

Washington U. Stormwater Detention Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: Washington University
School of Medicine Environmental Health and Safety Building
Location: St. Louis, Missouri
Application/Solution:
Stormwater Detention/Water Quality
Market Sector: Private Commercial

Salesperson: Guy Litteken
Owner: Washington University School of Medicine
Engineer: Genesis Engineering
Subcontractor: Concrete Strategies
Installed: August 2014

case study



case study

Challenge

As part of the design for Washington University's new Environmental Health and Safety Building, Genesis Engineering needed to incorporate stormwater design aspects to prevent runoff from entering the combined sewer system too rapidly. If the additional impervious area created by the development were allowed to immediately drain into the combined sewer, sewer backups would occur.



1 Site for BMP is excavated and soil compaction verified.

Solutions

Genesis worked on a site-specific underground detention design with ADS/StormTech's Technical Services to design a MC-3500 chamber stormwater storage system.



2 Placement of non-woven geotextile, clean aggregate and 6" N12 perforated underdrain pipe.

Results

This solution offered a number of benefits to the client, including a low cost and rapid installation along with the ability to install this sub-surface BMP early in construction. StormTech chambers also offer the benefit of pretreatment of site runoff with their patented Isolator® Row as well as the open bottom chamber to encourage infiltration and reduced downstream flow. Local ADS sales and engineering also provided installation support from preconstruction to completion.



3 Arch chamber placement begins.



Washington U. Stormwater Detention Case Study continued



Products

Manufacturers included in solutions and product:

Product:

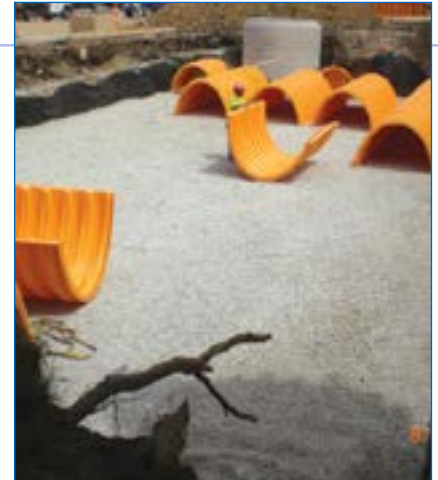
MC-3500 Chamber

Manufacturer:

Advanced Drainage Systems/
StormTech



4 Subsequent rows of arch chambers are installed.



5 Note ease of handling.



6 Arch chamber installation is completed. Notice woven geotextile placement to avoid scouring of clean rock.



7 Excavation for BMP is backfilled completely with clean aggregate and protected with non-woven geotextile.

Company Information

ASP Enterprises, Inc. and Quick Supply Co. For more than three decades, A.S.P. Enterprises and Quick Supply Co. has served the erosion control industry with integrity and expertise. We provide engineers and landscape contractors the exceptional value for their money and have grown to become the Midwest's full-line distributor of erosion-control, geosynthetics, storm water management products, wall block, landscape pavers, and drainage products.

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