

application

location

products

# Residential Slope Stabilization

## Minneapolis, Minnesota

### Miragrid® 5XT

#### THE CHALLENGE

Minneapolis homeowners needed to stabilize a 1:1 slide prone slope and restore the native planting to the once unusable parcel of land in their backyard.

With the severe slope and erosion a grave concern, using the large wet-cast ReCon Block reinforced with Miragrid® 5XT was the solution.

The retaining wall needed to be built with appropriate material and scale for this historical site, with minimal site disruption.

#### THE DESIGN

The homeowner, a landscape architect, was instrumental in creating an initial landscape plan. The design called for a single tier 14.0 ft (4.2 m) tall ReCon Wall to be constructed.

The wall had to be constructed to

accommodate the following:

- A set of stairs going through the retaining wall.
- Existing retaining walls on neighboring properties.
- Property line issues within the layout of the wall.
- 1:1 Grade at the wall top.

MJR Engineering did the final structural design, with help from the homeowner on the layout of the wall.

#### CONSTRUCTION

Construction of the retaining wall was difficult, and required a strategic plan of action. The wall itself could only be built from the front side. Coordination of the construction process with the neighbors, city and the park board was necessary, given the tight space restrictions

and a constant flow of traffic on the narrow one-way street adjacent to the wall. To protect the existing sidewalk and diminish compaction in front of the new wall, the contractor placed plywood and a minimum of 12 in (30 cm) of soil from the site over the sidewalk. This allowed the backhoe to get very close to the front of the wall during construction.

Care in staking the face of the wall was required, to insure that the face of wall matched the existing curve of the sidewalk. Miragrid® 5XT grid was placed every 16 in (40 cm) throughout the wall.

JOB OWNER:

**The Mark D Perrin Trust**

ENGINEER:

**MJR Engineering**

ARCHITECT:

**Ron Beining Associates**

CONTRACTOR:

**Hardscape Construction**



Miragrid® 5XT was placed every 16 in (40 cm) throughout the wall.



The completed retaining wall eliminated the 1:1 slope 15 ft (4.6 m) from the face of the wall.

## PERFORMANCE

This Miragrid reinforced ReCon Block retaining wall will offer a structurally sound wall for many years to come. The existing 1:1 slope was eliminated from the face of the wall, back about 15 ft (4.6 m). Once a eye-sore in the neighborhood, the retaining wall is an aesthetic addition to the once unusable land.



For more information: [www.mirafi.com](http://www.mirafi.com)

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