

CORPORATE REPORT

NO: R165

COUNCIL DATE: September 16, 2019

REGULAR COUNCIL

TO:	Mayor & Council	DATE:	September 12, 2019	
FROM:	Acting General Manager, Engineering	FILE:	0500-20 (Pattullo)	
SUBJECT:	Pattullo Bridge Replacement Municipal Agreement and Memorandum of Understanding			

RECOMMENDATION

The Engineering Department recommends that Council:

- 1. Receive this report for information;
- 2. Approve the Municipal Agreement with the Her Majesty the Queen in Right of the Province of British Columbia (the "Province") for the Pattullo Bridge Replacement Project, which is attached as Appendix "I";
- 3. Approve the Memorandum of Understanding with the Province regarding road resumption and land development approvals, as a result of the road resumption triggered by the Pattullo Bridge Replacement Project, which is attached as Appendix "II";
- 4. Authorize the Mayor and City Clerk to execute the finalized Municipal Agreement and Memorandum of Understanding provided they are substantially the same as those included in Appendix "I" and Appendix "II", respectively; and
- 5. Authorize the payment of \$850,000 to the Province for the City's portion of the cost to construct a planned City water main on Bridge Road between Old Yale Road to 112 Avenue.

INTENT

The purpose of this report is to provide background information regarding the Pattullo Bridge Replacement Project (the "Project") and seek Council's approval to execute the Project Municipal Agreement (the "MA") and the associated Memorandum of Understanding (the "MOU"). The report outlines the key aspects of both agreements and seeks Council's approval to execute them.

BACKGROUND

The Pattullo Bridge (the "Bridge") is one of the oldest bridges in Metro Vancouver and was opened in 1937. In 1999, it became a regional facility under the jurisdiction of TransLink and is a key element of the regional Major Road Network. It fulfills a critical regional function by providing access and linkage for general purpose traffic and goods movement across the Fraser River.

The Bridge is 82 years old and well past its design life with many significant issues, such as seismic vulnerability, pier scouring, sub-standard design that reduces road safety, and significant capacity constraints. In 2008, TransLink began planning work to replace the Bridge with a new six-lane structure, but this work was halted in 2012. Subsequently, through the development of the Mayors' Council Regional Transportation Investments Vision in 2014, the Bridge replacement was identified as a key element of more than \$7.5 billion in new capital infrastructure for the region.

The Mayors' Council concluded that the new Bridge should be constructed with four vehicular lanes but be able to be widened to six lanes in the future. Agreement to this approach was based on the provision of full direct connections between the Bridge and Highway 17, widening to six lanes upon reaching a predetermined threshold, and tolling, which would fund the construction and moderate traffic demand.

In May 2017, the newly elected Provincial government committed to the elimination of tolls within BC, and subsequently agreed to fund, deliver and own the replacement bridge. City staff have been working with the Province on the scope of the Project, roles and responsibilities of the City and Province with respect to construction of the Project, including impacted municipal roads and utilities, and handover of City assets once construction is complete.

DISCUSSION

The City and the Province have been working collaboratively over the past two years on negotiating a Municipal Access Agreement for the Project. The following sections of the report focus on the key elements within the Project Agreement.

Scope of Work

The Project includes the following features, as generally illustrated in Appendix "III":

- Four vehicle lanes plus two lanes reserved for pedestrians and cyclists on opening day. The pedestrian and cyclist lanes can be repurposed in the future to enable six lanes of vehicular traffic with pathways cantilevered on both sides of the Bridge to carry pedestrians and cyclists. The replacement Bridge will be located approximately 100 metres upstream of the existing Bridge;
- Reconstruction and completion of the City's 112 Avenue, west of 124 Street, to accommodate the new King George Boulevard approach to the Bridge;
- A new off-ramp connecting southbound Bridge traffic to Highway 17 westbound;
- Minor upgrades to the intersection of King George Boulevard and Bridgeview Drive;
- A new overpass of Highway 17 over Old Yale Road, which was originally planned as part of the Highway 17 construction project in the early 2010's but was deferred. The overpass replaces the existing signalized intersection and fully disconnects Highway 17 from Old Yale Road. Heritage features and public art will also be integrated into the overpass;
- The widening of the City's Bridge Road between Old Yale Road and Industrial Avenue, including upgrading the existing Southern Railway at-grade crossing;
- Improved connections, facilities and access for cyclists and pedestrians within the Bridgeview and South Westminster areas; and
- Installation of a new City feeder water main on Bridge Road from Old Yale Road to 112 Avenue (funded by the City).

Future Expansion of the New Bridge to Six Lanes

The City has always maintained that, based on traffic demand, operational efficiency, planned connectivity, and road safety, a six-lane Bridge is necessary on opening day. However, based on the direction of the Mayors' Council and budget considerations, the new Bridge will have four vehicular lanes on opening day, but will be designed and constructed such that it can be modified to accommodate six vehicular lanes in the future.

As part of the consideration to only proceed with four lanes at this time, there was awareness that removal of the tolls on the Port Mann Bridge has impacted short-term traffic patterns, but long-term implications need to be further assessed, including identifying the trigger and timing needed as to when the Bridge should be opened to six vehicular lanes.

The Province is committing in the MA to monitor the performance of the Bridge against criteria to be established by TransLink, in partnership with the Province and municipalities, and endorsed by the Mayors' Council. Furthermore, the Province will consult with the City of Surrey, the City of New Westminster and the Mayors' Council to develop appropriate responses to performance based on regional transportation planning and the endorsed criteria. One of the potential responses will be opening the Bridge to six vehicular lanes.

Surrey Road Connections Between the New Pattullo Bridge and Highway 17

The original scope of work for the Bridge replacement included new Scott Road interchanges at King George Boulevard and at Highway 17, and an interchange on Highway 17 at Bridgeview Drive. These direct connections, as illustrated on the attached Appendix "III", between the Bridge, Highway 17 and City arterial roads would improve regional road connectivity and minimize the impacts of traffic volume and queuing on residents and businesses in the Bridgeview area.

As the Provincial decision to remove the connections from the Project did not address the City's concern regarding queuing from the four-lane Bridge and impact to residents and businesses in the Bridgeview area, the Province agreed to work with TransLink and the City to evaluate the best option for connectivity between Highway 17 and the new Bridge by contemplating the first phase of the North Surrey Road Connections Study. Findings from this study (2019) concluded that the previously planned connections (the Scott Road Interchanges Option) provide significant travel time savings in conjunction with a six-lane bridge. Provincial and City staff support these conclusions. As such, the Province has committed in the MA to include the connections with any future six-lane Pattullo Bridge project to be submitted to the Minister of Transportation and Infrastructure.

Road Resumption

Although the planned connections have been removed from the scope of the Project, the Province still requires assurance of a strong connection between their two facilities, the new Bridge and Highway 17. This has resulted in the Province planning to resume (take ownership and responsibility for) King George Boulevard from the new Bridge to Bridgeview Drive and Bridgeview Drive from King George Boulevard to Highway 17.

With the Province taking ownership of these roads, Surrey staff identified three areas of concern:

- Provincial requirements related to development in proximity to arterial highways;
- City rights with respect to existing and planned City utilities within the roadways; and
- City rights with respect to the existing digital media sign on King George Boulevard.

Ministry of Transportation and Infrastructure Requirements with Development

In taking ownership of these roads, the Province has legislative authority with respect to any road or driveway access to these routes. It also provides them the authority to impose requirements on rezoning applications and building permits for commercial or industrial buildings over 4,500 m² that are within an 800-metre radius of any intersections along these roads.

The Province has indicated that they are supportive of the City's goal of achieving higher density, transit-oriented development for the South Westminster area around the Scott Road SkyTrain Station. Through the MOU included as Appendix "II", the Province has agreed to work collaboratively with the City on updating the land use and road network plan for the area to ensure there is a clear and efficient process for future development.

City Utilities

The Province grants permits that allow municipalities to have utilities within Provincial highways. The City has a number of existing utilities within King George Boulevard and Bridgeview Drive, as well as plans for some future utilities. The City and the Province have negotiated reasonable terms and conditions that can be imposed on utility permits, which will provide the City with continued access for operating, maintaining, repairing, replacing and extending of municipal utilities in these roads. These subject terms and conditions for the utility permits are included as a Schedule to the MA attached as Appendix "I".

Digital Media Sign

In the landscaped area between the eastbound and westbound travel lanes of the 12400 Block of King George Boulevard, the City has a digital media sign under contract with Pattison Outdoor Ltd. until December 31, 2030. This sign provides important revenue to the City and allows the City to display important messages for its residents. As such, it is important that the City preserves its rights to retain this sign indefinitely.

The Province has agreed that the area with the sign can be converted to a City fee simple lot, such that the City can continue to operate a digital sign at this location even though it is within the planned road resumption area. The City will be proceeding with this process, and language is included within the MA to reflect the agreement to this approach. It is important to note that a road safety assessment has been completed that demonstrated that the sign does not create any collision issues.

Bridge Road Water Main

The construction of a 450mm feeder water main within Bridge Road from Old Yale Road to 112 Avenue is identified in the Engineering Department's 10-Year Servicing Plan. As much of this segment of Bridge Road will be reconstructed by the Project, in the MA the Province has agreed to include the construction of the City's water main as part of the Project, at the City's expense. Funding for the City's portion is an agreed upon lump sum of \$850,000 which is a reasonable cost reflective of competitive construction pricing and available within the City's 2019 Water Development Cost Charge Capital Program.

This is consistent with the City's coordinated works approach taken in the past for other planned City infrastructure in the vicinity of major Provincial projects and development applications.

In addition to the above-noted items, the MA also outlines:

- Which City lands the Province may use on a temporary or permanent basis for construction, with compensation owed to the City;
- Maintenance responsibilities during construction of City transportation and utility infrastructure in the area, including the Fraser River dykes;
- The process for design review, approvals and handover of City infrastructure that the Province will construct or modify;
- The approach for traffic management during construction;
- The City's desire to improve public access to and connectivity along the riverfront, including under the new Bridge; and
- Issues of liability, insurance, warranty and indemnity between the City and Province.

Public Communications

To support the Project, the Province will be undertaking a comprehensive construction communications and public engagement program with two key goals:

- Keeping residents, businesses, the travelling public, and other stakeholders informed of Project plans and progress; and
- To receive and respond to questions and concerns raised by the public throughout the life of the Project.

The communications plan will include a number of channels to provide information and receive feedback, including meeting with business and community associations, hand-delivered notices and door-to-door visits, phone and email lines, website, social media, newspaper advertisements, mail, and signage. The Province's communications staff will meet regularly with City staff to facilitate the sharing of information, develop and amend the communications strategy.

Timeline

The current Project timelines, based on the MA and MOU being signed by September 30, 2019, are:

- Request for Proposals: Closing September/October 2019
- Contract award: Anticipated December 2019 to February 2020
- Construction start: Anticipated Spring 2021
- Bridge opening: 2023
- Existing bridge demolition: 2023-2024

Legal Services Review

The contents of this report, the MA, and the MOU have been reviewed by the Legal Services Division and they have no concerns.

SUSTAINABILITY CONSIDERATIONS

The replacement of the Pattullo Bridge supports the City's Sustainability Charter 2.0. In particular, the Bridge replacement relates to the Sustainability Charter 2.0 themes of Infrastructure, Economic Prosperity and Livelihoods, and Health and Wellness. Specifically, the Project supports the following Strategic Direction ("SD") and Desired Outcomes ("DO"):

- Transportation DO11: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations;
- Transportation DO14: Goods movement throughout the city is efficient and minimizes environmental and community impacts;
- Economy SD4: Collaborate with senior levels of government and TransLink to reduce congestion along strategic goods and people movement corridors;
- Economy DO6: Efficient land use and well-managed transportation infrastructure are in place to attract businesses and support a thriving economy; and
- Wellness and Recreation DO9: Pedestrian and cycling infrastructure promotes walking and cycling for travel to work, school, services and recreation.

FUNDING

Funding for the City's portion of the cost to construct the water main on Bridge Road is available in the approved 2019 Water Budget.

CONCLUSION

The replacement of the Pattullo Bridge is necessary as the Bridge is past its design life and has other significant issues, such as seismic vulnerability, pier scouring, sub-standard design that reduces road safety, and capacity constraints. It is recommended that Mayor and Council approve the MA and MOU with the Province and authorize the Mayor and City Clerk to execute the MA and MOU in order to move forward with the construction of the Project.

Scott Neuman, P.Eng. Acting General Manager, Engineering

JB/SBN/KT/cc

Appendix "I" -Pattullo Bridge Replacement Project Municipal AgreementAppendix "II" -Memorandum of Understanding - Road ResumptionAppendix "III" -Pattullo Bridge Replacement Scope of Work Drawing

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PATTULLO BRIDGE REPLACEMENT PROJECT

MUNICIPAL AGREEMENT

BETWEEN

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA as represented by the MINISTER OF TRANSPORTATION AND INFRASTRUCTURE

AND

CITY OF SURREY

SEPTEMBER 16, 2019

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PATTULLO BRIDGE REPLACEMENT PROJECT MUNICIPAL AGREEMENT

This Agreement, dated for reference September 16, 2019, (the "Reference Date")

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, as represented by the MINISTER OF TRANSPORTATION AND INFRASTRUCTURE

(the "**Province**")

AND:

CITY OF SURREY

(the "City")

WITNESSES THAT WHEREAS:

A. The Province intends to replace the existing Pattullo Bridge with a new bridge across the Fraser River to connect New Westminster and Surrey;

B. The Province's Business Case in respect of the Project sets out the following objectives for the Project:

- (i) Provide a river crossing for all modes that is structurally sound and meets current standards for withstanding seismic and ship impacts;
- (ii) Support local and regional land use plans and economic development;
- (iii) Provide reliable access and predictable travel times for all modes;
- (iv) Minimize single-occupancy vehicle use and vehicle kilometers travelled;
- (v) Move toward the regional goal that by 2040, half of all trips will be by walking, cycling or transit;
- (vi) Minimize emissions of greenhouse gases and pollutants;
- (vii) Minimize impacts to the natural environment; and
- (viii) Support neighbourhood livability by minimizing and mitigating impacts including during construction;

C. The Province acknowledges that significant parts of the Project Infrastructure will be located in Surrey and that the performance of the work contemplated by the Project

Scope of Work will potentially affect the inhabitants of Surrey and certain aspects of the City's operations and certain parts of its infrastructure;

D. The Province is committed to following all applicable provincial and federal legislation, and to communicating, engaging and cooperating with the City, in connection with the design, building and financing of the Project Infrastructure and the demolition of the existing Pattullo Bridge;

- E. In particular, the Province and the City acknowledge that:
 - portions of the South Approach Infrastructure will be built, and portions of the existing Pattullo Bridge will be demolished, within areas in proximity to certain City Infrastructure and City Utilities which the City will need to maintain and operate during the performance of the Project Work and, accordingly, the Province and the City will work together to provide access to the City to accommodate such need;
 - (ii) the New Fraser River Bridge will be designed and built:
 - (a) as a multi-modal bridge with four (4) vehicle lanes and two (2) pedestrian/cycle lanes; and
 - (b) so as not to foreclose consideration of potential future expansion to six (6) vehicle lanes and two (2) pedestrian/cycle lanes, recognizing that any such expansion would be effected only after consultation among the Province, the City, the City of New Westminster and the Mayor's Council on Regional Transportation;
 - (iii) once the New Fraser River Bridge is operational, the Province will, on an ongoing basis, monitor its performance in relation to criteria established in a transportation demand management framework developed by TransLink, in partnership with the Province, municipalities, and endorsed by the Mayors' Council. The Province will consult with the City of New Westminster, the City of Surrey and the Mayor's' Council on Regional Transportation to develop an appropriate response to the performance based on regional transportation planning and the transportation demand management framework;
 - (iv) through the "North Surrey Network Connections Planning Study" the Province and the City, in conjunction with South Coast British Columbia Transportation Authority ("TransLink"), have identified a preferred option for the connection of the South Approach Infrastructure to the regional road network in Surrey, including Highway 17 as substantially shown in Schedule K [Scott Road Interchanges Option Conceptual Plan] ("the "Scott Road Interchanges Option");
 - (v) the Scott Road Interchanges Option includes an extension of Scott Road to Highway 17, interchanges at both King George Boulevard and Highway

17 and consideration of the need for an overpass and/or interchange at Bridgeview Drive and Highway 17;

- (vi) the Province commits to assessing the operational benefits of implementing the Scott Road Interchanges Option in relation to the transportation demand management framework referred to in Recital E(iii), which would include a cost/benefit report to be submitted to the Minister of Transportation and Infrastructure within three (3) years of opening the New Fraser River Bridge; and
- (vii) if potential future six (6) lane expansion of the New Fraser River Bridge is determined as an appropriate response through the process referred to in Recital E(iii), the Province commits to including the Scott Road Interchanges Option as part of that solution in the applicable cost/benefit report to be submitted to the Minister of Transportation and Infrastructure;

F. The Province and the City are entering into this Agreement in respect of these and other matters pertaining to the design and building of the Project Infrastructure, and the demolition of the existing Pattullo Bridge, by the Province (through its contractor(s)), all as more particularly set forth herein;

NOW THEREFORE, in consideration of their mutual promises and other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto), the City and the Province hereby agree, each with the other, as follows:

1. **DEFINED TERMS**

In this Agreement, including the recitals hereto, the following definitions apply:

"Access Longstop Date" has the meaning set out in Section 5.7.

"Additional City Lands" means any City Lands which are added to or substituted for any part of the Project-Required City Lands pursuant to Section 5.2 but, for greater certainty, excludes any Purchased Lands;

"Additional Project-Required City Fee Simple Lands" means any City Fee Simple Lands (excluding, for certainty, the Project-Required City Fee Simple Lands) which become Purchased Lands pursuant to Section 5.3;

"**Agreement**" means this "Pattullo Bridge Replacement Project Municipal Agreement", including all of the Schedules referenced and identified in Section 19.1 of this Agreement, all as the same may be amended, modified or restated from time to time by written agreement between the parties hereto;

"Business Case" means the document published by the Province, dated January, 2018 and entitled "Pattullo Bridge Replacement Project Business Case";

"**Business Day**" means any day which is not a Saturday, Sunday or statutory holiday in the Province of British Columbia;

"**Chief Administrative Officer**" means the person holding that position in the City, or any successive position or title of this nature, or his or her designate;

"City" means the City of Surrey;

"**City Enhancements**" means, together, the City Infrastructure Enhancements and the City Utilities Enhancements;

"**City Fee Simple Lands**" means the lands (including lands covered by water) of which the City is the registered owner in fee simple in the Land Title Office;

"City Indemnified Parties" has the meaning set out in Section 14.1;

"City Infrastructure" means the infrastructure and systems, fixtures and facilities which are constructed, maintained and operated by or on behalf of the City, including City Roads (other than Project-Required City Roads), pavement, sidewalks, pathways, bus stops, benches, boulevards, trees, landscaping, curbs, gutters, catch basins, street lighting (including bases, poles and fixtures), traffic signs, and additions thereto or widenings, relocations or extensions thereof, but not including City Utilities or the Dikes;

"**City Infrastructure Enhancements**" means any new works, infrastructure or upgrade of any existing City Infrastructure, as expressly requested by the City to the Province and that is or are:

- (i) outside the Project Scope of Work or as otherwise expressly agreed to under this Agreement; or
- (ii) of a quality or standard above, beyond or additional to that required to achieve Like-for-Like restoration;

and are constructed by the Province for an agreed-upon price in advance;

"City Lands" means, together, the City Roads and City Fee Simple Lands;

"**City Representative**" means one or more senior representatives designated by written notice given by the City to the Province from time to time with at least one representative having full authority to represent and bind the City in connection with all matters pertaining to this Agreement;

"**City Roads**" includes roads, streets, highways, bridges, viaducts, lanes, pathways and sidewalks and any other ways normally open or reasonably capable of use by the public and which are owned or controlled by the City:

(i) including land dedicated or established as "road" on the records of the Land Title Office;

- (ii) including land over which the City has statutory rights-of-way expressly providing for public road, lane or access purposes;
- (iii) including titled lands which have been gazetted as road but have not been formally dedicated (by Section 115 of the *Land Title Act*, and Form 12 filing) according to Land Title Office records;
- (iv) excluding any Provincial highways or any other highways excluded pursuant to Section 35(2) of the *Community Charter* (British Columbia); and
- (v) excluding any City Roads that are Resumed Roads;

"**City Standards**" means, in case of conflict between any of the following, the standard as set out in the following order of precedence:

- the City's standards and requirements existing and applicable to City Utilities, Handover Facilities, City Infrastructure or City Enhancements, as the case may be, at the time of performance of the relevant work:
 - (A) as set out in the then-current editions of the following documents, as applicable:
 - (1) the City's Design Criteria Manual (available on the City's website at www.surrey.ca);
 - (2) the publication entitled "City of Surrey Supplementary Master Municipal Construction Documents – Supplementary General Conditions, Supplementary Specifications, and Supplementary Standard Drawings" (available on the City's website at www.surrey.ca);
 - the publication entitled "Master Municipal Construction Documents - Platinum Edition – General Conditions, Specifications and Standard Detail Drawings"; or
 - (B) to the extent a standard is not set out in the documents listed above, then in accordance with the City's relevant, thencurrent standard for similar works in Surrey;
- (ii) the standards, practices, methods and procedures consistent with a good professional and commercial standard, conforming to laws and exercising that degree of skill, care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances; and

(iii) the publication entitled "Drawing Standard Specifications, June 2017";

"City Utilities" means storm drainage systems, including catch basin leads, storm sewers, ditches, culverts, canals, drainage inlet structures, pump stations, sanitary, water and electrical infrastructure works (including the junction box, conduit and wires for street lighting, but excluding the bases, poles and fixtures for the street lighting), fibre facilities, traffic signal equipment, intelligent transportation systems equipment (including CCTV cameras, radios and sensors) and communications facilities, and works, which are constructed, maintained and operated by or on behalf of the City;

"City Utilities Enhancements" means any new works or upsizing or upgrading beyond the applicable City Standard (unless otherwise included within the Project Scope of Work) of any existing City Utilities, as expressly requested by the City to the Province, and that is or are:

- (i) outside the Project Scope of Work or as otherwise expressly agreed to under this Agreement; or
- (ii) of a quality or standard above, beyond or additional to that required to achieve Like-for-Like restoration;

and are constructed by the Province for an agreed upon price in advance;

"**City Utilities Work**" means the relocation, enlargement, extension, removal, replacement, repair, alteration, decommissioning, abandonment or connection to, any City Utilities, whether temporary or permanent;

"**Digital Sign**" means the digital advertising sign currently situated within the Project-Required City Roads at King George Boulevard, east of 124th Street, in Surrey, as more specifically described in Schedule H [Site of Digital Sign];

"**Dike**" means an embankment, wall, fill, piling, pump, gate, floodbox, pipe, sluice, culvert, canal, ditch, drain or any other thing that is constructed, assembled or installed to prevent the flooding of land and which is part of the system of dikes in Surrey generally shown on Schedule A [Project Scope of Work];

