

James K. Gray, O.C., A.O.E.

Friday May 7, 2021

Delivered by email

His Worship Naheed Nenshi, Mayor of Calgary

Don Fairbairn, Chair, Calgary Green Line Board

Dear Mayor Nenshi and Mr. Fairbairn,

RE: Green Line Options

We are writing in recognition of the very significant challenges you face in planning and designing a Green Line LRT project such that it will produce a legacy of benefits for the people of Calgary in a way that doesn't put the City's future at risk as a result of capital and operating cost overruns. We support the creation of a Green Line that ultimately connects the thriving family communities of south and north Calgary with the cultural hub and business heart of the City, and we recognize that you are making crucial decisions in the context of a significantly weakened tax base, high downtown vacancies, large and growing federal and provincial deficits and uncertainty about commuting behaviours in a post-pandemic world. Just in the past few weeks, concerns about very significant cost inflation have added a further risk. We appreciate the seriousness with which you are evaluating all options in light of these challenging and dramatically changed circumstances.

We are writing today to detail an actionable and sensible surface-and-elevated alternative (the "Alternative Plan") that achieves greater benefits for the people of Calgary with much less risk and at significantly lower costs than the City's existing plan. We have attached maps that show the feasibility of this option.

The Alternative Plan would see the creation of a City Hall Central Transit Hub (Attachment "A") with the Green Line entering downtown on an elevated track from the new Event Centre (4th Street SE), over the CP tracks and into downtown, immediately adjacent to the new Platform Innovation Centre and 9th Avenue Parkade. This same elevated track could accommodate a pedestrian walkway that links downtown to the Event Centre and surrounding development. Attachment "B" (Green Line LRT Options North from City Hall Central Transit Hub) shows the efficiency of building north, across the Bow River and using Edmonton Trail (or Centre Street North) as the conduit for trains to and from the north, when the time comes to proceed with this extension. Attachment "C" shows the south extension to Seton. We have also enclosed a perspective (Attachment "D") that shows the southwest ground view of the segment of line between the Event Centre and downtown.

The Alternative Plan has several compelling benefits including:

- Major reduction in cost. Tunneling is estimated to cost, on a per kilometre basis, at least four times as much as a surface/elevated track. The currently proposed tunnel option from 4th Street SE to 7th Avenue SW (underneath 2nd Street SW) is estimated to cost about \$2 Billion, plus added 'over budget' risk. In the Alternative Plan, the elevated line from the Event Centre (4th Street SE) to the City Hall Hub (which is both shorter and avoids costly tunnels) would cost about \$200 Million, saving about \$1.8 Billion.
- Significant reduction in risk. As we described in our [Op-Ed of April 3, 2021](#) the entire tunnel route carries a clear risk of dramatic cost overruns. On the planned route under 2nd Street there is thought to be a water-saturated, pre-glacial valley about 40 metres deep running southeast. In addition, the basic feature of downtown Calgary's sub-surface is water. It is built on waterlogged gravel, silts and clay and subject to severe flooding, as we all remember too well. Attempting tunnels in such geology is not just expensive, it is risky. The Alternative Plan avoids this risk entirely.
- The entire south leg of the Green Line (City Hall Central Transit Hub to Seton) can be built within the existing budget. Given the cost savings and risk reductions described above, the City would be able to confidently build the Green Line well within its existing \$5.5 Billion capital budget. This would both protect taxpayers and allow for funding of extensions to the north (including possibly the airport) and other vital infrastructure. Another exciting benefit of the Alternative Plan is that it allows the line to be extended, within the current \$5.5 Billion capital budget, to the growth corridor which includes the eight growing communities to the south of Shepard. This includes the South Health Campus which employs in excess 5,000 people and many patients. Furthermore, we understand the annual operating budget for the Green Line to be \$80 Million per year, of which 50% of the revenue is intended to come from ridership. Extending this line south would dramatically increase ridership revenue and protect the City's operating budget for other important priorities.
- Avoiding years of downtown disruption. The current plan to tear up 2nd Street SW to build tunnels will result in years of disruption to downtown businesses, residents and workers at a time when our downtown is already suffering. The Alternative Plan avoids this disruption entirely while also seamlessly connecting and supporting the cultural and entertainment hub just to the east of the downtown core with the growing communities of the south and then to those of the north. The Alternative Plan complements recent and planned development including the East Village, Arts Commons, BMO Centre expansion and the Event Centre and acknowledges that the City's downtown 'centre of gravity' is moving east.
- Improving the rider experience. Grade-level and elevated stations have natural visibility and safety advantages and improve the experience for LRT riders. The Alternative Plan could involve a design competition for the City Hall Hub that would

result in a world-class station that connects seamlessly with the iconic Central Library and redeveloped municipal buildings.

