KGM | ENGINEERING

THE BRIDGE BETWEEN CONSTRUCTION AND ENGINEERING

# BRIDGE DEMOLITION SPECIALIST

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## SECTION 1: COMPANY DESCRIPTION

KGM ENGINEERING was co-founded by Tamas Kalenda and Katia Gauthier in 2011. They have worked in the construction industry for nearly 20 years and they bring to KGM the knowledge and experience required in both engineering and management to assist in the overall success of any construction projects. Certified in Canada to practice in Ontario, British Columbia, Yukon, Northwest Territories, Alberta, Saskatchewan, New Brunswick, Nova Scotia and Newfoundland/Labrador.

In the construction industry of today we understand that success is not only a major team effort but also very dependent on design, engineering deliverables, precision, and meeting schedule deadlines. We also believe in design innovation that allows our clients to utilize all of their available resources and experience. We don't believe in reinventing the wheel. We believe in sharing strength and knowledge with one main goal - "finding the best and most cost-efficient solution". We make business personal.

KGM Engineering has many combined expertise, all related to structural engineering.

- Bridge Rehabilitation
- Structural Analysis, Design and Evaluation
- Construction Engineering and Constructability
- Geostructural Engineering

KGM Engineering has expanded internationally, certified and operating in Europe and Africa. KGM Europe located in Budapest, Hungary, providing structural engineering services for bridge engineering, tower engineering and various other specialty projects. KGM Africa located in Kigali, Rwanda, specializing in the field of renewable energy, geostructural engineering services, slope stability R&D and community development and sustainability.

### OUR MISSION:

- To provide clients across Canada and worldwide with quality, innovative and efficient structural engineering services for all Construction Industries.
- To work safely, maintain the highest quality of workmanship, and continuously improve and develop our people to serve and adhere to our core values.
- To give back and support community development and sustainability

### CORE VALUES:

**Trust, Professionalism, Innovation, Excellence, Respect & Integrity**

## SECTION 2: TEAM OVERVIEW

The KGM Engineering experience is not only supported by both the co-founder's years of construction experience but also supported with our "A"-Team. Their knowledge and various level of education and training is one of our most diversified qualities. We don't build on just one strength, we all share and join forces to find key solutions even when presumed impossible. These various levels include, PhD's and master's degrees in structural engineering, geotechnical and geostructural engineering, construction engineering specialist, senior project management and certified engineering technologist experience.

The engineering industry has never been more challenging, with greater responsibilities, schedule restrictions and trying to keep up with limitless expectations. This has shaped a generation of designers to become accustomed to achieving more with less within shorter deadlines and maintain and satisfy clients demands. It is for this reason that building the right team is one of our top priority.

KGM takes great pride in our TEAM. We focus on building and supporting both strengths and weaknesses to create equilibrium. It is in this balance that we become stronger and more efficient, resulting in limitless innovation that brings all of our client's the expected success.

Our Team has demonstrated over and over the following skills and achievements. They continue to deliver work with the highest quality by continuously:

- Proving leadership, inspiring, and motivating each other as a team
- Being self-aware, knowing each other's limitations and strengths and capitalizing on this self-awareness for efficient task sharing and innovating solution
- Being self-motivated and able to work well with each other under all types of pressure
- Showing confidence, assertiveness, and self-assurance with management team for overall company development
- Being resilient, optimistic, open to change, showing openness, and honesty in all dealings

We also believe in joining strengths with other engineering companies by creating a structure that allows all companies to join forces, share the work and be that much more diversified in various disciplines. This also guarantees that any schedule deadline-no matter the unforeseen obstacles, are fulfilled. We as a team, either internal or external will find that ground-breaking solution that will meet satisfaction on all levels.

