



Green Infrastructure & Stormwater Management CASE STUDY

SWT Design Campus

Location: 7722 Big Bend Blvd. St. Louis, MO

Client: SWT Design

Design Firm(s): SWT Design

Landscape architect/Project contact: Zach Snovelle

Email: zachs@swtdesign.com

ASLA Chapter: St. Louis

Project Specifications

Project Description: The SWT office campus.

Project Type:

Commercial

Part of a redevelopment project

Design features: Bioretention facility, rain garden, bioswale, green roof, and porous pavers. Of the project's total 14,450 sq/ft approximately 9,000 sq/ft are utilized in a combination of buffer plantings, greenroof, raingarden, and permeable pavement all designed to collect, manage, and infiltrate the sites stormwater.

This project was designed to meet the following specific requirements or mandates:

Local ordinance

Impervious area managed: 5,000 sq/ft to 1 acre

Amount of existing green space/open space conserved or preserved for managing stormwater on site: less than 5,000 sq/ft

The regulatory environment and regulator was supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Yes, this project was designed and developed with the intent of showcasing highly functional best management practices and green infrastructure while creating an aesthetically pleasing yet functional site.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$50,000-\$100,000 (Public funding: None)

Related Information: Unfortunately, we do not have complete project costs broken down at this time.

Was a green vs. grey cost analysis performed? No

Cost impact of conserving green/open space to the overall costs of the site design/development project: Unfortunately, we do not have any exact cost figures relating to this.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Unfortunately, we do not have any exact cost figures relating to this.

Number of jobs created: Not available

Job hours devoted to project: Not available

Planning and Design: Not available

Construction: Not available

Annual Maintenance: Not available

Performance Measures

Stormwater reduction performance analysis:

No specific analysis has been done. Based on observations it is likely that around 99% of the sites stormwater remains on site and is infiltrated into the soil. Runoff leaving the site via surface flow (the only way for water to leave) has only been observed during very brief periods following major storm events in which an inch or more of rain is deposited within a brief period of time after a long "wet" period of weather. This occurs one, maybe two times per year.

Community & economic benefits that have resulted from the project: SWT Design focuses on commitment to design excellence, on-going client relations, communication, community improvement, and sustainability. Our strong commitment to the environment and the community is evident in all of our projects, though maybe most pronounced in our own "backyard" throughout the expansions of our office building and campus. By integrating appropriate methods and best practices, SWT Design strives to sustain the natural resources from which we draw. We believe every design provides the opportunity to balance cultural and ecological resources with economic means. With this balance of environmental stewardship and design, we promote social well-being and community pride. SWT Design strives to connect

communities with our immersionary approach to site design to allow for many educational and interpretive opportunities. No matter the scope, scale or sector of our projects, we use creativity, innovation and respect for the origin of all natural resources; we preserve and perpetuate ecosystems which make us true stewards of the land. Providing interpretive signage and personal interaction with the environment encourages a higher understanding and awareness of sustainability. SWT Design's campus and studio serves as a dynamic living laboratory for community members to learn about new techniques in landscape design, storm water management, and green building practices.

Project Recognition

ASLA Chapter Merit Award

Additional Information

Links to images: <http://www.swtdesign.com/volume3.php> and <http://swtdesign.com/office/>
Additional imagery, diagrams, etc. can be provided upon request.