



Tensar[®] InterAx[®] facilitates pile driving and haul road in a wetland

CLIENT'S CHALLENGE

A land bridge requiring a pile driving platform and a haul road was being built through a wetland consisting of extremely high organic material. Geotechnical investigation revealed an N value equal to 2 or less across the site, and Dynamic Cone Penetrometer testing indicated a CBR of 0.8%. The crushed concrete aggregate only cost \$10/CY, but excavation and disposal of the material all the way in Bethlehem, Pennsylvania for \$50/CY would quickly drive up the cost of traditional construction. Additionally, whatever solution the engineer chose to stabilize the site would have to allow for pile driving through the constructed section.

TENSAR SOLUTION

A multilayer InterAx geogrid system was used to construct a temporary haul road. Lifts of 16 inches and then 6 inches were each placed over NX850 geogrid. In the pile driving area, a layer of InterAx FilterGrid was installed with 17 inches of gravel on top. This design replaced a section of almost double that thickness at 30 inches of excavation and gravel. The pipe piles were closed bottom and were installed through the filter grid geogrid. Most importantly, the pile driver rig was able to traverse the area safely.



132nd Street – Linden Place
Extension

📍 Queens, NY

The Borough of Queens
Owner

J.R. Cruz
Contractor

Installation: March 2024
Product: NX850

Value: \$21/SY saved due to high
cost of excavation and disposal

