

Statement of Qualifications

SURVEYING

CIVIL ENGINEERING

GEOTECHNICAL ENGINEERING

ENVIRONMENTAL ENGINEERING

CONSTRUCTION QUALITY CONTROL

MATERIALS TESTING SERVICES



2009

ASSOCIATED ENGINEERING & TECHNOLOGY, INC.

5403 Patton Drive, Unit 212

Lisle, IL 60532

(630) 420-8300

www.aetchicago.com



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Engineering & Technology, Inc.**
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BUSINESS PROFILE

Statement of Qualifications

AE&T is a consulting civil and structural engineering firm based in Lisle, IL. It is licensed by the Illinois Department of Professional Regulations (IDPR License Number 184 003234). We provide civil, geotechnical, structural, environmental and testing services for telecom towers, buildings, airports, public infrastructure and transportation projects. We are pre-qualified by the Illinois Department of Transportation for both Typical and Complex Geotechnical Engineering Services and certified as a Minority (MBE)/Disadvantaged Business Enterprise (DBE) firm.

Applied Soil Mechanics, Inc. of Naperville, IL, established in 1971 by Max Calhoun, P.E., S.E., merged its services with AE&T in 2002 and together we have completed over 6200 engineering, geotechnical and construction related projects. Our group provides professional services in surveying and civil design jointly with Geopool Surveyors, Inc. of Lemont, IL and Associated Engineering, P.C., having completed hundreds of telecom tower sites in the past 10 years.

We provide services in:

- **Surveying**
- **Civil & Structural Design**
- **Geotechnical Engineering**
- **Environmental Engineering**
- **Construction Monitoring**
- **Testing & Inspection**

Max L. Calhoun, P.E., S.E. – Chief Engineer

Ashok Medhi, M.S. - President

**5403 Patton Drive, Unit 212 . Lisle, IL 60532
Phone: (630) 420-8300, Fax: (630) 724-1420**



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Surveying & Civil Design

We use the latest in GPS equipment to provide you, a solid co-ordinate base. With the utilization of real-time GPS equipment, we provide wide-area surveys with precise accuracy. This type of equipment allows us to provide detailed information in a fraction of the time of conventional survey methods.

Telecom Sites

- **Site Survey**
- **Roof-top Survey**
- **Co-locate Survey**
- **2-C/1-A Letters**
- **Photo Sims**
- **Site Design**
- **Construction Drawings**
- **As-Builts**
- **Tower Mapping**

Land Surveying

- **Plat of Survey**
- **Topographical survey**
- **ALTA/ASCM Land Title Survey**
- **Condominium Survey**
- **Construction Lay-out**
- **As Built Survey**
- **FEMA Elevation Certificate**
- **FEMA letter of Map Revision & Amendments**

Boundary information complies with State, County and City rules



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Geotechnical Engineering

- IDOT Pre-qualified
- Total Quality Management
- ASTM – ACI - AASHTO – AMRL

Our geotechnical services comprise:

- SOIL BORING
- FIELD AND LABORATORY TESTING (AASHTO & ASTM)
- *(Soil, Concrete, Asphalt & Bituminous Materials)*
- GEOPHYSICAL INVESTIGATION
- *(Down & Cross-hole Shear & Compression Wave Survey)*
- ELECTRICAL RESISTIVITY TEST
- SHALLOW & MAT FOUNDATIONS
- CAISSON & PILE FOUNDATIONS
- ROAD / PAVEMENT / PARKING
- RETAINING WALL
- SLOPE STABILITY
- LANDFILL DESIGN
- GROUNDWATER STUDIES
- CONSTRUCTION DEWATERING
- FORENSIC STUDY
- FAILURE INVESTIGATION
- GEOTECHNICAL REPORT

Our engineers are members of the ASTM, ACI, ASCE and other professional organizations and licensed in Illinois, Indiana, Wisconsin and several other states. Our technicians are well trained and certified in their respective disciplines including 40 Hours OSHA Safety trained for hazardous waste sites and Troxler certified operators for Nuclear Density Gauge.



