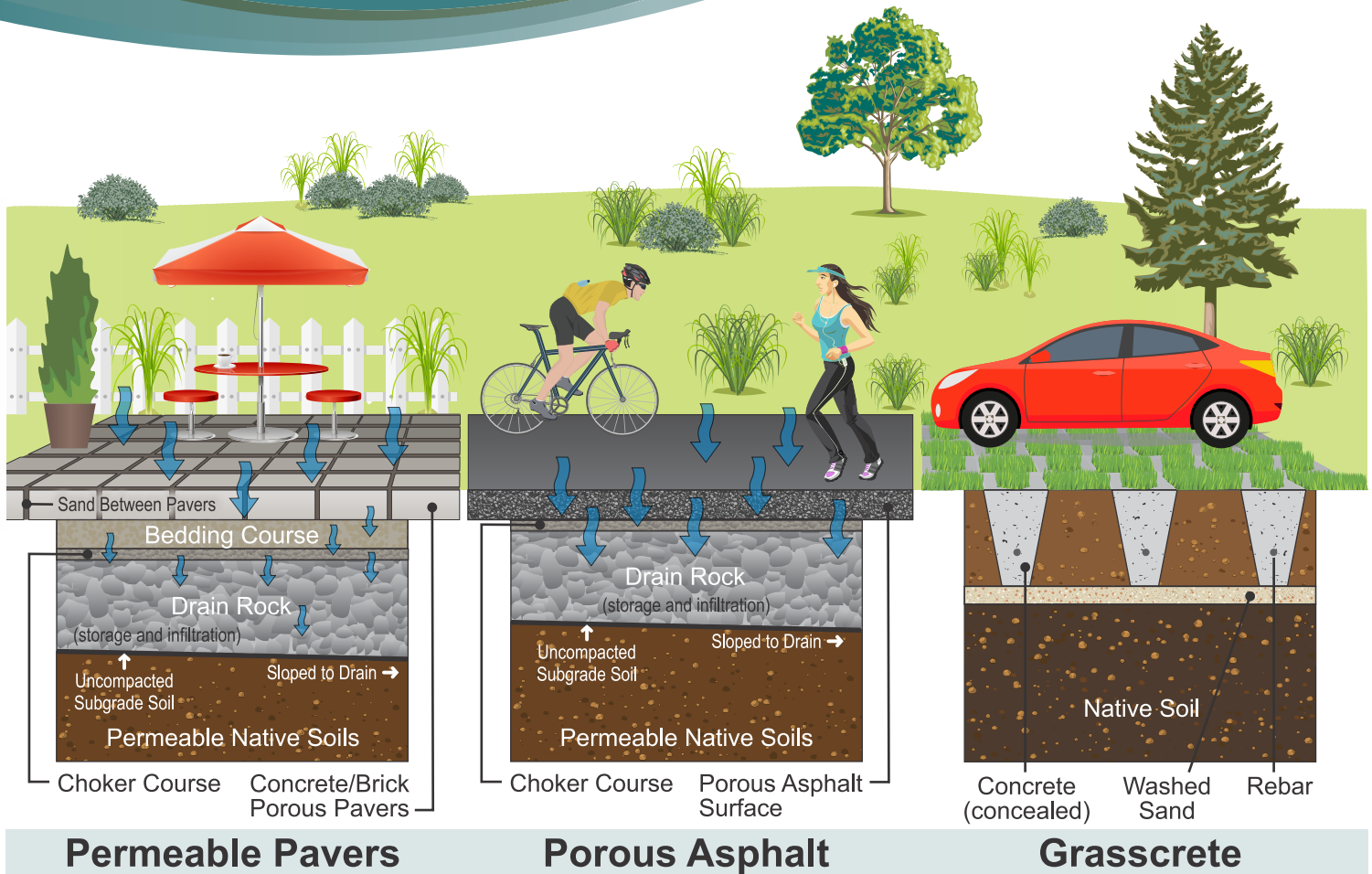


POROUS PAVEMENT Maintenance Guideline



UTILITY DEPARTMENT



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.

