



Land Redevelopment

COMPREHENSIVE. MULTI-DISCIPLINARY. INFORMATIVE.

With the increased emphasis on urban population intensification, the redevelopment and repurposing of land and the associated infrastructure is bringing more stakeholders into conflict. From climate adaptation to asset protection, those involved in urban development projects and transactions face increased risks.

30 Forensic Engineering, Canada's leading and fully-independent multi-disciplinary forensics firm, recognizes that our clients are faced with highly complex and often contentious situations related to land use and development that require clear and actionable investigations. Our multidisciplinary approach allows our experts to provide clients with a breadth of defensible and actionable advice to successfully advance projects such as:

- Commercial and industrial development
- Infrastructure assessment – transportation, storm and waste-water, electrical power
- Brownfield remediation and redevelopment
- Site characterization and servicing
- Resilience and urban planning
- Rail Proximity Issues

30 Forensic Engineering is one of Canada's largest and most respected multi-disciplinary forensic firms. Our core team of 70 Professional Investigators, Engineering Technicians and support staff is enhanced through relationships with some of the top scientists, standard-makers and specialized consultants in North America serving a wide variety of industries including: Insurance, Manufacturing, Legal, Construction, Health Care, Commercial and Residential Property, Financial, Government, Hospitality, Mining, Renewable Energy and Transportation.

30 Forensic Engineering

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With responsive communication, credibility, and extensive experience in both legal and failure-response files, we are uniquely positioned to bring a holistic understanding of technical issues to bear for our clients. Our expertise relating to the complex aspects of Land Use and Development includes, among others, the following:

Transportation

- Urban transportation safety assessments
 - Light and heavy rail
 - Pedestrian/Cyclist
 - Transit riders
 - Shared vehicle users
 - Micro-mobility users
 - Complete streets
 - Vision Zero
 - Goods movement
 - Rail proximity safety and issues
 - Operation and maintenance of transportation infrastructures
 - Long-combination vehicles
- Linear expropriation and tunneling
- Autonomous vehicles
- Local Planning Appeal Tribunal Expert Testimony

Civil, Geotechnical & Environmental

- Subsurface characterization
- Remediation peer-review
- In-situ treatment and revitalization
- Tailings storage facilities closure and reclamation
- Grading, dewatering and drainage
- Vibration and excavation impact assessment
- Ground Improvement and stabilization (soft ground reclamation, slopes, foundation soils)
- Engineering Containment (vertical subsurface barriers and cap layers)
- Waterfront engineering (offshore investigation and testing, sediments dredging, capping, remedial option appraisals, reclamation)

Code & Construction

- Official plan amendments, zoning, master planning & development permits
- Safety code compliance matters
- Local Planning Appeal Tribunal
- Construction Act dispute resolution
- Flood risk analysis

Meet Our Team



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

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Senior Associate | Infrastructure | Planning | Transportation Safety

Educated at the University of Tokyo, Dewan has spent more than eighteen years in mobility master planning, urban innovation for shared mobility, innovative transportation solutions for urban land developments and transit planning projects in both Japan and Canada. His land development expertise covers complex and dense urban projects, safety and mobility issues along regional and local transit lines, traffic safety along major streets, application of complete street and vision zero principles, community safety around traffic calming, roundabouts, traffic infiltration, and extensive other development process such as parking, street design, traffic safety, solving dispute in land tribunal courts. His innovative concept on emerging mobility was awarded by MIT Media Lab as the “best planning system” and ITE Project of Year in 2015. Subsequently, he authored a chapter in “Disrupting Mobility”, published by Springer University of California, and is currently writing “Shared Multimodal Cities” with Taylor & Francis. He is also teaching a professional course to summarize his innovative mobility concepts and master planning projects. He is frequently invited as a keynote speaker for local and international Livable and Smart City events in Berlin, Washington D.C., Minneapolis, Algiers, and international webinars. He is a registered member of Professional Engineering Ontario and certified as a Professional Traffic Operation Engineer.

Meet Our Team



Vito Schifano, PhD, PE, CEng

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Practice Lead | Geotechnical Analysis and Design

Vito has over 25 years of international experience in geotechnical engineering in the Oil and Gas, Energy, Manufacturing, Mining, Water and Infrastructure sectors, focusing on the remediation and redevelopment of brownfield sites and on design/construction/closure/restoration/reclamation of marginal and contaminated sites such as mine tailings storage facilities, sediments confined disposal facilities, coal combustion residuals ponds, and industrial waste containment ponds.



Terrence Holder, B.Eng., M.A.Sc., BSSO, CFEI, P.Eng.

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Practice Lead | Structural and Building Science Failure | Code Assessment

Terrence has 20 years of experience in new construction, rehabilitation of concrete structures, and forensic engineering. He also has extensive experience investigating structural and non-structural losses, and building science and building code compliance, specializing in concrete structures, membrane failures and specification writing. He has been qualified as an expert in matters related to concrete.



Thomas Pepper, B.Eng., CFEI, P.Eng.

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Practice Lead | Building and Fire Code Assessment | Structural Failure

Tom has over 15 years of experience in building science and building and fire code compliance, as well as extensive experience in construction project management, building inspections, code consulting and forensic engineering. He has been qualified as an expert in civil/structural engineering and building codes.



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

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Vice President & Practice Lead | Multidisciplinary Project Management | Remediation | Civil Infrastructure

Jeff has 15 years of experience leading multidisciplinary teams, specializing in engineering and remedial construction administrative services for complex catastrophic losses. He also has technical expertise in process-mechanical engineering, civil infrastructure, permits and approvals, schedule, cost and quality management, and risk management.



Christopher Ciasnocha, B.A.Sc., E.I.T.

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Senior Associate | Industrial Environmental Projects and Assessments | Remediation

Chris has 10 years of project management experience, specializing in commercial and industrial projects and assessments. He also has extensive experience related to all facets of environmental projects from initial assessment, preparation of scopes of work, inspections during construction phases and project closeout.



Xiangyu Li, E.I.T., B.Eng., M.Sc.

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Associate | Geotechnical Analysis

Xiangyu has expertise in soil and rock mechanics, foundation engineering, slope stability analysis, soil retaining structures and other geotechnical/underground construction problems.