

Stormwater Management Planters Milwaukee, WI

Description:

North 27th Street biofiltration planters: The project consists of designing and constructing 14 stormwater management planters (SWMP's). The SWMP's are designed to capture, slow, and treat the street runoff from approximately two acres of roadways. The system was also fashioned to enhance the landscape with plant life. Vegetation in the planters is salt tolerant to both wet and dry conditions in addition to being very low maintenance. The project total cost was approximately \$225,000 and was completed Fall 2008.

Background:

The project incorporates a system of stormwater treatment within the City Right of Way. It demonstrates how highly urbanized areas can be designed to provide direct environmental benefits and be aesthetically integrated into the urban streetscape. The green streets biofiltration planters and curb extensions are designed to capture, slow, treat, and to filtrate street runoff while providing a visual amenity for the neighborhood and promote a healthy community.

Project Results:

The project has been recently constructed and has not yet been tested for results. However, based on Wisconsin Department of Natural Resources Standards and Specifications for bioretention facilities design, we anticipate the following results:

1. Significantly reducing the total runoff peak flow by at least 30% as compared to existing conditions, and enhance the quality of streets runoff flow entering the sewer system by reducing the total suspended solids by at least 60%.
2. Narrowing the existing roadway to reduce the amount of area devoted to traffic and parking and increasing the amount of "open" space for sidewalks and landscaping.

Vegetation Details:

Size: 4^{1/2},"

ASTER NOVAE – ANGLIAE

ECHINACEA PURPUREA

PHLOX DIVARICATA

SOLIDAGA RUGOSA "FIREWORKS"

COREOPSIS PALMATA

ANDROPOGON GERARDII
PANICUM VIRGATUM
EUPATORIUM
ELYMUS VIRGINICUS

CAREX SSP
HEMEROCALLIS "DWARF"
RUDBECKIA HIRTA

Size: 2"
ACER FREEMANI "AUTUMN BLAZE"
ULMUS "SPECIES" "NEW HYBRIDS"

Size: 2'-3'
DIERVILLA LONICERA
ILEX VERTICILLATA
SALIX PURPUERA "ARTIC BLUE"
RHUS TYPHINA "TIGER EYES"

CORNUS SERICEA "ISANTI"
SAMBUCUS CANDENSIS "BLACK LACE"
PHYSOCARPUS OPUFOLIUS "DARTS GOLD", "SUMMERWINE"
MYRICA PENNSYLVANICA

Photos:





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