"**Dispute**" means any dispute between the City and the Province with respect to any Referable Matter or any other matter of disagreement between the City and the Province which either party states in writing is a "Dispute" to be resolved pursuant to the Dispute Resolution Procedure, but excludes any dispute between the City and the Province relating to the expropriation of land by the Province, which dispute shall be resolved in accordance with statute;

"**Dispute Resolution Procedure**" means the procedure for resolution of any Dispute set out in Section 16.1;

"Handover Facilities" means those parts of the South Approach Infrastructure and shown in Schedule D [Handover Facilities] which will be transferred to the City in accordance with Section 9.1;

"Highway 17/Old Yale Road Overpass" means the overpass of Highway 17 over Old Yale Road which is to be included as part of the Project Work;

"Land Title Office" means the Lower Mainland Land Title Office, or any other office, registry or authority in which or through which title to lands within Surrey may be registered or transferred;

"Like-for-Like" means, in relation to:

- (iii) any City Utilities which is or are being relocated, replaced or altered as part of the Project Work whether temporary or permanent, a standard for the relocation, replacement, or alteration pursuant to which the functionality, capacity and other service or operating features of such City Utilities are each equivalent to that which existed prior to the relocation, replacement, or alteration, provided always that design details, materials (including the quality thereof) and construction specifications for the relocated, replaced or altered City Utilities shall be consistent with the City Standards; and
- (iv) any City Infrastructure which is being relocated, replaced or altered as part of the Project Work, a standard for the relocation, replacement, or alteration pursuant to which the functionality, general appearance, as applicable, and other service or operating features of such City Infrastructure are each equivalent to that which existed prior to the relocation, replacement, or alteration, provided always that design details, materials (including the quality thereof) and construction specifications for the relocated, replaced or altered City Infrastructure shall be consistent with the City Standards;

"**New Fraser River Bridge**" means that portion of the Project Infrastructure, abutment to abutment, including abutments, foundations, fill, columns, tie backs and associated structural elements, that spans the Fraser River;

"**Non-Exclusive Occupation**" means the physical occupation by or on behalf of the Province of Project-Required City Lands where access and use of the Project-Required City Lands is shared with the City and/or third parties but may be controlled by the Province where necessary to ensure timely delivery of the Project;

"**Post-Construction Condition Surveys**" means post-construction condition surveys and assessments of the condition of City Infrastructure or City Utilities, including in respect of pavement quality on City Roads used for access to and egress from any of the South Approach Infrastructure (to a distance of one (1) km from such South Approach Infrastructure, or as otherwise agreed), conducted by a qualified professional engineer on behalf of the Province after completion of any Project Work affecting such City Infrastructure or City Utilities as contemplated in Section 7.2(b);

"**Pre-Construction Condition Surveys**" means pre-construction condition surveys and assessments of the condition of City Infrastructure or City Utilities, including in respect of pavement quality on City Roads used for access to and egress from any of the South Approach Infrastructure (to a distance of one (1) km from such South Approach Infrastructure, or as otherwise agreed), conducted by a qualified professional engineer on behalf of the Province prior to commencement of any Project Work affecting such City Infrastructure or City Utilities as contemplated in Section 7.2(b);

"**Pre-Existing Rights**" means any valid contractual or statutory rights in favour of any person, other than the City, to use all or any part of the Project-Required City Lands as at the Reference Date and which may affect all or any portion of such Project-Required City Lands following the Reference Date;

"**Pre-Existing Rights Holder**" means the owner, licensee, grantee or other beneficiary or holder of the benefit of any Pre-Existing Rights;

"**Pre-Existing Rights Holder's Works**" means any of the structures, buildings, poles, fixtures, fittings, equipment, machinery, cables, conduits, pipes, wires or other apparatus, improvements or works installed or owned by a Pre-Existing Rights Holder;

"**Project**" means the design, building and financing of the Project Infrastructure and the demolition of the existing Pattullo Bridge;

"**Project Agreement**" means an agreement to be entered into between the Province and its contractor, as such agreement may be amended, supplemented or replaced from time to time, for the design, building and financing of the Project Infrastructure;

"**Project Completion Date**" means the date on which Substantial Performance of the Project Work has been achieved;

"**Project Infrastructure**" means anything required, built, constructed, erected or installed as part of the Project Work and all other improvements, facilities, equipment or structures required to cross the Fraser River between New Westminster and Surrey including the New Fraser River Bridge and the South Approach Infrastructure;

"Project-Required City Fee Simple Lands" means the City Fee Simple Lands which are described in Schedule C [Project-Required City Fee Simple Lands] in respect of which access and Non-Exclusive Occupation and use is or may be required by the Province to facilitate activities required in connection with the construction of the South Approach Infrastructure or the New Fraser River Bridge; "**Project-Required City Lands**" means, together, the Project-Required City Roads, Project-Required City Fee Simple Lands and any Purchased Lands;

"**Project-Required City Roads**" means City Roads described in Schedule B [Project-Required City Roads] in respect of which access and Non-Exclusive Occupation and use is or may be required by the Province to facilitate activities required in connection with the construction of the South Approach Infrastructure or the New Fraser River Bridge, and includes, if applicable, any Additional City Lands which may be added to or substituted for any part of the Project-Required City Lands pursuant to Section 5.2;

"**Project Schedule**" means the Province's schedule for the design and building of the Project Infrastructure and the demolition of the existing Pattullo Bridge, as the same may be amended from time to time;

"**Project Scope of Work**" means the general scope of the Project Work as set out in the document attached as Schedule A [Project Scope of Work];

"**Project Work**" means all work required in the design, building and financing of the Project Infrastructure and the demolition of the existing Pattullo Bridge, and includes any work performed by or on behalf of the Province on or to any City Infrastructure or City Utilities pursuant to this Agreement or on or to any Third Party Infrastructure;

"**Province**" means Her Majesty the Queen in Right of the Province of British Columbia, as represented by the Minister of Transportation and Infrastructure;

"Province Indemnified Parties" has the meaning set out in Section 14.2;

"**Provincial Representative**" means the person designated by written notice given by the Province to the City from time to time as holding the position of Provincial Representative and having full authority to represent and bind the Province in connection with all dealings with the City under this Agreement;

"**Purchased Lands**" means any City Fee Simple Lands, or any part or parts of any City Fee Simple Lands, that the Province purchases pursuant to Section 5.3;

"Qualified Governmental Entity" means any of the following:

- (i) any ministry or department of the Province; and
- (ii) any person having the legal capacity, power and authority to become a party to and to perform the Province's obligations under this Agreement, the duties, obligations and liabilities of which are guaranteed or supported by the Province or any ministry or department of the Province;

"**Referable Matter**" means any matter arising under or in connection with this Agreement which could reasonably be expected to materially and adversely affect the ability to:

- (i) complete the design and building of the Project Infrastructure or any material part thereof and in accordance with the Project Schedule;
- (ii) expeditiously effect repairs, maintenance or, as necessary, modifications to the Project Infrastructure;
- (iii) achieve, maintain or restore compliance with the performance standards to which the Project Infrastructure will be designed; or
- (iv) demolish the existing Pattullo Bridge;

"Reference Date" means the date so called on the first page of this Agreement;

"Reference Plan" has the meaning set out in Section 5.3(d);

"Resumed Roads" has the meaning set out in Section 10.10;

"South Approach Infrastructure" means those portions of the Project Infrastructure located within Surrey;

"**Substantial Performance**" means the stage of completion when the Project Work, or a substantial part of it, is complete to such extent as is necessary to permit the safe, uninterrupted and unobstructed public use of the Project Infrastructure;

"Surrey" means the geographic area within the municipal boundaries of the City;

"**Term**" means that period commencing on the Reference Date and continuing thereafter until the Province and the City have each fully performed their respective obligations under this Agreement;

"Third Party Infrastructure" means any infrastructure and systems, fixtures and facilities which are situated within any Project-Required City Lands and are owned or operated by a third party, and includes any Pre-Existing Rights Holder's Works;

"Traffic Management Plan" means a plan for the management of traffic interruptions, rerouting and detours and other traffic impacts which may be required during construction of the Project, as described in Schedule E [Construction Traffic Management] as the same may be amended by the parties from time to time;

"Warranty Period" has the meaning set out in Section 9.3; and

"Watermain" has the meaning set out in Section 2.3.

2. PROJECT SCOPE

2.1 Acknowledgement of Project Scope of Work

The City acknowledges the scope of the Project Work proposed by the Province, as shown on the Project Scope of Work attached as Schedule A [Project Scope of Work].

2.2 Heritage Features for Highway 17/Old Yale Road Overpass

The Province will work collaboratively with the City to incorporate heritage feature works and public art into the proposed Highway 17/Old Yale Road Overpass. The Province will bear the cost of such works (including related design and consultation costs), to a maximum of \$250,000 in the aggregate. The Province and the City will endeavor to find the most cost-effective features.

2.3 City Contribution to Cost of Requested Works

The Province agrees, as part of the Project Work, to construct a new 400mm diameter watermain (the "**Watermain**") under and within the Bridge Road allowance, from Old Yale Road to 112th Avenue, in accordance with the City of Surrey's drawings for the Pattullo Bridge/Bridgeview Watermain Replacement Project, copies of which are attached as Schedule I [Bridge Road Watermain]. The City agrees to pay to the Province, promptly after completion of construction and handover to the City pursuant to Section 9.1, the total amount of \$850,000, inclusive of all taxes, as the City's contribution to the cost of construction of the Watermain, including the Province providing the applicable inspection records, reporting and as-built drawings.

3. COOPERATION

3.1 Work Cooperation During Design and Construction of the South Approach Infrastructure

- (a) The City and the Province agree to work co-operatively with each other, with the mutual objective of facilitating the expeditious and cost effective completion of the South Approach Infrastructure in conjunction with the balance of the Project Infrastructure.
- (b) In this regard, the City Representative and the Provincial Representative (or their respective delegates), and such of the City's and the Province's contractors, consultants and personnel as, respectively, the City and the Province deem appropriate, will meet periodically, as appropriate, to review the design, development and construction of the South Approach Infrastructure and related matters of concern, with the expectation that such meetings will be scheduled to occur at least bi-weekly and will occur more frequently when deemed appropriate by the Province and the City.
- (c) Notwithstanding Section 3.1(b), and subject to receiving reasonable notice, the City agrees to meet with the Province's contractors, consultants and personnel, as reasonably required by the Province's contractors, consultants and personnel, for the carrying out of the Project

and, in particular, to address issues relating to the design, development and construction of the South Approach Infrastructure and related matters.

- (d) The Province will regularly provide the City with information on the progress of the Project Work. Subject to any applicable confidentiality restrictions, such information may include:
 - copies of look-ahead activity reports as provided by the Province's contractor(s) to the Province;
 - (ii) digital copies (PDF and CAD) of design drawings of Handover Facilities and City Enhancements;
 - (iii) work-plans and methods of construction as provided by the Province's contractor(s) to the Province pursuant to the Project Agreement;
 - (iv) information regarding rectification of South Approach Infrastructure deficiencies and defects; and
 - (v) any other information which the Province, in its discretion, considers relevant.
- (e) As soon as reasonably practical after the date on which Substantial Performance of the Project Work has been achieved, the Province shall give to the City written notice thereof.

3.2 Province Consultation with the City

- (a) Without limiting the generality of Section 3.1, the Province will, during the design and construction of the South Approach Infrastructure, make reasonable efforts to consult with the City with respect to the following aspects of the Project:
 - (i) construction traffic management;
 - (ii) the potential impact of the Project on City Infrastructure, City Utilities and the Dikes;
 - (iii) City Enhancements;
 - (iv) Handover Facilities;
 - (v) public communications; and
 - (vi) Third Party Infrastructure.
- (b) Where applicable, the Province will provide to the City draft plans, drawings or other documents, together with such background information,

and at a sufficiently early time, as to permit the City to consider the matter and provide informed comment.

- (c) If the City provides comments, recommendations or requests for amendments to the Province's plans, drawings or proposals with respect to a particular matter including the Traffic Management Plan (but excluding Handover Facilities over which the City has approval rights pursuant to Section 9.1, and City Utilities Work, City Infrastructure and Third Party Infrastructure over which the City has approval rights pursuant to Section 10.5(d)), then:
 - (i) the Province will give reasonable consideration to such City comments, recommendations or requests;
 - (ii) the Province will notify the City if it accepts such City comments, recommendations or requests; and
 - (iii) if the Province does not accept a City comment, recommendation or request then the Province will provide to the City an explanation of why the City's recommendations or requests were not accepted by the Province.
- (d) If the time for a City review pursuant to this Section 3.2 is not specified in this Agreement, then the City will complete its review and provide any comment within ten (10) Business Days of receipt of the draft plans, drawings or other documents from the Province, or such other time (longer or shorter) as the parties may agree, each acting reasonably.

3.3 **Project Schedule and Work Priority**

- (a) As soon as practicable after the Province has entered into the Project Agreement, the Province will provide the City with a copy of the Project Schedule and any amendments thereto, including regular updates throughout construction.
- (b) The City acknowledges the necessity of the design and construction of the various portions of the Project Infrastructure being completed within the time-lines provided in the Project Schedule, and the City agrees to work co-operatively with the Province and to perform the City's obligations and commitments hereunder in a timely and expeditious manner so as to facilitate completion of the design and building of the South Approach Infrastructure in accordance with the Project Schedule. Without limiting the foregoing, the City agrees to treat the design and construction of the South Approach Infrastructure as high priority work, and to respond to requests for discussion of the Province's plans and drawings and related matters in a timely and expeditious manner.

3.4 Capacity Funding for the City

Subject as may otherwise be agreed in writing between the parties, the Province agrees to provide to the City, for the express purpose of assisting the City in financing the supply or provision of the resources necessary for the City to perform its obligations under this Agreement, capacity funding in the amount of \$110,400 (calculated as one (1) full-time equivalent) per year during the period from 2020 through 2023, such annual amount to be payable in quarterly instalments commencing on the effective date of the Project Agreement.

3.5 Riverfront

The Province acknowledges that, during and following the completion of construction of the New Fraser River Bridge, the City wishes to maintain and improve public access to the Brownsville Bar Park recreation areas and facilities adjacent to the south side of the Fraser River and connectivity along the riverfront in the vicinity of the New Fraser River Bridge. The Province and the City will work together co-operatively to maintain and improve public pedestrian and cyclist access to the riverfront in this area, including where feasible, connectivity along the south side riverfront under the New Fraser River Bridge. To the extent the Province owns or has legal authority to use any of the relevant lands and does not require them for purposes of the Project it will, subject to applicable law, authorize the City to occupy such lands for the purposes described in this Section 3.5.

4. PARTIES' RESPECTIVE RIGHTS AND AUTHORITY

4.1 **Province Rights and Authority**

The parties acknowledge and agree that:

- (a) the Province is exercising its constitutional jurisdiction and inherent authority concerning its use and development of the Project and in that regard, without limiting such jurisdiction and authority, the South Approach Infrastructure will, except as and to the extent expressly provided in Section 8.1, be designed and built in accordance with criteria, requirements, codes, processes and policies developed by the Province rather than the by-laws, codes, processes and policies of the City;
- (b) notwithstanding Section 4.1(a), any City Utilities Work performed by the Province, City Infrastructure work performed by the Province, Handover Facilities and City Enhancements shall be designed in accordance with City Standards;
- (c) except as expressly provided in Section 8.1, the Province will not be obliged to obtain any development, building, trade, occupancy or other permits, preliminary or other plan approvals, or other types of construction or similar permits or approvals from the City in connection with the Project;
- (d) the Province is not required to pay to the City any permit fees, development charges or other municipal fees or charges in connection

with the Project, except for those payable in connection with any permit specified in Section 8.1 and except for costs associated with emergency work in accordance with Section 5.6, or design work or fieldwork performed by the City at the request of the Province;

- (e) subject to any applicable confidentiality restrictions, the Province will make available to the City certain Project information and drawings developed for the Project by the Province;
- (f) in advance of any temporary and permanent interconnections of City Utilities to South Approach Infrastructure, the Province will provide the City with documents confirming compliance with City Standards and the relevant utilities-related design and construction codes and standards in relation to South Approach Infrastructure;
- (g) South Approach Infrastructure (excluding Handover Facilities, City Utilities, City Infrastructure or City Enhancements) situated on, over or under Project-Required City Lands, is, from the date of construction or installation and will continue thereafter to be, the property of the Province and will be freely alienable by the Province notwithstanding the degree to which the same may be annexed or affixed to land; and
- (h) nothing in this Agreement restricts or prohibits the Province from exercising any right, power, privilege or authority or discharging any duty under any applicable law and the Province reserves all of its rights in this regard.

4.2 Responsibility for the Project

Notwithstanding any other provision of this Agreement, the Province and its contractors will have complete responsibility for all aspects of the Project, including all design and construction and all means, methods, techniques, sequences and procedures and for coordinating the various parts of the Project Work. No review, comments or consultation by, from or with the City with respect to any aspect of the Project, nor any other act or omission of the City, whether pursuant to this Agreement or otherwise, will be construed as transferring any responsibility or liability to the City for any aspect of the Project.

4.3 City Rights and Authority

Nothing in this Agreement shall be construed as an agreement by the City to restrict, limit or otherwise fetter in any manner the exercise by the Municipal Council of the City of its duties, rights or authority in regards to any matter, and nothing in this Agreement shall fetter the City's approving officers in the exercise of their duties.

5. CITY GRANT OF RIGHTS OF ACCESS, OCCUPATION AND USE

5.1 **Project-Required City Lands**

Effective from and after the date specified in a notice given by the Province to the City that the Province intends to exercise its rights of access to, and use of, the Project-Required City Lands under this Section 5.1:

- (a) which notice, in the case of those Project-Required City Lands shown on the plan drawing attached as Schedule B [Project-Required City Roads], shall be given no less than thirty (30) days prior to the date on which the Province requires access to such Project-Required City Roads;
- (b) which notice, in the case of any of those Project-Required City Lands shown on the plan drawing attached as Schedule B [Project-Required City Fee Simple Lands], shall be given no less than thirty (30) days prior to the date on which the Province requires access to such Project-Required City Fee Simple Lands;

the City grants to the Province, until the Project Completion Date and for such period thereafter as may reasonably be required by the Province, and at no cost to the Province, the free and unobstructed right of access to and Non-Exclusive Occupation and use, as required by the Province at any time, of the Project-Required City Lands for all purposes relating to the performance of Project Work. The parties agree that their respective responsibilities for the Project-Required City Lands during such period shall be as set out in Section 5.8.

5.2 Additional City Lands

If the Province determines that it temporarily requires any Additional City Lands for construction of the South Approach Infrastructure in addition to, or in substitution for any of, the Project-Required City Lands, then upon written request of the Province and consultation with the City and at no cost to the Province (except that the Province shall reimburse the City for any out-of-pocket expenses the City may incur in connection with the operation of this Section 5.2, and except as provided in Section 6.1), such areas will be added to the Project-Required City Lands, provided that the Province confirms to the City the particulars of the Additional City Lands that it requires and provides the City Representative with plans for such Additional City Lands in form similar to the plans used to identify the Project-Required City Lands, and a description of the purpose for which such Additional City Lands are required and the period of time such Additional City Lands are expected to be required. Any Additional City Lands required for the South Approach Infrastructure must be identified by the Province prior to the commencement of the Project Work. Subject to Section 5.9, the Province will quit and deliver to the City possession of the Additional City Lands as soon as practicable.

5.3 **Province Purchase of Additional Project-Required City Fee Simple Lands**

The Province may purchase the City's interest in any City Fee Simple Lands (other than the Project-Required City Fee Simple Lands), or any part or parts thereof, that the Province determines, on the basis of the final design of the South Approach Infrastructure, are necessary for construction, operation, maintenance or rehabilitation of the South Approach Infrastructure (the "**Purchased Lands**"), in accordance with the following:

- (a) Any Purchased Lands will be acquired by the Province from the City at their fair market value. The fair market value of the City's interest in such Purchased Lands will be determined by an appraiser selected by the City from among the persons listed on a pre-approved list of appraisers provided by the Province to the City from time to time. Any disagreement as to the selection or appointment of any such appraiser or as to the appraised value of the City's interest in any Purchased Lands will be resolved pursuant to the Dispute Resolution Procedure.
- (b) Unless otherwise agreed, the transfer of the City's interest in Purchased Lands to the Province will be effected by way of dedication pursuant to the registration of a reference plan, as described in Section 5.3(e).
- (c) The City's interest in any Purchased Lands will be transferred free and clear of all encumbrances on title, other than Pre-Existing Rights, and free and clear of all financial charges. For the avoidance of doubt and pursuant to Section 6.1, the Province will be solely responsible, as between the parties, for negotiating any agreements with Pre-Existing Rights Holders dealing with the subordination, modification, assignment, surrender, termination or expropriation of any Pre-Existing Rights. The City will provide reasonable assistance to the Province in any such negotiations.
- (d) The Province will cause a survey plan (the "Reference Plan") to be prepared at its own cost for the purpose of defining the precise area of the Purchased Lands the Province intends to acquire. The Province will obtain execution of the Reference Plan by any and all affected public bodies and applicable charge holders (including the Pre-Existing Rights Holders but excluding the City), all as required by the Land Title Act (British Columbia) and will submit the executed Reference Plan to the Land Title Office for registration. The City agrees to execute the Reference Plan as required by the Land Title Act (British Columbia) and allow registration of the Reference Plan in the Land Title Office, to give effect to the acquisition by the Province of the Purchased Lands. The City will use its reasonable efforts to assist the Province in the timely preparation of the Reference Plan and to facilitate the timely execution by the Pre-Existing Rights Holders and registration of the Reference Plan.
- (e) Unless otherwise agreed, the completion of the sale of the City's interest in the Purchased Lands will occur on the Business Day that is thirty (30) days after the date on which the Reference Plan is finally registered in the Land Title Office (or the next following Business Day if the last day of such thirty (30) day period is not a Business Day).

5.4 Non-Derogation of Grant

- (a) From and after the effective date of the licence granted pursuant to Section 5.1 until the Project Completion Date (or such earlier or later date on which the Province has notified the City pursuant to Section 5.5 that it no longer requires Non-Exclusive Occupation of such Project-Required City Lands), the City will not sell, or agree to sell, in whole or in part, to any person other than the Province any of the applicable Project-Required City Fee Simple Lands.
- (b) The City will not make any grant in derogation of the grants of rights by the City to the Province in respect of the Project-Required City Lands under this Agreement, or otherwise regulate the Project-Required City Lands in a way that interferes with, or permits the City's licensees, permittees, contractors, agents or employees to interfere with, the Project Infrastructure or the Province's access to or occupation and use of the Project-Required City Lands under this Agreement. Without limiting the foregoing, the City will not take, or permit any of the City's licensees, permittees, contractors, agents, employees or, to the extent within the City's control, any other persons to take, any actions which prevent or interfere with the exercise by the Province of the Province's rights under this Agreement to construct the Project Infrastructure, subject to Section 5.8, which enables the City to carry on normal business operations.

