



THEODORE A. (TONY) JANISH, PE

**Principal
Senior Geotechnical Engineer**



PRINCIPAL PRACTICE

Geotechnical Engineering, Construction Materials Testing

EDUCATION

Michigan Technological University, MSCE, 1983, BSCE, 1981

PROFESSIONAL EXPERIENCE

ALPHA TESTING, 2006 – Present
Rone Engineering Services, Ltd., 1999 – 2006
Terracon Consultants, Inc., 1995 – 1999
Soil and Materials Engineers, 1983 – 1995

TxDOT Pre-certifications:

PE ESN: 0008331

14.1.1; 14.2.1; 14.3.1; 14.4.1.

12.1.1; 12.1.2; 12.2.1

PROFESSIONAL REGISTRATIONS

Professional Engineer: Texas No. 82418, Michigan #33170

PROJECT EXPERIENCE – Selected Municipal

City of Irving: Performed geotechnical investigations for all City departments including Parks and Recreation, Public Works, Transportation and Water over a 4 year period.

City of Dallas: Staff and direct experience performing geotechnical investigations for parks, alleys, and roads under the City of Dallas Bi-annual contract.

Irving, TX / TxDOT : Geotechnical investigation of feeder extension to 635 in vicinity of North Texas Tollway Authority (NTTA) President George Bush Turnpike. Work coincided with NTTA work on PGBT Segment 4 and TxDOT work on 635.

Dallas County :Jail And Forensic Center: Geotechnical investigations for both projects. Jail project requires deep drilling (200') and extensive coring in a potential Haz Mat environment. Forensic center requires drilling to coordinate with demolition activity.

George Allen Courts; Devised/performed geotechnical study for addition to 8-story existing courts building for Dallas County. Study involved basements and underground parking garage that impacted drilling. Site offered minimal clearance laterally. Construction under way at this time.

Bedford, TX Pavement Evaluation: Perform evaluation of 100% (455 lane miles) of road system for Bedford, Texas, using Falling Weight DeFlectometer (FWD), ground penetrating radar (GPR) and shallow pavement coring. Subcontracted to HNTB Corporation. Data used in creating long-range management plan to evaluate existing pavement performance as well as to assist in planning replacement/repair activities.

City of Plano: Perform geotechnical study for lane widening, turn lanes and route adjustment at existing Plano intersection. Performed with TranSystems Corporation, under contract with City of Plano. Also a project manager under Alpha Testing's current contract to the City of Plano (2009).

NTTA, Lake Lewisville Bridge.

As contract drilling firm for the project, re-mounted a rig from a truck chassis to a spud barge for over-water drilling (barge drilling in 2005) for the 50-boring project on Lake Lewisville. Land borings were included for both approaches.



PROJECT EXPERIENCE – Selected Engineering Specialties

Directed conventional and specialty geotechnical laboratory testing for bridge and retaining wall analyses and design.

- Evaluation of rock cores (detailed logging of cores, Rock Quality Designation, rock compression strength testing),
- Triaxial compression of soils (effective and total stress) for stability analyses,
- Consolidation testing and elastic modulus evaluation for settlement analyses.
- Performed in-depth settlement analyses for Lake Carolyn levee in Irving, Texas for the Dallas County Utility and Reclamation District. This included evaluation of anticipated settlement and time-rate of settlement over next 30 years.
- Monitored settlement of fill embankments for bridge approaches and other deep fills.
- Design and evaluation of surcharge loading and/or vertical wick drains to accelerate the time-rate of settlement.
- Monitor lateral movements in tied-back and soil-nailed retention systems, retaining walls
- Provided foundation design criteria and geotechnical recommendations for bridges and other general structures, retaining walls, embankments, CCTV and DMS towers, and temporary earth retention systems.
- Conventional and specialty subgrade preparation and evaluation – lime treatment, cement treatment, dynamic compaction, field bearing tests of pavement subgrade, injection, wick drains.
- Knowledgeable in the use of WinCore and other software for presentation of soil boring data for incorporation into PS&E packages. Also, analysis/design of deep foundations for bridges and other structures using WinCore.

PROJECT EXPERIENCE – Selected Transportation

TxDOT – Districts and Bridge Division

Mr. Janish currently serves as Project Manager for ALPHA's TxDOT Bridge Division as well as ALPHA's TxDOT Dallas District Geotechnical contract. Janish also served as TxDOT Program Manager for projects in the Paris, Wichita Falls, and Lufkin districts at other firms providing drilling and pavement design recommendations. Janish has completed multiple geotechnical projects and performed field tests during construction as needed for roads and buildings. Janish has assisted with Value Engineering and resolution of field constructability decisions.

Rail – Various Projects

UPRR Davidson Yard Realignment & Bridge Evaluation, Fort Worth, TX, Project Manager

Drilling in rail yard addressed design needs for multiple new bridges across the Trinity River and existing roads. All 1500 feet of retaining wall sections required borings completed to TxDOT specifications. Multiple track borings, and roadway pavement sections required. Coordinated drilling operations with railroad operations in busy railroad yard.

Siding Track and New Bridge – Saginaw, Texas

Directed the geotechnical investigation and laboratory work and prepared the engineering reports for new siding, track, bridge and retaining wall structures. Recommendations included track subgrade preparation, sub-ballast design, and pile foundations and lateral load analysis on pier foundations for retaining wall.

Slope Stability Evaluation – Marshall, TX

Provided engineering evaluation and recommendations for stabilizing an earth slope failure and subsequent earth encroachment on a mainline track. Visited the site while the failure was in progress and provided recommendations for near-term slope stability to allow the railroad to remain functional.

Railroad Bridges – Lockhart, Texas

Directed geotechnical engineering and laboratory investigation and provided recommendations for a new multi-span railroad bridge.
