

## Alexander Suttie P.Eng.

Forensic Engineer | Structural & Civil Engineering

100-177 Colonnade Road, Ottawa, Ontario

343-597-4342

[Alexander.Suttie@efiglobal.com](mailto:Alexander.Suttie@efiglobal.com)

### Professional Summary:



Alexander Suttie, P.Eng., joined the Forensic Engineering team at EFI Global Canada in October 2022, as a Forensic Engineer. Prior to joining EFI Global, Mr. Suttie worked as a Forensic Engineer working on a wide variety of projects involving residential, commercial, and industrial buildings and structures. Previously, Mr. Suttie worked in the consulting engineering field, providing building science and structural engineering services on multiple restoration and rehabilitation projects.

Mr. Suttie's past work experience includes forensic investigations related to insurance claims or litigation, remedial repair design, cost estimating, preparation of technical specifications and construction drawings, materials testing, construction review and construction contract administration. Mr. Suttie's consulting engineering experience designing and overseeing the repair of a variety of structures, along with his experience in forensic engineering, provide him with a strong understanding of structures and the building envelope, and their various failure modes.

As a Forensic Engineer, Mr. Suttie carries out on-site investigations and provides expert technical reports to identify the cause of damage or failure and the extent of related building damage.

### Licenses and Certifications:

- Professional Engineer (P.Eng.)

### Project Experience:

**Construction Review:** Provided on-site construction review for a variety of restoration or rehabilitation projects involving residential, commercial, condominium, and government properties, including low-, mid-, and high-rise buildings, parking garages, and single-family or multi-family houses.

**Contract Administration:** Responsible for the administration of construction contracts on many construction projects, including the creation of construction contract documents including

specifications and drawings, project tendering, submittal review, creation of contemplated changes and change orders, certifying payment and substantial performance, etc.

**Condition Assessments:** Completed the assessment of a variety of structures for restoration or rehabilitation projects (private and public owned).

**Restoration and Repair:** Provided analysis and design for restoration projects including, shoring, repair, rehabilitation, and strengthening for damaged structures (private and public owned).

**Pools & Reservoirs:** Performed failure analysis and Building Code compliance assessment of inground and above-ground pools.

**Forensic Investigation:** Completed forensic investigations at buildings and properties to determine the origin and cause of damage, extent of damage, and scope of repairs.

**Construction Related Damage:** Forensic investigation of construction-related damage to neighboring buildings or properties, including blast and vibration analysis from construction activities.

**Destructive and Non-Destructive Materials Testing:** Completion of in-situ destructive and non-destructive materials tests, involving structures to assess strength of materials, conformance to construction contract requirements, and for manufacturer warranties.

**Building Code Compliance:** Reviewed existing construction to determine compliance with the applicable Building Code at the time of construction.

**Construction Litigation Support:** Assessment of the origin and cause, extent of damage, and responsible parties to assist with litigation.

#### Major Projects:

- **Building Envelope Failure, Various (2019-2022):** Forensic Engineer. Forensic investigations regarding the failure of the building envelope.
- **Structural Failure, Various (2019-2022):** Forensic Engineer. Forensic investigations regarding structural failures of a variety of buildings or structures.
- **Post-Fire Assessment, Various (2019-2022):** Forensic Engineer. Forensic assessment of fire-related damage to buildings (wood, steel, and concrete construction).
- **Building Code Compliance Analysis, Various, Canada (2019-2022):** Forensic Engineer. Forensic assessment of existing buildings to determine compliance with the applicable building code after personal loss.
- **Structural Repair Design, Various, Canada (2019-2022):** Engineer, Design of structural repairs to return the structure to its pre-loss condition.
- **Catastrophic Event Response, Various, Canada (2022):** Forensic Engineer. Identify cause and origin of failures, determine extent of damage, and loss mitigation after the derecho windstorm across Ontario and Quebec on May 21, 2022.
- **Miscellaneous Repairs – Parking Structure 5, 141 Clarence Street, Ottawa, Ontario, Canada (2018):** Project Consultant. In progress construction review and contract administration of parking facility repair program.
- **Floor Slab and Foundation Repairs, 2100 Russell Road, Ottawa, Ontario, Canada (2018):** Project Consultant. In progress construction review, contract administration, and assessment for future repair program.