5.5 Duration of Use of Project-Required City Lands

From and after the date specified in the notice contemplated by Section 5.1, until the date specified in a notice given by the Province to the City terminating its rights pursuant to this Section 5.5, the Province shall have Non-Exclusive Occupation of the Project-Required City Lands identified in the notice given under Section 5.1. To the extent the Project-Required City Lands are not resumed by the Province pursuant to Section 10.11 or purchased by the Province pursuant to Section 5.3, then from and after the date specified in a termination notice given by the Province pursuant to this Section 5.5, the Province will surrender to the City possession and control of the Project-Required City Lands, excluding any Pre-Existing Rights that have been terminated pursuant to Section 6.1, in accordance with Section 5.9.

5.6 Emergencies

(a) Notwithstanding any other provisions of this Agreement, in the case of a bona fide perceived emergency, both the Province and the City will be authorized to take all such action as either of them considers necessary and appropriate, without prior written notice to the other in relation to any Project-Required City Lands, and to have access to and occupation and use of such Project-Required City Lands and any adjacent City-owned lands which either of them reasonably considers to be required for the purposes of dealing with the emergency; provided that in such event the party taking such action will, as soon as reasonably practicable, and in any event no later than two (2) Business Days following the occurrence of

such emergency, deliver notice to the other confirming the nature of the emergency and details as to the actions taken by the party in connection therewith.

(b) When the City responds to an emergency caused or contributed to by the Project, the City will be entitled to recover all reasonable costs of repairs and fieldwork from the Province (except to the extent the City's own actions or inaction caused or contributed to the emergency).

5.7 Time Limits on the Province's Exercise of Access and Occupation Rights

Notwithstanding anything to the contrary in this Agreement, in the event the Province fails to commence construction of the South Approach Infrastructure on any part of the Project-Required City Lands prior to December 31, 2023 (the "Access Longstop Date"), then, unless otherwise agreed to in writing by the parties:

- (a) any restrictions on the City's access, use and occupation of the Project-Required City Lands pursuant to this Agreement will, from and after the Access Longstop Date, be deemed to be inoperative and terminated, and the City may use any Project-Required City Lands in any manner which the City deems appropriate or desirable, without limitation, but only in respect of those portions of the Project-Required City Lands that have not already been actively used and occupied for the purpose of constructing the South Approach Infrastructure; and
- (b) any Purchased Lands purchased by the Province pursuant to Section 5.3 will be returned in whole to the City for the original purchase price paid by the Province.

5.8 Use of Project-Required City Lands following Reference Date

- (a) For so long as the Province has Non-Exclusive Occupation of any Project-Required City Lands in which City Infrastructure is located, the Province will, subject to Section 5.6, be responsible, at its own cost, for the operation and maintenance of the Project-Required City Lands and any City Infrastructure located thereon.
- (b) If the City requires access to Project-Required City Lands to construct, operate, maintain or repair City Utilities, or in the case of emergencies, City Infrastructure, and if such construction, operation, maintenance or repair would more than nominally interfere with Project Work, except in the case of an emergency, the City will first contact the Province and the Province and the City will coordinate the Project Work and the construction, operation, maintenance or repair proposed by the City so as to best accommodate the objectives of both the City and the Province.
- (c) In the case of an emergency, the City will undertake any work performed by it or on its behalf in such manner as will have the least impact reasonably possible on Project Work.

- (d) In addition to the City's obligations under Section 14.2, the City will indemnify the Province against any third party claims made in respect of damage to property, injury or death arising from any failure or malfunction of any City Infrastructure or City Utilities which is caused by the acts or omissions of the City in connection with or related to the Project.
- (e) For clarity, except as hereinafter provided in this Section 5.8(e), the City shall remain responsible, at its own cost, for the operation and maintenance of City Utilities located on, in or under Project-Required City Lands in respect of which the Province has Non-Exclusive Occupation. From and after the date on which the Province modifies, reconfigures, relocates or replaces any traffic signal equipment, the Province shall be responsible, at its own cost, for the operation and maintenance of such equipment.
- (f) Notwithstanding the foregoing in this Section 5.8, the City and the Province further agree that any restrictions on the City's ability to construct, operate, maintain or repair any City Infrastructure or City Utilities in or on the Project-Required City Lands will become inoperable on and after the date that is sixty (60) days after the Project Completion Date and the City may thereafter undertake any construction, operation, maintenance or repair of any City Infrastructure or City Utilities as the City deems appropriate or desirable, without limitation.

5.9 Return of Project-Required City Lands

With respect to any Project-Required City Lands that have been used or occupied by the Province or its contractors as at:

- (a) the end of the duration of occupation as described in Section 5.1; or
- (b) the date of earlier termination of occupation as notified pursuant to Section 5.5; or
- (c) the Access Longstop Date;

as applicable, except for Project-Required City Fee Simple Lands, Purchased Lands and Resumed Roads which, in each case, shall be owned and controlled by the Province, the Province and its contractors will (at the Province's cost):

- (d) peaceably quit and deliver to the City possession of such Project-Required City Lands;
- (e) within one hundred and twenty (120) days after the date described in Section 5.9(a), 5.9(b) or 5.9(c), as applicable, remove from such Project-Required City Lands any improvement that the Province placed on or made to the Project-Required City Lands and has not become part of the Project-Required City Lands and the City is satisfied (acting reasonably) that such removal will not materially adversely impact any City Infrastructure on such Project-Required City Lands; and

(f) restore the Project-Required City Lands as nearly as may reasonably be possible to the same condition as it was on the Reference Date, or to such state as may otherwise be agreed by the City, removing any waste and debris and leaving the Project-Required City Lands in a tidy and safe condition, having regard to all the circumstances.

5.10 Prime Contractor Designation

For purposes of the *Workers Compensation Act* (British Columbia) and the regulations thereunder the Province shall, before commencing work on any South Approach Infrastructure, notify the City of the person who will be the "prime contractor" in respect of the applicable part or parts of the Project Required City Lands.

6. TREATMENT OF PRE-EXISTING RIGHTS

6.1 **Pre-Existing Rights on Project-Required City Lands**

The Province acknowledges and agrees that the rights of access to and occupation of the Project-Required City Lands granted by the City to the Province under Section 5.1 and 5.2 will be subject to any Pre-Existing Rights which the City has disclosed to the Province. The City and the Province agree that:

- (a) as soon as reasonably practicable but in any event no later than sixty (60) days after the Reference Date, the City will deliver to the Province copies of any agreements entered into between the City and any Pre-Existing Rights Holders which the City can (with the exercise of due diligence) locate in its possession;
- (b) the City will, at the written request of the Province, but subject to agreement between the Province and the City, exercise any contractual rights reserved or available to the City to terminate or modify any such Pre-Existing Rights or to require the removal or relocation of any Pre-Existing Rights Holders' Works as may be required to facilitate the design, construction, operation, maintenance or rehabilitation of the Project Infrastructure;
- (c) subject to agreement between the Province and the City as to the termination or modification of Pre-Existing Rights, the Province will reimburse the City for costs and expenses incurred by the City as a result of such termination or modification of Pre-Existing Rights, or removal or relocation of Pre-Existing Rights Holders' Works;
- (d) the Province may enter into negotiations with any Pre-Existing Rights Holders with a view to coordinating the exercise of any such Pre-Existing Rights with the exercise of the rights granted to the Province hereunder or otherwise existing, or with a view to negotiating an agreement with such Pre-Existing Rights Holder(s) dealing with the subordination, modification, assignment, surrender or termination of any such Pre-Existing Rights

upon terms and conditions as may be agreed between the Province and such Pre-Existing Rights Holder(s);

- (e) if requested by the Province, the City will provide reasonable assistance to and support of the Province in the Province's conduct of any negotiations with Pre-Existing Rights Holders contemplated by Section 6.1(d); and
- (f) the Province will deliver to the City copies of any agreements which may be entered into between the Province and any Pre-Existing Rights Holders as contemplated in Section 6.1(d). If the Province negotiates any such agreements with respect to any Project-Required City Lands possession of which is subsequently returned to the City pursuant to Section 5.9, no such agreement will bind the City unless:
 - (i) the terms thereof are the same as the terms of the instrument providing for the applicable Pre-Existing Rights as at the Reference Date; or
 - (ii) the City consents to any modification of the terms thereof.

6.2 Protection of the Province's Rights in Relation to Pre-Existing Rights Holders and Other Third Parties

- (a) From and after the Reference Date:
 - (i) the City will not agree to any modification of Pre-Existing Rights except:
 - (A) if the terms of the Pre-Existing Rights require the City to enter into any such modification; or
 - (B) otherwise with the prior written consent of the Province, such consent not to be unreasonably withheld (including, without limitation, by withholding consent in circumstances in which:
 - (1) construction or utility servicing of a proposed development would thereby be materially adversely affected or unduly delayed; but
 - (2) the proposed modification could not reasonably be expected to affect adversely the Project Infrastructure or the performance of the Project Work in accordance with the Project Schedule); and
 - (ii) the City will not grant in favour of any third party any contractual rights to use any part of the Project-Required City Lands, except with the prior written consent of the Province, such consent not to be unreasonably withheld (including, without limitation, by withholding consent in circumstances in which:

- (A) construction or utility servicing of a proposed development would thereby be materially adversely affected or unduly delayed; but
- (B) the proposed modification could not reasonably be expected to affect adversely the Project Infrastructure or the performance of the Project Work in accordance with the Project Schedule).
- (b) The Province will respond promptly to, and in any event by no later than fifteen (15) Business Days after receiving from the City, a request for consent to a modification of any Pre-Existing Rights.
- (c) Notwithstanding the foregoing in this Section 6.2, the City and the Province further agree that any restrictions on the City's ability to grant rights to any third party or Pre-Existing Rights Holder in respect of the Project-Required City Lands will become inoperable on and after the Project Completion Date, and the City may thereafter recommence granting rights in the Project-Required City Lands in any manner which the City deems appropriate or desirable, without limitation.

7. PLANS RELATING TO PERFORMANCE OF PROJECT WORK

7.1 Plans, Drawings, Surveys and other Information with respect to South Approach Infrastructure

- (a) The City acknowledges that when the Province provides the City with any plans, drawings, documents or other information submitted with respect to Project Work to be undertaken by the Province, whether such provision is made pursuant to this Section 7.1, Section 3.2 or otherwise under this Agreement, such plans, drawings, documents and information are provided for review and comment only and the provision thereof to the City will not confer upon the City any right to approve same, except as expressly provided otherwise in Section 9.1 in respect of Handover Facilities, Section 9.2(a) in respect of City Enhancements and in Section 10.5(d) in respect of City Utilities Work, City Infrastructure and Third Party Infrastructure.
- (b) Subject to any applicable confidentiality restrictions, the Province commits to providing the City with plans and drawings related to the South Approach Infrastructure for review and comment separate from any review that the City may undertake as part of a process established by the British Columbia Environmental Assessment Office or by any other governmental authority having jurisdiction in respect of the Project. Nothing in this Agreement is intended to diminish or waive any rights the City has with respect to its participation in the Provincial Environmental Assessment review process or any other process managed or administered by any other governmental authority having jurisdiction in respect of the Project.

(c) The Province will provide to the City, for review and comment, the construction environmental management plan which will comply with the City's Erosion and Sediment Control By-law, 2006, No. 16138, as amended, for the Project.

7.2 Study, Condition Surveys of City Infrastructure, City Utilities, City Lands and Dikes

- (a) As part of the Project Work, the Province will retain and pay for a qualified professional engineer(s) to identify, in consultation with the City, any City Infrastructure, City Utilities and City Lands vulnerable to material damage or disturbance by the construction of the Project, including City Roads being used for access to and egress from any of the South Approach Infrastructure (to a distance of one (1) km from such South Approach Infrastructure, or as otherwise agreed), and any portions of the Dikes proposed to be relocated or replaced as part of the Project or otherwise vulnerable to material damage or disturbance by the construction of the Project.
- (b) Prior to the commencement, and after completion, of any Project Work in the vicinity of any such City Infrastructure, City Utilities, City Lands, or portions of the Dikes, the Province will procure a Pre-Construction Condition Survey and Post-Construction Condition Survey of such City Infrastructure, City Utilities, City Lands and portions of the Dikes to provide a record of any damage or disturbance that might occur or that has occurred, as the case may be. The City will make access to such City Infrastructure, City Utilities, City Lands and portions of the Dikes available to the Province for that purpose.
- (c) The Province will ensure that any complete Pre-Construction Condition Survey and Post- Construction Condition Survey of any City Infrastructure, City Utilities, City Lands or portions of the Dikes is delivered to the City promptly after it is made available to the Province.
- (d) The Province agrees to repair or replace, at its sole cost, City Roads (other than Project-Required City Roads), City Lands (other than Project-Required City Fee Simple Lands) City Infrastructure, City Utilities and Dikes damaged as a result of the performance of the Project Work.

7.3 Plans, Drawings, Surveys and other Information with respect to City Infrastructure and City Utilities

(a) The City agrees to provide to the Province, in a timely manner after the Reference Date and without cost to the Province, digital copies of any plans, drawings, surveys and other materials and information in the possession or control of the City relevant to the identification, description, condition and location of any City Infrastructure or City Utilities which the Province considers may be impacted by the Project Work.

- (c) The documents referred to in Section 7.3(a) and Section 7.3(b) are provided to the Province for information purposes only and the City makes no representations or warranties whatsoever, whether express or implied, that the information contained therein is accurate or complete and accepts no responsibility for any loss or damage arising therefrom or in any way related thereto. The Province is solely responsible for satisfying itself as to the location of existing City Infrastructure and City Utilities.
- (d) Any:

Cosmos.

(b)

- (i) new City Infrastructure or City Utilities constructed as part of the Project Work;
- (ii) new City Enhancements; and
- (iii) City Infrastructure, City Utilities or City Enhancements repaired, relocated or replaced in connection with the performance of the Project Work or otherwise pursuant to this Agreement;

must comply with applicable City Standards, and the Province will, as soon as reasonably practical after completion of construction, repair, relocation or replacement, as applicable, provide record documents and drawings thereof (PDF and CAD) to the City.

8. CITY PERMITS

8.1 Required City Permits

Despite that the Province is not bound by the requirements of the City's bylaws, including, without limitation, as to any requirement to obtain permits, in respect of the performance of the Project Work, the Province agrees that it will, voluntarily, pay the City for the relevant permits in relation to, as applicable:

- (a) City Utilities;
- (b) new buildings or modification of existing buildings, including plumbing and electrical services; and
- (c) use of water filling stations.

The Province will pay the City, at the City's then-prevailing rates, for all water consumed at City water filling stations in connection with the performance of the Project Work.

9. CITY ENHANCEMENTS AND OTHER WORKS

9.1 Transfer of Handover Facilities

- (a) Upon the Project Completion Date (or such earlier date as may specifically be provided for in this Agreement) and subject to the City's acceptance pursuant to this Section 9.1, all Handover Facilities installed by or on behalf of the Province will be passed to and be vested in the City.
- (b) As a condition to the acceptance by the City of any Handover Facilities, the Province will provide to the City all record documents and drawings, the as-built drawings (PDF and CAD) and all inspection reports prepared or received by the Province, including any applicable Pre-Construction Condition Surveys and Post-Construction Condition Surveys.
- (c) Within a reasonable time after notice from the Province and receipt of the information described in Section 9.1(b), the City will complete a final inspection of the Handover Facilities at such time or times as may be coordinated and agreed upon with the Province. Within a reasonable time after the City's inspection, the City will provide a letter to the Province either accepting the Handover Facilities and/or listing with specificity any deficiencies of the Handover Facilities.
- (d) All Handover Facilities will be transferred to the City free and clear of any financial encumbrances including any liens once the deficiencies in the final inspection have been addressed by the Province to the satisfaction of the City and the City delivers a letter to the Province stating:
 - the City accepts that the specific element(s) of such Handover Facilities is complete and ready for use for its intended purpose; and
 - (ii) subject to Section 9.3, the City assumes responsibility for the specific element(s) of such Handover Facilities.

The City will use commercially reasonable efforts to provide such letter to the Province within a reasonable time of the Province advising that the deficiencies in the final inspection have been addressed by the Province.

9.2 City Enhancements

(a) The Province will consider requests by the City for the construction by the Province of City Enhancements in the course of construction of the South Approach Infrastructure, provided that such City Enhancements can be constructed without adversely impacting the Project Schedule and that such City Enhancements, so approved by the Province, are designed and constructed at the sole cost of the City and without cost risk to the Province. If City Enhancements are to be undertaken, the City will have the right to review, comment and approve the City Enhancement work, on such terms (including as to price) as may be agreed between the City and
the Province prior to the performance of such City Enhancement work. If the parties cannot agree, the City is entitled to construct the City Enhancements concurrently with the Project Work.

- (b) Upon the Project Completion Date (or earlier date as may specifically be provided for in this Agreement) and subject to the City's acceptance pursuant to Section 9.2(d), all City Enhancements installed by or on behalf of the Province will be passed to and be vested in the City.
- (c) As a condition to the acceptance by the City of any City Enhancements, the Province will provide to the City the as-built drawings (PDF and CAD) and all inspection reports prepared or received by the Province.
- (d) Within a reasonable time after notice from the Province and receipt of the information described in Section 9.2(c), the City will complete a final inspection of the City Enhancements at such time or times as may be coordinated and agreed upon with the Province. Within a reasonable time after the City's inspection, the City will provide a letter to the Province either accepting the City Enhancements and/or listing with specificity any deficiencies of the City Enhancements.
- (e) All City Enhancements will be transferred to the City free and clear of any financial encumbrances including any liens once the deficiencies in the final inspection have been addressed by the Province to the satisfaction of the City and the City delivers a letter to the Province stating:
 - (i) the City accepts that the specific element(s) of such City Enhancements is complete and ready for use for its intended purpose; and
 - (ii) subject to Section 9.3, the City assumes responsibility for the specific element(s) of such City Enhancements.
- (f) The City will use commercially reasonable efforts to provide such letter to the Province within a reasonable time of the Province advising that the deficiencies in the final inspection have been addressed by the Province.

9.3 Warranty

The Province warrants that the Handover Facilities, City Utilities Work, City Enhancements and work on or to City Infrastructure will be free from any patent defects for a period (the "**Warranty Period**") of two (2) years following the date of written acceptance of the Handover Facilities, City Utilities Work, City Enhancements, or work on or to City Infrastructure, as applicable (or, in any such case, the relevant specific elements thereof) pursuant to Section 9.1, Section 9.2 or Section 10.5.

The Province will promptly correct, at the Province's own cost and expense, any patent or latent defects in the Handover Facilities, City Utilities Work, City Enhancements or work on or to City Infrastructure, as applicable, in respect of which the City has given notice to the Province:

- (a) for patent defects, within the Warranty Period; and
- (b) for latent defects, within one (1) year after the applicable latent defect has been discovered by the City within the time frame applicable to such latent defect pursuant to the *Limitation Act* (British Columbia).

10. MISCELLANEOUS PROVISIONS RELATING TO PROJECT WORK

10.1 Hours of Project Work

The Province will establish the hours of work during which Project Work will be performed with a view to achieving completion of the Project in accordance with the Project Schedule. Despite the foregoing, the Province agrees that, under normal circumstances, no Project Work which disturbs the quiet, peace, rest, enjoyment, comfort or convenience of the neighbourhood or of persons in the vicinity of the South Approach Infrastructure will be performed:

- (a) on any weekday or Saturday, outside of the hours of 7:00 a.m. to 10:00 p.m.; or
- (b) on a Sunday or on a public holiday.

If the Province proposes to perform any Project Work outside of the hours of work described above in this Section 10.1, the Province will consult with the City in respect of the proposed variance, and will provide to the City reasonable notice of such variance. Despite Section 10.3, the Province will, as between the Province and the City, be solely responsible for all communication with the public regarding such variance and the Project Work for which the Province requires the variance.

10.2 Construction Traffic Management

- (a) The City acknowledges that the Province may be required to temporarily modify the traffic flow on City Roads in the vicinity of the Project (including Project-Required City Roads) and to modify City Infrastructure in connection with and to facilitate performance of the Project Work.
- (b) Any temporary modifications to traffic flows on City Roads and to traffic signal and sign infrastructure, will be made in accordance with the requirements set out in Schedule E [Construction Traffic Management].
- (c) The Province may place, install, affix or post traffic or directional signs and signals, traffic control devices and barriers on City Roads and City Infrastructure as the Province deems appropriate to implement the Traffic Management Plan, and will promptly remove the same when no longer required.
- (d) The Province will give no less than forty-eight (48) hours' written notice prior to implementation of a traffic control plan on a City Road.

10.3 Public Communications during Project Work

The Province and the City will cooperate in the conduct of any and all communications with the public in connection with the Project, all in accordance with the requirements set out in Schedule F [Communications].

10.4 City Development Approvals

- (a) The Province recognizes that the City has a development application approval function and obligation for lands in and around the South Approach Infrastructure for all non-Project work and that the City will continue to carry out this municipal responsibility during the construction of the Project.
- (b) Subject to any applicable confidentiality restrictions, the City and the Province agree to work together to share information and the City will consider incorporating development approval conditions requested by the Province that will support and/or benefit the Project in the course of the development approval process, provided that such conditions are considered fair and reasonable and are within the City's jurisdiction and regulatory authority to secure. In order to facilitate such information sharing, the City will, subject to any applicable confidentiality restrictions, continue to provide the Province with development application information in advance of approval for determination by the Province of any impacts to Project cost or the Project Schedule. The Province acknowledges that any such information is provided by the City for review and comment only, and the provision thereof to the Province will not confer on the Province any right to approve the same.
- (c) When work resulting from development approvals is required on Project-Required City Lands, this work will be coordinated by the Province's contractor designated for such purpose by the Province and identified in a notice given by the Province to the City, as the designated Worksafe BC Prime Contractor for the Project site (or applicable part thereof), with priority given to avoiding delays to the Project Schedule, and otherwise wherever possible the City and the Province will coordinate all other works associated with such development approvals.

10.5 City Utilities and City Infrastructure

- (a) The Province and the City agree that, with respect to City Utilities and City Infrastructure which may be affected by the performance of the Project Work, the Province will, after consulting with the City Representative on alternatives, confirm to the City:
 - (i) the City Utilities and City Infrastructure likely to be affected by the Project Work;

- (ii) the nature and extent of the Province's proposed work on such City Utilities and City Infrastructure; and
- (iii) the Province's proposed timetable for the commencement, performance and completion of tie-in and integration of such City Utilities and City Infrastructure so that it can be completed in compliance with the Project Schedule.
- (b) Except to the extent a City Enhancement is agreed to by the parties pursuant to Section 9.2, any rebuilding, relocation, extension, decommissioning, abandonment, or replacement of City Utilities or City Infrastructure required in connection with the Project will be undertaken with systems, fixtures and facilities on a Like-for-Like basis at the Province's sole cost to the applicable City Standards. Provided that the City Utilities or City Infrastructure so relocated, extended or replaced are designed and constructed in accordance with the applicable City Standards, such City Utilities or City Infrastructure will be acceptable to the City.
- (c) All City Utilities Work, and all work performed by the Province on or to City Infrastructure pursuant to this Agreement, will be designed by, and all construction plans therefor will be sealed by, a professional engineer registered in the Province of British Columbia.
- (d) The City will have review, comment and approval rights on:
 - (i) City Utilities Work;
 - (ii) work on or to City Infrastructure;
 - (iii) work on or to Third Party Infrastructure; and
 - (iv) Handover Facilities in accordance with Section 9.1;

in each case performed by the Province pursuant to this Agreement. The City will work jointly with the Province in accordance with Section 3.2 to develop a schedule for the design and construction of City Utilities, City Infrastructure, Handover Facilities, City Enhancements and Third Party Infrastructure, always having regard to, and ensuring such schedule is consistent with, the Project Schedule.

