

# CASE STUDY

## Floral Vale Development Lower Makefield, Pennsylvania

<b>Storage Required:</b>	52,193 CF
<b>Storage Provided:</b>	53,650 CF
<b>Area:</b>	20,470.92 SF
<b>Models:</b>	Recharger® V8
<b>Number of Units:</b>	500
<b>Tons of Stone:</b>	2,038 Required
<b>Installed:</b>	November 2008
<b>Project Engineer:</b>	Tri-State Engineering Feasterville, PA
<b>Contractor:</b>	Allan A. Myers Worcester, PA



The Floral Vale development is a building complex designed primarily for doctors' offices and medical research facilities. Originally started in 1990, the project is now in its third phase of construction, and the engineers from Tri-State Engineering needed to design a stormwater management system that would retain runoff from the 5-acre development area.

Having considered several stormwater solutions, engineers selected a CULTEC underground system based on its quality, performance characteristics and cost-effectiveness. According to Jodi Litus at Tri-State Engineering, the Recharger® V8 met the storage requirements and the unit featured the best vertical height for the project.

In addition to complying with state and regional stormwater management guidelines and local township ordinances, the system needed to be configured to accommodate the site's varying permeability areas. One part of the site featured very high and another part very low infiltration rates, and CULTEC was able to configure the system to avoid the extreme permeability areas while still adequately collecting runoff from the site.

"CULTEC offers the widest selection of chamber sizes, which helps to fit the system into any footprint on-site in a cost-effective way," explained Jonathan Shell from East Coast Associates, a CULTEC sales representative.

More than 500 Recharger V8 chambers were installed in three beds and provided 53,650 cubic feet of storage. Two weeks before the installation took place, Tri-State Engineering needed to add extra volume to address a reduction

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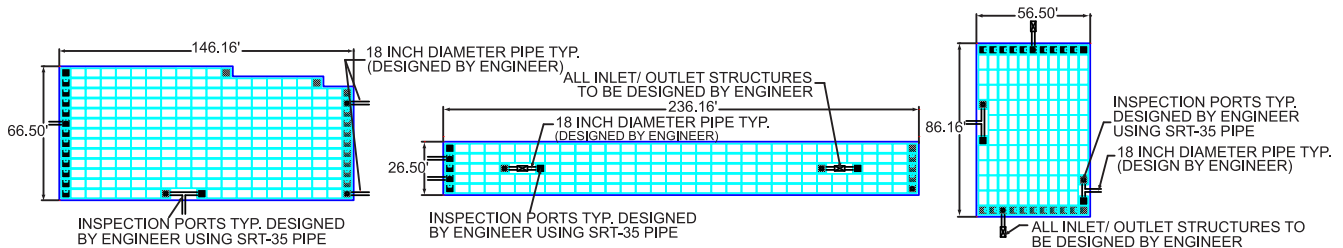
## Lower Makefield, Pennsylvania *(continued)*

in infiltration due to an increased factor of safety, as requested by the Lower Makefield Township Environmental Advisory Counsel. The technical staff at CULTEC modified the shop drawings, and East Coast Associates had the additional chambers shipped and helped reconfigure the footprint on-site.

“CULTEC has a great system, which is easy to work with both in terms of design and actual installation,” said Litus. “We are also pleased that CULTEC was so accessible throughout the entire process and promptly accommodated even minor design changes.”

The installation of CULTEC chambers took only a few days, and East Coast Associates was on-hand to help with the process. Production engineer Kelly Klipfel, who works with contractor Allan A. Myers, has never installed a CULTEC system before, but was pleased that it proved to be very easy to put together.

“We were very impressed at the ease of installation when working with CULTEC,” said Klipfel. “The material is so light, one person can pick up and install a chamber.”



### CULTEC, Inc.

878 Federal Road • P.O. Box 280 • Brookfield, CT 06804  
 Phone: 203-775-4416 • Toll Free: 800-4-CULTEC • Fax: 203-775-1462 • Web: [www.cultec.com](http://www.cultec.com)