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Environmental Studies

Associated Engineering & Technology Inc. provides professional solutions toward our society's goals for clean air, water, and soil in today's complex industrial environment. We have successfully completed numerous environmental site assessments for the telecommunication tower sites in Illinois, Indiana, Wisconsin, Minneapolis, North Dakota, Kansas, Missouri, Ohio, Pennsylvania and other mid-western states. Our engineers are fully aware of the latest federal, state and local regulatory compliance requirements and ASTM procedures. We pride ourselves on providing quick-response ASTM environmental site assessments that help clients meet their closing dates.

- ENVIRONMENTAL SITE ASSESSMENT
- NEPA/FCC SCREENING
- EXPLORATION DRILLING / PHASE II ESA
- CONTAMINATION EVALUATION AND DELINEATION
- LANDFILL DESIGN & CONSTRUCTION MONITORING
- MONITORING WELL INSTALLATION
- RECOVERY WELL INSTALLATION
- DRAINAGE AND FLOOD CONTROL
- FEMA FLOOD/HYDRAULIC STUDY
- AIR QUALITY MONITORING & TESTING



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Materials Testing Services

Associated Engineering & Technology, Inc. provides complete construction monitoring, testing and inspection services to assure that construction and materials being used meet the specifications and rigorous performance standards required by your project. These services may be conducted at the construction site, in the laboratory or in the fabricating plant. Our professional engineers and trained technicians solve materials problems related to all phases of construction in a variety of geologic, climatic and environmental conditions.

- **EARTHWORK MONITORING**
 - **SUBGRADE EVALUATION – WALL AND COLUMN FOOTINGS, FLOOR SLABS, BASEMENTS, ROADS, PAVEMENTS AND CURBS, BEARING CAPACITY & FOUNDATION INSPECTION, SETTLEMENT MEASUREMENT, COMPACTION DENSITY TESTING AND MONITORING**
 - **CAISSON INSPECTION, PILE AND PLATE LOAD TESTS**
 - **RETAINING WALLS – EARTH RETAINING AND FREE-STANDING CONCRETE WALLS**
 - **CAST-IN-PLACE CONCRETE – AGGREGATES, AIR CONTENT, SLUMP, TEMPERATURE, SETTING TIME, COMPRESSIVE, FLEXURAL AND TENSILE STRENGTH, FORMWORK, BATCH PLANT AND REINFORCING STEEL INSPECTION, FAILURE INVESTIGATION, CORING, FIELD CONTROL AND NON-DESTRUCTIVE TESTING**
 - **BRICK & BLOCK – MOISTURE, ABSORPTION, FREEZE-THAW, SHRINKAGE, STRENGTH, EFFLORESCENCE**
 - **ASPHALT AND BITUMINOUS PAVEMENT SUB-GRADE INSPECTION AND DENSITY TEST**
 - **STRUCTURAL STEEL FRAME INSPECTION (WELDING AND BOLT CONNECTIONS)**
 - **CONCRETE MASONRY INSPECTION – GROUT AND MORTAR**
 - **ROOFING INSPECTION – MOISTURE, APPLICATION, MATERIALS TESTING**
 - **MECHANICAL/HVAC SYSTEM INSPECTION**
 - **FIRE PROOFING INSPECTION**



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SELECTED PROJECT LIST

Architectural & Engineering (A&E) Services

**SPRINT & T-MOBILE Wireless Telecommunication Sites
(IL, IN, WI, OH, PA, NE, IA, MN, KS, MO). (1998 to 2003)**

AE&T provided construction monitoring, inspection and testing services for over 250 monopole, lattice and guyed tower sites. Monitored installation of caisson foundations, mat footing & equipment platform, performed soils and concrete testing for Sprint PCS and T-Mobile, Chicago Market. Provided full service A&E, Geotechnical, Environmental, Structural, Surveying, Tower Analysis, Rooftop and Foundation Design for Monopole, Guyed, and Self Supporting towers for specific loading per TIA/EIA-222-F, and recommended modifications if required.

