

## **Project Number 50194**

# Construction of Green Stormwater Infrastructure (GSI)

Start Date: August 2020 Anticipated Completion Date: August 2021





Areas impacted by construction:

- N. 39th St from Poplar St to Cambridge St
- Cambridge St from N. Sloan St to N. Union St
- Poplar St from N. 41st St to N. 40th St
- Poplar St from N. Sloan St to N. Union St
- N. 41st St from Cambridge St to Parkside Ave
- Cambridge St from Poplar St to N. 41st St

## Why are we doing this project?

State and federal regulations require Philadelphia to reduce the pollution entering our rivers when excess stormwater causes sewer overflows. **Green City, Clean Waters** is a program designed to meet those regulations and invest in neighborhoods across the city by creating stormwater infrastructure that incorporates green space.

In addition to water quality benefits, green tools used by **Green City, Clean Waters** provide a number of community benefits. New green spaces have been found to **improve the value of homes** and **encourage outdoor recreation** while **reducing stress**, **noise**, **air pollution** and **litter** in neighborhoods.

## What is green stormwater infrastructure?

Green stormwater infrastructure (GSI) uses materials such as plants, soil, stone and special pavement to slow, filter and soak up water during storms. This project includes the following types of green stormwater infrastructure:

**Stormwater Tree Trench** - A stormwater tree trench looks like a series of traditional street trees, but underground the trees are connected by a concrete structure designed to store and filter water. During construction, a trench is created along the sidewalk and lined with special fabric, then filled with stone and topped with soil and trees.

**Stormwater Bumpout** - A stormwater bumpout is a landscaped extension of the curb. Underneath the bumpout is a large concrete storage system filled with gravel or stone and topped off with soil. Grasses, perennials and shrubs are planted on top of the storage system.

**Underground Storage** - Underground or subsurface storage refers to spaces that store stormwater underground. Typically, a rectangular bed is cut in the street or sidewalk. The bed is lined with special fabric and then filled with stone or gravel and sometimes plastic storage pipes.



Plants filter water and enhance streetscape. Water filters through soil.

Etopa and other materials provide

At Right: Graphic rendering of a completed bumpout similar to the one to be constructed on the northwest corner of Poplar St and N. 40<sup>th</sup> St.

Stormwater flows from street into bumpout.

Stone and other materials provide additional stormwater storage.

## Frequently Asked Questions (FAQs)

With all construction there is a level of inconvenience. Philadelphia Water is working to minimize construction impacts. Please refer to our Frequently Asked Questions for more information:

#### Q: Will I lose water service during construction?

- A: Minor disruptions of water service are anticipated during construction, resulting in the loss of water service for 1-2 hours while house connections to new pipes are made and for 4-8 hours while water main connections are completed. Residents will be notified when water service outages are anticipated.
- Q: Will other utilities be interrupted during construction?
- A: No disruption of utilities is anticipated during this construction period.

#### Q: What are the hours of construction?

- A: Typical construction hours are from 7:00 a.m. to 4:00 p.m. but can vary seasonally.
- Q: How will construction impact traffic, sidewalk access and parking?
- A: Street parking during hours of construction will be restricted. Temporary "No Parking" signs will be installed as needed for safety and construction. Signs will be installed before the start of work indicating the dates and hours that the areas will be closed.
  Vehicular traffic, pedestrian access, trash collection and deliveries will be maintained. Any cars left on streets where work is scheduled to take place will be towed to a nearby public street. Project personnel will be available to direct you to your car.

#### Q: How dusty will my street be during construction?

A: All construction work is subject to dirt and dust, but we try to keep it to a minimum. At the end of each work day, the contractor will be responsible for keeping the site clean.

#### **Q: Will trees be protected during construction?**

A: A tree specialist will assess all trees in the project area prior to construction to identify measures to protect the trees.

#### Q: Will SEPTA service in the area be impacted?

- A: No interruptions to SEPTA service are anticipated
- Q: Once the project is built, who will maintain the new plants and trees?
- A: Philadelphia Water is responsible for maintaining all of our infrastructure, including green stormwater infrastructure. We visit sites about once a month to perform routine maintenance.

