

# Timing is everything for infrastructure projects

**As is acting like a ‘preferred client’ for engineers, writes Keith Sashaw.**

The best time to invest in infrastructure projects for tomorrow is yesterday. With one million new residents expected to call Metro Vancouver home in the next 25 years, the decade ahead presents a monumental opportunity for sustainable growth in B.C.



**NICK PROCAYLO** With more than \$900 million being invested by all three levels of government in sustainable public transit initiatives across B.C., working with consulting engineers will be crucial to delivering products on time and on budget, writes Keith Sashaw.

In June, Prime Minister Trudeau and Premier Christy Clark announced that an agreement has been reached resulting in more than \$900 million being invested by all three levels of government benefiting sustainable public transit initiatives across B.C.

As the first province to sign an agreement with the federal government for new public transit infrastructure funds, it is a step in the right direction for B.C., which has the nation’s leading economy and job growth rate, and continues to grow from the ground up, and the city, out, at an unrelenting pace.

In addition, there are a number of major projects underway or under consideration that will require substantial resources over the next few years, including the expertise of our province’s leading consulting engineering companies that provide manufacturing, technology and intellectual services that are integral to the success of major projects in British Columbia.

Moreover, with legacy projects that will benefit citizens of all socioeconomic backgrounds for generations already in pre-construction, design or consultation phases such as the George Massey Replacement Project, Site C Clean Energy Project, Lions Gate Waste Water Treatment plant and the Surrey Organic Biofuel facility, billions of hard-earned tax dollars being invested across the province will require the services of engineers.

At this crucial point in foundational investment for our growing province, we can choose to either seize the opportunity for the next generation, or let it slip away from our capable hands. The decision is ours, and the challenge will be how to ensure successful delivery of engineering and construction services that turn timely promises into tangible benefits.

As the voice of British Columbia's association of engineering consulting firms, our members are motivated by the opportunity to have a hand in building our great province through the execution of challenging projects, and we encourage project executives to proceed carefully and appropriately to avoid difficulties in keeping up with the demand on our services.

The Association of Consulting Engineering Companies — B.C. (ACEC-BC) suggests the following steps should be taken by any client seeking consulting engineering services, especially for large, complex projects:

1. Commit to the project as soon as possible. Most federal infrastructure funds are tied to hard, immovable target dates, which can increase complexity and costs if timelines are strained.
2. Alert the industry of general procurement schedules so consulting engineers can plan accordingly.
3. Make speedy decisions once a project goes to tender. Consulting engineers do not want to tie up resources waiting for clients to make decisions.
4. Use Qualification Based Selection (QBS) for selecting the consulting engineer. QBS relies on the most qualified consultant being selected and incorporates a process of determining the scope of work before design is undertaken, which reduces uncertainty, and results in fewer changes and more efficient construction in turn.
5. Use fair, open and transparent contract documents that impartially allocate risk to the party that can best deal with the risk. Where contracts are not balanced or fair, some consultants may not pursue the opportunity, lessening the competition, or adding a risk premium to their quotation.

It is in everyone's best interest for a client to take steps to be seen as a "preferred client." By using balanced contracts, providing reasonable timelines, and being a knowledgeable client, owners can attract the most qualified consulting engineers. Given that design services are approximately one per cent of the overall life cycle costs of a project, astute investment at this stage pays huge dividends through the entire life of the project, helping the train arrive on time, on budget, and on the right track from day one.