- (e) The City may review and provide comments on any work conducted by the Province on or to City Infrastructure.
- (f) The Province will coordinate with and seek approval from the City for any temporary use of City Utilities will acquire all requisite permits in accordance with Section 8.1(a).
- (g) The Province will commence, perform and complete City Utilities Work in accordance with the timetable prepared pursuant to Section 10.5(a).

- (h) Upon the Project Completion Date (or earlier date as may specifically be provided for in this Agreement) and subject to the City's acceptance pursuant to Section 10.5(i), all City Utilities Work and work on or to City Infrastructure installed by or on behalf of the Province will be passed to and be vested in the City.
- (i) Within a reasonable time after notice from the Province, the City will complete a final inspection of the City Utilities Work and work on or to City Infrastructure at such time or times as may be coordinated and agreed upon with the Province. Within a reasonable time after the City's inspection, the City will provide a letter to the Province either accepting the City Utilities Work and work on or to City Infrastructure and/or listing with specificity any deficiencies of the City Utilities Work and work on or to City Infrastructure.
- (j) All City Utilities Work and work on or to City Infrastructure will be transferred to the City free and clear of any financial encumbrances including any liens once the deficiencies in the final inspection have been addressed by the Province to the satisfaction of the City and the City delivers a letter to the Province stating:
 - (i) the City accepts that the specific element(s) of such City Utilities Work and work on or to City Infrastructure is complete and ready for use for its intended purpose; and
 - (ii) subject to Section 9.3, the City assumes responsibility for the specific element(s) of such City Utilities Work and work on or to City Infrastructure.
- (k) The City will use commercially reasonable efforts to provide such letter to the Province within a reasonable time of the Province advising that the deficiencies in the final inspection have been addressed by the Province.

10.6 New City Utilities and New City Infrastructure

- (a) Subject to Section 10.6(b), the City may construct or install new City Utilities and City Infrastructure on, in or under Project-Required City Lands and make modifications to or replace existing City Utilities or existing City Infrastructure on Project-Required City Lands, provided it cooperates with the Province in so doing and acts reasonably in coordinating the construction, installation, modification or replacement of any such City Utilities and City Infrastructure with the performance of the Project Work.
- (b) The City will not, without the prior consent of the Province (not to be unreasonably withheld or delayed), undertake construction or installation of any new City Utilities or new City Infrastructure on Project-Required City Lands nor make any material modification or replacement of existing City Utilities or existing City Infrastructure on Project-Required City Lands if

such construction, installation, modification or replacement would materially interfere with the performance of the Project Work.

(c) The foregoing Sections 10.6(a) and (b) do not apply to emergencies.

10.7 Repairs to Damaged City Infrastructure or City Utilities

- (a) The Province will use all reasonable efforts to preserve and protect the existing City Infrastructure and City Utilities, or to cause the existing City Infrastructure and City Utilities to be preserved and protected from and against damage arising out of the Project until the Project Completion Date.
- (b) If the parties establish from a Post-Construction Condition Survey, by reference to the applicable Pre-Construction Condition Survey, that the Province has damaged any City Infrastructure or City Utilities in the carrying out of the Project Work or City Utilities Work then the Province will repair such damage to the City Standards, at the Province's expense, to the extent necessary to restore the City Infrastructure or City Utilities, as applicable, to a Like-for-Like condition prior to the carrying out of the Project Work and City Utilities Work as evidenced by the applicable Pre-Construction Condition Survey.
- (c) Should damage occur to any traffic signal equipment or communications facilities on any City Roads, including Project-Required City Roads, at any time as a result of the Project Work, the City will make such necessary repairs and the Province will pay for these repairs.
- (d) For clarity, the Province will not be obligated to repair damage due to ordinary wear and tear to City Infrastructure or City Utilities due to the use of such City Infrastructure or City Utilities in a lawful manner, but will repair damage due to extraordinary wear and tear on City Roads resulting from access to and egress from the Project during performance of the Project Work.

10.8 Repairs to Damaged Project Infrastructure

If it is established that the City or contractors working on behalf of the City have damaged any Project Infrastructure, then the City will be responsible for reimbursing the Province for the reasonable costs of repairing such damage to the extent necessary to restore the Project Infrastructure to the condition it was in prior to the occurrence of such damage.

10.9 Landscaping

The City acknowledges that certain landscaping will be designed and implemented by the Province as part of the Project Work. The Province will work collaboratively with the City to jointly develop a landscape plan for the Project, to be completed in conjunction with the design of the South Approach Infrastructure and multi-use pathways. The City acknowledges and agrees that certain City Roads, to the extent required for the ownership, operation and maintenance of the Project (as determined by the Province, acting reasonably), will be resumed by the Province pursuant to Section 35(8) of the *Community Charter* (British Columbia). The Province will consult with the City and, by notice to the City, identify such City Roads, or part or parts thereof, to be so resumed substantially as set out in Schedule G [Resumed Roads] (the "**Resumed Roads**"). On the date upon which the Lieutenant Governor in Council makes an order pursuant to Section 35(8) of the *Community Charter* (British Columbia), the Resumed Roads shall be resumed by the Province and the infrastructure thereon, therein or thereunder constructed or improved by the Province as part of the Project Work shall, from and after such date, be for all purposes Project Infrastructure.

The parties acknowledge and agree that:

- the Province intends to resume, in accordance with Section 10.10, portion(s) of Bridgeview Drive and King George Highway, as reflected in Schedule G [Resumed Roads];
- (b) upon completion of construction of the proposed North Surrey Connector, the Province may, in its sole and absolute discretion, return to the City some or all of such portion(s) of Bridgeview Drive and King George Highway resumed in accordance with Section 10.10 (together, the "Returned Roads"); and
- (c) if the Province does so return to the City the Returned Roads, the Province will ensure, at its own cost and expense, that the design details and materials (including the quality thereof) of the pavement on such Returned Roads are each equivalent to that which existed as at the Reference Date.

The Province agrees that it will not disturb the operation of the Digital Sign, and agrees that the Digital Sign may remain in its current location, as shown on Schedule H [Site of Digital Sign], throughout the performance of the Project Work and after the Project Completion Date. The Province acknowledges and agrees that the area shown on Schedule H [Site of Digital Sign] shall at all times remain part of the City Lands.

10.11 Dikes

- (a) The parties agree that the Dikes are critical infrastructure that will remain under the City's ownership and control.
- (b) The Province will ensure that the City has unobstructed access to the Dikes at all times, notwithstanding that the Dikes may be located within the Project-Required City Lands.

10.12 Province to pay for Certain City Work

The City shall be entitled to recover from the Province all its reasonable costs incurred in connection with the following work performed by the City at the request of the Province including without limitation:

- (a) fieldwork undertaken by the City, including inspections and testing;
- (b) testing and inspection of City Utilities;
- (c) repairs and/or fieldwork undertaken by the City in dealing with an emergency caused or contributed to by the performance of the Project Work;
- (d) testing and inspection of traffic signals; and
- (e) legal surveys.

10.13 As-Built Records

Subject to Section 9.1(b) in respect of Handover Facilities and Section 9.2(c) in respect of City Enhancements, the Province will, within a reasonable time after the Project Completion Date, at its own cost, make available to the City digital copies of the as-built drawings for the New Fraser River Bridge and the South Approach Infrastructure.

10.14 Subsurface Conditions

Both parties are aware that within the area of the Project, there are a number of known and unknown subsurface conditions, including but not limited to the following:

- (a) soils containing peat and soft silts prone to short and long-term settlement;
- (b) concealed utilities;
- (c) multiple layers of asphalt or concrete pavement resulting in a cumulative thickness in excess of 300 mm;
- (d) historical ground improvements such as the use of light weight fills for roads and utility trench backfill;
- (e) buried railway ties and tracks;
- (f) piles; and
- (g) buried corduroy roads.

The risk of, responsibility and liability for the subsurface conditions, known or unknown, as the same may affect the performance of the Project Work, rests solely with the Province.

10.15 Drainage from South Approach Infrastructure

Both parties agree that runoff from the New Fraser River Bridge will drain directly to the Fraser River.

The City agrees that runoff from the South Approach Infrastructure (excluding the Highway 17/Old Yale Road Overpass, connections to Highway 17 and catchment area currently draining to the Province's private pump station near the Highway 17/Southern Railway crossing) can be diverted to the City's Pattullo pump station. Such diversion(s) shall include direct connection(s) to the drainage channel or forebay immediately upstream of the pump station and not through the City's existing storm drainage system or ditches. The City reserves the right to approve the location and design drawings for such diversion(s) connection, including any isolation and backwater infrastructure that may be required by the City.

The Province agrees that the Project Work will not increase runoff into the City's storm drainage systems and that it will mitigate any increases in impervious area resulting from the construction of the South Approach Infrastructure through use of stormwater management best practices. The Province will prepare, and submit to the City for approval, stormwater control plans for interim conditions during construction and ultimate post construction site conditions.

The Province agrees not to pump or drain any surface runoff water into the sanitary sewer system.

10.16 Drainage and Flooding

- (a) The parties acknowledge that the Project area is low-lying, prone to surface flooding, and elevated groundwater levels, influenced by the Fraser River and tidal conditions. Specifically, the parties acknowledge that:
 - the storm drainage system along the south side of King George Boulevard convey stormwater runoff from the City's drainage utilities to the City's Pattullo pump station and that the existing pump stations, ditches and storm sewers are all hydraulically connected and integral to the drainage servicing operations within the City's surrounding low lying areas;
 - (ii) the storm drainage system along the north side of King George Boulevard convey stormwater runoff from the City's drainage utilities to the City's Royal City pump station and that the existing pump stations, ditches and storm sewers are all hydraulically connected and integral to the drainage servicing operations within the City of Surrey's surrounding low lying areas; and
 - (iii) King George Boulevard experiences flooding and the existing storm drainage system along King George Boulevard experiences

backwater and surcharging to the road surface and surrounding properties.

- (b) As a result of the existing conditions described in Section 10.16(a), the Province covenants and agrees that:
 - (i) the Province will maintain existing runoff from the Resumed Roads to the City's storm drainage systems. In the event that the Project Work or any future works on the Resumed Roads increase runoff to the City's storm drainage systems, the Province will pay the costs of upgrading the City's storm drainage systems, including storm drains and pump stations in order to accommodate the increase in runoff;
 - (ii) the Province will not make any modifications to the storm drainage systems within Resumed Roads, where such modifications will adversely impact the hydraulic capacity and/or hydraulic grade lines (water levels) through any City storm drainage system, including the consequential impacts in the upstream and downstream storm drainage systems operated and maintained by the City, without prior written approval from the City which approval will be conditional on the Province agreeing to bear the cost of any upgrades to the City's storm drainage systems that are required to accommodate such modifications; and
 - (iii) as between the City and the Province, the City will not be liable for any flooding in the Resumed Roads or adjacent areas or overland storm drainage issues, except to the extent the City's negligent act(s) or omission(s) cause or contribute to the same.

10.17 Railway Works

Except as may otherwise be agreed as among the City, the Province and Southern Railway of British Columbia ("**Southern Railway**"), if any railway works for or in respect of Southern Railway's rail system are required in connection with or as a result of the construction of the South Approach Infrastructure, the Province covenants and agrees, as between itself and the City, to construct, repair, maintain and replace such works at its own sole cost. For greater certainty, the City agrees that it will negotiate in good faith and enter into requisite agreement(s) with Southern Railway for any such works that may be located on City Roads.

10.18 Fisheries

If any works are required by the Department of Fisheries and Oceans as a result of or in connection with the Project, the Province covenants and agrees, as between itself and the City, to install, maintain and replace such works at its own sole cost. Despite the foregoing, the City agrees, as between itself and the Province, that the City will install, maintain and replace at its own sole cost, any works that may be required by the

Department of Fisheries and Oceans as a result of or in connection with the work the City proposes to perform pursuant to Section 3.5.

10.19 Separate Electrical Circuits

The Province will maintain all relevant electrical facilities that are constructed and installed:

- (a) as part of the Project Infrastructure; or
- (b) on Highway 17;

on electrical circuits and meters that are separate from those owned and operated by the City.

For further clarity, where intelligent transportation systems equipment that comprises part of the City Utilities is mounted to traffic signal infrastructure owned by the Province, such equipment shall be connected such that the City can utilize the Province's power supply (including the uninterruptable power supply). If the Province deems it necessary or advisable, the applicable Highway Use Permit(s) authorizing such equipment to occupy a provincial public highway may specify an annual or other periodic charge based on the typical power consumption and BC Hydro power rates.

11. TRANSPORTATION ACT (BRITISH COLUMBIA) SECTION 52

11.1 Memorandum of Understanding regarding *Transportation Act* (British Columbia) Section 52

The Province and the City, each acting in good faith, will negotiate the terms of a memorandum of understanding acknowledging and addressing, among other things:

- (a) the potential application of section 52 of the *Transportation Act* (British Columbia) to areas in proximity to the Resumed Roads;
- (b) the needs and objectives of the Province with respect to operation, maintenance and control of the Resumed Roads;
- (c) the needs and objectives of the City with respect to potential development of lands in proximity to the Resumed Roads and, especially, in proximity to the Scott Road SkyTrain station; and
- (d) the mutual desire of the parties to cooperate with respect to the foregoing.

12. HIGHWAY USE PERMIT

12.1 Application for Highway Use Permit

If any City Utilities or Handover Facilities are, from and after the date of the order of the Lieutenant Governor in Council referred to in Section 10.10, situated within any of the Resumed Roads (whether or not such City Utilities have been relocated, replaced or

altered pursuant to this Agreement), the parties will proceed in accordance with the following:

- (a) the parties will cooperate in the preparation and submission, in accordance with the requirements of all applicable laws, of an application for a Highway Use Permit in respect of the relevant City Utilities or Handover Facilities, as applicable, to use or occupy a provincial public highway, on substantially the terms and conditions set out in Schedule J [Form of Highway Use Permit]; and
- (b) the Province shall, in good faith, promptly commence and continue to completion the review and processing of such application in the ordinary course.

13. ASSIGNMENT AND EXERCISE OF RIGHTS

13.1 Assignment by Province

Except as otherwise provided herein, the Province may at any time transfer or assign all or any of its rights and interests under this Agreement to any Qualified Government Entity, and upon any such transfer or assignment, the Province will be released from its obligations under this Agreement to the extent that they are assumed in writing by the transferee or assignee. The City will be provided with written notice of any such transfer or assignment, including a copy of the relevant executed transfer or assignment and assumption agreement (or any relevant authorizing legislation, as applicable).

Effective as of and from the date of any such transfer or assignment, any such transferee or assignee will be entitled to exercise any rights and to enjoy any benefits of the transferor or assignor under this Agreement which have been so transferred or assigned.

13.2 Rights Exercisable by Province's Contractors, Subcontractors and Agents

Except as otherwise provided herein, the rights granted to the Province in this Agreement may be exercised by the Province or any of its contractors, subcontractors, agents, lessees or licencees (which persons may, without limitation, include FortisBC Energy Inc. or an affiliate thereof) at any time in connection with the design, building, operation, maintenance and rehabilitation of the Project Infrastructure provided that, for certainty:

- (a) the Province shall, at all times and despite such delegation of rights, be and remain responsible for the covenants and responsibilities of the Province herein, and shall in no way be released from the same; and
- (b) without limiting the foregoing, the Province shall, notwithstanding any delegation of its rights to its contractor under the Project Agreement, fully participate in any Dispute resolution process under this Agreement.

14. INDEMNIFICATION/CONDUCT OF INDEMNIFIED CLAIMS

14.1 **Province Indemnity**

The Province will indemnify and save harmless the City its elected and appointed officials, directors, officers, employees, contractors and agents (collectively, the "**City Indemnified Parties**"), from and against any and all losses, claims, damages, actions, causes of action, fines, penalties, costs and expenses (including, without limitation, actual legal fees and disbursements) the City Indemnified Parties may sustain, incur, suffer or be put to at any time, either before or after the expiration or termination of this Agreement, arising out of, or in connection with:

- (a) any breach of this Agreement or anything negligently done or negligently omitted to be done pursuant to this Agreement by the Province or any employee, contractor or agent of the Province; or
- (b) any contravention or contravention alleged by a governmental authority having jurisdiction, by the Province of applicable laws, statutes, regulations, by-laws, or directions of governmental or statutory authorities issued under lawful authority, including, without limitation, those related to the environment, environmental protection and contaminated sites in the course of the performance of the Project Work;

except for losses, claims, complaints, damages, actions, causes of action, fines, penalties, costs or expenses that arise out of any breach of this Agreement by, or the negligent acts or omissions of, the City Indemnified Parties.

14.2 City Indemnity

The City will indemnify and save harmless the Province, its directors, officers, employees, contractors and agents (collectively, the "**Province Indemnified Parties**"), from and against any and all losses, claims, damages, actions, causes of action, fines, penalties, costs and expenses (including, without limitation, actual legal fees and disbursements) the Province Indemnified Parties may sustain, incur, suffer or be put to at any time, either before or after the expiration or termination of this Agreement, arising out of, or in connection with:

- (a) any breach of this Agreement or anything negligently done or negligently omitted to be done pursuant to this Agreement by the City or any elected or appointed official, director, officer, employee, contractor or agent of the City; or
- (b) any contravention or contravention alleged by a governmental authority having jurisdiction, by the City or by any elected or appointed official, director, officer, employee, contractor or agent of the City of applicable laws, statutes, regulations, by-laws, or directions of governmental or statutory authorities issued under lawful authority, including, without limitation, those related to the environment, environmental protection and

contaminated sites in the course of the Province's performance of the Project Work.

except for losses, claims, complaints, damages, actions, causes of action, fines, penalties, costs or expenses that arise out of any breach of this Agreement by, or the negligent acts or omissions of, the Province Indemnified Parties.

15. INSURANCE

15.1 Province Self-Insured

The City acknowledges that the Province may self-insure in respect of the Project Work.

16. DISPUTE RESOLUTION

16.1 Dispute Resolution Procedure

If any Dispute arises at any time, the party which identifies the Dispute will give written notice of the Dispute to the other and the following provisions will apply:

- (a) The parties agree to endeavour to resolve the Dispute as expeditiously as possible, with a view to enabling the design, construction, testing and commissioning of the Project Infrastructure to proceed expeditiously in accordance with the Project Schedule.
- (b) Each of the Province and the City may invite any of its contractors or consultants whose work is the subject of the Dispute to participate in any discussions or proceedings which are the subject of the dispute on terms as to confidentiality and otherwise as the parties may agree.
- (c) The Provincial Representative and the City Representative will examine any matter in Dispute as soon as possible and attempt to resolve the Dispute within 10 Business Days following receipt of the notice of the Dispute.
- (d) If the Provincial Representative and the City Representative are unable to agree on a resolution of the Dispute within ten (10) Business Days following the date on which the Dispute was referred to them for resolution, then either party may elect to have the Dispute resolved by litigation in the proper judicial forum, unless the Province and the City have agreed in writing as to some alternative means for resolving the Dispute.

Notwithstanding the provisions of Section 13.2, the Province agrees that the rights and obligations of the Province as set out in Section 14.1 cannot be exercised or performed by anyone other than the Province.

16.2 **Progress of Project**

Notwithstanding any Dispute, the Project will continue to the fullest extent possible and each party will continue complying with its obligations under this Agreement until the Dispute has been resolved through the Dispute Resolution Procedure set forth in Section 16.1.

17. NOTICES

17.1 Notices

Any notice given pursuant to this Agreement will be in writing and delivered or sent by facsimile transmission addressed to the parties as follows:

To the City:

CITY OF SURREY

13450 104 Avenue Surrey, British Columbia V3T 1V8

Attention: General Manager, Engineering Department

Copy to: Municipal Solicitor

To the Province:

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE

5B – 920 Blanshard Street Victoria, British Columbia V8W 3EG

Attention: Executive Project Director Pattullo Bridge Replacement Project

or at such other address or to the attention of such other person as either party may specify by notice in writing given to the other in accordance with the foregoing. The time of giving and receiving any such notice will be deemed to be on the day of delivery, if delivered, or the day of transmittal with confirmation of receipt, if sent by facsimile or the date of transmission, if sent by email unless, in the case of notice sent by facsimile or email, the party sending the facsimile or email is notified by the intended recipient that the facsimile or email has failed or not been received.

18. GENERAL

18.1 Reference Date and No Right of Termination

Except as otherwise provided in this Agreement, the rights granted to the Province hereunder are effective as of and from the Reference Date and will remain in full force and effect thereafter for and during the Term.

The City acknowledges and agrees that no breach of this Agreement by the Province will give rise to any right to terminate this Agreement or result in the suspension, cancellation or termination of all or any of the rights granted to the Province under this Agreement.

18.2 Further Assurances

The Province and the City agree to do all such things, to sign all such documents and to provide all such further assurances as are reasonably required to carry out the intent and purpose of this Agreement in a timely fashion.

18.3 Sections, Schedules and Interpretation

The division of this Agreement into separate Schedules, Articles and Sections and the insertion of headings are for convenience of reference only and will not affect its interpretation.

18.4 No Deemed Waiver

No failure or delay in the exercise of any right under this Agreement will operate as a waiver, nor will any single or partial exercise of any right under this Agreement preclude any other or future exercise of such right or the exercise of any other right. No waiver of any right under this Agreement will be effective unless it is in writing signed by the party sought to be bound thereby.

18.5 Enurement and Binding Effect

Subject to Article 13, this Agreement will enure to the benefit of and be binding on each party and its respective successors and permitted assigns and every reference to the City and the Province will include the successors and permitted assigns of such party, wherever the context so requires.

18.6 Governing Law

The Agreement will be governed by and construed in accordance with the law of British Columbia. Subject to the provisions of Article 16, the parties irrevocably submit to the jurisdiction of the courts of British Columbia in all matters relating to the interpretation or enforcement of this Agreement.

18.7 Severability

All of the rights and obligations contained in this Agreement are severable so that if any one or more of such rights and obligations is determined to be void or unenforceable, either in whole or in part, the balance of this Agreement will remain in effect and be binding and enforceable to the fullest extent permitted by law.

18.8 Reference to Statutes

A reference to a statute or law includes all regulations made thereunder, all amendments to the statute or law in force from time to time, and every statute or law that supplements or supersedes such statute or law.

18.9 Jurisdiction of the Province

Nothing in this Agreement shall be construed as an agreement by the Province to restrict, limit or otherwise fetter in any manner the Province's ability to introduce, pass, amend, modify, replace, revoke or otherwise exercise any rights or authority regarding legislation, regulations, policies or any other authority of the Province.

18.10 Limitation of Liability

In no case shall either party have any liability to the other party for any consequential or special damages, loss of profits or business interruption suffered by that party.

