Overcoming Geotechnical Challenges with Innovation and InterAx® geogrid

Simcoe County Road 21

Innisfil, Ontario

Tensar®
A Division of CMC

CHALLENGE

Simcoe County launched a critical infrastructure upgrade to widen the main road serving as Innisfil's primary gateway. The goal: handle rising traffic volumes and strengthen regional connectivity. But the project hit an unexpected obstacle; unstable ground conditions.

The adjacent land was swampy, underlain by thick peat deposits, a highly organic, compressible, soil with California Bearing Ratio (CBR) values as low as 0.4%. Such poor load-bearing capacity made traditional construction methods impractical. Removing the peat wasn't an option due to environmental restrictions and prohibitive costs.

TENSAR SOLUTION

Tensar mobilized quickly, conducting on-site DCP testing with the contractor. Based on the results, Tensar recommended a design that eliminated costly undercutting. By integrating NX850 into the road design, the team achieved:

- Subgrade stabilization without peat removal
- Reduced differential settlement, lowering long-term maintenance
- Improved load distribution, boosting performance and lifespan

Tensar geogrid delivered a cost-effective, technically sound solution that allowed construction to proceed over challenging peat deposits. The road now meets structural and safety standards, ensuring reliable access for years to come.

PROJECT DETAILS

Owner
Simcoe County

Installation
Summer 2025 & Ongoing

Products
InterAx NX850
InterAx FilterGrid NX850FG

Low CBR values made conventional construction methods impractical.

Tensar geogrid technology allowed construction to proceed over challenging peat deposits.

Let us help you with your next challenge: TensarCorp.com | 800-TENSAR-1