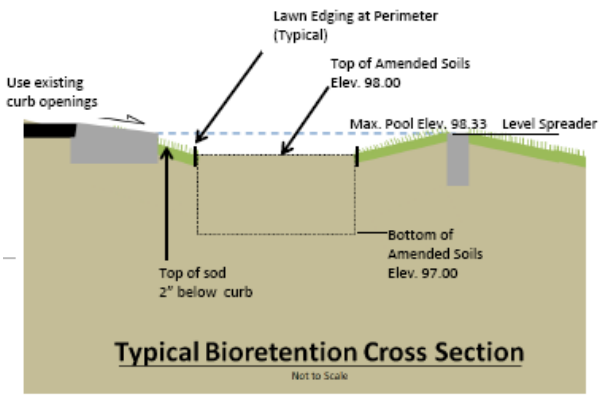
City of Farmington
Schmitz-Maki Ice Arena
Stormwater Retrofit

Project:

A 625 square foot bioretention cell provides water quality treatment for the runoff from approximately 0.50 acres of existing parking lot.



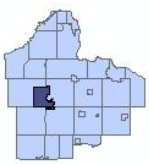
Funding:

Total project cost	$6,422
State Clean Water Fund	$4,056
Landowner	$2,366

Location:

Farmington

Minnesota



Practice:
Stormwater Retrofit (Bioretention)

Benefits:
Runoff volume reduction

Reduction in sediment and phosphorus

Partners:
Minnesota Board of Water and Soil Resources

City of Farmington

Vermillion River Watershed JPO

Watershed:
Vermillion River

Construction 2010

Clean Water Fund: Protecting and restoring Minnesota's waters for generations to come.

Dakota County Soil and Water Conservation District
4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 11/21/11

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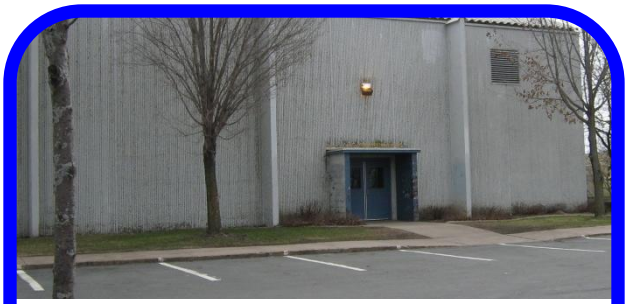

The project retrofits stormwater best management practices to an older public facility that was constructed without provisions to treat stormwater runoff.

The existing facility released untreated stormwater runoff carrying sediment, nutrients, metals and increased thermal loads into the Vermillion river, a designated trout stream.

Box elder trees, stumps and other undesirable woody debris was removed to create a location for a bioretention cell along the flow path between the parking lot and the riverbank.

Imported granular materials formed a perimeter berm. Coarse washed sand was mixed into the existing soils to create a planting bed. Turf sod stabilized the area to reduce erosion.

The vegetated inlet swale and bioretention cell help filter runoff to reduce pollutant loads. High flows bypass the main cell and are routed over a weir structure armored with rip rap.

Due to poorly drained soils, the cell's pool depth is limited to 4 inches or less. Perimeter sod , lawn edging, a layer of shredded wood mulch, and a native shrub planting complete the cell.

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Revised 6/1/2011