

REGULAR COUNCIL

TO: Mayor & Council **DATE: December 14, 2017**

FROM: General Manager, Engineering **FILE: 1717-071/11**

SUBJECT: Award of Contract No. 1717-071-11
Bear Creek Bridge Replacement

RECOMMENDATION

The Engineering Department recommends that Council:

1. Award Contract No. 1717-071-11 to WestPro, A Division of Pomerleau Inc., in the amount of \$5,029,447.90, including GST, for the Bear Creek Bridge Replacement Project;
2. Set the expenditure authorization limit for Contract No. 1717-071-11 at \$5,532,400.00, including GST and contingency; and
3. Authorize the General Manager, Engineering to execute Contract No. 1717-071-11.

SCOPE OF WORK

As part of the Surrey-Newton-Guildford Light Rail Transit (“SNG-LRT”) Early Work program, this contract consists of the replacement of the existing timber trestle bridge spanning Bear Creek that was built in the 1930s. The existing bridge is too narrow to accommodate the proposed SNG-LRT corridor, cannot carry the anticipated loading of LRT, and does not meet current seismic standards. As a result, replacement of the existing bridge is required to accommodate the planned LRT system. The location of the bridge is illustrated on the map attached to this report as Appendix “I”. Photos of the existing timber trestle bridge are provided in Appendix “II”.

The contract work is expected to start on January 8, 2018 and be completed by November 30, 2018. During construction, northbound and southbound movements will be maintained for vehicles and pedestrians on King George Boulevard. As well, access to businesses and residents will be maintained during construction.

BACKGROUND

Construction of the Bear Creek Bridge Replacement is included as part of the SNG-LRT Early Work Program. While TransLink is delivering the SNG-LRT project, the City is supporting the project by delivering components of the Early Work Program, specifically the replacement of key City infrastructure given the City’s experience in delivering similar municipal infrastructure projects. Completion of this work in advance of construction of the SNG-LRT will reduce key project risk elements which will facilitate the successful delivery of the SNG-LRT project.

TENDER RESULTS

Tenders for the subject contract were opened on December 7, 2017 with the following results:

<i>Contractor</i>	<i>Tendered Amount with GST</i>	<i>Corrected Amount</i>
1. WestPro, A Division of Pomerleau Inc.	\$5,029,447.90	No Change
2. Jacob Bros. Construction Inc.	\$5,676,615.00	No Change
3. Tybo Contracting Ltd.	\$6,155,915.00	\$6,168,533.70
4. Lafarge Canada Inc.	\$6,482,882.70	No Change
5. HRC Construction (2012) Inc.	\$6,540,014.00	No Change
6. Eurovia British Columbia Inc.	\$6,701,792.49	No Change
7. Gateway Infrastructure Group GP, per Kingston	\$6,923,895.30	No Change
8. Surespan Construction Ltd.	\$6,953,641.83	No Change
9. Jack Cewe Ltd.	\$8,336,260.80	\$8,339,515.80

The Engineer's (McElhanney Consulting Services Ltd.) pre-tender estimate was \$6,102,135, including GST. A City consultant has reviewed the submissions in detail and has confirmed with WestPro, A Division of Pomerleau Inc., that they can complete the project within budget.

EVALUATION

The City's consultant reviewed the tender submissions for accuracy and completeness. There were two minor arithmetic errors that had no bearing on the outcome of the tender process. All submissions included the required 10% bid bond, were signed on the Tender Form, and were initialed on the Summary Sheet of the Schedule of Quantities and Prices.

The lowest tender, WestPro, A Division of Pomerleau Inc., has provided a Consent of Surety for a Performance Bond and a Labour & Materials Bond. WestPro, A Division of Pomerleau Inc., has direct comparable work experience, which was confirmed from reference checks, and represents the best value for the City. They have no outstanding legal claims against the City. It is recommended that WestPro, A Division of Pomerleau Inc., be awarded Contract No. 1717-071-11.

