

# Overcoming Geotechnical Challenges with Innovation and InterAx® geogrid



## Simcoe County Road 21

Innisfil, Ontario

### 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.

## Tensar®

A Division of CMC

### 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.*

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