



February 21, 2022

Curriculum Vitae for Glen K. Leckie, P.E., P.Eng.

Senior Engineer, Structural Engineering
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EMPLOYMENT HISTORY

2012 – Present **Professional Analysis and Consulting, Inc., Lisle, IL**
Senior Engineer
1999 – 2012 **Packer Engineering, Inc., Ann Arbor, MI**
Senior Director

A senior engineer employed with both companies, responsible for investigating collapses, failures, disputes involving residential, commercial and industrial buildings, industrial operations, foundations, roof/wall systems, civil roadway, sewer/drainage, and piping. He has provided testimony on behalf of individuals, corporations, and insurers, including deposition and trial.

Glen Leckie was responsible for over 1,500 investigations involving disciplines listed above and types of investigations highlighted within SPECIFIC INVESTIGATION/RESTORATION EXPERIENCE.

1990 – 1998 **Kurdziel Industries, Inc., Muskegon, MI**
Vice President of Operations
New Haven Foundry, New Haven, MI
General Manger

First employed by Kurdziel Industries Inc. (KII produced gray iron castings for the lift/construction industry), and then by New Haven Foundry Inc., (NHF produced automotive engine head castings for Chrysler and GM). Both had individual annual sales of 60-70 million dollars. Managed all departments, including production, engineering, product development, safety, and human resource. In addition, while with Kurdziel Industries, Inc. managed facility design/construction of a cleaning and paint facility in Ohio and while with New Haven Foundry, Inc. in addition to the management of the Foundry directed the ISO 9002 and QS9000 certification of the foundry facility.

1965 – 1990 **Whittaker Leckie, Alberta Ltd., Edmonton, Alberta**
Shelter Engineering Company Limited, Edmonton, Alberta
President and Managing Partner

A senior managing engineer of a multi-discipline prime consultant engineering and architectural firm that served clients in the residential, commercial, institutional, petrochemical, building, and process industries. Responsible for the design and fast track of engineering/architectural projects, investigations, and the planning/design/project management undertaking in Canada,



USA, and the Far East. Over this period, was responsible for over 2,000 projects ranging from small consultations to projects of more than \$10,000,000. Of these projects approximately 250 were investigations.

1961 – 1965 **Stacey & Skinner and Albert C. Martin Associates, Los Angeles, CA**
Assistant Project Structural Engineer

Structural engineer for many buildings and civil engineering projects including the Union Bank Building (43 stories), Music Center & Parkade, Los Angeles, CA and Camp Stuart Mesa, Camp Pendleton, Oceanside, CA.

ACADEMIC

Bachelor of Science, Civil Engineering, University of Alberta, Edmonton, Alberta

Master of Science, Civil Engineering (Structural), Stanford University, Palo Alto, California

Over a period of 35 years attended numerous seminars, involving building science, project management, and personal development to locations throughout the United States and Canada, both technical centers and universities.

PROFESSIONAL REGISTRATION AND CERTIFICATION

Professional Engineer, State of Michigan, License Number – 6201059817.

Professional Engineer, State of Texas, Member Number – 101146.

Professional Engineer, Association of Professional Engineers and Geoscientists of Alberta (APEGA), Life Member Number M15298.

Holder of National Council of Examiners for Engineering and Surveying (NCEES) Council Record Number 51143.

Restricted Practitioner in Architecture, Alberta Association of Architects, 1984-1990.

GENERAL ENGINEERING EXPERIENCE

Structural/Civil Design & Investigations

- Structural – Structural design of numerous commercial, residential single and multi-floor buildings and parkades, institutional (hospitals, schools, university, civic), and bridge and ancillary structures. Commercial – Prime Consultant in engineering and architectural for commercial retail, warehouse, restaurant, hotel/motel, banks, residential developments, office buildings, and parkades.
- Industrial – Site planned, designed and project managed industrial projects for the petro-chemical, metals, and mining industries, including Imperial Oil Limited (a division of Exxon), British Petroleum, and Solar Turbines (a division of IH). Projects located in northern and eastern Canada, United States, and the Far East.



- Forensic Science Investigations – Investigated building and equipment failures to industrial, research, hospital, school, commercial, and residential buildings.
- Industrial Plan Operations – Investigated operation and safety of equipment/process procedures and policies.
- Civil engineering municipal structures, waste/storm water storage failures.
- Laboratory Design – Involved the design of industrial laboratories.