- Protecting Prince's Island Park. The current plan envisions a rail overpass that bisects Prince's Island Park, permanently casting a shadow and planting concrete supports through one of the City's most beautiful recreational and natural features. The Alternative Plan avoids blighting this important natural outdoor gathering place.
- Creating more local jobs, sooner. A little-understood problem with the existing tunnel plan is that the complexity of the engineering, specialized skills and equipment require contracts going to international engineering firms, sending jobs and money abroad. The Alternative Plan can be built with Calgary-based engineering and construction talent, creating more jobs for Calgarians, and doing so sooner.
- Making sure the Green Line can go ahead. The uncertainty and risk associated with the current "tunnel plan" is causing extra planning costs, delays, loss of confidence and political controversy that put the project at risk. The Alternative Plan, by reducing cost and risk, can help save the Green Line by allowing the City to move ahead with confidence. It would help secure federal and provincial funding by building confidence with our federal and provincial partners that Calgary has its house in order and is capable of delivering this immense project on time and on budget.

We offer this Alternative Plan in good faith, as a viable and responsible solution to the challenges, risks and uncertainties associated with the current tunnel plan. Some of the factors that have amplified the risk have arisen since the original tunnel plan was developed. We sincerely hope you will take those changed circumstances into account and give this proposal the consideration we believe it deserves.

As always, we would be pleased to meet and discuss any questions or comments you may have.

Yours truly,




James K. Gray and Barry Lester, P. Eng.

On behalf of the Ad Hoc Citizens' Committee

Copies:

Members of Calgary City Council

Members of Green Line Board

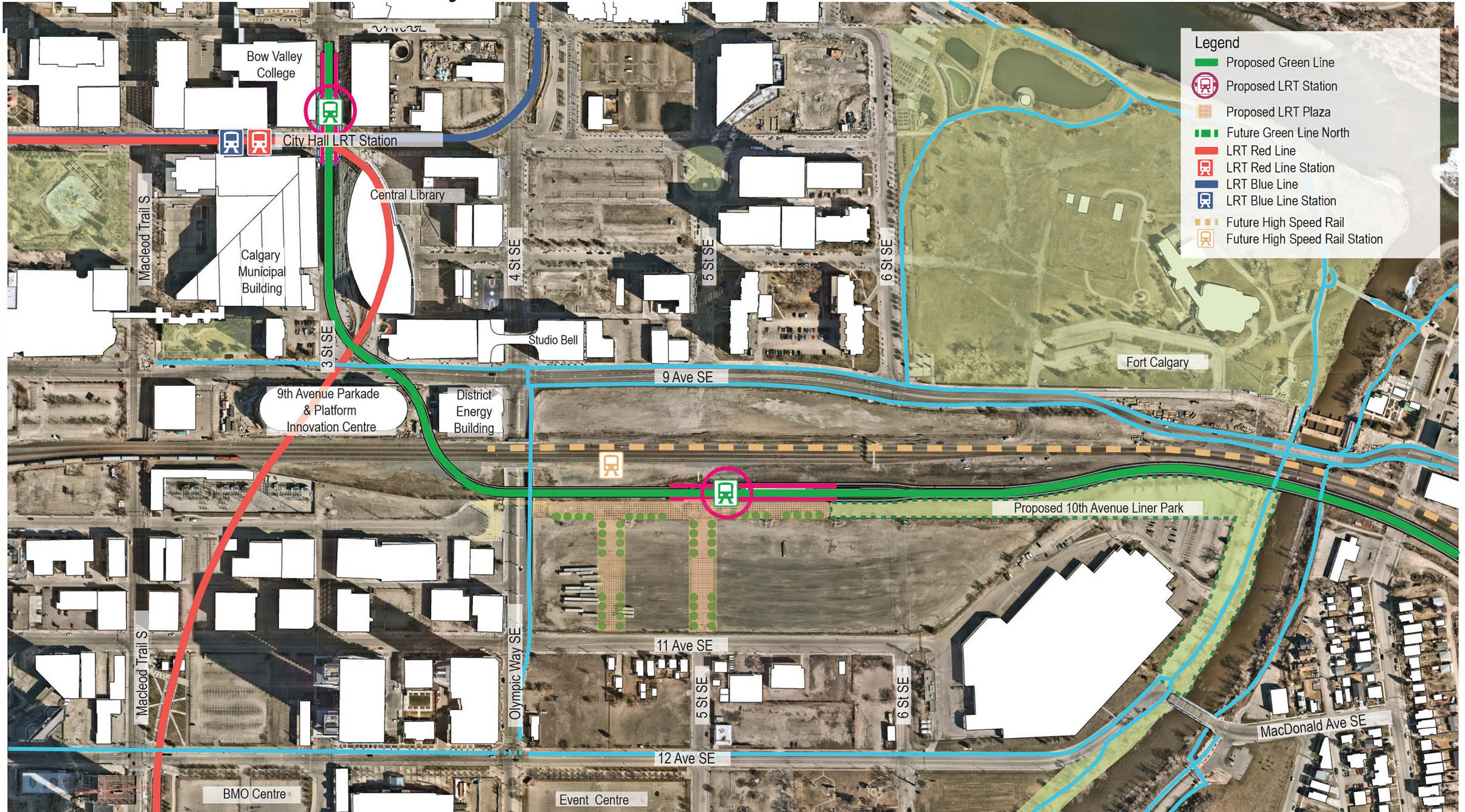
Michael Thompson, General Manager Green Line