# SPECUALTY – BRIDGE DEMOLITION EXPERIENCE

## ONTARIO PROJECTS:

- ON- MTO 2017-5107 – Naiscoot River Bridge, Steel Truss Bridge
- ON- MTO 2017-5101 – Hwy 144 Bridge, Precast Concrete Bridge
- ON- MTO 2017-4008 – Perry's Creek Bridge, Precast Concrete Bridge
- ON- MTO 2015-5004 – Hwy 11 Severn River Bridge, Precast Concrete
- ON- MTO 2015-5004 – Hwy 169 Muskoka River Bridge, Post tension Bridge
- ON- MTO 2015-2007 - CNR Overhead Washago Bridge, Steel Girder Bridge
- ON- MTO 2015-2007 - Trent -Severn Canal Bridge, Concrete Girder Bridge
- ON- MTO 2014-6000 - Pic River Bridge, Steel Truss Bridge
- ON- MTO 2014-6027- Cedar Creek, Concrete Arch Bridge
- ON- MTO 2014-6031 - Gravel River, Concrete Deck Steel Girders
- ON- MTO 2014-2002 - Appleby Line overpass, Concrete Bridge
- ON- MTO 2014-2002 -Campbell Ave, Concrete Bridge
- ON- MTO 2014-2002 - Sixteen Mile Creek, Concrete Bridge
- ON- MTO 2014-2009 - Oakville Creek, Concrete Bridge
- ON- MTO 2014-2009 - Fifth Line overpass, Concrete Bridge
- ON-Duckworth Bridge, Concrete Arch Bridge
- ON-Harris Farm Bridge, Steel Truss Bridge
- ON-Centennial Parkway Bridge, Concrete Arch Bridge
- ON-Hyde Park Rd / CN overhead, Concrete Deck Steel Girders

## MTO 2014-6000 Pic River Bridge, ON

Multi span truss bridge, complete demolition design. Temporary post-tension top chord to allow cut trusses in the middle after complete deck removal in the middle span.





## MTO 2014-6027- Cedar Creek, Concrete Arch Bridge, ON



- Multi span bridge, complete demolition design. 390,000lbs suspended girder span at the middle, lowered onto concrete blocks 70' below just over the river using hydraulic jacking system.

## MTO 2014-6031 - Gravel River, Concrete Deck Steel Girders, ON



- Multi span bridge, complete demolition design. 390,000lbs suspended girder span at the middle, lowered onto concrete blocks 70' below just over the river using hydraulic jacking system.

## ALBERTA PROJECTS:

- AB-102 Ave bridge over Groat Road, Edmonton, Steel Truss Bridge
- AB-Walterdale Brigde, Edmonton, Steel Truss Bridge
- AB-Drayton Valley Bridge, Steel Truss Bridge
- AB- Fort-McMurray -Athabasca River Bridge, Steel Truss Bridge
- AB - Drayton Valley -Drayton Valley Bridge, Steel Truss Bridge
- AB - Yellowhead County Bridge, Steel Truss Bridge
- BC- Golden Donald Bridge, Concrete Deck Steel Plate Girders
- AB-East Sousa Bridge, Concrete Bridge

## Donald Bridge over Columbia River, Golden, BC

Multi span bridge, complete demolition design. 390,000lbs suspended girder span at the middle, lowered onto concrete blocks 70' below just over the river using hydraulic jacking system





## Hwy 22 Drayton Valley Bridge over North Saskatchewan River, Drayton Valley, AB



- Multi span truss bridge built in early 20th century. Demolition consists conventional demolition from off the ground level and 60m main span lowering onto partially barges over the River.

## 102 Ave Bridge over Groat Road, Edmonton, AB



- Multi span plate girder and truss bridge built in early 20th century over the Groat road gorge. Bridge consisted 7 spans total of 345'. Complete demolition design including 70' tall truss towers.

## Old Memorial drive bridge demolition on Hwy 63, For McMurray, AB



- Multi span truss bridge built in early 20th century. Hinged spans lowing procedure and design using hydraulic jacking system. Designed system as installed and section was lowered onto ice bridge in a single day

## Yellowhead County bridge demolition, AB



- 70-meter single span truss bridge, design included jacking to confirm weight, crane lifting procedure and slope design and stability analysis. Complete dismantling plan.