

# SOFT SOIL COUNTERMEASURE OPTIONS



		Over-Excavation	Woven Fabric (Geotextile)	Chemical Treatment	BX Geogrid (BX 1200)	TriAx Geogrid (TX 160)
Method		Remove existing soil and replace it with select fill.	Installing a layer of geotextile and placing a material (usually an aggregate) on top of it.	Chemically modifying the existing soil by adding lime or a similar product.	Installing a layer of BX geogrid and placing an aggregate fill material on top of it.	Installing a layer of TriAx geogrid and placing an aggregate fill material on top of it.
Pros		Tried and true method using conventional materials.	Provides separation to prevent pumping of subgrade soil into aggregate.	Effective on moderate to high plasticity clay soils.	Provides separation with well-graded aggregate and stabilizes more effectively than geotextile	Highest performing geosynthetic. Separates and stabilizes soil with least amount of aggregate. Proven to maintain performance long-term.
Cons		Depth of unsuitable material is unknown. How low do you go?	Greater thickness of aggregate required compared to geogrid.	Installation possible only in dry weather above 40 degrees F. Lengthy curing period required (3-7 days.)	Lower performance than TriAx Geogrid.	The TriAx Geogrid line item may cost more. But, the total solution costs (grid and aggregate) will be lower than with other geosynthetics.
<div>How much aggregate is required for each method?</div> <div>Example subgrade has CBR (California Bearing Ratio) of 1.3%</div>		<div>24 in. AGGREGATE</div> <div>SUBGRADE CBR = 1.3%</div>	<div>18 in. AGGREGATE</div> <div>SUBGRADE CBR = 1.3%</div>	<div>12 in. LIME</div> <div>SUBGRADE CBR = 1.3%</div>	<div>12 in. AGGREGATE</div> <div>SUBGRADE CBR = 1.3%</div>	<div>8 in. AGGREGATE</div> <div>SUBGRADE CBR = 1.3%</div>
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## WHATEVER YOUR PROJECT, WE CAN HELP

Tensar International is a manufacturer of proven geosynthetic products and full provider of engineering services. Backed by extensive research and thoroughly tested, Tensar’s world-renowned geogrid products have set the industry standard. We help engineers, contractors and owners use geogrid to achieve more cost-effective, reliable solutions for soil stabilization, earth reinforcement, and other site development challenges.

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