18.11 Entire Agreement

This Agreement is the entire agreement between the parties pertaining to the design and building of the Project Infrastructure including the South Approach Infrastructure and other matters provided herein, this Agreement supersedes all prior agreements, negotiations and discussions, whether oral or written, of the parties, and there are no agreements, covenants, representations or warranties, express, implied, statutory, collateral or otherwise, save as set forth herein. This Agreement shall not be amended except in a written instrument executed by all of the parties or their solicitors on their behalf and stated to be an amendment to this Agreement.

18.12 Financial Administration Act

Notwithstanding any other provision of this Agreement, the Province's obligation to pay any money to the City is subject to the *Financial Administration Act* (British Columbia), which makes that obligation subject to an appropriation being available in the fiscal year of the Province during which payment becomes due.

18.13 Relationship of the Parties

This Agreement does not constitute either party the contractor, agent or partner of the other for any purpose whatsoever, or create a partnership, joint venture or similar relationship between the parties.

19. SCHEDULES

19.1 Schedules

The parties agree that the following Schedules are deemed to be attached to this Agreement and form an integral part of this Agreement.

Schedule A - Project Scope of Work

- **Project-Required City Roads** Schedule B -Project-Required City Fee Simple Lands Schedule C -Handover Facilities Schedule D -Construction Traffic Management Schedule E -Schedule F Communications -**Resumed Roads** Schedule G -
- Schedule H -Site of Digital Sign

-

- Bridge Road Watermain Schedule I -
- Form of Highway Use Permit Schedule J -
- Schedule K
- Scott Road Interchanges Option Conceptual Plan

[Signature page to follow]

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto.

CITY OF SURREY

Per:

DOUG McCALLUM, MAYOR

Per:

JENNIFER FICOCELLI, CITY CLERK

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA REPRESENTED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE

Per:

Representative, Ministry of Transportation and Infrastructure

Per:

Representative, Ministry of Transportation and Infrastructure

SCHEDULE A

Project Scope of Work

GENERAL

- 1) This schedule describes the scope of the New Fraser River Bridge and the South Approach Infrastructure. For the purpose of this Schedule A:
 - a) the following roads are described using a westbound (towards New Westminster) and eastbound (towards Surrey) orientation: the New Fraser River Bridge, King George Boulevard, 112 Avenue, 111A Avenue, and Old Yale Road; and
 - b) the following roads are described using a southbound and northbound orientation: Highway 17, Scott Road, Bridge Road, Bridgeview Drive, and 124 Street.

NEW FRASER RIVER BRIDGE

- 2) The New Fraser River Bridge will be located upstream of the New Westminster Railway Bridge, connecting directly to King George Boulevard in Surrey. The New Fraser River Bridge will be designed to accommodate:
 - a) an opening day bridge deck with an equivalent six lane width, configured to accommodate:
 - i. four through travel lanes (two westbound and two eastbound) for motor vehicles centered on the bridge deck;
 - ii. two, 3.5 metre wide multi-use pathways (MUP) for pedestrians and cyclists on the bridge deck adjacent to the travel lanes, including the approach ramps; and
 - iii. bi-directional pedestrian travel and uni-directional cyclist travel, adjacent to and in the same direction as traffic for each MUP.
 - b) a future configuration consisting of:
 - i. six through travel lanes (three westbound and three eastbound) for motor vehicles utilizing the opening day bridge deck;
 - ii. two, 4.0 metre wide MUPs for pedestrians and cyclists, cantilevered on each side of the bridge deck and along the approach ramps; and
 - iii. bi-directional pedestrian travel and uni-directional cyclist travel in the same direction as traffic for each MUP.

- c) an opening day vehicle deck configuration that includes everything necessary for future expansion to six travelled lanes without modification to the bridge, other than:
 - i. addition of two new MUPs cantilevered to the outside of, and at the same elevation as, the opening day bridge deck;
 - ii. relocation of barriers; and
 - iii. modification of safety and security fencing, drainage and pavement markings.
- d) foundations, substructure and superstructure accommodating appropriate design loads, including vehicle, wind and seismic for the future six lane configuration as described in b);
- e) viewing platforms on both sides of the New Fraser River Bridge, located at each tower leg;
- f) safety barriers separating the two directions of traffic and separating the traffic lanes from the multi-use pathways;
- g) safety and security fence on both sides of the bridge;
- h) a cable snow and ice removal system; and
- i) vehicle lane widths and shoulder widths in accordance with the Ministry's design criteria.
- 3) In carrying out the Project Work, the Province will not disturb or impact the existing Surrey Dikes system as indicated in **Figure A1** and **Figure A2**.



Figure A1

Surrey Dike System

(image source: City of Surrey COSMOS)



Figure A2

Surrey Dike System

(image source: Ministry of Environment, Lower Mainland Region)

SOUTH APPROACH INFRASTRUCTURE

- 4) The South Approach Infrastructure will be designed to accommodate the following road connections in Surrey:
 - a) a single-lane exit ramp from eastbound New Fraser River Bridge to southbound Highway 17;
 - b) replacing the existing traffic signal at Highway 17 and Old Yale Road with an overpass, without significantly changing the grade and drainage of Old Yale Road;
 - c) reconfiguring Bridge Road (between Old Yale Road and immediately north of the Southern Railway of BC at-grade railway crossing) to permit two-way vehicle operation, including any required modification or upgrade to the Southern Railway of BC at-grade railway crossing on Bridge Road and any other railway crossing improvements required as a result;
 - d) all remaining road connections within the project boundary will be generally similar to existing; and
 - e) the posted speed for Surrey roads will be 50km/hr, with the exception of King George Boulevard east of 124 Street, which will be 60km/hr.
- 5) The following roads and adjacent multi-use pathways will be designed in accordance with City Standards and modified as shown by the respective typical cross-sections. The street trees and lighting shall be provided in accordance with City Standards as noted elsewhere in this Schedule. The Province's geotechnical design criteria, listed in Appendix A to this Schedule, will be applied for the road cross-sections, and a design life of 100 years will be assumed for the New Fraser River Bridge. Expanded Polystyrene (EPS) will not be used to support the following road cross-sections unless approved by the City.
 - a) Bridge Road (Figure A3);
 - b) 112 Avenue (Figure A4);
 - c) 111A Avenue (Figure A5);
 - d) 124 Street (Figure A6); and
 - e) Old Yale Road (Figure A7).





Typical Cross Section: Bridge Road between Old Yale Road and north of SRY Crossing



Figure A4

Typical Cross Section: 112 Avenue west of 124 Street



Figure A5

Typical Road Cross Section: 111A Avenue west of 124 Street





Typical Road Cross Section: 124 Street between 111A Avenue and west of Pattullo Place





Typical Road Cross Section: Old Yale Road east of Bridge Road

Preliminary conceptual drawings of the South Approach Infrastructure are shown in **Figures A8** to **A11**. The conceptual drawings are subject to final design and refinements by the Province's designbuilder. These drawings are provided for ease of reference only and where conflicts occur between them and the text of this Schedule, the text shall govern.

- 6) Intersection improvements at King George Boulevard / Bridgeview Drive, conceptually shown in **Figure A11**. These improvements include:
 - a) On the westbound King George Boulevard approach, an open-graded friction course asphalt pavement consistent with the existing asphalt pavement; and
 - b) On the westbound King George Boulevard approach, a raised median separating the rightturn lane from the through traffic lanes to prevent queue-jumping. This median should extend for at a minimum of 200 metres.
- 7) Existing signalized intersections along King George Boulevard and Scott Road will remain, with signal timings and signal infrastructure modified as required to accommodate the Project Work.
- 8) The existing traffic signal at Highway 17 and Old Yale Road, including all associated left and right turning movements at the intersection, will be removed and an overpass of Highway 17 over Old Yale Road constructed. The resulting T-intersection of Old Yale Road and Bridge Road will accommodate all movements with Bridge Road being stop controlled. A preliminary design for a future signal at the intersection of Old Yale Road will be prepared.
- 9) Landscaping will be designed and implemented by the Province as part of the Project Work. The Province will work collaboratively with the City to jointly develop a landscape plan for the South Approach Infrastructure and Handover Facilities, to be completed in conjunction with the design of

the South Approach Infrastructure and Handover Facilities. Trees removed as part of the Project will be replaced at a minimum ratio of 2:1.

- 10) The South Approach Infrastructure will include the following new MUP facilities:
 - a) a continuous MUP along the south side of 112 Avenue to the north side of 111A Avenue. The MUP will connect to:
 - i. the MUPs on both sides of the New Fraser River Bridge;
 - ii. the sidewalk on the north side of 112 Avenue, at a new signed and marked crosswalk;
 - iii. the existing Scott Road Station foot path immediately west of Pattullo Place; and
 - iv. the Highway 17 pedestrian overpass (located near the western terminus of 112A Avenue), via a new MUP connection that crosses 112 Avenue at a new signed and marked crosswalk;
 - b) a MUP on the west side of Bridge Road, between Old Yale Road and immediately north of the existing Southern Railway at-grade railway crossing. The MUP may be reduced to three metres where constrained by properties. The MUP will connect to:
 - i. the eastbound MUP on the New Fraser River Bridge;
 - ii. the Scott Greenway on the south side of Old Yale Road at a new signed and marked crosswalk; and
 - iii. the existing shoulder bike lanes on Bridge Road north of the Southern Railway atgrade railway crossing;
 - c) the existing MUP on the south side of Old Yale Road (Scott Greenway) will be modified as needed to accommodate the new Highway 17 overpass;
 - d) new MUP facilities will be designed to include:
 - i. a clear width of 4m, unless otherwise specified;
 - ii. where practical and unconstrained by private properties, a 3.2m wide boulevard separation from the roadway which may be used for installing street lights and trees, except for sections of MUPs that are located on structures where code compliant barriers will be used;
 - iii. Boulevards with a width of 1.2m or greater will include tree plantings in accordance with the landscape plan. Boulevards with a width less than 1.2m will have a stamped and colourized concrete treatment. If a localized reduction to the width of a MUP and/or boulevard is necessary due to property constraints, the reductions will be applied in the following descending order:
 - a. reduce boulevard width to a minimum of 1.5m;

- b. reduce MUP width to a minimum of 3m; and
- c. eliminate boulevard altogether, with appropriate treatments for placement of street lights, signage, and other utilities;
- iv. appropriate crossing treatments at intersections, crosswalks, and driveways;
- v. an asphalt paved surface;
- vi. lighting designed in accordance with the City of Surrey Design Criteria Manual using a 'High Pedestrian Activity' classification, including pedestrian level lighting where required; and
- vii. wayfinding signage;
- e) notwithstanding section 10.c), City approval is required for all boulevard component alignments including multi-use paths in order to preserve trees and optimize the installation of landscaping.

11) The South Approach Infrastructure will include the following new sidewalk facilities:

- a) north side of 112 Avenue, west of 124 Street;
- b) north side of Old Yale Road;
- c) new sidewalk facilities will be designed to include:
 - i. a width of 2m, with a minimum clear width of 1.2m adjacent utilities if a boulevard cannot be provided due to space constraints;
 - ii. where practical and unconstrained by private properties, a minimum 2m wide boulevard separation from active vehicle lanes;
 - iii. boulevards with a width of 1.2m or greater will include tree plantings in accordance with the landscape plan. Boulevards with a width less than 1.2m will have a stamped and colourized concrete treatment;
 - iv. if a localized reduction to the width of a sidewalk and/or boulevard is necessary due to property constraints, the reductions will be applied in the following descending order:
 - a. reduce boulevard width to a minimum of 1.5m;
 - b. reduce sidewalk width to a minimum of 1.5m; and
 - c. eliminate boulevard altogether, with appropriate treatments for placement of street lights, signage, and other utilities.
 - v. appropriate crossing treatments at intersections, crosswalks, and driveways;

- vi. a concrete broom-finished surface;
- vii. lighting designed in accordance with the City of Surrey Design Criteria Manual using a 'Medium Pedestrian Activity' classification; and
- viii. wayfinding signage;
- d) notwithstanding section 11.c), City approval is required for all boulevard component alignments including sidewalks in order to preserve trees and optimize the installation of landscaping.
- 12) The following bus stops will be reconstructed in accordance with TransLink's Bus Infrastructure Design Guidelines and designed to be wheelchair accessible and in accordance with City Standards:
 - i. eastbound bus stop on 112 Avenue, west of 124 Street; and
 - ii. westbound bus stop on 111a Avenue, west of the existing signed and marked crosswalk.
- 13) All new or modified roadworks, multi-use paths, and sidewalks shall tie in to existing facilities as per City Standards.
- 14) All new or modified intersections and crosswalks shall meet sightline and road safety requirements.

DECOMMISSIONING AND REMOVAL OF EXISTING BRIDGE

- 15) The decommissioning and removal of the existing bridge will include the removal of all existing bridge superstructures, abutments, retaining walls, and substructures. For greater certainty:
 - a) outside of the Fraser River, the foundations in Surrey will be removed to ground level, with the foundations and surrounding areas restored with topsoil, revegetation seeding, and other landscaping in accordance with the landscape plan;
 - b) within the Fraser River, the foundations will be demolished to the lowest elevations in accordance with the river navigation zone, and as a minimum this level will be the top of existing riprap; and
 - c) abandoned roadways and vehicle ramps will be removed and reinstated with appropriate fill, top soil, and other landscaping in accordance with the landscape plan.

Appendix A

ARTICLE 1 Geotechnical Design Criteria

1.1 General

The provisions of the BC Supplement to CAN/CSA-S6-14, CAN/CSA-S6-14 Section 6 (Foundations and Geotechnical Systems) and EGBC Landslide Guidelines, shall apply unless otherwise provided in this Article.

1.2 Slope Stability

- (a) The factor of safety for slope stability analysis of new or modified cut and fill slopes, including approach embankments not in close proximity to Structures, shall meet the requirements of the BC Supplement to CAN/CSA-S6-14.
- (b) Where existing slopes are modified, all functional and performance requirements specified in this Schedule shall be met.
- (c) For seismic design of all new or modified slopes or embankments refer to Article 4 [Seismic Design Criteria] of this Part.
- (d) All new or modified slopes shall be provided adequate protection against erosion and shallow slope movement. Except in the case of slopes under the end spans of overpass and underpass Bridges, the Design of such protection shall be in accordance with the Manual of Control of Erosion and Shallow Slope Movement. For slopes under the end spans of overpass and underpass Bridges, slope protection shall be provided in accordance with Article 3 [Structure Design Criteria] of this Part.

1.3 Settlement

- (a) Foundations for Structures shall be designed such that their total and differential settlements are compatible with the function and performance requirements of the Structures over their Design Life.
- (b) Foundations for Structures shall be designed such that their total settlements after Substantial Completion are less than 50 mm over their Design Life.
- (c) Foundations for the New Fraser River Bridge, on land in Surrey and in the Fraser River, shall extend into bedrock. Foundations for the New Fraser River Bridge in New Westminster shall extend into till or bedrock.
- (d) The Design shall account for differential settlements of road embankments, approach slabs and Bridges such that the original profile is maintained to within 0.5%.
- (e) The Design shall account for total and differential settlements of road embankments and pavement surfaces, over a 75 year period following the SC1 Substantial Completion Date such that the Infrastructure remains safe for use and smoothness and cross-slope requirements

are met, ponding and sheeting of water is prevented, pavement drainage is maintained and the function of culverts and ditches is preserved.

- (f) Embankments shall be designed such that their total settlements after the SC1 Substantial Completion Date are less than 150 mm over the Design Life of the Bridge.
- (g) On Highway 17 for embankments greater than 2m in height, the Design shall use Expanded Polystyrene ("**EPS**") and/or timber piles.
- **1.4** Lightweight Fills
 - (a) All lightweight fills shall be adequately protected in terms of wheel loads, ground water, road salts, weather and fire resistance, flotation under flood conditions and fuel spills.
 - (b) Where walls are used to contain flammable lightweight fills, the walls shall provide a minimum 2-hour fire rating.
 - (c) Foundation systems (sign or abutment foundations for example) or landscaping above the lightweight fills shall be designed such that protective membrane covers required to protect the lightweight fill are not compromised.
 - (d) Flotation forces corresponding to inundation of the fill to the flood of record (1894) flood level shall be considered in the design of lightweight fills, regardless of any flood protection provided for the area in which the fill is to be constructed.
 - (e) Shredded rubber tires shall not be used.
 - (f) Pumice shall not be used.
 - (g) Hog fuel (wood waste) shall not be used.
 - (h) Lightweight fill shall have a minimum 1.2 m clean granular material cover.
 - (i) EPS lightweight fills shall meet the following requirements:
 - EPS shall be supplied in the form of blocks. It shall be classified as to surface burning characteristics in accordance with CAN/ULC-S102.2-03-EN, having a flame spread rating not greater than 500;
 - (ii) the minimum compressive strength, measured in accordance with ASTM D1621 shall be 125 kPa at a strain of not more than 5%;
 - (iii) the density of EPS shall not be less than 22 kg/m³;
 - (iv) EPS blocks shall be fully wrapped with a black polyethylene sheeting with a minimum thickness of 0.254 mm (10-mil); and
 - (v) polyethylene sheeting joints shall be overlapped by a minimum of 0.5 m and sealed.

- **1.5** Use of Timber Piles
 - (a) Timber piles must be installed permanently below groundwater level. Timber piles shall not be used as Foundations supporting Bridges, utility poles or highway sign bases.
 - (b) Timber piles shall be founded in the underlying sand layer.
 - (c) If timber piles are used, then a load distribution platform shall be incorporated in the design.
- **1.6** Geotechnical Investigation Plan for the New Fraser River Bridge
 - (a) Within 60 days following the Effective Date, Project Co shall prepare and submit to the Province's Representative in accordance with the Review Procedure a geotechnical investigation plan (the "Geotechnical Investigation Plan" or "GIP") which shall describe the geotechnical investigation and tests that Project Co will carry out in connection with the Design and Construction of the New Fraser River Bridge, including:
 - (i) the location and type of tests;
 - (ii) the qualification requirements for geotechnical testing staff;
 - (iii) the identification, qualification and certification of laboratories conducting the tests; and
 - (iv) reference to relevant Quality Documentation.
 - (b) Within 90 days following the Effective Date the GIP shall be reviewed by the Checking Team for Category III Structures, updated to address comments from the Checking Team, and submitted to the Province's Representative in accordance with the Review Procedure with all comments and responses attached.
- 1.7 Geotechnical Design
 - (a) Project Co shall prepare comprehensive geotechnical reports for the Project, including geotechnical investigation reports and geotechnical design reports. The geotechnical investigation reports shall cover existing geotechnical information and known site conditions, new geotechnical investigations performed for the Project and geotechnical test results. The geotechnical design reports shall include geotechnical engineering analysis, geotechnical design assumptions, design parameters (and the basis for these), and geotechnical design recommendations. The geotechnical design reports shall also include foundation settlements, pile capacities, seismic ground response analysis and design response spectra. All assumptions used in analyses shall be clearly documented in the reports.
 - (b) The geotechnical reports shall be submitted to the Province's Representative at the Interim Design review.
 - (c) The geotechnical reports associated with any Category III Structures shall be reviewed by the Checking Team for Category III Structures prior to Project Co submitting the Interim Design.

ARTICLE 2 Design Life

- (a) Non-replaceable components shall have a minimum Design Life of 100 years. Non-replaceable components of Structures will, as a minimum, include:
 - (i) Foundations, including piles, pile caps and footings;
 - (ii) Substructures, including piers, pier caps, abutments, retaining walls, ground anchors, tie backs and soil reinforcing elements of mechanically stabilized earth walls; and
 - (iii) Superstructures, including primary and secondary structural members and decks, for roadway Superstructures.
- (b) Trial mixes shall be used to demonstrate that Design Life of concrete elements can be achieved. Concrete mixes shall undergo an accelerated testing program to confirm their scaling resistance.
- (c) Replaceable components shall include, as a minimum, the components given in Table 3.3.2 below and shall have the corresponding Design Life given in Table 3.3.2.

Component	Design Life (years)
Bearings	50
Joints	40
Joint seals, sliders and springs	15
Shock transmission units	30
Steel coating systems	30
Hand rails, fencing and barriers	40
Deck Wearing Surface System	30
Drainage systems	40
Sign support Structures	75
Stay cables and tie-down cables, including sheaths	60
Stay cable dampers	30
Structural Health Monitoring System	20
Elevators, travellers, inspection gantries	50
Ladders, platforms, handrails, doors, hatches	50
Dehumidification system	40
Stay Cable Snow and Ice Removal System	20

Table 2.1 – Design Life for Replaceable Components

SCHEDULE B

Project-Required City Roads

1) Refer to Figure B1 for the Project-Required City Roads.


SCHEDULE C

Project-Required City Fee Simple Lands

- 1) No Project-Required City Fee Simple Lands are identified.
- 2) This Schedule will be amended as needed if the Province determines that Additional Lands are necessary for the Project Work.
- 3) Refer to Figure C1 for the Project-Required City Fee Simple Lands. Note that portions of the lots on Bridgeview Drive used as road will be dedicated.



SCHEDULE D

Handover Facilities

- 1) This schedule describes the Handover Facilities in Surrey.
- 2) Project Infrastructure, excluding Third Party Infrastructure, constructed on the following City Roads are Handover Facilities:
 - a) 112 Avenue;
 - b) 111A Avenue;
 - c) 124 Street;
 - d) Bridge Road; and
 - e) Old Yale Road excluding Highway 17/Old Yale Road Overpass.
- 3) City Utilities Work and City Utilities Enhancements are Handover Facilities.

SCHEDULE E

Construction Traffic Management

COORDINATION BETWEEN PROVINCE AND CITY

- 1) The goal of construction traffic management during Project Work is to protect construction workers, accommodate all road users while construction is underway, and support neighbourhood livability by minimizing and mitigating impacts on residents and businesses during construction. For greater clarity, road users include pedestrians and cyclists of all ages and abilities (including children, seniors, and people with disabilities who are travelling independently), and motor vehicles (including passenger vehicles, trucks, motorcycles, buses, and emergency vehicles).
- 2) The Province, the City of New Westminster and the City of Surrey will meet regularly, and as one group where appropriate, to review the development and construction of the Project Work, coordinate on construction traffic management, and review any traffic related changes, analysis boundaries, impacts, observations, and mitigation measures implemented. The meetings will occur bi-weekly, and more frequently when appropriate. The contractor and other stakeholders (e.g. TransLink, BC Trucking Association) may be invited to participate in the meetings.
- 3) The Province and the City acknowledge that multiple closures of Bridge Road may be required to facilitate construction of the Project Infrastructure and demolition of the existing Pattullo Bridge. The Province and the City agree to work co-operatively and in a timely manner to plan for any such required closures.

