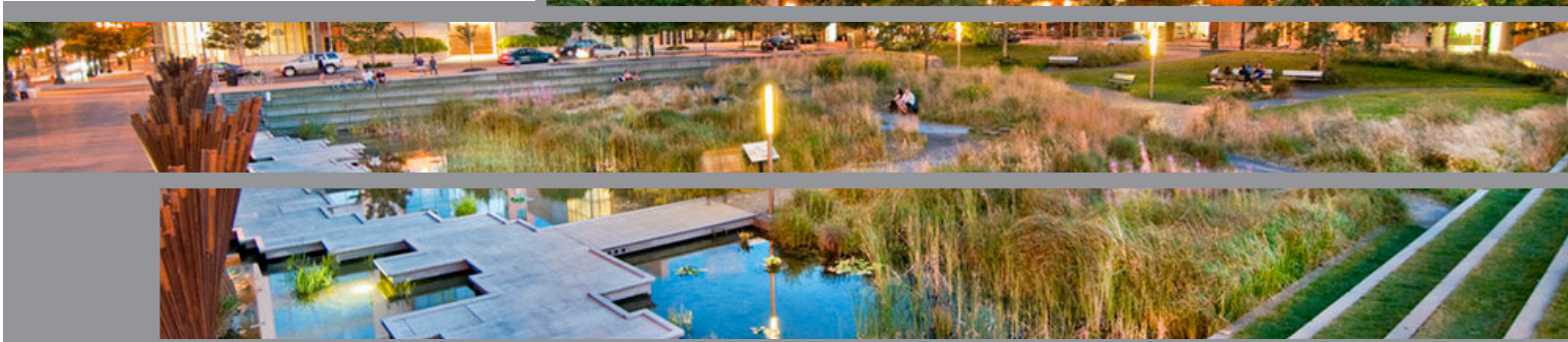


# 30 Forensic Engineering



## Infrastructure

### RELIABLE. INNOVATIVE. TRANSPARENT.

Across all levels of government and among utility providers, one of the most pressing concerns is the maintenance and upgrade of the critical infrastructure that society depends on – roads and bridges; air, rail and marine transportation; drinking-water, waste-water and storm-water distribution and treatment; energy and telecommunications. Faced with an ever evolving mix of challenges from climate change to pandemics and social disruptions, the demands put on our infrastructure, and the risks related to their failure, have never been greater.

The experts of **30 Forensic Engineering** come from a wide array of backgrounds and have proven track-records of executing projects related to infrastructure along with cutting edge insights into future trends, bringing the right mix of technical skills required. Our experience in the design, construction and maintenance of infrastructure combined with our failure response and litigation experience ensures that we are able to effectively communicate and collaborate with our clients and partners in solving complex problems with confidence.

#### Planning & Design

- Planning and risk-assessment of infrastructure investments and maintenance programs
- Peer review of design and strategy
- Code and regulatory compliance
- Heavy civil, structural and geotechnical assessments
- Material selection and testing

#### Construction

- Bid review, contract management
- Cost, schedule and scope management
- Health and safety and injury investigations
- As-built assessments, including drone and laser-scanning

#### Operation & Maintenance

- Condition audits and pre-loss risk assessments
- Failure investigation and litigation:
  - Maintenance practices
  - Design suitability
  - Operational issues, service levels
- Emergency response:
  - Impact assessment
  - Remedial design, construction support

#### 30 Forensic Engineering

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Calgary | (403) 208-4545  
Toronto | (416) 368-1700  
Ottawa | (613) 903-6900

[www.30fe.com](http://www.30fe.com)



## Meet Our Team



**Vito Schifano, P.Eng., P.E., Ph.D.**

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Practice Lead | Geotechnical Analysis and Design

25 years combined academic and industrial experience in consulting, design and construction management and forensic geotechnical engineering. Specialized expertise in soft soils and ground technologies, remediation and redevelopment of contaminated land, and traditional geotechnical applications to roads, railways, buildings and dams.



**Dewan Karim, M.A.Sc., MITE, PTOE, P.Eng.**

dkarim@30fe.com

Practice Lead | Transportation Safety | Infrastructure | Planning

Over 20 years of experience in transportation engineering, planning, and traffic safety issues. Additional expertise in traffic engineering and safety regulations, transportation planning and street design issues, and winter maintenance.



**Robert Sparling, B.Eng.Mgt., P.Eng.**

rsparling@30fe.com

Vice President & Practice Lead | Mechanical Failure Analysis | Metallurgical Analysis | Fractography

Court-qualified expert witness with over 30 years experience, specializing in design and repair of gas turbine hot system components, welding, brazing, plasma coating, diffusion coating, and other surface treatments, and overall assessment of mechanical and fuel system failures.



**Jeff Reitsma, P.Eng., PMP, M.B.A.**

jreitsma@30fe.com

Vice President & Practice Lead | Multidisciplinary Project Management | Remediation

Over 20 years experience leading multi-disciplinary engineering and construction service teams for industrial, infrastructure, remediation, and catastrophic loss response projects. Specialized technical expertise in environmental & process engineering, project management, municipal infrastructure, and dispute resolution.



**Kamyab Zandi, M.Sc., Ph.D., Docent**

kzandi@30fe.com

Senior Associate | Western Canada | Structural and Building Science Failure

20 years combined academic and industrial experience in structural engineering, structural assessment and analysis, structural simulation and modelling, structural health monitoring, and structural codes and standardization.



**Tom Pepper, B.Eng., CFEI, P.Eng.**

tpepper@30fe.com

Practice Lead | Building and Fire Code Assessment | Structural and Building Science Failure

Over 25 years experience, with specialized expertise in building and fire code compliance assessments and construction experience. Extensive experience in construction project management, building inspections, code consulting and forensic engineering. Court qualified as an expert in civil/structural engineering and building codes.



**Grant Elligsen, P.Eng., CRSP, CFSC**

gelligsen@30fe.com

Senior Associate | Occupational Health and Safety | Remediation

15 years of project management, leadership and investigation experience, including commercial, retail, industrial and residential properties. Specializing in environmental projects, occupational health and safety assessments, and hazardous materials and designated substance surveys.