Honourable Ric Mclver, Minister of Transportation

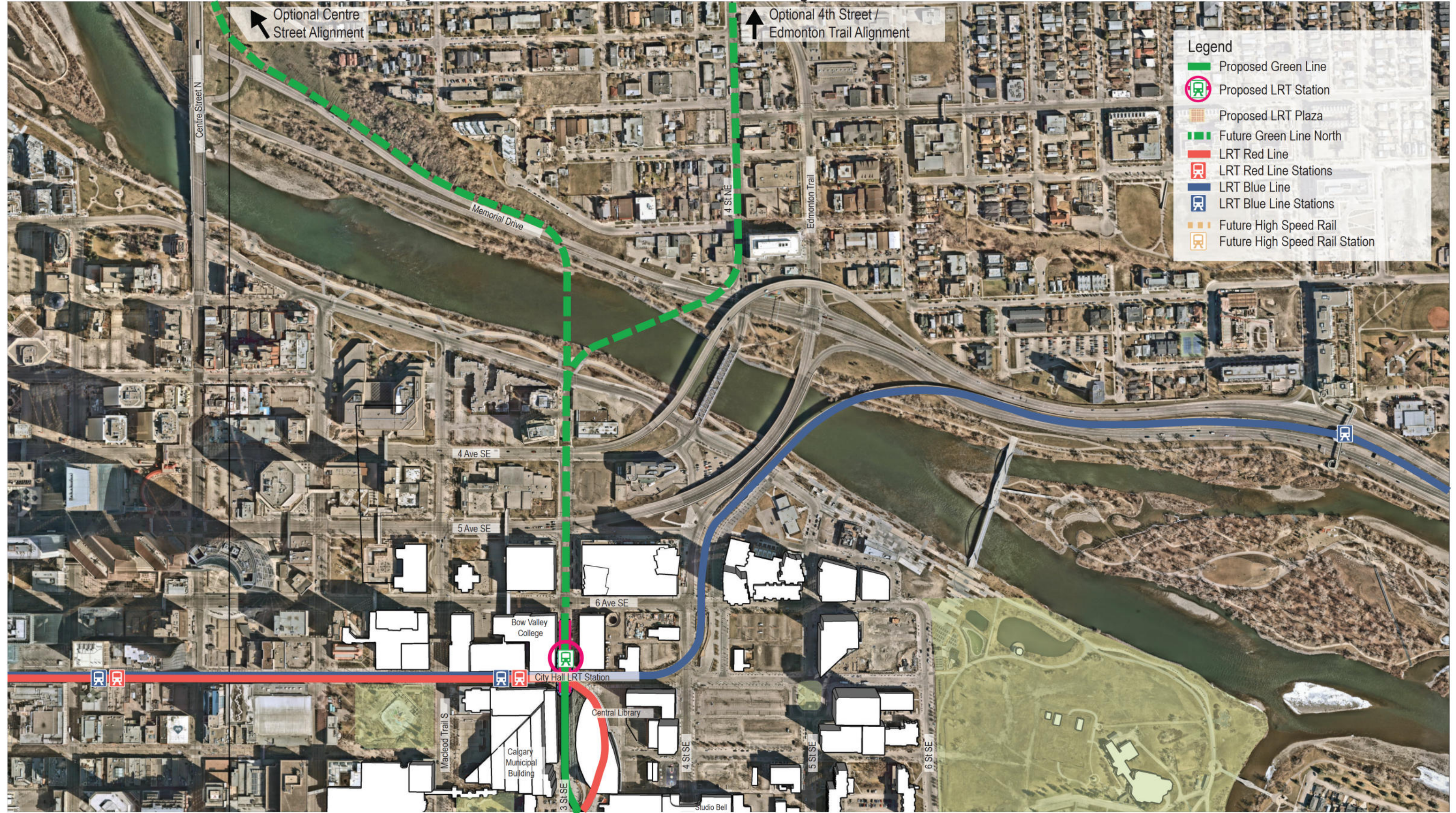
Mr. Ranjit Tharmalingam, Assistant Deputy Minister of Transportation