- **Targeted Parking Garage Repairs, 1500 Riverside Drive, Ottawa, Ontario, Canada (2018):** Project Consultant. Design and tender, construction review, and contract administration for parking garage repair program.
- **Solar Array Foundation Design, 2711 Hunt Club Road, Ottawa, Ontario, Canada (2018):** Designer. Designed new foundation for the construction of a new solar array.
- **Roof Anchor Testing, 105 Champagne Avenue South, Ottawa, Ontario, Canada (2018):** Field Engineer. Visually inspected and load tested new roof anchors on a new high-rise residential building.
- **Guardrail Anchor Testing, 1455 Clementine Boulevard, Ottawa, Ontario, Canada (2018):** Field Engineer. Perform load testing on newly installed guardrail anchors.
- **Guardrail Anchor Testing, 1365 Bank Street, Ottawa, Ontario, Canada (2018):** Field Engineer. Perform load testing on newly installed guardrail anchors.
- **Parking Garage Rehabilitation, 1365 Bank Street, Ottawa, Ontario, Canada (2018):** Project Consultant. Construction review and contract administration of the parking garage rehabilitation program, including excavation of podium deck and garage walls and reinstatement of all exterior finishes (asphaltic concrete, concrete pavements, landscaping, etc.), interior and exterior concrete repairs, waterproofing membrane replacement.
- **Parking Garage Assessment, 1380 Prince of Wales Drive, Ottawa, Ontario, Canada (2018):** Field Engineer. Performed the assessment of the parking garage and determining extent of garage repair program.
- **Balcony and Cladding Restoration, 300 Lacasse Avenue, Ottawa, Ontario, Canada (2017):** Project Consultant. Performed the initial assessment and outlined recommended repair scope of work. Provided design and tender services for the restoration of the balconies and cladding of a high-rise residential building.
- **Parking Garage Repairs, 456 Cooper Street, Ottawa, Ontario, Canada (2017):** Project Consultant. Completed the construction review and contract administration for parking garage repairs, including concrete repairs, waterproofing membrane replacement, and crack injection of the foundation walls.
- **Balcony Assessment, 185 Clearview Avenue, Ottawa, Ontario, Canada (2017):** Project Consultant. Performed the assessment of balconies to determine extent of repairs required.
- **Leak Investigation, 185 Clearview Avenue, Ottawa, Ontario, Canada (2017):** Project Consultant. Carried out leak investigations and leak testing to determine requirements for moisture infiltration in precast concrete cladding.
- **Roof Anchor Testing, Botanica Private, Ottawa, Ontario, Canada (2017):** Field Engineer. Carried out roof anchor load tests at low-rise residential buildings.
- **Balcony Rehabilitation, 1599 Lassiter Terrace, Ottawa, Ontario, Canada (2017-2018):** Project Consultant. Performed the initial assessment to determine repair recommendations with estimated costs, design and tender of the project, and construction review and contract administration of the project.
- **Attic Improvements, Meadowbrook Drive, Ottawa, Ontario, Canada (2017-2018):** Project Consultant. Designed and tendered the project and provided construction review and contract administration during the completion of the work.
- **Concrete Slab Replacement and Foundation Wall Repairs, 962 Terranova Drive, Ottawa, Ontario, Canada (2017):** Project Consultant. Provided construction review and contract administration for repair project.
- **Parking Garage Repairs, 300 Goulburn Avenue, Ottawa, Ontario, Canada (2017):** Project Consultant. Performed the construction review and contract

administration for repair project which included, excavation, concrete repairs, and new podium waterproofing installations.