TRAFFIC MANAGEMENT PLAN

- 4) The Project has been assessed to be a Category 3 project in accordance with the Ministry's Traffic Management Manual for Work on Roadways. The Traffic Management Plan (TMP) and sub-plans, and implementation of all traffic control operations, will be in accordance with the requirements of a Category 3 project and applicable industry codes and standards, including the City of New Westminster's Draft Construction Traffic Control Guidelines for Pedestrians and Cyclists document. The Province will provide the TMP, and any subsequent amendments, to the City for review, and the City will provide its comments thereon to the Province within fifteen (15) Business Days after receipt.
- 5) The TMP will include the following sub-plans:
 - a) Traffic Control Plan;
 - b) Emergency Response Plan;

- c) Communications Plan (includes Advisory Signing Plan and Public Information Plan);
- d) Parking Management Plan;
- e) Implementation Plan; and
- f) Risk Assessment Plan.
- 6) The TMP will identify key personnel including the contractor's Traffic Manager, Traffic Engineer, Traffic Control Supervisors, and Traffic Control Personnel and demonstrate that they are suitably qualified and licensed.
- 7) The TMP will include a parking management plan that details how the parking requirements will be implemented, managed and monitored, and how impacts to on-street parking will be minimized.
- 8) The allowable periods for lane closures will be in accordance with the requirements specified in Table E1 Traffic Management Requirements – Allowable Periods. For greater certainty, lane closures on residential streets will not be permitted after 10pm.

TRAFFIC CONTROL PLANS

- 9) Customized and site-specific Traffic Control Plans (TCP) will be developed for each unique traffic control set up.
- 10) Each TCP that has planned traffic control on City Roads will be provided to the City for review, and the City will provide its comments thereon to the Province within five (5) Business Days or such other time (longer or shorter) as the Province and the City may agree. For greater certainty, traffic control cannot be implemented on City roads until the TCP has been circulated for City review, sealed by a Traffic Engineer and accepted by the Province.
- 11) For unique situations (for example, full road closures) where more complex traffic control is required, and for situations where an earlier implementation of traffic control is required, the Province and the City will mutually agree on an appropriate review timeline for TCP submissions.
- 12) Each TCP will include traffic analysis to determine the effect of each TCP on roadway capacity and traffic operation, including as a minimum the estimated vehicle delays and queue lengths compared to existing conditions. The level of analysis and analysis boundaries will be appropriate for the level of construction impact. All traffic data used for analysis will be relevant and required to be less than 6 months old. Construction generated traffic volumes will be included in the traffic analysis.
- 13) Each TCP will physically and safely accommodate design vehicles manoeuvring through the project site, including on any detour or re-configured roadways. Where on-street parking is affected by a TCP, the TCP will indicate details of how restrictions will be communicated to the public.
- 14) Portable Dynamic Message Signs will be provided, as required, to provide advance notification of planned traffic pattern changes. The sign locations and messages will be shown on the TCP submission.

- 15) TCP will include the design of any signal timing modifications if required. All proposed modifications to traffic signals that are, at the time of the required modifications, operated and controlled by the City, will be provided to the City for its use. The City will be responsible for implementing and modifying all signal timing changes in a timely manner suitable to the reasonable requirements of the Province.
- 16) Materials or equipment will not be stored at any time on the travel portion or shoulder of any road, sidewalk, or bike facility. Materials and equipment stored within the clear zone of any road will be protected by barriers.
- 17) TCP will take into consideration major events in the region that may affect traffic volumes in the area (e.g. sporting events, festivals, parades, etc), and designed appropriately to accommodate such events.
- 18) TCP will include no-parking signs if on-street parking is removed. The no parking signs will include hours and dates of the restriction and will be erected at least 72 hours prior to the restriction.

PEDESTRIAN AND CYCLING FACILITIES

- 19) Temporary closures or re-routing of pedestrian and cycling routes will be permitted contingent upon provision of a safe, efficient and suitable alternative route. For greater clarity:
 - a) passage at each existing facility and crossing point within the project site currently used by pedestrians and cyclists will be maintained in a safe and efficient manner throughout construction except at facilities or crossing points that are to be permanently closed;
 - b) a temporary stoppage on pedestrian and cycling facilities that are less than ten (10) minutes in duration will be preceded with signage designed to the applicable standards. (e.g. sidewalk closed ahead signs);
 - c) temporary closure of pedestrian and cycling routes exceeding ten (10) minutes will be preceded with signage indicating the dates and duration of any closure as well as alternative routes available; and
 - d) detour routes that are in place for greater than three days or longer than thirty metres (30m) will be of a similar or better standard, in terms of width, comfort, connectivity and quality of surface, as the existing route.

TRANSIT

20) Passage along each existing transit route within the project site will be maintained or rerouted in a safe and efficient manner. The Province will consult with TransLink, Coast Mountain Bus Company, and the British Columbia Rapid Transit Company, as applicable, with respect to any construction that

might affect transit operations, facilities, bus stops (including accessible bus stop features), schedules or routing.

MONITORING

- 21) Effectiveness of traffic control for all road users will be continuously monitored and unanticipated impacts will be addressed in a timely manner (e.g. impact of unanticipated traffic diversions to local roads). The monitoring process will be addressed in the Traffic Quality Management Plan, which will be shared with the City for information.
- 22) The Province will have on-site staff to monitor all aspects of construction, including construction traffic management.

MANAGEMENT OF CONSTRUCTION WORKER PARKING

- 23) Staff/contractors will be prohibited from parking in the Scott Road Station park-and-ride, in parking lots owned by the City, and on City streets for commuting and work purposes unless prior approval is received from the City.
- 24) The contractor will provide off street parking for its staff/contractors within walking distance or an alternative means of accessing the site.

ADJACENT PROPERTIES

- 25) Physical access to all properties will be maintained throughout active construction zones. Temporary short duration closures or stoppages will be communicated well in advance to affected property owner(s) with a view to minimizing and mitigating impacts to business operations, and where appropriate to emergency services, the City, and other affected parties.
- 26) The Emergency Response Plan will specify how access for emergency vehicles and assistance to emergency response personnel will be provided.
- 27) Changes to on-street parking will be communicated well in advance to adjacent property owner(s). Parked vehicles within the works area are not permitted to be impounded unless prior approval is received from the RCMP or the City. In circumstances where a parked vehicle needs to be towed, towing fees will not be charged to the registered vehicle owner.

CONSTRUCTION SITE ACCESS AND HAUL ROUTES

28) Construction site access and haul routes will avoid residential areas where alternatives are available.

	geniontito	Allowable Porieds		Ston		
		Allov Outside of allowable processes intersection storage lengths will be	vable Periods eriods, all existing road I turning movements, and maintained	Stoppages are a Province	always subject to approval.	Full closures are always subject to
Road Category	Direction / Connection	 During allowable perio lane in each direction a movements will be ma otherwise below. 	ds, a minimum of one basic and existing turning intained unless specified			Province approval.
		 On residential street, la after 10pm or before 7 Sundays. 	ane closures are not permitted :00 am and anytime on			
		 Lane Closures are alwa of a TCP. 	ys subject to Province approval			
		Weekdays	Weekend	< 2 min	Up to 20 min	
Pattullo Mainline Existing Pattullo Bridge, New Fraser River Bridge, Bridge Connector, King George Boulevard.	Both directions	10:00pm to 5:00am	10:00pm (Fri) to 8:00am (Sat) 8:00pm (Sat) to 10:00am (Sun) 8:00pm (Sun) to 5:00am (Mon)	Permitted during allowable periods	Permitted between 12 am - 4 am.	Permitted only in exceptional situations on weekends (Fri 10pm – Mon 5am)
Highway 17Mainline	Westbound	10:00pm to 5:00am	10:00pm to 7:00am	Permitted during	Permitted between	Permitted only in exceptional situations
(excluding ramps)	Eastbound	10:00pm to 6:00am	10:00pm to 7:00am	allowable periods	11 pm - 5 am	between 11pm – 5am, and only if a detour route is provided
Ramps	Ramps connecting Hwy 17 w/ Specified Roads	10:00pm to 5:00am	10:00pm to 10:00am	Permitted during	Permitted between	Permitted only in exceptional situations between 11pm – 5am, and only if a detour
	Ramps connecting Pattullo Mainline w/ Specified Roads or Hwy 17	9:00pm to 5:00am	10:00pm to 9:00am	allowable periods	12 am - 4 am	route is provided

Table E1 Traffic Management Requirements – Allowable Periods (2 pages)

		Allow	vable Periods	Stop	pages	Full Closure
		 Outside of allowable per capacities, intersection storage lengths will be in 	eriods, all existing road turning movements, and maintained.	Stoppages are a Province	Full closures are always subject to Province approval.	
Road Category	Direction / Connection	 During allowable period lane in each direction a movements will be mai otherwise below. 	ds, a minimum of one basic nd existing turning ntained unless specified			
		 On residential street, la after 10pm or before 7: Sundays. 	ane closures are not permitted 00 am and anytime on			
		 Lane Closures are alway of a TCP. 	ys subject to Province approval			
		Weekdays	Weekend	< 2 min	Up to 20 min	
Specified Roads Scott Road, Bridgeview Drive, Tannery Road, Old Yale Road, 128 Street.	Both directions	10:00pm to 5:00am SLAT is permitted on Old Yale Road during allowable periods, subject to Province approval.	10:00pm to 7:00am SLAT is permitted on Old Yale Road during allowable periods, subject to Province approval.	Permitted during allowable periods	Permitted between 12 am - 5 am	Permitted only in exceptional situations between 11pm – 5am, and only if a detour route is provided.
Other Streets Timberland Road, Bridge Road, 111 Avenue, 111A Avenue, 112 Avenue, 112A Avenue, 128A Avenue, 124 Street, Musqueam Drive, Industrial Road, King George Frontage Road, all other roads except private roads.	Both directions	9:00am to 3:00pm and 6:00pm to 7:00am SLAT is permitted during allowable periods, subject to Province approval.	No Restrictions SLAT is permitted during allowable periods, subject to Province approval.	No restrictions for minor interruptions up to 2 min (this is not subject to Province approval). Stoppages between 2-5 min are permitted during allowable periods subject to Province approval.	Permitted between 10 pm - 5 am.	Permitted only if approved by Province. Full Closures of both directions are not permitted on 112 Avenue.

SCHEDULE F

Communications

COMMUNICATIONS OVERVIEW

- The Province will undertake a comprehensive construction communications program to support the Project Work. The key focus of communications and engagement activities throughout the construction phase will be to keep residents, businesses and other stakeholders informed of project plans, progress and construction information, and to receive and respond to questions and concerns raised by the community.
- 2) The project's communications and engagement program will facilitate ongoing twoway community and stakeholder communications to ensure that the public, stakeholders, and City staff are well-informed; to ensure that inquiries are responded to in a timely manner; and to ensure project managers are mindful of community interests and concerns.

COMMUNICATIONS WITH THE CITY

- 3) The Province and the City will meet regularly to review the development and construction of the Project Work. The meetings will occur at least bi-weekly, and will occur more frequently when appropriate.
- 4) The Province will work with City staff to manage communications with elected officials for the duration of the Project Work.
- 5) After the project design has been finalized, the Province will engage with City staff to determine an appropriate strategy for communicating the project design and the construction traffic management strategy to the public.

COMMUNICATIONS DURING CONSTRUCTION

- 6) The Province will organize meetings with the following stakeholders to provide information regarding the project, answer questions, and receive feedback or concerns:
 - a) community, neighbourhood and business associations, in particular those associations in close proximity to construction; and

- b) local residents and businesses, including hand-delivering construction notices and door-to-door visits as needed to provide and receive information about upcoming construction.
- 7) To ensure there are multiple opportunities to provide information and facilitate twoway communications with the public and stakeholders, the Province will utilize a variety of materials and methods to support the project's communications and engagement, including:
 - a) an Inquiry Response Program that will track, record and address questions or concerns from the public during construction. The program will include:
 - i. a project information phone line with a live operator that is accessible to the public 24 hours a day, seven days a week; and
 - ii. a project e-mail address that is checked and responded to regularly.
 - b) advertising in local papers to provide project information from time-to-time;
 - c) providing information to traffic radio reporters as required;
 - d) a project website, including the use of the Province's existing social media channels as appropriate, that provides a central point for information about the project. During construction, the website will also provide the following project information in a timely manner as appropriate:
 - i. project updates: overall updates on the Project Work, schedule and milestones;
 - ii. construction notices: upcoming construction activities, including timing and impacts.
 - iii. information Sheets: information on specific aspects, or topics related to, the Project Work.
 - e) mailing construction notices to stakeholders and the public, and e-mailing construction notices to people who have requested regular project updates, to inform them of upcoming construction activities and planned traffic changes.
- Project signs will be installed throughout the project site during construction. The signs will have information on the project information phone line, and the project website address.

SCHEDULE G

Resumed Roads

1) The Resumed Roads are identified in Figures G1 and G2.



de la		DAIL	IL VISIONS	SIGNATORE	DESTRUCT
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					AND INFRASTRUCTUR
1	С	2019-09	ISSUED FOR MA		SCALE 0 20 1:2000 100m Designed
	В	2019-07	ISSUED FOR MA		CAD FILENAME QUALITY ASSURANCE
	A	2019-05	ISSUED FOR MA	SC	DATE DRAWN



SCHEDULE H

Existing Digital Sign

1) The Digital Sign location is identified in Figure H1.



File: C:\pw_working\bc\p005223b\dms00864\SK-C-460 Existing Digital Sign - KGB.dwg Save Date: Aug 14, 2019 12:22 PM Saved By: P00523B

SCHEDULE I

Bridge Road Watermain

1) The Bridge Road Watermain Issued For Construction drawings and units of work are provided in this Schedule I.

Water Package 1218-005-21			SFPR/Br	idge Road: Old Avenue	Yale Road - 112	
				Pr	ojected Quantity	and Cost
		DESCRIPTION	UNIT	Quantity	Bid Price	Total Price
DIV	33	Utilities		<u> </u>		
Item No.	Section	Specification Title	Unit	Quantity	Unit Price	Amount
	33 11 01	Watermains				
33.01	1.8.2	W/M DI 400mm dia, Imp B/f	Lineal Metres	540		
33.02	1.8.3	Gate Valves 150mm (at Hydrants)	Each	3		
33.03	1.8.3	In-line Gate Valves 400mm	Each	4		
33.04	1.8.3	Tee 400mm x 400mm x 200mm	Each	1		
33.05	1.8.3	Tee 400mm x 400mm x 150mm	Each	3		
33.06	1.8.3	400mm x 11-1/4 deg bend	Each	9		
33.07	1.8.3	Double Ball Flexible Joint, 400mm	Each	1		
33.08	1.8.3	450 mm x 300 mm Redcer	Each	2		
33.09	1.8.3	400 mm dia end Cap (Permanent)	Each	1		
33.10	1.8.5	400mm Temporary End Cap with 75mm Blow-off per SSD-W.4	Each	2		
33.11	1.8.5	Test Point MMCD W5	Each	2		
33.12	1.8.9	Concrete Slab over Watermain 30m x 1.2mx 0.15m thick	Cubic Metre	6		
33.13	SS 1.8.10	760mm dia Steel Casing including restraining spacers and end seals	Lineal Metre	15		
33.14	1.8.14	Hydrant (includes lead) MMCD W4	Each	3		
33.15	SS 1.8.13	Service per Detail 4 from new main to property line (includes 200 tee, gate valves, check valves, bend, temporary cap, fire and domestic pipe)	Lump Sum	1		
33.16	SS 1.8.13	400mm dia at Bridge Road / Old Yale Road per Detail 1 - W01	Lump Sum	1		
33.17	SS 1.8.13	400mm dia at Bridge Road / 112 Avenue per Detail 3 - W02	Lump Sum	1		
33.18	SS 1.8.13	Fill Abandoned mains over 300mm with Flowable Fill	Lump Sum	1		
33.19	SS 1.8.13	Removals, Caps, and work to Abandon Existing per W05	Lump Sum	1		
	33 40 01	Storm Sewers				
33.20	1.6.2	Relay 200mm storm lead	Lineal Metre	20		
			DIV	33	Sub-Total	



CITY OF SURREY CONTRACT 1218-005-21 BRIDGE ROAD WATERMAIN REPLACEMENT

SURREY PROJECT NO.	ROAD NAME	LOCATION / LIMITS	TYPE	DRAWING NO.
W-00629			NOTES	G-01
W-00629	BRIDGE ROAD	OLD YALE ROAD TO STA 1+250	WATER – PLAN AND PROFILE	W-01
W-00629	BRIDGE ROAD	STA 1+250 TO 112 AVENUE	WATER – PLAN AND PROFILE	W-02
W-00629	KING GEORGE BLVD	PATTULLO BRIDGE	WATER – EXISTING WATERMAIN ABANDONMENT PLAN	W-03
W-00629	112A AVENUE	HWY 17 (SFPR) TO 124 STREET	WATER – DETAILS	W-04
W-00629	112A AVENUE	SOUTHERN RAILWAY OF BC	WATER – WATERMAIN CROSSING PERMIT DRAWING	WR1



ISSUED FOR CONSTRUCTION



PROJECT SPECIFIC PRE-SELECTED PRODUCTS AND ASSOCIATED DESIGN STANDARDS Whereas the attached project works have been designed to good engineering standards and are generally in accordance with the latest edition of the City of Surrey Design Criteria, the design of this project uses some products and material technologies that supersede the City of Surrey Design Criteria Manual and Supplementary Master Municipal Construction Documents (January 2016). No substitution of products is permitted without written authority of the design professional and the City of Surrey. Should there be any conflicts between the aforementioned documents and the Design Drawings, the information on the Design Drawings shall prevail.

Pre-selected Products

Watermain pipe : Pipe shall be Pressure Class-350 minimum, zinc- coated TR-XTREME pipe

Gaskets : SBR or nitrile gaskets

Polyethylene wrapping : pipe and all fittings shall be *V-Bio* enhanced polyethylene wrapped in accordance with DIPRA Modified Method-A installation

Joint Restraint : pipe-to-fittings shall be EBAA Tandem MEGALUG or Uniflange c/w Grade-A Type-304 SS hardware; pipe-to-pipe shall be *TR-XTREME* restraining system.

Project Design Criteria:

Utility Alignments: Horizontal and vertical elements are project site specific.

Materials: project materials specified in the design are to be as per pre-selected above. Corrosion Protection: designed to specific pre-selected product requirements and Manufacturer's recommendations.

Valves: Spacing/location modified to City's specific project requirements. Size to match pipe dimension (no size reduction).

Hydrants: locations to City's specific project requirements.

Joint Restraints: Thrust restraint requirements modified to meet pre-selected TR-XTREME product requirements.

Trench Backfill and Pipe Zone Material: Site Specific to Bridge Road to be treated as an arterial-class heavy-truck route, design road structure to be a minimum 125mm asphalt, 100mm Base gravel, 200mm Sub-Base. Pipe-zone material shall be clean, high electrical-resisitivety sand.

Railway Crossing: Railway crossing shall incorporate a steel casing pipe, length, size and coating in accordance with AREMA and Ministry of Transport Canada standards and specific Southern Railway Crossing Permit requirements.

ADDITIONAL NOTES FOR PRESELECTED PRODUCTS:

NEW WATERMAIN TO BE SEISMICALLY RESTRAINED FOR FULL LENGTH.

TR-XTREME INSTALLATION SPECIFICATION TR-XTREME JOINTS TO BE ASSEMBLED AS OUTLINED IN MANUFACTURER ASSEMBLY INSTRUCTIONS PROVIDED WITH THE PIPE AND AS DIRECTED DURING WORKSHOPS WITH MANUFACTURER. TR-XTREME PIPE JOINTS SHALL BE ASSEMBLED WITH SPIGOT WELD BEAD INSERTED TO MID-POINT OF INSERTION ZONE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. INSTALLATION TO CONFORM WITH AWWA M41 AND AWWA C600 STANDARDS.

DUCTILE IRON ZINC-COATING SPECIFICATION THE EXTERIOR OF DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179-1, DUCTILE-IRON PIPES--EXTERNAL ZINC-BASED COATING--PART-1: METALLIC ZINC WITH FINISHING LAYER

THE ZINC-COATING MATERIALS SHALL BE METALLIC ZINC WITH A ZINC CONTENT OF AT LEAST 99.99% BY MASS AND THE MASS OF ZINC APPLIED SHALL BE A MINIMUM OF 200g/m² OF PIPE EXTERIOR SURFACE AREA. A FINISHING LAYER OF BITUMINOUS PAINT COMPATIBLE WITH THE ZINC COATING SHALL BE APPLIED OVER THE ZINC-RICH PAINT COATING.

REPAIRS TO THE ZINC COATING DAMAGED AREAS OF THE ZINC COATING CAUSED BY HANDLING ARE ACCEPTABLE PROVIDED THAT THE AREA OF DAMAGE IS LESS THAN 5cm² WITH A MINOR ACCESS GREATER 5mm. IF DAMAGED AREA EXCEEDS THIS VALUE THAN IT SHALL BE REPAIRED UTILIZING EITHER: 1. METALLIC-ZINC SPRAY COMPLYING WITH THIS SPECIFICATION, OR 2. APPLICATION OF A ZINC-RICH PAINT CONTAINING MORE THAN 85% ZINC BY MASS IN THE DRIED FILM.

PIPE MARKING SHALL CONFORM TO APPLICABLE REQUIREMENT OF ANSI/AWWA C151 AND SHALL INCLUDE THE WORD 'ZINC' IN THE PIPE MARKING OR LABEL. THE FACE OF THE BELL END SHALL BE PAINTED WITH SILVER COLOUR TO IDENTIFY THE PIPE AS ZINC COATED.

V-BIO ENHANCED POLYETHYLENE ENCASEMENT SPECIFICATIONS MATERIAL - POLYETHYLENE ENCASEMENT FOR USE WITH DUCTILE IRON PIPE SHALL MEET ALL THE REQUIREMENTS OF ANSI/AWWA CIO5/A21.5 (POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE SYSTEMS). THE POLYETHYLENE ENCASEMENT FILM SHALL BE MANUFACTURED FROM VIRGIN POLYETHYLENE AND SHALL CONSIST OF THREE LAYERS OF CO-EXTRUDED LINEAR LOW-DENSITY POLYETHYLENE (LLDPE), FUSED INTO A SINGLE THICKNESS OF NOT LESS THAN EIGHT MILS. THE INSIDE SURFACE OF THE POLYETHYLENE WRAP TO BE IN CONTACT WITH THE PIPE EXTERIOR SHALL BE INFUSED WITH A BLEND OF AN ANTIMICROBIAL TO MITIGATE MICROBIOLOGICALLY INFLUENCED CORROSION AND A VOLATILE CORROSION INHIBITOR TO CONTROL GALVANIC CORROSION. THE PRODUCT SHALL BE V-BIO® ENHANCED POLYETHYLENE ENCASEMENT MANUFACTURED ONLY BY POLYETHYLENE EXTRUDERS AUTHORIZED BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION.