SUSTAINABILITY CONSIDERATIONS

The approval of this contract supports the objectives of the City's Sustainability Charter. In particular, this work relates to the Sustainability Charter themes of Built Environment and Neighbourhoods, Infrastructure, and Ecosystems. Specifically, these agreements support the following Desired Outcomes and Strategic Direction:

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active all-ages-and-abilities transportation infrastructure;
- All Infrastructure SD1: Proactively manage community assets to maintain them over the long-term in a state of good repair; and
- Natural Areas, Biodiversity and Urban Forest DO2: Surrey actively protects, enhances and restores its natural environment and habitats.

FUNDING

This project is being funded through the Public Transit Infrastructure Fund program. TransLink will reimburse the City the cost of the project based on the funding agreement that was approved by Council at its Regular meeting of July 24, 2017, as part of Corporate Report No. R157; 2017, attached as Appendix "III".

Fraser Smith, P.Eng., MBA
General Manager, Engineering

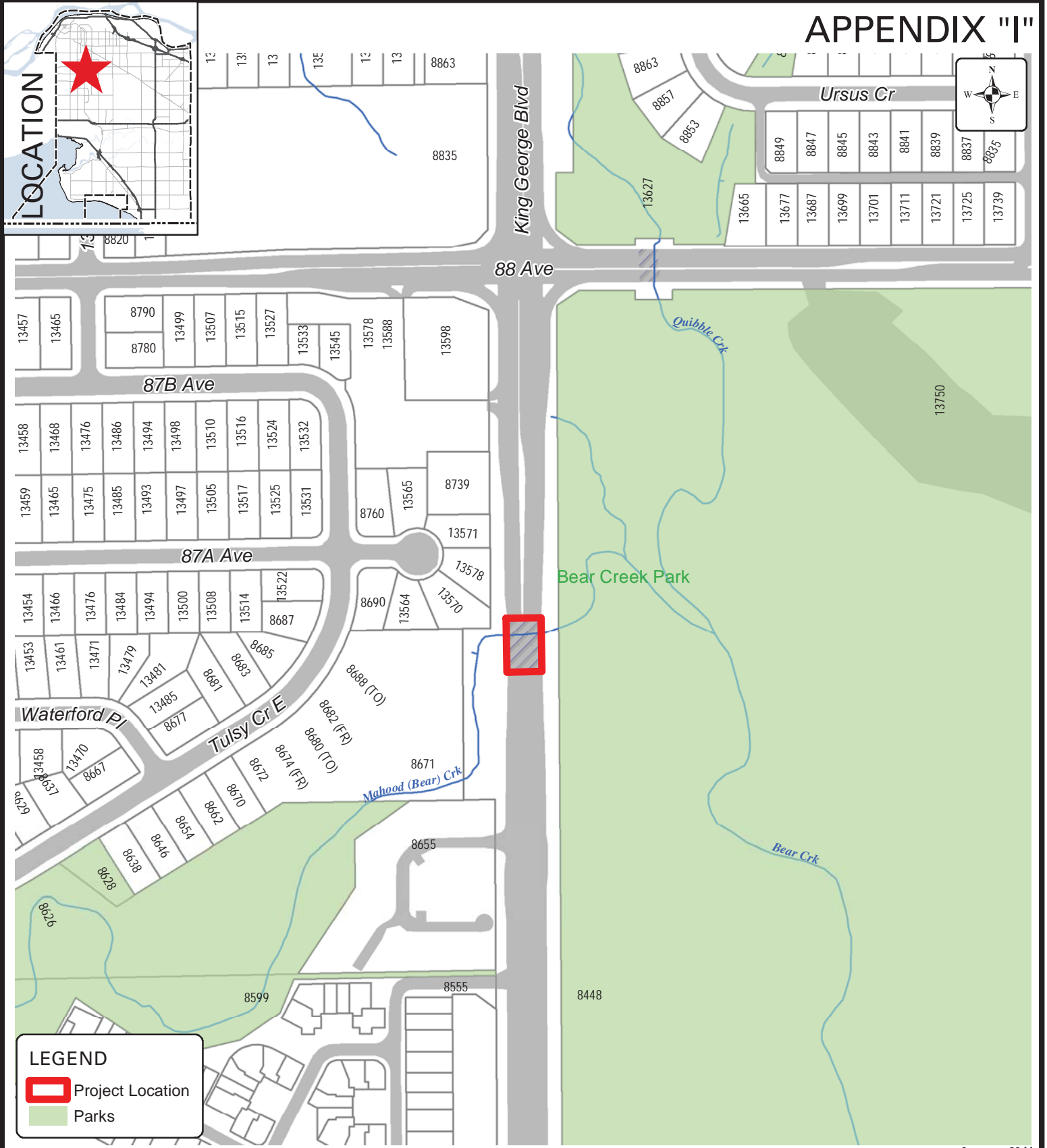
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Appendix "I" – Project Location – Contract No. 1717-071-11

