



Green Stormwater Infrastructure FAQ for plumbers and contractors

The Philadelphia Water Department is installing hundreds of stormwater drainage structures in streets, sidewalks and at other locations. These structures, known as **green stormwater infrastructure (GSI)**, are often not visible from the surface.



Call PA One Call before you dig!

To avoid damaging City-owned GSI, call **PA One Call** at **8-1-1**



subsurface
infrastructure

Stormwater Bumpout

What is GSI?

GSI is a surface and/or subsurface drainage system that stores, filters and conveys stormwater runoff. GSI slows the flow of stormwater into sewers, and natural features such as soil and plants remove pollutants.

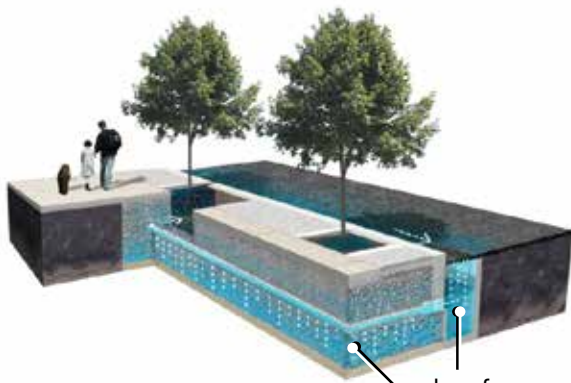
Why should I care about GSI?

GSI is necessary for the City to meet its environmental obligations to the state and federal governments. GSI is fragile and a disturbed system may collapse. If you damage GSI, please notify Philadelphia Water GSI Maintenance at (215) 300-9079 immediately. **You will be required to repair any damage caused to GSI, or the City will do so and bill you. You may also be fined.**

What can I do to avoid damaging GSI?

- **Call PA One Call at 8-1-1**
- **Get GSI drawings from PWD Records: (215) 685-6271**

Philadelphia Water will provide record plans showing locations, type of GSI, GSI footprint area/extent, and critical elevations (top of storage, bottom of storage, invert elevations of connection points). We will mark out the extent of GSI during field one-calls. Emergency exceptions may be made.



subsurface
infrastructure

Stormwater Tree Trench

How can I avoid damaging GSI ? *(continued from previous page)*

If a private lateral must run through GSI or if you must dig near GSI, Philadelphia Water will provide specific requirements. Plumbers and contractors must contact Philadelphia Water for any proposed work in the immediate vicinity of GSI. A Philadelphia Water inspector must be on site during construction and must give final approval after appropriate GSI restoration.

What does GSI look like?

GSI takes a variety of forms. Typically, there are surface and underground stormwater storage areas. Surface storage can include rain gardens, tree plantings, and stormwater planters. Subsurface storage is typically a trench or other area comprised of clean-washed AASHTO No. 57 aggregate wrapped in non-woven geotextile or a 40 mil.-thick high density polyethylene geomembrane. Subsurface storage trenches can run several hundred feet under the sidewalk.

GSI often blends into its surroundings, and even installations that appear to be standard street trees have extensive underground infrastructure.



Stormwater Planter

Where is GSI located?

GSI is located throughout Philadelphia in sidewalks, streets, parks, and community centers. Visit the Big Green Map to locate many of our planned and completed projects: www.phillywatersheds.org/BigGreenMap. **This map is not a comprehensive list of projects and is not a substitute for calling Philadelphia Water or PA One Call (8-1-1).**

Why is Philadelphia Water installing GSI?

State and federal regulations require the City to reduce the amount of sewage discharged into our rivers when it rains. Philadelphia Water is taking many steps to meet these obligations, including installing GSI in areas served by a combined sanitary and stormwater sewer. Our combined sewer overflow prevention program, *Green City, Clean Waters*, began in 2011 and full implementation is projected through 2036. More on *Green City, Clean Waters* is available at: www.phillywatersheds.org/GreenCityCleanWaters.

What else I should know?

Sediment can damage GSI and is generally not permitted in the sewer system. GSI is designed to filter and clean stormwater, and sediment runoff from construction or excavation sites can clog GSI and negatively impact performance. Install appropriate erosion and sediment (E&S) controls at all times.

Where can I learn more?

More information about *Green City, Clean Waters* and GSI is available at

www.phillywatersheds.org.

Email general questions to:

questions@phillywatersheds.org.

Philadelphia Water Contact List

For GSI drawings, contact **Records** at **(215) 685-6271**

To schedule work near GSI or report damage, contact **GSI Maintenance** at **(215) 300-9079**