

# IDOT Geoweb Wall Reinforced Slope Case Study



The Midwest's Most Trusted Site Solutions Provider

Project: Buchanan County  
Box Culvert Replacement  
Location: Old Hwy 20  
Buchanan County, Iowa  
Application/Solution: Vegetated  
Reinforced Slope  
Market Sector: Transportation

Salesperson: John Parenza  
Owner: Buchanan County  
Engineer: Buchanan County Engineer  
Contractor: Tschiggfrie Excavating Co.  
Installed: September 2013

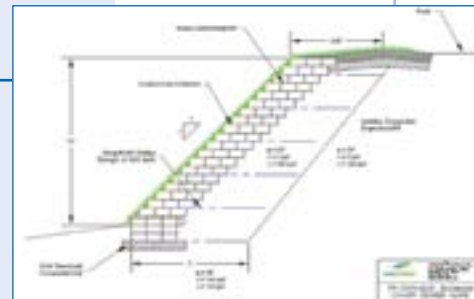
case study



case study

## Challenge

In the Summer of 2013, The Iowa DOT had a box culvert replacement project bidding in Buchanan County. A railroad right away would require fairly steep slopes on one side of the bridge. The DOT bid the project calling for a "Vegetated Reinforced Slope" system with a few design parameters, but for the most part left it up to the awarded contractor to submit a system for review and approval.



1 Drawing from Presto's project evaluation report.

## Solutions

Quick Supply Co met with the contractor to discuss the project and it was decided to proceed with using Presto's Geoweb Earth Retention System. The Geoweb system adapts to a wide range of design criteria and construction requirements. The flexible wall sections conform to differential settlement and allows natural conformance to landscape obstructions and contours.



2 Geogrid layers utilized for reinforcement. The wood stretcher frame is used to hold the Geoweb open as material is infilled.

## Results

An RFPE (request for project evaluation) was filled out and submitted to Presto for preliminary design evaluation. Presto's complimentary project evaluation service really helped the contractor visualize the application and allow them to effectively plan for the installation.

The contractor installed the system in September of 2013 and seeded a standard DOT rural seed mix in the front facing units of the cells. The contractor found the lightweight sections easy to handle, deploy and construct. The DOT was pleased to see how well the project came together.



# IDOT Geoweb Wall Reinforced Slope Case Study continued



## Products

Manufacturers included in solutions and product:

Product: Geoweb GW30V  
6", tan face  
Manufacturer: Presto Geosystems

Product: 3XT Geogrid  
Manufacturer: Mirafi



3 Front Cells filled with soil and seed mix. Hydromulching the front face was recommended to help hold the seed and soil in place.



4 Completed project after guardrail installed above reinforced slope. Late Fall 2013.



5 Vegetation coming through nicely.

## 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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