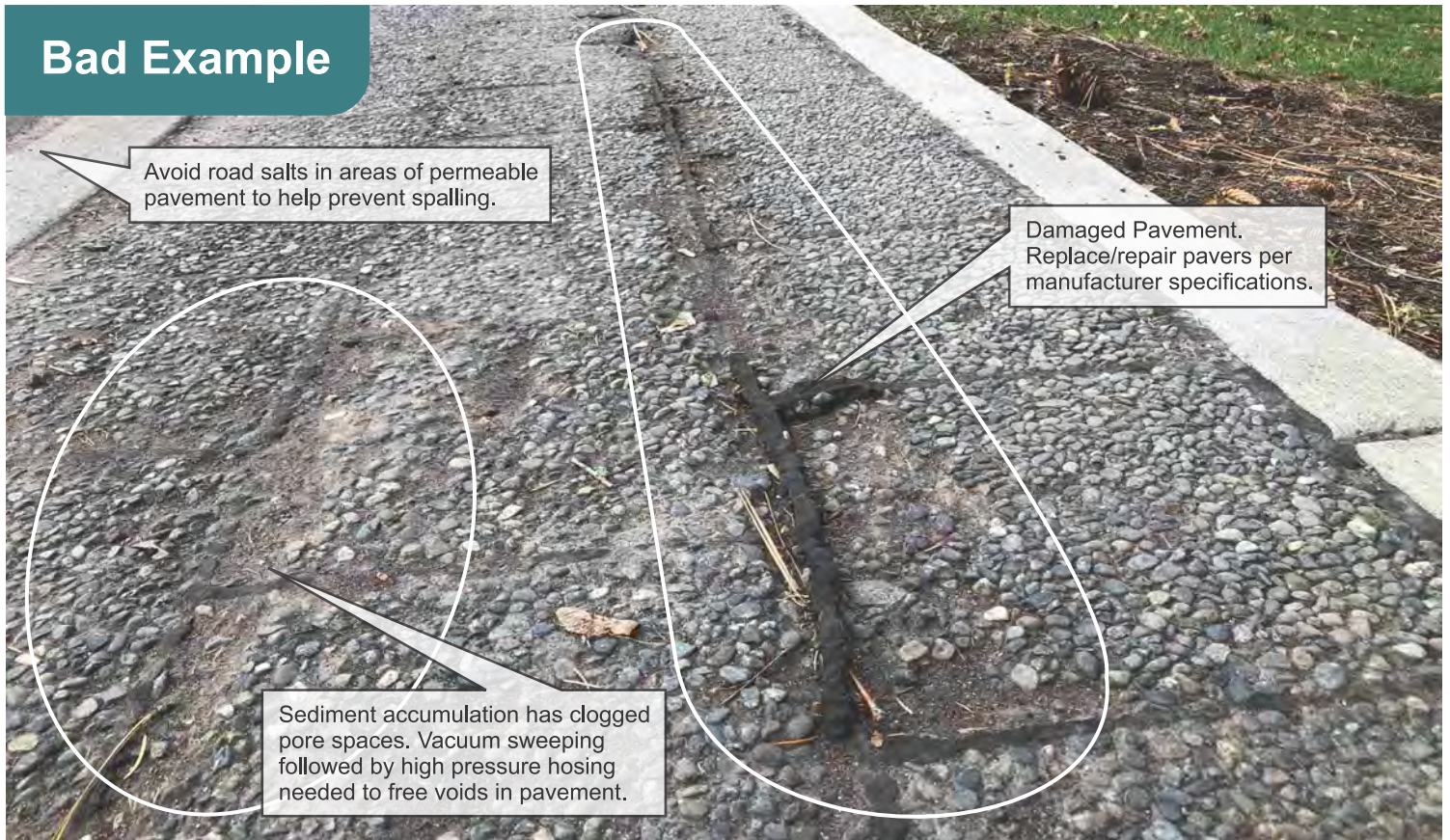
Why is it important to maintain your Porous Pavement?

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



Good Examples






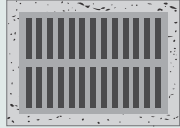



Porous Pavement and Maintenance Checklist

Property Address _____ Property Owner _____

FacilityName/Designator _____ Date of Inspection _____

Type of Inspection: Pre-rainy Season Monthly Quarterly Annual Re-inspection¹

Inspector(s) _____

Defect	Conditions When Maintenance Is Needed	Maintenance Needed? Yes / No	Comments <small>Describe maintenance completed; and if any needed maintenance was not conducted, note what is needed and when it will be done</small>	Results Expected When Maintenance Is Performed
 Debris, Organic Matter and Sediment	<ul style="list-style-type: none"> • Porous pavement clogging due to debris, organic matter and sediment 			<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Any evidence of oil, gasoline, contaminants or other pollutants 			<ul style="list-style-type: none"> • No contaminants or pollutants present • Spills must be vacuumed immediately and followed by jet washing
 Erosion	<ul style="list-style-type: none"> • Soil from adjacent areas washed onto pavement 			<ul style="list-style-type: none"> • Landscaped areas that are well maintained should prevent soil from eroding onto pavement
 Overflow Devices (Pipes)	<ul style="list-style-type: none"> • Trash and debris accumulated on overflow devices 			<ul style="list-style-type: none"> • Trash and debris removed from overflow devices
 Vegetation	<ul style="list-style-type: none"> • When the planted vegetation becomes excessively tall; when nuisance weeds and other vegetation start to take over 			<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Cracked or moving edge restraints • Cracked or settled pavement 			<ul style="list-style-type: none"> • Repair or replace cracked or shifted components per manufacturer specifications • Prevent large root systems from damaging structural components
 Filter Medium	<ul style="list-style-type: none"> • Aggregate loss in pavers from settling or power washing 			<ul style="list-style-type: none"> • Replace paver pore space with aggregate from original design

¹ Re-inspection of a previously-noted maintenance issue.

Additional Resources

Central Oregon Stormwater Manual

IDDE Manual

Available at the website below.



UTILITY DEPARTMENT

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541-317-3000 option 2
FAX: 541-317-3046

www.bendoregon.gov/cleanwaterworks



Accommodation Information for People with Disabilities.

To obtain this information in an alternate format such as Braille, large print, or electronic, please contact 541-317-3000 ext. 2 or email utilities@bendoregon.gov.