Plaisted trucks delivered 3,500 tons of iron-aggregate mix for this project at the Costco property in Woodbury, Minn.

Iron-Enhanced Sand

An Innovation in Stormwater Runoff Treatment

Now there's a more cost effective way to clean up the nation's stormwater runoff. It's centered on the reduction of phosphorus through the use of elemental iron mixed with sand.

Research at the University of Minnesota led to the discovery of this iron-sand filtration. It works through a chemical process in which phosphorus molecules in water bind to iron particles within the sand filter as water passes through. Testing revealed that sand mixed with 5% iron filings captures an average of 88% phosphate for at least 200 m of treated depth, significantly greater than a sand filter without iron filings.*

C-33 Washed Sand

The iron aggregate used in our iron-enhanced sand blend is produced by Connelly-GMS, Inc. This product, designed to meet standards developed using EnviroMetal Technologies, Inc. (ETI) patented technology, has been proven effective in laboratory testing and in over 100 full-scale systems.

Typical uses for iron-enhanced sands

- Areas with minimal groundwater intrusion or tailwater effects
- Use in a treatment sequence or as a standalone Best Management Practice (BMP)
- Can be used as a retrofit for existing areas

Key features of this new filtration process

- High pollutant removal rates; contaminants are eliminated as the water passes through the material
- Little maintenance needed after initial installation; natural flow of groundwater does all the work
- Good for nutrient impaired water
- Suitable for cold climates

For information on how to use iron-enhanced sand, visit the Minnesota Pollution Control Agency website (www.pca.state.mn.us). The site includes information on two key filtration applications:

- Iron-enhanced sand filter basin
- Iron-enhanced sand bench in wet ponds

* Erickson, A., Fulliver, J.,Weiss, P. (2012). Capturing phosphates with iron enhanced sand filtration.

Plaisted Companies INCORPORATED

Consistent engineered soils – Guaranteed.

It's all about precise measurement and blending. With our creation of the *Accublender*™ in 1995, customers' requests for a consistent quality soil was answered.

Our computerized, four-bin *Accublender* is used to create the iron-aggregate blend. Each ingredient is put into a separate bin then ingredients are precisely fed onto the *Accublender* belt, layering one on top of the other. As they fall through special screens and paddles, the ingredients are blended together creating a consistent product, load after load.

The *Accublender*™ *4* can blend up to four components. It precisely blends up to 2,500 tons of materials a day. *The Accublender*™ *2* is a portable two-bin blender capable of blending up to 2,500 tons of material a day on your site. Some of the most popular items we blend together are screened soils, peat, sand, compost, inorganic amendments, clay, silt, composted pine bark, fertilizer, and lightweight rooftop aggregate. Our soil experts can help you determine the best blends for your application.

Consistent quality, reliable delivery.

Our experienced drivers, fleet of 45 trucks, and our GPS locator help set the standard for the most responsive delivery system in the 5-state area.

Our Pledge

We deliver on our promise or we will make it right.

Ordering Information

763.441.1100

To obtain more technical information or for a price quote contact dispatch.

Plaisted Companies INCORPORATED

P.O. Box 332, 11555 205th Ave. NW
Elk River, MN 55330
www.plaistedcompanies.com
Tel 763.441.1100 • **Fax** 763.441.7782

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THE SOIL EXPERTS.