

NCDOT Urban Loop Greensboro, NC Road Stabilization TerraTex HPG-57 Terragrid RX1200

With rising costs of rock, freight, and labor, finding solutions to save money is a top priority for owners and contractors. The northern section of the newly built 16.5mile NCDOT Urban Loop project was originally designed with traditional road stabilization methods. During construction, the contractor ran into softer soils than they expected, leading them to look for an alternate pavement design.

In partnership with NCDOT and the contractor, Hanes Geo proposed a two-layer geosynthetic solution to create both a separation and stabilization layer, eliminating the need for additional rock without compromising the integrity of the road. Hanes Geo's TerraTex HPG-57 geotextile created a separation layer between the soft soils and rock to prevent loss of aggregate as well as high tensile strength reinforcement to aid in compaction. The TerraGrid RX1200 layer helped confine the base stone to further increase pavement strength while keeping the project under budget.

This road section required roughly 250,000 SY of TerraTex HPG-57 and 150,000 SY of TerraGrid RX1200 before paving. The combined geosynthetic solution eliminated additional excavation, freight, and rock costs incurred due to the job site challenge and reduced the project timeline by roughly four months.