Materials Testing Services

SCHOOL BUILDINGS & GROUNDS

New 100 acres site development and Kaneland Middle School (present)

Waubonsee Community College, Aurora Multi-Story Building - present

Waubonsee Community College, New Plano Campus, IL. 2009 – present

New Kaneland Middle School, Sugar Grove, IL 2008-present

New Minooka Elementary, 5th & 5th Grade and Elementary Schools - present

Waubonsee Community College Auditorium & North Campus, Sugar Grove, IL (07-09)

Addison School District – Fullerton, Ardmore, Army Trail Elementary, Indian Trail

New Manhattan Elementary School, Manhattan, IL April 2005 – 06

Pleasantdale Elementary School, La Grange, IL August 2005

New Lake Central School, St. John, IN. (Geotechnical April 2005)

Libertyville High School Building & Gymnasium Additions. (Geotechnical Feb. 2005)

Vernon Hills High School Addition, (Geotechnical – March 2005)

Libertyville High School, Libertyville, IL (Geotechnical - Jan. 2005)

Manhattan Elementary School, (Geotechnical/Construction Testing)'03-05

Munster High School Additions & Renovations.1996-99

Wilbur Wright Middle School Additions & Renovation.1996-99

Frank Hammond Elementary School Addition.1996-99

Eads Elementary School.1998-99

Elliot Elementary School. 2003



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New Jefferson High School, 2003 - 05
Clark High School Addition
Morton High School Addition
Hammond Senior High School Addition
Hammond Gavitt High School Addition
Morton Elementary School Addition
Edison Elementary School Addition
Maywood Elementary School Addition
Hammond Gavitt High School Addition
Morton Elementary School Addition
Edison Elementary School Addition
Maywood Elementary School Addition

AIRPORT, COMMERCIAL & INDUSTRIAL BUILDINGS

Midway Airport Terminal Development, Chicago, IL (2000- 02)

AE&T provided construction quality control and inspection for HVAC system installation of the **950,000 square foot new terminal building and concourse** as a sub to Rust-Kenny Joint Venture.

Retail Center for System 27 Corporation, Naperville, IL, August 2005

AE&T performed construction monitoring and material testing services for a two-story 40,000 square foot retail center comprising two steel frame and masonry buildings.

Construction & General Labourer's District Council of Chicago, Burr Ridge, IL 2003-2004

AE&T was retained to provide construction monitoring, soils and materials testing services for the 45,360 square feet of a three-story office building with a 157 car parking lot in Burr Corporate Park. Work commenced in late September 2003 and was completed in April 2004. The project entailed building-out two 15,120 square foot floors of the structure for office usage and the remaining 15,120 square foot floor for lease.

Network Technology Center Building, Cingular, Schaumburg, IL.

AE&T provided construction monitoring/testing for 25,000 SF building. 2004

Brinks Incorporated Corporate Office, Chicago, Illinois. 2003

AE&T provided soils and material testing services for a new facility for Brinks Incorporated located at the California Business Center at 919 S. California Avenue in Chicago, Illinois. The 76,984 square foot facility is situated on a 6.9-acre site. The ground was dynamically compacted and the pre-cast concrete structure comprised slab on grade construction.



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FORD: Chicago Manufacturing Campus Infrastructure Ford Supplier Park. 2003

AE&T was retained by its client to provide construction quality control and materials testing services comprising soils, concrete, steel welding, roof inspection for infrastructure improvements and construction of five industrial buildings and parking areas at the 155-acre brownfield site located one-half mile from Ford's Chicago assembly plant near the intersection of 126th Street and Torrance on the city's South side. Once complete this 155-acre, 1.7 million square foot park will be home to Ford Motor Company's many automotive suppliers. The pre-cast building floor areas ranged from 215,000 SF to 461,000 SF with 30 feet clear height and also comprised parking areas, truck docks with trailer stalls, cranes and gantry cranes.