- **Balcony Repairs, 31 McEwen Avenue, Ottawa, Ontario, Canada (2017):** Project Consultant. Performed the assessment, provided repair options and recommendations, and completed the design and tendering of the repair project.
- **Roof Anchor Load Testing, 1465 and 1485 Caldwell Avenue, Ottawa, Ontario, Canada (2017):** Field Engineer. Performed load testing of the roof anchors at two residential high-rise buildings.
- **Roof Placement, NRC Building U72, 1920 Research Private, Ottawa, Ontario, Canada (2017):** Site Inspector. Construction review of new roof system installation.
- **Balcony Repairs and Painting, 1505 Baseline Road, Ottawa, Ontario, Canada (2017):** Project Consultant. Designed and tendered repair project and provided construction review and contract administration during the work.
- **Balcony Repairs and Repainting, 2000 and 2020 Jasmine Crescent, Ottawa, Ontario, Canada (2017):** Project Consultant. Designed and tendered repair project and provided construction review and contract administration for repair project.
- **Princess Auto, 3055 Palladium Drive, Kanata, Ontario, Canada (2016-2017):** Site Inspector. Completed the site review and reporting of new steel framing installations for the construction of a new Princess Auto.
- **Concrete Slab Moisture Testing, Wildlife Centre, Ottawa, Ontario, Canada (2016):** Field Engineer. Performed floor slab moisture testing using in-situ probes for new flooring installations.
- **Cladding Investigation, 45 Boulevard Sacre-Coeur, Gatineau, Quebec, Canada (2016):** Field Engineer. Performed the site review of historically significant federal office building consisting of granite and concrete cladding and various glazing systems.
- **Tanger Outlets Phase 2 Roof Installations, 8555 Campeau Drive, Ottawa, Ontario, Canada (2016):** Site Inspector. Performed the site review and reporting of new roof installations.
- **Precast Concrete Repairs and Caulking Replacement, Jeanne Mance Building, 200 Eglantine Driveway, Ottawa, Ontario, Canada (2016):** Site Inspector. Carried out the site review and reporting of concrete repairs to the precast concrete cladding and complete replacement of rain screen caulking.
- **Building Envelope Inspections, 455 Via Verona Avenue, Ottawa, Ontario, Canada (2016):** Site Inspector. Performed site inspector duties of building envelope components of new low-rise residential apartment buildings and row-houses at new development.
- **Roof Replacement, 257 Lisgar Street, Ottawa, Ontario, Canada (2016):** Project Consultant. Performed the construction review and contract administration for a roof replacement project at an apartment building.
- **Roof Placement, 255 Bay Street, Ottawa, Ontario, Canada (2016):** Site Inspector. Construction review of new roof installations at new high-rise residential building.
- **Roof and Attic Assessments, Ottawa, Ontario, Canada (2016):** Consultant. Completed the condition assessment and repair estimates for 50 Ottawa Community Housing properties, including row houses and high- and low-rise buildings.
- **L'Esplanade Laurier Cladding Assessment, 300 Laurier Avenue West, Ottawa, Ontario, Canada (2015):** Project Consultant: Performed the visual assessment and performance testing of the marble-faced veneer precast concrete cladding of a high-rise office building.

### Professional Experience:

- **EFI Global Canada, Ottawa, Canada**  
2022 – Present  
Forensic Engineer – Civil and Structural Engineering
- **CEP Forensic, Ottawa, Canada**  
2019 – 2022  
Forensic Engineer – Civil and Structural Engineering
- **WSP Canada**  
2018-2019  
Building Science Consultant – Existing Structures
- **Paterson Group**  
2016-2018  
Building Science / Structural EIT (Engineering Intern)
- **Paterson Group**  
2015  
Engineering Summer Student – Building Science and Structural Engineering

### Other Certifications:

- Level II Secret Clearance
- Working at Heights and Fall Protection
- Occupational Health and Safety Awareness
- WHMIS
- Swing Stage Safety

### Education:

- Bachelor of Engineering (Civil Engineering), Lakehead University, Thunder Bay, Ontario
- Ontario College Advanced Diploma (Civil Engineering Technology), Algonquin College, Ottawa, Ontario
- Ontario College Diploma (Construction Engineering Technician), Algonquin College, Ottawa, Ontario

### Affiliations:

- Professional Engineer at Professional Engineers Ontario (PEO)