Appendix "II" – Photos of the Existing Timber Trestle Bridge

Appendix "III" – Corporate Report No. R157; 2017

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Contract No. 1717-071-11
 Bear Creek Bridge Replacement
 (SNG - LRT Early Work)

ENGINEERING
 DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.

APPENDIX "II"

Photos of the Existing Timber Trestle Bridge





NO: R157

COUNCIL DATE: July 24, 2017

REGULAR COUNCIL

TO: Mayor & Council

DATE: July 19, 2017

FROM: General Manager, Engineering

FILE: 8740-01

**SUBJECT: Surrey Newton Guildford Light Rail Transit
Early Work Agreements**

RECOMMENDATION

1. That Council approve entering into the two Early Works Agreements with TransLink, for the advancement of the Surrey-Newton-Guildford Light Rail Transit (“SNG-LRT”) project; and
2. That the Mayor and City Clerk be authorized to execute the Early Work Agreements.

INTENT

The purpose of this report is to present the content of the Early Work Agreements for the SNG-LRT project, as developed by TransLink and City of Surrey staff, and to recommend that Council approve the Agreements.

BACKGROUND

In June 2016, TransLink as part of the South of Fraser Rapid Transit project secured funding under the Public Transit Infrastructure Fund (“PTIF”) program, allowing continued planning, consultation and preparatory works on the SNG-LRT project. This funding has been allocated in Phase 1 of TransLink’s 10-Year Investment Plan, and is attributed to all three levels of government: the Federal and Provincial announcements in June 2016; and TransLink’s approval of funds in November of last year.

There is approximately \$58 million in funding designated to specific “Early Works” projects, which include: transit exchanges in Guildford and Newton; relocation of City water main and storm sewer utilities on 104 Avenue; replacement of the Bear Creek Bridge on King George Boulevard south of 88 Avenue; and raising BC Hydro transmission powerlines on both 104 Avenue and King George Boulevard. Completion of the Early Works will streamline the overall construction schedule of the main SNG LRT works after procurement in 2018.

While funding for the Early Works is provided by TransLink, delivery of the Early Works projects is shared between TransLink and the City. The City is responsible for the 104 Avenue utility relocations, the Bear Creek Bridge and coordination with BC Hydro on their transmission powerline relocations. The Early Works projects to be delivered by the City are listed in the following table and also illustrated on the map attached to this report as Appendix “I”.

Map Reference Number	Project #	Project Description	Location
1	1217-503	2,700 lin.m. of Feeder Water Main Relocation	104 Avenue: City Parkway to 144 Street
2	4817-303	600 lin.m. of Trunk Storm Sewer Relocation	105 Avenue: 148 Street to 150 Street 148 Street: 104 Avenue to 105 Avenue
3	1717-309	Bear Creek Bridge Replacement	King George Boulevard at Bear Creek
4	1717-804	BC Hydro Transmission Relocation/Raising	104 Avenue and 140 Street
5	1717-804	BC Hydro Transmission Relocation/Raising	King George Boulevard and 92 Avenue
6	1717-804	BC Hydro Transmission Relocation/Raising	King George Boulevard and 84 Avenue

The feeder water main and trunk storm sewer relocation involves the relocation of a large diameter water main and trunk storm sewer which services both the City Centre and Guildford communities. These utilities are located on 104 Avenue and are in conflict with the planned center running SNG-LRT track corridor alignment, thus requiring relocation. The feeder water main will be relocated off of 104 Avenue, and staff are currently evaluating alternative alignments for this relocation. The trunk sewer will be relocated on 105 Avenue near Guildford Mall within existing roads.

