MAINTAINING PERMEABLE PAVEMENT

Taking Care of Permeable Pavement
Permeable pavements require regular maintenance to keep them working properly and to avoid expensive replacement costs. Without maintenance, the permeable pavement may become clogged and allow water to pool or run off the surface.

To Maintain Your Permeable Pavement

- Identify the type of pavers or permeable pavement you have. Different types have different maintenance needs. (If you are unsure, refer to the Virginia BMP Clearinghouse online.)
- Mow grass that grows in grid pavers and remove grass clippings regularly.
- Pressure-wash interlocking pavement joints to remove sediment seasonally.
- Remove trash, leaves, debris, and sediment from pavement joints, monthly and as needed, especially in the fall.
- Vacuum-sweep annually to remove sediment from the pavement pores.
- After pressure-washing or vacuum-sweeping, replace or replenish the top layer of stone between joints with new clean stone.
- Inspect permeable pavement after heavy storms to make sure stormwater is seeping in.
- Inform contractors working on your property of the presence of permeable pavement to prevent damage.

Stormwater runoff is rainfall that moves over paved or impervious surfaces, picking up pollutants like litter, oil, and animal waste along the way to the storm drain system. Stormwater management facilities help to remove pollutants from stormwater runoff before that water reaches the rivers and bays of Virginia Beach. This fact sheet provides information on a specific type of stormwater management facility and how to maintain it.

What is Permeable Pavement?
Permeable (or porous) pavement allows water to seep through the pavement to the underlying stone and soil instead of flowing off the paved surface. There are three main types of permeable pavement: porous asphalt, pervious concrete, and permeable interlocking concrete pavers.

Permeable pavement is used primarily for walkways, parking areas, driveways, and patios. It is typically designed to treat stormwater and prevent rain falling on the pavement from becoming runoff.

Cross-Section of Concrete Paver Permeable Pavement
How Does Permeable Pavement Work?
Specific types of permeable pavement vary, but all consist of a permeable surface layer, an underlying layer of stone aggregate that holds water until it can seep into the soil, and a filter layer or filter fabric at the bottom. If underlying soils do not absorb water well, there may also be an underdrain to direct filtered stormwater into the storm drain system. Systems with an underdrain will have a capped pipe to access the drain.

When designed and maintained properly, permeable pavements provide long-term stormwater quality benefits and protect Virginia Beach’s rivers and bays.

**Troubleshooting**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Likely cause</th>
<th>How to fix</th>
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<tbody>
<tr>
<td>Stormwater pools or flows slowly off after heavy rain (Water should soak in immediately)</td>
<td>Pavement is clogged.</td>
<td>Vacuum-sweep or clean pavement or interlocking paver joints. Remove all sediment or debris. If there is an underdrain, open the capped access pipe and flush the pipe by running water through it from a hose.</td>
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<tr>
<td>Weeds growing on porous pavement</td>
<td>Maintenance is overdue.</td>
<td>Remove weeds by the roots. Vacuum-sweep or power-wash joints to remove excess sediment. Fill with new stones as needed.</td>
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<tr>
<td>Pavement shows signs of staining or has a build-up or sediment or organic debris</td>
<td>Pavement may be clogged.</td>
<td>Vacuum-sweep or clean pavement or interlocking paver joints. Remove all sediment or debris. If there is an underdrain, open the capped access pipe and flush the pipe by running water through it from a hose. Do not do any vehicle repair on permeable pavement.</td>
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<tr>
<td>Crumbling or other surface deterioration</td>
<td>Pavement is old and/or damaged.</td>
<td>Replace or repair affected areas. Do not drive heavy vehicles on permeable pavement.</td>
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<tr>
<td>Erosion at pavement edges</td>
<td>Excess runoff at the edges may be causing erosion.</td>
<td>Gravel, mulch, or native plants may need to be added at pavement edges to prevent further erosion.</td>
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</tbody>
</table>

**Figure 7.1. Types of Permeable Pavement:** (clockwise from upper left): Concrete Grid Pavers (Chesapeake Stormwater Network); Pervious Concrete (www.perviouspavement.org); Porous Asphalt (UC Davis); Permeable Interlocking Concrete Pavers (UC Davis)

**Figure 7.2. Cross Section of Typical Permeable Pavement**

**Virginia Beach Stormwater Management Program**
www.vbgov.com/stormwater-program  
📞 757-385-4131  
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**Hampton Roads Planning District Commission**
www.askhrgreen.org  
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**Virginia Beach Master Gardeners**
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**Virginia Stormwater BMP Clearinghouse**
www.swbmp.vwwrcc.vt.edu  
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