Medical Center Building, Elgin, IL.1998

Construction Manager/General Contractor for a 20,000 SF two-story commercial medical office building construction and developed the 4 acre commercial site.

Medical Office Building, Crystal Lake, IL. 1988

Construction Manager/GC for the construction of a 8000 SF medical office building.

RESIDENTIAL LAND DEVELOPMENTS

AE&T provided EARTHWORK monitoring and TESTING services for the following residential subdivisions in Naperville/Aurora/Plainfield/Wheaton/Oak Brook, IL:

- 225 acre Foxborough Estates, Phase III, Mokena, IL (06-08)
- 160 acre Crystal Brook subdivision, Frankfort, IL (06-07)
- 150 acre Ashwood Park North, Naperville, IL (07)
- 50 acre English Rows Townhome Development, Naperville, IL (07-08)
- 500 acre Henneberry Woods Subdivision, Oswego, IL (07)

St. Kitts Island, West Indies (2004) AE&T provided Soil Investigation & Hydraulic study for the 600 Acres La Valle Greens Residential Development, Golf Resort, Club House, Marina & De-Salination Plant in the exclusive Caribbean Sea volcanic island resort. (\$25 million project).

Sand Creek Development, Chesterton, IN. (\$500 million)

AE&T provided QA/QC, soils, materials testing and construction monitoring for phase IV and V of the 600 acres championship golf course residential land development project. **AE&T** also developed an in-house **GIS** software package which included custom queries/report, polygon overlays, data preparation, digitization and conversion for topographic maps, street and utility layout including house-lot plan using ESRI Arc Info and Arc View packages.



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Lake Erie Land Company, Chesterton, IN.

AE&T provided Construction Inspection, Soils & Materials testing services for the 600 acres Coffee Creek Center infrastructure and commercial development including new Hilton Garden Inn, Medical Center building, parks, roads, Structural Design pedestrian bridges and driveways.

OTHER LAND DEVELOPMENTS

Tall Grass, White Eagle, Hobson's Pond, Prairie Crossing, Royce Woods, Ashbury, Creekside, Harmony Grove, Stillwater, High Meadows, Champion Creek, Clearwater, Saddle Creek, Forest Gate, River Run, Blazing Trails, Black Walnut Trails, Stone Haven, Park Place, Nadelhoffer Woods, Gilmore Farm, Fairfield Village, Princeton Estates, Forest Ridge, Wind Ridge, Spring Meadow, Sanctuary, Kinloch, Dayfield, Chelsea, Deerpath, Swanbrook, Heron Creek, Wooded Creek, Seasons Ridge, Orchard Valley, Nature's Edge, Chicory Place, Indian Trail Estates, Rose Hill, 20th Century Homes (First Country Homes) .

ROADS & STREETS

- ***Harter Road Lane Addition, Sugar Grove, IL - present***
- Harlem Avenue Access Lane Addition, Frankfort, IL - 2008
- New Construction of 248th Avenue between 103rd & 119th Street, Naperville, IL
- Lake Street Reconstruction and Resurfacing, City of Chicago, IDOT project.
- Route 59 Concrete Surfacing near 103rd Street across the English Rows subdivision.
- Utility Trench for storm water and sewer backfill construction monitoring and testing at 225 acres Foxborough Development, Mokena, IL.
- Geotechnical Study for proposed 4 span road bridge at Gateway Boulevard, Coffee Creek Center, Chesterton, IN.
- Several parking lots and pavements in residential subdivisions and schools.
- Geotechnical Investigation for Spencer Road Lane Addition, New Lenox, IL. 2007