The Bear Creek Bridge is an existing timber trestle bridge spanning Bear Creek and was built in the 1930's. The existing bridge is too narrow to accommodate the proposed SNG-LRT corridor, nor can it support the anticipated loading of LRT. As a result, replacement and upgrading to current seismic standards is required to accommodate the planned LRT system.

BC Hydro transmission infrastructure crosses the planned SNG-LRT alignment at three locations. With the high voltages contained in the BC Hydro transmission infrastructure, adequate clearances must be achieved between the BC Hydro transmission infrastructure and LRT power supply system to prevent interference between the two power supplies.

These projects were identified as Early Works projects, given the critical and complex nature of infrastructure work required. Completion of this work in advance will reduce key project risk elements which will facilitate the successful delivery of the SNG-LRT project. The value of the Early Works projects is estimated at \$20.3 million (excluding the BC Hydro transmission work). As a condition of the PTIF program, this work must be completed prior to March 31, 2019 in order to remain eligible for PTIF program funding and to ensure timely delivery of the SNG-LRT project. The value of the BC Hydro transmission work will be established once BC Hydro has finalized their compatibility review of the two power supply systems.

DISCUSSION

Subject to Council's approval, the City has agreed to partner with TransLink in the delivery of the Early Works projects, given the City's experience in delivering similar municipal infrastructure projects, and as these projects primarily require the relocation and replacement of City assets. As well, the City supports delivering the Early Works projects as it will allow the City to ensure the

infrastructure work is completed in accordance with City standards along with the objectives of the SNG-LRT project.

The Early Works Agreements are two-way agreements between the City and TransLink. These agreements establish the respective obligations and responsibilities of the City and TransLink to complete the Early Works projects in accordance with the PTIF program. The two Early Works agreements have been prepared, one for Early Works projects requiring the relocation and replacement of City assets, and the other for the BC Hydro transmission work. Provisions in the agreements have been established based on the principles in the following two paragraphs:

104 Avenue Utility Relocations and Bear Creek Bridge Replacement Agreement

This agreement encompasses the relocation of the feeder water main and trunk storm sewer, and replacement of the Bear Creek Bridge to support the SNG-LRT project. The agreement is structured similar to other infrastructure funding agreements between the City and TransLink, which places the risk of any cost overruns to the City. Although this agreement may have financial-implications to the City, staff have reviewed the budget allowances provided for these Early Works projects and it is anticipated the projects can be delivered within the Early Works budget established in the amount of \$20.3 million.

BC Hydro Transmission Work Agreement

This agreement encompasses BC Hydro transmission work that is required to support the SNG-LRT project. Based on the City's past experience, work completed by BC Hydro comes with significant risk for cost overruns. In an effort to minimize this risk, the agreement has been structured to allow the budget for this work to be established based on BC Hydro's final cost estimate for the work, rather than establishing a budget for the work based on preliminary estimates. Once a final cost estimate has been provided, TransLink and the City will have the opportunity to review the BC Hydro cost estimate. Should the estimate appear reasonable to both TransLink and the City, the agreement will be amended to include the final cost estimate as the project budget. Should any cost overruns occur once the final cost estimate is agreed upon, TransLink and Surrey will share the risk. In the event the final cost estimate is not supported by TransLink or the City, the agreement will be terminated. Although the agreement is structured with potential financial implications to the City, the risk will be managed during review of the BC Hydro final cost estimate.

The Early Works Agreements have been reviewed by the Engineering Department and the City Solicitor. This review has found the agreements to be acceptable to the City in its terms and scope of commitments it includes.

SUSTAINABILITY CONSIDERATIONS

The approval of the Early Works Agreements supports the objectives of the City's Sustainability Charter. In particular, this work relates to the Sustainability Charter themes of Built Environment and Neighbourhoods, and Infrastructure. Specifically, these agreements support the following Desired Outcomes:

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active all-ages-and-abilities transportation infrastructure; and

