



# Terraprobe

Consulting Geotechnical & Environmental Engineering  
Construction Materials Inspection & Testing

## HISTORY OF FIRM

Incorporated in 1977 in Brampton near Toronto, Terraprobe has branch offices in Barrie, Sudbury, and Stoney Creek to serve central and northern Ontario. The firm is entirely owned by senior employees. Professional staff totals about 160 including 40 professional engineers, geologists, hydrogeologists, and environmental engineers.

## SENIOR STAFF

Michael Tanos, B.A.Sc., P.Eng., President, Principal

Paul W. Bowen, B.A.Sc., M.A.Sc., P.Eng., P.Geo., QP<sub>RA</sub>, VP, Principal

Tim Orpwood, B.A.Sc., M.A.Sc., P.Geo., P.Eng., Principal

Brian H. Jackson, B.A., Principal, Barrie Mgr.

Denis Paquette, B.A.Sc., P.Eng., Principal, Sudbury Mgr.

Garry Muckle, B.E.Sc., M.E.Sc., P.Eng., Associate, Hamilton Mgr.

Patrick Cannon, B.A.Sc., P.Eng., Associate

Christopher Elvidge, B.Sc., M.Sc., P.Eng., Associate

Jason Crowder, B.Sc., Ph.D., P.Eng., Associate

Serena Oyama, B.E.S., C.E.T., Associate

Joseph F. Gushue, C.E.T., C.W.B. Level III, Associate

Mikko Nyyssonen, M.Eng., P.Eng., Sr. Geotechnical Engineer

## PRINCIPAL FIELDS OF SPECIALIZATION

Terraprobe offers a comprehensive range of consulting engineering services in the fields of:

- **geotechnical engineering**
- **hydrogeology, environmental engineering**
- **engineering geology**
- **materials and construction inspection and testing**
- **shoring design**

## DESCRIPTION OF SERVICES

### Inspection and Testing

- compaction control
- foundations & bearing capacity; footings, caissons, piles
- excavation stability
- soil properties: gradation, permeability, conductivity
- ready-mix concrete testing
- investigation of concrete cracking
- mortar, concrete blocks, adsorption, freeze-thaw
- asphaltic: bitumen content, gradation, Marshall bulk density, stability and air flow, air voids
- evaluation of asphaltic and concrete pavements
- shop and site inspection of structural steel and welding
- inspection of reinforcing steel
- roof evaluation and roofing inspection

### Hydrogeology

- supervision of well drilling, pump tests
- ground water sampling and testing
- design of ground water control
- ground water level monitoring
- ground water and soil contamination studies
- soil percolation testing
- septic tile bed design

### Geotechnical Engineering

- subsurface investigations
- foundation designs
- slope stability analysis
- erosion studies
- pavement evaluation and design
- retaining wall design
- settlement evaluation
- instrumentation and monitoring of ground movements, shoring walls
- investigation of potential aggregate sites
- pile load tests, plate load tests
- assessment of construction claims or litigation

### Environmental Engineering

- assessment of fill qualities for lake filling
- environmental audits for sites
- investigation of spills, buried tanks
- soil gas (methane) surveys
- evaluation of landfills, lagoons
- landfill site selection
- design of storm sewer water infiltration works
- assessment of ground water related impacts on aquifers

## Terraprobe Inc.

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### Central Ontario

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### Northern Ontario

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