Green Line LRT - City Hall Central Transit Hub

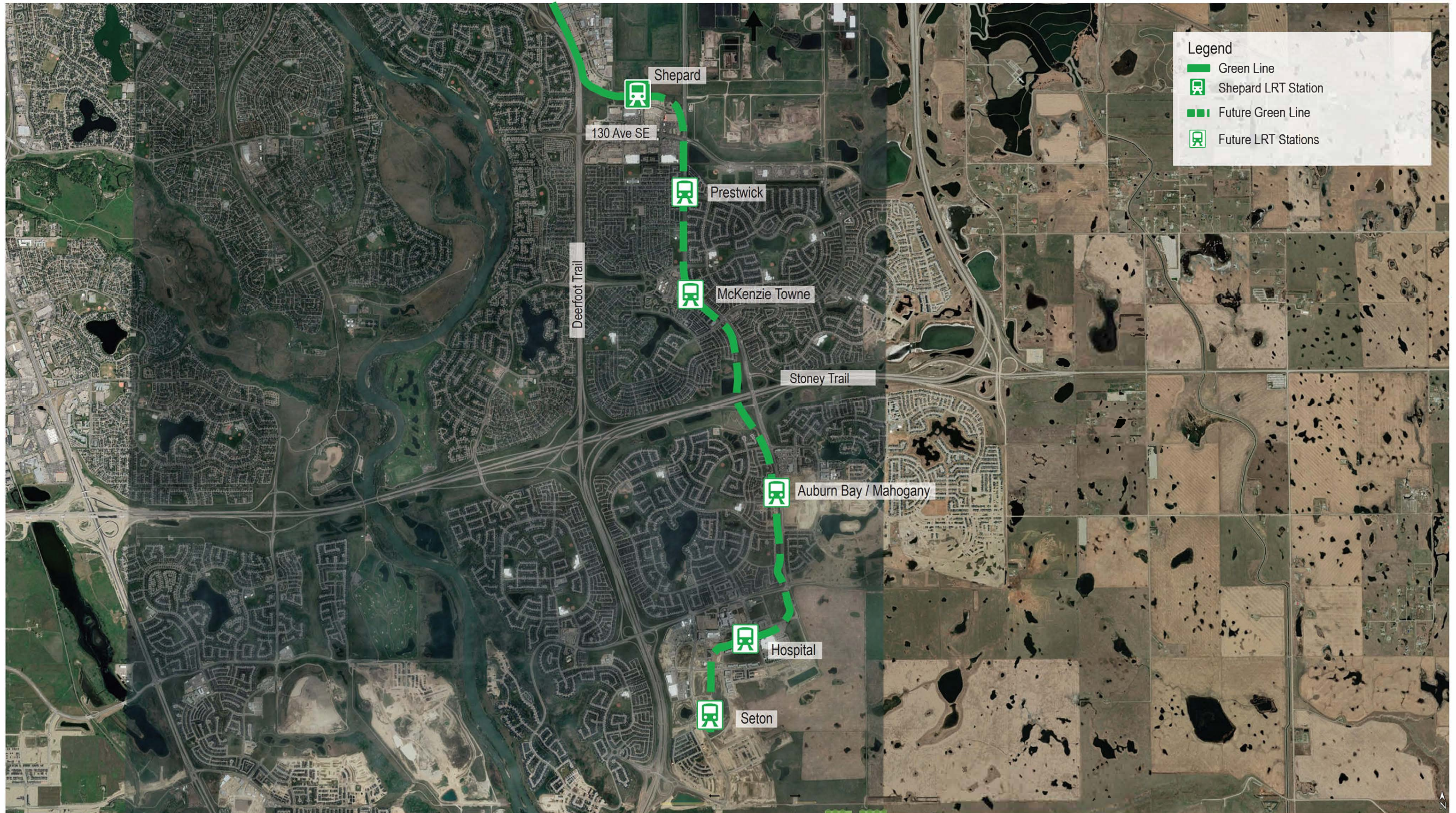
ATTACHMENT "A"



Green Line LRT Options North from City Hall Central Transit Hub



Green Line LRT South Extension



Southwest Ground View

ATTACHMENT "D"