INSTALLATION - DUCTILE IRON PIPE AND THE POLYETHYLENE ENCASEMENT USED TO PROTECT IT SHALL BE INSTALLED IN ACCORDANCE WITH AWWA C600 AND ANSI/AWWA C105/A21.5. AS WELL AS IN ACCORDANCE WITH ALL RECOMMENDATIONS AND PRACTICES OF THE AWWA M41, MANUAL OF WATER SUPPLY PRACTICES - DUCTILE IRON PIPE AND FITTINGS, SPECIFICALLY: 1) THE WRAP SHALL BE OVERLAPPED A MINIMUM OF ONE FOOT AT JOINTS AND SECURED TIGHTLY IN PLACE AROUND THE PIPE, 2) ALL DAMAGE SHALL BE REPAIRED, AND 3) ANY WRAP AT TAP LOCATIONS SHALL BE TAPED TIGHTLY PRIOR TO TAPPING AND INSPECTED FOR ANY NEEDED REPAIRS FOLLOWING THE TAP. FOR INSTALLATIONS BELOW WATER TABLE OR IN AREAS SUBJECT TO TIDAL ACTIONS THE TUBE FORM POLYETHYLENE ENCASEMENT SHALL BE USED. COMPLETELY SEAL BOTH ENDS OF EH POLYETHYLENE TUBE WITH ADHESIVE TAPE AT JOINT OVERLAP AND CIRCUMFERENTIALLY WRAP WITH TAPE OR PLASTIC TIE STRAPS EVERY TWO FEET ALONG THE BARREL.

THRUST-RESTRAINT NOTES:

- TR-XTREME PIPE IN FULLY-EXTENDED POSITION.
- JOINTS TO BE EXTENDED.
- PRESSURE TESTING.
- TEE.

		300mm	400mm	300mm	400mm
FITTING		MIN. RESTRAINED PIPE LENGTH (m)		FULL-LEN JOINTS RESTR	IGTH PIPE TO BE AINED
11.25° HORIZONTAL BEND		1.80	2.50	1	1
22.5 HORIZONTAL BENE)	3.70	4.90	1	1
45° HORIZONTAL BEND		7.60	9.80	2	2
VALVES		-	3	3	
TEES		SEE	NOTE		

LEGAI	DESCRIPTION	NAD83(CSRS)GVRD, CVD28GVRD201	8		"BY SEALING AND SIGNING THIS DRAWING, I CERTIFY	CONSULTANT
SURV MO	EY BENCHMARK N:5345 N	5450220.614 E 509654.280	SCALE FACTOR: 0.9996 ELEV. 2.423m		THAT THE INFORMATION CONTAINED IN THESE DRAWINGS ACCURATELY REFLECTS THE ORIGINAL DESIGN, ADDENDA, CHANGE ORDERS AND MATERIAL	
REV.	DATE	DESCRIPTION		BY	DESIGN CHANGES MADE DURING CONSTRUCTION AND	
					THAT THE AS-CONSTRUCTED WORKS SUBSTANTIALLY	cons
					COMPLY WITH THE ORIGINAL DESIGN INTENT, HOWEVER,	
3	2019.08.09	ISSUED FOR CONSTRUCTION		A.A.	OR COMPLETENESS OF THE AS-CONSTRUCTED	4173 DAWSON STRE
2	2019.06.11	GENERAL REVISION		DSch	INFORMATION SUPPLIED BY OTHERS CONTAINED IN	
1	2019.05.21	GENERAL REVISION		DSch	INESE DRAWINGS.	

1. REQUIRED TRUST RESTRAINT TO BE ACHIEVED BY INSTALLING

2. REFER TO TABLE-1 FOR SPECIFIED MINIMUM PIPE LENGTHS TO BE RESTRAINED AND CORRESPONDING NUMBER OF FULL-LENGTH PIPE

3. ALL VALVES TO REMAIN IN FULLY-OPENED POSITION DURING INITIAL

4. HYDRANT TEES TO BE INSTALLED WITH MINIMUM ONE FULL-LENGTH TR-XTREME PIPE ON BOTH UPSTREAM AND DOWNSTREAM SIDES OF RUN. HYDRANT LEADS TO BE FULLY RESTRAINED FOR ENTIRE LENGTH.

5. TEE BRANCHES CONNECTING TO EXISTING WATERMAIN TO BE FULLY RESTRAINED FOR ENTIRE LENGTH FROM EXISTING WATERMAIN BACK TO

TABLE-1: WATERMAIN JOINT RESTRAINT

ENGINEERING LTD.

vulting civil engineers EET, BURNABY, B.C. tel. 604-294-8588

GENERAL NOTES:

- 1. REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR A MINIMUM OF 72-HOURS PRIOR TO CONSTRUCTION TO ENSURE THAT THE LINE AND GRADE OF THE PROPOSED UTILITY CAN BE ADJUSTED TO SUIT FIELD CONDITIONS AS REQUIRED.
- 2. EVERY EFFORT SHALL BE MADE TO SAVE EXISTING LANDSCAPING WITHIN THE ROAD RIGHT-OF-WAY, LANDSCAPING SHALL BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION. IN THE EVENT OF LANDSCAPING REMOVAL, THE PROPERTY OWNER SHALL BE ADVISED OF THE REMOVAL, AND ANY LANDSCAPING PLACED IN OWNER'S PROPERTY SHALL BE DONE UPON THEIR REQUEST.
- 3. ALL SURVEY MONUMENTS WITHIN THE PROJECT BOUNDARIES SHALL BE PROTECTED DURING THE COURSE OF THE WORK. SHOULD ANY SURVEY MONUMENT REQUIRE RAISING OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR AT LEAST 72 HOURS IN ADVANCE OF SCHEDULED WORK.
- 4. ALL PUBLIC ROADWAYS AFFECTED BY THE WORKS SHALL BE KEPT IN A CLEAN STATE AT ALL TIMES, AND KEPT FREE OF EQUIPMENT AND MATERIALS AT ALL TIMES WHEN CONSTRUCTION ACTIVITY IS NOT UNDERWAY. DUST CONTROL MEASURES SHALL ALSO BE EMPLOYED.
- 5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHOD TECHNIQUES, SEQUENCES AND PROCEDURES. AS WELL AS CO-ORDINATING THE VARIOUS PARTS OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT THERE IS NO DISRUPTION TO SERVICE. IF DISRUPTION IS ANTICIPATED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 72-HOURS PRIOR, AND OBTAIN APPROVAL FOR THE DISRUPTION. THE REQUIREMENTS FOR TEMPORARY SERVICE SHALL BE INCLUDED IN THE CONTRACTOR'S METHODOLOGY.

CITY OF SURREY 13450 104TH AVENUE SURREY, BC, V3T 1V8

CLIENT

NOTES

SEAL

WATERMAIN NOTES:

- 1. WATERMAINS SHALL BE PRESSURE CLASS-350 DUCTILE IRON, ZINC-COATED PIPE. REFERENCE STANDARDS ANSI/AWWA C151/A21.51, DUCTILE-IRON PIPE, CENTRIFUGALLY CAST, FOR WATER; AND ISO 8179-1, DUCTILE-IRON PIPES--EXTERNAL ZINC-BASED COATING--PART-1: METALLIC ZINC WITH FINISHING LAYER (ISO 2004).
- 2. GASKETS SHALL BE NITRILE (NBR) (ACRYLONITRILE BUTADIENE). REFERENCE ANSI/AWWA C111/A21.11, RUBBER-GASKET JOINTS FOR DUCTILE-IRON PRESSURE PIPE AND FITTINGS.
- 3. ALL WATERMAINS SHALL BE POLYETHYLENE WRAPPED--REFERENCE ANSI/AWWA C105/A21.5 AND ASTM A674. APPROVED FOR USE IS V-BÍO ENHANCED POLYWRAP FOR DUCTILE IRON. INSTALLED PER DIPRA MODIFIED METHOD 'A'.
- 4. FLEXIBLE EXPANSION JOINTS SHALL BE OF A DUCTILE IRON, SINGLE-BALL EXPANSION JOINT CONFORMING TO ALL APPLICABLE REQUIREMENTS OF ANSI/AWWA C153/A21.53.
- 5. JOINT RESTRAINT SHALL BE REQUIRED ON ALL JOINTS. APPROVED FOR USE, PIPE TO FITTING, ARE: EBAA TANDEM MEGALUG OR UNIFLANGE 2800 TANDEM RESTRAINTS c/w GRADE-A TYPE-304 SS HARDWARE; AND, PIPE TO PIPE: TR-XTRÉME OR SIMILAR JOINT DESIGNED FOR SEISMIC FORCES.
- 6. FITTINGS SHALL BE DUCTILE IRON WITH MECHANICAL OR FLANGED JOINTS AS REQUIRED BY THE DESIGN. FITTINGS. INCLUDING THE EXTERNAL JOINT RESTRAINTS. SHALL BE WRAPPED WITH PETROLEUM TAPE AND COVERED WITH V-BIO POLYWRAP.
- 7. WATER SERVICE CONNECTIONS SHALL BE POLYETHYLENE, TO AWWA C-901. c/w #10 TRACER WIRE ATTACHED. SERVICES SHALL BE "SNAKED" WITH A MINIMUM OF 500mm OF ADDITIONAL "SNAKED" LENGTH, AND IN ACCORDANCE WITH CITY OF SURREY STANDARD DRAWING SSD-W.1.
- 8. STEEL CASING PIPE, WHERE OPEN CUT EXCAVATION, SHALL BE 760mm DIAMETER, DESIGNED FOR COOPER'S E80 TRACK LOADING AND C.S.A STANDARD Z662-99. CASING PIPE SHALL BE COATED WITH A HIGH-DENSITY, TWO-LAYER POLYETHYLENE COATING TO CSA Z245.21 (SYSTEM A2), OR COAL-TAR EPOXY TO AWWA C210-78. MINIMUM WALL THICKNESS FOR 760mm STEEL CASING PIPE SHALL BE 10.3mm, OR, WHERE CASING PIPE IS DRILLED AND NON-COATED CASING PIPE IS USED, MINIMUM WALL THICKNESS SHALL BE 11.91mm.
- 9. INSTALLED WITHIN EACH STEEL CASING PIPE SHALL BE CASING INSULATORS--INSULATORS APPROVED FOR USE ARE CALPICO PX-SS, APPROXIMATELY (3) PER EVERY 5.5m LENGTH OF CARRIER PIPE, AND SPACED AS RECOMMENDED BY MANUFACTURER. REFER TO MANUFACTURER'S INSTRUCTIONS.
- 10. FILL MATERIAL SURROUNDING THE WATERMAIN, WITHIN THE PIPE ZONE OF THE TRENCH, SHALL BE CLEAN, HIGH ELECTRICAL-RESISTIVETY SAND THAT HAS LESS THAN 50ppm CHLORIDE IONS AND LESS THAN 50ppm SULFATE IONS.
- 11. LIGHT-WEIGHT AGGREGATE FILL SHALL BE EITHER RED VESICULAR BASALT. OR DACITE PUMICE--REFER TO SUPPLEMENTARY SPECIFICATIONS--WRAPPED IN A NON-WOVEN NILEX 4553 GEOTEXTILE OR EQUAL.
- 12. ALL NEW WATERMAINS, AT TIE-IN POINTS, SHALL BE TEMPORARILY CAPPED FOR TESTING 1.5m FROM THE TIE-IN LOCATION. THE NEW WATERMAIN SHALL BE SET AT A LINE AND GRADE TO MEET THE EXISTING WATERMAIN. THE CONTRACTOR SHALL CONFIRM THE EXISTING MAIN ELEVATIONS AND MATERIAL TYPE THROUGH PRE-DIG.
- 13. TESTING AND CHLORINATION OF THE NEW WATERMAIN SHALL BE PERFORMED BY THE CITY. TIE-INS TO EXISTING WATERMAINS AND SERVICES SHALL BE BY A CITY-APPROVED AND QUALIFIED CONTRACTOR UNDER FULL WITNESS BY CITY WATER OPERATIONS.
- 14. ALL EXISITNG MAINLINE VALVE BOXES ON ABANDONED WATERMAINS SHALL BE REMOVED. VALVE BOX AND RISER PIPE SHALL BE CUT DOWN TO 300mm BELOW GRADE AND FILLED WITH GRANULAR BASE GRAVEL. COMPLETE SURFACE RESTORATION AS REQUIRED. ALL WORKS COMPLETED BY CITY CREWS OR OPTIONAL BY CONTRACTOR WHERE APPROVED.
- 15. WATERMAIN TRENCH DETAILS AND SURFACE REINSTATEMENT SHALL BE AS PER TYPICAL TRENCH SECTION DETAILS 'A' AND 'B', DRAWING 'W04'.
- 16. <u>PERMANENT PAVEMENT RESTORATION</u> (TYP.): - FULL-DEPTH MILL EXISTING PAVEMENT
 - REGRADE AND RESHAPE BASE
 - REPAVE WITH: – 50mm U.C. #1 ASPHALT
 - 75mm L.C. #1 ASPHALT
- 17. ALL BOLTS AND NUTS TO BE GRADE-A TYPE-304 STAINLESS STEEL AND FULLY WRAPPED WITH DENSO TAPE. NUTS TO BE TORQUED TO MANUFACTURER'S INSTRUCTIONS FOR INTENDED USE.

	DATE (YYYY.MM.DD)	SURREY PROJECT NUMBER
SCALE: AS NOTED	2019.05.15	W_00620
	CONSULTANT PROJ. NO.	W-0002 9
	1001	DRAWING TYPE
DESIGNED	1801	
R.P.		
DRAWN	DWG.	
DSch	NO.	_
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		-0.084	0.563	0.657				0.850			
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EN Iting of 1, burn	GII civi 1aby,	VЕ , в.с	EERING LTD. Ingineers C. tel. 604-294-8588	SURR	EY	TITLE	CITY OF 13450 104TH AVI SURREY, BC, V3T BRID OLD YALE PLAN	SURREY IV8 GE ROAL RD. TO STA. 1+2 & PROFILE	D 50		SEAL

♪	O. W. 1 - 400 MJ TEMPORARY CAP c/w TEST POINT & 759 BLOW-OFF REMOVE EXISTING END CAP; TE-IN TO EXISTING 4000 DI STUB WITH: 1 - 400 DI TO DI RESTRAINING COUPLING U U U U U U U U U U U U U U U U U U U
	S. F. P. R.
	DETAIL—1 SCALE: 1:250
4	 <u>GENERAL NOTES</u>: 1. REFER TO SHEET 'GO1' FOR COMPLETE SET OF GENERAL NOTES 2. WATERMAIN TRENCH DETAILS AND SURFACE REINSTATEMENT SHALL BE AS PER TYPICAL TRENCH SECTION DETAILS 'A' AND 'B', DRAWING 'WO4'.
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HOR. 1:500	DATE (YYYY.MM.DD)	SURREY PROJECT NUMBER
SCALE: VERT. 1:50	2018.03.28	W_00629
	CONSULTANT PROJ. NO.	W-00023
		DRAWING TYPE
<u>п.г.</u>		· · · · · · · · · · · · · · · · · · ·
DRAWN	NO.	WATER
DSCI	REV.	1
REVIEWED	W01 6	



DESTROY ALL PRINTS BEARING PREVIOUS NUMBER





SCALE:	AS NOTED	DATE (YYY 2018.03 CONSULTANT	Y.MM 5.28 PR0	I.DD) 3 J. NO.	SURREY PROJECT NUMBER W-00629
DESIGNED	R.P.	1801			DRAWING TYPE
DRAWN REVIEWED	DSch/J.M.	NO.	4	rev. 6	WATER

DESTROY ALL PRINTS BEARING PREVIOUS NUMBER





LOCATION PLAN SCALE: 1:5000

<u>NOTES:</u>

1. WATERMAIN:

C151/A2
AND ISO
COATING
1

21.51 DUCTILE-IRON PIPE, CENTRIFUGALLY CAST FOR WATER; 8179-1, DUCTILE-IRON PIPES--EXTERNAL ZINC-BASED (ISO 2004).

.1 PRESSURE CLASS-350 DUCTILE-IRON PIPE TO BE METALLIC

ZINC-COATED PIPE. REFERENCE STANDARDS ANSI/AWWA

- .2 JOINT RESTRAINT REQUIRED ON ALL JOINTS PIPE TO FITTING: EBAA TANDEM MEGALUG OR UNIFLANGE 2800 TANDEM, PIPE TO PIPE: TR-XTREME OR EQUAL.
- .3 ALL PIPE AND JOINTS TO BE WRAPPED WITH V-BIO (OR EQUAL) POLYWRAP.
- 2. CASING:
- .1 760mm DIAMETER STEEL CASING DESIGNED FOR COOPER'S E80 TRACK LOADING, C.S.A. STANDARD Z662-99. COATING TO BE HIGH-DENSITY TWO-LAYER POLYETHYLENE COATING TO C.S.A. Z245.21 (SYSTEM A2) OR COAL TAR EPOXY TO AWWA C210-78. MINIMUM WALL THICKNESS FOR 760mm STEEL CASING PIPE TO BE 10.3mm.
- .2 CASING INSULATORS AT MAX. 3m SPACING, CALPICO PX-SS. SEAL CASING ENDS WITH SYNTHETIC RUBBER END SEALS c/w STAINLESS-STEEL BANDING.
- 3. INSTALLATION TO BE OPEN TRENCH. CROSSING TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH RAILWAY ACT AND REGULATIONS.

CITY OF SURREY	
CARRIER PIPE	CASING PIPE
POTABLE WATER 421.9mm 442.0mm DUCTILE IRON PC-350 8.6mm 827 kPa 2137 kPa MECHANICALLY RESTRAINED ZINC COATED OPEN TRENCH	POTABLE WATER 760.0mm 780.6mm STEEL 10.3mm WELDED COLD TAR EPOXY OPEN TRENCH
NO	

SCALE: HOR. 1: 500 VERT. 1: 50	DATE (YYYY.MM.DD) 2018.03.28	SURREY PROJECT NUMBER
	CONSULTANT PROJ. NO.	
	1801	DRAWING TYPE
	DWG.	
DRAWN DSch /JM	NO.	WAIER
	REV.	
REVIEWED	WR1 5	

DESTROY ALL PRINTS BEARING PREVIOUS NUMBER

Draft: September 11, 2019

SCHEDULE J

Form of Highway Use Permit

(See attached)



Lower Mainland District

PERMIT TO CONSTRUCT, USE, AND MAINTAIN WORKS WITHIN THE RIGHT-OF-WAY OF A PROVINCIAL PUBLIC HIGHWAY

PURSUANT TO THE TRANSPORTATION ACT.

BETWEEN:

The Minister of Transportation and Infrastructure

Lower Mainland District

310 - 1500 Woolridge Street Coquitlam, B.C. V3K 0B8

("The Minister")

AND:

City of Surrey 13450 - 104 Avenue Surrey, B.C. V3T 1V8

("The Permittee")

WHEREAS:

- A. The Minister has the authority to grant permits for the auxiliary use of highway pursuant to the Transportation Act,
- **B.** The Permittee has and uses pre-existing utilities including sanitary, water infrastructure and drainage all as further set out in Schedule A (the "Works"), within the portion of highway shown in Schedule B (the "Highway");
- **C.** Prior to the Minister resuming the Highway from the Permittee, the land comprising the Highway contained the Works of the Permittee;
- **D.** The Minister issuing a Permit to the Permittee pursuant to this authority for the purpose of constructing, operating, maintaining, repairing, upgrading, replacing, and decommissioning the Works (the "Purpose");
- E. This Permit is valid only for the Works specified herein, and any new infrastructure required by the Permittee will require a separate Permit; and
- F. The Minister is prepared to issue a Permit on certain terms and conditions.

ACCORDINGLY, the Minister hereby grants to the Permittee a Permit to use the Highway for the Purpose on the following terms and conditions:

- 1. The Works must be carried out by the Permittee in accordance with all applicable Bylaws, orders, directions, ordinances and regulations of any competent government authority, and with the provisions of this Agreement, to the satisfaction of the person serving Her Majesty the Queen in Right of the Province of British Columbia as represented by the Minister (the "Ministry") who is responsible for managing Highway Permits (the "District Official").
- 2. (a) The Minister acknowledges that it will provide reasonable notice to the Permittee of its intention to commence any activities related to the connection of any new infrastructure with the Works. The Ministry acknowledges that approval from the Permitee is required for any connections into the Works. The Ministry agrees to notify the Permitee of any increase in impervious areas that would result in increased runoff into the storm drainage system.
 - (b) The Permittee must complete and submit a Works Notification/Lane Closure Request and Approval (H1080) form to the District Official at least 10 days prior the date on which the Permittee intends to commence any activities pursuant to this Permit. The District Official will review the Works Notification/Lane Closure Request and Approval (H1080) form and will make reasonable efforts to provide the Permittee with a response to its request or written approval of the District Official within 10 days.



- (c) The Permittee shall not carry out any activities under this Permit without prior written approval of the District Official, and, upon receiving any written approval by the District Official acting reasonably, the Permittee must undertake its activities in accordance with the conditions, if any, set out the written approval.
- (d) Notwithstanding subsection (b) and (c), in the case of an emergency, the Permittee will carry out emergency repair of the Works and within 12 hours of commencing the emergency repair of the Works the Permittee will notify the following:
 - (i) the Regional Transportation Management Centre at 1-877-707-7862 or other such entity as directed by the District Official;
 - (ii) the District Official; and
 - (iii) all contractors of the Ministry who are working in the area of the Works or Joint-Use Utilities emergency

of the nature of the emergency repair and its expected duration.

- 3. The Ministry shall have free access to all parts of the Works for the purpose of inspecting same.
- 4. (a) The Highway must at all times be kept open to traffic, unless required for emergency repair or if authorization for limited interruption is approved by the District Official in writing, and, in such instances, the road surface must be completely restored and made open for traffic as soon as possible.
 - (b) At all times the Permittee must safeguard the traveling public when carrying out any activities for the Works.
 - (c) All excavation work must be carried out in accordance with the BC Occupational Health and Safety Regulation.
 - (d) Care shall be taken by the Permittee to protect adjacent property when carrying out any activities for the Works.
 - (e) All excavations shall be carefully back-filled with suitable material, which is to be tamped into place, and the Permittee shall restore the surface of the road and shoulders and ditches as impacted from the excavation of the Works at its own expense.
 - (f) All surplus material removed from the Highway must be deposited where and as required by the District Official.
 - (g) For replacement of the Works, involving crossing of the Highway, but excluding repair and alterations of the Works, the pipeline crossing installation is to be placed in such a manner as to afford minimum grade settlement. No water jetting will be permitted. Where, an excavation or opening for a pipeline crossing installation could be made which would not be detrimental to the Highway or its users, or if the Permittee demonstrates why the replacement of the Works involving crossing of the Highway cannot reasonably be completed by drilling or jacking, the Minister acting reasonably will grant permission for said Works for an excavation or opening for the pipeline crossing of the Highway.
 - (h) The inside diameter of any replacement casing pipe shall be at least 25 percent larger than the outside diameter of the pipeline. The casing pipe shall be installed with an even bearing throughout its length, and in such a manner so as to prevent leakage, except through the water.
 - (i) The top of the casing-pipe, or the pipeline where casing is not required, shall be located as directed by the District Official, and shall in no case be less than 0.90 metres below the surface of the highway and not less than 75 cm below the highway ditches. For greater certainty, the Ministry will not require the maintenance, repairs, or alteration of the Works and Joint-Use Utilities to comply with the standards set out in Sections 4 (h), (i), (j), and (k).
 - (j) Pipelines must not obstruct drainage structures or ditches or interfere with traffic on the Highway or with Highway maintenance.
 - (k) The Permittee must keep the Works in a safe, clean and sanitary condition.
 - (I) The Permittee must not commit any willful or voluntary waste, spoil or destruction of the Highway or neighbouring land, or do anything which might become a nuisance or annoyance to an owner or occupier of the neighbouring land.
- (a) Where the Works come in contact with any bridge, culvert, ditch, or other existing work ("Existing Works"), such Existing Works must be properly maintained and supported in such manner as not to interfere with its proper function during the course of the Permittee carrying out its Purpose on the Highway, to the satisfaction of the District Official, acting reasonably and on the completion of any activities by the Permittee, the Existing Work shall be completely restored to its original condition at the Permittee's expense.
 - (b) The Permittee shall not damage any existing underground or overhead services on the Highway.
 - (c) The Permittee shall not:
 - (i) damage or deposit any material, except that referenced in Section 4; or



(ii) use machines with steel tracks or flat pads;

on any paved portion of the Highway during normal maintenance or operation of the Works.

