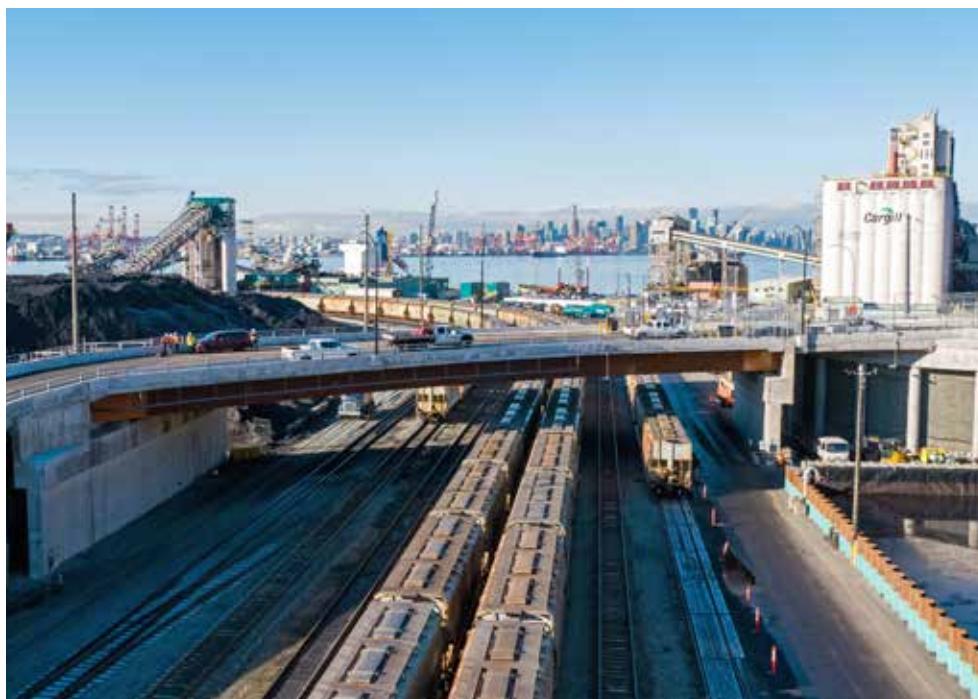


Examining Alternative Project Delivery

The increased need for strong technical advisory

BY KIP SKABAR



Neptune Terminals Overpass Extension is an approx. 56m curved main span that was installed using accelerated bridge construction techniques in 2019 and required close collaboration with the port authority, contractor, terminal operators, and their stakeholders.

With 2020 behind us, the outlook for coming years is positive for many infrastructure sectors across British Columbia. Our port authorities are reporting at par or better in terms of trade volumes; the province is moving forward with a host of capital investments; federal recovery plans are in place, and the B.C. construction industry is busy despite the continuing pressures of a global pandemic.

Also, a surge of smart mobility technologies is emerging along the West Coast and worldwide, which will surely change the landscape of transportation networks in the future and offer efficiencies across our supply chains. The balance of economic strength in Western Canada appears to be shifting in B.C.'s favour, at least for infrastructure in the short term, which means an increased volume of projects coming online in our backyards that require sound technical advice to meet our client's strategic objectives. In particular, we need to continue to evaluate project risks carefully to make informed, timely decisions — to support our growing economy and ultimately for the future betterment of our communities.

We have observed an interesting local trend over the years — more and more projects of various sizes and complexities are moving away from conventional design-bid-build delivery, the historically tried and tested means of implementing infrastructure improvements. Owners are favouring alternative procurement delivery methods for certain types of projects. This requires a detailed understanding of risks and

the ability to adapt to different types of models as part of the specialized experience required to serve owner's project needs in today's market.

Reasons for the shift in delivery method vary from a growing desire for added price certainty, to accelerated timeframes in meeting funding deadlines or providing opportunities for design and construction innovation to add value — and all of these objectives can be met, when applied to the appropriate project with an acceptable risk profile and buy-in from stakeholders. However, alternative project delivery also has challenges that require a breadth of experience and judgement to navigate.

Ultimately, it all comes down to managing risk and there is obviously a host of factors that contribute to the process. The key is to ensure that our engineering industry is providing owners with the sound technical advice required to make good decisions at each step along the path of project development — often making impactful decisions at an early planning stage of a development where the design progress may be limited. It is our duty to inform owners of our past experiences so we can learn and grow together, and partner with specialized project teams that are built to deliver exceptional projects while also meeting stakeholder requirements.

By having seismic specialists, bridge experts, highway designers, transit planners, drainage engineers, environmental scientists, regulatory experts, port planners, traffic engineers, and sustainability specialists all at the same table together with the owner and their expert team

of lawyers, stakeholder representatives and commercial advisors, we can all work together to move towards a common vision.

A concerning issue that we have observed recently is the ability to come to terms with contractors regarding acceptable risk transfer, which requires considerable market sounding and commercially confidential meetings prior to the bid, among other key steps. Even after considerable efforts ahead of the procurement phase, we are sometimes still facing unexpected circumstances that further test how much our technical teams have done their homework. There is no universal solution, as every project has different conditions that need to be reviewed carefully by qualified professionals.

But in the words of Jim Collins, “with the right people on the bus sitting in the right seats”, we can help owners “take the bus to some place great”. Whether we are talking about a regional highway bridge replacement like the Highway 37 Nass River Bridge or Highway 1 Quartz Creek Bridge in the north, or two high volume interchange projects such as the Highway 97 Boucherie and Westlake Interchanges in the interior, a port terminal grade separation on the north shore like the recent Neptune Overpass Extension, or a major marine terminal development like RBT2 in Delta, having a deep bench of technical specialists at your disposal to provide timely service in answering the tough questions is critical to making the right decisions.

Each project has its own unique risk profile with competing stakeholder interests, and each project may use a different procurement method, but in the end we are all working to improve infrastructure together for the safe movement of goods and people — and we need to do it sustainably in meeting the owner's objectives. **CB**

Kip Skabar, P.Eng., P.E., ENV SP, is business centre practice leader, BC Transportation at Stantec Consulting Ltd.