



# Bringing Green Infrastructure to Keeler Street in 2016

## Project Overview and Update

### What's happening on Keeler Street in 2016?

The Detroit Department of Public Works (DPW) will resurface Keeler Street, as well as other surrounding residential streets, in 2016. DPW and the Detroit Water and Sewerage Department (DWSD) identified an opportunity to work together to incorporate innovative green infrastructure projects to help manage storm water runoff more effectively. Construction will start in June.

### What type of green infrastructure is DWSD constructing on Keeler Street?

DWSD will install pervious paver blocks on portions of Keeler Street.

Pervious paver blocks allow water to pass through the spaces between the blocks and eventually soak into the ground. Pervious paver blocks significantly reduce the amount of storm water runoff compared to conventional pavement. They can help to reduce ponding and flooding on the streets as well as improve public safety by reducing ice formation. DWSD will install pervious paver blocks along Keeler Street between Outer Drive and Piedmont Street.

### What is green infrastructure?

Green infrastructure is an approach to managing storm water that uses the natural processes of soils and plants to soak up storm water where it falls before it can enter and overwhelm the sewer system. DWSD is working with partners throughout Detroit to install a variety of green infrastructure practices, including bioswales, pervious pavement, rain gardens, and tree planting.

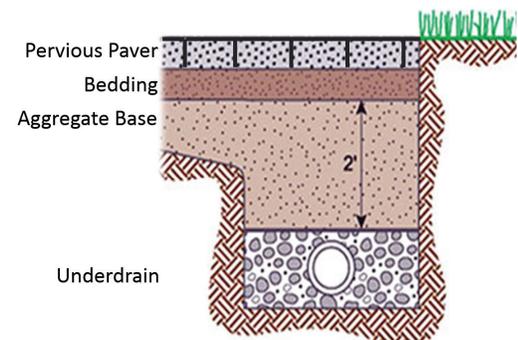




*Location of pervious paver blocks along Keeler Street*

## How do pervious paver blocks work?

Pervious paver blocks are designed to support vehicles the same as conventional pavement. They are also designed so that storm water passes through the spaces between the pavers. Under the pervious paver blocks is a 12 to 30-inch layer of stones. The storm water is stored within the void spaces between the stones while the water slowly infiltrates into the underlying soil. A drain pipe is buried within the stone to help drain the stone layer, if needed. The drain pipe flows to the existing sewer.



*A side view of pervious paver blocks*

## Project Update (as of May 2016)

### What is the project schedule?

The project will begin mid-June and last approximately three months.

## Where will residents park during road resurfacing and pervious paver block installation?

A project goal is to keep homeowners happy while construction crews are at work. The construction crew will coordinate with residents when road work will affect a driveway. Driveways might be temporarily inaccessible during the day when work is happening, but the construction crew will install a temporary entry to driveways by the end of the construction day. Driveways should remain accessible during most of the construction activity and overnight driveway parking should still occur as normal.

During driveway entrance paving, there may be several days when driveways are inaccessible while the concrete sets. The contractor will keep residents informed about driveway access as construction progresses.

Residents should also be aware that traffic patterns may be changed to allow one-way travel down Keeler Street as well. Part of the construction process involves removing large portions of roadway. Construction crews will assist drivers through these areas with flaggers and signs. Drivers should watch out for signs and follow changes in traffic patterns.

## What time will the construction crews work each day?

Construction crews will be working during daylight hours Monday through Friday. They may also work on Saturdays if needed.

## Frequently Asked Project Questions

### Are there other examples of pervious paver blocks in Detroit and southeast Michigan?

Pervious paver blocks are not a new approach to managing storm water. Property owners and municipalities are using this type of green infrastructure practice throughout southeast Michigan and around the country. Lawrence Tech has an interactive map that shows the location of pervious pavement projects in southeast Michigan. Please visit: <http://www.ltu.edu/lid/>.

### How well do pervious paver blocks perform?

Pervious paver blocks provide the same advantages as traditional pavement, including resistance to heavy loads, flexibility of repair, low maintenance, exceptional durability, and high quality. Research from existing pervious paver block installations demonstrate that they withstand cold, wet weather conditions, and perform well over time. More information on the performance of pervious paver blocks is available at: <http://atfiles.org/files/pdf/PermPavers.PDF>.

## Can pervious paver blocks cause basement flooding?

Pervious paver blocks can actually help reduce basement flooding caused by storms that overload the sewer system. The sections of Keeler Street with pervious paver blocks will be located more than 10 feet from homes and at least 2 feet above the groundwater table so as not to cause seeping into basements. Drain pipes beneath the pervious paver blocks also help direct storm water to the sewer during heavy rains. Residents with concerns about basement flooding should remember to direct downspouts 6 feet away from the house and ensure that the ground slopes away from the house.

## Who is responsible for maintaining the pervious paver blocks?

DWSD is responsible for maintaining the pervious paver blocks using street vacuums. This will be done twice a year to remove small particles from the pervious paver blocks to prevent clogging and ensure it effectively soaks up storm water.

## Project Contact Information

### Who can residents call if there are questions or problems with the pervious paver blocks once installed?

If residents on Keeler Street have questions or concerns about the pervious paver blocks in front of their property or in the neighborhood, they can call DWSD at the 24 hour emergency hotline (313.267.7401) or email [dwsd-publicaffairs@detroitmi.gov](mailto:dwsd-publicaffairs@detroitmi.gov) or use the Improve Detroit mobile app available at: [www.detroitmi.gov/How-Do-I/Mobile-Apps/ImproveDetroit](http://www.detroitmi.gov/How-Do-I/Mobile-Apps/ImproveDetroit). It is important to DWSD to know if there are problems with the pervious paver blocks or any questions on proper maintenance or functioning.

### Where can I get more information?

DWSD will provide updates about the Keeler Street pervious paver block project, as well as other Green Infrastructure projects, on the DWSD website ([www.detroitmi.gov/dwsd](http://www.detroitmi.gov/dwsd)). More technical information about pervious pavement and how it works is available in Chapter 7 of SEMCOG's *Low Impact Development Manual for Michigan* (<http://www.semco.org/lowimpactdevelopmentreference.aspx>).

### Who can I contact to share my thoughts?

If you have questions or concerns about the pervious paver block project, please contact Parvez Jafri at 313.267.1224 or [jafrip@detroitmi.gov](mailto:jafrip@detroitmi.gov).

If you have questions or concerns about road resurfacing, please contact Jihad Slim 313.224.3947 or [slimj@detroitmi.gov](mailto:slimj@detroitmi.gov).