- (d) Any materials spilled onto the Highway by the Permittee shall be cleaned up by the Permittee immediately.
- (e) Any repair to damage of the Highway, Existing Works, or neighbouring works or improvements arising out of or in connection with the Permittee's activities under this Permit will be carried out at the expense of the Permittee.
- (f) The Minister reserves the right to carry out, or arrange to have carried out, repairs to any damage arising out of or in connection with the Permittee's activities under this Permit and to bill the Permittee for the expense of any such repairs or cleanup. The Minister will provide the Permittee with prior written notice of the cost estimate to complete the repairs to any damage arising out of or in connection with the Permittee's activities and provide the Permittee with the first opportunity to complete the repairs.
- 6. When necessary all excavations, materials, or other obstructions are to be efficiently fenced, lit, and watched, and at all times every possible precaution is to be taken to ensure the safety of the public, by the Permittee at the Permittee's expense.
- 7. (a) The Permittee shall indemnify and save harmless the Minister, the Ministry, BC Transportation Financing Authority ("BCTFA") and their agents and employees, from and against all claims, liabilities, demands, losses, damages, costs and expenses, fines, penalties, assessments and levies made against or incurred, suffered or sustained by the Minister, the Ministry, BCTFA and their agents and employees, or any of them at any time or times, whether before or after the expiration or termination of this Permit, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the Permittee, its employees, agents or subcontractors, in connection with the Permit.
 - (b) The Permittee shall release the Minister, the Ministry, BCTFA and their agents and employees, from and against all claims, demands, actions, causes of action, losses, damages, fines, penalties, costs, expenses and liabilities arising out of or in connection with any environmental liability on the Highway, including without limitation, any contamination or any liability related to any toxic, hazardous, dangerous or potentially dangerous substances migrating from the Highway related to the Permittee's entry upon, use or occupation of the Highway.
- 8. The permission herein granted to use and maintain the Works is only granted for such times as the Highway is under the jurisdiction of the Minister. This permission is not to be construed as being granted for all time and shall not be deemed to vest in the Permittee any right, title or interest whatsoever in or to the lands upon which the Works are constructed. Should the lands affected at any time be included within that of an incorporated municipality or city, this permission shall become void, unless the Works are on a highway duly classified as an arterial highway pursuant to Section 45 of the *Transportation Act*.
- 9. After the Permittee receiving notice in writing of the intention of the Ministry to construct, extend, alter, or improve any public work in or around the Highway such that the Minister determines, in the Minister's sole discretion, that the Works must be relocated or altered, the Permittee shall:
 - (a) within 90 days, deliver to the District Official a plan and cost estimate for the relocation or alteration of the Works to accommodate the Ministry's intended activities, as well as the estimated timelines; and
 - (b) relocate or alter such Works at its own expense to such new positions or in such manner as may be required by the District Official.

provide that, for the relocation or alteration the Works, the Ministry will reimburse the Permittee for a portion of the costs of relocation of the Works, as set out in Schedule D.

- 10. For any maintenance, repair, alteration, or replacement of the Works required by the Permittee, the Permittee will complete such work at its own expense with no reimbursement by the Minister.
- 11. The Minister shall be responsible for damage of any kind to the Works occurring in the course of carrying-out its construction, extension, alterations, improvement, repair, or maintenance of any public work adjacent thereto, and will undertake all reasonable measures to safeguard the Works.
- 12. The permission hereby granted without prejudice to the provisions of the *Transportation Act*, or other Acts governing Crown lands and public works or their use by the public.
- 13. This permission shall be in force only during such time as the Works are operated and maintained by the Permittee, to the entire satisfaction of the District Official, acting reasonably.
- 14. This Permit is valid only for the Works specified herein, and any new infrastructure, including any additions to the Works as required by the Permittee will require a separate Permit.



- 15. The term of the Permit is from the date this Permit is issued by the Ministry until the earliest of:
 - (a) the date the Highway is no longer required by the Permittee for the Purpose and the Permittee and the Ministry agree the parties' obligations have been completed and agree to end the Permit, or
 - (b) the date the Permit is otherwise terminated in accordance with its terms or the provisions of the Transportation Act.
- 16. (a) Upon termination of this Permit, the Minister, acting reasonably, reserves the right to require the Permittee to:
 - (i) remove from the Highway all Works that the District Official directs the Permittee to remove;
 - (ii) peaceably quit and deliver to the Province possession of the Highway and, subject to paragraph (i) and (iii), the Works in a safe, clean and sanitary condition (including, without limitation, free of any environmental contamination related to your entry upon, use or occupation of the Highway;
 - (iii) decommission any Works which the District Official does not direct the Permittee to remove such that they are left in a safe condition as certified by a professional engineer who is licenced under the Engineers and Geoscientist Act and to the satisfaction of the District Official; and
 - (iv) restore the surface of the Highway as nearly as may be reasonably possible to the same condition as it was on the date this Permit was issued, to the satisfaction of the District Official.

Any Works which remain on or in the Highway after termination of this Permit become the property of the Ministry and the Permittee will cease to have any interest in those Works.

- 17. The Works shall be identified with this Permit number in a manner satisfactory to the District Official.
- 18. As a condition of this Permit, the Permittee unconditionally agrees with the Minister that for any work performed by the Permittee in respect of the Works, the Permittee is the prime contractor or will appoint a qualified prime contractor, as described in Section 118 of the *Workers Compensation Act*, for the purposes of the work described by this Permit, at the work location described in this Permit, and that the Permittee or designated prime contractor will observe and perform all of the duties and obligations which fall to be discharged by the prime contractor pursuant to the *Workers Compensation Act* and the *Occupational Health and Safety Regulation*, provided that if the Highway is designated as a "multiple-employer workplace" (as defined in the *Workers Compensation Act*), the Permittee must coordinate its activities on the Highway with those of the "prime contractor" (as defined in the *Workers Compensation Act*) for the Highway in accordance with Section 118 of the *Workers Compensation Act*.
- 19. The Permittee is advised and acknowledges that the following hazards may be present at the work location and need to be considered in coordinating site safety: overhead hazards, particularly electrical or telecommunications lines; buried utilities, particularly electrical, telecommunication, and gas lines; traffic; danger trees; falling rocks; and sharp or infectious litter.
- 20. Any Works that fall within the scope of "engineering" under the *Engineers and Geoscientists Act* will be performed by a Professional Engineer and shall comply with this Ministry's "Engineer of Record and Field Review Guidelines". The Guidelines can be viewed on the Ministry's website at http://www2.gov.bc.ca/assets/gov/driving-and-transportation-infrastructure/engineering-standards-and-guidelines/technical-circulars/2009/t06-09.pdf
- 21. The Permittee is responsible for preventing the introduction and spread of noxious weeds on the Highway as defined by the *British Columbia Weed Control Act* and *Weed Control Regulation* during the course of the Permittees works under this Permit.
- 22. The conditions of this Permit were determined in contemplation of the specific Works and Purpose set out herein, and do not function as a precedent for other Permits granted to the Permittee.
- 23. This Permit is personal to the Permittee, and cannot be assigned, mortgaged or otherwise transferred to a third party without the written consent of the Minister, which may be withheld by the Minister in the Minister's sole discretion.
- 24. The Permittee must, without limiting its obligations or liabilities under this Permit, at its expense maintain throughout the during of this Permit, the insurance set out in Schedule C placed with insurers licensed to transact business in the Province of British Columbia or Canada in accordance with Schedule C.
- 25. The Permittee must ensure that the most current editions of the following standards and specifications, manuals and guides are used and complied with during the installation, operation and maintenance of the Works and the 2015 Interim Traffic Management Manual for Work on Roadways.
- 26. The Permittee is responsible for ensuring that all Works are contained to the Highway. Any Works located within private property must have the owner's permission.
- 27. Where the Ministry and a regulator both set a standard or requirement in a particular area, the highest or most stringent standard or requirement will apply.



Ministry of Transportation and Infrastructure

Office: Lower Mainland District

- 28. The Permittee shall be responsible for the preservation during construction of all geodetic benchmarks, survey monuments and property markers on the Highway. The Permittee shall use, at the Permittee's, a British Columbia Land Surveyor to replace any survey monuments destroyed or damaged as a result of the Permittee's negligence. At locations where construction work will cover or destroy such markers, the Permittee shall not move or remove them until written direction is received from the District Official.
- 29. If, due to a strike, lockout, labour dispute, act of God, inability to obtain labour or materials, law, ordinance, rule, regulation or order of a competent government authority, enemy or hostile action, civil commotion, fire or other casualty or any condition or cause beyond the Permittee's reasonable control, other than normal weather conditions, the Permittee is delayed in the performance of any of the Permittee's obligations under this Agreement, the time for the performance of that obligation will be extended by a period of time equal to the period of time of the delay so long as:
 - (a) The Permittee gives notice to the Minister within 30 days of the commencement of the delay setting forth the nature of the delay and an estimated time frame for the performance of the Permittee's obligation; and
 - (b) The Permittee diligently attempts to remove the delay;

provided that the Ministry may, in its sole discretion, complete the performance of any of the Permittee's obligations which the Permittee is unable to complete within a time acceptable to the Ministry, and the Permittee will repay to the Ministry its costs of such work.

The rights granted to the Permittee in this Permit are to be exercised only for the purpose as defined in Recital C on page 1.

On Behalf of the Minister

The Permittee acknowledges and agrees to the terms of this Permit

Name: Title:



Ministry of Transportation and Infrastructure

Permit/File Number:

Office: Lower Mainland District

SCHEDULE A

[Permittee to Insert Drawings]



Ministry of Transportation and Infrastructure

Office: Lower Mainland District

SCHEDULE B

PERMIT AREA

[Insert Sketch]



Ministry of Transportation and Infrastructure

Office: Lower Mainland District

SCHEDULE C

INSURANCE

- 1. The Permittee must without limiting its obligations or liabilities under this Permit, at its expense, maintain during the duration of the Permit,
 - (a) Commercial General Liability Insurance including non-owned automobile and contractual liability insurance with inclusive limits of not less than \$5,000,000 for bodily injury, death or property damage arising from any one accident or occurrence which insurance policy will indemnify the insureds under the policy for all sums which the insured may become liable to pay or pays for bodily injury, death or property damage or for loss of use, arising out of or resulting from the work or operations of the parties under this Permit which must be endorsed as follows:

"It is understood and agreed that Her Majesty the Queen in Right of the Province of British Columbia as represented by the Minister of Transportation and Infrastructure (the "Province"), together with the employees, agents (including the BC Transportation Financing Authority, the Transportation Investment Corporation and their respective officers, directors, employees, servants and agents), and servants of the Province (the "Additional Insureds"), are each added as an Additional Insured, in respect of liability arising from the work or operations of the insured and each Additional Insured, in connection with contracts entered into between the insured and the Additional Insured.

The Insurance as is afforded by this policy will apply in the same manner and to the same extent as though a separate policy had been issued to each insured. Any breach of a condition of the policy by any insured will not affect the protection given by this policy to any other insured. The inclusion herein of more than one insured will not operate to increase the limit of liability under this policy";

- (b) if vessels are owned, leased or rented or used in the performance of this Permit by the Permittee and are not covered under the general liability policy, the Permittee will provide Protection and Indemnity insurance with limits of not less than \$5,000,000 for such vessels and will include four-fourths collision liability insurance;
- (c) if any licensed vehicles are owned, leased, rented or used by the Permittee in the performance of this Permit, Automobile Liability Coverage with inclusive limits of not less than \$5,000,000 providing third party liability and accident benefits insurance for all such vehicles; and
- (d) if aircraft (including helicopters) are owned, rented, leased or used by the Permittee in the performance of this Permit, third party liability coverage with inclusive limits of not less than \$5,000,000,

which, in the case of the policies of insurance described in subsections (a), (b) and (d), must include endorsements or provisions that they may not be cancelled, reduced, altered or materially changed without the insurer or insurers giving not less than 30 days' prior written notice to the Ministry by registered mail, which endorsements must be in terms comparable to those normally obtainable from insurers in the Province of British Columbia or Canada issuing comparable policies.

- 2. All insurance required to be maintained by the Permittee under this Permit must be placed with insurers licensed to transact business in the Province of British Columbia or Canada and, the Permittee must, under the insurance required to be maintained by it under this Permit,
 - (a) pay all deductibles;
 - (b) not exclude hazardous operations such as excavation, pile driving, shoring, blasting, under-pinning or demolition work or any other operation or work from insurance coverage;
 - (c) deliver to the Ministry upon receiving this Permit and on the renewal of the insurance and atother times required by the Ministry:
 - (i) for all policies except Automobile Liability Insurance, a completed and executed certificate of insurance in a form acceptable to the Ministry (as of the date of this Permit, such form is entitled "Certificate of Insurance" and is numbered H-0111); and
 - (ii) evidence of Automobile Liability Insurance in the form of a duly executed Insurance Corporation of British Columbia APV47 or APV250 form or a copy of the vehicle registration/insurance certificate; and
- 3. The Permittee acknowledges and agrees that, in the event of any third party loss or damage or any physical loss or damage to the Works (and the associated apparatus, improvements or fixtures of the Permittee), the settlement or payment by the insurer of the subsequent claim will be made without the right of subrogation against the Ministry, the BCTFA, or for whom the Ministry and the BCTFA are legally obligated to indemnify against such claims.



SCHEDULE D

RELOCATION COSTS REIMBURSEMENT TABLE

9.1 DELIVERED ON OR AFTER THE FOLLOWING YEARS AFTER THE CONSTRUCTION OF THE PRE- EXISTING UTILITY	NOTIFICATION UNDER SECTION 9.1 DELIVERED BEFORE THE FOLLOWING YEARS AFTER THE CONSTRUCTION OF THE PRE-EXISTING UTILITY	PERCENTAGE OF FULL DIRECT COSTS TO BE PAID TO THE PERMITTEE BY THE PROVINCE
15 th	16 th	98.0
16 th	17 th	95.2
17 th	18 th	92.4
18 th	19 th	89.6
19 th	20 th	86.8
20 th	21 st	84.0
21 st	22 nd	81.2
22 nd	23 rd	78.4
23 rd	24 th	75.6
24 th	25 th	72.8
25 th	26 th	70.0
26 th	27 th	67.2
27 th	28 th	64.4
28 th	29 th	61.6
29 th	30 th	58.8
30 th	31 st	56.0
31 st	32 nd	53.2
32 nd	33 rd	50.4
33 rd	34 th	47.6
34 th	35 th	44.8
35 th	36 th	42.0
36 th	37 th	39.2
37 th	38 th	36.4
38 th	39 th	33.6
39 th	40 th	30.8
40 th	41 st	28.0
41 st	42 nd	25.2
42 nd	43 rd	22.4
43 rd	44 th	19.6
44 th	45 th	16.8
45 th	46 th	14.0
46 th	47 th	11.2
47 th	48 th	8.4
48 th	49 th	5.6
49 th	50 th	2.8
Schedule K

Scott Road Interchanges Option Conceptual Plan



APPENDIX "II"

MEMORANDUM OF UNDERSTANDING

This MEMORANDUM OF UNDERSTANDING ("MOU") is dated for reference the _____ day of 2019.

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, as represented by the Minister of Transportation and Infrastructure, having offices at 310-1500 Woolridge Street, Coquitlam, British Columbia, V3K 0B8

(the "Ministry")

AND:

CITY OF SURREY, having offices at 13450 104 Avenue, Surrey, British Columbia, V3T 1V8

(the "City")

(collectively, the "Parties" and each individually, a "Party")

WHEREAS:

- A. The Ministry is undertaking the planning and construction of a new bridge (the "New Fraser River Bridge") to replace the existing Pattullo Bridge linking the communities of Surrey and New Westminster.
- B. The Ministry has an interest in maintaining a safe and efficient highway system and wishes to resume the road approaches to the New Fraser River Bridge, being King George Boulevard ("KGB") from 128 Street to the New Fraser River Bridge, and Bridgeview Drive ("BVD") from KGB to Highway 17 (the "Resumed Areas", see Schedule "A") pursuant to subsection 35(8)(b) of the *Community Charter*, SBC 2003, c. 26, as amended.
- C. Once resumed, the Ministry wishes to designate the Resumed Areas as controlled access highway pursuant to subsection 48(1) of the *Transportation Act*, SBC 2004, c. 44, as amended (the "*Act*").
- D. As a result of the designation of the Resumed Areas as controlled access highway, the Ministry's approval is required for:
 - (i) Construction or reopening of any means of access to or from the Resumed Areas;

- (ii) A zoning bylaw applicable to land and improvements within an 800 metre radius of an intersection of the Resumed Areas with any other highway (the "Controlled Area");
- (iii) The construction of commercial or industrial buildings exceeding 4,500 square metres in gross floor area within the Controlled Area;
- (iv) A bylaw, a development permit, or development variance permit to amend a land use contract applicable within the Controlled Area that is registered in the land title office, unless otherwise exempted;
- (v) A heritage revitalization agreement or amendment applicable within the Controlled Area; and
- (vi) Other approvals, permissions or authorizations required by the *Act*.

(the "Approvals"; applications submitted to the Ministry for the Approvals are hereinafter referred to as the "Applications")

E. The Parties see a mutual benefit to working cooperatively in the planning, development and operation of lands within the vicinity of the Resumed Areas.

NOW THEREFORE this MOU witnesses that the Parties desire to proceed as follows:

1. Schedules

1.1. The following Schedule is attached to and incorporated into this MOU:

Schedule A – Map of Resumed Areas Schedule B – City of Surrey's Council Approved Land Use Designations for the South Westminster Neighbourhood Concept Plan ("South Westminster NCP") Schedule C – City of Surrey's Council Approved Land Use Designations for the Bridgeview Local Area Plan ("Bridgeview LAP")

2. Land Use Objectives and Process

- 2.1. The Ministry acknowledges that the City has existing Council approved South Westminster NCP and Bridgeview LAP, (collectively, the "Existing Concept Plans"). The Existing Concept Plans cover the lands north and south of KGB between BVD and the New Fraser River Bridge generally in accordance with Schedule "B" and Schedule "C".
- 2.2. The South Westminster NCP was originally passed by City Council in 2003, and the Bridgeview LAP was passed by City Council in 1976. The Concept Plans shown in Schedule "B" and "C" reflected the latest Council passed version of the plans.

- 2.3. The Ministry acknowledges that the City will be reviewing and amending the Existing Concept Plans to be consistent with the principles of the Metro Vancouver Regional Growth Strategy, and TransLink's Transit-Oriented Community Design Guidelines. This will result in a new updated concept plan ("Updated Concept Plan") with new land use designations that would result in increased density, population, and employment.
- 2.4. The Ministry acknowledges that the Updated Concept Plan will include a finer-grid road network to support the area, and is expected to include at least one additional local road connection on the south side of KGB, west of BVD.
- 2.5. The City will conduct a transportation modelling analysis (the "Transportation Analysis") to support the Updated Concept Plan. The City shall consult with the Ministry in the preparation of Terms of Reference for the Transportation Analysis, and will carry out the Transportation Analysis in accordance with those Terms of Reference.
- 2.6. The City will submit to the Ministry the draft Updated Concept Plan and Transportation Analysis, for review and endorsement, with such endorsement not to be unreasonably withheld. For greater certainty, endorsement of the Updated Concept Plan by the Ministry shall not constitute authorization to construct or reopen an access point for the purposes of section 49 of the *Act*.
- 2.7. Upon endorsement of the Updated Concept Plan and Transportation Analysis by the Ministry, the Ministry will not require an independent Traffic Impact Analysis for future Applications on lands within the Controlled Area, unless the proposed development's density and/or floor area is beyond the scope of the Transportation Analysis.
- 2.8. Upon endorsement of the Updated Concept Plan and Transportation Analysis by the Ministry, the Ministry will make reasonable efforts to review Applications expeditiously for lands within the Controlled Area that require its approval. The Ministry will impose only those terms and conditions it considers appropriate, acting reasonably.
- 2.9. The Ministry acknowledges that Applications requiring its approval are anticipated for lands within the Controlled Area prior to the Ministry's endorsement of the Updated Concept Plan and Transportation Analysis. The Ministry will make reasonable efforts to review such Applications expeditiously, and will impose only those terms and conditions it considers appropriate, acting reasonably.

3. Cooperation

3.1. Signing the MOU signifies the Parties' acceptance of the principles and business terms contained herein. Both Parties will work in a collaborative effort to achieve their mutual goals and objectives with respect to the successful construction of the New Fraser River Bridge and its approaches in the City. Any approvals will not be unreasonably withheld if such approvals are in accordance with the Ministry-endorsed Updated Concept Plan and the principles and business terms contained herein.

4. Communications

4.1. Neither Party will undertake any public communications in regards to this MOU without advance confirmation from the respective other Party.

5. Law Applicable

5.1. This MOU is to be construed in accordance with and governed by the laws applicable in, and the courts of, the Province of British Columbia.

6. No Fettering and Powers Preserved

6.1. Each of the Parties acknowledges and agrees with the other Party that nothing in this MOU shall be construed as or intended to fetter the discretion of a Party's municipal council, treasury board or board of directors' decision-making authority. Nothing in this MOU affects the rights and powers of the Parties in the exercise of their functions, rights, power or authority under any enactments, which may be fully and effectively exercised as if this MOU had not been made.

7. Notices

7.1. Any notices or other communications which may be or is required to be given or made under this MOU will, unless otherwise expressly provided herein, be in writing and be personally delivered to a Party at its address set forth on Page 1 of this MOU.

8. Counterparts

8.1. This MOU may be executed in counterparts and by electronic means, with the same effect as if both Parties had signed the same document. Each counterpart shall be deemed to be an original. All counterparts shall be construed together and shall constitute one and the same MOU.

EXECUTED FOR AND ON BEHALF OF THE CITY OF SURREY

Per:

Authorized Signatory

Title:

EXECUTED FOR AND ON BEHALF OF HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, BY A DULY AUTHORIZED REPRESENTATIVE OF THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE

Per:

Authorized Signatory

Name: _____

Title:



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Schedule B



City of Surrey's Council Approved Land Use Designations for the South Westminster Neighbourhood Concept Plan ("South Westminster NCP")

Schedule C City of Surrey's Council Approved Land Use Designations for the Bridgeview Local Area Plan ("Bridgeview LAP")



APPENDIX "III"

Pattullo Bridge Replacement Scope of Work Drawing

