

PROJECT PROFILE

WESTCHASE PARK

Suntree Technologies Grate Inlet Skimmer Basket

PREFACE - Storm Water Quality Regulations in the City of Houston and Harris County have gradually become more of a priority for each of the government agencies and subsequently can become more expensive for property Owners and Developers. Because there are numerous ways of meeting the SWQ regulatory requirements (and some more expensive than others), it is in the developer's best interest to have an input during the design and installation phase of the Storm Water Quality BMP's.

PROJECT BACKGROUND

Westchase Park is a planned two office building development with more than 1,700 feet of frontage directly on the Sam Houston Parkway in Houston, Texas. This highly-visible 18-acre, Class A headquarters-style office project features sophisticated architectural design and high-end finishes, with a dramatic water feature and park. The building is a LEED Certified "Silver" sustainable development.

THE BUSINESS CASE

The design for Westchase Park has three individual discharge locations, two coming from parking/paved area inlets, and one discharging from rooftop runoff. A traditional design to meet local storm water quality requirements typically entails installing end-of-pipe units, one at each outfall location. These large units usually cost, at a minimum, \$12,000 for supply and installation, and \$2500 annually to maintain. Factor in unexpected maintenance needs, and over the life of the development this design can become extremely costly.

An alternative to the traditional design was presented, which was not only less expensive to supply and install, but also required less maintenance over the life of the development. The alternative was to treat stormwater at the source, as it drains into the parking/paved area inlets, by using Suntree Technologies Grate Inlet Skimmer Baskets. With 13 inlets onsite, total product and installation costs were about \$13,000 (compared to the approximate \$24,000 for the two traditional units that would treat these 13 inlets), and maintenance of these individual units is estimated at about \$100 per unit, per year. Stormwater discharges from the roof drains to the third outfall through a traditional unit. Therefore, overall savings to the contractor were approximately \$12,000, and savings to the end user of the development are approximately \$3,000 annually.

WHY SIMPLICITY MATTERS

Bigger is not always better, and oftentimes, less is more. In many site situations, such is true when it comes to determining which BMP to utilize in order to obtain the site storm water quality permit. Considering most of the manufactured BMP's that exist in the market today, the Suntree Technologies Grate Inlet Skimmer Basket (GISB) is by far the least expensive to install, least complex and, most importantly, least expensive to maintain. The GISB sufficiently achieves treatment effectiveness that meets the LEED standard for Sustainable Sites Credit 6.2 Storm Water Quality, which was why the design team at Pate Engineers in Houston, Texas chose the GISB as the storm water quality BMP for Westchase Park.



As shown above, a storm boom can be fitted to the unit to filter hydrocarbons from runoff

Owner: Simmons Vedder and Company

Engineer: Pate Engineers

Contractor: D. E. Harvey Builders

Site Contractor: Joslin Construction

Completion: October 2009

Advancement in the industry's awareness and knowledge surrounding storm water quality solutions that meet regulatory requirements have conceived a multitude of various products, each with its own unique benefits. All products are not created equal, however, and choosing the right Storm Water Quality Unit or Best Management Practice (BMP) is critical. SWQ Units and BMP's range in cost both during and after construction. Some are less expensive to install, but are more costly to maintain over the life of the development, and vice-versa.

About Suntree Technologies

Suntree Technologies Inc. has been designing and manufacturing stormwater BMP's since 1993, providing innovative stormwater treatment solutions that are cost effective and reliable.

Send an email to AskCES@ecosvs.com for a free cost comparison of your project.



Left - leaves and pine needles prevented from entering the storm sewer.

Right - the unit is cleaned out and placed back in the inlet.



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PROJECT PROFILE

Westchase Park
Address

82% TSS reduction

50% Less to Install

100% Green

PROJECT TEAM

Design Team

Architect

Ambrose, McEnany, & House
Architects

Civil Engineer

Pate Engineers

Construction Team

General Contractor

D. E. Harvey Builders

Installation

Construction EcoServices



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