SPECIFIC INVESTIGATION/RESTORATION EXPERIENCE

Structural /Civil

- Foundation Settlement – Settlement – Settlement of piling and footings due to inferior design/construction, changing soil condition, or freezing action. Building Types: apartment, hospital, office, and school/college.
- Basement Wall and Slab Cracking – Swelling and shrinkage of clay soils, old building analysis, retaining wall failure.
- Building perimeter and landscape/pavement drainage failures and restoration.
- Slab on Grade Settlement or Heave – Due to failure or settlement of sub-grade as a result of poor design/construction, frost heave or buildup. Building Types: apartment, retail, warehouse space, ice arena.
- Slab and Beam Failure, Adverse Deflection – Due to poor design or construction.
- Concrete Shrinkage Cracking – Due to poor design, materials, and placement of control joints.
- Pre-stress and Post Tensioned Slabs and Beams – Involving failure or adverse deflection due to poor design or rusting of tendons.
- Roof Structure Failure or Adverse Deflection – Roof truss failure, wood and steel, wind, contraction shoring, welding and other similar type failures.
- Wall Cladding (including glazing) Attachment Failure – Poor design resulting in insufficient support or connection and possible rain/water penetration.
- Severe Wind and Tornado Damage – Causing loss of walls, cladding, roof, and or collapse of structure.
- Blast and concussion damage due to mining, unplanned explosions above and below grade, and nearby construction activity.
- Bridge and ancillary structure damage, deterioration due to impact, design and or long term deterioration.
- Roadway Pavement Failure – Subgrade and or asphalt failure due to poor design, construction, and maintenance.
- Sewer System Design, Construction Flooding, and Failure including pipe and manhole failure due to poor design or construction.
- Omissions or Errors to Design Drawings – Resulting in structural/civil failure and or disputes.



Architectural

- Institutional Building Restoration – Restoration and renovation of old buildings, residential, institutional, school, and university.
- Wall Cladding (including glazing) attachment and or Membrane Failure – Failure of wall and cladding design due to aging, inferior design or construction, fire, or severe wind damage resulting rain/water penetration.
- Roofing Design Failure – Due to failure of roofing material, jointing, curbing, or poor maintenance, causing water penetration and interior damage.
- Drywall and Concrete Block (CMU) Shrinkage – Investigation of drywall and concrete block shrinkage due to poor design (lack of control joints), sealer.
- Redevelopment of Warehouse Buildings – Involving inventory and assessment of structure for new use and occupancy.

Mechanical

- Equipment and Piping Failure – Due to inadequate design, controls, equipment selection, or maintenance.
- Industrial Equipment Vibration – Involving foundations and supporting structure or equipment.
- Manufacturing equipment processing – Involving industrial process engineering and departure from a prescribed or safe manufacturing process.
- Dangerous and or Hazardous Products and Processes – Involves the original design of processes and buildings or handle new products or material of manufacture. Closed loop environmentally safe processes.
- Equipment design and investigation, industrial lifting devices, bridge cranes, boom and telescopic mobile cranes, lift slab field manufacture, and lift technology.

Special Projects and Conditions

- Dangerous Buildings – Resulting from inferior design or construction. Hong Kong experience in detecting low strength concrete throughout that region of the industry. Extensive investigation in Hong Kong of numerous buildings over a two-year period.
- Foundation Repairs – Jacking and replacement with footing or jack piles.
- Construction Shoring/Bracing Failure – Concrete forming failure and construction shoring failure, construction bracing to concrete block wall (CMU) and roof trusses.
- Truss Failure During Erection – Due to lack of bracing and or attention to lifting and truss limberness or wind.
- Epoxy Repair – To delamination glulam wood beams and shrinkage/shear cracking to concrete beams.
- Buckling of Angles or channel Sections – To special structures, cranes, and lifting devices.
- Church and Synagogue – Restorations because of aging, fire, or severe wind damage.



PROFESSIONAL AND COMMUNITY SERVICE

Member, Structural Engineers Association of Michigan, SEAMI.

Board Member, Foundry Association of Michigan, 1991-1998.

Member, Acts and Bylaws Committee, APEGA, 1985 through 1989.

Member, Rotary International, Downtown Club, Edmonton, Alberta, 1969 through 1990.