



roarengineering.com



## Sepehr Shojaei, P.Eng.

Structural Engineer

### Contact

cel 437.248.3071

tel +1 844.235.8565

sepehrshojaei@roarengineering.com

## Education

### WESTERN UNIVERSITY

2013

Masters of Engineering

### AZAD UNIVERSITY

2011

Bachelor of Science

## Experience

### ROAR ENGINEERING Structural Engineer

2021 – PRESENT

Assess damage to buildings and infrastructure. Determine the cause of damage to building structural elements and systems. Design and review the restoration of property damage.

Prepare engineering reports to document damage and identify cause of damage.

Promptly respond to emergency conditions that require structural engineering assessment and preservation of property.

**READ JONES CHRISTOFFERSON LTD.**  
**Structural Engineer**

**2018 - 2021**

- Responsible for the completion of structural engineering design and management of residential and commercial projects of varying scope and complexity
- Prepare cost-effective structural engineering designs from conceptual to detail design, tender, and construction as per Canadian Codes and Standards
- Manage projects and teams in a variety of structural projects, assuring QA/QC in the final product
- Manage multiple projects with tight deadlines, prepare technical condition reports, respond to RFIs, prepare site instructions and other construction documentation
- Liaise with the public, developers, consultants, and the city to ensure successful execution of projects

Key Projects:

- 481 University Avenue, Toronto, ON (55 story residential building) - Performed analysis and design of the lateral system of the building using ETABS; involved in analysis and design of a 2.8m deep transfer slab
- 2135 Sheppard Ave, Toronto, ON (45 story residential building) - Performed detailed design of slabs, columns, beams, shear walls, coupling beams, and the foundation; assisted in coordinating with the architect in the schematic design of the building
- The Landing, Whitby, ON (20 Story high rise and five 5 story low rise buildings) - Performed coordination with the project team from schematic to detail design; involved in analysis and design of the deep foundation, lateral analysis, design, and transfers

**STEPHENSON ENGINEERING LTD.**  
**Structural Engineer**

**2017 - 2018**

- Acted as a Project Manager and Structural Engineer, responsible for developing plans, sections, details, and calculations for the modification and rehabilitation of existing structures
- Performed and reviewed complex calculations in compliance with applicable building codes and standards, and specifications for various small and medium-sized projects
- Reviewed & understood project plans, proposals (RFP), and specifications, the scope of work, and estimating to generate project schedule
- Planned, executed and controlled projects through all phases from initial feasibility to preliminary design/definition, detailed design, and construction; produced drawing package suitable for tender and permit using AutoCAD and Bluebeam
- Involved in the analysis and design of structural components in steel and reinforced concrete for modification and rehabilitation projects
- Performed Load review of garage podium slabs for new fire and garbage truck route and loaded requirements with using SAFE and SP-Slab
- Prepared and reviewed project standard specifications and design criteria and contributed to design reviews
- Developed effective client relationships and established solid working relationships with the team members, engineers, architects, project managers, and stakeholders



- Designed structural components for large-scale commercial and residential projects, including completion of structural engineering design, and reviewing client requirements to ensure specifications meet project goals
- Reviewed blueprints, plans, and change orders to verify the structural integrity of materials and designs, and perform complex calculations and use modeling methods to ensure correct results
- Researched existing and new material technology to determine practical applications, strength and durability expectations, and cost-benefits information, and prepare material recommendations for current and future projects
- Created and presented structural overviews for upcoming projects, and develop reports that include technical details for engineers as well as big-picture analysis and cost estimates for project managers and senior executives
- Prepared documentation covering project plans and progress
- Regularly visited construction sites and communicated with contractors, engineers, and BIM experts to ensure projects are on schedule and budget to meet deadlines and ensured any refurbishments or newly erected buildings are structurally sound

#### Key Projects

- Garrison Point Condos, Toronto, ON (25 and 30 story residential building) - Performed analysis and design of the lateral system utilized ETABS to model and analyze the structural system and used S-Concrete to detail the shear walls
- City Place Affordable Homes, Toronto, ON (10 story residential building) - Performed analysis and design of the lateral system using ETABS
- Birchwood Retirement Home, Peterborough, ON (5 story residential building) - Performed Gravity load takedown and detailed design of columns, spread, and raft footings; involved in analysis and design of the lateral system
- Arena Complex, Peterborough, ON (Multi-purpose sports facility) - Designed reinforced concrete columns and beams using S-Line and S-Concrete

## Core Expertise

**Project Management:** Project Plans & Documentation, Technical Writing, Engineering Cost Estimates, Cross-Functional Team Supervision, Project Coordination

**Engineering Disciplines:** Structural and Construction Engineering, Structural Analysis, Structural Steel Design, Reinforced Concrete Design, Lateral Analysis & Design, Design Finite Element Analysis, Foundation Engineering

**Technical Tools:** MS Office/O365 (Word, Excel, PowerPoint, Outlook, OneNote, OneDrive, SharePoint, Teams), Zoom, AutoCad, ETABS, SAFE, SAP2000