- Transportation DOI: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

CONCLUSION

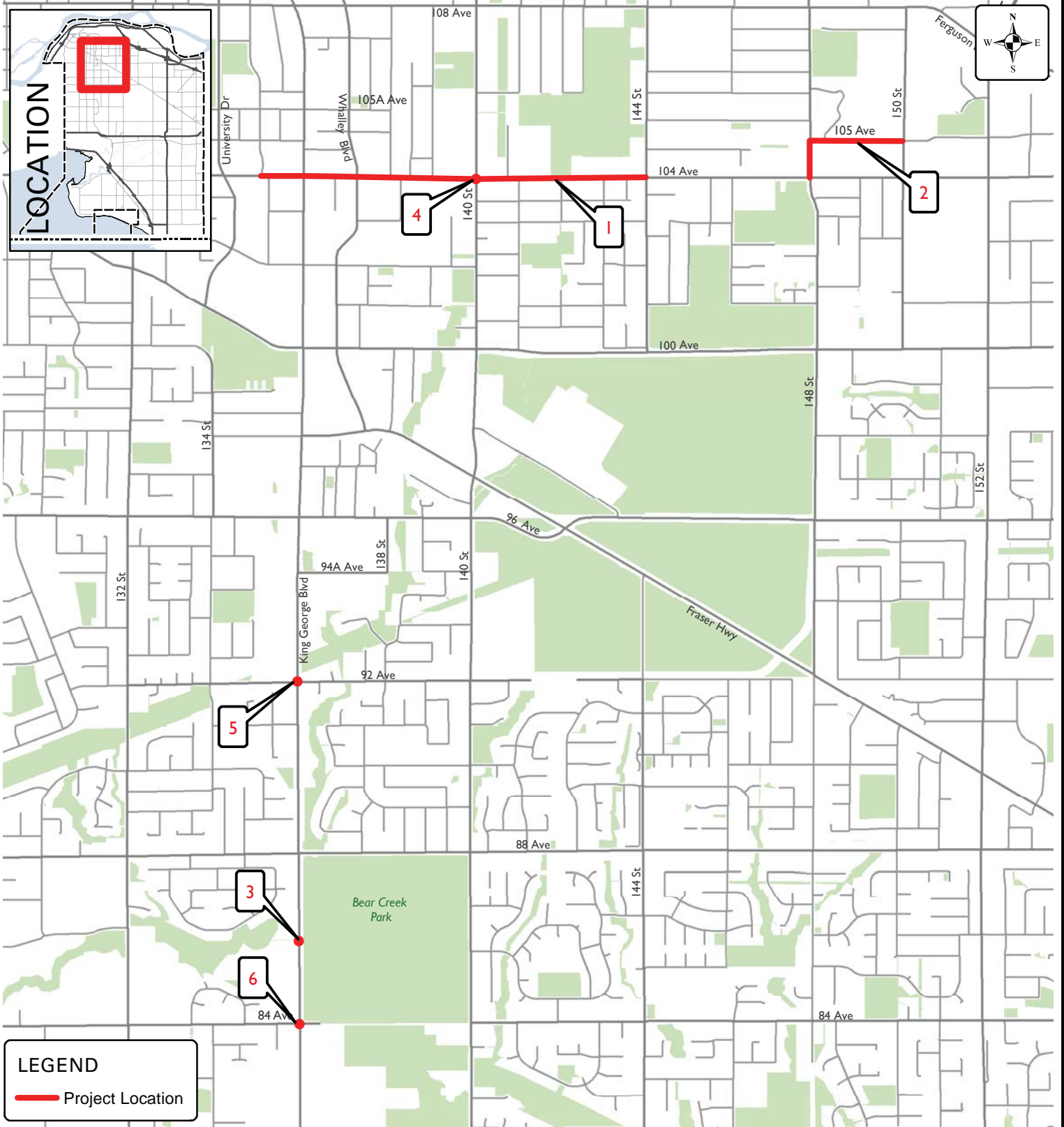
Based on the above discussion, it is recommended that Council approve entering into the two Early Works Agreements. Funding for the 104 Avenue Utility Relocations and Bear Creek Bridge Replacement Agreement Early Works agreement in the amount of \$20.3 million is committed as part of the PTIF program for the Early Works Agreements, with the funding for the BC Hydro Transmission Work being established once a final cost estimate is provided by BC Hydro.

Fraser Smith, P.Eng., MBA
General Manager, Engineering

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Appendix "I" – SNG-LRT "Early Works" Project Locations

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SNG LRT "Early Works"

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