

Lake Cunningham Stormwater Infiltration Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: Lake Cunningham
Universal Water Access
Location: 96th & Garvin St.
Omaha, Nebraska
Application/Solution:
Permeable Articulating Concrete
Block using PaveDrain

Market Sector: Stormwater Infiltration
Salesperson: Lynn Ewoldt
Owner: City of Omaha Parks Department
Engineer: Ehrart Griffin & Associates
Contractor: Dostals Construction
Installed: June 2014

case study

Challenge

The City of Omaha Parks Department wanted to install a one of a kind in the area handicap accessible kayak lift at Lake Cunningham. They also needed an ADA compliant parking area at the park. The parking lot would be near the lake so they didn't want any runoff occurring to the lake. Upfront suggestions included pervious concrete but due to the cost, ease of installation and functional longevity of the product it was quickly disregarded.

Solutions

The PaveDrain System proposed by ASP was ultimately chosen for the solution for the project. PaveDrain is a permeable articulating concrete block. It can be hand placed individually or cabled together at the factory and placed as mats. The hand place option was chosen by the contractor due to the size and limited space of the project. Mirafi RS380i, a woven high-performance polypropylene geosynthetic fabric was chosen for reinforcement, separation, confinement and filtration over the soft subgrade and under the clean bedding stone that is placed under the PaveDrain. A unique feature of the PaveDrain is its arched shape on the underside of the block. This allows for additional water storage during a rain event. With 4,000 inches/SF/hour of permeability, the PaveDrain System was an easy choice.

Results

The installation went extremely well. The Universal Water Access project was completed by Dostals Construction. Bodie Dostal, owner of Dostals Construction, stated, "I like the PaveDrain product. The thing that takes the longest to do is get the aggregate level. Once that is done, the block installation is simple and quick." It took them two days to place the filter fabric, bring in the aggregate, compact and level. The PaveDrain block took three days to finish with a three man crew. After eight months of the installation, the parking lot is performing great. Numerous summer and fall rain events have occurred with no issues. ASP is pleased to provide PaveDrain as a proven site solution for the Lake Cunningham Universal Water Access project.



1 Dirt work beginning May 2014.



2 Geotextile and aggregate bedding installed.



3 PaveDrain can be driven on immediately.

Lake Cunningham Stormwater Infiltration Case Study continued



Products

Manufacturers included in solutions and product:

Product:

PaveDrain

Manufacturer:

PaveDrain

Product:

RS380i

Manufacturer:

TC Mirafi

Product:

Straw Wattles

Manufacturer:

North American Green



4 Blocks were cut to fill in gap at the curb.



5 Blocks are easily set in place.



7 3,600 SF PaveDrain complete.



6 Parking lines painted and project seeded.

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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