

## CUSTOMER CASE STUDY

# RAIN GUARDIAN FOXHOLE REDUCES COMBINED SEWER OVERFLOWS AND MAINTAINS A SAFE WALKWAY

**CLIENT:**

City of Lancaster, PA

**LOCATION:**

Lancaster, PA

**PRODUCT/SOLUTION:**

Rain Guardian Foxhole

**DATE:**

September 2019

Ferguson Waterworks teams up with Jacobs®, an engineering company in Philadelphia, PA, to improve a critical bioretention system at the intersection of Prince and Walnut streets in Lancaster. The Rain Guardian Foxhole was installed to reduce combined sewer overflows (CSOs) and safely convey runoff across the sidewalk.

**WHY WAS THE RAIN GUARDIAN FOXHOLE RECOMMENDED AS THE BEST PRETREATMENT BMP FOR THE LANCASTER, PA, BIORETENTION SYSTEM?**

Pretreatment provided by the Rain Guardian Foxhole will elongate the functional design life of the downstream bioretention system and minimize maintenance intervals for the City of Lancaster. It will also maintain aesthetics at a busy, highly visible intersection.

**WHAT ARE THE KEY FEATURES OF THE RAIN GUARDIAN FOXHOLE?**

The RainGuardian Foxhole offers a high-strength, 52lb composite lid that easily supports pedestrian and bike passage. In addition, the modular pretreatment BMP installation is straightforward. Using 3' easy-to-connect units, contractors fit the Foxhole to the sidewalk's width, avoiding nearby utilities and maintaining pedestrian access to the sidewalk.

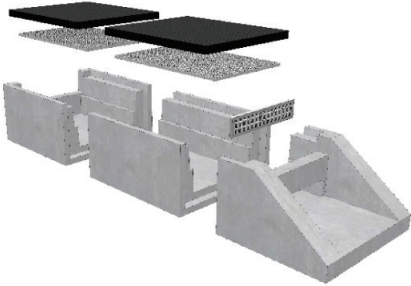


#### THE RAIN GUARDIAN FOXHOLE WAS INSTALLED BECAUSE IT:

- Maximizes system capacity and extends the life of the bioretention system.
- Reduces maintenance requirements and difficulties. Maintenance crews can visually inspect the Foxhole and clean it out using a shovel, broom, and/or hose.
- Eliminates bypass and sediment build-up while protecting nearby vegetation and maintaining a safe pedestrian pathway across Prince Street.

#### RAIN GUARDIAN FOXHOLE FEATURES AND SPECIFICATIONS

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| Composite Lid            | 3,540 lbs/sq (uniform load rating)              |
| Lightweight installation | 52 lbs/lid                                      |
| Modular Chamber          | 3' increments adapt to various sidewalk lengths |
| Ponding Depth            | 9"                                              |
| Inlet Capacity           | 2 cfs                                           |
| Outlet Capacity          | 4.39 cfs                                        |



#### WERE LANCASTER, PA, AND ITS RESIDENTS SATISFIED WITH THE PRETREATMENT BMP?

Yes! The new BMP provided an attractive green space that also functions to protect the city's water quality. In addition, PennDOT, which partially funded the project, was pleased with the outcome.

Ferguson Waterworks is an industry-leading solutions provider for stormwater BMPs. We work closely with engineers, contractors, DOT professionals, municipalities, and other stakeholders to meet local regulatory requirements. For innovative, sustainable, clean-water infrastructure, contact your local expert today.